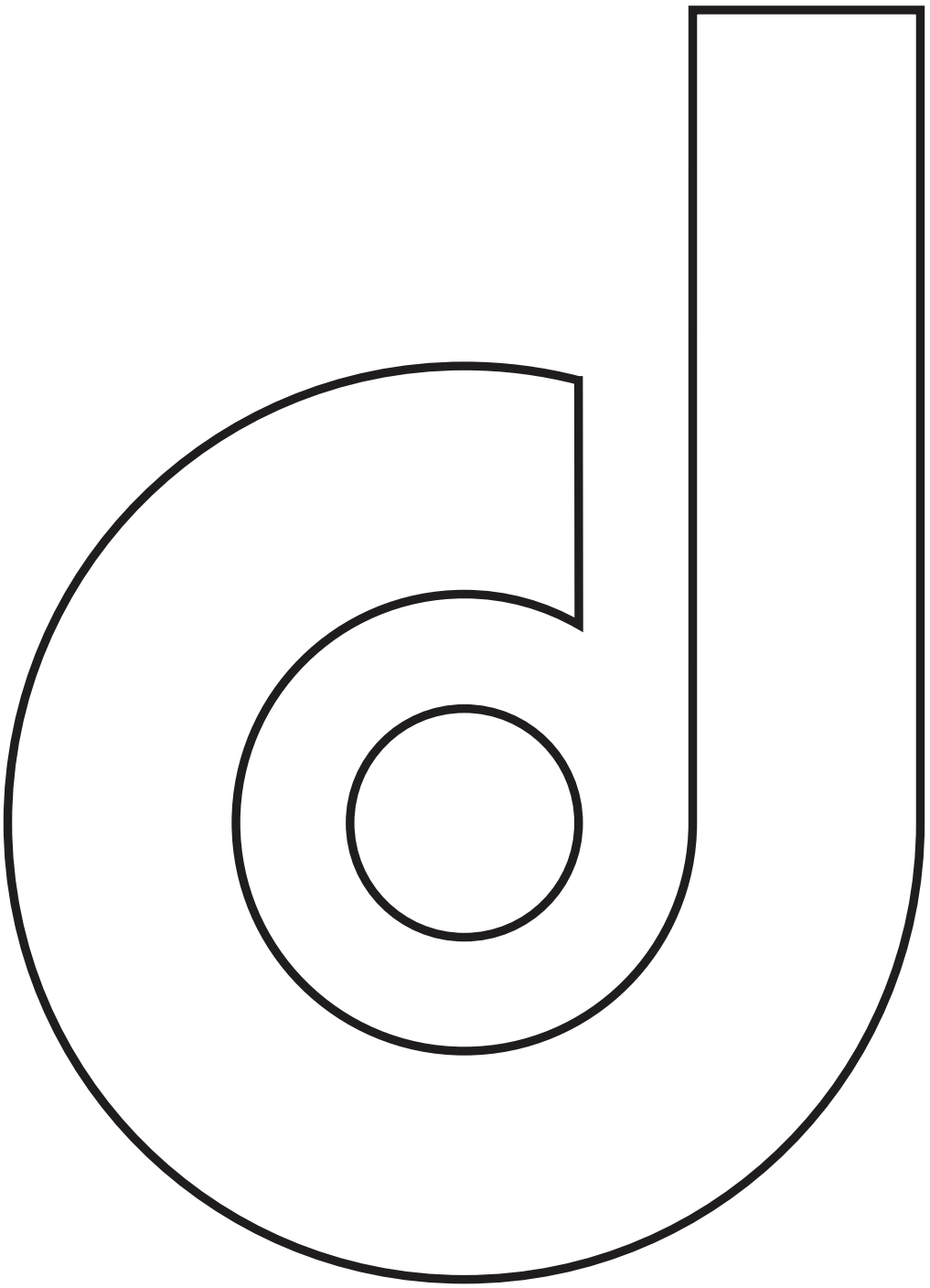

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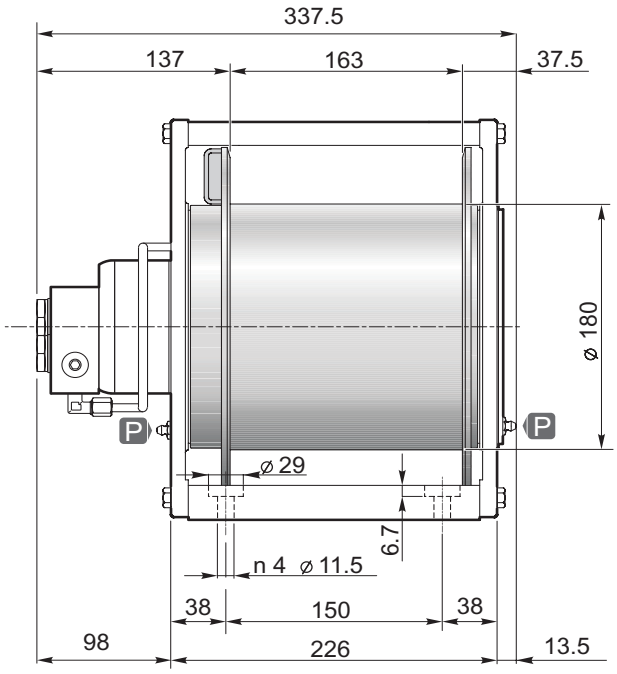
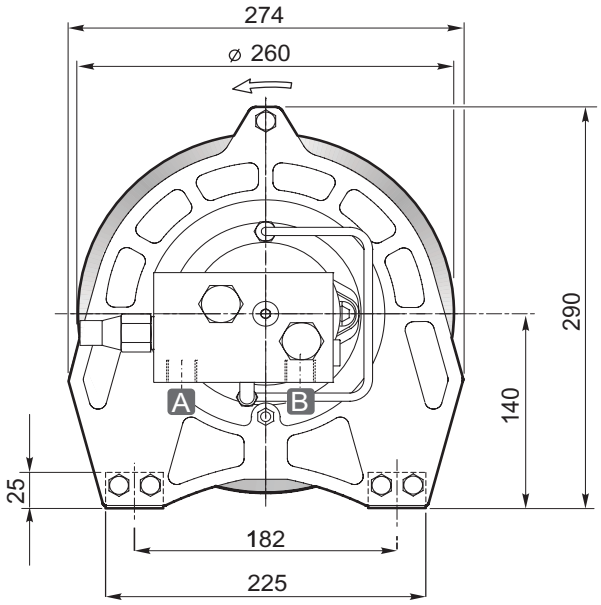
P6





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	750	700	650	600
Velocità fune con *Rope speed with*	30 [L/1']	[m/1']	24.5	26.5	28	30
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	13	27	41	57
Q.tà fune tamburo filettato *Rope capacity grooved drum*			11	23	36	50

Pressione di sollevamento *Hoisting pressure*	[bar]	115
Max-min portata alimentazione *Max-min pump flow*	[L/1']	40/10
Cilindrata motore *Motor displacement*	[cm^3]	100
Rapporto di riduzione *Gear ratio*	1:	6
Diametro fune consigliato *Advised rope diameter*	[mm]	7

A	Ramo di sollevamento *Hoisting port*	1/2"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	33

Tamburo/*Drum* Smooth **1** Grooved **2** **

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 25 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolte.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M10 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 25 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M10 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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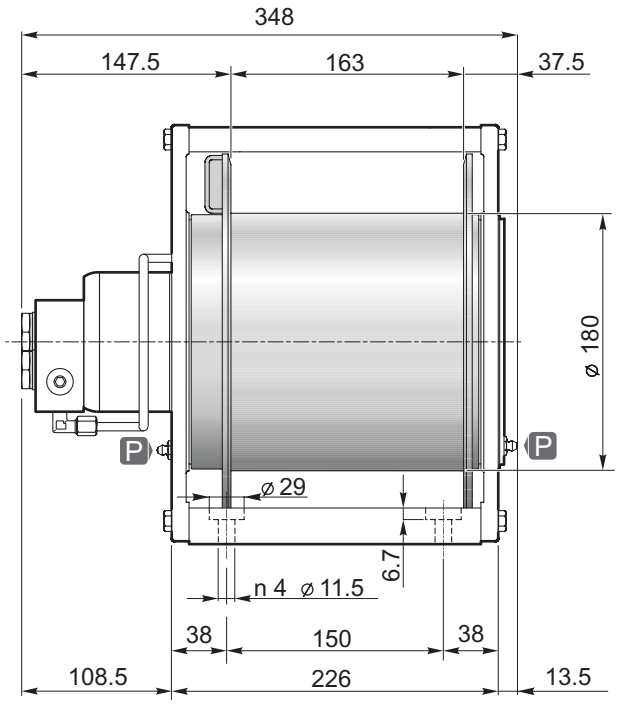
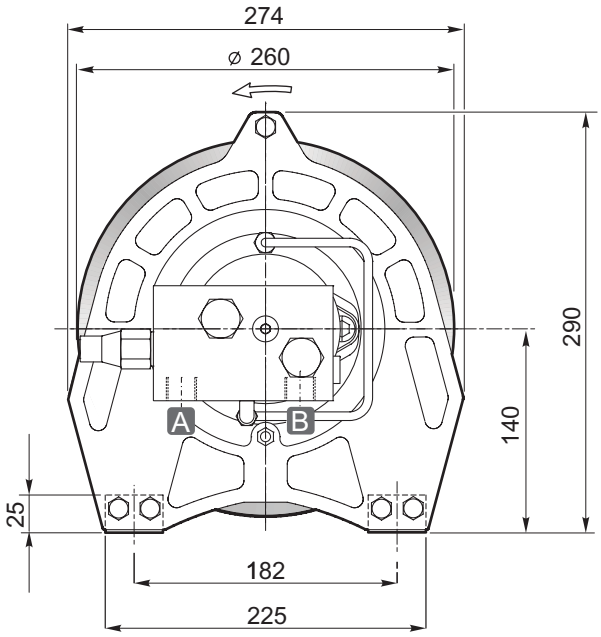
P6/E





Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	1000	920	850	800
Velocità fune con *Rope speed with*	40 [L/1']	[m/1']	20	21.5	23.5	25
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	11	23	36	50
Q.tà fune tamburo filettato *Rope capacity grooved drum*			10	21	32	44

Pressione di sollevamento *Hoisting pressure*	[bar]	100
Max-min portata alimentazione *Max-min pump flow*	[L/1']	40/10
Cilindrata motore *Motor displacement*	[cm^3]	160
Rapporto di riduzione *Gear ratio*	1:	6
Diametro fune consigliato *Advised rope diameter*	[mm]	8

A	Ramo di sollevamento *Hoisting port*	1/2"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	33

Tamburo/*Drum* Smooth 1 | Grooved 2 **

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 25 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M10 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 25 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M10 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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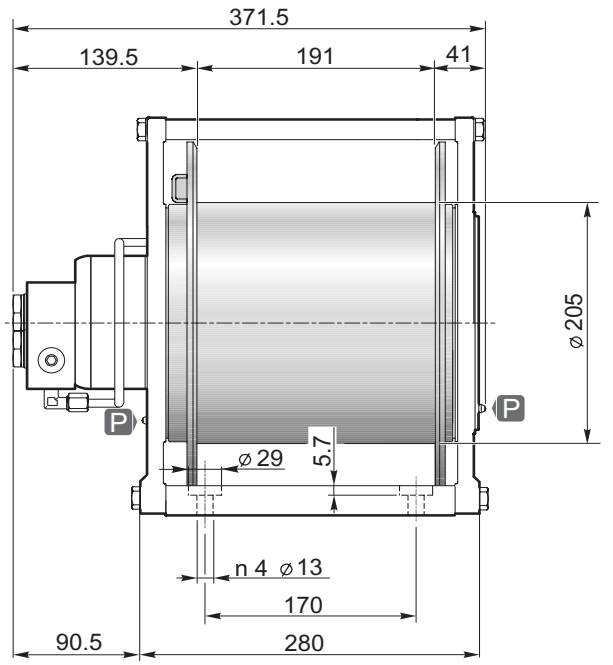

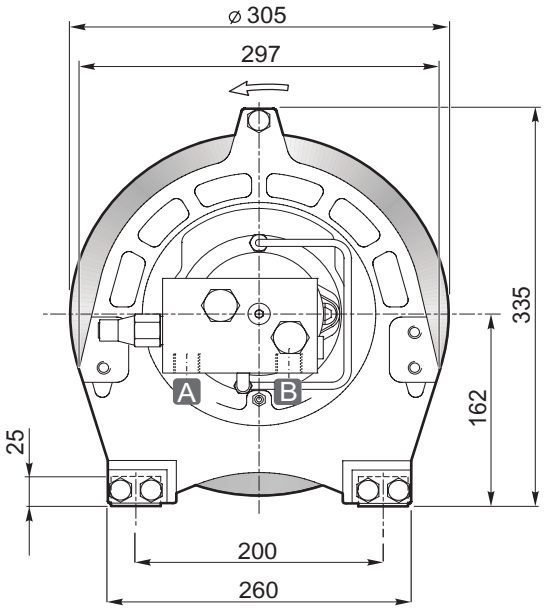

Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	1100	1000	950	900
Velocità fune con *Rope speed with*	40 [L/1']	[m/1']	27.5	29.5	31.5	34
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	15	31	49	68
Q.tà fune tamburo filettato *Rope capacity grooved drum*			13	28	44	60

Pressione di sollevamento *Hoisting pressure*	[bar]	145
Max-min portata alimentazione *Max-min pump flow*	[L/1']	55/15
Cilindrata motore *Motor displacement*	[cm^3]	160
Rapporto di riduzione *Gear ratio*	1:	5.04
Diametro fune consigliato *Advised rope diameter*	[mm]	8

A	Ramo di sollevamento *Hoisting port*	1/2"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	54

Tamburo/*Drum* Smooth 1 | Grooved 2 **

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 57 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M12 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 57 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M12 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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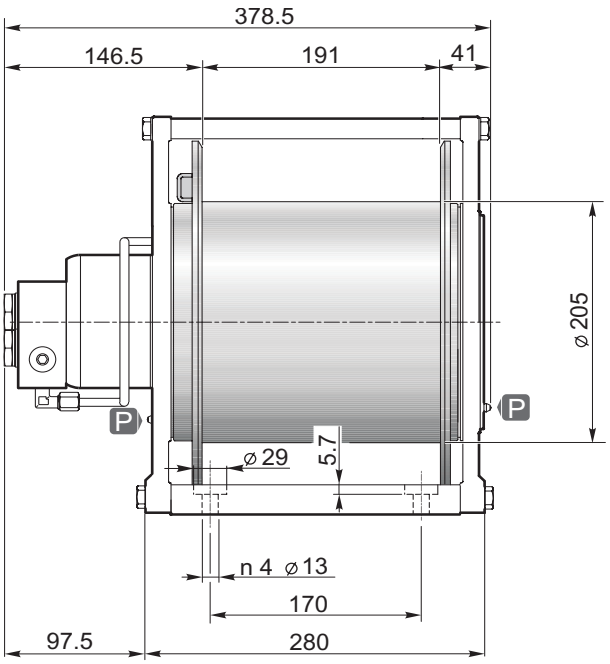
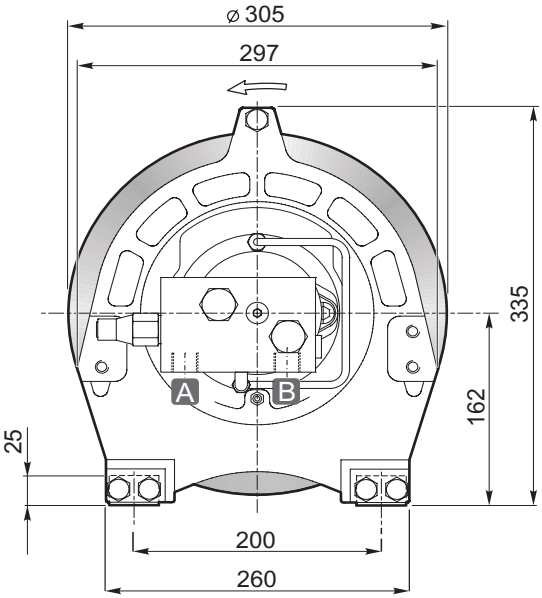
P9/E





Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	1500	1370	1260	1170
Velocità fune con *Rope speed with*	50 [L/1']	[m/1']	27.5	30	32.5	35
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	12	26	40	55
Q.tà fune tamburo filettato *Rope capacity grooved drum*		[m]	11	23	36	50

Pressione di sollevamento *Hoisting pressure*	[bar]	150
Max-min portata alimentazione *Max-min pump flow*	[L/1']	55/20
Cilindrata motore *Motor displacement*	[cm^3]	200
Rapporto di riduzione *Gear ratio*	1:	5.04
Diametro fune consigliato *Advised rope diameter*	[mm]	10

A	Ramo di sollevamento *Hoisting port*	1/2"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	54

Tamburo/*Drum* Smooth 1 Grooved 2 **

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 57 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M12 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 57 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M12 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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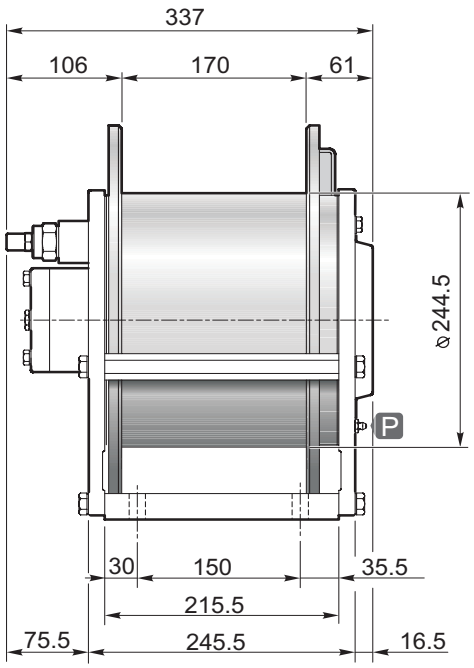
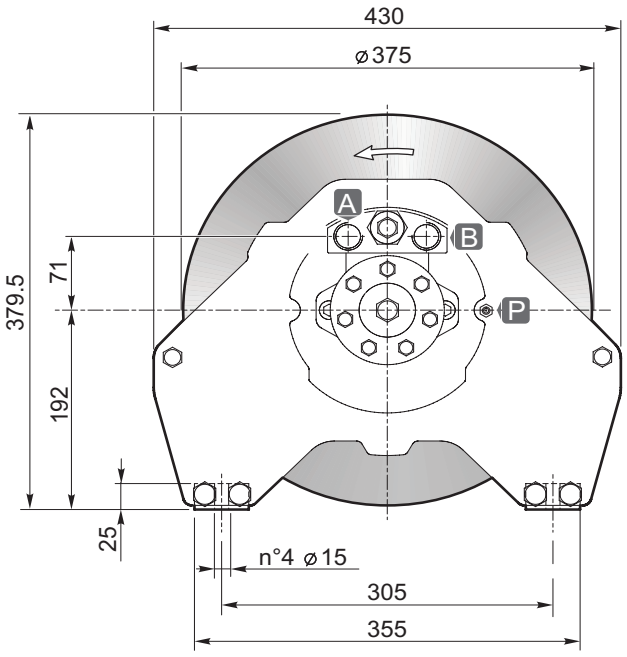
P15





Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	2000	1850	1730	1600
Velocità fune con *Rope speed with*	60 [L/1']	[m/1']	30	32	34.5	37
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	13	26	41	57
Q.tà fune tamburo filettato *Rope capacity grooved drum*		[m]	12	24	37	51

Pressione di sollevamento *Hoisting pressure*	[bar]	170
Max-min portata alimentazione *Max-min pump flow*	[L/1']	75/25
Cilindrata motore *Motor displacement*	[cm^3]	249
Rapporto di riduzione *Gear ratio*	1:	5.77
Diametro fune consigliato *Advised rope diameter*	[mm]	10

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	80

Tamburo/*Drum* Smooth **1** Grooved **2** **

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 68 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M14 classe 8.8.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 68 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M14 8.8 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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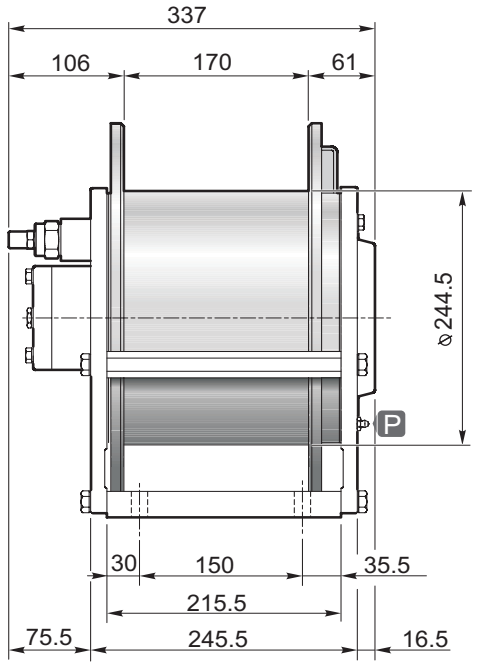
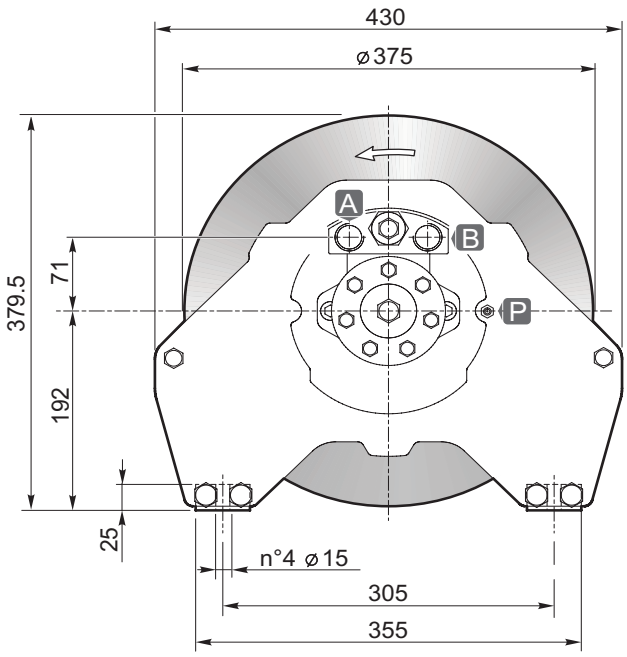
P15/E





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	2500	2300	2100	1950
Velocità fune con *Rope speed with*	60 [L/1']	[m/1']	24	26	28	30
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	11	22	34	48
Q.tà fune tamburo filettato *Rope capacity grooved drum*		[m]	10	21	33	46

Pressione di sollevamento *Hoisting pressure*	[bar]	175
Max-min portata alimentazione *Max-min pump flow*	[L/1']	75/30
Cilindrata motore *Motor displacement*	[cm³]	315
Rapporto di riduzione *Gear ratio*	1:	5.77
Diametro fune consigliato *Advised rope diameter*	[mm]	12

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

P	Ingrassatore *Grease nipple*	1/8"

kg	Massa *Weight*	80

Tamburo/*Drum* Smooth **1** Grooved **2****

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 68 daNm.
- Lubrificazione interna a grasso.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M14 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 68 daNm of static torque.*
- *Internal lubrication with grease.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M14 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
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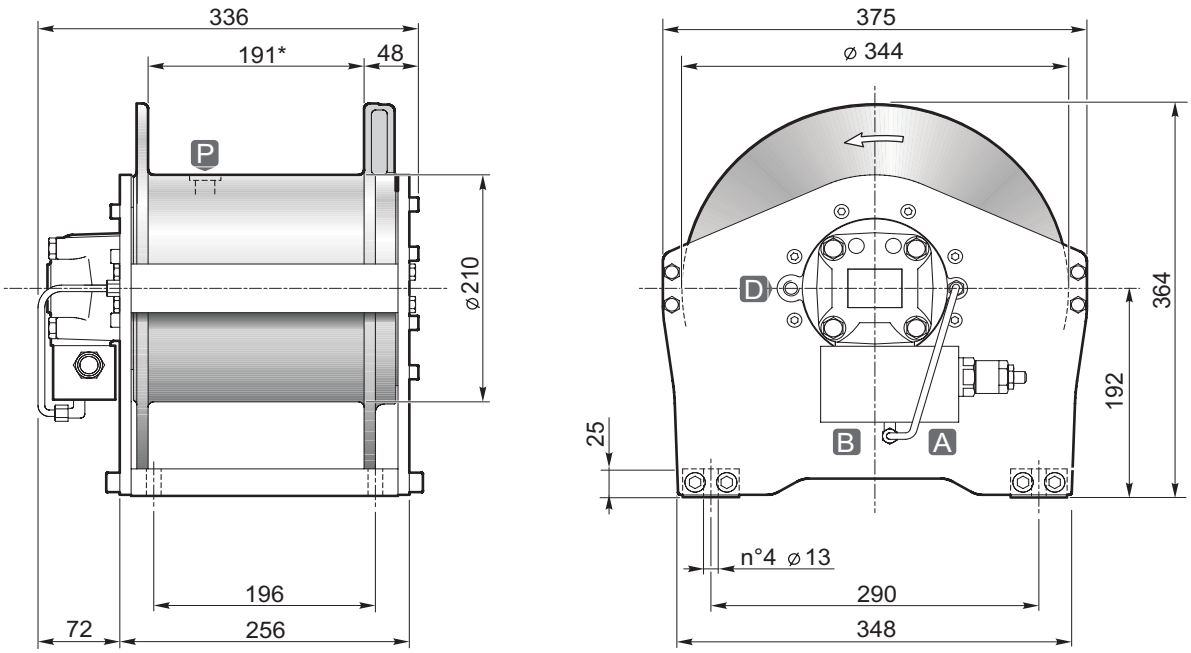
S15



Strato di fune / ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto / *Line pull*		[daN]	2000	1830	1700	1570
Velocità fune con / *Rope speed with*	45 L/1'	[m/1']	31.5	34.5	37	40
Q.tà fune tamburo liscio / *Rope capacity smooth drum*		[m]	12	26	41	57
Q.tà fune tamburo filettato / *Rope capacity grooved drum*		[m]	11	24	37	51

Pressione di sollevamento / *Hoisting pressure*	[bar]	205
Max-min portata alimentazione / *Max-min pump flow*	[L/1']	45/15
Cilindrata motore / *Motor displacement*	[cm³]	160
Rapporto di riduzione / *Gear ratio*	1:	5.77
Diametro fune consigliato / *Advised rope diameter*	[mm]	10

A	Ramo di sollevamento / *Hoisting port*	3/4"
B	Ramo di discesa / *Lowering port*	

D	Ramo di drenaggio / *Drain port*	1/4"
P	Tappo olio lubrificazione / *Lubrication oil plug*	3/8"

kg Massa / *Weight*	77

*A richiesta è disponibile la versione con tamburo liscio lungo (L=320 mm, quantità fune: 97 m)

**It is available on request the version with longer smooth drum (L=320 mm, rope capacity drum 97 m)*

Tamburo/*Drum* Smooth 1 Grooved 2**

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 74 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M12 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 74 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M12 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
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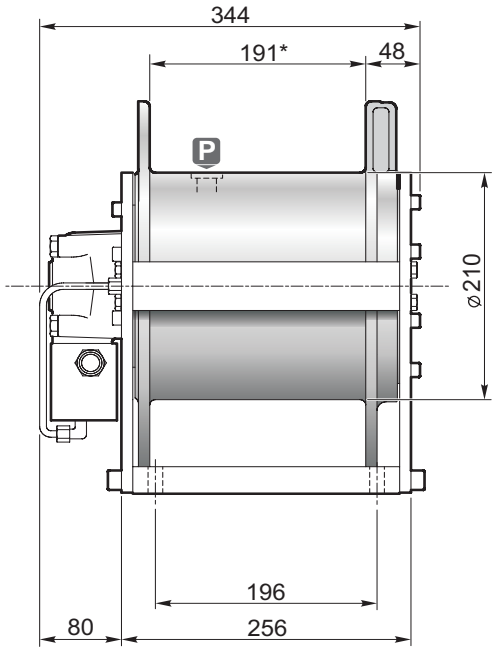
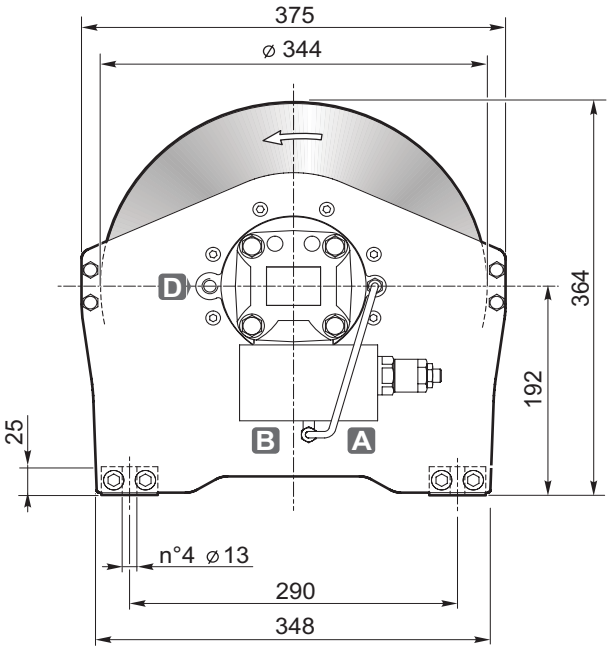
S19





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	2500	2250	2050	1900
Velocità fune con *Rope speed with*	60 L/1'	[m/1']	34	37	41	45
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	10	22	35	48
Q.tà fune tamburo filettato *Rope capacity grooved drum*		[m]	9	20	32	45

Pressione di sollevamento *Hoisting pressure*	[bar]	205
Max-min portata alimentazione *Max-min pump flow*	[L/1']	75/20
Cilindrata motore *Motor displacement*	[cm³]	200
Rapporto di riduzione *Gear ratio*	1:	5.77
Diametro fune consigliato *Advised rope diameter*	[mm]	12

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8"

kg	Massa *Weight*	78

*A richiesta è disponibile la versione con tamburo liscio lungo (L=320 mm, quantità fune: 82 m)

**It is available on request the version with longer smooth drum (L=320 mm, rope capacity smooth drum 82 m)*

Tamburo/*Drum* Smooth 1 Grooved 2**

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

** Fornibile a richiesta per quantità
Sold by request for quantity

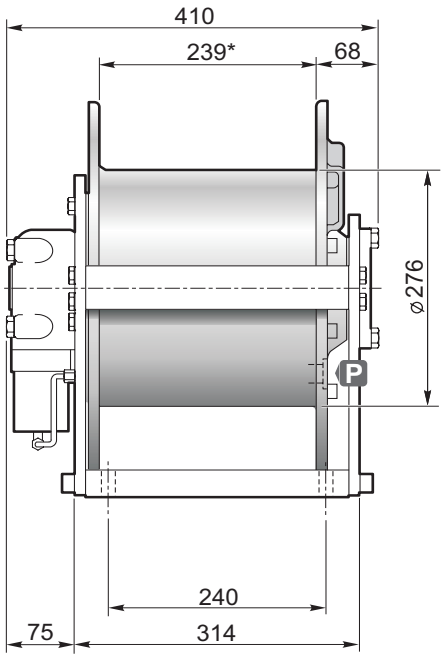
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 74 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M12 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

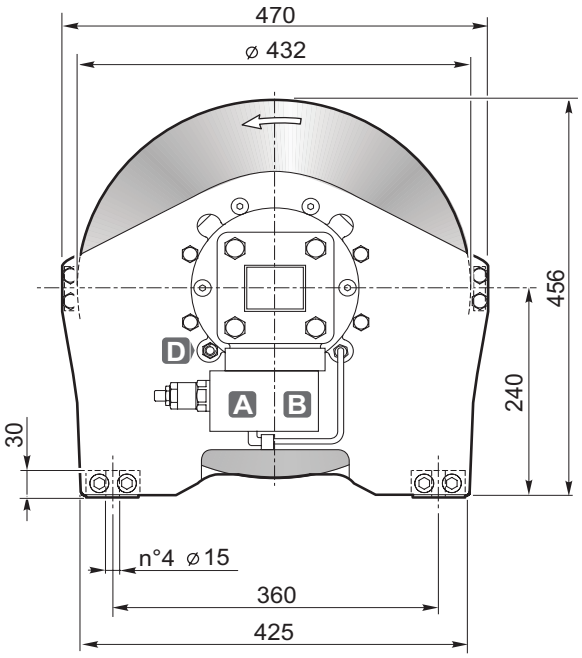
- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 74 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M12 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

S20





Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	2500	2300	2150	2000
Velocità fune con *Rope speed with*	60 L/1'	[m/1']	38.5	42	45	48.5
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	17	35	55	76
Q.tà fune tamburo filettato *Rope capacity grooved drum*			16	33	51	71

Pressione di sollevamento *Hoisting pressure*	[bar]	225
Max-min portata alimentazione *Max-min pump flow*	[L/1']	100/15
Cilindrata motore *Motor displacement*	[cm^3]	200
Rapporto di riduzione *Gear ratio*	1:	6.5
Diametro fune consigliato *Advised rope diameter*	[mm]	12

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8"

kg	Massa *Weight*	154

*A richiesta è disponibile la versione con tamburo liscio lungo (L=310 mm, quantità fune: 100 m)

**It is available on request the version with longer smooth drum (L=310 mm, rope capacity smooth drum 100 m)*

Tamburo/*Drum* Smooth **1** Grooved **2****

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M14 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M14 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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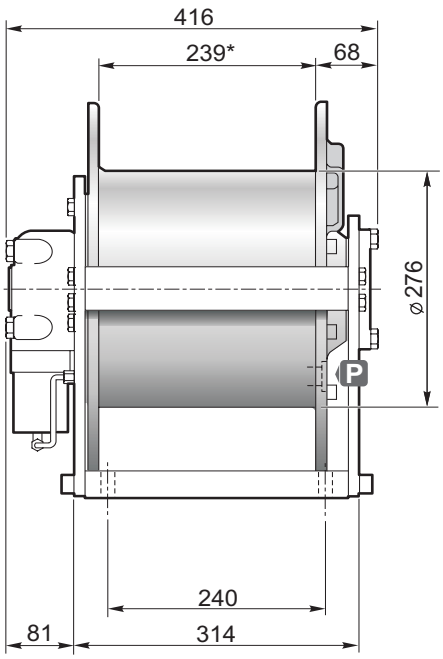
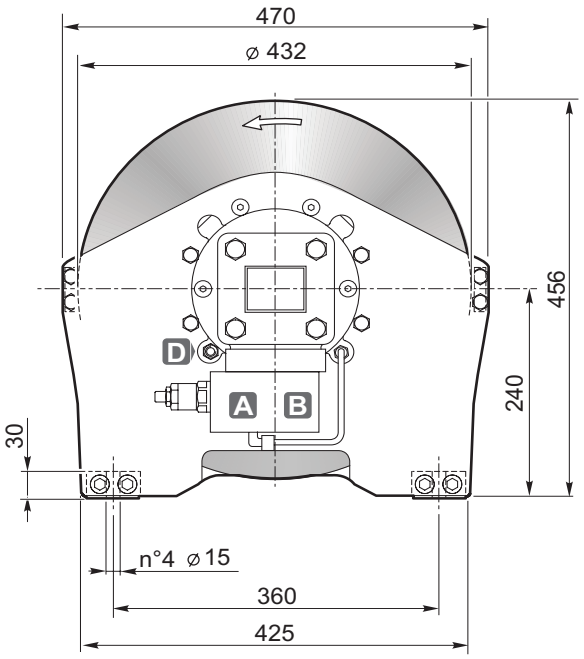
S25





Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	3200	2950	2700	2500
Velocità fune con *Rope speed with*	60 L/1'	[m/1']	31	34	37.5	40.5
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	15	31	48	66
Q.tà fune tamburo filettato *Rope capacity grooved drum*			14	29	45	62

Pressione di sollevamento *Hoisting pressure*	[bar]	235
Max-min portata alimentazione *Max-min pump flow*	[L/1']	100/15
Cilindrata motore *Motor displacement*	[cm^3]	250
Rapporto di riduzione *Gear ratio*	1:	6.5
Diametro fune consigliato *Advised rope diameter*	[mm]	14

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8"

kg	Massa *Weight*	154

*A richiesta è disponibile la versione con tamburo liscio lungo (L=310 mm, quantità fune: 87 m)

**It is available on request the version with longer smooth drum (L=310 mm, rope capacity smooth drum 87 m)*

Tamburo/*Drum* Smooth 1 Grooved 2**

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M14 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M14 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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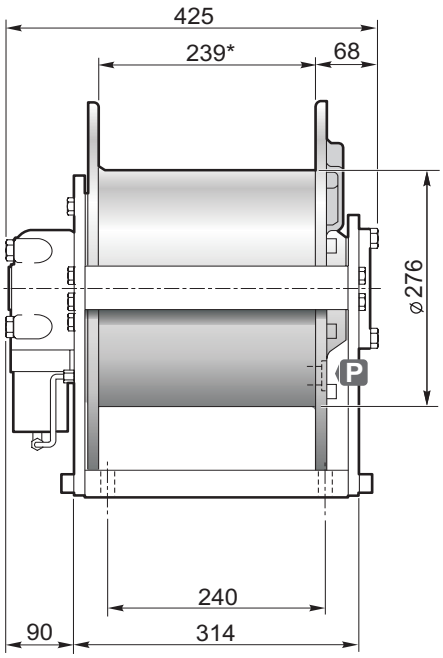
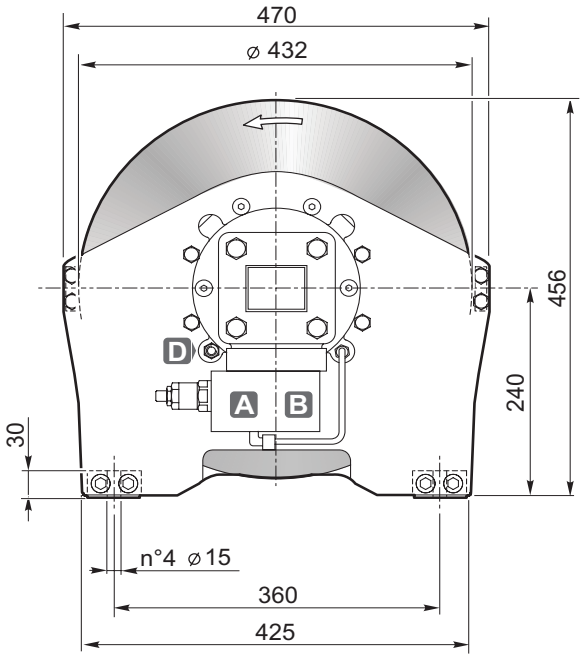
S27





Strato di fune / ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto / *Line pull*		[daN]	3550	3250	3000	2750
Velocità fune con / *Rope speed with*	60 L/1'	[m/1']	24	26	28.5	31
Q.tà fune tamburo liscio / *Rope capacity smooth drum*		[m]	15	31	48	66
Q.tà fune tamburo filettato / *Rope capacity grooved drum*		[m]	14	29	45	62

Pressione di sollevamento / *Hoisting pressure*	[bar]	200
Max-min portata alimentazione / *Max-min pump flow*	[L/1']	100/20
Cilindrata motore / *Motor displacement*	[cm³]	326
Rapporto di riduzione / *Gear ratio*	1:	6.5
Diametro fune consigliato / *Advised rope diameter*	[mm]	14

A	Ramo di sollevamento / *Hoisting port*	3/4"
B	Ramo di discesa / *Lowering port*	

D	Ramo di drenaggio / *Drain port*	1/4"
P	Tappo olio lubrificazione / *Lubrication oil plug*	3/8"

kg	Massa / *Weight*	155

*A richiesta è disponibile la versione con tamburo liscio lungo (L=310 mm, quantità fune: 87 m)

**It is available on request the version with longer smooth drum (L=310mm, rope capacity smooth drum 87 m)*

Tamburo/*Drum* Smooth **1** Grooved **2****

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M14 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M14 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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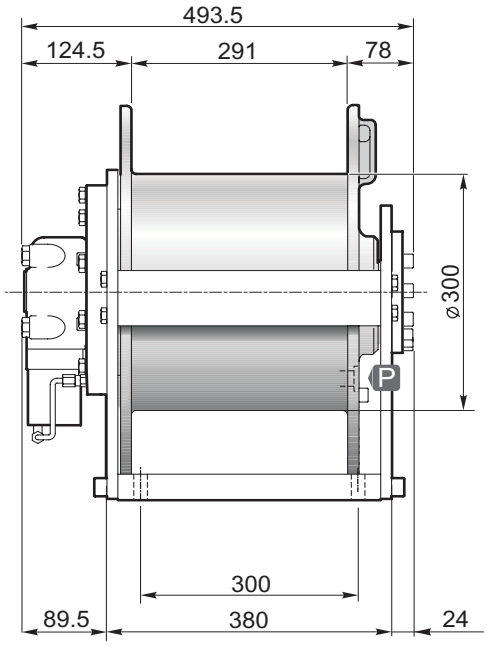
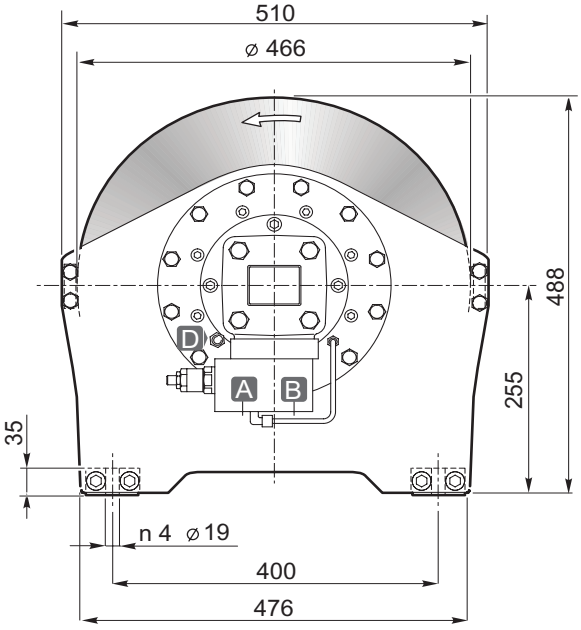
S30/2





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	3800	3500	3200	3000
Velocità fune con *Rope speed with*	80 [L/1']	[m/1']	32	34.5	37.5	40.5
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	19	40	63	88
Q.tà fune tamburo filettato *Rope capacity grooved drum*		[m]	17	36	57	80

Pressione di sollevamento *Hoisting pressure*	[bar]	215
Max-min portata alimentazione *Max-min pump flow*	[L/1']	100/15
Cilindrata motore *Motor displacement*	[cm^3]	200
Rapporto di riduzione *Gear ratio*	1:	11.5
Diametro fune consigliato *Advised rope diameter*	[mm]	14

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8"

kg	Massa *Weight*	214

Tamburo/*Drum* Smooth 1 Grooved 2 **

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

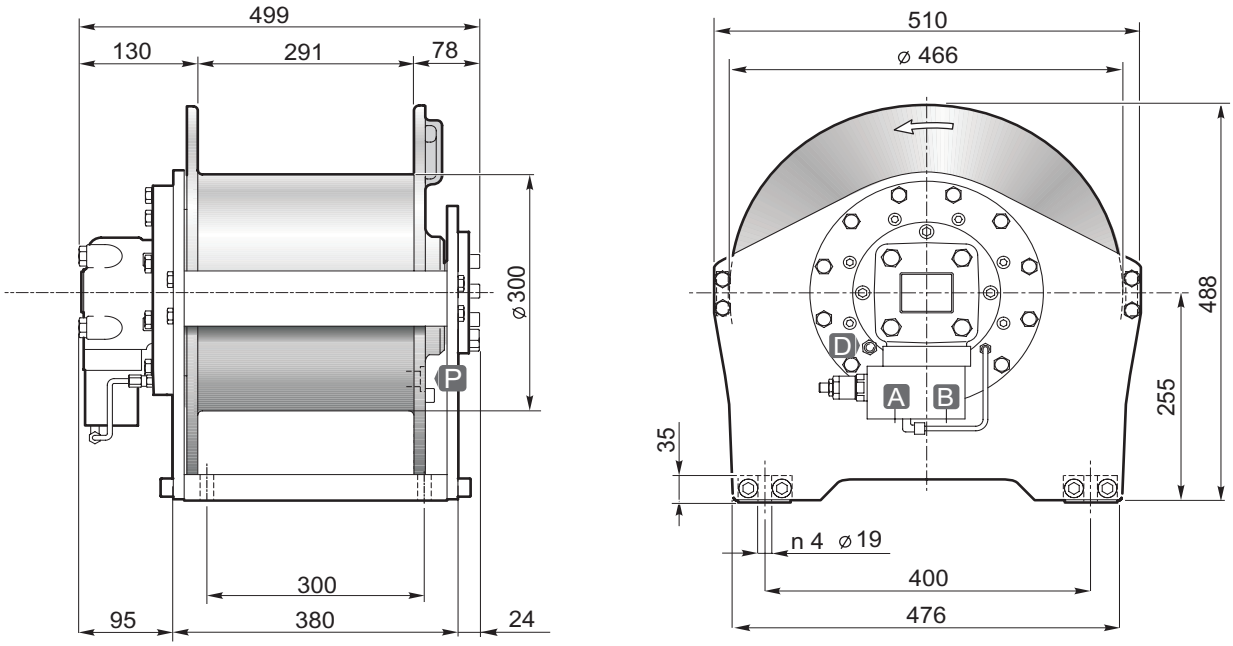
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M18 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M18 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

S35/2



Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	4500	4100	3800	3500
Velocità fune con *Rope speed with*	80 [L/1']	[m/1']	26	28	30.5	33
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	18	38	60	83
Q.tà fune tamburo filettato *Rope capacity grooved drum*			16	35	54	75

Pressione di sollevamento *Hoisting pressure*	[bar]	210
Max-min portata alimentazione *Max-min pump flow*	[L/1']	100/15
Cilindrata motore *Motor displacement*	[cm^3]	250
Rapporto di riduzione *Gear ratio*	1:	11.5
Diametro fune consigliato *Advised rope diameter*	[mm]	15

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8"

kg	Massa *Weight*	214

Tamburo/*Drum* Smooth 1 Grooved 2 **

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M18 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M18 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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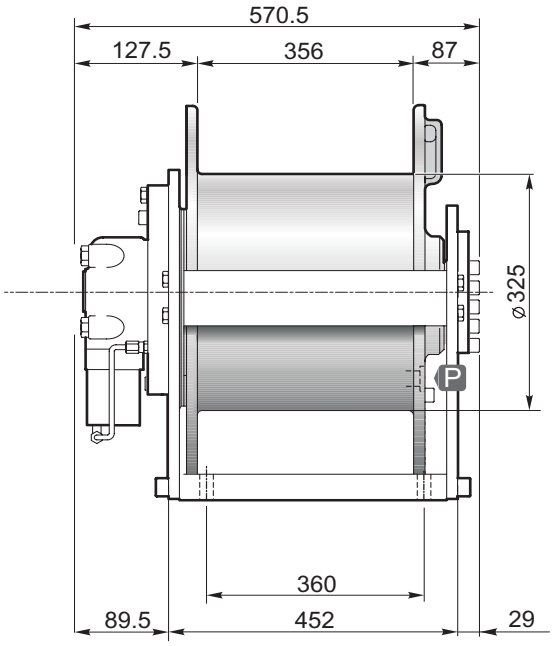
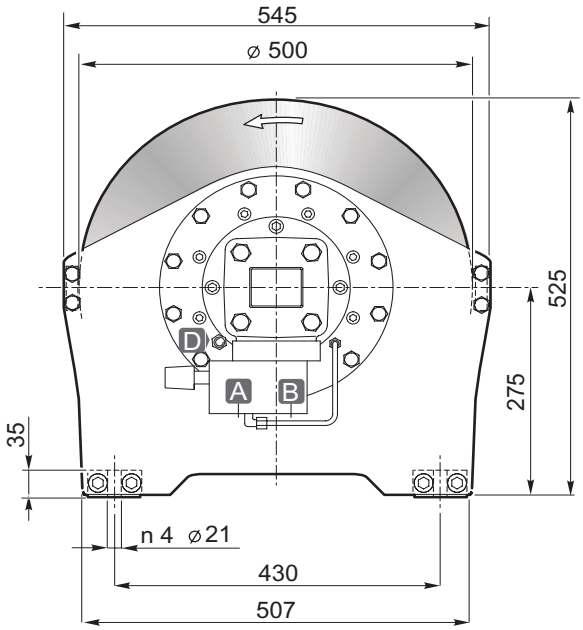
S45/2





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	5750	5250	4850	4500
Velocità fune con *Rope speed with*	100 [L/1']	[m/1']	27.5	30	33	35
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	23	47	74	103
Q.tà fune tamburo filettato *Rope capacity grooved drum*			21	43	68	94

Pressione di sollevamento *Hoisting pressure*	[bar]	230
Max-min portata alimentazione *Max-min pump flow*	[L/1']	100/15
Cilindrata motore *Motor displacement*	[cm³]	200
Rapporto di riduzione *Gear ratio*	1:	18
Diametro fune consigliato Advised rope diameter	[mm]	16

A	Ramo di sollevamento *Hoisting port*	3/4"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	1/2"

kg	Massa *Weight*	260

Tamburo/*Drum* Smooth **1** Grooved **2** **

** Fornibile a richiesta per quantità
Sold by request for quantity

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-F1**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M20 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M20 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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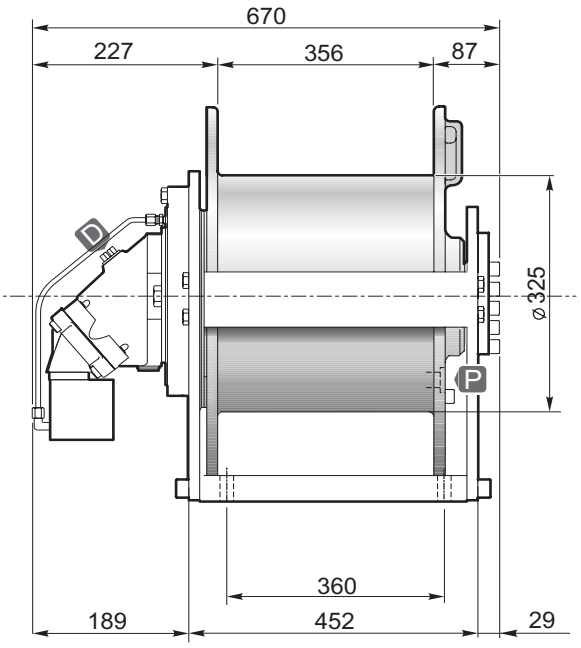
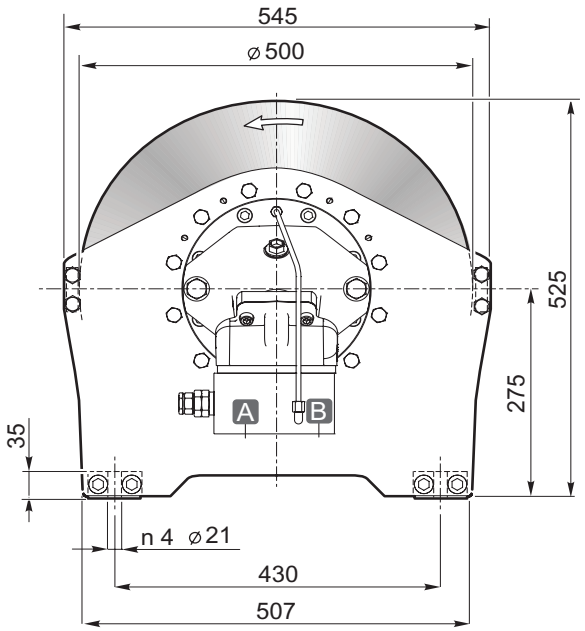
S45V/2





Strato di fune *Rope layer*		n°	1	2	3	4
Tiro diretto *Line pull*		[daN]	5750	5250	4850	4500
Velocità fune con *Rope speed with*	160 [L/1']	[m/1']	48	53	58	63
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	23	47	74	103
Q.tà fune tamburo filettato *Rope capacity grooved drum*			21	43	68	94

Pressione di sollevamento *Hoisting pressure*	[bar]	255
Max-min portata alimentazione *Max-min pump flow*	[L/1']	190/25
Cilindrata motore *Motor displacement*	[cm^3]	64
Rapporto di riduzione *Gear ratio*	1:	51.7
Diametro fune consigliato *Advised rope diameter*	[mm]	16

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	1/2"

kg	Massa *Weight*	285

Tamburo/*Drum* Smooth 1 Grooved 2 **

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-F1**

** Fornibile a richiesta per quantità
Sold by request for quantity

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 44 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M20 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 44 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M20 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

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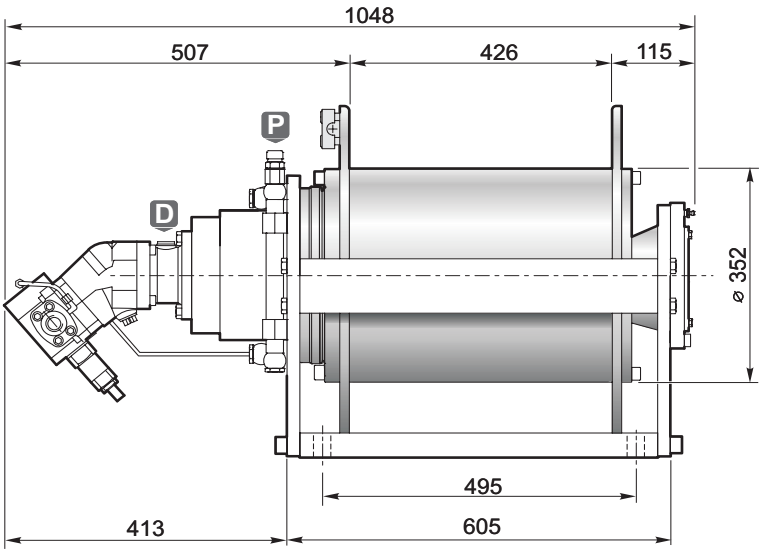
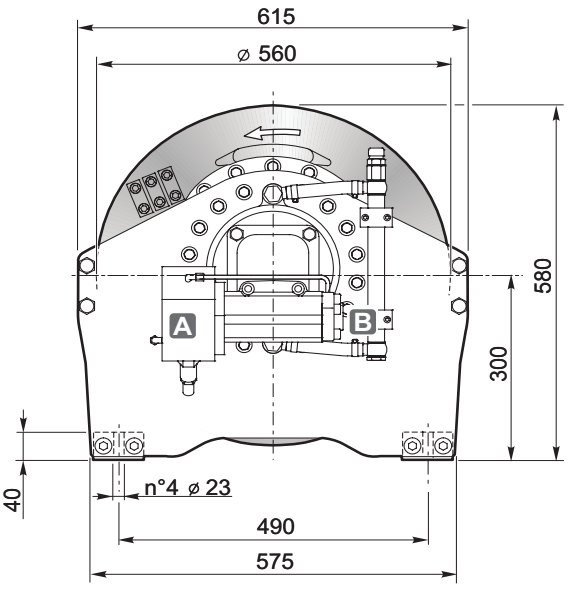
SRD A60





Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	8000	7300	6700	6200
Velocità fune con *Rope speed with*	180 [L/1']	[m/1']	42	46	50	54
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	26	55	87	121
Q.tà fune tamburo filettato *Rope capacity grooved drum*			24	52	83	116

Pressione di sollevamento *Hoisting pressure*	[bar]	265
Max-min portata alimentazione *Max-min pump flow*	[L/1']	220/30
Cilindrata motore *Motor displacement*	[cm^3]	63.5
Rapporto di riduzione *Gear ratio*	1:	74.03
Diametro fune consigliato *Advised rope diameter*	[mm]	18

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	3/4"

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	473

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 80 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le *UNI ISO 4301/1.*

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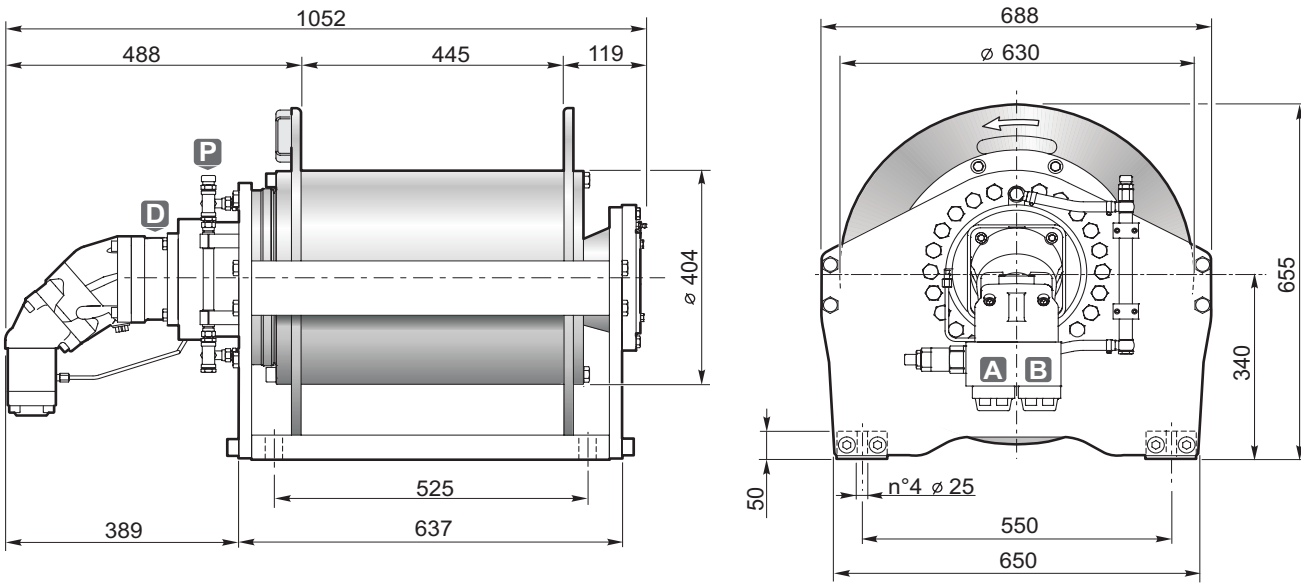
- Per fissare l'argano utilizzare viti M22 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 80 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M22 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD B80



Strato di fune *Rope layer*		n°	1	2	3	4
Tiro diretto *Line pull*		[daN]	10300	9400	8600	8000
Velocità fune con *Rope speed with*	180 [L/1']	[m/1']	35	38	42	45
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	28	59	93	129
Q.tà fune tamburo filettato *Rope capacity grooved drum*			26	56	88	123

Pressione di sollevamento *Hoisting pressure*	[bar]	285
Max-min portata alimentazione *Max-min pump flow*	[L/1']	220/30
Cilindrata motore *Motor displacement*	[cm^3]	84
Rapporto di riduzione *Gear ratio*	1:	76.73
Diametro fune consigliato *Advised rope diameter*	[mm]	20

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	605

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

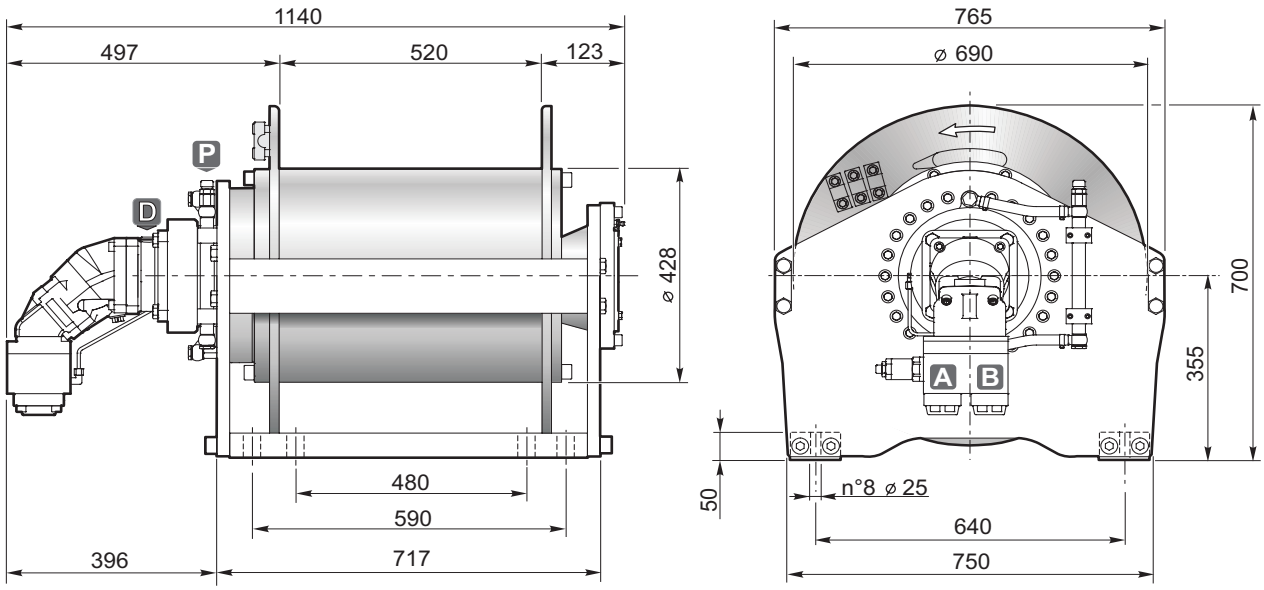
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 80 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M24 classe 12.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 80 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M24 12.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD C100



Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	13000	11800	10800	10000
Velocità fune con *Rope speed with*	220 [L/1']	[m/1']	32	36	39	42
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	32	67	105	147
Q.tà fune tamburo filettato *Rope capacity grooved drum*			30	63	100	140

Pressione di sollevamento *Hoisting pressure*	[bar]	275
Max-min portata alimentazione *Max-min pump flow*	[L/1']	260/30
Cilindrata motore *Motor displacement*	[cm^3]	108
Rapporto di riduzione *Gear ratio*	1:	83.92
Diametro fune consigliato *Advised rope diameter*	[mm]	22

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	722

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

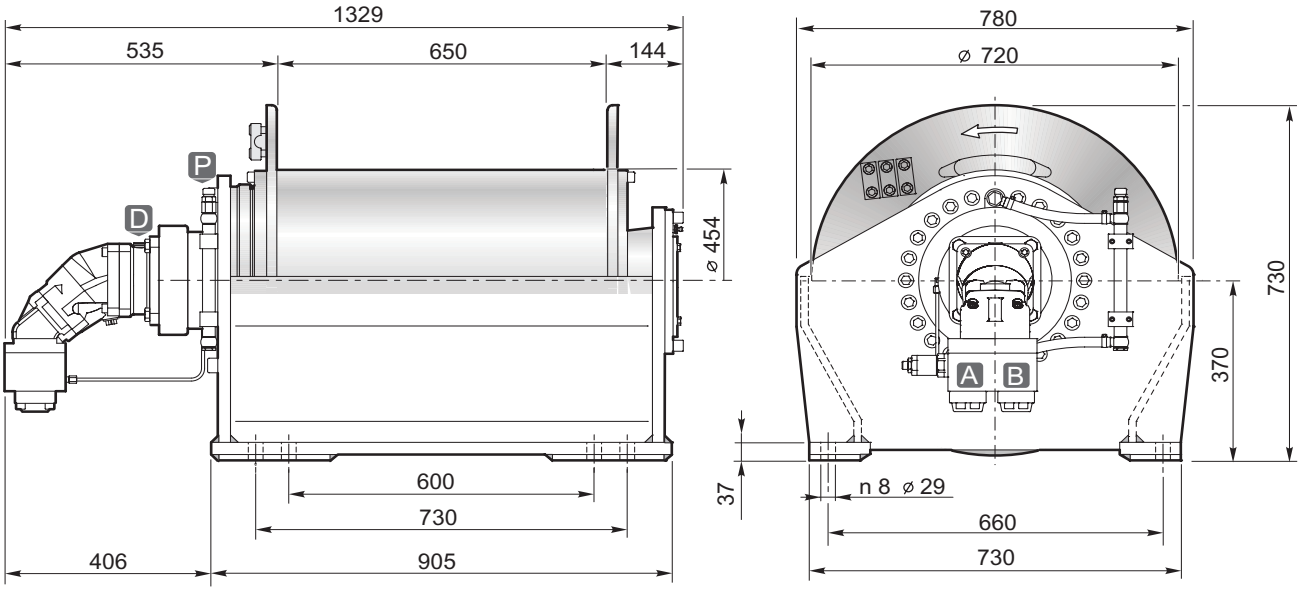
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 80 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M24 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 80 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M24 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD D120



Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	15600	14200	13000	12000
Velocità fune con *Rope speed with*	230 [L/1']	[m/1']	29.5	32.5	35	38
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	39	82	129	180
Q.tà fune tamburo filettato *Rope capacity grooved drum*			35	77	123	173

Pressione di sollevamento *Hoisting pressure*	[bar]	285
Max-min portata alimentazione *Max-min pump flow*	[L/1']	250/30
Cilindrata motore *Motor displacement*	[cm^3]	108
Rapporto di riduzione *Gear ratio*	1:	102.02
Diametro fune consigliato Advised rope diameter	[mm]	24

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	762

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

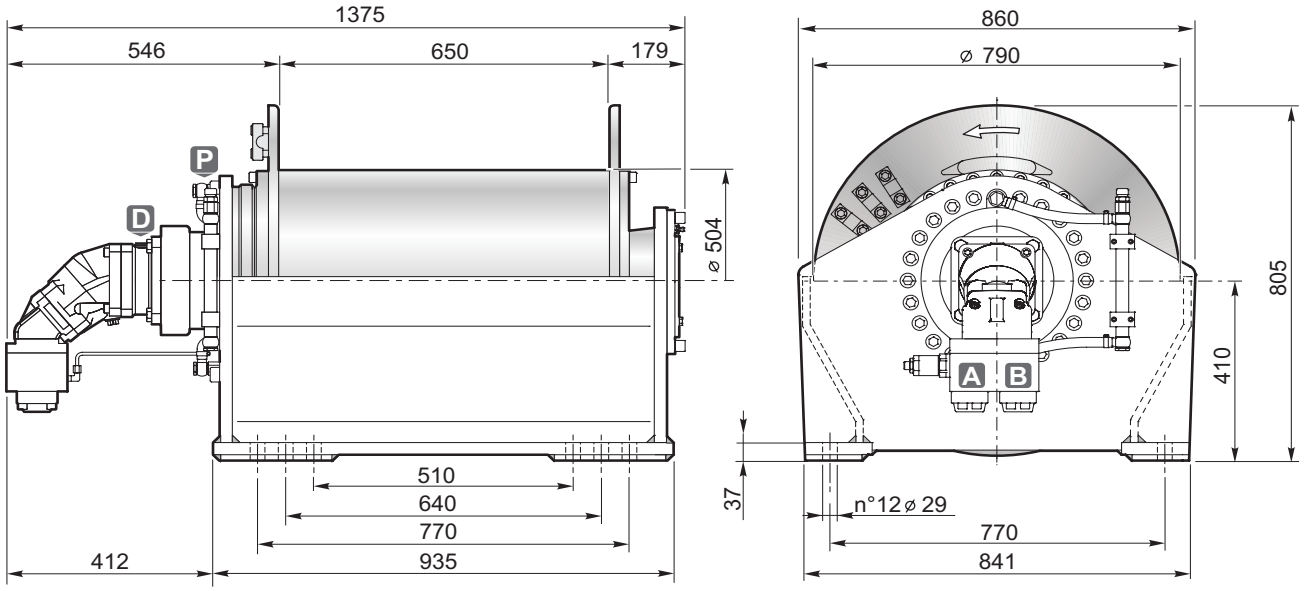
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 80 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M27 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 80 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M27 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD E150



Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	19400	17650	16200	15000
Velocità fune con *Rope speed with*	250 [L/1']	[m/1']	25.5	28	30.5	33
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	40	84	132	183
Q.tà fune tamburo filettato *Rope capacity grooved drum*			36	79	126	176

Pressione di sollevamento *Hoisting pressure*	[bar]	290
Max-min portata alimentazione *Max-min pump flow*	[L/1']	250/30
Cilindrata motore *Motor displacement*	[cm^3]	130
Rapporto di riduzione *Gear ratio*	1:	117.8
Diametro fune consigliato Advised rope diameter	[mm]	26

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	762

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

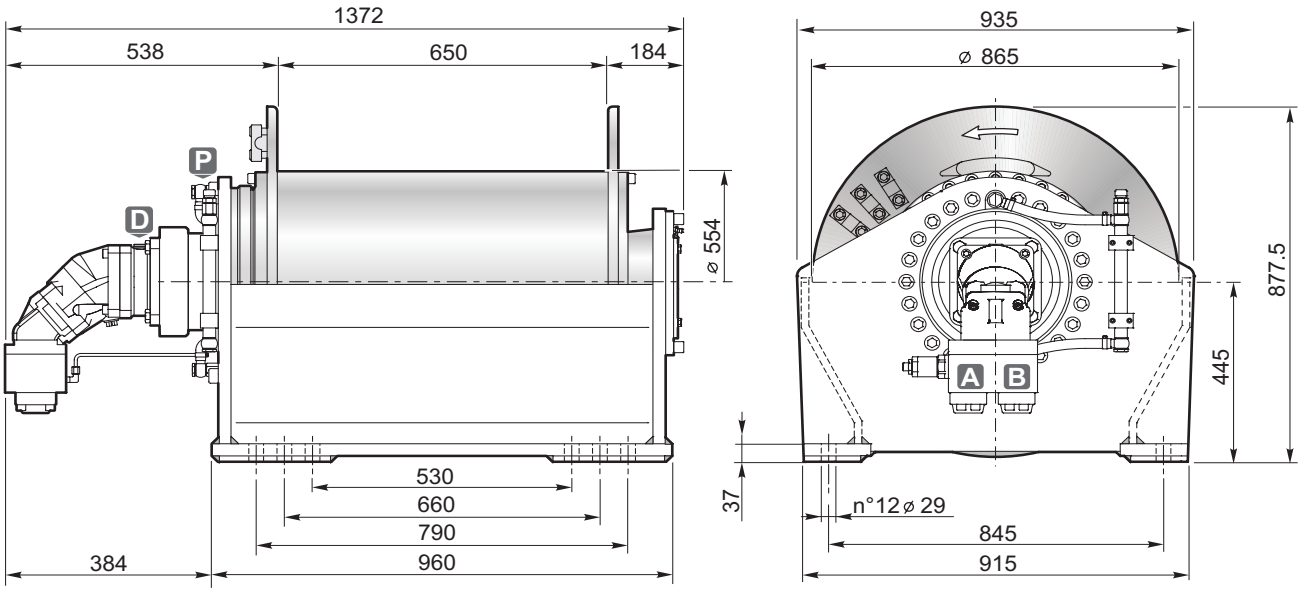
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M27 classe 10.9.
- Questo argano è disponible su richiesta.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M27 10.9 grade.*
- *This winch is avaiable on request.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD F180



Strato di fune *Rope layer*		n°	1	2	3	4
Tiro diretto *Line pull*		[daN]	23200	21150	19450	18000
Velocità fune con *Rope speed with*	250 [L/1']	[m/1']	22	24	26	28
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	40	85	133	186
Q.tà fune tamburo filettato *Rope capacity grooved drum*			37	80.5	128	179

Pressione di sollevamento *Hoisting pressure*	[bar]	295
Max-min portata alimentazione *Max-min pump flow*	[L/1']	250/30
Cilindrata motore *Motor displacement*	[cm^3]	130
Rapporto di riduzione *Gear ratio*	1:	150.2
Diametro fune consigliato *Advised rope diameter*	[mm]	28

A	Ramo di sollevamento *Hoisting port*	1"
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/2"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	795

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

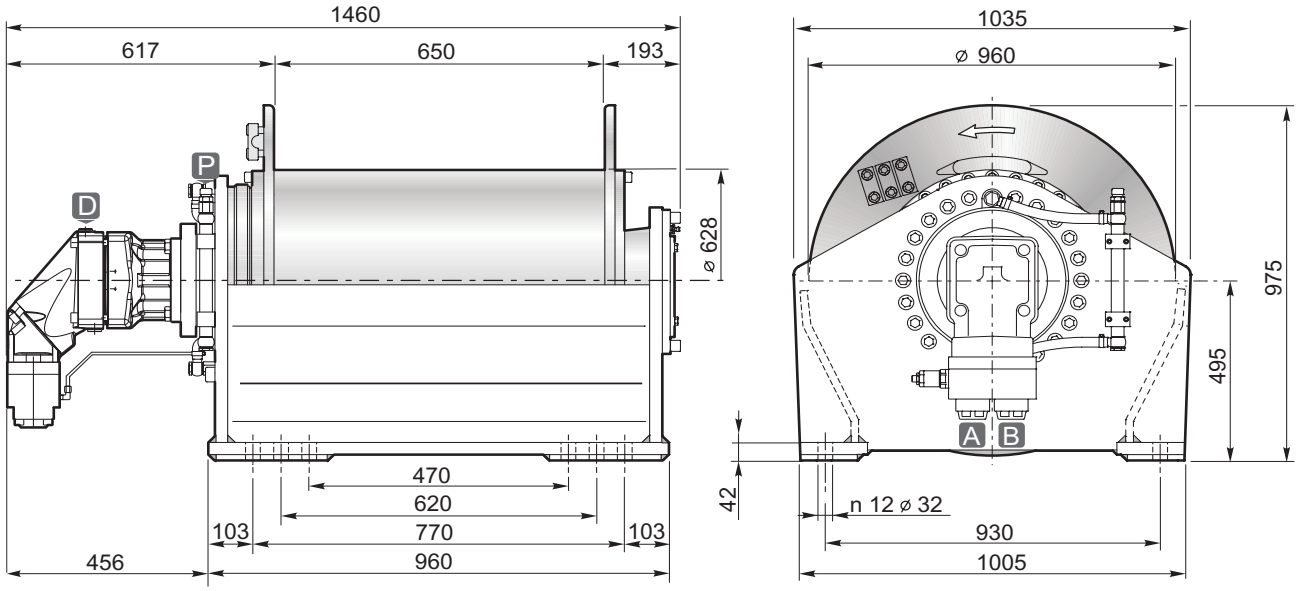
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 120 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M27 classe 10.9.
- Questo argano è disponibile su richiesta.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 120 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M27 10.9 grade.*
- *This winch is avaiable on request.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

SRD G230



Strato di fune ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	29300	26850	24750	23000
Velocità fune con *Rope speed with*	250 [L/1']	[m/1']	16.5	18	19.5	21
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	42.5	89	140	194
Q.tà fune tamburo filettato *Rope capacity grooved drum*			38.5	84	133	186

Pressione di sollevamento *Hoisting pressure*	[bar]	290
Max-min portata alimentazione *Max-min pump flow*	[L/1']	250/30
Cilindrata motore *Motor displacement*	[cm^3]	242
Rapporto di riduzione *Gear ratio*	1:	120.13
Diametro fune consigliato *Advised rope diameter*	[mm]	30

A	Ramo di sollevamento *Hoisting port*	1" 1/2
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	3/4"
P	Tappo olio lubrificazione *Lubrication oil plug*	M18x1.5

kg	Massa *Weight*	865

Accessori disponibili / *Available accessories* **A-B-C1-C2-F1-F2**

Tamburo/*Drum* Smooth **1** Grooved **2**

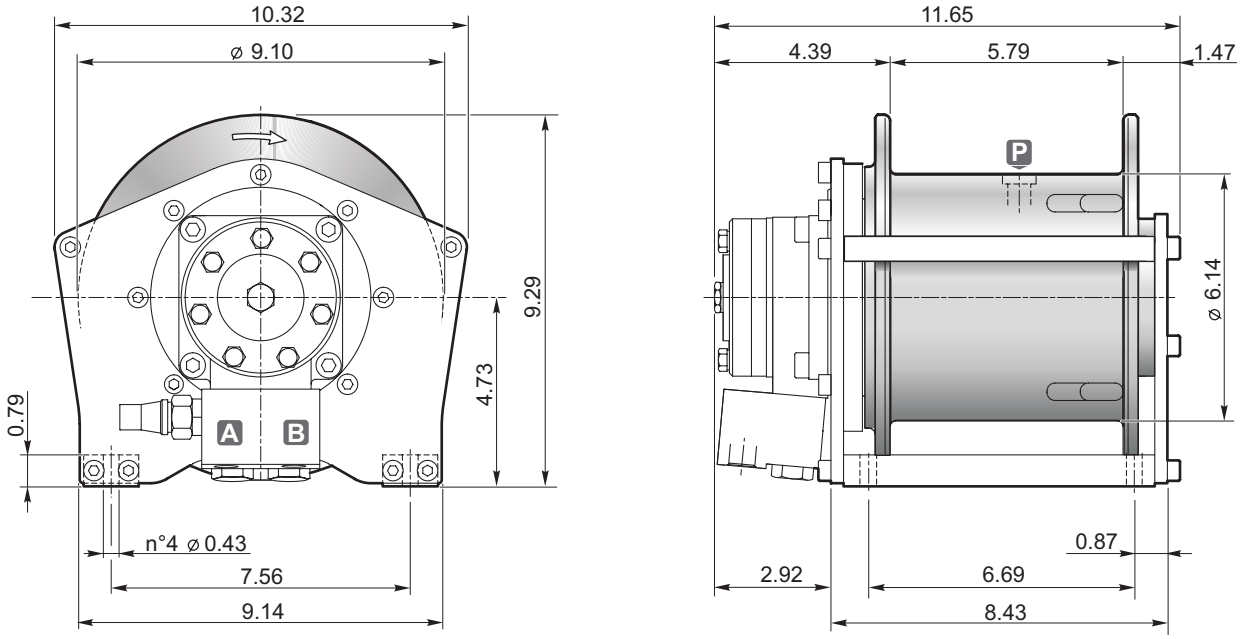
- Sollevamento con rotazione del tamburo antioraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 160 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- L'apparecchio è classificato secondo le UNI ISO 4301/1.
- Per fissare l'argano utilizzare viti M30 classe 10.9.
- Questo argano è disponibile su richiesta.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with counter clockwise rotation of the drum (or clockwise if required).*
- *Negative multi-disc brake, with 160 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *The equipment is classified under UNI ISO 4301/1.*
- *To fix the winch use screws M30 10.9 grade.*
- *This winch in avaiable on request.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

A11



Performance info: 5.23:1 ratio - 3.05 cu.in. disp. - 2250 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**
Line pull	*[lbs]*	*1100*	*1000*	*950*	*890*	840
Line speed ***@ 7.7 GPM***	*[fpm]*	*164*	*176*	*189*	*200*	214

Above specifications based on 1/4" wire rope diameter

A	*Hoisting port*	*9/16" 18-UNF*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

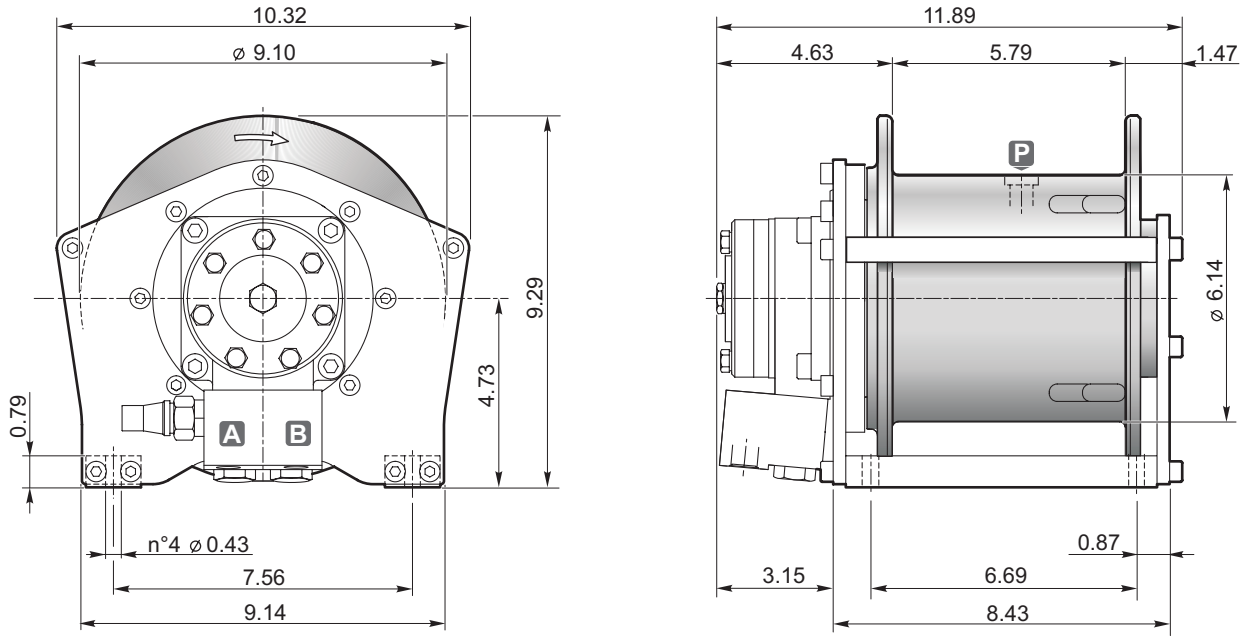
lbs	*Weight*	*75*

Rope Dia. [in]	*Rope storage capacity [FT]*					**D/d**
	Layer					
	1	**2**	**3**	**4**	**5**	
1/4"	*37*	*77*	*120*	*165*	214*	25.5
5/16"	*30*	*62*	*97*	*135**	—	20.6

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.20 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A18



Performance info: 5.23:1 ratio - 4.88 cu.in. disp. - 2300 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**
Line pull	*[lbs]*	*1800*	*1650*	*1550*	*1450*	1350
Line speed ***@ 7.7 GPM***	*[fpm]*	*102*	*110*	*118*	*125*	132

Above specifications based on 1/4" wire rope diameter

A	*Hoisting port*	*9/16" 18-UNF*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

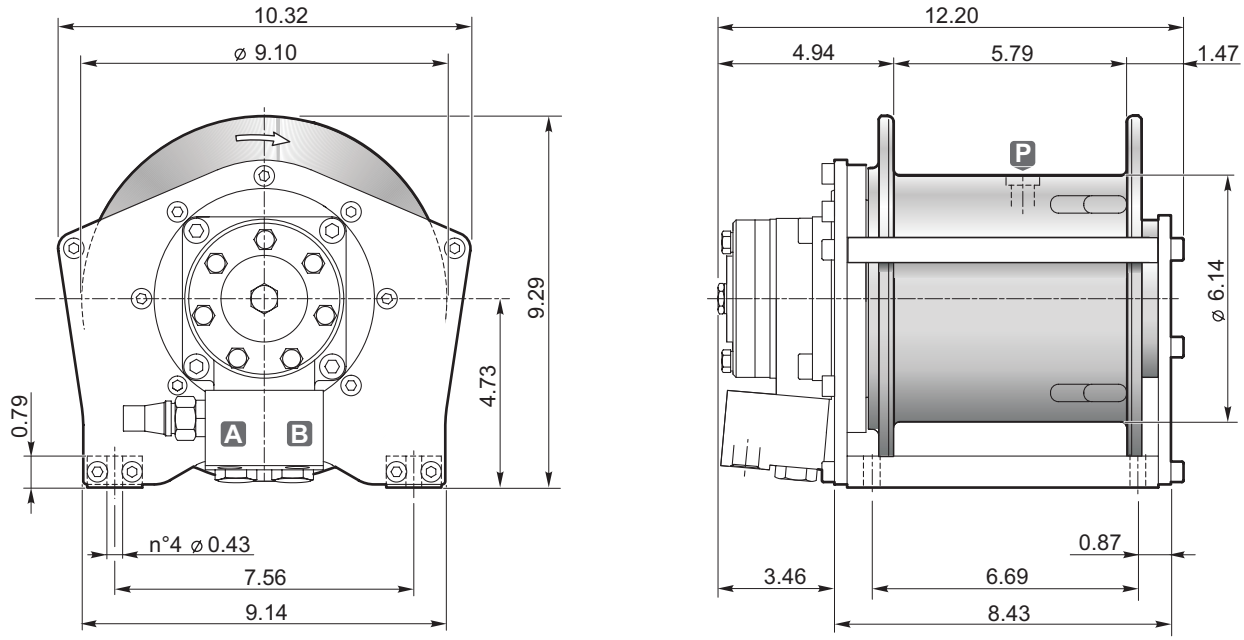
lbs	*Weight*	*75*

Rope Dia. [in]	*Rope storage capacity [FT]*					**D/d**
	Layer					
	1	**2**	**3**	**4**	**5**	
1/4"	*37*	*77*	*120*	*165*	214*	25.5
5/16"	*30*	*62*	*97*	*135**	—	20.6

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.20 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A24



Performance info: 5.23:1 ratio - 6.10 cu.in. disp. - 2450 PSI

Layer	**n**	**1**	**2**	**3**	**4**
Line pull	*[lbs]*	*2400*	*2190*	*2000*	*1860*
Line speed ***@ 7.7 GPM***	*[fpm]*	*82*	*90*	*98*	106

Above specifications based on 5/16" wire rope diameter

A	*Hoisting port*	*9/16" 18-UNF*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

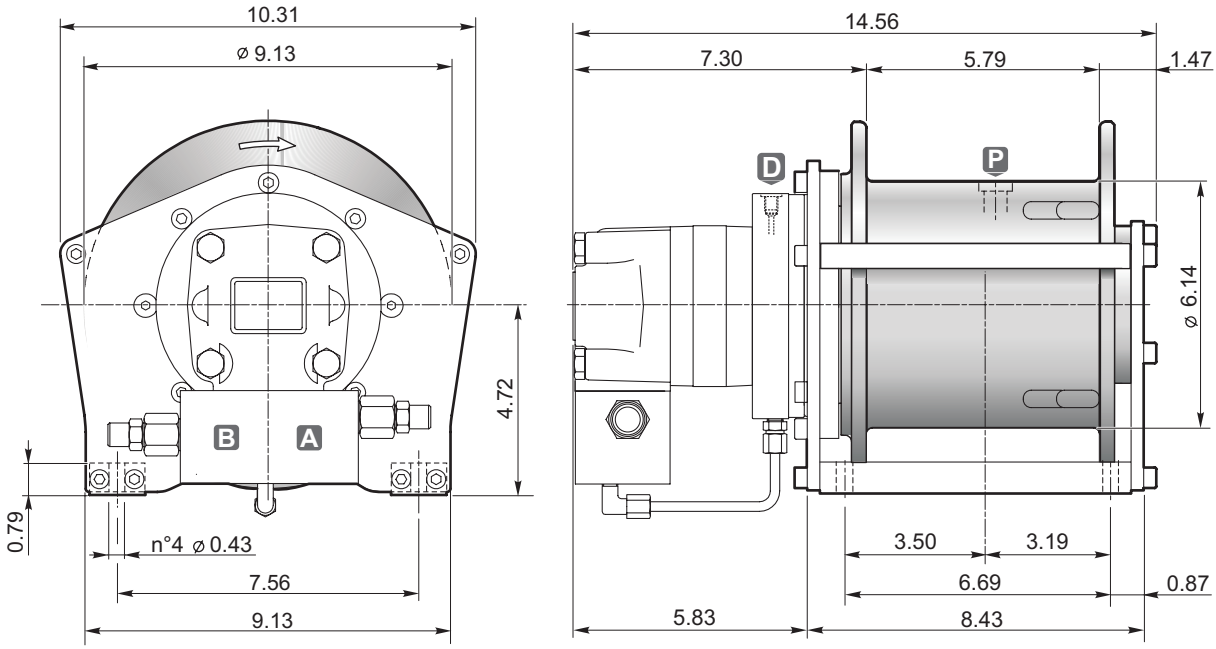
lbs	*Weight*	*75*

Rope Dia. [in]	*Rope storage capacity [FT]*				**D/d**
	Layer				
	1	**2**	**3**	**4**	
5/16"	*30*	*62*	*97*	135*	20.5
3/8"	*25*	*52*	*82**	—	17.4

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.20 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A30



Performance info: 5.23:1 ratio - 7.63 cu.in. disp. - 2250 PSI

Layer	**n**	**1**	**2**	**3**	**4**
Line pull	*[lbs]*	*3000*	*2730*	*2500*	*2320*
*Line speed @ **15 GPM***	*[fpm]*	*140*	*153*	*167*	180

Above specifications based on 5/16" wire rope diameter

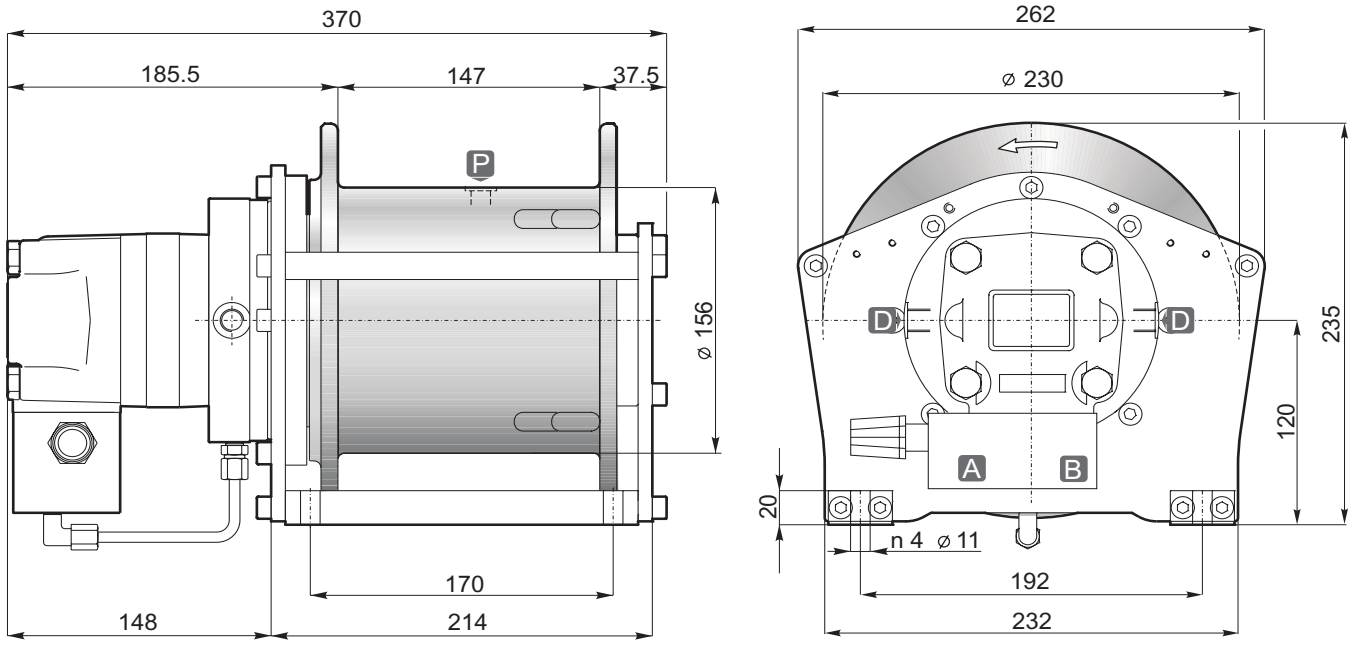
A	*Hoisting port*	*7/8" 14-UNF*	D	*Motor case drain*	*1/4" BSP*	lbs	*Weight*	*100*
B	*Lowering port*		P	*Lubrication oil plug*	*3/8" BSP*			

Rope Dia. [in]	*Rope storage capacity [FT]*				**D/d**
	Layer				
	1	**2**	**3**	**4**	
5/16"	*30*	*62*	*97*	135*	20.5
3/8"	*25*	*52*	*82**	—	17.4

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.20 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A30



Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4**
Tiro diretto *Line pull*		[daN]	1360	1200	1100	1000
Velocità fune con *Rope speed with*	57 [L/1']	[m/1']	42	46	50	54
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	11	23	36	51

Pressione di sollevamento *Hoisting pressure*	[bar]	155
Max-min portata alimentazione *Max-min pump flow*	[L/1']	*76/20*
Cilindrata motore *Motor displacement*	[cm^3]	125
Rapporto di riduzione *Gear ratio*	1:	5.23
Diametro fune consigliato Advised rope diameter	[mm]	8

A	Ramo di sollevamento *Hoisting port*	7/8" 14 UNF
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio Drain port	1/4" BSP
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8" BSP

kg	Massa *Weight*	36 kg

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

Tamburo/*Drum* Smooth **1**

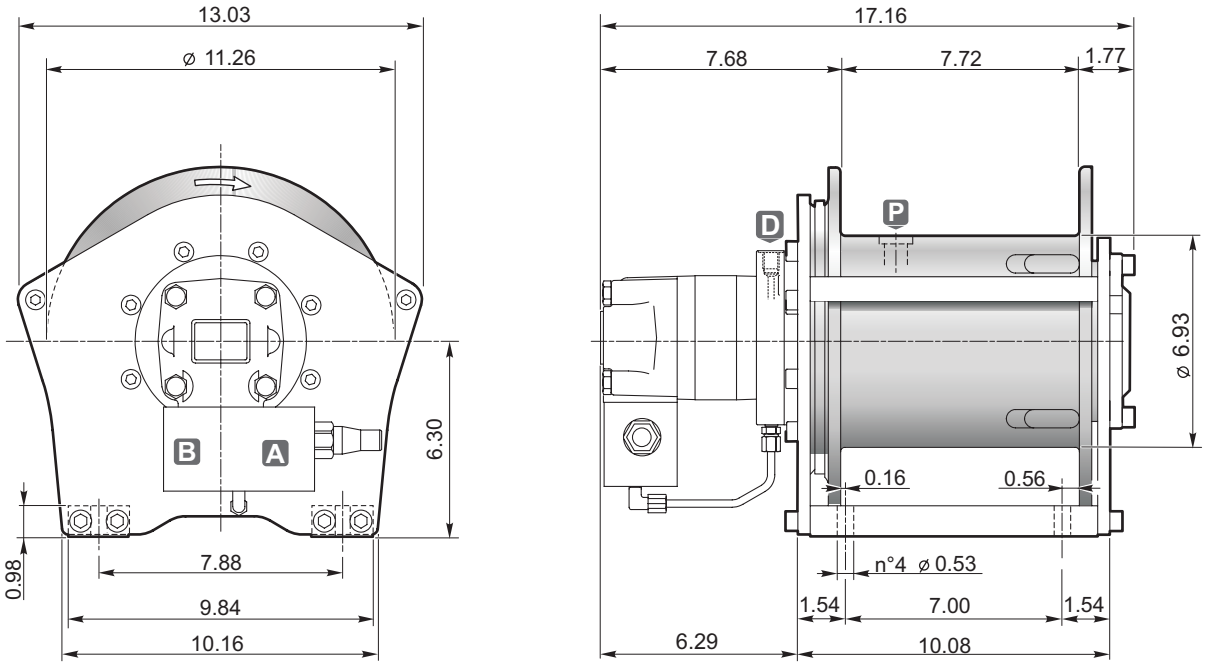
- Sollevamento con rotazione del tamburo oraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 42 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- Per fissare l'argano utilizzare viti M10 classe 10.9 .
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with clockwise rotation of the drum (or counter-clockwise if required).*
- *Negative multi-disc brake, with 42 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *To fix the winch use screws M10 10.9 grade .*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

A44



Performance info: 4.77:1 ratio - 12.2 cu.in. disp. - 2450 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5***
Line pull	*[lbs]*	*4400*	*4000*	*3650*	*3350*	3100
Line speed **@ *20 GPM***	*[fpm]*	*141*	*155*	*170*	*184*	200

Above specifications based on 3/8" wire rope diameter

A	*Hoisting port*	*7/8" 14-UNF*
B	*Lowering port*	

D	*Motor case drain*	*1/4" BSP*
P	*Lubrication oil plug*	*3/8" BSP*

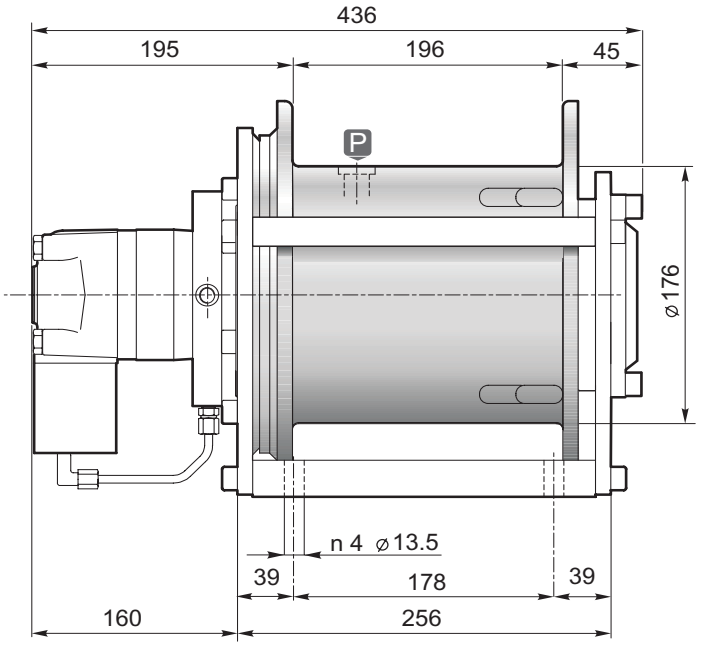
lbs *Weight*	*110*

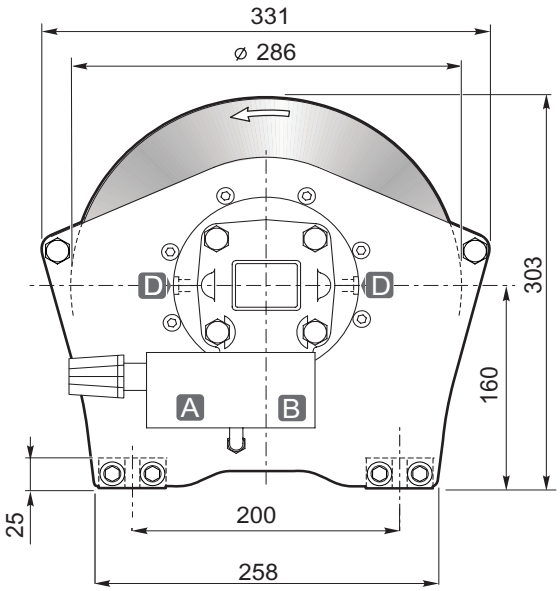
Rope Dia. [in]	*Rope storage capacity [FT]*					**D/d**
	Layer					
	1	**2**	**3**	**4**	**5**	
3/8"	*37*	*78*	*124*	*173*	225*	19.5
7/16"	*32*	*68*	*108*	*151**	—	16.8

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 455 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.25 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A44





Strato di fune / ***Rope layer***		**n°**	**1**	**2**	**3**	**4**
Tiro diretto / *Line pull*		[daN]	2000	1800	1650	1530
Velocità fune con / *Rope speed with*	76 [L/1']	[m/1']	43	47.5	52	56.5
Q.tà fune tamburo liscio / *Rope capacity smooth drum*		[m]	11	23	36	51

Pressione di sollevamento / *Hoisting pressure*	[bar]	170
Max-min portata alimentazione / *Max-min pump flow*	[L/1']	*76/20*
Cilindrata motore / *Motor displacement*	[cm^3]	200
Rapporto di riduzione / *Gear ratio*	1:	4.77
Diametro fune consigliato / *Advised rope diameter*	[mm]	10

A	Ramo di sollevamento / *Hoisting port*	3/4" BSP
B	Ramo di discesa / *Lowering port*	

D	Ramo di drenaggio / Drain port	1/4" BSP
P	Tappo olio lubrificazione / *Lubrication oil plug*	3/8" BSP

kg	Massa / *Weight*	45 kg

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

Tamburo/*Drum* Smooth **1**

- Sollevamento con rotazione del tamburo oraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 62 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- Per fissare l'argano utilizzare viti M12 classe 10.9 .
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with clockwise rotation of the drum (or counter-clockwise if required).*
- *Negative multi-disc brake, with 62 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *To fix the winch use screws M12 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

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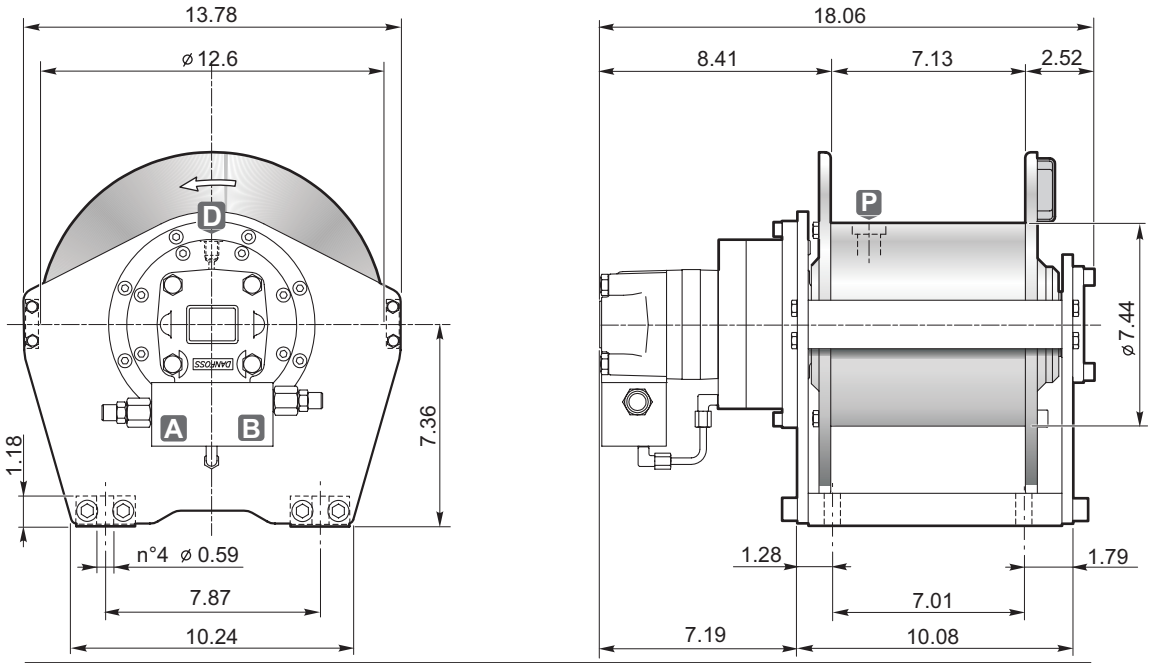
A55



Performance info: 12.28:1 ratio - 6.1 cu.in. disp. - 2550 PSI

Layer	**n**	**1**	**2**	**3**	**4**
Line pull	*[lbs]*	*5500*	*4800*	*4300*	*3850*
Line speed ***@ 10 GPM***	*[fpm]*	*61*	*69*	*78*	*86*

Above specifications based on 9/16" wire rope diameter

A	*Hoisting port*	*7/8" 14 UNF*
B	*Lowering port*	

D	*Motor case drain*	*1/4" BSP*
P	*Lubrication oil plug*	*3/8" BSP*

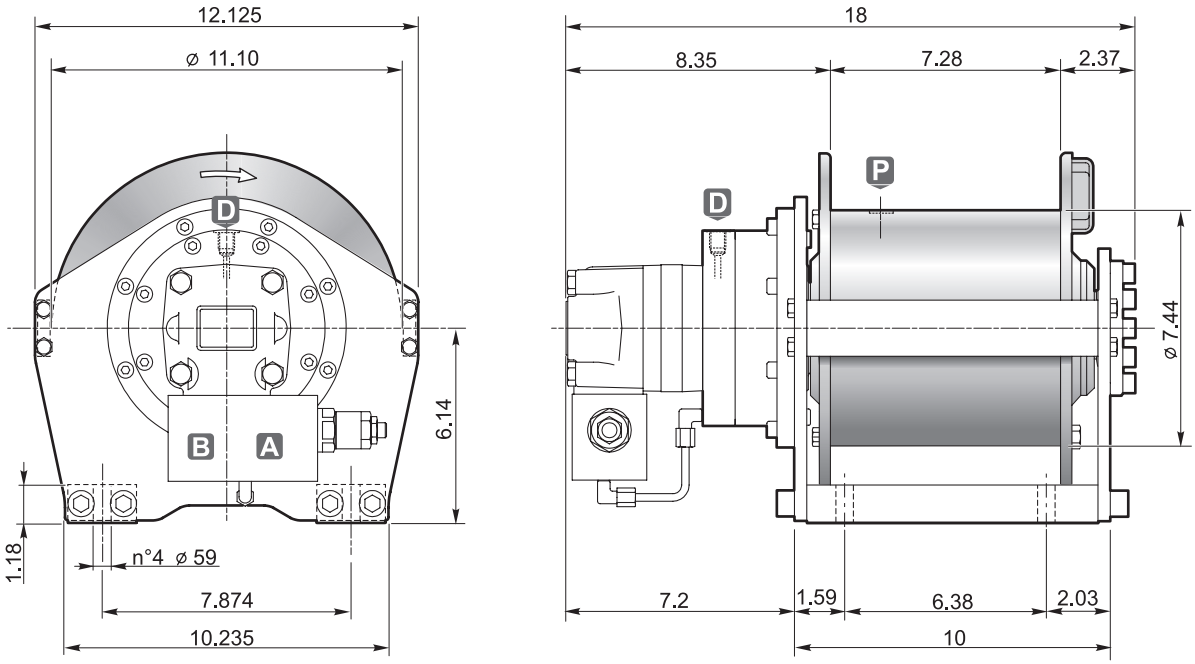
Weight	*180*

Rope Dia. [in]	*Rope storage capacity [FT]*			
	Layer			
	1	**2**	**3**	**4**
1/2"	*28*	*59*	*93*	131
9/16"	*24*	*52*	*84*	118*

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 3 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.25 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A60



Performance info: 12.28:1 ratio - 6.10 cu.in. disp. - 2650 PSI

Layer	**n**	**1**	**2**	**3**	**4***
Line pull	*[lbs]*	*6000*	*5400*	*4900*	4500
Line speed **@ *17 GPM***	*[fpm]*	*103*	*114*	*126*	137

Above specifications based on 3/8" wire rope diameter

A	*Hoisting port*	*7/8" 14-UNF*	D	*Motor case drain*	*1/4" BSP*
B	*Lowering port*		P	*Lubrication oil plug*	*3/8" BSP*

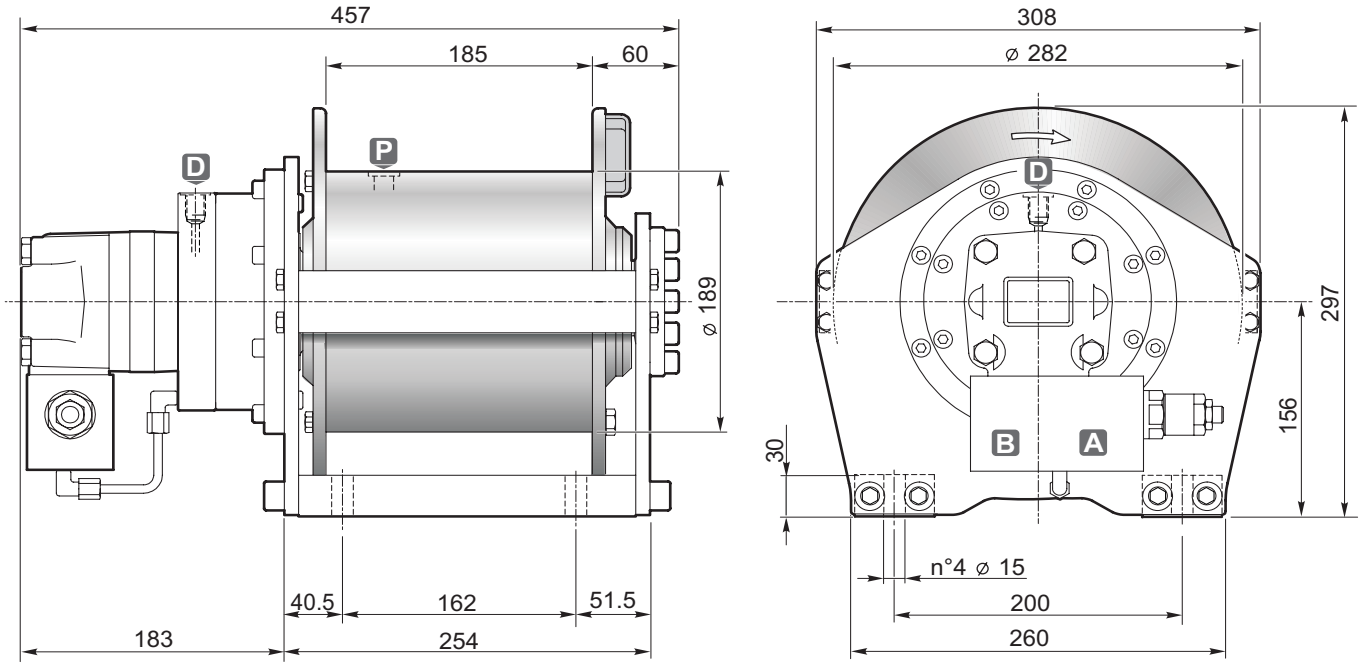
lbs *Weight*	*165*

Rope Dia. [in]	*Rope storage capacity [FT]*				**D/d**
	Layer				
	1	**2**	**3**	**4**	
3/8"	*38*	*79*	*124*	*172**	20.8
7/16"	*32*	*68*	*108*	151*	18.0

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 3 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.37 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A60



Strato di fune *Rope layer*		**n°**	**1**	**2**	**3**	**4***
Tiro diretto *Line pull*		[daN]	2670	2400	2180	2000
Velocità fune con *Rope speed with*	64 [L/1']	[m/1']	31.5	35	38.5	42
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	10	21	33	46

* Per la normativa ANSI, il numero di strati massimo è 3.
** The last layer per ANSI is 3.*

Pressione di sollevamento *Hoisting pressure*	[bar]	185
Max-min portata alimentazione *Max-min pump flow*	[L/1']	75/10
Cilindrata motore *Motor displacement*	[cm^3]	100
Rapporto di riduzione *Gear ratio*	1:	12.28
Diametro fune consigliato Advised rope diameter	[mm]	11

A	Ramo di sollevamento *Hoisting port*	3/4" BSP
B	Ramo di discesa *Lowering port*	

D	Ramo di drenaggio *Drain port*	1/4" BSP
P	Tappo olio lubrificazione *Lubrication oil plug*	3/8" BSP

kg Massa *Weight*	74 kg

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

Tamburo/*Drum* Smooth 1

- Sollevamento con rotazione del tamburo oraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 74 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- Per fissare l'argano utilizzare viti M14 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with clockwise rotation of the drum (or counter-clockwise if required).*
- *Negative multi-disc brake, with 74 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *To fix the winch use screws M14 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

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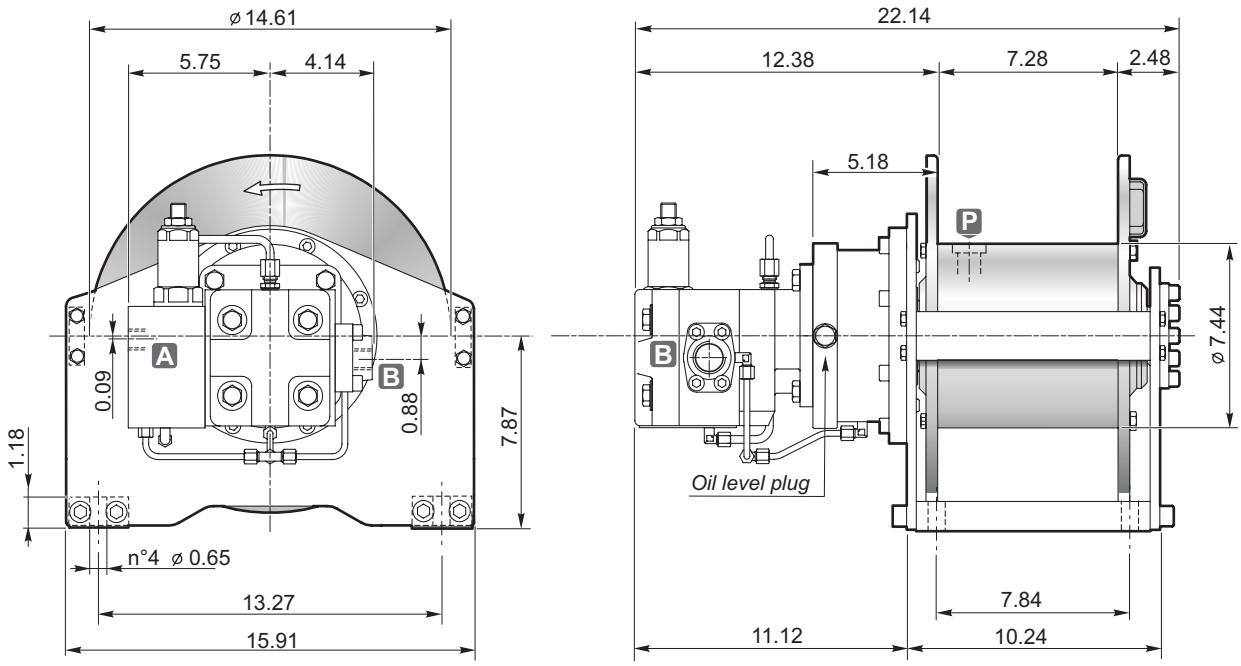
A62-3



Performance info: 26.5:1 ratio - 3.5 cu.in. disp. - 2450 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Line pull	*[lbs]*	*6000*	*5400*	*4920*	*4510*	*4160*	*3860*	*3600*	*3380*
Line speed ***@ 21 GPM***	*[fpm]*	*90*	*100*	*110*	*120*	*130*	*140*	*150*	*160*

Above specifications based on 7/16" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs	*Weight*	*200*

Rope Dia. [in]	*Rope storage capacity [FT]*									**D/d**
	Layer									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	
3/8"	*38*	*79*	*124*	*172*	*225*	*280*	*340*	*403*	*470**	20.8
7/16"	*32*	*68*	*108*	*151*	*197*	*248*	*302*	*360**	—	18.0

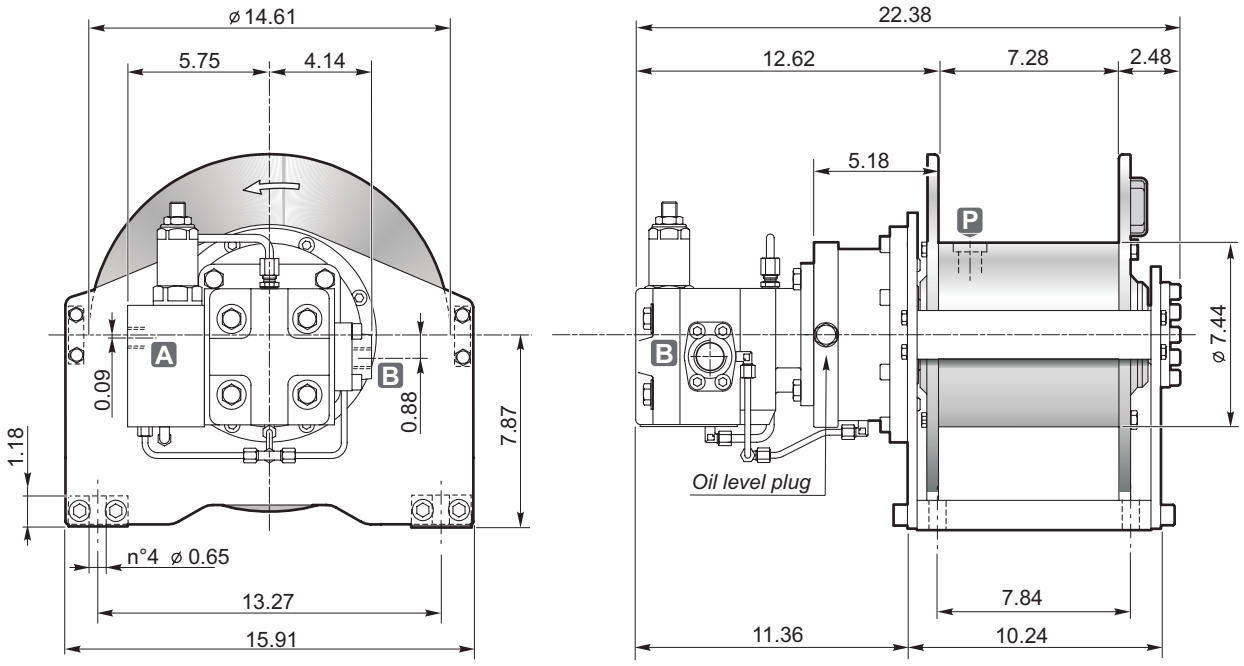
**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.40 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

A62-4



Performance info: 26.5:1 ratio - 4.0 cu.in. disp. - 2100 PSI

Layer	n	1	2	3	4	5	6	7	8
Line pull	*[lbs]*	*6000*	*5400*	*4920*	*4510*	*4160*	*3860*	*3600*	*3380*
*Line speed @ **27 GPM***	*[fpm]*	*100*	*112*	*123*	*134*	*145*	*156*	*167*	*179*
*Line speed @ **60 GPM***	*[fpm]*	*223*	*248*	*273*	*297*	*322*	*346*	*371*	*396*

Above specifications based on 7/16" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs *Weight*	*200*

Rope Dia. [in]	*Rope storage capacity [FT]*									D/d
	Layer									
	1	2	3	4	5	6	7	8	9	
3/8"	*38*	*79*	*124*	*172*	*225*	*280*	*340*	*403*	470*	20.8
7/16"	*32*	*68*	*108*	*151*	*197*	*248*	*302*	*360**	—	18.0

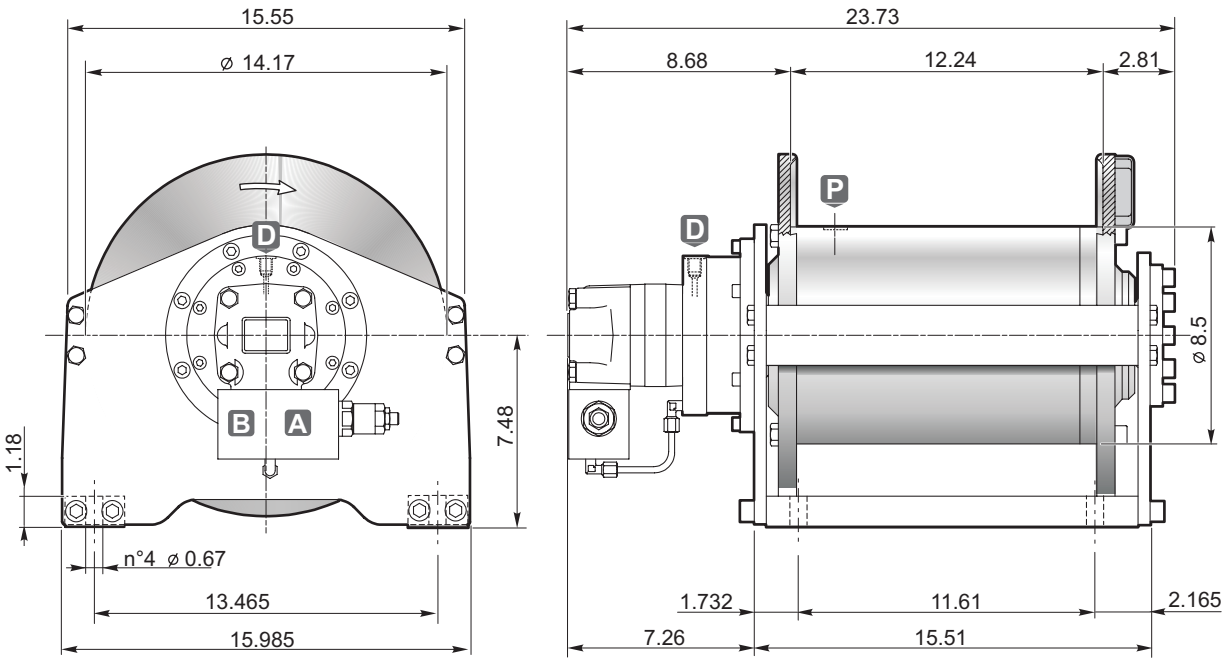
**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.40 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

A80



Performance info: 15.26:1 ratio - 7.67 cu.in. disp. - 2650 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**
Line pull	*[lbs]*	*8000*	*7200*	*6500*	*6000*	5500
Line speed @ ***17 GPM***	*[fpm]*	*76*	*84*	*93*	*101*	110

Above specifications based on 1/2" wire rope diameter

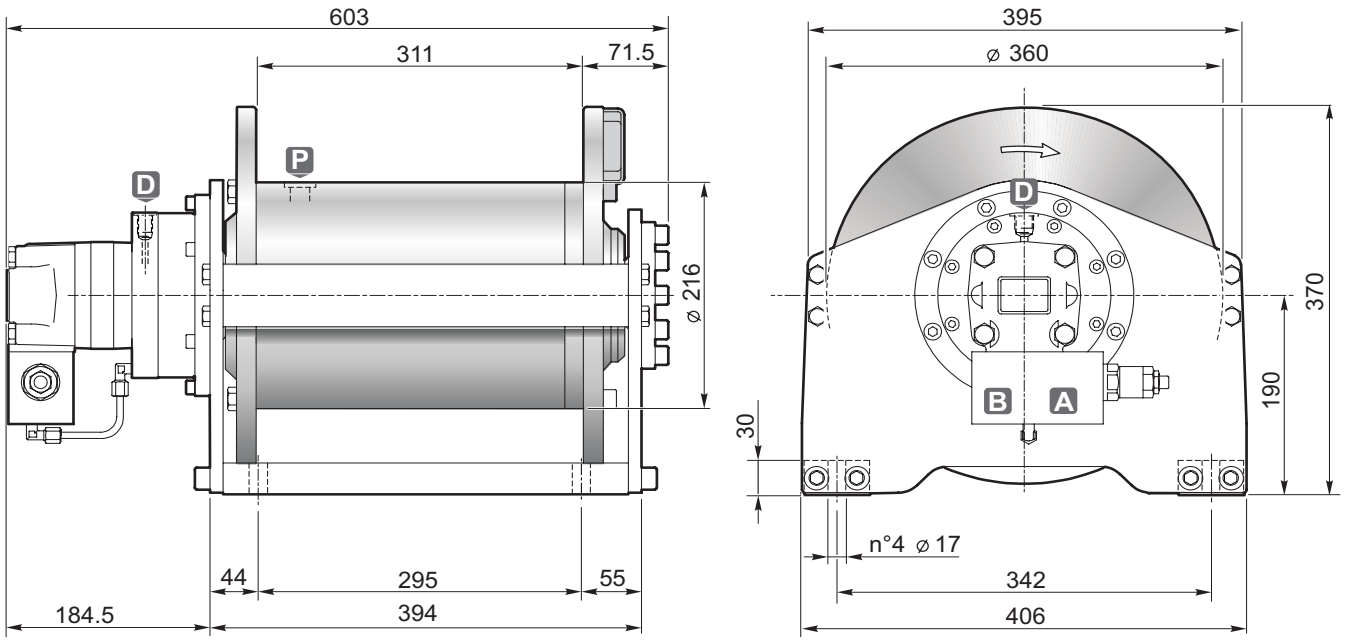
A	*Hoisting port*	*7/8" 14-UNF*	D	*Motor case drain*	*1/4" BSP*	lbs	*Weight*	*290*
B	*Lowering port*		P	*Lubrication oil plug*	*3/8" BSP*			

Rope Dia. [in]	*Rope storage capacity [FT]*					**D/d**
	Layer					
	1	**2**	**3**	**4**	**5**	
1/2"	*55*	*117*	*184*	*258*	338*	18

**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.75 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

A80



Strato di fune *Rope layer*		n°	1	2	3	4
Tiro diretto *Line pull*		[daN]	3525	3175	2885	2645
Velocità fune con *Rope speed with*	45 [L/1']	[m/1']	16	18	19.5	21.5
Q.tà fune tamburo liscio *Rope capacity smooth drum*		[m]	17	36	57	80

Pressione di sollevamento *Hoisting pressure*	[bar]	175
Max-min portata alimentazione *Max-min pump flow*	[L/1']	75/6
Cilindrata motore *Motor displacement*	[cm^3]	125
Rapporto di riduzione *Gear ratio*	1:	15.3
Diametro fune consigliato *Advised rope diameter*	[mm]	12.7

A	Ramo di sollevamento *Hoisting port*	3/4" BSP	D	Ramo di drenaggio *Drain port*	1/4" BSP
B	Ramo di discesa *Lowering port*		P	Tappo olio lubrificazione *Lubrication oil plug*	3/8" BSP

kg	Massa *Weight*	132 kg

Accessori disponibili / *Available accessories* **A-B-C1-C2-D-E**

Tamburo/*Drum* Smooth **1**

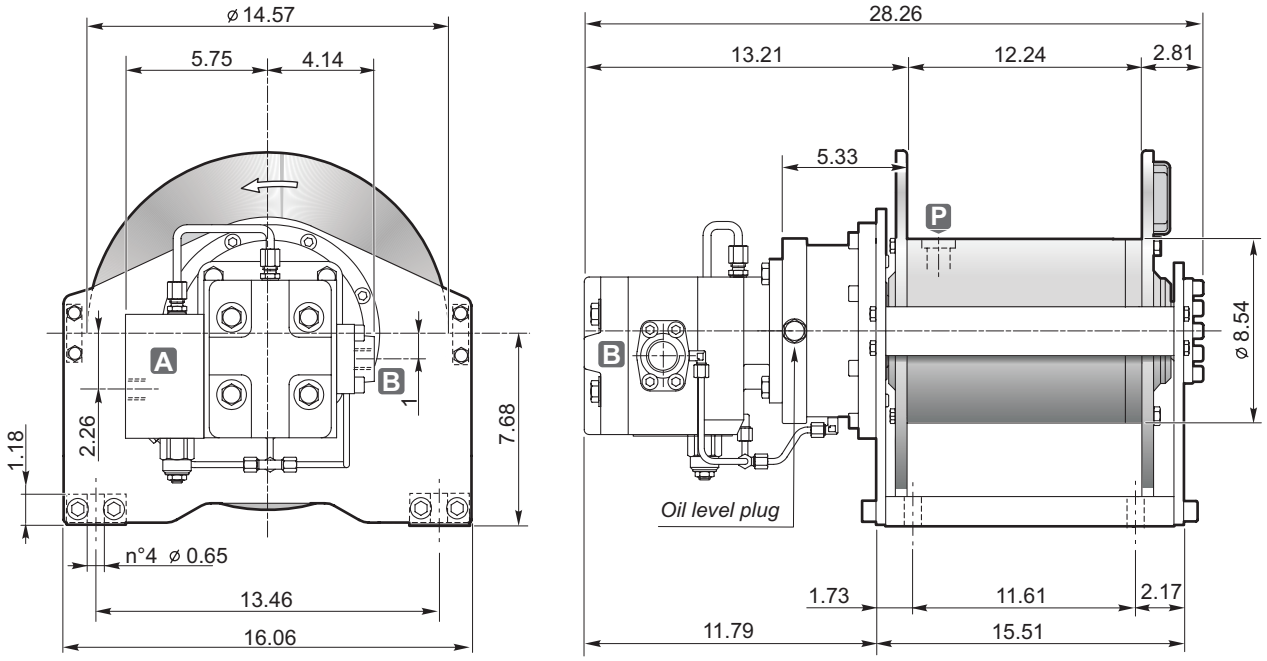
- Sollevamento con rotazione del tamburo oraria (contraria a richiesta.
- Freno negativo multidisco con coppia statica di 74 daNm.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 4 spire di fune sempre avvolta.
- Per fissare l'argano utilizzare viti M16 classe 10.9.
- Le caratteristiche tecniche possono variare senza preavviso.

- *Hoisting with clockwise rotation of the drum (or counter-clockwise if required).*
- *Negative multi-disc brake, with 74 daNm of static torque.*
- *Gear lubrication oil bath.*
- *Maximum back pressure on return line: 5 bar.*
- *Always keep at least 4 wraps of rope on the drum for safety reasons.*
- *To fix the winch use screws M16 10.9 grade.*
- *Technical features may change with no previous notice from the manufacturer.*

IL PRESENTE ARGANO NON PUÒ ESSERE UTILIZZATO PER IL SOLLEVAMENTO DI PERSONE
THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE

dinamic oil

A81-5



Performance info: 21:1 ratio - 5.14 cu.in. disp. - 3000 PSI

Layer	n	1	2	3	4	5	6
Line pull	*[lbs]*	*8000*	*7200*	*6500*	*6000*	*5500*	5100
Line speed ***@ 45 GPM***	*[fpm]*	*195*	*216*	*238*	*260*	*281*	303
Line speed ***@ 65 GPM***	*[fpm]*	*282*	*313*	*344*	*376*	*407*	438

Above specifications based on 1/2" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs	*Weight*	*330*

Rope Dia. [in]	*Rope storage capacity [FT]*						D/d
	Layer						
	1	2	3	4	5	6	
7/16"	*63*	*132*	*208*	*290*	*377*	472*	20.4
1/2"	*55*	*117*	*184*	*258*	*338*	424*	18.0

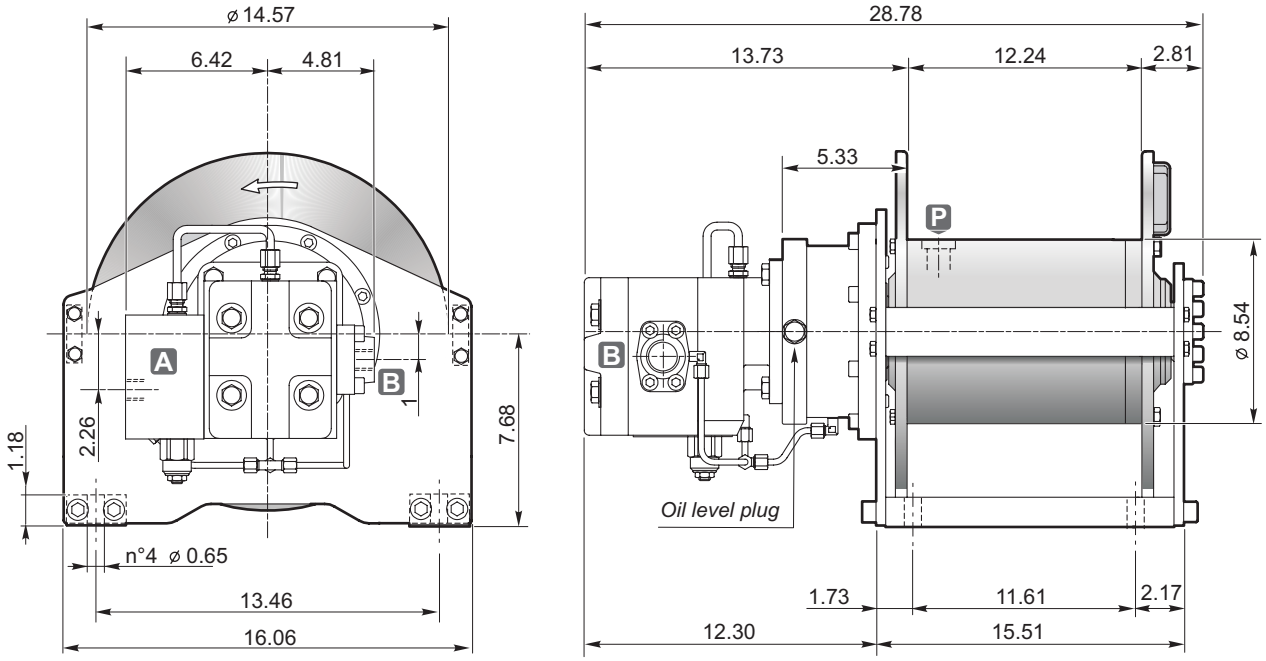
**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.75 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

A81-6



Performance info: 21:1 ratio - 6.42 cu.in. disp. - 2500 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**	**6**
Line pull	*[lbs]*	*8000*	*7200*	*6500*	*6000*	*5500*	5100
Line speed ***@ 45 GPM***	*[fpm]*	*163*	*181*	*199*	*217*	*236*	*254*
Line speed ***@ 65 GPM***	*[fpm]*	*235*	*262*	*289*	*315*	*340*	367

Above specifications based on 1/2" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs *Weight*	*330*

Rope Dia. [in]	*Rope storage capacity [FT]*						**D/d**
	Layer						
	1	**2**	**3**	**4**	**5**	**6**	
7/16"	*63*	*132*	*208*	*290*	*377*	472*	20.4
1/2"	*55*	*117*	*184*	*258*	*338*	424*	18.0

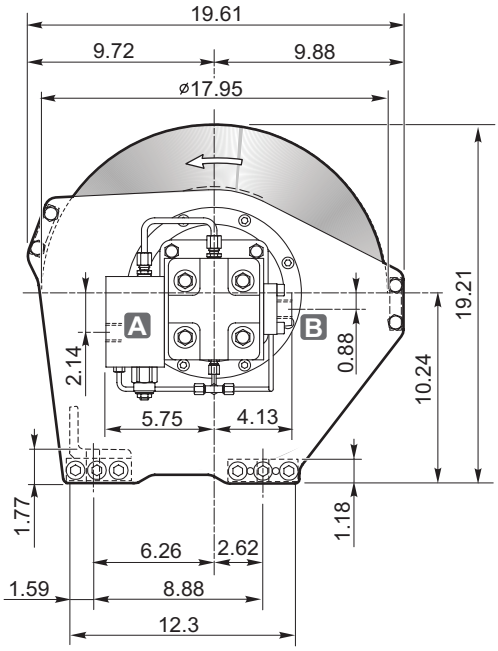
**** This layer does not comply with ANSI spec. B30.7***

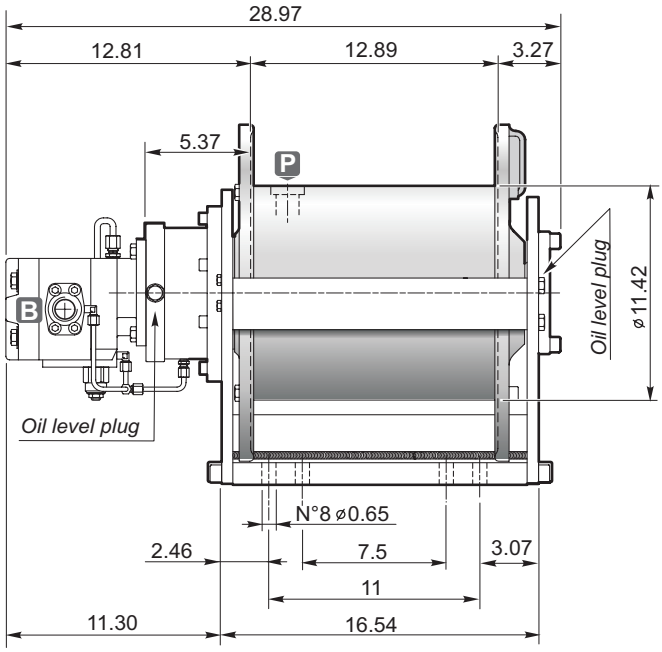
- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 0.75 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

A120-4





Performance info: 64.1 :1 ratio - 4.0 cu.in. disp. - 2570 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**	**6**
Line pull	*[lbs]*	*12000*	*10970*	*10100*	*9360*	*8720*	8160
Line speed ***@ 45 GPM***	*[fpm]*	*114*	*125*	*135*	*146*	*157*	168
Line speed ***@ 65 GPM***	*[fpm]*	*165*	*180*	*196*	*211*	*227*	242

Above specifications based on 9/16" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs	*Weight*	*520*

Rope Dia. [in]	*Rope storage capacity [FT]*						**D/d**
	Layer						
	1	**2**	**3**	**4**	**5**	**6**	
1/2"	*77*	*161*	*251*	*349*	*450*	550*	23.8
9/16"	*68*	*143*	*225*	*313*	*407*	508*	21.3
5/8	*62*	*130*	*205*	*285*	*373**		19.2

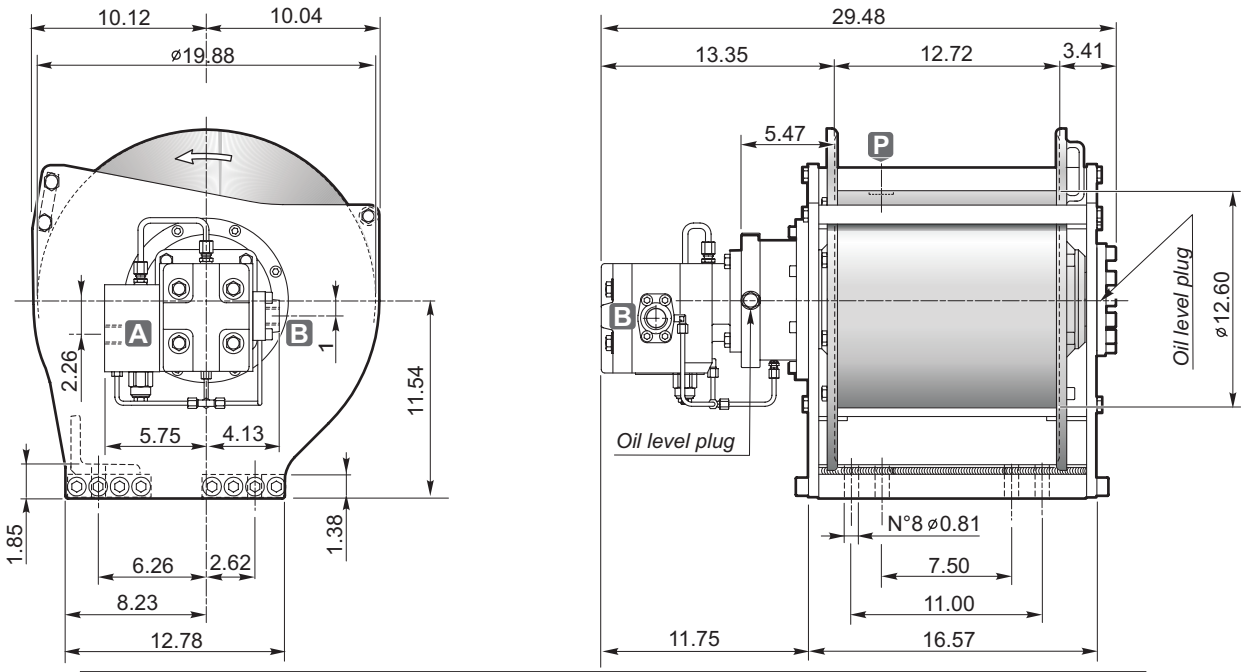
**** This layer does not comply with ANSI spec. B30.7***

- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line : 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 1.8 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

A150-5



Performance info: 62.7:1 ratio - 5.14 cu.in. disp. - 2550 PSI

Layer	**n**	**1**	**2**	**3**	**4**	**5**	**6**
Line pull	*[lbs]*	*15000*	*13700*	*12600*	*11700*	*10900*	10200
Line speed ***@ 45 GPM***	*[fpm]*	*103*	*113*	*123*	*133*	*143*	153
Line speed ***@ 80 GPM***	*[fpm]*	*185*	*202*	*220*	*237*	*255*	272

Above specifications based on 5/8" wire rope diameter

A	*Hoisting port*	*1" 5/16-12 THD SAE-16 ORB*
B	*Lowering port*	

P	*Lubrication oil plug*	*3/8" BSP*

lbs	*Weight*	*730*

Rope Dia. [in]	*Rope storage capacity [FT]*						**D/d**
	Layer						
	1	**2**	**3**	**4**	**5**	**6**	
9/16"	*75*	*155*	*242*	*336*	*436*	542*	23.8
5/8"	*67*	*140*	*220*	*306*	*400*	498*	21.3

**** This layer does not comply with ANSI spec. B30.7***

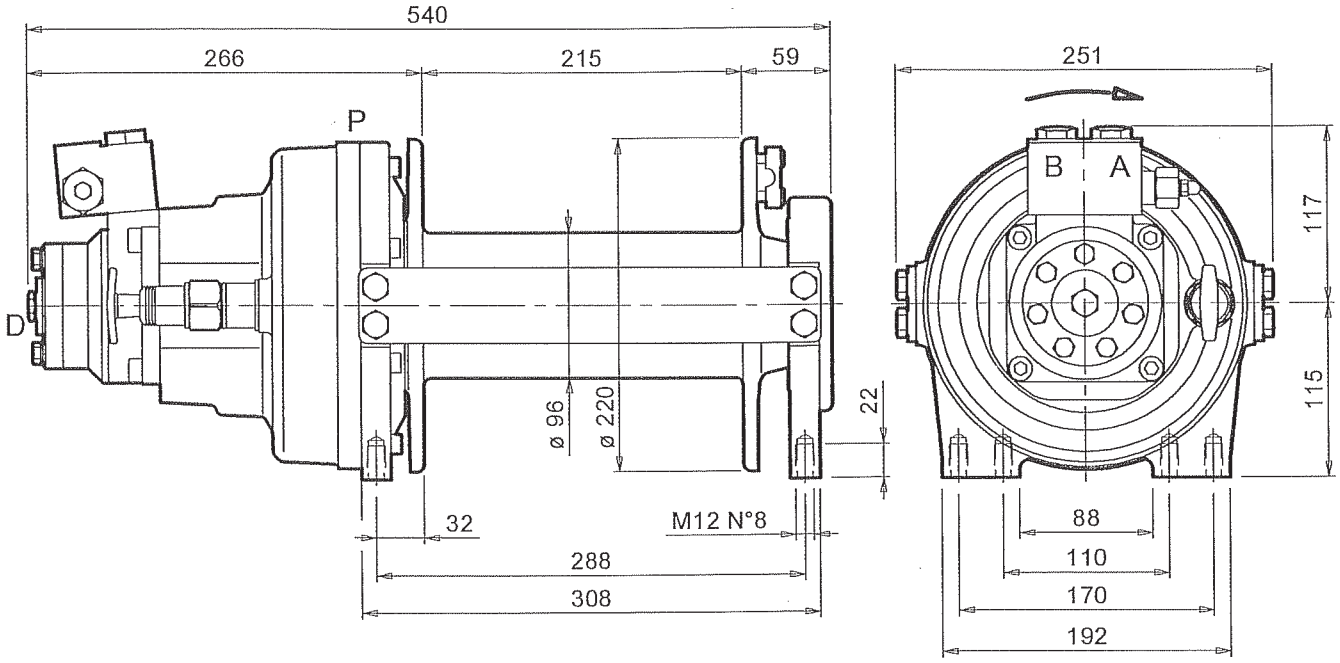
- *Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.*
- *Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.*
- *Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.*
- *Maximum back pressure on the return line: 72.5 PSI.*
- *Always keep at least 4 wraps of cable on the drum for safety reasons.*
- *Gear lubrication is achieved by splash oil bath.*
- *Gear lubricant - hydraulic oil 2.5 gal.*
- *Technical Specifications are subject to change without prior notice from manufacturer.*

PERSONNEL HANDLING APPLICATIONS ON REQUEST

dinamic oil

Grandezza ***Size***	Tiro diretto primo strato Line pull first rope layer [daN]	Tiro diretto ultimo strato Line pull last rope layer [daN]
T27	2700	1725
T36	3600	2150
T46	4600	2750
T60	6000	3500
T100	10000	6000
T200	20000	12000
T300	30000	18200

T27



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	2700	2300	2000	1725
Velocità fune con 40 l/1° *Rope speed with*	m/1°	12	14	16,5	19
Q.tà fune ø 8 mm *ø 8 mm Rope capacity*	m	8,5	18	29	41,5
Q.tà fune ø 10 mm *ø 10 mm Rope capacity*		6,8	15	24	35

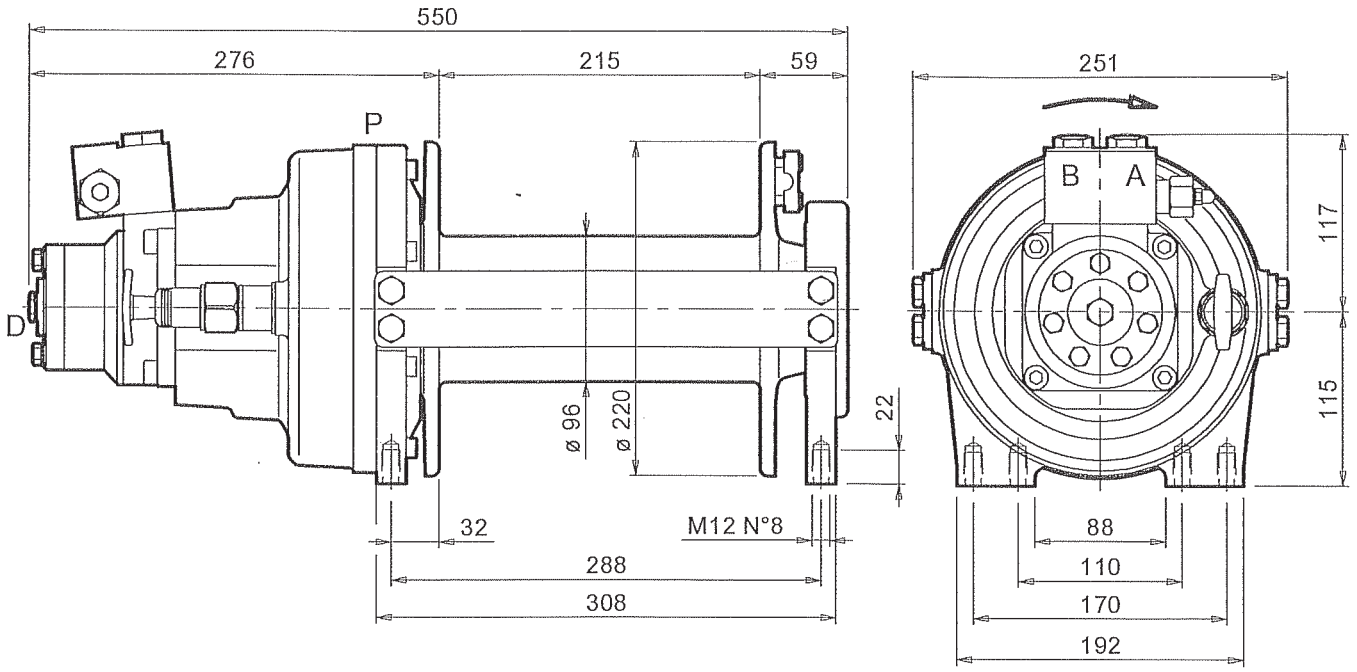
Pressione di traino *Pulling pressure*	150 bar
Max-min portata alim. *Max-min pump delivery*	45/10 l/1°
Cilindrata motore *Motor displacement*	165 cm^3
Rapporto di riduzione *Gear ratio*	1:5,7

A= Ramo di avvolgimento *Winding port*	3/8°	D= Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	8 mm 10 mm
B= Ramo di svolgimento *Unwinding port*		P= Tappo olio lubrificazione *Lubrification oil plug*	1/4°	Massa *Weight*	50 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 55 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 55 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T36



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	3600	2950	2500	2150
Velocità fune con 40 l/1° *Rope speed with*	m/1°	8	10	12	14
Q.tà fune ø 10 mm *ø 10 mm Rope capacity*	m	6,8	15	24	35
Q.tà fune ø 12 mm *ø 12 mm Rope capacity*		5,7	12,5	21	30,6

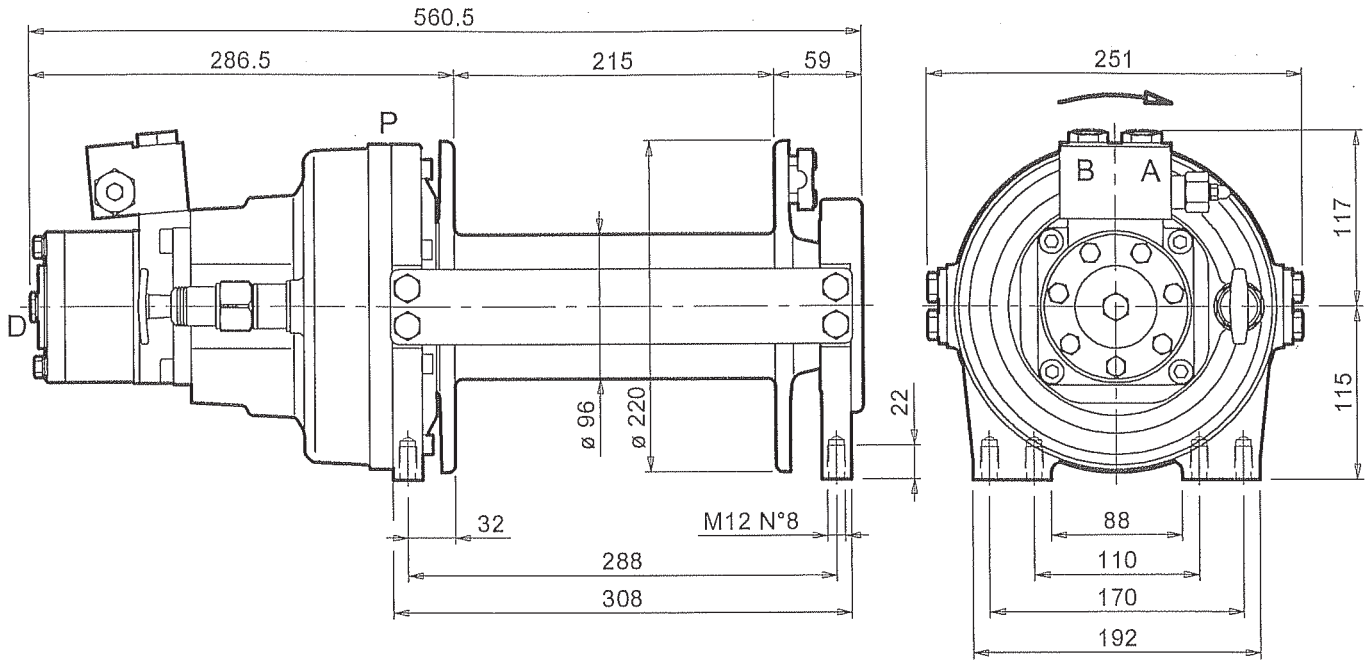
Pressione di traino *Pulling pressure*	145 bar
Max-min portata alim. *Max-min pump delivery*	45/10 l/1°
Cilindrata motore *Motor displacement*	240 cm^3
Rapporto di riduzione *Gear ratio*	1:5,7

A= Ramo di avvolgimento *Winding port*	3/8°	D= Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	10 mm 12 mm
B= Ramo di svolgimento *Unwinding port*		P= Tappo olio lubrificazione *Lubrification oil plug*	1/4°	Massa *Weight*	50 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 55 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 55 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T46



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	4600	3750	3200	2750
Velocità fune con 40 l/1° *Rope speed with*	m/1°	8,5	10	12	14
Q.tà fune ø 12 mm *ø 12 mm Rope capacity*	m	5,7	12,5	21	30,6

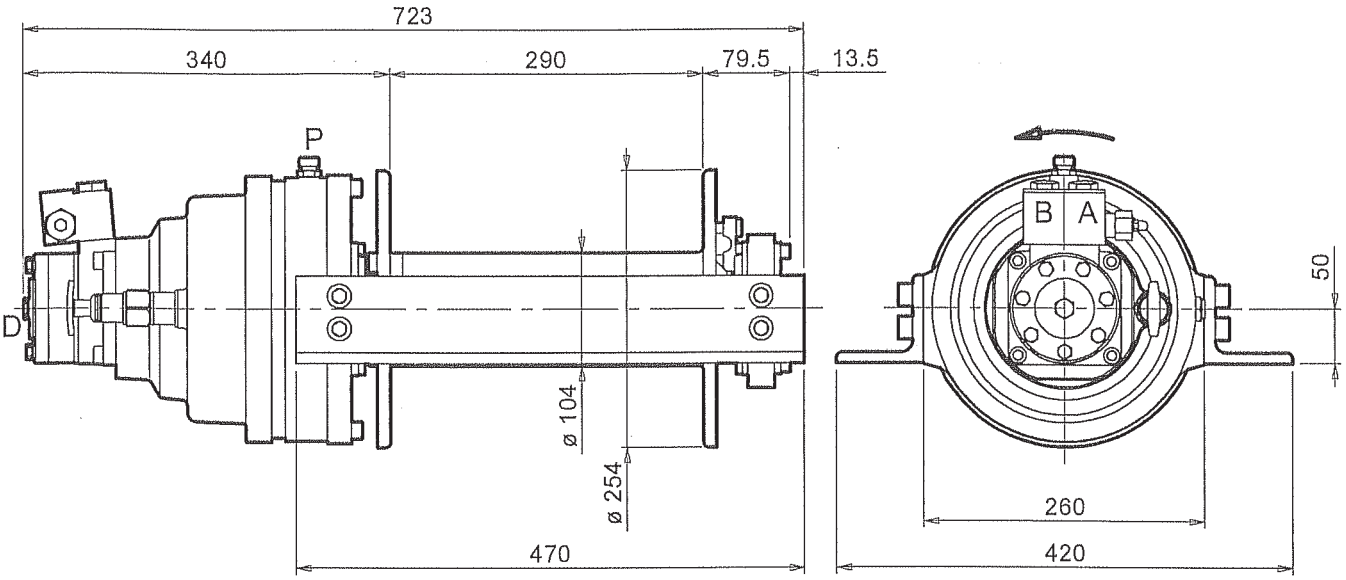
Pressione di traino *Pulling pressure*	170 bar
Max-min portata alim. *Max-min pump delivery*	45/10 l/1°
Cilindrata motore *Motor displacement*	250 cm^3
Rapporto di riduzione *Gear ratio*	1:5,4

A=	Ramo di avvolgimento *Winding port*	3/8°	D=	Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	12 mm
B=	Ramo di svolgimento *Unwinding port*		P=	Tappo olio lubrificazione *Lubrification oil plug*	1/4°	Massa *Weight*	50 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 55 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 55 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T60



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	6000	4850	4070	3500
Velocità fune con 40 l/1° *Rope speed with*	m/1°	6,5	8	9,5	11
Q.tà fune ø 14 mm *ø 14 mm Rope capacity*	m	7,5	16,5	27	40

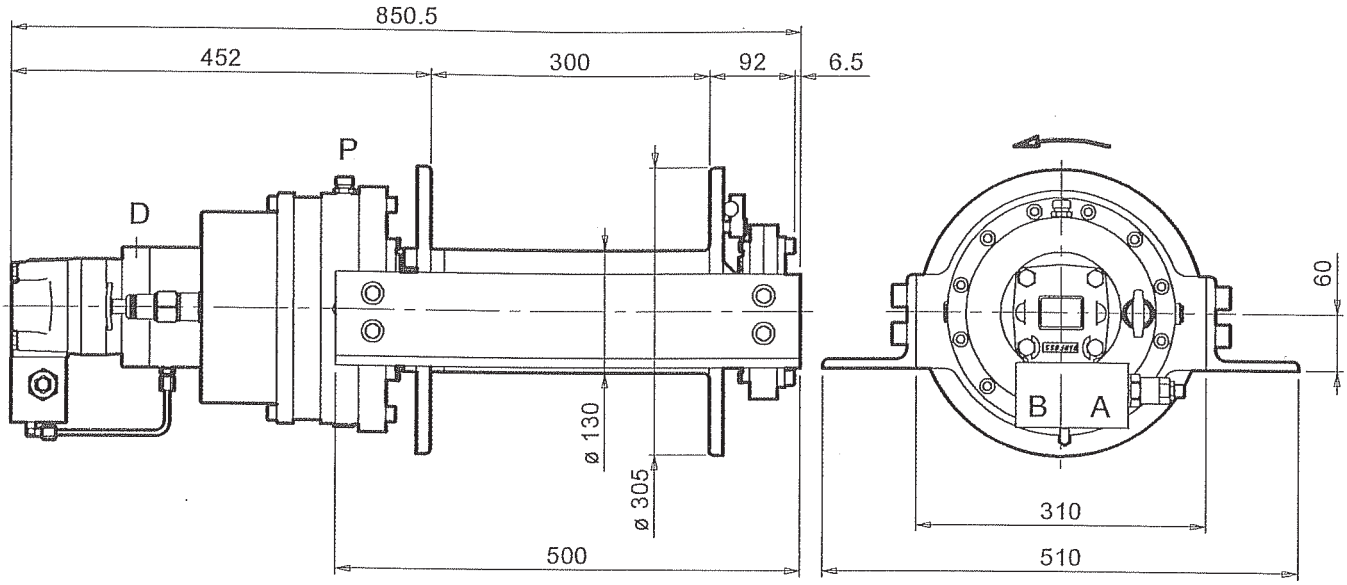
Pressione di traino *Pulling pressure*	180 bar
Max-min portata alim. *Max-min pump delivery*	45/10 l/1°
Cilindrata motore *Motor displacement*	127 cm^3
Rapporto di riduzione *Gear ratio*	1:14,8

A=	Ramo di avvolgimento *Winding port*	3/8°	D=	Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	14 mm
B=	Ramo di svolgimento *Unwinding port*		P=	Tappo olio lubrificazione *Lubrification oil plug*	3/8°	Massa *Weight*	86 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 55 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 55 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T100



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	10000	8200	6950	6000
Velocità fune con 75 l/1° *Rope speed with*	m/1°	8	10	12	14
Q.tà fune ø 16 mm *ø 16 mm Rope capacity*	m	8	18	30	43

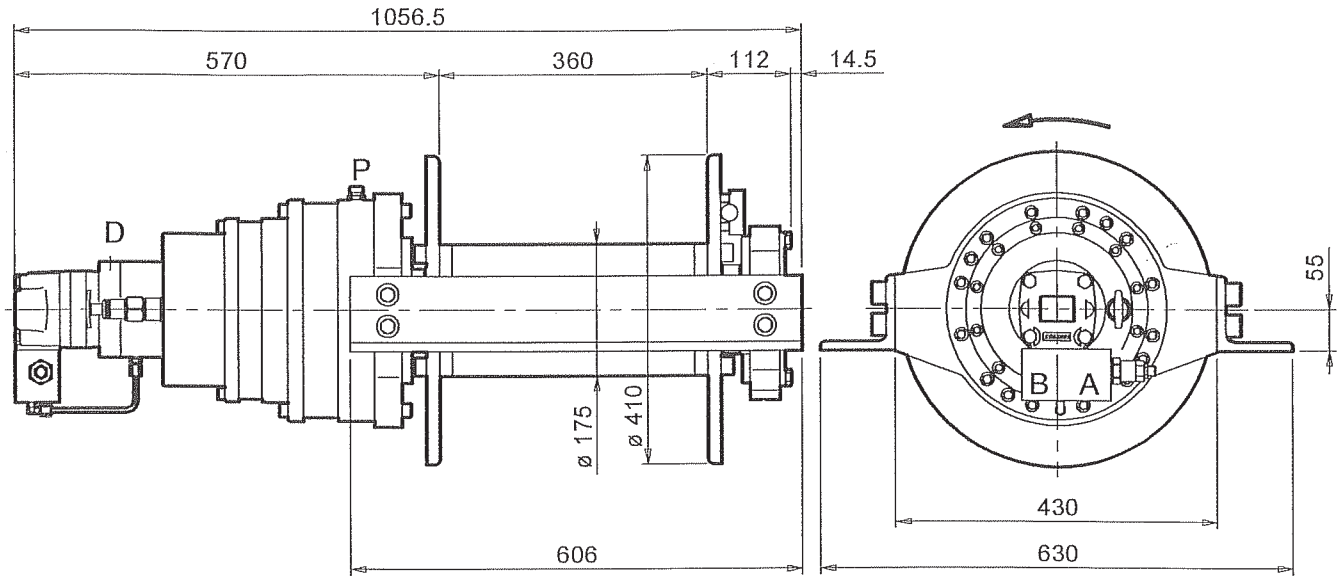
Pressione di traino *Pulling pressure*	170 bar
Max-min portata alim. *Max-min pump delivery*	75/10 l/1°
Cilindrata motore *Motor displacement*	160 cm^3
Rapporto di riduzione *Gear ratio*	1:23

A=	Ramo di avvolgimento *Winding port*	3/4°	D=	Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	16 mm
B=	Ramo di svolgimento *Unwinding port*		P=	Tappo olio lubrificazione *Lubrification oil plug*	3/8°	Massa *Weight*	135 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 42 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 42 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T200



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	20000	16350	13850	12000
Velocità fune con 75 l/1° *Rope speed with*	m/1°	5	6	7,3	8,5
Q.tà fune ø 22 mm *ø 22 mm Rope capacity*	m	9,5	21	35	51

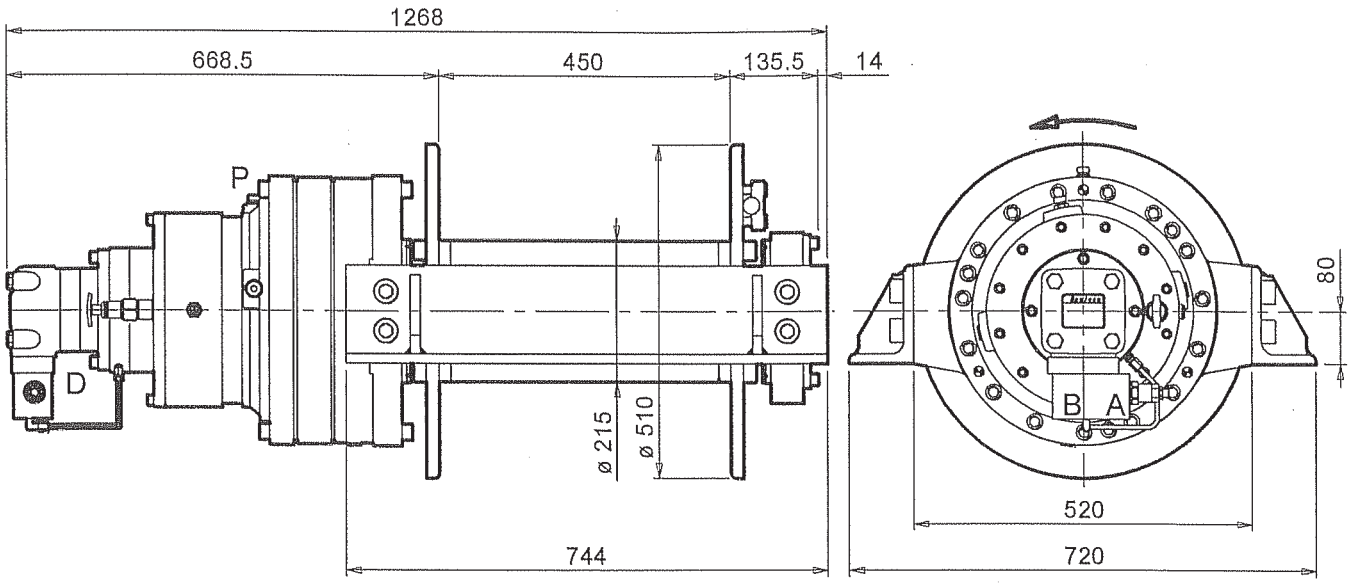
Pressione di traino *Pulling pressure*	210 bar
Max-min portata alim. *Max-min pump delivery*	75/10 l/1°
Cilindrata motore *Motor displacement*	125 cm^3
Rapporto di riduzione *Gear ratio*	1:64,5

A= Ramo di avvolgimento *Winding port*	3/4°	D= Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	22 mm
B= Ramo di svolgimento *Unwinding port*		P= Tappo olio lubrificazione *Lubrification oil plug*	3/8°	Massa *Weight*	250 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 42 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 42 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

T300



Strato di fune *Rope layer*	n°	1	2	3	4
Tiro diretto *Line pull*	daN	30000	24650	20950	18200
Velocità fune con 100 l/1° *Rope speed with*	m/1°	4,5	5,5	6,5	7,5
Q.tà fune ø 26 mm *ø 26 mm Rope capacity*	m	12,5	27,5	45	65,5

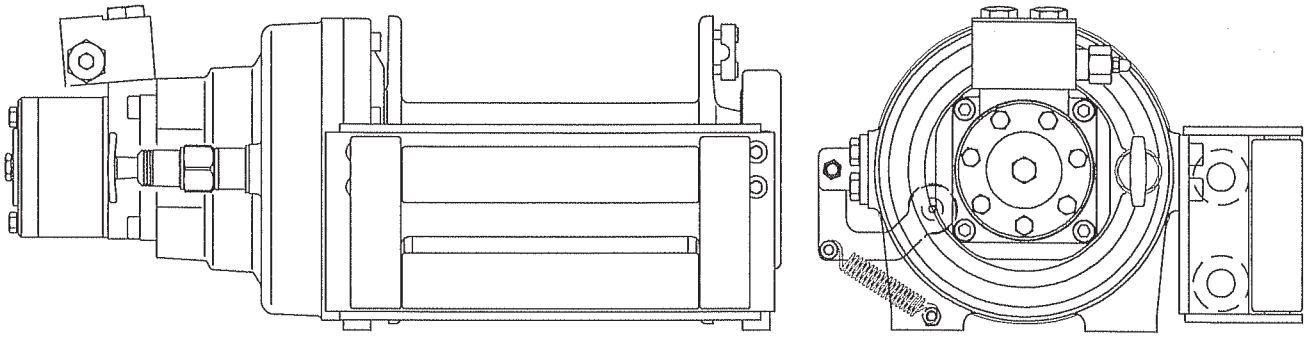
Pressione di traino *Pulling pressure*	205 bar
Max-min portata alim. *Max-min pump delivery*	100/10 l/1°
Cilindrata motore *Motor displacement*	250 cm^3
Rapporto di riduzione *Gear ratio*	1:60,5

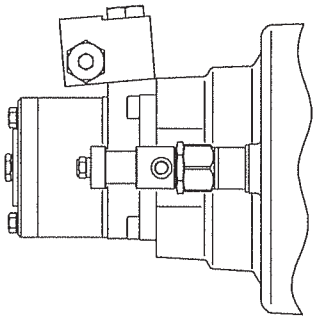
A= Ramo di avvolgimento *Winding port*	3/4°	D= Ramo di drenaggio *Drain port*	1/4°	Diametro fune consigliato *Adviced rope size*	26 mm
B= Ramo di svolgimento *Unwinding port*		P= Tappo olio lubrificazione *Lubrification oil plug*	3/8°	Massa *Weight*	420 Kg

Il presente verricello non può essere utilizzato per il sollevamento o lo spostamento di persone.
- Tiro con rotazione antioraria del tamburo. (Contraria a richiesta).
- Freno negativo multidisco con coppia statica di 120 daN.m.
- Lubrificazione ingranaggi in bagno d'olio.
- Contropressione massima sulla linea di ritorno 5 bar.
- Per sicurezza lasciare sul tamburo 5 spire di fune sempre avvolte.
- Le caratteristiche tecniche possono variare senza preavviso.

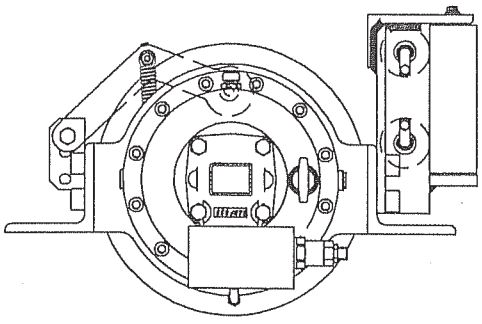
The present equipment can't be used to lift or transport people.
- *Pull with counter clockwise rotation of the drum. (or clockwise if required).*
- *Negative multi-disc brake with 120 daN.m of static torque.*
- *Gear lubrification oil bath.*
- *Maximum back pressure or return line: 5 bar.*
- *Always keep at least 5 twists of rope on tne drum, for safely reasons.*
- *Technical features may change with no previous notice from manufacturer.*

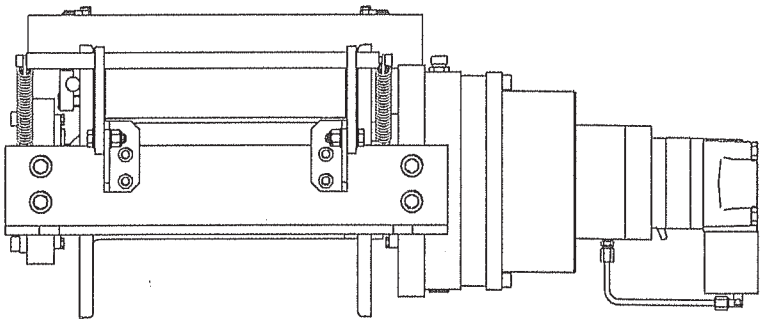
PRESSACAVO E GUIDAFUNE
CABLE TENSIONER AND GUIDE ROPE



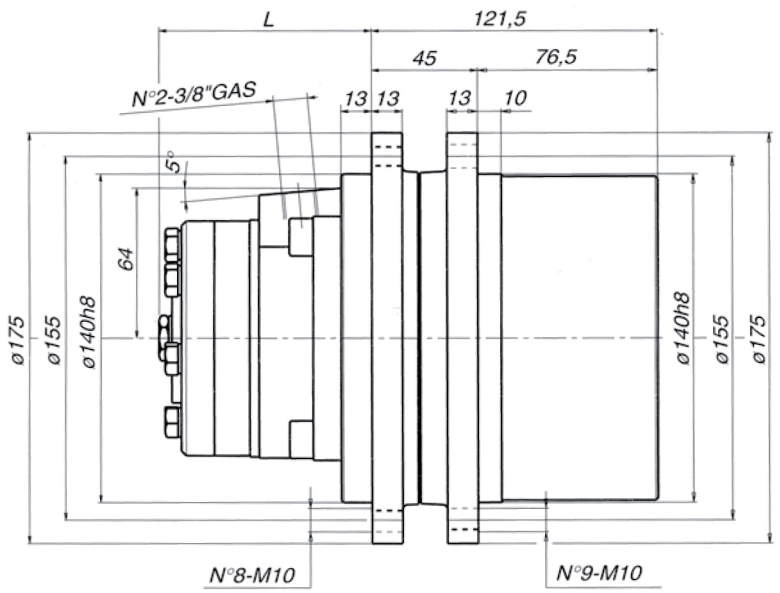


DISINNESTO PNEUMATICO
PNEUMATIK DRUM RELEASE

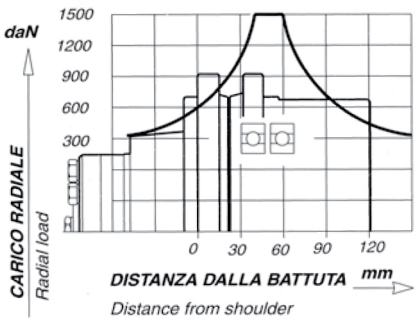




MOTORIDUTTORE RUOTA - WHEEL GEARBOX **GR 80**



CARICHI RADIALI - Radial load



I valori dei carichi riportati sono validi per una velocità di ***50 giri/min*** *ed una durata teorica di* ***2000 ore***.

Radial loads are valid for ***50 r.p.m.*** *and a theorical life-time of* ***2000 hours***.

MOTORE / MOTOR	50	80	100	125	160	200	250
L (mm)	84,5	90,5	94	99	105	113	122

				COPPIA-TORQUE Mt						VELOCITA'-SPEED		POTENZA-POWER	
TIPO / TYPE	MOTORE / MOTOR	RIDUZIONE / RATIO	CIL.TOT. / TOT.DISPL.	cont.	Δ p	max int.	Δ p	picco / peak	Δ p	max r.p.m.	Port. flow	max cont.	max int.
	cc	Rapp.	cc	daNm	bar	daNm	bar	daNm	bar	n/min	Lt/min	kW	kW
GR80-MLR50	49	5,23	256,3	47	145	57	175	63	205	115	30	5,5	7
GR80-MLR80	83		434,1	80	145	96	175	106	205	68	30	5,5	7
GR80-MLR100	103		538,7	80	115	100	145	131	205	55	30	5,5	7
GR80-MLR125	127		664,2	80	95	100	120	150	190	45	30	5,5	7
GR80-MLR160	162		847,2	80	75	100	95	150	145	33	30	5	7
GR80-MLR200	205		1072	80	60	100	75	150	115	26	30	5	7
GR80-MLR250	255		1333	80	50	100	60	150	95	21	30	4,5	6

FRENO-BRAKE	
Coppia fren. braking torque	**Δ p apert.** opening press.
daNm	bar
100	25

NOTE:

SERVIZIO CONTINUO: 8 ore su 24.

SERVIZIO INTERMITTENTE: 5 minuti per ogni ora di lavoro. Nei restanti minuti i valori di pressione e portata non devono superare l'80% dei valori di servizio continuo.

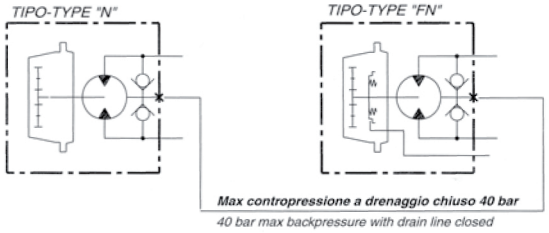
SERVIZIO DI PICCO:1/2 minuto ogni ora di lavoro,nei restanti minuti i valori di pressione e portata non devono superare il 65% dei valori di servizio continuo.

CONTINUOUS DUTY: 8 hours a day

INTERMITTENT DUTY: 5 minutes per hour. In the remaining time,pressure and flow should not exceed the 80% of the continuous duty values.

PEAK DUTY: 1/2 minute per hour. In the remaining time, pressure and flow should not exceed the 65% of the continuous duty values.

SCHEMA IDRAULICO-Hydraulic diagram



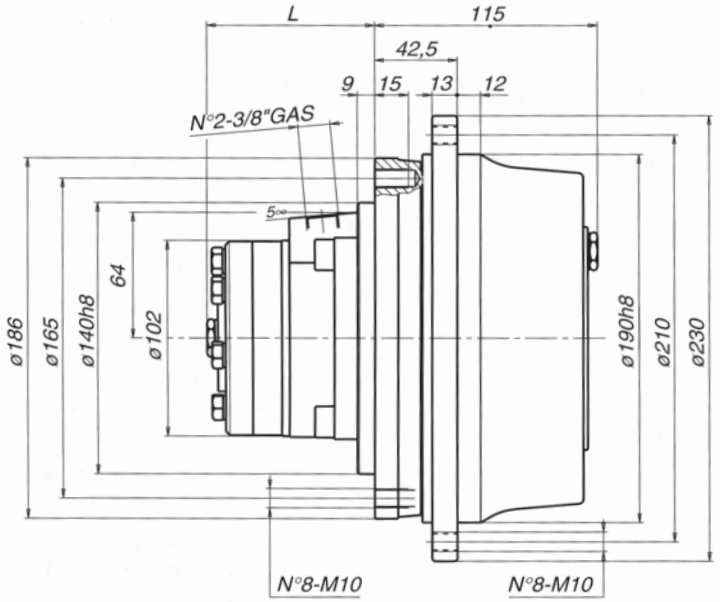
CODICE DI SCELTA - HOW TO ORDER:

Es.:Riduttore Ruota-Wheel gear **GR80 FN- MLR100**

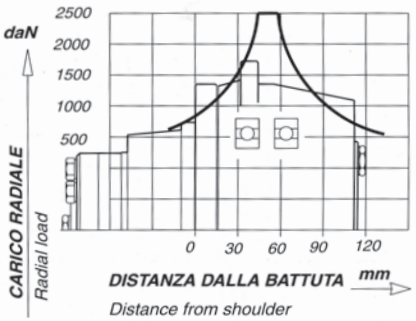
- **FN** FRENO NEGATIVO-Negative brake
- **N** SENZA FRENO-Without brake
- CILINDRATA MOTORE / Motor displacement

dinamic oil

MOTORIDUTTORE RUOTA - WHEEL GEARBOX **GR 200**



CARICHI RADIALI - *Radial load*



I valori dei carichi riportati sono validi per una velocità di ***50 giri/min*** *ed una durata teorica di* ***2000 ore***.

Radial loads are valid for ***50 r.p.m.*** *and a theorical life-time of* ***2000 hours***.

MOTORE / MOTOR	50	80	100	125	160	200	250	300	375
L (mm)	80,5	86,5	90	95	101	109	118	129,5	140,5

TIPO / TYPE	MOTORE / MOTOR cc	RIDUZIONE / RATIO Rapp.	CIL.TOT. / TOT.DISPL. cc	COPPIA-TORQUE Mt: cont. daNm	Δ p bar	max int. daNm	Δ p bar	picco / peak daNm	Δ p bar	VELOCITA'-SPEED: max r.p.m. n/min	Port. flow Lt/min	POTENZA-POWER: max cont. kW	max int. kW
GR200-MLR50	49	6,2	303,8	56	145	67	175	74	205	98	30	5,5	7
GR200-MLR80	83		514,6	95	145	115	175	125	205	58	30	5,5	7
GR200-MLR100	103		638,6	118	145	142	175	156	205	46	30	5,5	7
GR200-MLR125	127		787,4	145	145	175	175	192	205	38	30	5,5	7
GR200-MLR160	162		1004	160	125	210	165	245	205	29	30	5	7
GR200-MLR200	205		1271	160	100	215	135	250	165	23	30	5	7
GR200-MLR250	255		1581	160	80	215	105	250	135	18	30	4,5	6
GR200-MLR300	315		1953	160	65	215	85	250	110	15	30	4	5
GR200-MLR375	377		2337	160	55	215	70	250	90	12	30	3,5	4,5

FRENO-BRAKE	
Coppia fren. braking torque daNm	**Δ p apert.** opening press. bar
180	30

NOTE:

SERVIZIO CONTINUO: 8 ore su 24.

SERVIZIO INTERMITTENTE: 5 minuti per ogni ora di lavoro. Nei restanti minuti i valori di pressione e portata non devono superare l'80% dei valori di servizio continuo.

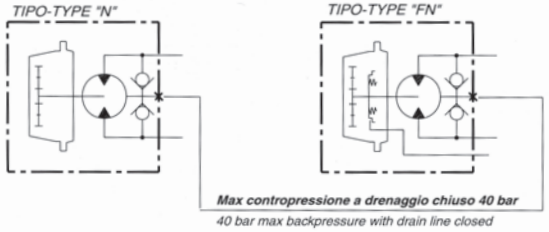
SERVIZIO DI PICCO:1/2 minuto ogni ora di lavoro,nei restanti minuti i valori di pressione e portata non devono superare il 65% dei valori di servizio continuo.

CONTINUOUS DUTY: 8 hours a day

INTERMITTENT DUTY: 5 minutes per hour. In the remaining time,pressure and flow should not exceed the 80% of the continuous duty values.

PEAK DUTY: 1/2 minute per hour. In the remaining time, pressure and flow should not exceed the 65% of the continuous duty values.

SCHEMA IDRAULICO-*Hydraulic diagram*



CODICE DI SCELTA - *HOW TO ORDER:*

Es.:Riduttore Ruota-*Wheel gear* **GR200 FN-D-MLR100**

FN *FRENO NEGATIVO-Negative brake*

N *SENZA FRENO-Without brake*

DISINNESTO *Optional*
Mechanical release

CILINDRATA MOTORE
Motor displacement

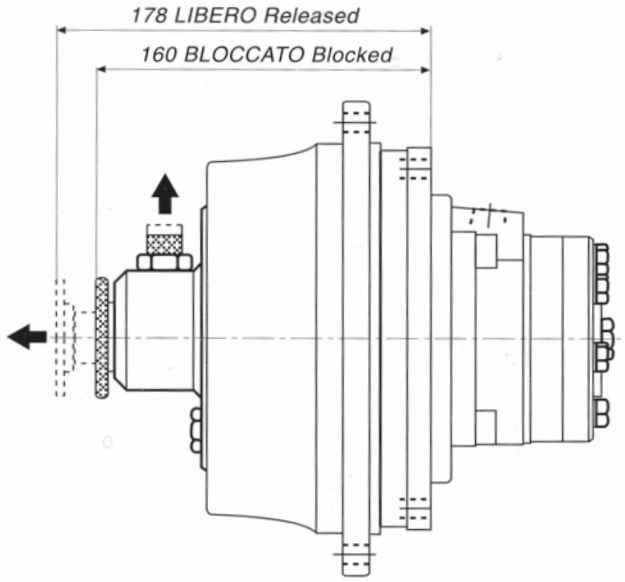
dinamic oil

GR 200

DISINNESTO - MECHANICAL RELEASE

I motoriduttori ruota tipo GR200 possono essere dotati a richiesta di un disinnesto per rendere trainabile il veicolo al quale sono installati.

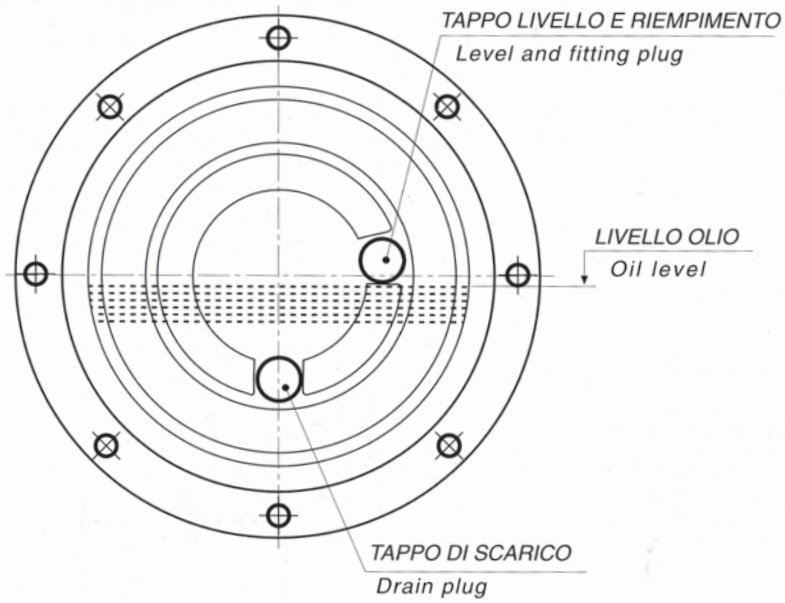
GR200 type wheel gearboxes can be equipped, on request, with a release device to allow the vehicle to be towed.



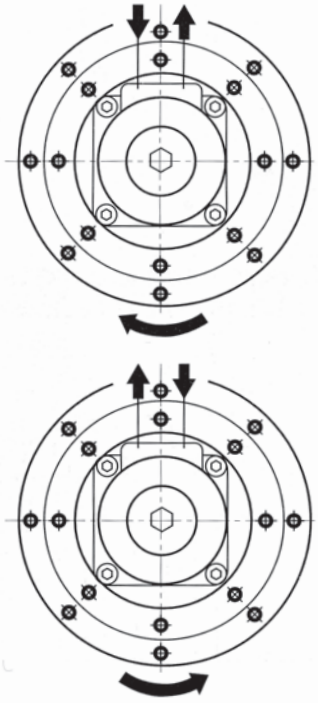
GR 200

ATTENZIONE: verificare che la velocità di traino con disinnesto LIBERO non comporti al riduttore una velocità di rotazione superiore a 600 giri/min.
WARNING: check that towing speed with free release does not cause to the gearboxes a rotation speed higher than 600 r.p.m.

LIVELLO OLIO - OIL LEVEL



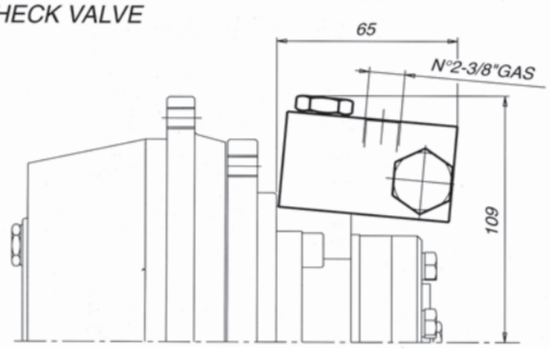
SENSO DI ROTAZIONE - DIRECTION OF ROTATION

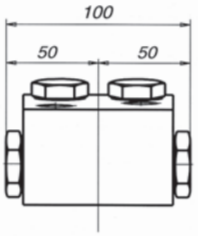


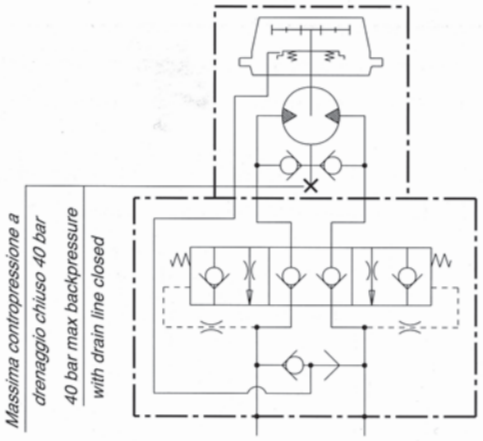
VALVOLE FLANGIABILI AI MOTORIDUTT.RUOTA GR - VALVES TO BE MOUNTED ON GR WHEEL GROUPS

VALVOLA DI CONTROLLO A CASSETTO SERIE VBC MD

CHECK VALVE

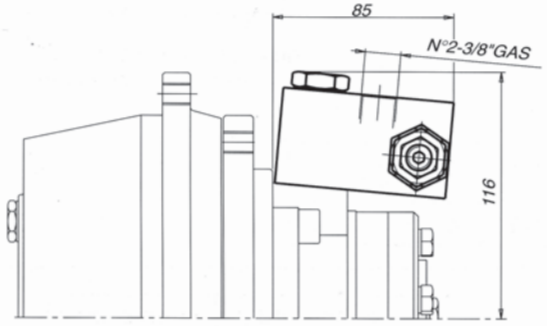


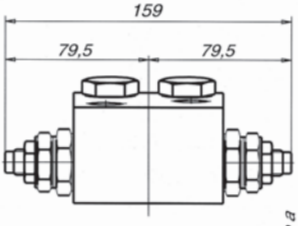




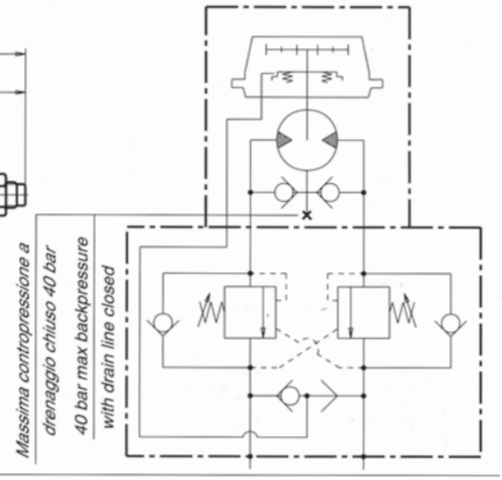
VALVOLA DI CONTROLLO ROTAZIONE CON SELETTRICE SERIE VBDSEGR

DUAL OVERCENTER VALVE WITH FLOW SELECTOR



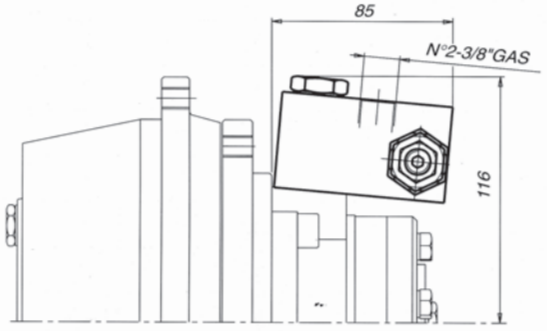


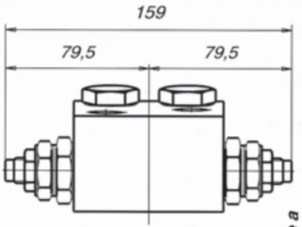
Rapp.pilotaggio Pilot ratio
7:1
Press.max (bar) Max pressure
215
Port.max (L/min) Max flow
50



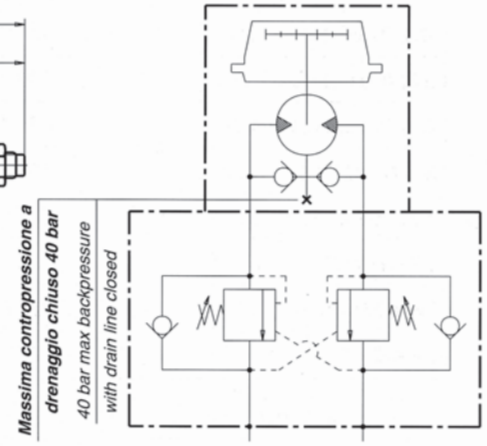
VALVOLA DI CONTROLLO ROTAZIONE SERIE VBDSEGR

DUAL OVERCENTER VALVE



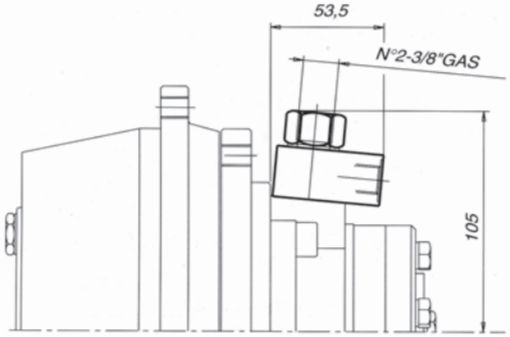


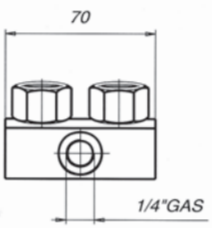
Rapp.pilotaggio Pilot ratio
7:1
Press.max (bar) Max pressure
215
Port.max (L/min) Max flow
50

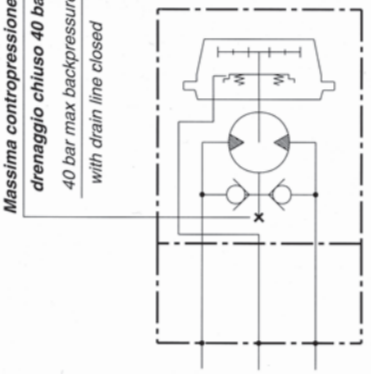


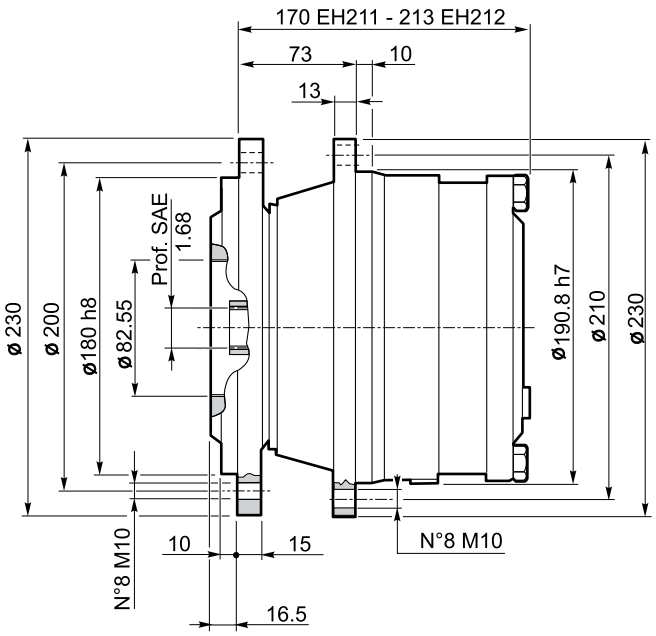
BLOCCHETTO COMANDO FRENO PER CIRCUITO CHIUSO VFCEMD

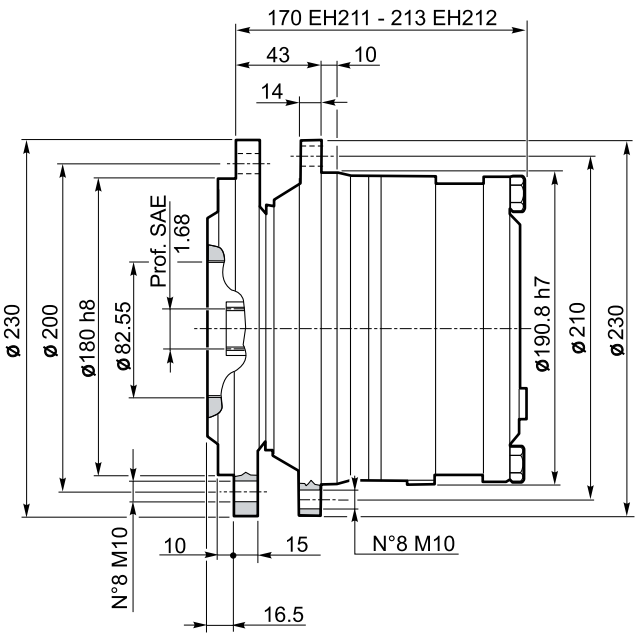
BRAKE RELEASE VALVE IN CLOSED LOOP TRANSMISSION











DATI TECNICI *- Technical data:*

TIPO *TYPE*	***N. STADI*** *N. STAGES*	***RAPPORTI DI RIDUZIONE i*** *RATIOS i*
EH 211	*1*	*6,2*
EH 212	*2*	*14 17 23 29*

	RAPPORTO *Ratio*	***M. int.*** *daNm*	***M. max*** *daNm*
A	*14 17 23 29*	*210*	*320*
C	*6,2*	*130*	*160*

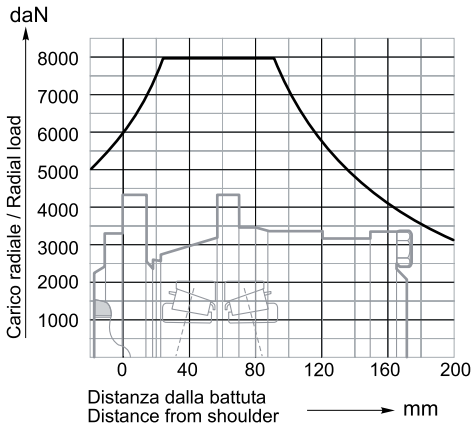
n_1 cont *n/min. r.p.m.*		*3000*
n_1 int *n/min. r.p.m.*		*4500*
P. n	*kW*	*25*
P_t	*kW*	*8*

FRENO - *BRAKE*	**Δ *p apert.*** *opening press.*
M_f *= 20 daNm x riduz.* M_f *= 20 daNm x ratio*	*bar* *22*

CARICHI RADIALI *- Radial load*

Carichi radiali ed assiali ammissibili sull'albero lento del riduttore validi per una durata di n2xh • 100.000

Permissible radial and axial loads on slow shall for life n2xh - 100.000



Coefficente di correzione kf
Load corrective factor kf

n2xh	**kf**
20.000	*1.7*
40.000	*1.3*
60.000	*1.15*
80.000	*1.06*
200.000	*0.8*
400.000	*0.63*
800.000	*0.5*
1.000.000	*0.47*

Validi per n2 ≥ 10 rpm

CODICE DI SCELTA *- HOW TO ORDER:*

Es.: ***Riduttore Ruota*** *- Wheel gear -* ***EH 211S - 6.2 - N***

RAPPORTO
Ratio

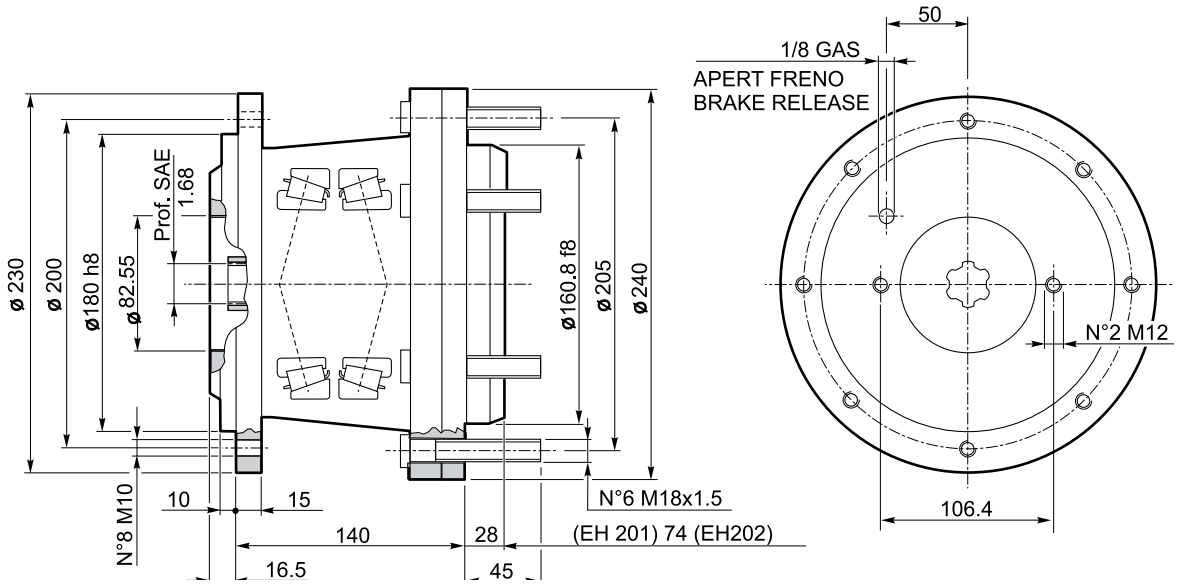
N *SENZA FRENO - Without brake*
*(****FN*** *FRENO NEGATIVO - Negative brake)*

Es.: ***Riduttore Ruota*** *- Wheel gear -* ***EH 212SPD - 23 - FN***

RAPPORTO
Ratio

N *SENZA FRENO - Without brake*
*(****FN*** *FRENO NEGATIVO - Negative brake)*

dinamic oil



DATI TECNICI *- Technical data:*

TIPO *TYPE*	***N. STADI*** *N. STAGES*	***RAPPORTI DI RIDUZIONE i*** *RATIOS i*
EH 211 PD	*1*	*6,2*
EH 212 PD	*2*	*14 17 23 29*

	RAPPORTO *Ratio*	***M. int.*** *daNm*	***M. max*** *daNm*
A	*14 17 23 29*	*210*	*320*
C	*6,2*	*130*	*160*

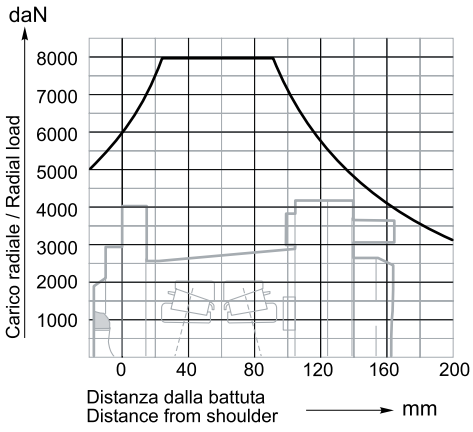
n_1 ***cont*** *n/min. r.p.m.*	*3000*
n_1 ***int*** *n/min. r.p.m.*	*4500*
P. n *kW*	*25*
P_t *kW*	*8*

FRENO - *BRAKE*	***Δ p apert.*** *opening press.*
M_f *= 20 daNm x riduz.* M_f *= 20 daNm x ratio*	*bar* *22*

CARICHI RADIALI *- Radial load*

Carichi radiali ed assiali ammissibili sull'albero lento del riduttore validi per una durata di n2xh • 100.000

Permissible radial and axial loads on slow shall for life n2xh - 100.000



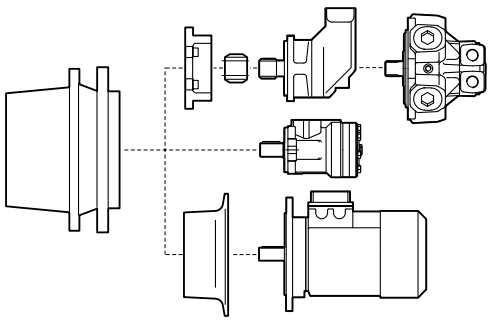
Coefficente di correzione kf
Load corrective factor kf

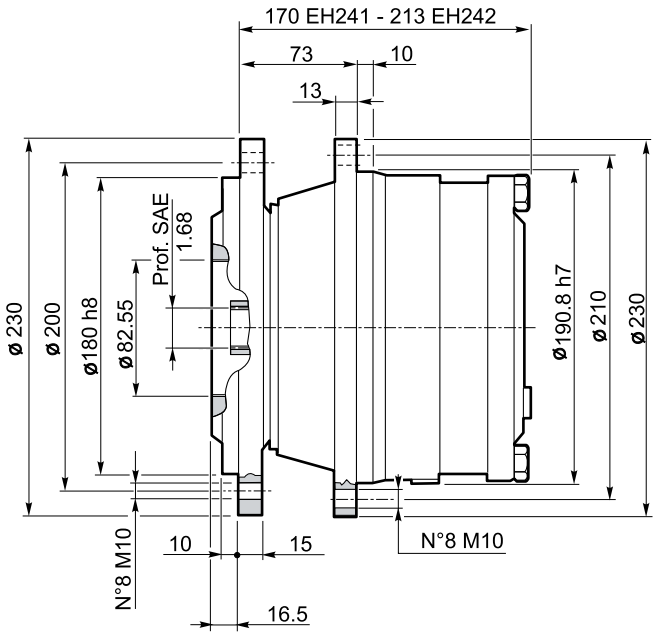
n2xh	**kf**
20.000	*1.7*
40.000	*1.3*
60.000	*1.15*
80.000	*1.06*
200.000	*0.8*
400.000	*0.63*
800.000	*0.5*
1.000.000	*0.47*

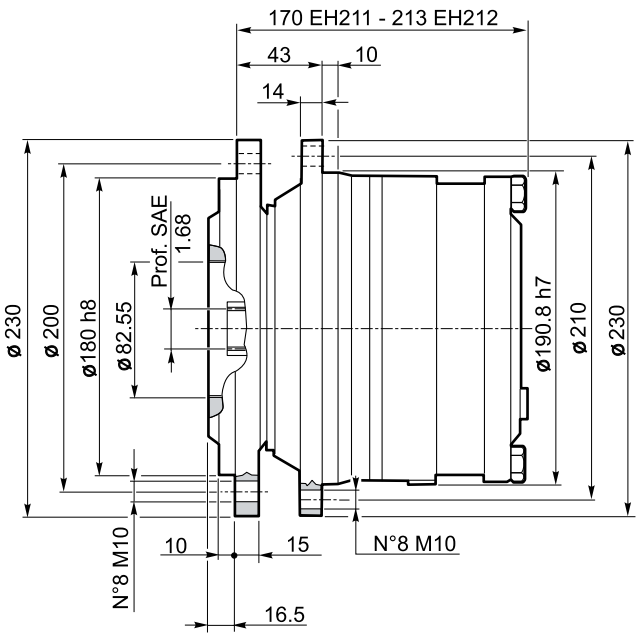
Validi per n2 ≥ 10 rpm

COMBINAZIONI POSS. IN ENTRA TA AL RIDUTTORE

Input layout for possible combinations







DATI TECNICI *- Technical data:*

TIPO *TYPE*	***N. STADI*** *N. STAGES*	***RAPPORTI DI RIDUZIONE i*** *RATIOS i*
EH 242	*2*	*12,3 - 15,3 - 18 - 21 - 24,6 - 31*

	RAPPORTO *Ratio*	***M. int.*** *daNm*	***M. max*** *daNm*
A	*12,3 - 15,3 - 21*	*300*	*360*
B	*18 - 24,5 - 31*	*270*	*340*

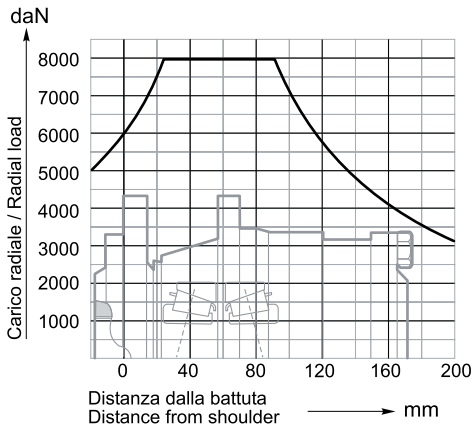
n_1 ***cont*** *n/min. r.p.m.*	*3000*	
n_1 ***int*** *n/min. r.p.m.*	*4500*	
P. n *kW*	*25*	
P_t *kW*	*8*	

FRENO - *BRAKE*	***Δ p apert.*** *opening press.*
M_t *= 20 daNm x riduz.* M_t *= 20 daNm x ratio*	*bar* *22*

CARICHI RADIALI *- Radial load*

Carichi radiali ed assiali ammissibili sull'albero lento del riduttore validi per una durata di n2xh • 100.000

Permissible radial and axial loads on slow shall for life n2xh - 100.000



Coefficente di correzione kf
Load corrective factor kf

n2xh	***kf***
20.000	*1.7*
40.000	*1.3*
60.000	*1.15*
80.000	*1.06*
200.000	*0.8*
400.000	*0.63*
800.000	*0.5*
1.000.000	*0.47*

Validi per n2 ≥ 10 rpm

CODICE DI SCELTA *- HOW TO ORDER:*

Es.: Riduttore Ruota *- Wheel gear -* ***EH 241S - 6.2 - N***

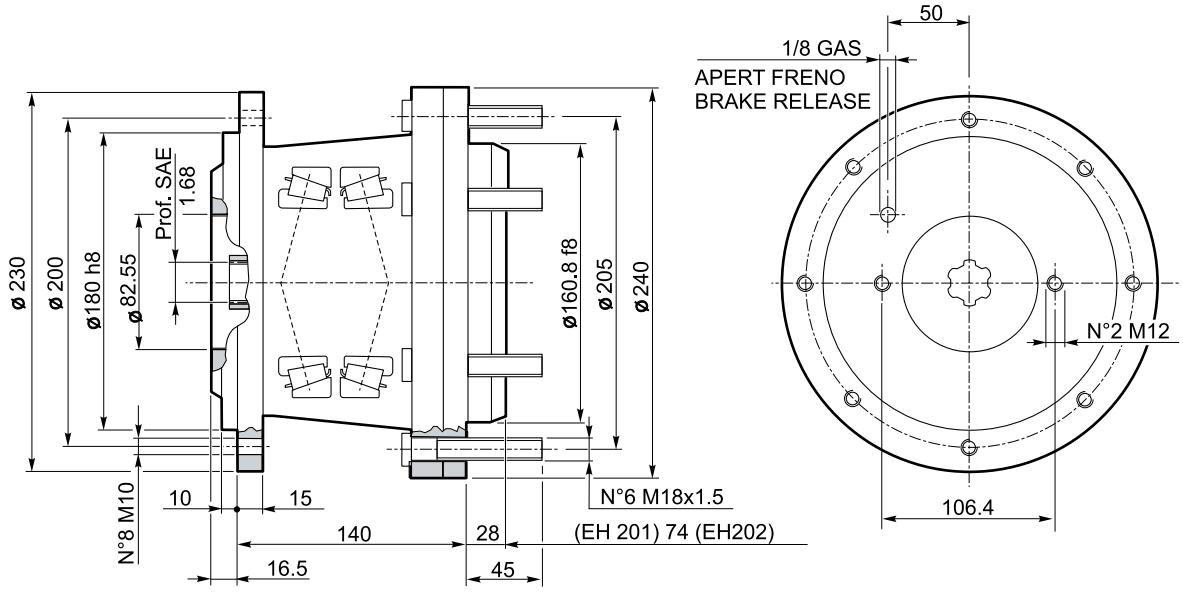
RAPPORTO
Ratio

N *SENZA FRENO - Without brake*
*(**FN** FRENO NEGATIVO - Negative brake)*

Es.: Riduttore Ruota *- Wheel gear -* ***EH 242SPD - 23 - FN***

RAPPORTO
Ratio

N *SENZA FRENO - Without brake*
*(**FN** FRENO NEGATIVO - Negative brake)*



DATI TECNICI *- Technical data:*

TIPO *TYPE*	***N. STADI*** *N. STAGES*	***RAPPORTI DI RIDUZIONE i*** *RATIOS i*
EH 242 PD	*2*	*12,3 - 15,3 - 18 - 21 - 24,6 - 31*

	RAPPORTO *Ratio*	***M. int.*** *daNm*	***M. max*** *daNm*
A	*12,3 - 15,3 - 21*	*300*	*360*
B	*18 - 24,5 - 31*	*270*	*340*

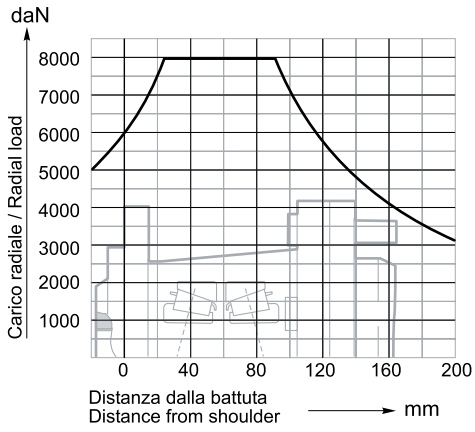
n_1 cont	*n/min.*	*r.p.m.*	*3000*
n_1 int	*n/min.*	*r.p.m.*	*4500*
P. n		*kW*	*25*
P_t		*kW*	*8*

FRENO - *BRAKE*	**Δ *p apert.*** *opening press.*
M_f = 20 daNm x riduz. *M_f = 20 daNm x ratio*	*bar* *22*

CARICHI RADIALI *- Radial load*

Carichi radiali ed assiali ammissibili sull'albero lento del riduttore validi per una durata di n2xh • 100.000

Permissible radial and axial loads on slow shall for life n2xh - 100.000



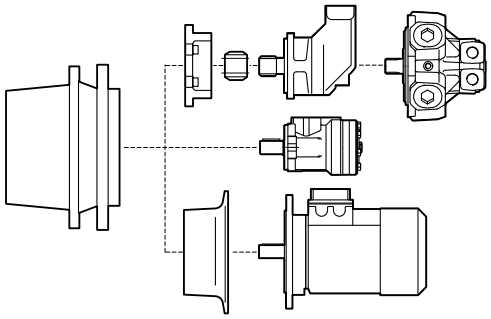
Coefficente di correzione kf
Load corrective factor kf

n2xh	**kf**
20.000	*1.7*
40.000	*1.3*
60.000	*1.15*
80.000	*1.06*
200.000	*0.8*
400.000	*0.63*
800.000	*0.5*
1.000.000	*0.47*

Validi per n2 ≥ 10 rpm

COMBINAZIONI POSS. IN ENTRATA AL RIDUTTORE

Input layout for possible combinations



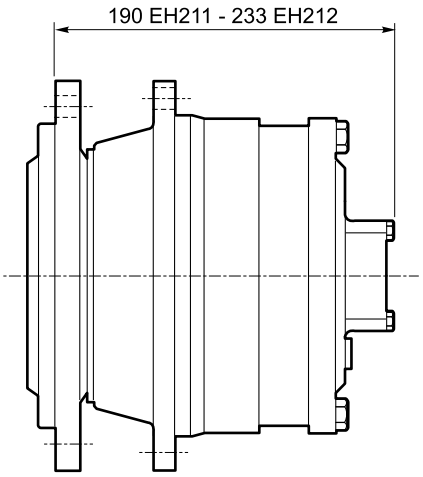
dinamic oil

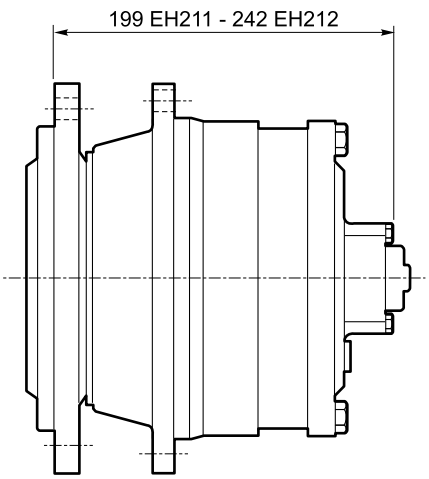
***DISINNESTO* MECCANICO** - *MECHANICAL RELEASE* **EH**

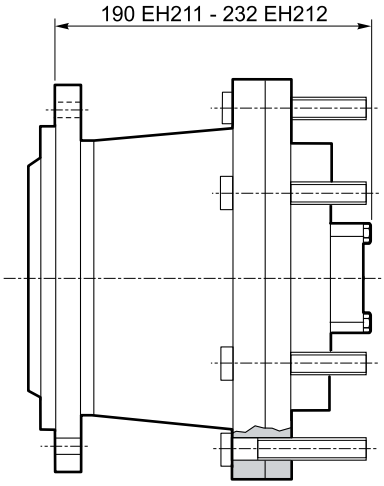
I riduttori ruota EH possono essere dotati di disinnesto meccanico per rendere trainabile il veicolo sul quale sono installati
EH wheel gearboxes can be equipped with a release device to allow the vehicle to be lowed

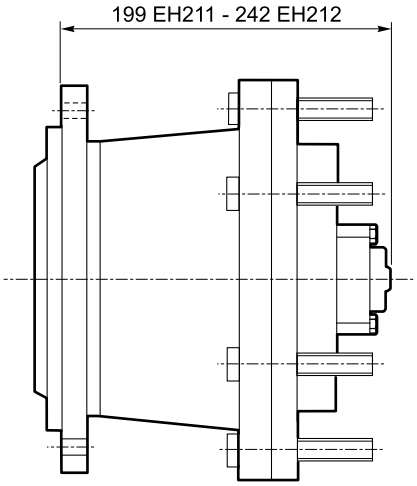
DIMENSIONI - *Dimensions*

BLOCCATO - LIBERO
ENGAGED - DISENGAGED

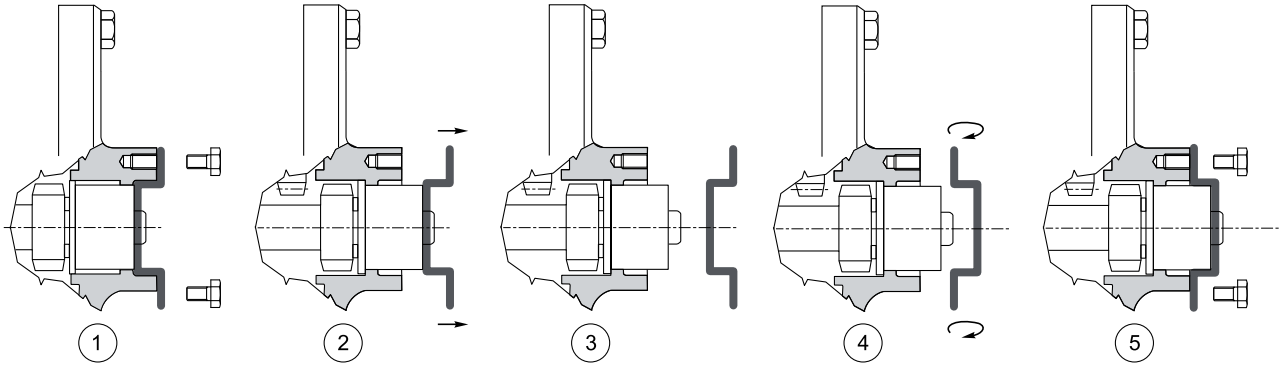








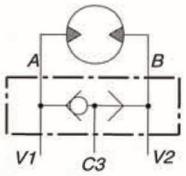
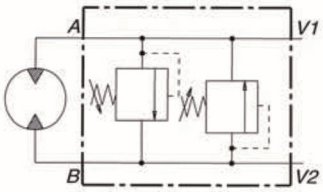
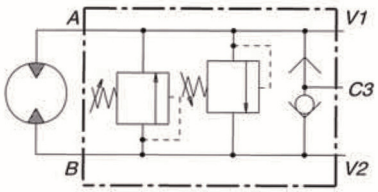
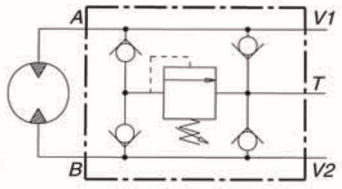
Come disinnescare il riduttore ruota EH - *How to disengage the wheeldrive EH*



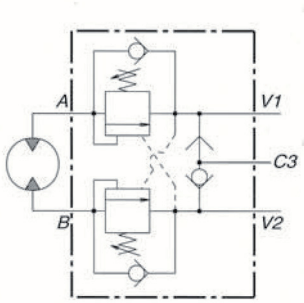
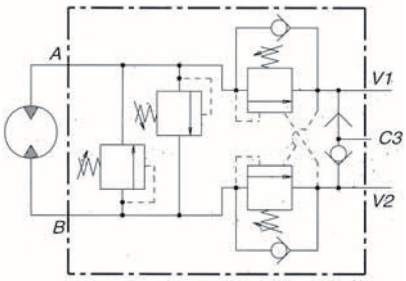
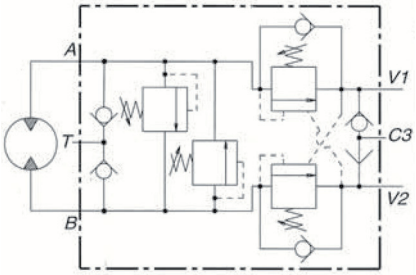
Togliere le viti di fissaggio (pos. 1) disinnestare (pos. 2) estrarre il coperchiello, ruotarlo di 180° e riinserirlo (pos. 3 - 4 - 5), riavvitare la vite di fissaggio (pos. 5)

Take off the fixing screws (pos. 1), disengage (pos. 2), take off the cover, tur the cover of 180° or upset it, and mount again (pos. 3 - 4 - 5), tighten again the fixing screws (pos. 5)

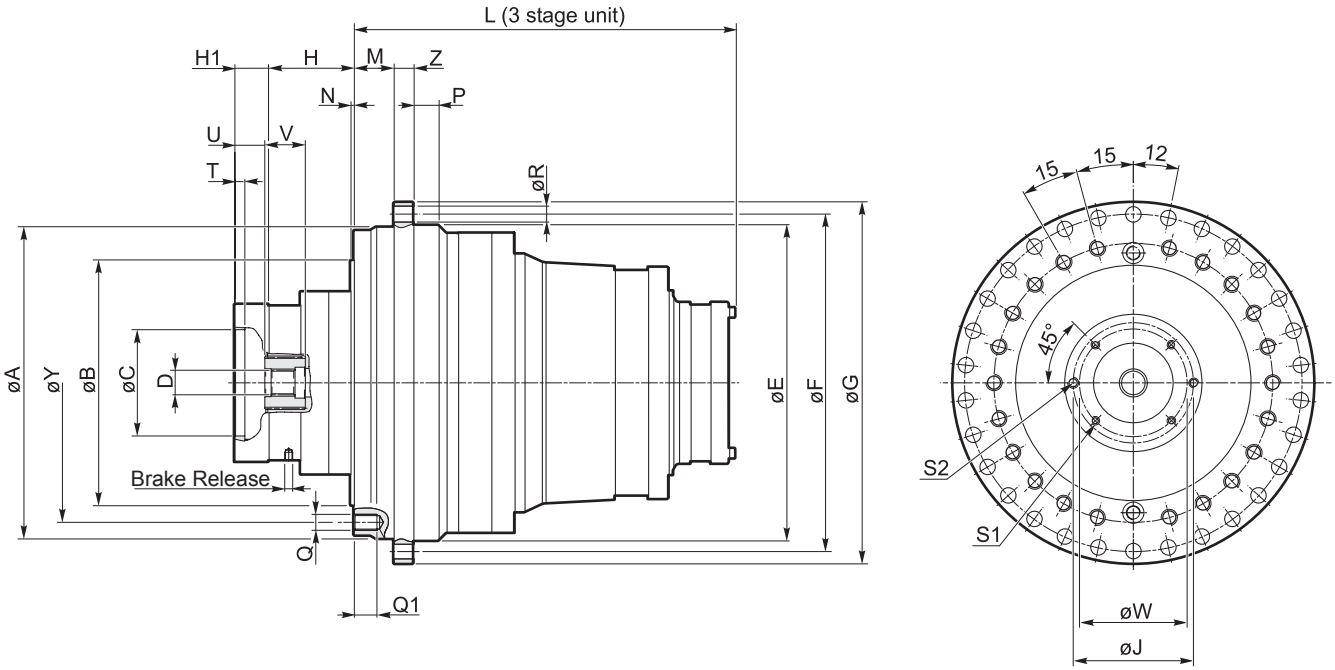
VALVOLE FLANGIABILI AI MOTORI ORBITALI - *Valves to be mounted on orbit motors*

SCHEMA IDRAULICO *Hydraulic circuit*	**DENOMINAZIONE** *Description*	**MOTORI** *Motors*	**PORTATA MAX.** *Max. flow*	**TARATURA** *Setting*	**ATTACCHI** *Ports*		
					V1-V2	C3	T
Valvola selettrice  *Shuttle valve*	USE	OMP OMR			1/2"G	1/4"G	
Valvola di controllo pressione doppia  *Dual relief valve*	USD	OMP OMR	50 l/min	50 - 215 bar	1/2"G		
Valvola di controllo pressione doppia con selettrice  *Dual relief and shuttle valve*	USDSE	OMP OMR	50 l/min	50 - 220 bar	1/2"G	1/4"G	
Valvola di controllo pressione con dispositivo anticavitazione  *Relief valve and anticavitation valve*	UAACC	OMP OMR	50 l/min	30 - 220 bar	1/2"G		1/2"G

VALVOLE FLANGIABILI AI MOTORI ORBITALI - *Valves to be mounted on orbit motors*

	SCHEMA IDRAULICO *Hydraulic circuit*	DENOMINAZIONE *Description*	MOTORI *Motors*	PORTATA MAX. *Max. flow*	TARATURA *Setting*	PILOTAGGIO *Pilot* standard	ATTACCHI *Ports* V1-V2	C3	T
VALVOLE DI CONTROLLO ROTAZIONE BILANCIATE (Vcrb) *Overcenter*	***Vcrb doppia,di blocco pilotata con selettrice***  *Dual pilot assisted overcenter valve*	VBDSE/45	OMP OMR	35 l/min	30 - 220 bar	4:1	1/2"G	1/4"G	
		VBDSE/50	OMP OMR	50 l/min	30 - 220 bar	4:1	1/2"G	1/4"G	
		VBDSE/60	OMP OMR	50 l/min	30 - 220 bar	4:1	1/2"G	1/4"G	
	Vcrb doppia,di blocco pilotata con selett. e antiurto doppia  *Dual pilot assisted over center and antishock valve with brake release port*	VBDSDSE/50	OMS	35 l/min	OC: 30 - 220 bar MP: 30 - 175 bar	4:1	1/2"G	1/4"G	
		VBDSDSE/60	OMP OMR	60 l/min	OC: 30 - 220 bar MP: 30 - 215 bar	4:1	1/2"G	1/4"G	
	Vcrb doppia,di blocco pilotata con selett., antiurto doppia e dispositivo anticavit.  *Dual pilot assisted overcenter and antishock valve with brake release port and anticavitation device*	VBDSDACSE	OMP OMR	35 l/min	OC: 30 - 220 bar MP: 30 - 175 bar	4:1	1/2"G	1/4"G	3/8"G

RIDUTTORI EPICICLOIDALI WD PER ARGANO WD *PLANETARY WINCH DRIVES*



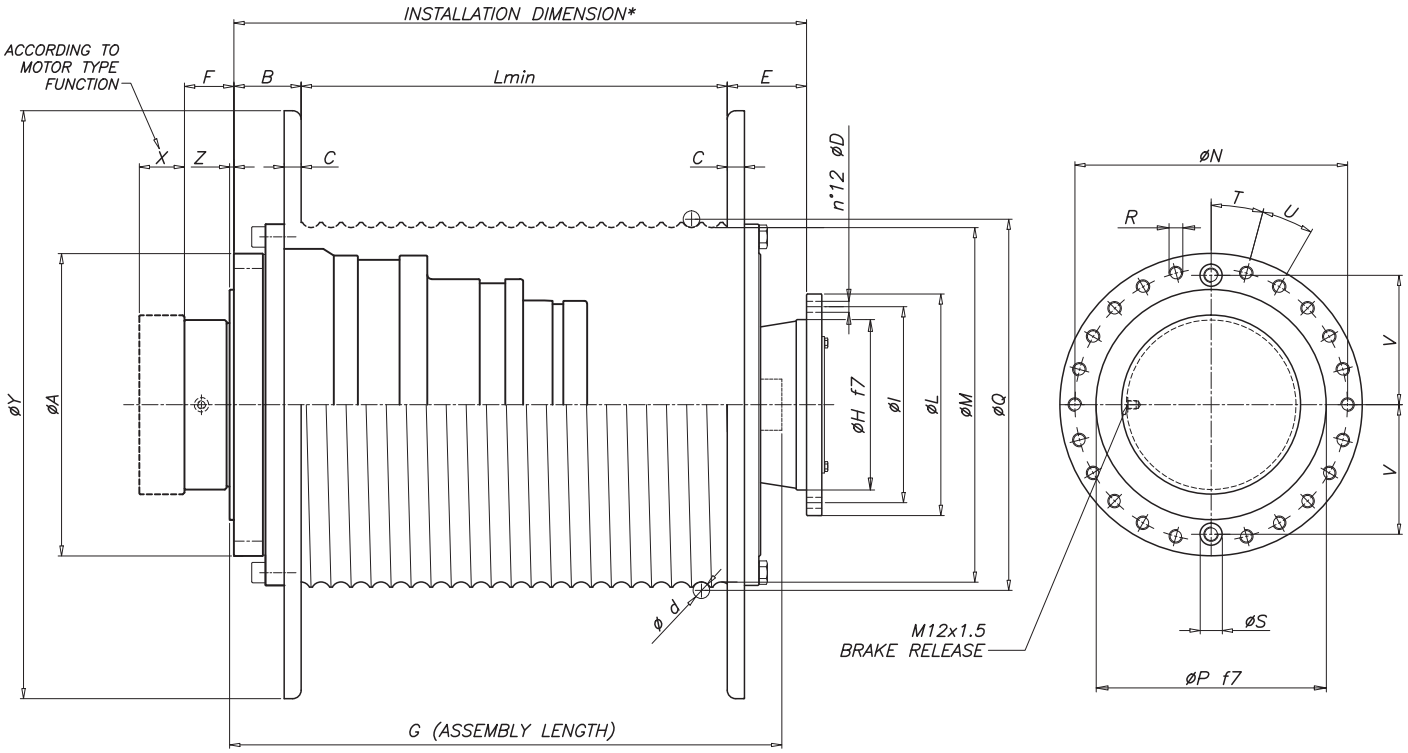
Dimensioni generali - *General Dimensions*

Tipo / *Type*	A	B	E	F	G	H	L	M	N	P	Q	Q1	R	Y	Z
WD 1023	290	200 f7	295 f7	320	348	99	383	40	5	41	M16 (6)	24	Ø17 (18)	255	20
WD 1523	328	230 f7	335 f7	368	398	68	414	37	5	58	M16 (22)	24	Ø17 (24)	280	23
WD 2003	355	270 f7	366 f7	394	424	57,5	424.5	37	5	45	M16 (22)	24	Ø17 (24)	320	23
WD 2523	394	300 f7	402 f7	424	450	81	626	50	5	53	M20 (22)	30	Ø14.5 (36)	350	25
WD 3003	432	330 f7	436 f7	465	495	87,5	477	50	5	60	M20 (22)	30	Ø19 (30)	390	25
WD 4803	470	355 f7	476 f7	508	545	128	575	60	5	38	M24 (22)	34	Ø24 (24)	420	30
WD 8003	530	430 f7	544 f7	578	618	129,5	688	55	5	45	M24 (22)	36	Ø24 (30)	480	35

Dimensioni ingressi - *Input Dimensions*

	C	D	H1	T	U	V	W	S1	J	S2
Input SAE B	101.6 H8	DP16/32 Z13	20	10	7	37	127	n°4 M12	146	n°2 M14
Input SAE C	127 F8	DP12/24 Z14	30	15	16	56	162	n°4 M12	181	n°2 M16
Input SAE D	152.4 F8	DP8/16 Z13	40	15	28	75	229	n°4 M20	/	/

Altre predisposizioni su richiesta - *Different input on demand*



Secondo le norme FEM, classe M5 - T2 - T5 *According to FEM rules, class M5 - T2 - T5*

Dimensioni generali WDD - *WDD General Dimensions*

Tipo / *Type*	A	B	C	D	E	F	G	H	I	L	M	N	P	Q	R	S	T	U	V	Lmin	Y	Z
WDD A75	285	74	15	10.5	85	99	451	175	200	225	341	255	200	359	N°16-M16	32	20°	20°	117	320	560	5
WDD B100	315	79	20	12.5	93	68	494	200	230	260	392	280	230	412	N°22-M16	32	15°	15°	132	350	630	5
WDD C130	355	79	20	13	93	58	514	200	230	260	416	320	270	438	N°22-M16	32	15°	15°	152	370	690	5
WDD D155	385	94	20	17	110	81	554	230	260	290	443	350	300	467	N°22-M20	35	15°	15°	168	385	720	5
WDD E190	425	99	25	21	135	87.5	592.5	260	310	360	490	390	330	516	N°22-M20	35	15°	15°	184	390	790	5
WDD F230	460	118.5	30	21	139.5	60	678	260	310	360	540	420	355	568	N°22-M24	35	15°	15°	195.5	465	865	5
WDD G300	530	118.5	30	21	147	61	780.5	300	350	400	610	480	430	640	N°22-M24	35	15°	15°	233	560	960	5

* Installation dimension = B + Lmin. + E

Prestazioni WDD - WDD *Performances*

Tipo / *Type*	*Typical line pull on first layer* [daN]	*ø d (suggested cable)* [mm]
WDD A75	7500	18
WDD B100	10000	20
WDD C130	13000	22
WDD D155	15500	24
WDD E190	19000	26
WDD F230	23000	28
WDD G300	30000	30

Prestazioni WD *WD Performances*

Coppie nominali secondo FEM 1.001 sezione 1 - 3ª edizione-1998
Nominal torques according to FEM 1.001 part 1 - 3rd edition-1998

Size	i_e	$T_{2\ fem}$ [Nm]	$T_{d\text{-}max}$ [Nm]	$T_{s\text{-}max}$ [Nm]	$n_{1\text{-}max}$ [RPM]
WD 1023	52.83	18100	26900	33400	3100
	62.55	18100	26900	33400	3100
	74.03	18100	26900	33400	3100
	78.70	18100	26900	33400	3100
	93.09	18100	26900	33400	3100
	108.45	18100	26900	33400	3100
	111.15	18100	26900	33400	3100
	117.00	18100	26900	33400	3100
	131.40	18100	26900	33400	3100
	136.27	18100	26900	33400	3100
	165.05	18100	26900	33400	3100
WD 1523	51.46	26100	43200	60000	3100
	60.16	26200	43200	60000	3100
	71.21	26300	43200	60000	3100
	74.11	26300	43200	60000	3100
	76.71	26300	43200	60000	3100
	87.67	26300	43200	60000	3100
	89.61	26350	43200	60000	3100
	104.33	26350	43200	60000	3100
	108.29	24900	43200	60000	3100
	110.27	26400	43200	60000	3100
	126.42	26400	43200	60000	3100
	128.35	26400	43200	60000	3100
	155.48	26500	43200	60000	3100
WD 2003	48.16	33800	57900	80000	3100
	56.31	33500	57900	80000	3100
	57.03	34000	57900	80000	3100
	66.66	33800	57900	80000	3100
	69.38	33000	57900	80000	3100
	71.82	34100	57900	80000	3100
	82.09	33000	57900	80000	3100
	83.90	33650	57900	80000	3100
	97.70	33650	57900	80000	3100
	103.26	33000	57900	80000	3100
	120.21	33000	57900	80000	3100
	145.62	33000	57900	80000	3100
WD 2523	50.29	44050	72800	105000	3100
	58.82	44200	72800	105000	3100
	59.55	44200	72800	105000	3100
	69.62	44300	72800	105000	3100
	72.44	44300	72800	105000	3100
	75.0	44350	72800	105000	3100
	85.70	44350	72800	105000	3100
	87.34	44450	72800	105000	3100
	97.99	42450	72800	105000	3100
	102.02	44500	72800	105000	3100
	105.86	44500	72800	105000	3100
	107.79	44500	72800	105000	3100
	123.62	44500	72800	105000	3100
	125.48	44600	72800	105000	3100
	152.00	44600	72800	105000	3100

Prestazioni WD *WD Performances*

Coppie nominali secondo FEM 1.001 sezione 1 - 3ª edizione-1998
Nominal torques according to FEM 1.001 part 1 - 3rd edition-1998

Size	i_e	$T_{2\,fem}$ [Nm]	$T_{d\text{-}max}$ [Nm]	$T_{s\text{-}max}$ [Nm]	$n_{1\text{-}max}$ [RPM]
WD 3003	49.75	48200	94700	136500	2500
	58.19	48250	94700	136500	2500
	68.02	47620	94700	133700	2500
	71.66	48200	94700	136500	2500
	81.97	48200	94700	136500	2500
	83.74	48250	94700	133700	2500
	95.75	47900	94700	133700	2500
	96.70	48400	94700	136500	2500
	103.04	46800	90600	121200	2500
	112.94	47600	94700	133700	2500
	117.79	46800	90600	121200	2500
	138.88	46800	90600	121200	2500
WD 4803	51.99	69850	123300	160000	3100
	61.55	69350	123300	160000	3100
	71.58	83750	123300	168500	3100
	77.49	67500	123300	160000	3100
	84.68	84000	123300	168500	3100
	90.26	66650	123300	160000	3100
	106.51	84100	123300	168500	3100
	109.39	52000	103200	160000	3100
	123.99	84000	123300	168500	3100
	150.20	70000	123300	168500	3100
WD 8003	56.0	96800	197200	312000	2500
	65.45	96000	197200	312000	2500
	73.1	118000	197200	312000	2500
	80.60	94450	197200	312000	2500
	85.4	115800	197200	312000	2500
	92.17	93100	197200	298100	2500
	105.08	113500	197200	312000	2500
	108.71	91300	184300	304500	2500
	120.12	112200	197200	312000	2500
	126.50	96500	174500	221600	2500
	141.63	110300	197200	312000	2500
	170.43	96700	174500	221600	2500

Peso e olio - *Weight and Oil Quantity*

	***Weight* [kg]**	***Oil Quantity* [litri - *liters*]**
WD 1023	150	3.5
WD 1523	200	4.5
WD 2003	225	5
WD 2523	275	6
WD 3003	350	8
WD 4803	455	10
WD 8003	660	15

Quando sono richieste approvazioni da enti esterni (DNV;ABS;API etc..), per la selezione contattare l'Ufficio Commerciale
When approvals are required by third parties(DNV;ABS;API etc..), please contact the Commercial Sales Department for the selection

Valori di coefficiente di amplificazione γ_m - *Values of Amplifying Coefficient* γ_m

Mechanism group	M1	M2	M3	M4	M5	M6	M7	M8
γ_m	1.00	1.04	1.08	1.12	1.16	1.20	1.25	1.30

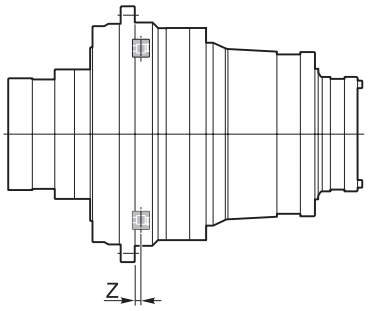
Classe del meccanismo - *Mechanism Class*

		T0	T1	T2	T3	T4	T5	T6	T7	T8	T9
Class of load spectrum	Spectrum Coefficent K_m	200h	400h	800h	1600h	3200h	6300h	12500h	25000h	50000h	100000h
L1	**0.5**	M1 1.89	M1 1.71	M1 1.57	M2 1.44	M3 1.34	M4 1.26	M5 1.16	M6 1.02	M7 0.87	M8 0.72
L2	**0.63**	M1 1.5	M1 1.36	M2 1.24	M3 1.14	M4 1.06	M5 1	M6 0.92	M7 0.81	M8 0.69	M8 0.57
L3	**0.79**	M1 1.18	M2 1.07	M3 0.98	M4 0.9	M5 0.84	M6 0.79	M7 0.72	M8 0.64	M8 0.55	M8 0.45
L4	**1**	M2 0.95	M3 0.86	M4 0.78	M5 0.72	M6 0.67	M7 0.63	M8 0.58	M8 0.51	M8 0.44	M8 0.36

Esempio - *Example*: $C_{L3\text{-}T1} = C_{L2\text{-}T5} \cdot 1.07$

Queste coppie non devono mai superare il valore della coppia massima dinamica a tabella
These torques must never be higher than the max dynamic torque in the rating table

Capacità di carico cuscinetto - *Bearing Load Capacity*



Tipo - *Type*	C_0 [N]	C_d [N]	Z [mm]
WD 1020	330000	183000	17.5
WD 1520	435000	224000	19.7
WD 2000	435000	224000	25.2
WD 2520	620000	315000	21
WD 3000	620000	315000	20.75
WD 4800	800000	390000	13.25
WD 8000	840000	405000	14.5

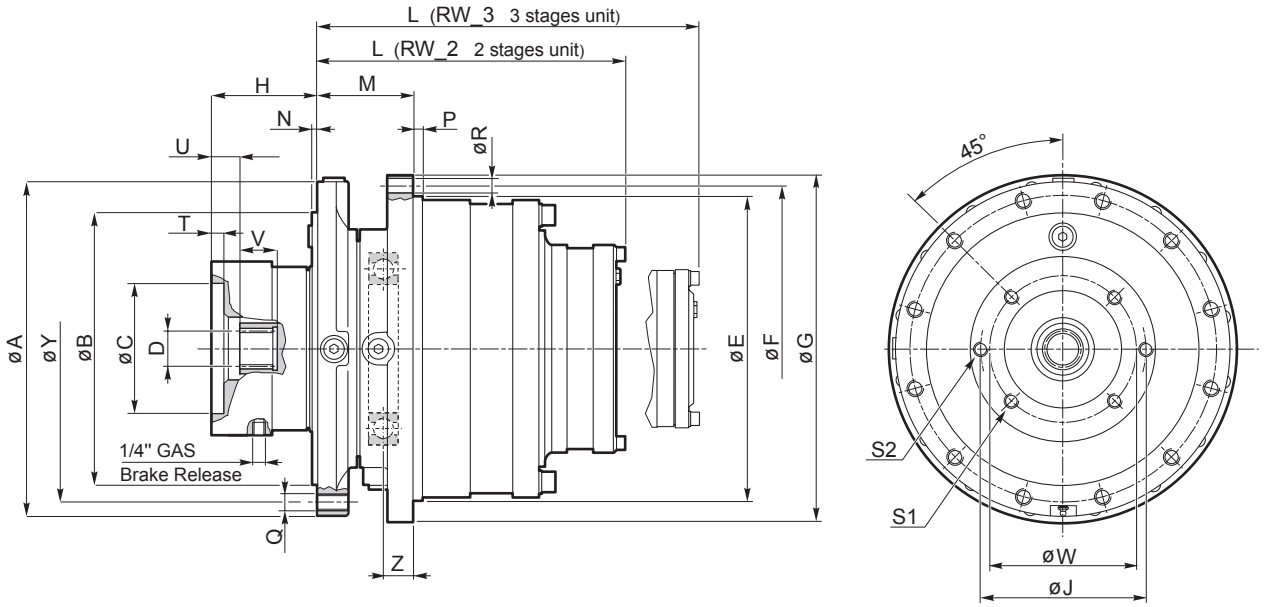
Prestazioni freni FW - *FW Brake Performances*

	FW02	FW03	FW05	FW08	FW11	FW13	FW16	
T_b *[Nm]*	230	340	550	800	1100	1300	1600	
p_b *[bar]*	15	15	17.5	17.5	17.5	17.5	17.5	
p_{max} *[bar]*	300	300	300	300	300	300	300	± 5%
$n_{1\text{-}max}$ *[RPM]*	3500	3500	3500	3500	3500	3500	3500	

Prestazioni freni FY - *FY Brake Performances*

	FY22	FY27	FY36	
T_b *[Nm]*	2200	2700	3600	
p_b *[bar]*	17.5	17.5	17.5	
p_{max} *[bar]*	300	300	300	± 5%
$n_{1\text{-}max}$ *[RPM]*	3500	3500	3500	

RIDUTTORI EPICICLOIDALI RW PER ARGANO RW *PLANETARY WINCH DRIVES*



Dimensioni generali - *General Dimensions*

Tipo / *Type*	A	B	E	F	G	L	M	N	P	Q	R	Y	Z
RW 512	262	215 f7	246 f7	271	291	246.5	75	11	10	n° 12 M12	n° 12 Ø13	240	20
RW 513	262	215 f7	246 f7	271	291	289.5	75	11	10	n° 12 M12	n° 12 Ø13	240	20
RW 612	262	215 f7	246 f7	271	291	251	75	11	10	n° 12 M12	n° 12 Ø13	240	20
RW 613	262	215 f7	246 f7	271	291	293	75	11	10	n° 12 M12	n° 12 Ø13	240	20
RW 812	330	270 f7	297 f7	327	352	305	100	6	12	n° 12 M16	n° 12 Ø17	300	26.5
RW 813	330	270 f7	297 f7	327	352	348.5	100	6	12	n° 12 M16	n° 12 Ø17	300	26.5
RW 1022	330	270 f7	297 f7	327	352	340	100	6	12	n° 12 M16	n° 12 Ø17	300	26.5
RW 1023	330	270 f7	297 f7	327	352	395.5	100	6	12	n° 12 M16	n° 12 Ø17	300	26.5
RW 1532	393	320 f7	352 f7	383	408	363	113	6	11	n° 12-M20	n° 16 Ø17	360	34.5
RW 2522	393	320 f7	415 f7	448	473	413	115	6	24	n° 16 M20	n° 24 Ø17	360	29.5

Dimensioni ingressi - *Input Dimensions*

	C	D	H	T	U	V	W	S1	J	S2
Input SAE B	101.6 H8	DP16/32 Z13	138	10	8	30	127	n° 4 M12	146	n° 2 M14
Input SAE C	127 F8	DP12/24 Z14	114	15	16	48	162	n° 4 M12	181	n° 2 M16
Input SAE D	152.5 F8	DP8/16 Z13	128	15	33	47	229	n° 4 M20	/	/

Altre disposizioni su richiesta / *Different input on demand*

Prestazioni RW_2 (2 stadi) **- RW_3** (3 stadi)
Performances RW_2 *(2 stages)* **-** ***RW_3*** *(3 stages)*

Coppie nominali secondo FEM 1.001 sezione 1 - 3ª edizione-1998
Nominal torques according to FEM 1.001 part 1 - 3rd edition-1998

Size	i_e	$T_{2\,fem}$ [Nm]	$T_{d\text{-}max}$ [Nm]	$T_{s\text{-}max}$ [Nm]	$n_{1\text{-}max}$ [RPM]
RW 512	13.79	7300	7900	8800	5200
	17.11	7380	9700	10800	5200
	21.71	6000	10500	13500	5200
	23.52	6600	12500	14500	5200
	29.75	6100	10500	14800	5200
	34.77	5100	8900	11800	5200
	37.38	5850	10500	14800	5200
	43.64	5150	8900	11800	5200
RW 513	42.60	7680	11900	13200	5200
	52.41	7720	11900	13200	5200
	62.05	7680	12900	15500	5200
	64.42	7750	11900	13200	5200
	71.27	7760	11900	13200	5200
	76.24	7700	12900	15500	5200
	84.32	7720	12900	15500	5200
	89.20	6580	11900	13200	5200
	95.92	6250	10500	14800	5200
	105.81	7710	12900	15500	5200
	109.50	7800	11900	13200	5200
	123.47	5240	8900	11800	5200
	129.45	7750	12900	15500	5200
	154.35	5240	8900	11800	5200
	162.69	6250	10500	14800	5200
	189.30	5250	8900	11800	5200
RW 612	13.4	9550	10500	11800	3100
	16	9700	12500	13900	3100
	18.34	8600	13400	15800	3100
	20.33	9800	15600	17400	3100
	23.8	9050	16200	18100	3100
	27.21	8750	13400	20500	3100
	29	7100	13600	18100	3100
	33.13	8000	13400	20500	3100
RW 613	49.11	10000	16200	18100	5200
	55.94	8900	13400	20500	5200
	60.39	10000	16200	18100	5200
	68.75	8950	13400	20500	5200
	73.24	10150	16200	18100	5200
	83.35	9000	13400	20500	5200
	93.41	9000	13400	20500	5200
	97.09	10150	16200	18100	5200
	102.33	9000	13400	20500	5200
	110.45	9000	13400	20500	5200
	122.09	10070	16200	18100	5200
	142.10	9250	16200	18100	5200
	152.59	10300	16200	18100	5200
	161.59	9050	13400	20500	5200
	173.52	9050	13400	20500	5200
	201.89	9050	13400	20500	5200
RW 812	14.14	11750	11100	12400	3100
	18	9600	13900	15500	3100
	21.13	10750	16200	18100	3100
	24.73	9400	18000	21000	3100
	30.62	9100	15700	21000	3100
	35.10	7700	13400	18600	3100
	37.25	9000	15700	21000	3100
	42.74	7900	13400	18600	3100
RW 813	43.60	12400	20800	24300	5200
	53.63	12400	20800	24300	5200
	63.50	12350	20800	24500	5200
	76.09	11150	18600	23000	5200
	86.30	11100	20800	24500	5200
	93.44	11150	18600	23000	5200
	100.87	11150	18600	23000	5200
	108.55	10000	18300	24500	5200
	114.88	9300	15700	21000	5200
	126.82	11200	18600	23000	5200
	135.70	9800	18300	24500	5200
	147.61	9700	18000	23000	5200
	158.50	11200	18600	23000	5200
	184.43	9700	18000	23000	5200
	207.31	7900	13400	18600	5200

Prestazioni RW_2 (2 stadi) **- RW_3** (3 stadi)
Performances RW_2 *(2 stages)* **-** ***RW_3*** *(3 stages)*

Coppie nominali secondo FEM 1.001 sezione 1 - 3ª edizione-1998
Nominal torques according to FEM 1.001 part 1 - 3rd edition-1998

Size	i_e	$T_{2\,fem}$ [Nm]	$T_{d\text{-}max}$ [Nm]	$T_{s\text{-}max}$ [Nm]	$n_{1\text{-}max}$ [RPM]
RW 1022	14.14	13770	13770	15352	3100
	16.64	15400	16060	17900	3100
	18.00	16500	17280	19260	3100
	21.08	16600	20000	22400	3100
	24.73	15700	23400	26100	3100
	30.13	15150	26880	31600	3100
	37.25	13200	22650	30300	3100
	42.74	11200	19300	26950	3100
RW 1023	43.60	17880	30000	35400	5200
	53.63	17950	30000	35400	5200
	65.07	18010	30000	35400	5200
	72.95	18040	30000	35400	5200
	79.94	18060	30000	35400	5200
	93.09	17150	30000	35400	5200
	100.87	16200	26900	33400	5200
	108.55	17200	30000	35400	5200
	126.82	16200	26900	33400	5200
	135.70	18150	30000	35400	5200
	147.61	16250	26900	33400	5200
	158.50	17150	26900	33400	5200
	167.22	9800	16600	21400	5200
	184.43	16250	26900	33400	5200
	207.31	11450	19300	27000	5200
	226.66	13500	22600	30300	5200
RW 1532	17.9	19100	32200	35900	3100
	20.81	22650	37200	41400	3100
	24.36	19100	36500	48200	3100
	27.00	19450	33800	53200	3100
	29.68	14950	28700	50300	3100
	31.55	19550	33800	54600	3100
	38.38	19100	33800	54600	3100
	45.73	15550	26900	46300	3100
RW 2522	17.51	31400	33400	37200	2500
	19.40	32530	36800	41000	2500
	21.25	24600	40100	44700	2500
	25.52	32000	47800	53200	2500
	29.26	32100	52900	60800	2500
	30.88	25000	43700	61700	2500
	34.62	31150	53000	61700	2500
	41.81	25150	43700	61700	2500

Peso e quantità olio - ***Weight and Oil Quantity***

	Weight **[kg]**	***Oil Quantity*** **[litri -** ***liters*****]**
RW 512	75	2
RW 513	85	2.3
RW 612	90	2.3
RW 613	100	2.5
RW 812	130	3
RW 813	140	3.5
RW 1022	145	4
RW 1023	155	4.2
RW 1532	195	5
RW 2522	275	7

Quando sono richieste approvazioni da enti esterni (DNV;ABS;API etc..), per la selezione contattare l'Ufficio Commerciale
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Valori di coefficiente di amplificazione γ_m - *Values of Amplifying Coefficient* γ_m

Mechanism group	M1	M2	M3	M4	M5	M6	M7	M8
γ_m	1.00	1.04	1.08	1.12	1.16	1.20	1.25	1.30

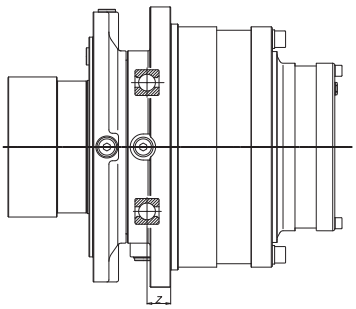
Classe del meccanismo - *Mechanism class*

		T0	T1	T2	T3	T4	T5	T6	T7	T8	T9
Class of load spectrum	Spectrum Coefficent K_m	200h	400h	800h	1600h	3200h	6300h	12500h	25000h	50000h	100000h
L1	**0.5**	M1 1.89	M1 1.71	M1 1.57	M2 1.44	M3 1.34	M4 1.26	M5 1.16	M6 1.02	M7 0.87	M8 0.72
L2	**0.63**	M1 1.5	M1 1.36	M2 1.24	M3 1.14	M4 1.06	M5 1	M6 0.92	M7 0.81	M8 0.69	M8 0.57
L3	**0.79**	M1 1.18	M2 1.07	M3 0.98	M4 0.9	M5 0.84	M6 0.79	M7 0.72	M8 0.64	M8 0.55	M8 0.45
L4	**1**	M2 0.95	M3 0.86	M4 0.78	M5 0.72	M6 0.67	M7 0.63	M8 0.58	M8 0.51	M8 0.44	M8 0.36

Esempio - *Example*: $C_{L3\text{-}T1} = C_{L2\text{-}T5} \cdot 1.07$

Queste coppie non devono mai superare il valore della coppia massima dinamica a tabella
These torques must never be higher than the max dynamic torque in the rating table

Capacità di carico cuscinetto - *Bearing Load*



Tipo - *Type*	C_0 [N]	C_d [N]	Z [mm]
RW 512 - RW 513	65500	72800	20
RW 612 - RW 613	65500	72800	20
RW 812 - RW 813	100000	106000	26.5
RW 1022 - RW 1023	100000	106000	26.5
RW 1532	125000	125000	34.5
RW 2522	143000	390000	29.5

Prestazioni freni F5 - *F5 Brake Performances*

		F 501	F 502	F 503	F 504	F505	F 506	F508	
T_b ***[Nm]***		110	215	325	405	500	630	818	
p_b ***[bar]***		10	20	30	38	28	35	33	
p_{max} ***[bar]***		300	300	300	300	300	300	300	± 5%
$n_{1\text{-}max}$ ***[RPM]***	standard	1500	1500	1500	1500	1500	1500	1500	
	special	3500	3500	3500	3500	3500	3500	3500	

Prestazioni freni F9 - *F9 Brake Performances*

		F 902	F 903	F 904	F 905	F906	F 908	F910	F 912	F915	
T_b ***[Nm]***		244	317	439	488	683	854	976	1120	1465	
p_b ***[bar]***		16	21	20	16	23	23	26	32	39	
p_{max} ***[bar]***		300	300	300	300	300	300	300	300	300	± 5%
$n_{1\text{-}max}$ ***[RPM]***	*standard*	1500	1500	1500	1500	1500	1500	1500	1500	1500	
	special	3500	3500	3500	3500	3500	3500	3500	3500	3500	

Su richiesta, i freni fino alla taglia F912 possono essere dotati di ruota libera.
Upon request, brakes up to size F912 can be equipped with freewheeling clutch.

Ratings RE - 2 (2 stages) **Ratings RE - 3** (3 stages)

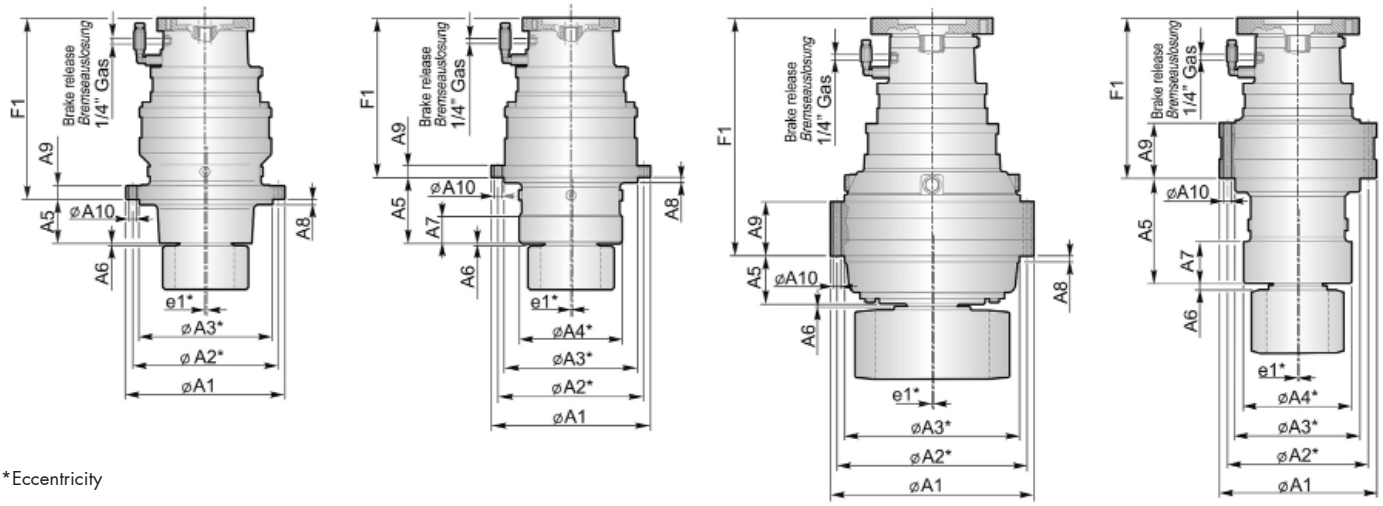
	Type	RE240		RE310		RE510		RE610		RE810		RE1020		RE1520		RE2520		RE3510		RE4800		RE6000		RE8000	
	in	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm	ie	T2 FEM* Nm
2	**12.5**	13.29	4352	12.53	4583	12.53	9530			12.83	14970	12.83	24124												
	14	15.47	3716	14.79	4824	14.79	9946	14.40	12838	15.14	14183	15.14	24124	14.73	33651	14.25	54046	13.68	75579	13.17	95682	14.20L	102049	14.5L	150171
	16	16.28	4352	15.35	4513	15.35	9025	16.36	11173	17.65	14400	17.65	20856	17.39	32879	16.62	46706	16.88	66986	15.71	105241	15.88	116657	16.00	166208
	18			18.12	4824	18.12	9946	17.00	12838	18.36	11683	19.00	19413			18.53	41294			17.75	73907			18.82	166208
	20	18.95	3716	20.77	3217	20.77	6492	19.32	11173									19.68	66986	20.16	79719	20.70	91603	20.8L	136351
	22.5	22.03	3401	22.74	3786	22.74	7800	21.33	12538	22.15	12994	22.15	20856	21.82	26383	21.60	41294	22.59	52440	21.18	73908	21.75	111360	21.96	139657
	25	25.64	3716	24.52	3763	24.52	7592	24.24	11173	25.75	10865	25.75	20856	25.36	22117	26.52	41294	24.16	65279	26.40L	70976			24.26L	139657
	28	27.49	2409	26.43	3113	26.43	6427	28.18	11173	27.20	11683	27.20	16895	28.00	25062	30.28	41294	27.73	52440	27.18	73907	28.35	91603	29.16L	122265
	32.5	31.32	2908	30.77	3786	30.77	7800	30.00	8148	31.62	11683	31.62	16895	32.55	25062			31.67	52440	32.25	73907				
	35.5			35.77	3113	35.77	6427	34.09	9190	36.11	9724	36.11	14063	33.23	19319	35.66	35513	37.29	52440						
	40	39.09	2908	38.40	3303	38.40	6687			38.25	10244	38.25	16895	39.38	21690							40.05L	67526		
	45			44.64	3113	44.64	6427			43.68	9724	43.68	14063	46.73	19319	42.86	31354	44.31	44402						
	50			54.00	2368	54.00	4878			51.43	8140	51.43	11775												
3	**45**	46.24	4352	43.60	4583	43.60	9530													47.40	95682				
	50	53.82	3716	51.47	4824	51.47	9946	50.11	12838	52.69	14183	52.69	24124	51.25	33651	51.30	53251	49.25	75579						
	56	56.65	4352	53.41	4583	53.41	9530	59.16	12838	54.68	14717	54.68	24124	60.50	32879	59.82	46706	58.14	75579	56.55	105241			57.00	166208
	63	65.94	3716	63.05	4824	63.05	9946	61.39	12838	63.75	14400	63.75	20856	62.78	33535	60.56	51521	60.75	66986	66.76	105241	63.52	116657	66.46	139658
	71	69.39	4352	72.28	4583	72.28	9530	72.47	12838	75.26	14400	73.99	21510	74.12	32879	70.62	46706	72.96	75579	72.58	79719	72.19	116657		
	80	76.66	4352	77.24	4824	77.24	9946	83.08	11892	77.10	12994	81.00	23157	80.57	25062	78.73	41294	82.33	52440	83.58	93812	78.68L	91603	78.19	166208
	90	93.91	4352	85.33	4824	85.33	9946	90.95	12538	87.35	12467	89.62	20856	93.01	26383	86.70	38490	90.00	66986	90.00	73907	87.00	111360	93.17	166208
	100	95.67	4352	104.53	4824	104.53	9946	98.08	12838	101.85	14400	101.85	20856	100.31	28657	103.02	40151	98.89	65340	97.39	78644	98.86	111360		
	112	111.36	3716	106.49	4824	110.50	8948	111.45	11173	109.62	11241	109.62	23157	109.04	25062	112.71	41294	104.94	66986	112.94	73908	113.40	91603	112.00	139657
	125	117.20	4352	130.45	4824	130.45	9946	123.08	12538	127.81	12994	127.81	20856	125.87	26383	128.70	41294	121.99	66986	124.99	79719	128.86	91603	127.88	139657
	140	147.93	3716	141.46	3763	141.46	7592	139.86	11173	134.80	11683	148.58	20856	146.33	22117	141.44	41294	149.78	65279	144.94	73908	142.99L	86422	150.58	139657
	160	158.60	3401	163.71	3786	163.71	7800	162.59	11173	156.92	11683	159.51	20856	157.09	25238	164.42	41294	168.88	52440	158.82	73908	163.12L	82849	166.4L	139657
	180	184.62	3716	176.54	3763	176.54	7592	178.56	10486	182.42	11683	185.43	20856	182.62	22117	187.75	41294	181.18	65279	172.02	73908	175.77L	91603		
	200	197.93	2409	190.31	3113	190.31	6427	202.91	11173	195.84	11683	195.84	16895	201.60	25062	198.90	41294	207.98	52440	199.97	73908	208.60L	86422	200L	122265
	225	230.40	2781	221.54	3786	221.54	7800			227.66	11683	227.66	16895	234.36	25062	221.07	35513	237.49	52440			212.62L	91603		
	250			257.54	3113	257.54	6427	245.45	9190	251.98	9724			239.26	19319	239.06	31354	247.15	44402	241.90	73908				
	280	281.42	2908	276.48	3303	276.48	6687			275.40	10244	275.40	16895	278.14	19319	267.43	35513	279.64	52440			252.34L	86422		
	315			321.41	3113	321.41	6427			314.47	9724	314.47	14063			321.43	31354	332.31	44402						

* It could be limited by pinion performance.

in		Renard numbers ratio
ie		Actual ratio
T2 FEM	[Nm]	Nominal output torque according to FEM M2 (T2 - L2) with 25 rpm
T2 _ CONT	[Nm]	Output continuous torque
T_MAX_dyn	[Nm]	Max dynamic output torque
T_MAX_stat	[Nm]	Max static output torque

1 2 3 4

Possible different f ange according to mounted motor.

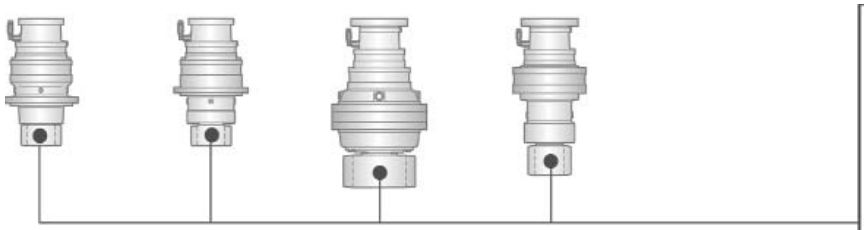


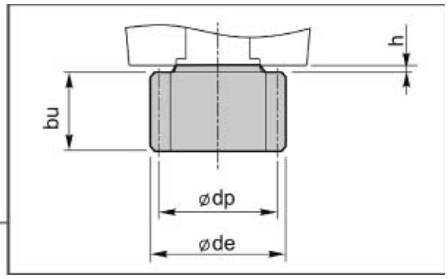
*Eccentricity

Output dimension

Type		T2_CONT (Nm)	ø A1	ø A2	ø A3	A4	A5	A6	A7	A8	A9	ø A10	n° A10	F1 2 stages	F1 3 stages	e1
RE 240 DBS	1	4350	214	190	160 h8	—	54.5	2	—	12	12	12.5	12	322.5	—	—
RE 240 T4	1	4350	250	227	180 h8	—	46.5	3.5	—	15	20	12.5	8	229.5	—	—
RE 310 NR	1	4820	224	190	150 f7	—	20.5	7.5	—	8.5	20	14.5	8	336.5	379.5	—
RE 310 T	1	4820	272	245	175 h7	—	38	1.5	—	12	20	12.5	20	319	362	1.5
RE 310 T6	1	4820	272	245	175 h7	—	38	1.5	—	9	20	18	10	319	362	—
RE 310 T8	1	4820	240	215	175 h7	—	38	1.5	—	9	20	17	12	319	362	—
RE 310 T9	1	4820	250	227	180 h8	—	38	1.5	—	12	20	12.5	10	319	362	—
RE 510 NR	1	7730	224	190	150 f7	—	20.5	7.5	—	8.5	20	14.5	8	373.5	416.5	—
RE 510 T	1	9940	272	245	175 h7	—	38	1.5	—	12	20	12.5	20	366.5	409.5	1.5
RE 510 T6	1	9940	272	245	175 h7	—	38	1.5	—	9	20	18	10	349	392	—
RE 510 T8	1	9940	240	215	175 h7	—	38	1.5	—	9	20	17	12	349	392	—
RE 510 T9	1	8430	250	227	180 h8	—	38	1.5	—	12	20	12.5	10	349	392	—
RE 510 T18	2	9940	350	325	290 h8	184 h8	286	5	72	10	20	14.5	12	349	392	—
RE 510 DBS	1	9940	280	250	215 f7	—	73	7	—	15	20	17	12	213.5	256.5	1.5
RE 610 T18	2	12830	350	325	290 h8	184 h8	286	5	72	10	20	14.5	12	216.5	260	—
RE 610 DBS	1	12830	340	310	250 h8	—	87	5	—	12	23.5	16.5	12	369.5	412	—
RE 810 TR	1	14740	280	250	200 f7	—	44.5	3.5	—	10.5	22	17	12	370.5	414	1.5
RE 1020 DBS	1	24120	355	325	298 h8	—	98	2	—	12	30	16.5	16	396.5	481	1.5
RE 1020 DBT	2	24120	355	325	298 h8	230 h8	147	2	60	12	25	16.5	16	353.5	432	—
RE 1020 Z	2	24120	365	326	250 h8	200 h8	247	8	62	20	40	18	12	297	351	1.5
RE 1020 Z1	2	24120	380	350	280 h7	230 h7	296.5	6	93.5	20	30	18	16	287	341	2.5
RE 1520 DBS	1	33650	420	380	340 h8	—	95	5	—	20	30	21	20	492	546	2.5
RE 1520 DBT	2	33650	420	380	340 h7	290 h7	220	5	45	20	30	21	16	367	422	—
RE 1520 Z	4	26030	350	314	278 h8	240 h8	233	6	92	30	123	16.5	12	310.5	364.5	—
RE 2520 DBS	1	54040	420	380	340 h8	—	97	3	—	20	30	21	20	—	585	2.5
RE 2520 Z	2	54040	500	460	410 h8	270 h8	370	9	95	25	25	22	12	—	388.25	—
RE 2520 Z1	1	54040	430	395	280 h7	—	78	5	—	58	35	22	24	—	680.5	2.5
RE 3510 DBS1	1	75570	490	445	400 f7	—	104	7	—	18	37	21	24	—	801	1.5
RE 3510 T	1	75570	575	525	465 h7	—	110	5	—	20	42	26	24	—	729.5	2.5
RE 3510 Z2	2	75570	530	490	410 h8	325 h8	342	20	105	30	30	22	24	—	567	—
RE 3510 HR	3	75570	452	424	390 f7	—	107	2	—	15	120	20.5	24	—	480.5	2
RE 4800 DBS1	1	105240	490	445	400 f7	—	104	7	—	18	37	21	24	—	858	1.5
RE 6000 Z1	2	116660	585	545	510 h8	360 h8	245.5	10	118	15	30	19	24	—	645.5	2
RE 6000 Z4	2	116660	680	630	575 h8	380 h8	510	16	145	25	30	26	16	—	540	2.5
RE 8000 Z4	2	166210	680	630	575 h8	380 h8	510	16	145	25	30	26	16	—	835	2.5

All dimensions are in mm.





Pinion data

Type	m	z	x	de	dp	bu	h	T_MAX_dyn [Nm]	T_MAX_stat [Nm]
RE 240 DB	8	14	0.5	134.75	112	68	2	5790	6430
RE 240 T4	8	11	0	104	88	60	1.5	2450	3060
RE 310 T	8	14	0.5	135	112	75	11	4920	7600
RE 310 NR	10	12	0.5	149	120	90	19.5	4920	7600
	8	12	0.5	120	96	83	10.5	4920	7600
	8	11	0.5	110.8	88	79	10.5	4920	7600
RE 310 T6	10	14	0.5	168	140	80	2	4920	7600
	10	13	0.6	161	130	86	16.5	4920	7600
RE 310 T8	10	12	0.55	150.5	120	93	3	4920	7600
RE 310 T9	10	11	0.43	136.8	110	85	20	4920	7600
RE 510 T	8	14	0.5	135	112	75	11	9580	11980
RE 510 NR	10	12	0.5	149	120	90	19.5	7730	12110
	8	12	0.5	120	96	83	10.5	7730	10410
	8	11	0.5	110.8	88	79	10.5	7730	9720
RE 510 T6	10	14	0.5	168	140	80	2	10160	14280
	10	13	0.6	161	130	86	16.5	10160	13250
RE 510 T8	10	12	0.55	150.5	120	93	3	10160	13000
RE 510 T9	10	11	0.43	136.8	110	85	20	8430	10880
RE 510 T18	8	14	0.355	138.68	112	78	4	9560	11950
RE 510 DB	10	11	0.5	137	110	78	7	10160	11676
	10	10	0.5	127	100	81.5	7	10160	13250
RE 610 DB	12	10	0.5	152.4	120	86	5	17310	18630
RE 610 T18	12	11	0.525	168.61	132	110	6	10950	13690
RE 810 TR	10	13	0.5	160	130	85	5.5	14470	18080
RE 1020 DB	12	12	0.5	177.33	144	88	2	16980	21230
	14	11	0.5	192.36	154	97	2	17880	22350
RE 1020 Z	10	12	0.2	144	120	90	21	15890	19860
RE 1020 Z1	16	11	0.57	222	176	118	6	21990	35770
RE 1520 DBS	16	10	0.5	203.2	160	120	5	31000	34500
	18	10	0.5	230.4	180	150	5	33000	37000
RE 1520 DBT	16	10	0.5	203.2	160	120	5	31000	34500
	18	10	0.5	230.4	180	150	5	33000	37000
RE 1520 Z	10	18	-	200	180	100	21	27000	30000
	16	10	0.5	206	160	120	6	27000	30000
	20	10	0.5	277	200	140	6	29000	32000
RE 2520 DB	18	12	0.5	266	216	176	3	37140	46420
	20	11	0.5	280	220	130	3	41420	51780
RE 2520 Z	14	13	0.5	224	182	125	5	57610	72010
	16	12	0.5	240	192	117	5	59590	77270
RE 2520 Z1	18	11	0.5	250.2	198	200	5	52210	65260
	18	10	0.5	234	180	168	5	53640	67050
RE 3510 DBS1	18	13	0.5	288	234	190	7	80973	111600
RE 3510 T	35	7	0.4	335	245	130	5	65592	81990
RE 3510 z2	16	13	0.5	251.5	208	160	20	90000	100000
RE 3510 HR	16	17	-	304	272	142	12	52730	88110
	20	11	0.5	274.8	220	155	12	52730	75960
RE 4800 DBS1	18	13	0.5	288	234	190	7	88380	98200
RE 6000 Z1	16	19	-	336	304	99	10	120550	133940
RE 6000 Z4	20	12	0.5	300	240	150	10	120550	133940
RE 8000 Z4	20	12	0.5	300	240	150	10	153090	170100

All dimensions are in mm.

Torque corrective factor according to FEM class

		Class of utilization						
		T2	T3	T4	T5	T6	T7	T8
Lifetime in hours		400 to 800	800 to 1600	1600 to 3200	3200 to 6300	63000 to 12500	12500 to 25000	25000 to 50000
Spectrum class	L1	M1	M2	M3	M4	M5	M6	M7
		1.26	1.13	1.04	0.99	0.93	0.83	0.71
	L2	M2	M3	M4	M5	M6	M7	M8
		1.00	0.90	0.83	0.79	0.74	0.66	0.56
	L3	M3	M4	M5	M6	M7	M8	M9
		0.79	0.71	0.65	0.62	0.58	0.52	0.44
	L4	M4	M5	M6	M7	M8	M9	M10
		0.63	0.57	0.52	0.50	0.46	0.42	0.36

Mechanism selection guide according to FEM 1.001/3

Type of application	Type of mechanisme				
	Hoisting	Slewing	Luff ng	Traverse	Travel
Hand-operated application	M1	–	–	M1	M1
Erection and cranes	M2 - M3	M2 - M3	M1 - M2	M1 - M2	M2 - M3
Erection and dismantling cranes for power stations, machine shops	M2	–	–	M2	M2
Stocking and reclaiming transporters	M5 - M8	M4 - M6	–	M4 - M7	M5 - M8
Workshop cranes	M6	M4	–	M4	M5
Overhead travelling cranes, pigbreaking cranes, scrapyard cranes	M8	M6	–	M6 - M7	M7 - M8
Ladle cranes	M7 - M8	–	–	M4 - M5	M6 - M7
Soaking-pit cranes	M8	M6	–	M7	M8
Stripper cranes, open-hearth furnace-charging cranes	M8	M6	–	M7	M8
Forge cranes	M8	–	–	M5	M6
Bridge cranes for unloading, bridge cranes for containers	M4 - M8	M4 - M6	M3 - M6	M4 - M8	M4 - M5
Drydock cranes, shipyard jib cranes	M5 - M6	M4 - M5	M4 - M5	M4 - M5	M5 - M6
Floating cranes and pontoon derricks for very heavy loads	M3 - M4	M3 - M4	M3 - M4	–	–
Deck cranes	M4 - M6	M3 - M4	M3 - M4	M2 - M5	M3 - M4
Tower cranes for building	M4	M5	M4	M3	M3
Derricks	M2 - M3	M1 - M2	M1 - M2	–	–
Railway cranes allowed to run in train	M3 - M4	M2 - M3	M2 - M3	–	–

NOTE LEGALI

LEGAL NOTES

Tutti i contenuti riportati nel presente catalogo sono stati controllati; in caso di eventuali errori viene comunque declinata ogni responsabilità.

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I INTRODUZIONE

Le gamme di riduttori planetari “RE” e “GB”, sono state concepite per soddisfare le aspettative del mercato moderno, sempre più esigente e selettivo. Oggi vengono introdotte nuove taglie che nella continua ricerca di dinamicità, evoluzione tecnologica e flessibilità, completano e in parte rinnovano l'offerta Dinamic Oil sul mercato delle trasmissioni di potenza.
Questi riduttori sono stati studiati per le applicazioni più selettive, tenendo conto sia dei forti sovraccarichi delle applicazioni mobili sia delle esigenze di lunga durata ed affidabilità degli impieghi industriali.
I prodotti Dinamic Oil trovano infatti applicazione con successo su macchine mobili nei settori sollevamento e trasporto, edile, cantieristico, agricolo e marino, così come nelle rotazioni di pompe per calcestruzzo, escavatori, autogrù, gru per autocarro e piattaforme aeree. I riduttori planetari sono largamente utilizzati negli impianti industriali nei settori più svariati: lavorazione lamiera, siderurgico, lavorazione materie plastiche, depurazione acque, chimico, energetico, minerario e di trasformazione in genere.

Questo nuovo catalogo 2012 rappresenta le prestazioni dei riduttori in base alla potenza trasmissibile rispetto ad un fattore di servizio unitario, consentendo una selezione semplice e veloce in funzione dei fattori di servizio richiesti.
I tecnici Dinamic Oil, che si avvalgono dei programmi di calcolo più aggiornati, sono a disposizione dei clienti per una selezione più approfondita, in funzione di normative fem, di durate di vita teorica o di altri metodi di calcolo.
Il catalogo illustra i riduttori attualmente in produzione con coppie massime ammissibili comprese tra 1000 Nm e 3000000 Nm.
Oltre alle diverse versioni di supporti di uscita e predisposizioni per attacco motore, è stata arricchita la gamma degli accessori in ingresso e in uscita che rendono estremamente versatile l'applicazione dei riduttori Dinamic Oil.

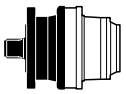
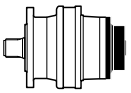
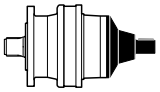
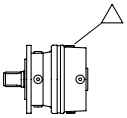
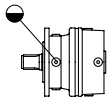
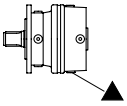
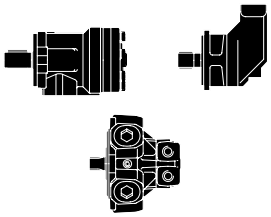
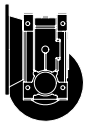
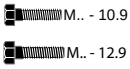
A

Indice

Indice delle tabelle

1.0 Simbologia e unità di misura

Simbolo	Unità di misura	Descrizione
$_1$		valore riferito all'ingresso
$_2$		valore riferito all'uscita
bu	mm	altezza fascia dentata
de	mm	diametro esterno
dp	mm	diametro primitivo teorico
fa	N	carico assiale
$\mathbf{f_{amax}}$	N	carico assiale massimo
$\mathbf{f_r}$	N	carico radiale
H	mm	altezza pignone
$\mathbf{i_e}$	-	rapporto di riduzione effettivo
m	mm	modulo
n	RPM	velocità
$\mathbf{n_{max}}$	RPM	velocità massima
nxh	RPMxh	indice di durata
$\mathbf{P_1}$	kW	potenza nominale
pb	bar	pressione apertura freno
pmax	bar	pressione massima freno
$\mathbf{P_t}$	kW	potenza termica
T	Nm	coppia
$\mathbf{T_b}$	Nm	coppia frenante
$\mathbf{T_{max}}$	Nm	coppia massima
X	mm	distanza applicazione carico
x	-	correzione dentatura
z	-	numero di denti

Simbolo	Descrizione
	Supporto in uscita
	Entrata
	Supporto in entrata
 ...Nm	Coppia di serraggio [Nm]
	Quantità d'olio [litri]
	Peso [kg]
	Carico olio / sfiato
	Livello olio
	Scarico olio
	Motori idraulici
	Motori elettrici
	Riduttore a vite senza fine
 M.. - 10.9 M.. - 12.9	Vite di fissaggio raccomandata
	Riferimento pagina

2.0 Forme costruttive disponibili

MOTORI UTILIZZABILI

1 Motore elettrico
2 Motore idraulico orbitale
3 Motore idraulico a pistoni assiali
4 Motore idraulico a pistoni radiali
5 Motore idraulico orbitale "MLR"

TIPI DI ENTRATE

9 Predisposizione attacco motore
10 Albero veloce
11 Motore elettrico diretto
12 Motore orbitale diretto
13 Freno negativo "F1../F2.."
14 Freno negativo "F5../F6../F8../F9"
15 Flangia standard
16 Flangia attacco "MZ"
17 Flangia attacco "MD"

STADI DI RIDUZIONE

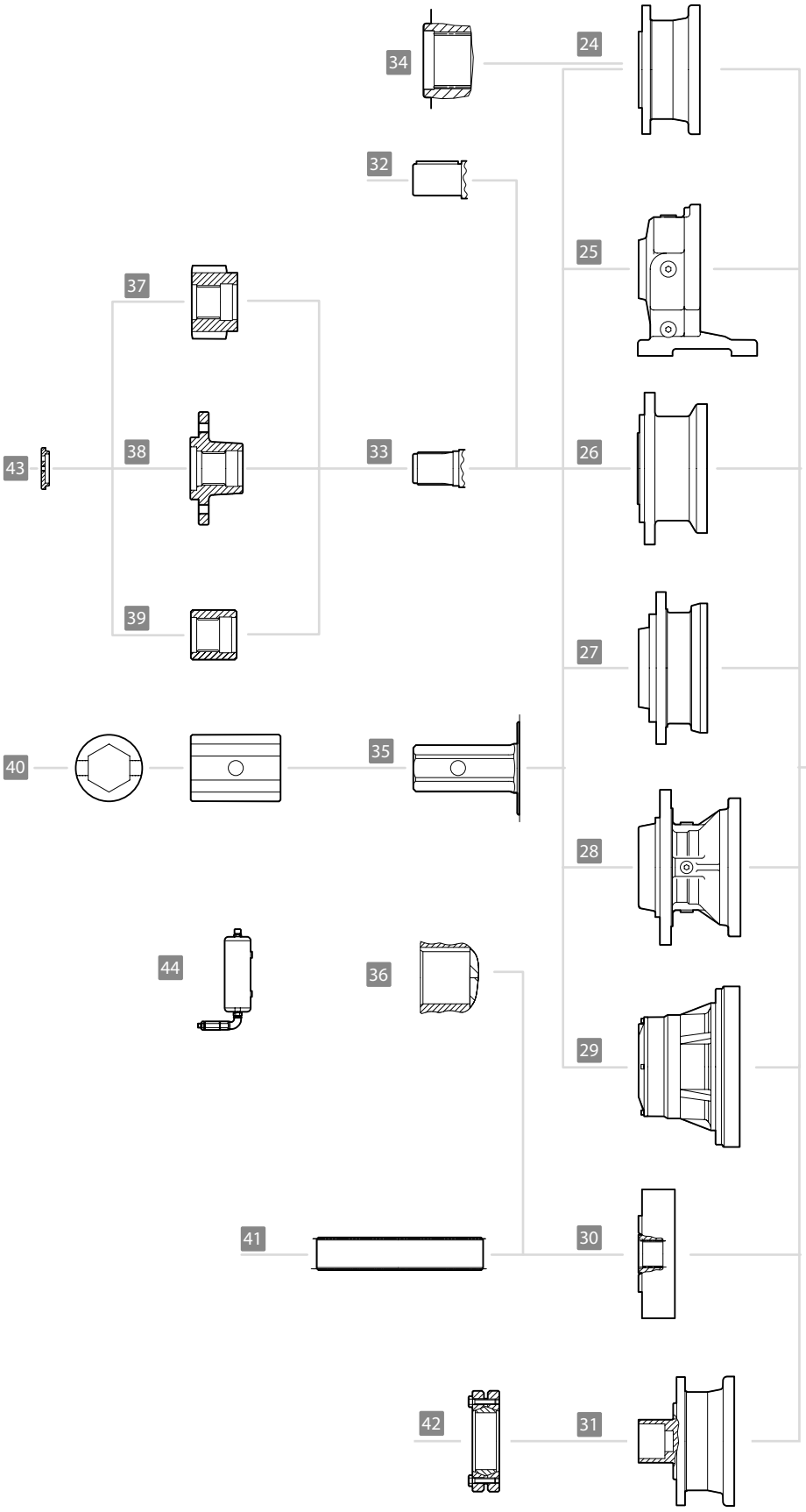
18 Riduttore angolare entrata diretta
19 Uno stadio di riduzione
20 Due stadi di riduzione
21 Tre stadi di riduzione
22 Quattro stadi di riduzione
23 Cinque stadi di riduzione

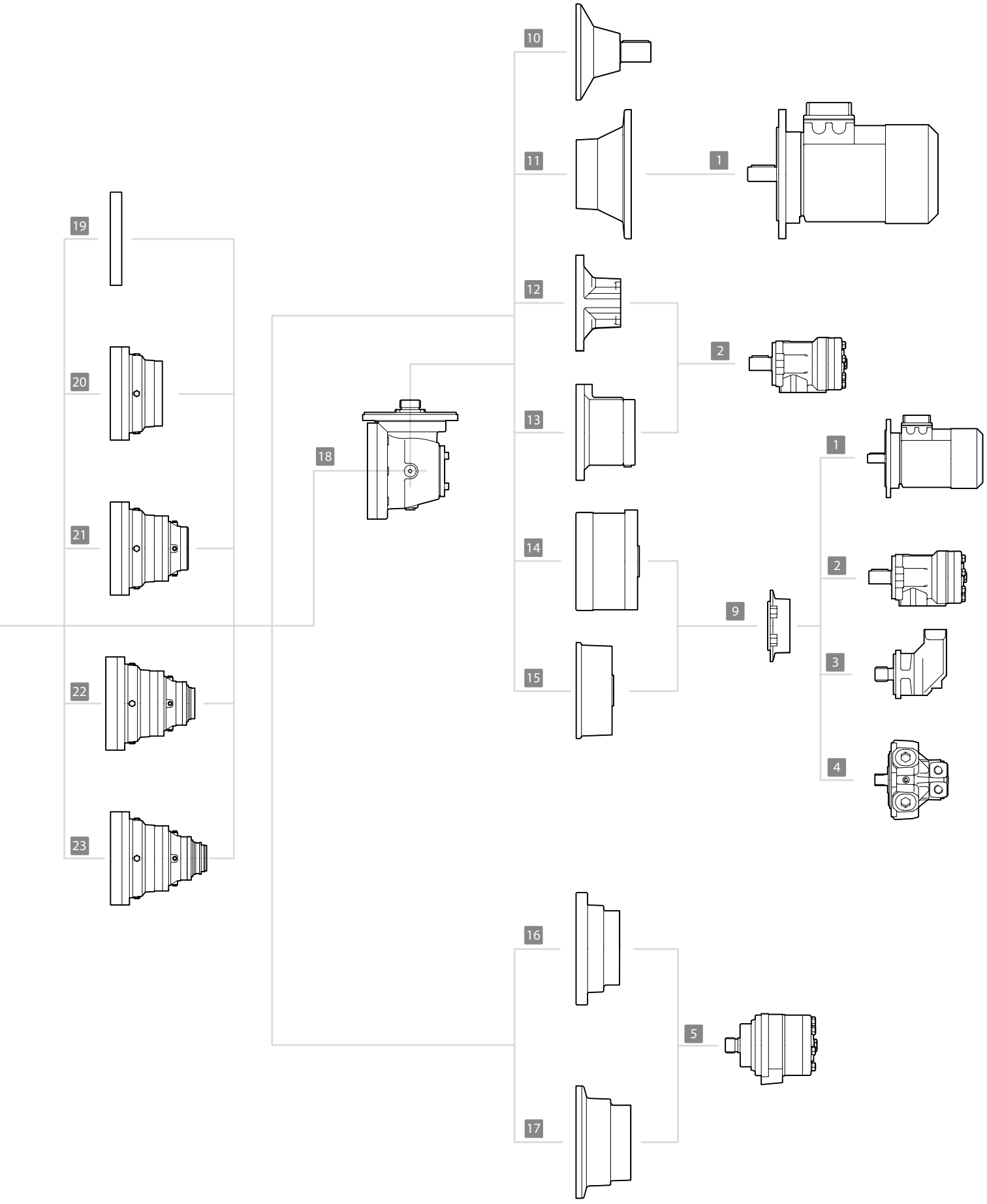
SUPPORTI E ALBERI DI USCITA

24 Supporto uscita "N"
25 Supporto uscita "P"
26 Supporto uscita "T"
27 Supporto uscita "TR"
28 Supporto uscita "TL"
29 Supporto uscita "H"
30 Supporto uscita "F"
31 Supporto uscita "NQ"
32 Albero uscita cilindrico
33 Albero uscita scanalato
34 Albero uscita femmina scanalato
35 Albero uscita esagonale
36 Albero uscita femmina cilindrico

ACCESSORI

37 Pignone "P"
38 Flangia "FL"
39 Boccola scanalata "BS"
40 Manicotto esagonale "ES"
41 Barra scanalata"BF"
42 Giunto di attrito "GA"
43 Fondello di arresto "EP"
44 Vaso di espansione "VE"




10
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3.0 Definizioni tecniche

Tutti i valori prestazionali indicati nel presente catalogo sono calcolati secondo le normative ISO 6336
e ISO 281,ma potrebbero non rispondere a ulteriori requisiti richiesti dai regolamenti interni degli Enti certificatori.
Per selezioni in accordo con tali regolamenti contattare il servizio commerciale Dinamic Oil.

f_S - Fattore di servizio

è il fattore che tiene conto della gravosità dell'applicazione; dipende dalle condizioni di funzionamento, dal tipo di azionamento e dalla frequenza degli avviamenti.
I dati forniti nel presente catalogo sono calcolati per $f_s = 1$.
Il valore del fattore di servizio di un riduttore è calcolabile dividendo la sua potenza nominale per la potenza assorbita.

Fattori di servizio (tab. 1)

	CONDIZIONI DI FUNZIONAMENTO								
	Uniforme U			Variabile con urti moderati M			Variabile con urti forti H		
ore / giorno	AVVIAMENTI / ORA								
	< 16	16 - 63	64 - 250	< 16	16 - 63	64- 250	< 16	16 - 63	64 - 250
< 0.5	0.9	1.3	1.5	0.9	1.3	1.5	1.2	1.5	1.8
0.5 - 3	0.9	1.3	1.5	1.2	1.5	1.8	1.7	2.0	2.3
3 - 8	1.2	1.5	1.8	1.4	1.8	2.0	1.9	2.3	2.8
8 - 24	1.4	1.8	2.0	1.7	2.0	2.5	2.4	2.8	3.0

P_1 - Potenza nominale [kW]

è la potenza meccanica trasmissibile dal riduttore, riferita all'ingresso, alla quale con $f_s = 1$ il riduttore ha una durate di vita teorica pari a 10.000 ore secondo la norma ISO 6336. Tale valore non tiene conto di eventuali limiti di capacità termica del riduttore, ma si basa esclusivamente sulla tenuta meccanica in funzione della velocità di utilizzo.

P_a - Potenza assorbita [kW]

rispetto alla potenza installata o disponibile, è il valore di potenza realmente assorbita dall'applicazione, riferita all'ingresso del riduttore.

P_t - Potenza termica [kW]

è la massima potenza meccanica che il riduttore può trasmettere in funzionamento continuo, con lubrificazione a sbattimento, senza oltrepassare il livello termico limite (temperatura dell'olio non superiore a 90°C).
Potenze superiori possono essere trasmesse utilizzando tenute in viton e oli sintetici o appositi dispositivi di raffreddamento.
I valori indicati per le varie grandezze di riduttore si riferiscono ad un funzionamento continuo con velocità in ingresso di 1500 RPM, temperatura ambiente di 20°C, altitudine 0 / 500 m, applicazione al coperto.
Per diverse condizioni di impiego il valore di potenza termica deve essere moltiplicato per i fattori termici indicati nella seguente tabella. Per periodi di funzionamento limitati, seguiti da periodi di riposo sufficientemente lunghi da garantire un opportuno raffreddamento del riduttore, la potenza termica perde il suo significato e può essere trascurata.

Fattori termici (tab. 2)

Temperatura ambiente	Tempo di funzionamento [%]				
	100%	80%	60%	40%	20%
10°	1.2	1.3	1.4	1.6	1.8
20°	1.0	1.1	1.3	1.4	1.6
30°	0.8	1.0	1.1	1.3	1.4
40°	0.7	0.8	1.0	1.1	1.3
50°	0.5	0.7	0.8	1.0	1.1
Altitudine [m]	**Velocità in ingresso [RPM]**				
	400	800	1000	1500	2000
0	1.2	1.1	1.1	1.0	0.7
500	1.2	1.1	1.1	1.0	0.7
1000	1.1	1.0	1.0	0.9	0.6
1500	1.1	1.0	1.0	0.9	0.6
2000	1.1	1.0	1.0	0.9	0.6

P_d - Potenza da dissipare [kW]
rappresenta la potenza che un eventuale sistema di raffreddamento deve dissipare, nel caso in cui la potenza da trasmettere sia superiore alla potenza termica del riduttore.

η_m - Rendimento meccanico
è il rapporto tra potenza meccanica in uscita e potenza meccanica in ingresso; normalmente è considerato pari a 0.97 – 0.98 per ogni stadio di riduzione epicicloidale di cui è composto il riduttore e pari a 0.94 - 0.95 per l'eventuale coppia conica; il valore effettivo dipende da diversi fattori tra quali velocità, coppia, rapporto, posizione di montaggio e lubrificazione.

T_2 - Coppia trasmessa [Nm]
è il valore di coppia applicata in continuo alla velocità n_1, alla quale il riduttore ha una durata di vita teorica di 10000 h per gli ingranaggi e 5000 h (L_{h10}) per i cuscinetti dell' ingranaggeria.

T_{max} - Coppia massima trasmissibile [Nm]
è la coppia massima trasmissibile dall'accessorio eventualmente fornito a corredo del riduttore. Questo valore potrebbe limitare la coppia massima trasmissibile dal riduttore.

T_{2max} - Coppia massima [Nm]
è la coppia massima d'uscita ammissibile come punta o per brevi durate (calcolata al 90% Rs del componente più debole). Per azionamenti che comportano un elevato numero di avviamenti o inversioni occorre considerare valori di coppia massima apportunamente ridotti.
Il valore indicato si riferisce alla versione con albero femmina scanalato (FS); versioni diverse potrebbero avere valori inferiori.

T_b - Coppia frenante [Nm]
è il valore della coppia frenante trasmissibile staticamente dal freno negativo.

n_1 - Velocità in ingresso [RPM]
è la velocità al lato veloce del riduttore.

n_2 - Velocità in uscita [RPM]
è la velocità al lato lento del riduttore.

n_{1max} - Velocità massima [RPM]
è la velocità massima in ingresso al freno. Per applicazioni con valori superiori rivolgersi al servizio commerciale Dinamic Oil per verificare la compatibilità con l'applicazione.

i_e - Rapporto di riduzione effettivo
è il rapporto di riduzione effettivo, cioè il rapporto tra la velocità di ingresso e quella di uscita dal riduttore.

nxh - Indice di durata [RPMxh]
è il valore che equivale al prodotto tra la velocità e la durata di vita teorica espressa in ore. É espresso come $n_2$xh quando riferito alla velocità in uscita, come $n_1$xh quando riferito alla velocità in ingresso.

Valori indicativi delle durate richieste per diverse applicazioni (tab. 3)

Applicazione	Ore di vita richieste
Macchine agricole	300 - 3000
Macchine con funzionamento intermittente o per brevi periodi (macchine per l'edilizia)	3000 - 8000
Macchine con funzionamento intermittente o per brevi periodi con alta affidabilità operativa (montacarichi)	8000 - 12000
Macchine con funzionamento per 8 ore al giorno, ma non pienamente utilizzate (macchine varie per l'industria, frantoi rotativi)	10000 - 25000
Macchine con funzionamento per 8 ore al giorno pienamente utilizzate (macchine varie per l'industria, nastri trasportatori)	20000 - 30000
Macchine con funzionamento continuo (laminatoi, macchine tessili)	40000 - 50000

k_f - Fattore di correzione
è il fattore da applicare per calcolare la durata teorica dei supporti con alberi maschio per valori di nxh diversi da quelli dei diagrammi riportati nel catalogo. Per tutti i riduttori le curve dei carichi esterni sono calcolate per:
- $n_2$xh = 100.000 per i supporti in uscita
- $n_1$xh = 1.500.000 per i supporti in ingresso

L_{min} - Lunghezza minima del braccio di reazione [mm]
è la lunghezza minima consigliata per il braccio di reazione da realizzarsi nelle applicazioni di tipo pendolare.

4.0 Selezione del riduttore

4.1 Selezione

La selezione del riduttore avviene sulla base del fattore di servizio richiesto dall'applicazione e della velocità richiesta in uscita. Una volta determinato il motore elettrico (nei termini di potenza e velocità nominale), occorre selezionare quel riduttore che abbia il rapporto di riduzione necessario per raggiungere il valore di velocità richiesto in uscita ed una potenza nominale tale che il rapporto tre il suo valore ed il valore della potenza nominale del motore è superiore al fattore di servizio.

$$i_e = n_1 / n_2$$

$$P_1 \geq P_a \times f_s$$

Tale selezione deve essere poi verificata in funzione di altri parametri, come potenza termica, coppia impulsiva ed eventuali carichi radiali o assiali agenti sugli alberi maschi di ingresso e di uscita.
In caso di azionamenti non elettrici applicare lo stesso metodo facendo riferimento alla coppia in uscita richiesta dall'applicazione anziché alla potenza nominale.

4.2 Verifiche

Supporti di uscita e di ingresso del riduttore:
devono essere verificati in base agli eventuali carichi radiali e assiali presenti. Per ogni modello vengono riportati nel catalogo i diagrammi che rappresentano i carichi radiali dinamici sopportabili secondo la normativa ISO 281 per una durata L10 corrispondente a nxh = 100.000. Per durate differenti è possibile ottenere i carichi radiali applicabili moltiplicando i valori dei diagrammi per il fattore correttivo k_f. In ogni caso il carico radiale non deve mai essere superiore al valore massimo raggiunto dalla curva del diagramma.
Per quanto riguarda gli eventuali carichi assiali, occorre verificare che non superino il valore massimo ammesso.

Coppia in uscita:
non deve comunque mai superare la coppia massima trasmissibile del riduttore selezionato. Occorre verificare con particolare cura che questo valore sia superiore a quello della massima coppia erogabile dal motore istallato riportata all'uscita del riduttore (cioè moltiplicata per il rapporto di riduzione effettivo e per il rendimento meccanico del riduttore)

Velocità in ingresso:
Per valori di velocità diverse da quelle in tabella,contattare l'ufficio commerciale.

Potenza termica:
nel caso in cui la potenza installata sia superiore alla potenza termica del riduttore, occorre selezionare un riduttore di grandezza superiore, utilizzare olio sintetico unitamente con l'impiego di tenute in viton oppure prevedere un circuito di raffreddamento.
Nel caso dell'impiego di tenute in viton ed olio sintetico, si può considerare il fattore termico equivalente ad una temperatura ambiente inferiore di 20°C rispetto a quella reale, simulando in questo modo il fatto che il riduttore può accettare un surriscaldamento di 20°C rispetto ai dati di progetto.
Nel caso di utilizzo di un sistema di raffreddamento, la potenza da dissipare è

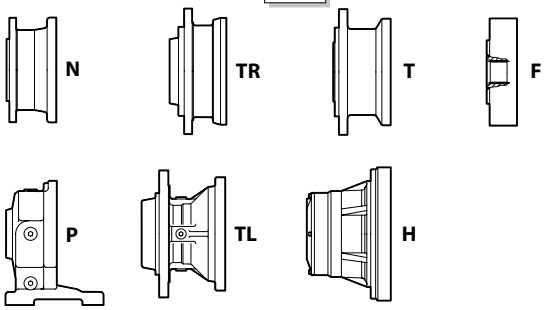
$$P_d = (P_a - P_t) \cdot (1 - \eta_m)$$

5.0 Codice d'ordinazione

RA	21	3	P	S	78.7	

VERSIONE USCITA

G-2



ALBERO IN USCITA

G-2

S = Scanalato maschio
F = Scanalato femmina
C = Cilindrico
K = Cilindrico lungo
E = Esagonale
Q = Giunto di attrito
FS = Femmina scanalato
FC = Femmina cilindrico
U = Femmina cilindrico

NUMERO STADI DI RIDUZIONE

F-2

1 - 2 - 3 - 4 - 5 - 6

GRANDEZZA RIDUTTORE

F-1

RE - RA	RE - RA	GB - GBA	GB - GBA
110	**1520**	**12010**	**61000**
210	**2000**	**16000**	**85000**
240	**2520**	**21000**	**110000**
310	**3000**	**26000**	**130000**
510	**3510**	**31000**	GB
610	**4800**	**40000**	**150000**
810	**6000**	**45000**	**205000**
1020	**8000**	**53000**	**235000**

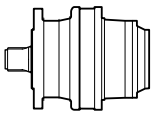
RAPPORTO DI RIDUZIONE

F-2

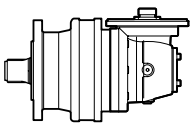
Indicare il valore del rapporto (compreso virgola e decimale) riportato sulle pagine dei dati tecnici relative ad ogni grandezza

ESECUZIONE

F-1



RE - GB = Lineare



RA - GBA = Angolare

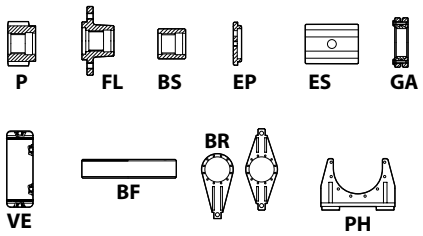
COMPOSIZIONE

F-2

/ = Standard
L = Light
R = Rinforzato
S = Speciale

ST | BB | B3 | 0 | BS

ACCESSORI IN USCITA H-36

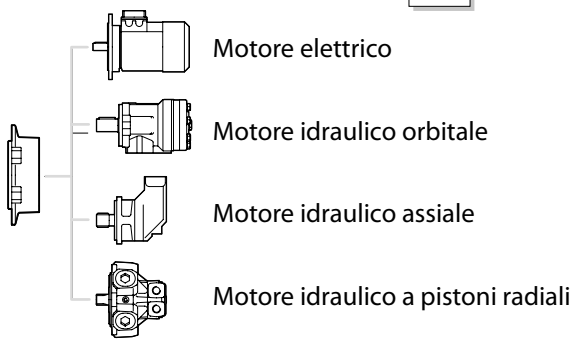


P = Pignone
FL = Flangia
BS = Boccola scanalata
EP = Fondello
ES = Manicotto esagonale
GA = Giunto di attrito
VE = Vaso di espansione
BF = Barra scanalata
BR = Braccio di reazione
PH = Piede

ORIENTAMENTO RIDUTTORE ANGOLARE H-46

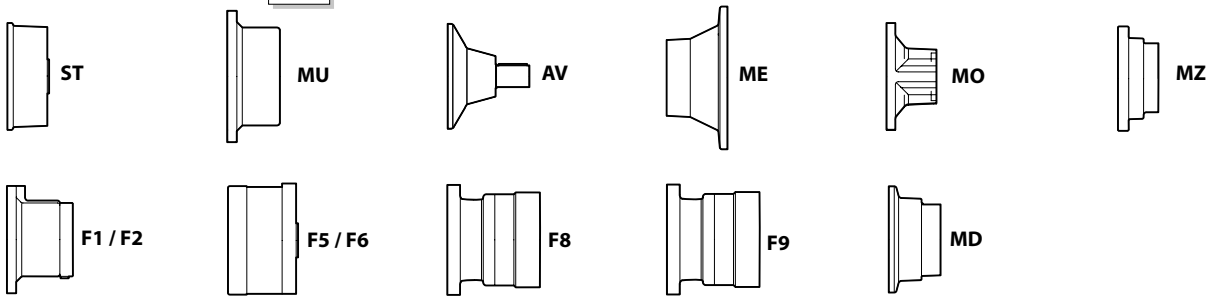
POSIZIONE DI MONTAGGIO H-46

PREDISPOSIZIONE MOTORE H-27



Motore elettrico
Motore idraulico orbitale
Motore idraulico assiale
Motore idraulico a pistoni radiali

ENTRATE DIRETTE H-2



Nell'esempio è illustrato il codice di ordinazione di un riduttore planetario angolare, grandezza 210, tre stadi di riduzione, versione in uscita con i piedi e albero scanalato, rapporto di riduzione 78.7, entrata standard, predisposizione per motore "SAE B" albero 16/32 z=15, posizione di montaggio del riduttore in uscita orizzontale, orientamento del riduttore angolare standard, boccola scanalata in uscita

6.0 Freni idraulici negativi

6.1 Freni idraulici negativi a dischi multipli

I riduttori Dinamic Oil possono essere dotati di freno negativo statico a dischi multipli a comando idraulico.
I freni dal modello **F1** al modello **F2** sono previsti per il montaggio diretto di motori idraulici orbitali con flangiatura secondo norme SAE A.
I freni dal modello **F5** al modello **F6**, raggiungono coppie frenanti maggiori e sono predisposti con entrata integrale ST per il montaggio di flange e giunti di collegamento per una vasta gamma di motori in commercio.
I freni del modello **F8**, raggiungono coppie frenanti fino a 3.000 Nm ed sono predisposti con entrata integrale MU per il montaggio di flange e giunti di collegamento per una vasta gamma di motori in commercio.
I freni del modello **F9** raggiungono coppie frenanti fino a 1.500 Nm e possono avere la possibilità di montare un meccanismo a ruota libera fino alla coppia di 1.200 Nm. Sono predisposti con entrata "SAE C", "SAE D" ed entrata integrale ST. Tramite quest'ultima possono montare flange e giunti di collegamento per una vasta gamma di motori in commercio.
Il freno **MD** è montato all'interno di una flangia di collegamento diretto per motori MLR su stadi di riduzione RE110-240.
La frenatura è generata da molle che comprimono coppie di dischi fissi in acciaio temprato alternati a dischi mobili in bronzo; questa spinta si trasforma per attrito in coppia frenante.
L'apertura si ottiene introducendo nel freno olio idraulico in pressione; la pressione agisce su un pistone che comprime le molle permettendo ai dischi di ruotare liberamente. Si tratta di freni di stazionamento che agiscono creando una coppia frenante statica quando la pressione idraulica di comando é nulla. La loro azione cessa quando la pressione idraulica raggiunge il minimo valore per lo sbloccaggio.
Per i freni che hanno una camera di lubrificazione(F1, F2 e versioni standard di F5, F6 e F8) è necessario effettuare il riempimento (circa 0.1 l) con olio minerale di viscosità ISO VG 32.
Alcuni modelli di freni F5, F6,F8 ed F9 sono disponibili in versioni speciali che consentono valori elevati di velocità massima.

6.2 Selezione del freno

Occorre tenere in considerazione i seguenti parametri:

- Le coppie frenanti sono calcolate con pressione di comando nulla; nel caso di contropressioni nel circuito idraulico i valori effettivi di frenatura vanno ridotti come segue:

  Coppia effettiva = Coppia teorica x (Pressione di apertura – Contropressione) / Pressione di inizio apertura.

- La coppia del freno moltiplicata per il rapporto di riduzione e divisa per il rendimento del riduttore, deve essere maggiore o uguale alla coppia richiesta in uscita:

$$T_b \times i_e / \eta_m \geq T_2$$

- Ad eccezione di particolari casi, la coppia del freno moltiplicata per il rapporto di riduzione e divisa per il rendimento del riduttore, non deve superare la coppia massima del riduttore:

$$T_b \times i_e / \eta_m \leq T_{2max}$$

7.0 Posizioni di montaggio

Per la completa definizione della forma costruttiva del riduttore occorre definire la posizione di montaggio. In base alla posizione è inoltre possibile determinare i tappi per riempimento, livello e scarico dell'olio.
Vedi pag. H46 - H48.
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8.0 Istruzioni di installazione

Le informazioni contenute nel presente capitolo non sono esaustive, ma rappresentano una sintesi parziale del manuale di uso e manutenzione al quale occorre fare sempre riferimento.

8.1 Installazione

Riduttori con flangia e albero maschio:
il telaio di accoppiamento deve avere la superficie di appoggio al riduttore non verniciata, piana, lavorata di macchina utensile e perpendicolare all'asse di rotazione. La tabella seguente mostra la tolleranza dei centraggi sugli accoppiamenti.
Per la serie RE i centraggi hanno tolleranza H8.

Diametri	[mm]	**80 - 120**	**120 - 180**	**180 - 250**
Tolleranze	[mm]	+0.054 0	+0.063 0	+0.072 0
Diametri	[mm]	**250 - 315**	**315 - 400**	**400 - 500**
Tolleranze	[mm]	+0.081 0	+0.089 0	+0.097 0

I riduttori delle grandezze da RE1520 a RE8000 con uscita H sono provvisti di due diametri di centraggio. È sufficiente realizzare sulla struttura un solo centraggio, quello maggiore, quando sull'albero in uscita i carichi radiali non sono presenti o sono inferiori al 50% dei carichi massimi ammessi.
Per la gamma GB i centraggi hanno tolleranza F8.

Diametri	[mm]	**80 - 120**	**120 - 180**	**180 - 250**
Tolleranze	[mm]	+0.186 +0.076	+0.205 +0.080	+0.226 +0.086

Riduttori con albero femmina scanalato:
i riduttori con supporto di uscita femmina non sono idonei a sopportare carichi radiali sull'uscita; è pertanto molto importante curare l'allineamento tra riduttore e albero condotto. Occorre inoltre verificare che l'albero condotto non subisca flessioni durante le fasi di lavoro.

Riduttori con fissaggio a piede:
il riduttore deve essere fissato su una superficie di appoggio piana ed essere in asse con la macchina condotta; è importante che ogni operazione di livellamento e allineamento venga eseguita con accuratezza. Un errato appoggio o un allineamento non corretto pregiudicano la vita del riduttore.

Riduttori con montaggio pendolare:
occorre realizzare un ancoraggio del braccio di reazione non vincolato nella direzione dell'asse del riduttore. L'ancoraggio deve inoltre essere opportunamente ammortizzato.
Nelle tavole dimensionali di ogni riduttore sono riportati i valori minimi di lunghezza del braccio di reazione per realizzare l'applicazione in modo corretto.

Coppie di serraggio e corrispondenti forze assiali esercitate dalle viti a passo grosso (tab. 4)

	Classe 8.8		Classe 10.9		Classe 12.9	
	Coppia [Nm]	Forza [N]	Coppia [Nm]	Forza [N]	Coppia [Nm]	Forza [N]
M10	44	26000	62	37000	74.5	44000
M12	77	37800	108	53000	130	64000
M14	122	51500	172	72000	207	87000
M16	191	70400	269	99000	323	119000
M18	263	86000	370	121000	444	145000
M20	373	110000	525	154000	630	185000
M22	507	138000	714	191000	857	229000
M24	645	158000	908	222000	1090	267000
M27	944	206000	1330	289000	1590	347000
M30	1280	251000	1800	353000	2160	424000
M33	1740	311000	2460	437000	2940	525000
M36	2240	366000	3150	515000	3780	618000
M39	2900	437000	4080	615000	4890	738000
M42	3580	502000	5040	706000	6050	847000

8.2 Lubrificazione

I riduttori sono forniti senza olio.
Prima della messa in funzione occorre riempire il riduttore fino al livello previsto con uno degli oli lubrificanti consigliati.
La scelta e la quantità dell'olio saranno demandate all'installatore / utilizzatore in base al tipo di applicazione.

8.3 Vernice

I riduttori sono forniti non verniciati. Alcune parti sono trattate con uno strato di fondo idrosolubile estere epossidico rosso ossido. È cura del cliente realizzare la finitura utilizzando una vernice compatibile con quella di fondo. Gli anelli di tenuta devono essere protetti durante la verniciatura.

8.4 Montaggio dei motori a flangia

Il montaggio dei motori alle flange di accoppiamento fornite da Dinamic Oil è un'operazione particolarmente semplice, ma da eseguire seguendo alcuni importanti suggerimenti:
- lubrificare l'accoppiamento con un leggero velo di grasso o lubrificante anti-grippaggio;
- assicurarsi che il motore vada liberamente a battuta sulla flangia di fissaggio del riduttore senza forzare né sull'albero né sul centraggio;
- serrare le viti.

Per ulteriori informazioni si faccia riferimento al manuale d'uso e manutenzione.

8.5 Montaggio dei motori con giunto di collegamento

Quando vengono utilizzati giunti di collegamento fra motore e riduttore, bisogna verificare che l'allineamento deve essere compatibile col tipo di giunto utilizzato. I giunti sono largamente usati in applicazioni industriali per le varie funzioni che essi possono svolgere come:
- limitare la coppia in ingresso,
- smorzare vibrazioni provenienti dal motore,
- compensare piccoli disallineamenti.

Nell'applicazione dei giunti si faccia riferimento ai manuali d'uso dei fornitori di detto componente.

8.6 Peso dei riduttori

I pesi dei vari riduttori sono riportati, a titolo indicativo, a pag. H52.

9.0 Stoccaggio

Le informazioni contenute nel presente capitolo non sono esaustive, ma rappresentano una sintesi parziale del manuale di uso e manutenzione al quale occorre fare sempre riferimento.

I riduttori non devono essere conservati all'aperto o a diretto contatto con il suolo. Per lunghi periodi di stoccaggio devono essere riempiti d'olio, con le parti esterne lavorate ricoperte di grasso; le superfici di accoppiamento vanno protette con agenti antiossidanti, i tappi di sfiato sostituiti con tappi chiusi e si raccomanda l'azionamento a vuoto (è sufficiente una rotazione completa dell'albero di uscita) almeno ogni due mesi.
Per maggiori informazioni sullo stoccaggio si faccia riferimento al manuale d'uso e manutenzione.

10.0 Lubrificazione

10.1 Tipo di lubrificazione

La lubrificazione dei riduttori avviene per bagno d'olio; prima della messa in funzione del riduttore occorre procedere al riempimento d'olio, accertandosi visivamente attraverso il tappo di livello che sia raggiunto il livello corretto; tale operazione richiede particolare attenzione e si deve verificare nuovamente, dopo pochi minuti di funzionamento, che il livello sia stato effettuato correttamente. Le quantità d' olio a catalogo sono indicative e variano in funzione del rapporto di riduzione e del tipo di ingresso e di uscita del riduttore.

10.2 Scelta dell'olio

Può essere impiegato qualunque olio per trasmissioni meccaniche con additivazione EP che soddisfi la classe di viscosità da ISO VG220 a ISO VG320 secondo ISO 3448. In casi particolari possono essere utilizzati oli con viscosità diverse; in tal caso contattare il servizio tecnico Dinamic Oil. La viscosità dell'olio deve essere selezionata in funzione della temperatura ambiente e della reale temperatura di lavoro del riduttore. Per riduttori che devono operare a temperature ambiente molto elevate o con forte escursione termica si raccomanda l'uso di oli a base sintetica. Nei riduttori con montaggio verticale e funzionamento continuo l'olio può subire un elevato surriscaldamento; in questi casi si rende necessario un serbatoio esterno (che può essere fornito da Dinamic Oil) per consentire all'olio di espandersi per effetto della sua dilatazione termica.

10.3 Cambio dell'olio

Il cambio dell'olio deve essere effettuato dopo le prime 150 ore di lavoro, successivamente secondo le tempistiche della tabella seguente, o almeno ogni 2 anni.

Durata media di funzionamento secondo il tipo di olio

Temperatura di funzionamento [°C]	Tipo di olio		
	Olio minerale [h]	Olio sintetico [h]	
		Polialfaolefine (PAO)	Poliglicoli (PG)
70°	7000	15000	16000
80°	5000	10000	12000
90°	3000	7500	9000

10.4 Quantità di olio

Le quantità di olio per la corretta lubrificazione dei riduttori sono riportate, a titolo indicativo, da pag. H49.

10.5 Lubrificanti consigliati

Viscosità consigliata (tab. 5)

ISO VG 3448	TEMPERATURA DI FUNZIONAMENTO [C°]												
	Temperatura ambiente [C°]												
	-20°	-10°	0	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
220													
320													

Lubrificanti raccomandati (tab. 6)

Lubrificanti per uso generale

Produttore	Olio minerale	Olio sintetico	
		Polialfaolefine (PAO)	Poliglicoli (PG)
AGIP	Blasia	Blasia SX	Blasia S
ARAL	Degol BG		Degol GS
BP	Energol GR-XP	Enersyn EPX	Enersyn HTX
CASTROL	Alpha SP	Alphasyn EP	Alphasyn PG
CHEVRON	Ultra Gear	Tegra Synthetic	HiPerSYN
DEA	Falcon CLP		
ELF	Reductelf SP	Elf Syntherma	Elf Syntherma
ESSO	Spartan EP	Spartan S EP	Glycolube
FINA	Giran		
IP	Mellana		Telesia Oil
KLÜBER	Kluberoil GEM 1	Klubersynt EG4	Klubersynt GH6
MOBIL	Mobilgear XMP	Mobilgear SHC	Glygoile
OPTIMOL	Ultra		
Q8	Goya	El Greco	El Greco
SHELL	Omala S2 G	Omala S4 GX	Omala S4 WE
TOTAL	Carter EP	Carter SH	Carter SY

Lubrificanti per uso alimentare

Produttore	Olio per ingranaggi
AGIP	Rocol Foodlube Hi-Torque
ESSO	Gear Oil FM
KLÜBER	Klüberoil 4 UH1 N
MOBIL	DTE FM
SHELL	Cassida Fluid GL

10.6 Temperatura

La temperatura ambiente consigliata, per l'utilizzo di riduttori standard, dovrà essere compresa fra -15°C e +40°C.

11.0 Unità autonome di raffreddamento

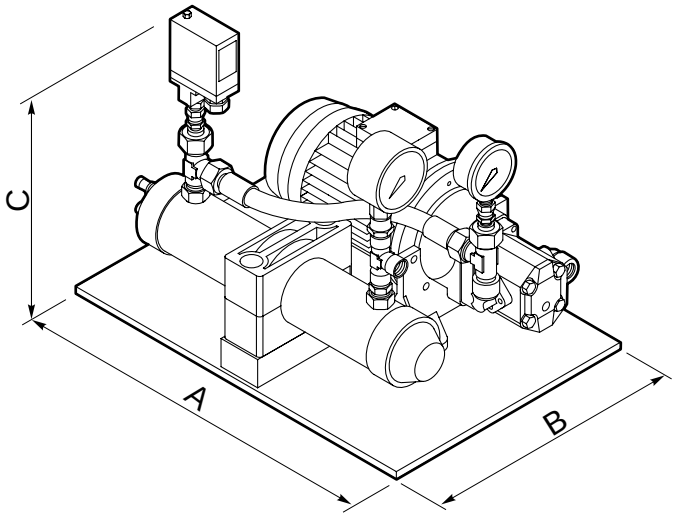
Quando la potenza trasmessa è superiore alla potenza termica dissipabile dal riduttore,è necessario l'impiego di un'unità di raffreddamento,in grado di smaltire la potenza termica in eccedenza.
Dinamic Oil propone una serie di unità autonome di raffreddamento, olio-acqua ed olio-aria, in grado di dissipare fino a 50kW. Per potenze superiori contattare l'ufficio tecnico.

11.1 Unità autonome di raffreddamento olio-acqua, composizione standard e personalizzata

Le unità di raffreddamento serie URO/W standard sono composte da:

- Uno scambiatore di calore acqua-olio.
- Una motopompa (collegamento motore-pompa con giunto e supporto; pompa con tenute al viton) composta da un motore a 4 poli in forma B5, alimentazione standard trifase 230/400V - 50Hz e da una pompa ad ingranaggi.
- Manometro 0-16 bar montato fra pompa e scambiatore di calore.
- Termometro analogico 0-120 °C, montato in uscita dallo scambiatore.
- Filtro, da installare in mandata al serbatoio, per la pulizia dell'olio scaricato (optione consigliata).

Per un'esecuzione personalizzata è possibile equipaggiare l'unità con i seguenti optional:
- Pressostato di minima con contatti in scambio, da montare fra pompa e scambiatore di calore. (In questo caso è già presente la predisposizione sull'impianto idraulico).
- Flussostato elettrico per il totale controllo della portata dell'olio.



Unità	Capacità	Motopompa olio		Portata acqua	A	B	C
	[kW]*	[kW]	[l/min]	[l/min]*			
URO/W 4	4	0.37	16	8	500	350	400
URO/W 6	6	0.37	16	10	500	350	400
URO/W 9	9	0.55	16	16	500	350	400
URO/W 13	13	1.1	30	25	500	350	400
URO/W 21	21	1.5	30	40	500	400	450
URO/W 31	31	2.2	56	50	720	510	520
URO/W 50	50	3.0	80	80	730	520	520

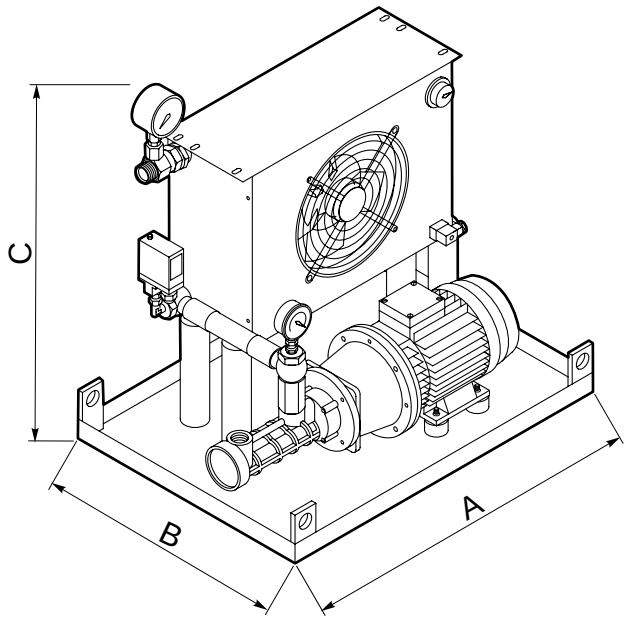
* I valori indicati in tabella sono riferiti ad una temperatura dell'acqua di 20° C.

11.2 Unità autonome di raffreddamento olio-aria, composizione standard e personalizzata

Le unità di raffreddamento serie URO/A standard sono composte da:

- Uno scambiatore di calore aria-olio completo di ventilatore e termostato regolabile 0-90 ° C già cablato.
- Una motopompa collegamento motore-pompa con giunto e supporto , pompa con tenuta al viton) composto da un motore a 4 poli in forma B3/B5, alimentazione standard 230/400V - 50Hz e da una pompa a vite.
- Manometro 0-16 bar montato fra pompa e scambiatore di calore.
- Termometro analogico 0-120 °C, montato in uscita dallo scambiatore.
- Filtro, da installare in mandata al serbatoio, per la pulizia dell'olio scaricato (opzione consigliata).

Per un'esecuzione personalizzata è possibile equipaggiare l'unità con i seguenti optional:
- Pressostato di minima con contatti in scambio, da montare fra pompa e scambiatore di calore. (In questo caso è già presente la predisposizione sull'impianto idraulico).
- Flussostato elettrico per il totale controllo della portata dell'olio.



Unità	Capacità	Motopompa olio		Motoventilatore		A	B	C
	[kW]*	[kW]	[l/min]	[kW]	[m³/h]			
URO/A 5	5	1.5	30	0.12	900	660	430	700
URO/A 7	7	1.5	30	0.12	1300	710	510	700
URO/A 10	10	1.5	30	0.18	2750	710	510	830
URO/A 13	13	1.5	30	0.23	2750	710	510	830
URO/A 16	16	2.2	56	0.23	3500	710	510	1010
URO/A 21	21	2.2	56	0.56	6300	800	500	1200
URO/A 26	26	3	56	0.56	7450	800	500	1265
URO/A 30	30	3	80	0.56	7450	800	500	1265
URO/A 40	40	2.2	56	0.9	9500	1010	600	1350
URO/A 46	46	3	80	0.9	9500	1010	600	1350

* I valori indicati in tabella sono riferiti ad una temperatura dell'aria di 20° C.

UK GENERAL INFORMATION

To meet the needs of an increasingly demanding and selective market Dinamic Oil have completely updated their RE and GB ranges of planetary gearboxes. With the introduction of new sizes the already comprehensive product lines have been extended and enhanced in line with feedback from the power transmission market.

Planetary gearboxes are suited to a broad range of applications covering the high overload characteristics found in the mobile industry to the longevity and reliability requirements of the industrial sector.

In the mobile market Dinamic Oil products can be found in machinery for lifting & transportation, building and construction, agriculture & marine; specific applications include concrete pumps, excavators, cranes and aerial platforms, in fact anywhere rotational movement is required. The use of planetary gearboxes for industrial applications is growing rapidly and they are now common in sheet metal, steel, plastics water treatment, chemical, energy mining and process industries.

The new 2012 catalogue facilitates quick & easy preliminary gearbox selection based on the transmissible power adjusted by the appropriate service factors. However, the Dinamic Oil Technical Sales Department is at your disposal providing a wealth of experience backed by the latest technology to provide confirmation and ensure the most cost effective solution in accordance with relevant standards.

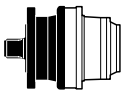
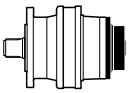
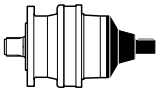
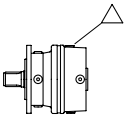
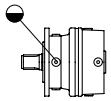
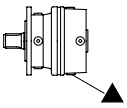
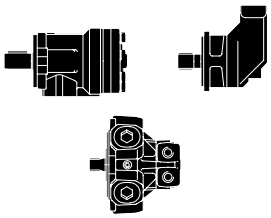
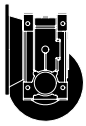
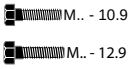
The catalogue illustrates the range of gearboxes in production at the time of going to press with maximum torque capacity between 1000Nm and 3,000,000Nm. If your requirements fall outside this range please contact us.
The renowned versatility of Dinamic Oil gearboxes has been further expanded with the introduction of new input and output adaptors and accessories to make this the most comprehensive transmission system on the market

Contents

List of tables

1.0 Symbols and Unit of Measurement

Symbol	Unit of measurement	Description
$_1$		Input value
$_2$		Output value
bu	mm	Height of toothed set
de	mm	External diameter
dp	mm	Theoretical primitive diameter
fa	N	Axial load
$\mathbf{f_{amax}}$	N	Maximum axial load
$\mathbf{f_r}$	N	Radial load
H	mm	Pinion height
$\mathbf{i_e}$	-	Effective reduction ratio
m	mm	Module
n	RPM	Speed
$\mathbf{n_{max}}$	RPM	Maximum speed
nxh	RPMxh	Duration index
$\mathbf{P_1}$	kW	Rated power
pb	bar	Brake opening pressure
pmax	bar	Maximum brake pressure
$\mathbf{P_t}$	kW	Thermal power
T	Nm	Torque
$\mathbf{T_b}$	Nm	Braking torque
$\mathbf{T_{max}}$	Nm	Maximum torque
X	mm	Load application distance
x	-	Tooth correction
z	-	Number of teeth

Symbol	Description
	Support at output
	Input
	Support at input
 ...Nm	Tightening torque [Nm]
	Oil quantity [liters]
	Weight [kg]
	Oil fill / breather plug
	Oil level
	Oil drain
	Hydraulic motors
	Electrical motors
	Wormgearbox
 M.. - 10.9 M.. - 12.9	Recommended screw
	Reference page

2.0 Construction Options

USABLE MOTORS

1 Electric motor
2 Orbital hydraulic motor
3 Hydraulic motor with axial pistons
4 Hydraulic motor with radial pistons
5 Orbital hydraulic motor "MLR"

TYPES OF INPUT

9 Preparation for motor connection
10 Input shaft
11 Direct electric motor adapter
12 Direct orbital motor adapter
13 Negative brake "F1../F2.."
14 Negative brake "F5../F6../F8../F9"
15 Standard flange
16 Adaptor "MZ"
17 Adaptor "MD"

REDUCTION STAGES

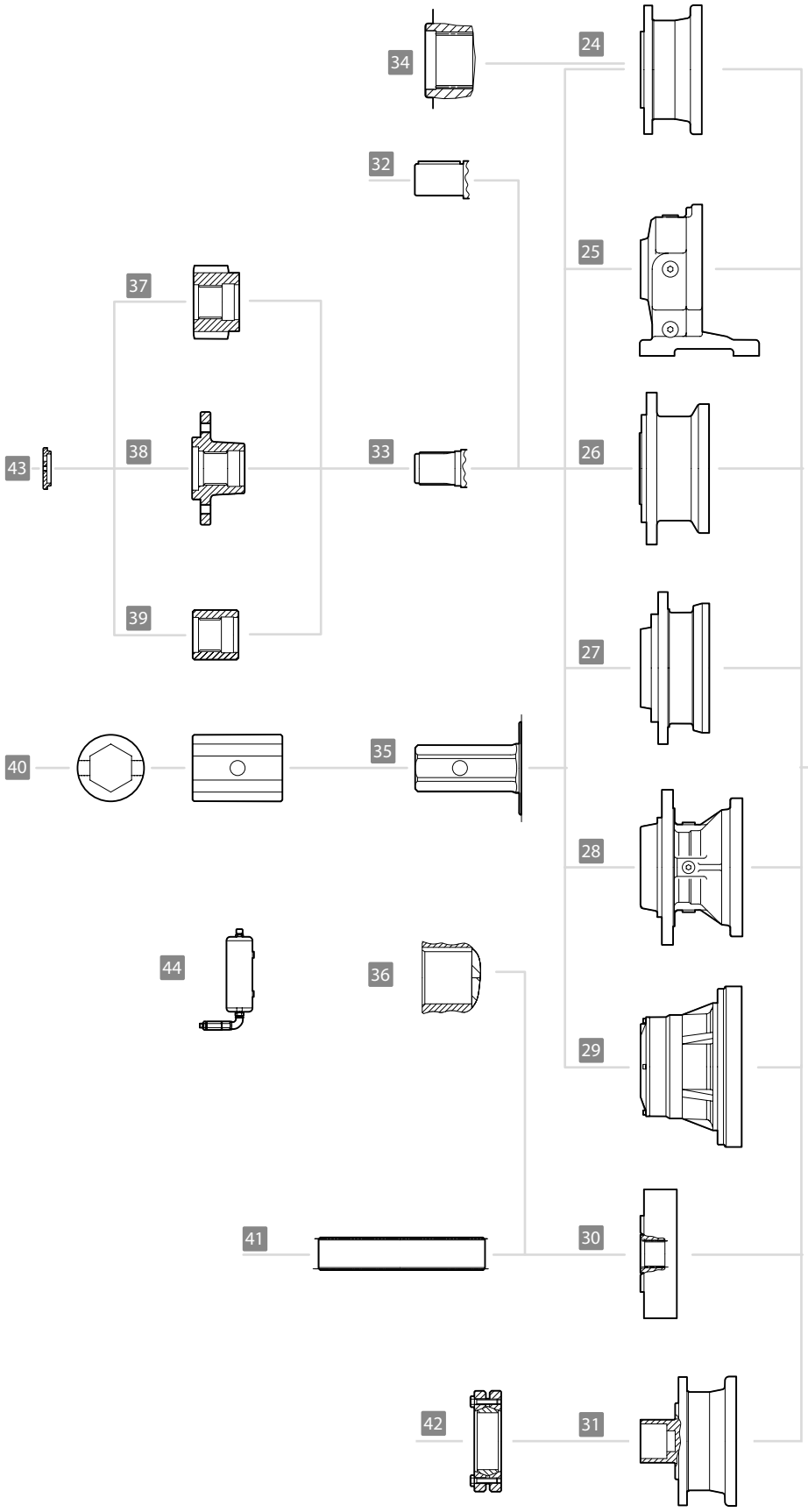
18 Angular gearbox with direct input
19 One reduction stage
20 Two reduction stages
21 Three reduction stages
22 Four reduction stages
23 Five reduction stages

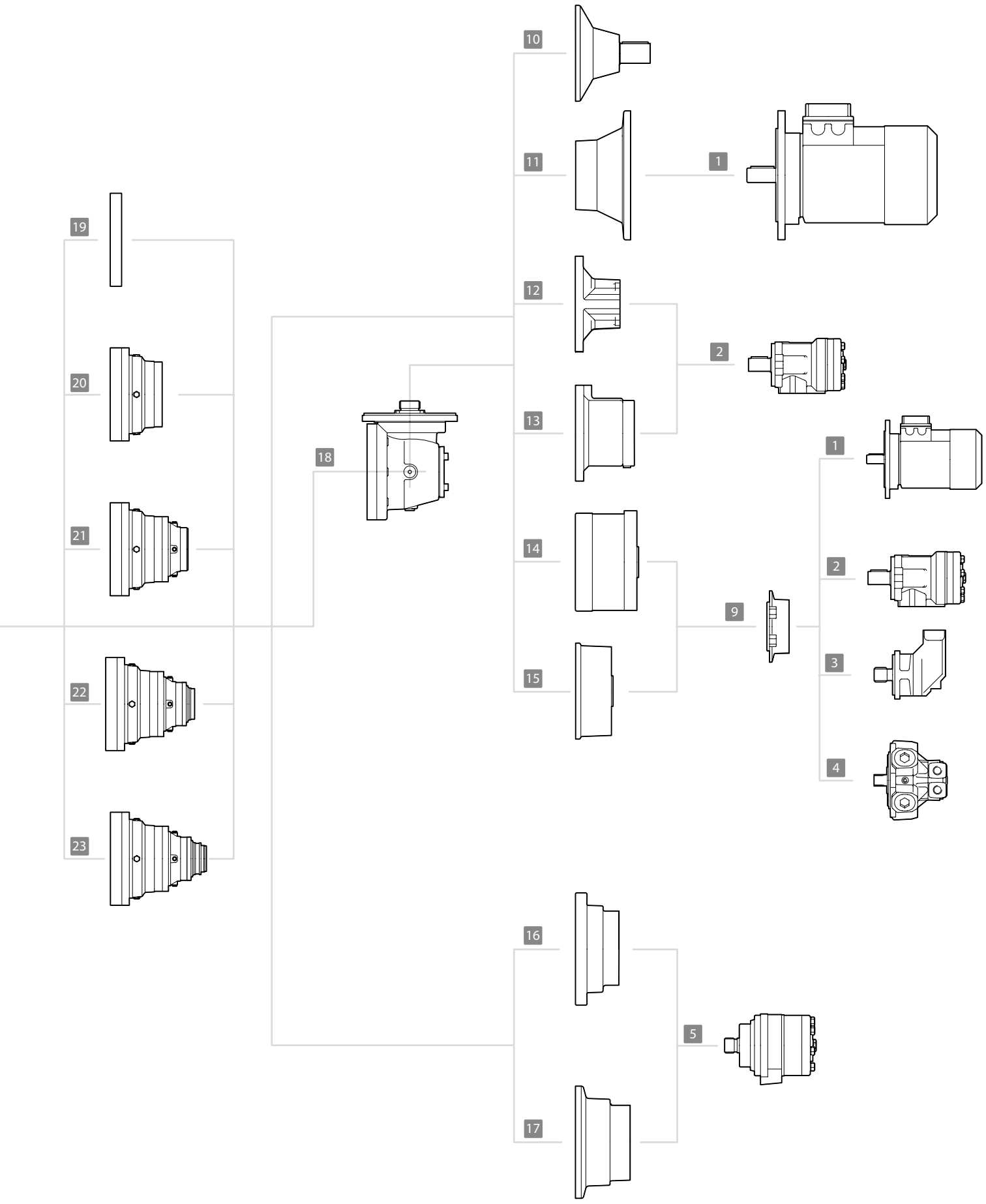
SUPPORTS AND OUTPUT SHAFTS

24 Output support "N"
25 Output support "P"
26 Output support "T"
27 Output support "TR"
28 Output support "TL"
29 Output support "H"
30 Output support "F"
31 Output support "NQ"
32 Cylindrical output shaft
33 Splined output support
34 Female splined output shaft
35 Hexagonal output shaft
36 Female cylindrical output shaft

ACCESSORIES

37 Pinion "P"
38 Flange "FL"
39 Splined bushing "BS"
40 Hexagonal bushing "ES"
41 Splined bar "BF"
42 Shrink disk "GA"
43 End plate "EP"
44 Oil expansion tank "VE"




10
11
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3.0 Technical Definitions

All values specified in this catalogue were calculated using the ISO 6336 and ISO 281 standards, but may not meet additional requirements set by the internal regulations of certifying bodies.
To select products that comply with these regulations, contact Dinamic Oil's sales team.

f_S - Service Factor

this factor represents the application's industrial rating; it depends on operating conditions, type of drive and frequency of start-up.
The information provided in this catalog is calculated for $f_s = 1$. The service factor value of a gearbox may be calculated by dividing its nominal power by its absorbed power.

Service factors (tab. 1)

	OPERATING CONDITIONS								
	Uniform U			With moderate shocks **M**			With heavy shocks **H**		
hours / day	START-UPS / HOUR								
	< 16	**16 - 63**	**64 - 250**	**< 16**	**16 - 63**	**64- 250**	**< 16**	**16 - 63**	**64 - 250**
< 0.5	0.9	1.3	1.5	0.9	1.3	1.5	1.2	1.5	1.8
0.5 - 3	0.9	1.3	1.5	1.2	1.5	1.8	1.7	2.0	2.3
3 - 8	1.2	1.5	1.8	1.4	1.8	2.0	1.9	2.3	2.8
8 - 24	1.4	1.8	2.0	1.7	2.0	2.5	2.4	2.8	3.0

P_1 - Nominal Power [kW]

the mechanical power transmitted by the gearbox, related to input. At fs = 1 the gearbox has a theoretical lifetime of 10000 hours under the ISO 6336 standard. This value does not take into account any limits on the gearbox's thermal capacity, as it is exclusively based on mechanical resistance in accordance with the speed of use.

P_a - Absorbed Power [kW]

relates to installed or available power, the amount of power actually absorbed by the application, at the gearbox input

P_t - Thermal Power [kW]

the maximum mechanical power the gearbox can transmit while in continuous operation, with splash lubrication, without going beyond its maximum temperature level (oil temperature below 90°C). More power may be transmitted using a Viton seal and synthetic oils or special cooling devices. The values indicated for various gearbox sizes refer to continuous operation with input speeds of 1500 RPM, at an ambient temperature of 20°C and an altitude of 0 / 500 m, for indoor applications.
Under different conditions of use, thermal power must be multiplied by the thermal factors identified in the tables below. For limited periods of operation, followed by periods of rest long enough to guarantee sufficient cooling of the gearbox, thermal power loses its significance and may be neglected.

Thermal Factors (tab. 2)

Ambient Temperature	Operating Time [%]				
	100%	80%	60%	40%	20%
10°	1.2	1.3	1.4	1.6	1.8
20°	1.0	1.1	1.3	1.4	1.6
30°	0.8	1.0	1.1	1.3	1.4
40°	0.7	0.8	1.0	1.1	1.3
50°	0.5	0.7	0.8	1.0	1.1
Altitude [m]	**Input Speed [RPM]**				
	400	800	1000	1500	2000
0	1.2	1.1	1.1	1.0	0.7
500	1.2	1.1	1.1	1.0	0.7
1000	1.1	1.0	1.0	0.9	0.6
1500	1.1	1.0	1.0	0.9	0.6
2000	1.1	1.0	1.0	0.9	0.6

P_d - Power to be Dissipated [kW]
the power that a cooling system must dissipate if the power to be transmitted exceeds the gearbox's thermal power.

η_m - Mechanical Efficiency
The ratio between mechanical power output and input; normally considered equal to 0.97 ÷ 0.98 for each epicycloidal reduction stage in the gearbox, and equal to 0.94 ÷ 0.95 for bevel gear; the actual value depends on a number of factors including speed, torque, ratio, assembly position and lubrication.

T_2 - Torque Transmitted [Nm]
this value represents torque continuously applied at a speed of n_1, at which the gearbox has a theoretical lifetime of 10000 h for gears, or 5000 h (L_{h10}) for the bearings in gear mechanisms.

T_{max} - Maximum Transmissible torque [Nm]
the maximum torque transmitted by the accessory supplied with the gearbox, if applicable. This value may limit the maximum transmissible torque of the gearbox.

T_{2max} - Maximum Torque [Nm]
the maximum admissible output torque, as a peak value or for brief periods of time (calculated at 90% Rs of the weakest component).
For drives with a high number of start-ups or inversions, appropriately reduced maximum torque values should be considered.
The value specified refers to the version with a splined female shaft (FS); different versions may have lower values.

T_b - Braking Torque [Nm]
the value of braking torque that may be conveyed statically by the negative brake.

n_1 - Input Speed [RPM]
the speed on the fast side of the gearbox.

n_2 - Output Speed [RPM]
the speed on the slow side of the gearbox.

n_{1max} - Maximum Speed [RPM]
the maximum input speed at the brake. For applications with higher values, contact Dinamic Oil's sales service to determine application compatibility.

i_e - Effective Reduction Ratio
the actual reduction ratio, meaning the ratio between the gearbox's input and output speeds.

nxh - Duration Index [RPMxh]
the value of the product between speed and duration of theoretical lifetime in hours. This value is expressed as $n_2$xh when used with output speed, $n_1$xh with used with input speed.

Duration Values Required for Different Applications (tab. 3)

Application	Required Lifetime
Agricultural machinery	300 - 3000
Machines operated intermittently or for short periods of time (construction machines)	3000 - 8000
Machines operated intermittently or for short periods of time with high operational reliability (freight lifts)	8000 - 12000
Machines operated 8 hours a day but not all the time (various industrial machines, rotary mills)	10000 - 25000
Machines operated 8 hours a day all the time (various industrial machines, conveyor belts)	20000 - 30000
Machines operated continuously (rolling mills, textiles machines)	40000 - 50000

k_f - Correction Factor
the factor applied to calculate the theoretical lifetime of bearings with male shafts for values of nxh other than those shown in catalog diagrams. External load curves are calculated for all gearboxes as:
- $n_2$xh = 100000 for output supports
- $n_1$xh = 1500000 for input supports

L_{min} - Minimum Length of Torque Arm [mm]
the minimum length recommended for the torque arm, applied to pendular applications.

4.0 Gearbox selection

4.1 Selection

Gearbox selection is based on the service factor required by the application and the required output speed. Once the electric motor has been determined (in terms of nominal speed and power), select the gearbox with the reduction ratio required to reach the required output speed and nominal power needed to ensure that the ratio between its value and the value of the motor's rated power is higher than the service factor.

$$i_e = n_1 / n_2$$

$$P_1 \geq P_a \times f_s$$

Confirm the selection with other parameters such as thermal power, impulse torque and any radial or axial loads acting on the male input and output shafts.
If the drive is not electric, apply the same method for the output torque required by the application rather than the nominal power.

4.2 Verification

Gearbox input and output supports:
these must be verified based on any radial and axial loads present. For each model, the catalog provides diagrams representing the dynamic radial loads that may be supported in accordance with the ISO 281 standard with a duration of L_{10} corresponding to nxh = 100000. For different durations, an applicable radial load can be calculated by multiplying the values in the diagrams by the corrective factor k_f.
The radial load cannot in any case exceed the maximum value on the curve in the diagram.
Make sure that if there are axial loads, they do not exceed the maximum permitted value.

Output torque:
this must never exceed the maximum transmissible torque of the selected gearbox. Carefully check that this value is higher than the maximum torque deliverable by the motor installed, shown at the gearbox output (that is, multiplied by the actual reduction ratio and the gearbox's mechanical yield).

Input speed:
for speeds other than those shown in the table, please contact the sales office.

Thermal power:
if installed power exceeds the gearbox's thermal power, select a larger gearbox and use synthetic oil with Viton seals or use a cooling circuit.
If you use Viton seals and synthetic oil, you may consider the thermal factor equivalent to an ambient temperature lower than 20°C with respect to the actual temperature, in order to consider the fact that the gearbox can withstand overheating 20°C over the projected data.
If you use a cooling system, the power to be dissipated is

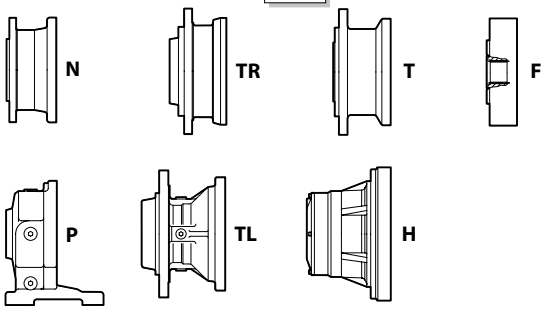
$$P_d = (P_a - P_t) \cdot (1 - \eta_m)$$

5.0 Order code

RA	21	3	P	S	78.7	

OUTPUT VERSION

G-2



OUTPUT SHAFT

G-2

S = Male spline
F = Female spline
C = Cylindrical shaft
K = Extended cylindrical shaft
E = Hexagonal shaft
Q = Hollow female shaft
FS = Female spline
FC = Female cylindrical shaft
U = Female cylindrical shaft

NUMBER OF STAGES

F-2

1 - 2 - 3 - 4 - 5 - 6

GEARBOX FRAME SIZE

F-1

RE - RA	RE - RA	GB - GBA	GB - GBA
110	1520	12010	61000
210	2000	16000	85000
240	2520	21000	110000
310	3000	26000	130000
510	3510	31000	GB
610	4800	40000	150000
810	6000	45000	205000
1020	8000	53000	235000

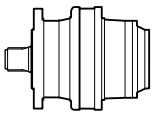
REDUCTION RATIO

F-2

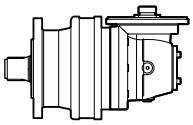
Please write the exact ratio as shown on the selection table

EXECUTION

F-1



RE - GB = Linear



RA - GBA = Angular

COMPOSITION

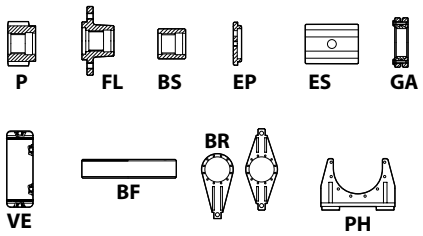
F-2

/ = Standard
L = Light
R = Reinforced
S = Special

ST	BB	B3	0	BS

OUTPUT ACCESSOIRES

H-36



P = Pinion
FL = Flange
BS = Splined bushing
EP = End plate
ES = Hexagonal bushing
GA = Shrink disc
VE = Expansion tank
BF = Splined bar
BR = Torque arm
PH = Foot support

RIGHT ANGLE POSITIONING

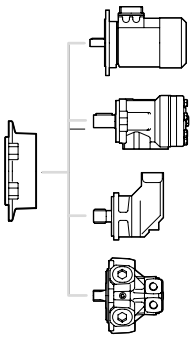
H-46

MOUNTING POSITION

H-46

MOTOR ADAPTER CONFIGURATION

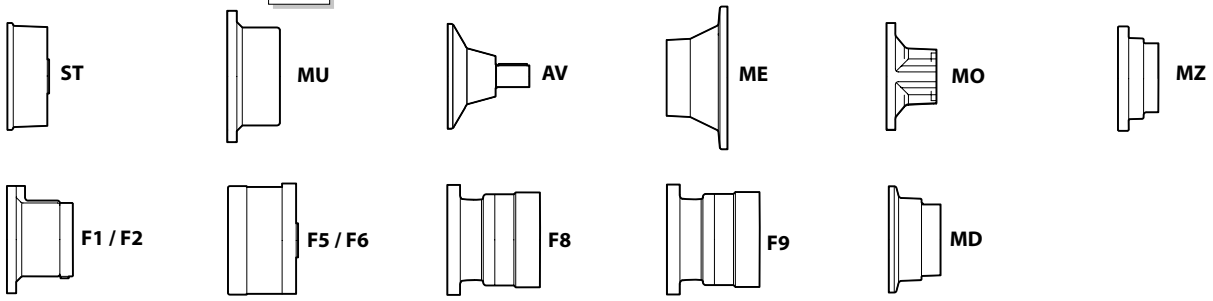
H-27



Electric motor
Orbit motor
Axial piston motor
Radial piston motor

DIRECT INPUTS

H-2



The example shows the ordering code for a right angle planetery gearbox frame 210, with 3 reduction stages a foot mounted output support and a male splined shaft, and 78.7 reduction ratio, with a "ST" input and "SAE B", 16/32 15 teeth motor adapter flange. Horizontal mounting position and standard right angle positioning, and a splined bushing output accessory.

6.0 Negative Hydraulic Brakes

6.1 1.1 Negative Hydraulic Multi disk Brakes

Dinamic Oil gearboxes may have a static negative multi disk brakes and hydraulic control.
The brakes on models **F1** through **F2** are designed for direct assembly of orbital hydraulic motors with flanging, compliant with the SAE A Standard.
The brakes on models **F5** through **F6** reach greater braking torques and have an ST universal for connection to wide range of motors available on the market.
The brakes on model **F8** reach braking torques of up to 3000 Nm and have anl MU input for connection to a wide range of motors available on the market.
The brakes on model **F9** reach braking torques of up to 1500 Nm. An optional sprag clutch mechanism with a torque of up to 1200 Nm can also be mounted. They have a "SAE C" or "SAE D" input and or optional universal ST input. These can be used for connection to a wide range of motors available on the market.
The **MD** brake is assembled with a direct flange connection for MLR motors on reduction stages RE 110-240.

Braking is generated by springs which compress fixed tempered steel disks alternating with bronze disks; friction transforms this thrust into a braking torque.
The brakes open when hydraulic oil pressurizes the brake release port; the pressure acts on a piston which compresses the spring so that the disks can turn freely. These are parking brakes which act by creating static braking torque when hydraulic release pressure is zero. The action stops when hydraulic pressure reaches the minimum release value.
For the following brakes F1, F2 and standard versions of F5, F6 and F8, circa 0.1 liter of mineral oil, with an ISO VG 32 viscosity is required.
Several brake models - F5, F6, F8 and F9 - are available in special versions with a higher maximum velocity.

6.2 Brake Selection

The following criteria must be considered:

- Braking torques are calculated under zero release pressure; if there is counter-pressure in the hydraulic circuit the actual braking values will be reduced as follows:

  Actual torque = Theoretical torque x (Opening pressure – Counter-pressure) / Pressure at the start of opening.

- Brake torque multiplied by the reduction ratio and divided by gearbox efficiency must be greater than or equal to the required output torque:

$$T_b \times i_e / \eta_m \geq T_2$$

- Except in particular cases, brake torque multiplied by the reduction ratio and divided by gearbox efficiency must not exceed the maximum gearbox torque:

$$T_b \times i_e / \eta_m \leq T_{2max}$$

7.0 Assembly Positions

For a complete definition of gearbox order code, it is necessary to determine the assembly position. This position defines the location of the oil filling caps, levels and drainage plugs.
See page H46 - H48.

8.0 Installation Instructions

The information in this chapter is indicative: it provides a partial summary of the installation and maintenance manual, which users should always refer to for more detailed information.

8.1 Installation

Gearboxes with flange and male shaft:
the coupling frame must have an unpainted, flat surface for the gearbox to rest on. The surface should be processed with machine tools and perpendicular to the axis of rotation. The table below shows the tolerance for centering on couplings.
For the RE series, the centering has a tolerance of H8.

Diameter	[mm]	**80 - 120**	**120 - 180**	**180 - 250**
Tolerance	[mm]	+0.054 0	+0.063 0	+0.072 0
Diameter	[mm]	**250 - 315**	**315 - 400**	**400 - 500**
Tolerance	[mm]	+0.081 0	+0.089 0	+0.097 0

The gearboxes sized from RE1520 to RE8000 with output H have two pilot diameters. It is sufficient to use 1 pilot when the radial loads on the output shaft are not present or are less than 50% of the maximum permitted loads.
For the GB line, the pilot diameter has a tolerance of F8.

Diameter	[mm]	**80 - 120**	**120 - 180**	**180 - 250**
Tolerance	[mm]	+0.186 +0.076	+0.205 +0.080	+0.226 +0.086

Gearboxes with a female splined shaft:
gearboxes with a female splined output shaft are not suitable for supporting radial loads on the output; it is therefore very important to carefully align the gearbox and the drive shaft. It is also necessary to check that the drive shaft does not bend while operating.

Gearboxes with Foot Support:
the gearbox foot support must be anchored to a flat surface and be aligned with the drive machine; it is important to align and level it very carefully. Incorrect support or alignment will affect the gearbox's lifetime.

Gearboxes with Pendular Assembly:
anchor the torque arm so that it is not constrained in the direction of the gearbox axis. The anchor point must have appropriate shock absorption.
The dimensional tables for each gearbox show the minimum length of the torque arm.

Torques and corresponding axial forces exerted by large pitch screws (tab. 4)

	Class 8.8		Class 10.9		Class 12.9	
	Torque [Nm]	Force [N]	Torque [Nm]	Force [N]	Torque [Nm]	Force [N]
M10	44	26000	62	37000	74.5	44000
M12	77	37800	108	53000	130	64000
M14	122	51500	172	72000	207	87000
M16	191	70400	269	99000	323	119000
M18	263	86000	370	121000	444	145000
M20	373	110000	525	154000	630	185000
M22	507	138000	714	191000	857	229000
M24	645	158000	908	222000	1090	267000
M27	944	206000	1330	289000	1590	347000
M30	1280	251000	1800	353000	2160	424000
M33	1740	311000	2460	437000	2940	525000
M36	2240	366000	3150	515000	3780	618000
M39	2900	437000	4080	615000	4890	738000
M42	3580	502000	5040	706000	6050	847000

8.2 Lubrication

Gearboxes are supplied without oil.
Before use, the gearbox should be filled up to the specified level with a recommended lubricant oil.
The choice and quantity of oil will be determined by the installer / user based on the type of application.

8.3 Paint

Gearboxes are supplied unpainted. Some parts are treated with a water-soluble base coat of red epoxy paint. The customer should paint them using a paint compatible with the base coat. Oil seals must be protected during painting

8.4 Assembling Flanged Motors

Assembling motors on the coupling flanges supplied by Dinamic Oil is easy, but these important recommendations should be followed:
- lubricate the coupling with a light layer of anti-seizure grease or lubricant;
- make sure the motor runs freely but snugly on the flange, anchoring the gearbox in place, without forcing the shaft or the pilot;
- tighten screws.
Refer to the installation and maintenance manual for additional information.

8.5 Assembling Motors with Connection Couplings

When connection couplings are used between the motor and the gearbox, ensure that the alignment is compatible with the type of coupling used. Couplings are widely used in industrial applications for a variety of functions, such as:
- limiting input torque,
- absorbing vibrations from the motor,
- compensating for small misalignments.
When using connection couplings, refer to the instruction manuals supplied by the suppliers of the component.

8.6 Gearbox Weight

For your information, the indicative weights of various gearboxes are provided on page H52.

9.0 Storage

The information in this chapter is indicative: it provides a partial summary of the installation and maintenance manual, which users should always refer to for more detailed information.

Gearboxes must not be stored outdoors or in direct contact with the ground or sun. For long-term storage they must be filled with oil, and all external parts covered with grease; coupling surfaces must be protected with rust proof agents, breather plugs replaced by closed plugs and the gearbox should be operated under no load at least once every two months (one complete turn of the output shaft is sufficient).
Refer to the installation and maintenance manual for additional information on storage.

10.0 Lubrication

10.1 Type of Lubrication

Gearboxes are lubricated in oil baths; before operating the gearbox, fill it with oil and look through the level cap to see if the oil is at the correct level; this operation requires special attention, and you must check the level again after a few minutes of operation. The oil quantities identified in the catalog are approximate and vary according to the reduction ratio and the type of gearbox input and output.

10.2 Selecting an Oil

You may use any mechanical transmission oil with EP additives in viscosity classes ISO VG220 to ISO VG320 under ISO 3448. In special cases, oils with different viscosities may be used; for more information on these exceptions, contact Dinamic Oil's Technical Assistance Service. Oil viscosity must be selected based on ambient temperature and the actual operating temperature of the gearbox. If the gearboxes are being operated at very high ambient temperatures, synthetic oil is recommended. Oil may suddenly overheat in gearboxes assembled vertically and continuously functioning; in these cases it is necessary to use an external expansion tank (which Dinamic Oil may supply) to allow the oil to expand through thermal dilation.

10.3 Changing the oil

Oil must be changed after the first 150 hours of operation, and then according to the following table, or least every 2 years.

Avarage operating duration to oil type

Operating temperature [°C]	Oil type		
	Mineraloil [h]	Syntheticoil [h]	
		Polyalfhaolefins (PAO)	Polyglycols (PG)
70°	7000	15000	16000
80°	5000	10000	12000
90°	3000	7500	9000

10.4 Oil quantity

Information on the quantity of oil required for proper gearbox lubrication is provided on page H49.

10.5 Recommended lubricants

Recommended viscosity (tab. 5)

ISO VG 3448	OPERATING TEMPERATURE [C°]												
	Ambient Temperature [C°]												
	-20°	-10°	0	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
220													
320													

Recommended lubricants (tab. 6)

Lubricants for general use

Manufacturer	Mineral Oil	Synthetic Oil	
		Poly-Alpha-Olefin (PAO)	Polyglycol (PG)
AGIP	Blasia	Blasia SX	Blasia S
ARAL	Degol BG		Degol GS
BP	Energol GR-XP	Enersyn EPX	Enersyn HTX
CASTROL	Alpha SP	Alphasyn EP	Alphasyn PG
CHEVRON	Ultra Gear	Tegra Synthetic	HiPerSYN
DEA	Falcon CLP		
ELF	Reductelf SP	Elf Syntherma	Elf Syntherma
ESSO	Spartan EP	Spartan S EP	Glycolube
FINA	Giran		
IP	Mellana		Telesia Oil
KLÜBER	Kluberoil GEM 1	Klubersynt EG4	Klubersynt GH6
MOBIL	Mobilgear XMP	Mobilgear SHC	Glygoile
OPTIMOL	Ultra		
Q8	Goya	El Greco	El Greco
SHELL	Omala S2 G	Omala S4 GX	Omala S4 WE
TOTAL	Carter EP	Carter SH	Carter SY

Lubricants for food use

Manufacturer	Gear Oils
AGIP	Rocol Foodlube Hi-Torque
ESSO	Gear Oil FM
KLÜBER	Klüberoil 4 UH1 N
MOBIL	DTE FM
SHELL	Cassida Fluid GL

10.6 Temperature

The recommended ambient temperature for use of standard gearboxes is from -15°C to +40°C.

11.0 Independent Cooling Units

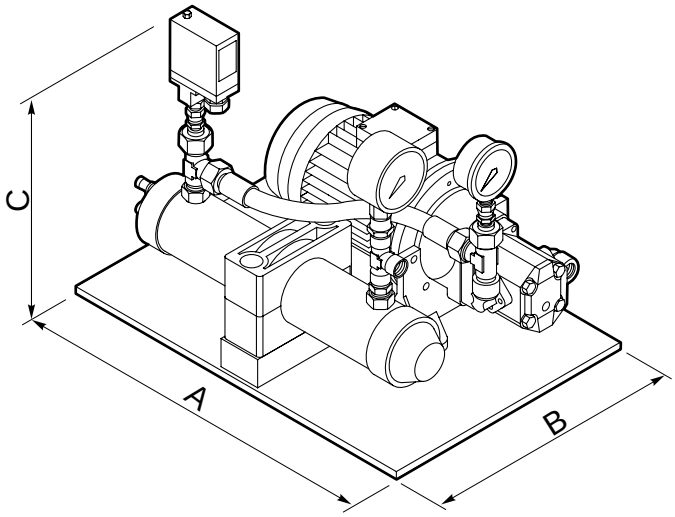
When transmitted power exceeds the thermal power that may be dissipated by the reducer, it is necessary to use a cooling unit to dispose of excessive thermal power.
Dinamic Oil offers a series of independent oil/water and oil/air cooling units which can dissipate up to 50 kW. For greater power levels, contact our technical office.

11.1 Independent oil/water cooling units, standard and customized composition.

Standard series URO/W cooling units are composed of:

- A water/oil heat exchanger.
- A motor-driven pump (motor/pump connection with joint and support; pump with viton seals) composed of a 4 pole B5 motor, standard three-phase 230/400V 50Hz power supply and gear pump.
- 0-16 bar manometer assembled between pump and heat exchanger.
- Analogue 0-120 °C thermometer mounted at the exchanger exit.
- Filter for installation on the tank delivery for cleaning the oil released (recommended option).

Units in customized installations may be equipped with the following options:
- Minimum pressure switch with exchange contacts, for assembly between the pump and the heat exchanger. (In this case the hydraulic system is already prepared).
- Electric flow switch for total control of oil flow. .



Unit	Capacity	Motor-driven oil pump		Water quantity	A	B	C
	[kW]*	[kW]	[l/min]	[l/min]*			
URO/W 4	4	0.37	16	8	500	350	400
URO/W 6	6	0.37	16	10	500	350	400
URO/W 9	9	0.55	16	16	500	350	400
URO/W 13	13	1.1	30	25	500	350	400
URO/W 21	21	1.5	30	40	500	400	450
URO/W 31	31	2.2	56	50	720	510	520
URO/W 50	50	3.0	80	80	730	520	520

* The values appearing in the table are for a water temperature of 20° C..

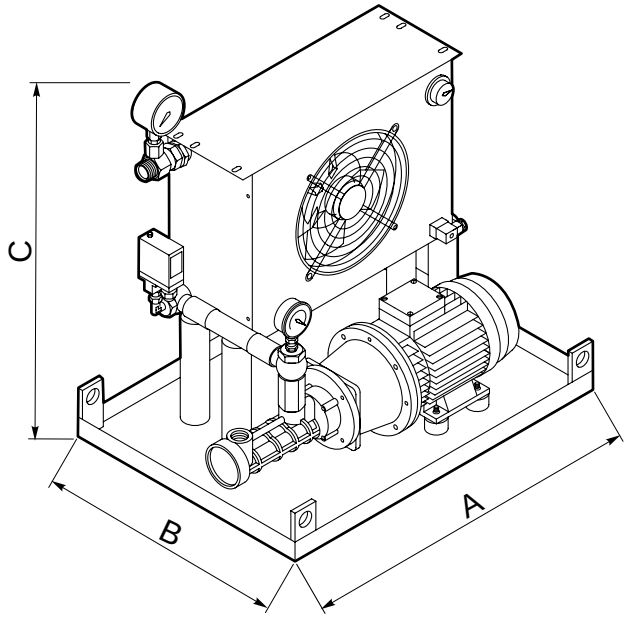
11.2 Independent oil/air cooling units, standard and customized composition

Standard series URO/A cooling units are composed of:

- An air/oil heat exchanger complete with a fan and an adjustable 0-90 ° C thermostat, already wired.
- A motor-driven pump (motor/pump connection with joint and support; pump with viton seals) composed of a 4 pole B3/B5 motor, standard 230/400V - 50Hz power supply and screw pump.
- 0-16 bar manometer assembled between pump and heat exchanger.
- Analogue 0-120 °C thermometer mounted at the exchanger exit.
- Filter for installation on the tank delivery for cleaning the oil released (recommended option).

Units in customized installations may be equipped with the following options:

- Minimum pressure switch with exchange contacts, for assembly between the pump and the heat exchanger. (In this case the hydraulic system is already prepared).
- Electric flow switch for total control of oil flow.
- Filter for installation on the tank delivery for cleaning the oil released (recommended option).



Unit	Capacity	Motor-driven oil pump		Motor-driven fan		A	B	C
	[kW]*	[kW]	[l/min]	[kW]	[m³/h]			
URO/A 5	5	1.5	30	0.12	900	660	430	700
URO/A 7	7	1.5	30	0.12	1300	710	510	700
URO/A 10	10	1.5	30	0.18	2750	710	510	830
URO/A 13	13	1.5	30	0.23	2750	710	510	830
URO/A 16	16	2.2	56	0.23	3500	710	510	1010
URO/A 21	21	2.2	56	0.56	6300	800	500	1200
URO/A 26	26	3	56	0.56	7450	800	500	1265
URO/A 30	30	3	80	0.56	7450	800	500	1265
URO/A 40	40	2.2	56	0.9	9500	1010	600	1350
URO/A 46	46	3	80	0.9	9500	1010	600	1350

* The values appearing in the table are for a air temperature of 20° C.

dinamic oil

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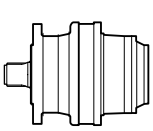
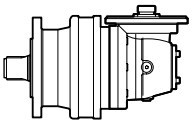




RE	ie	RA	ie	T_{2max} [Nm]	
110	3.48 - 2153.35	110	11.14 - 1194.39	1780	F-2
210	3.48 - 2153.35	210	11.14 - 1194.39	3600	F-4
240	3.82 - 1658.88	240	12.22 - 900.53	4000	F-6
310	3.60 - 1990.66	310	10.03 - 1244.16	5630	F-8
510	3.60 - 1990.66	510	10.03 - 1244.16	11600	F-10
610	4.00 - 1416.08	610	11.14 - 629.37	14900	F-12
810	3.56 - 2264.19	810	10.41 - 1184.91	18600	F-14
1020	3.56 - 2264.19	1020	10.41 - 1184.91	27200	F-16
1520	4.09 - 2041.20	1520	12.56 - 1076.68	39000	F-18
2000	3.83 - 1451.52	2000	11.77 - 907.20	44100	F-20
2520	4.00 - 1925.49	2520	12.29 - 1091.91	50100	F-22
3000	4.00 - 1742.52	3000	12.29 - 968.07	78800	F-24
3510	3.84 - 2392.62	3510	12.48 - 1118.57	96500	F-26
4800	3.84 - 1741.68	4800	12.48 - 967.60	111000	F-28
6000	4.14 - 1435.91	6000	13.46 - 1009.38	135000	F-30
8000	4.00 - 3164.84	8000	13.00 - 800.00	198000	F-32

GB	ie	GBA	ie	T_{2max} [Nm]	
12010	4.09 - 3544.35	12010	48.55 - 3161.48	281000	F-34
16000	3.83 - 3172.87	16000	47.84 - 3544.35	357000	F-36
21000	3.68 - 3129.84	21000	49.55 - 3065.78	406000	F-38
26000	3.68 - 3532.80	26000	55.81 - 2527.69	540000	F-40
31000	3.43 - 3559.02	31000	172.32 - 5011.04	650000	F-42
40000	3.43 - 3559.02	40000	172.32 - 5011.04	650000	F-44
45000	3.83 - 3554.59	45000	210.50 - 2211.75	650000	F-46
53000	3.84 - 3103.82	53000	248.00 - 4278.67	1191000	F-48
61000	3.84 - 2943.14	61000	190.27 - 11772.58	1131000	F-50
85000	3.84 - 2448.10	85000	214.32 - 11429.12	1131000	F-52
110000	4.32 - 3553.28	110000	744.42 - 21647.68	2250000	F-54
130000	4.32 - 2350.11	130000	909.34 - 10967.19	2720000	F-56
150000	4.07 - 2344.94			2720000	F-58
205000	4.14 - 3259.83			3620000	F-59
235000	4.14 - 2902.95			3620000	F-60

F

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 111	**3.48**	216	***14.7***	630	259	***16.8***	610	417	***23.5***	530	833	***38.2***	430	1730	11 (N) 13 (T) 8 (F) 21 (P)
	4.26	176	***12.2***	650	211	***14.4***	640	340	***20.1***	550	680	***32.7***	450	1780	
	5.77	130	***6.7***	480	156	***7.9***	470	251	***12.4***	460	503	***23.9***	440	1320	
	7.20	104	***3.8***	340	125	***4.6***	340	201	***7.1***	330	403	***13.7***	320	950	
RE 112	**12.11**	62	***4.6***	680	74	***5.5***	670	120	***8.6***	660	239	***16.4***	620	1730	7 (N) 8 (T) 5 (F) 13 (P)
	14.84	51	***3.8***	690	61	***4.6***	680	98	***7.1***	660	195	***13.7***	640	1730	
	18.17	41.3	***3.2***	700	49.5	***3.8***	700	80	***6.0***	680	160	***11.4***	650	1780	
	20.08	37.4	***2.9***	700	44.8	***3.4***	690	72	***5.4***	670	144	***10.3***	650	1730	
	24.60	30.5	***2.4***	720	36.6	***2.9***	710	59	***4.5***	690	118	***8.6***	660	1780	
	30.69	24.4	***2.0***	720	29.3	***2.3***	720	47.2	***3.6***	700	94	***7.0***	670	1780	
	33.28	22.5	***1.3***	530	27.0	***1.6***	520	43.6	***2.4***	510	87	***4.7***	490	1320	
	41.54	18.1	***1.1***	530	21.7	***1.3***	530	34.9	***2.0***	510	70	***3.8***	490	1320	
	51.84	14.5	***0.61***	380	17.4	***0.73***	380	28.0	***1.1***	370	56	***2.2***	350	950	
RE 113	**51.63**	14.5	***1.2***	750	17.4	***1.5***	740	28.1	***2.3***	720	56	***4.4***	690	1730	5 (N) 6 (T) 4 (F) 10 (P)
	63.25	11.9	***1.0***	760	14.2	***1.2***	750	22.9	***1.9***	730	45.9	***3.6***	700	1780	
	69.87	10.7	***0.92***	750	12.9	***1.1***	740	20.8	***1.7***	720	41.5	***3.3***	700	1730	
	77.48	9.7	***0.84***	760	11.6	***0.99***	760	18.7	***1.6***	740	37.4	***3.0***	710	1780	
	85.59	8.8	***0.76***	770	10.5	***0.90***	760	16.9	***1.4***	740	33.9	***2.7***	710	1780	
	104.85	7.2	***0.64***	790	8.6	***0.75***	770	13.8	***1.2***	750	27.7	***2.2***	720	1780	
	106.82	7.0	***0.63***	790	8.4	***0.73***	770	13.6	***1.1***	750	27.1	***2.2***	720	1780	
	130.86	5.7	***0.53***	820	6.9	***0.62***	800	11.1	***0.95***	760	22.2	***1.8***	730	1780	
	141.90	5.3	***0.49***	830	6.3	***0.58***	810	10.2	***0.88***	760	20.4	***1.7***	730	1780	
	144.55	5.2	***0.49***	840	6.2	***0.58***	820	10.0	***0.86***	760	20.1	***1.6***	730	1730	
	177.09	4.2	***0.41***	860	5.1	***0.48***	830	8.2	***0.72***	770	16.4	***1.4***	740	1780	
	180.40	4.2	***0.41***	870	5.0	***0.48***	850	8.0	***0.72***	790	16.1	***1.3***	730	1730	
	221.00	3.4	***0.34***	880	4.1	***0.40***	860	6.6	***0.59***	800	13.1	***1.1***	750	1780	
	239.64	3.1	***0.22***	630	3.8	***0.26***	610	6.1	***0.39***	570	12.1	***0.75***	550	1320	
	299.08	2.5	***0.18***	650	3.0	***0.21***	630	4.8	***0.32***	590	9.7	***0.61***	550	1320	
RE 114	**220.10**	3.4	***0.35***	880	4.1	***0.41***	860	6.6	***0.61***	800	13.2	***1.1***	750	1780	4 (N) 5 (T) 4 (F) 8 (P)
	243.14	3.1	***0.33***	910	3.7	***0.38***	890	6.0	***0.57***	830	11.9	***1.0***	750	1730	
	269.63	2.8	***0.29***	910	3.3	***0.34***	890	5.4	***0.51***	830	10.8	***0.95***	760	1780	
	303.44	2.5	***0.27***	940	3.0	***0.32***	920	4.8	***0.47***	850	9.6	***0.85***	770	1730	
	364.89	2.1	***0.23***	950	2.5	***0.27***	930	4.0	***0.40***	860	7.9	***0.72***	780	1780	
	403.08	1.9	***0.21***	980	2.2	***0.25***	960	3.6	***0.37***	890	7.2	***0.67***	800	1730	
	447.00	1.7	***0.19***	980	2.0	***0.22***	960	3.2	***0.33***	890	6.5	***0.60***	800	1780	
	493.79	1.5	***0.18***	1000	1.8	***0.21***	970	2.9	***0.31***	900	5.9	***0.55***	810	1780	
	557.86	1.3	***0.16***	1020	1.6	***0.19***	990	2.6	***0.28***	920	5.2	***0.50***	830	1780	
	627.80	1.2	***0.15***	1050	1.4	***0.17***	1020	2.3	***0.25***	950	4.6	***0.46***	860	1730	
	818.63	0.92	***0.11***	1080	1.1	***0.13***	1050	1.8	***0.20***	980	3.5	***0.36***	880	1780	
	942.17	0.80	***0.10***	1100	0.96	***0.12***	1070	1.5	***0.18***	1000	3.1	***0.32***	900	1780	
	1021.64	0.73	***0.09***	1120	0.88	***0.11***	1090	1.4	***0.17***	1010	2.8	***0.30***	910	1780	
	1275.01	0.59	***0.08***	1150	0.71	***0.09***	1120	1.1	***0.14***	1040	2.3	***0.25***	940	1780	
	1591.22	0.47	***0.07***	1190	0.57	***0.08***	1160	0.91	***0.11***	1080	1.8	***0.21***	970	1780	
	1725.44	0.43	***0.04***	840	0.52	***0.05***	820	0.84	***0.07***	760	1.7	***0.13***	690	1320	
	2153.35	0.35	***0.04***	870	0.42	***0.04***	850	0.67	***0.06***	790	1.3	***0.11***	710	1320	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 112	**11.14**	67.3	***5.1***	680	81	***6.1***	670	130	***9.5***	650	260	***16.4***	560	1730	5 (N) 5 (T) 4 (F) 9 (P)
	13.64	55.0	***4.3***	690	66	***5.1***	680	106	***7.9***	670	213	***15.1***	630	1780	
	18.46	40.6	***2.3***	510	48.8	***2.8***	500	79	***4.3***	490	157	***8.3***	470	1320	
	23.04	32.6	***1.3***	370	39.1	***1.6***	360	63	***2.5***	350	126	***4.8***	340	950	
RA 113	**38.75**	19.4	***1.6***	730	23.2	***1.9***	720	37.4	***3.0***	700	75	***5.8***	670	1730	4 (N) 5 (T) 3 (F) 8 (P)
	47.47	15.8	***1.3***	740	19.0	***1.6***	740	30.5	***2.5***	720	61	***4.8***	690	1780	
	58.16	12.9	***1.1***	750	15.5	***1.3***	740	24.9	***2.1***	720	49.9	***4.0***	700	1780	
	64.25	11.7	***1.0***	750	14.0	***1.2***	740	22.6	***1.9***	720	45.1	***3.6***	690	1730	
	78.70	9.5	***0.84***	770	11.4	***0.99***	760	18.4	***1.6***	740	36.8	***3.0***	710	1780	
	98.22	7.6	***0.69***	780	9.2	***0.81***	770	14.8	***1.3***	750	29.5	***2.4***	720	1780	
	106.51	7.0	***0.46***	560	8.5	***0.54***	560	13.6	***0.85***	540	27.2	***1.6***	520	1320	
	132.92	5.6	***0.37***	570	6.8	***0.44***	570	10.9	***0.69***	550	21.8	***1.3***	530	1320	
	165.89	4.5	***0.21***	410	5.4	***0.25***	410	8.7	***0.40***	390	17.5	***0.76***	380	950	
RA 114	**134.86**	5.6	***0.55***	830	6.7	***0.64***	810	10.8	***0.95***	750	21.5	***1.8***	720	1730	4 (N) 4 (T) 3 (F) 8 (P)
	165.21	4.5	***0.45***	850	5.4	***0.53***	820	8.8	***0.79***	770	17.6	***1.5***	740	1780	
	202.39	3.7	***0.38***	870	4.4	***0.44***	850	7.2	***0.67***	790	14.3	***1.3***	750	1780	
	223.58	3.4	***0.36***	900	4.0	***0.41***	880	6.5	***0.62***	810	13.0	***1.1***	740	1730	
	247.94	3.0	***0.32***	900	3.6	***0.37***	880	5.8	***0.56***	810	11.7	***1.0***	760	1780	
	273.89	2.7	***0.29***	910	3.3	***0.34***	890	5.3	***0.52***	830	10.6	***0.95***	760	1780	
	335.53	2.2	***0.25***	940	2.7	***0.29***	920	4.3	***0.43***	850	8.6	***0.78***	770	1780	
	341.82	2.2	***0.24***	950	2.6	***0.28***	920	4.2	***0.43***	860	8.5	***0.77***	770	1780	
	418.74	1.8	***0.21***	970	2.1	***0.24***	950	3.5	***0.36***	880	6.9	***0.65***	790	1780	
	454.06	1.7	***0.19***	990	2.0	***0.22***	960	3.2	***0.34***	890	6.4	***0.60***	800	1780	
	566.67	1.3	***0.16***	1020	1.6	***0.19***	990	2.6	***0.28***	920	5.1	***0.50***	830	1780	
	614.47	1.2	***0.10***	720	1.5	***0.12***	700	2.4	***0.18***	650	4.7	***0.33***	590	1320	
	707.21	1.1	***0.13***	1060	1.3	***0.15***	1030	2.1	***0.23***	960	4.1	***0.41***	860	1780	
	766.86	0.98	***0.09***	750	1.2	***0.10***	730	1.9	***0.15***	680	3.8	***0.27***	610	1320	
	957.05	0.78	***0.07***	770	0.94	***0.08***	750	1.5	***0.12***	700	3.0	***0.22***	630	1320	
	1194.39	0.63	***0.04***	550	0.75	***0.05***	540	1.2	***0.07***	500	2.4	***0.13***	450	950	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 211	**3.48**	216	***26.5***	1140	259	***30.1***	1080	417	***42.0***	940	833	***68***	760	2420	11 (N) 13 (T) 9 (F) 22 (P)
	4.26	176	***22.7***	1200	211	***25.7***	1140	340	***36.0***	980	680	***58***	800	3550	
	5.77	130	***13.4***	960	156	***16.0***	950	251	***25.0***	930	503	***45.8***	850	2650	
	7.20	104	***7.8***	690	125	***9.2***	690	201	***14.4***	670	403	***27.8***	640	1920	
RE 212	**12.11**	62	***9.7***	1410	74	***11.5***	1400	120	***18.0***	1360	239	***29.3***	1110	2420	7 (N) 8 (T) 5 (F) 13 (P)
	14.84	51	***7.7***	1390	61	***9.2***	1380	98	***14.4***	1340	195	***25.0***	1160	3550	
	18.17	41.3	***6.4***	1410	49.5	***7.6***	1390	80	***11.9***	1360	160	***21.7***	1240	3550	
	20.08	37.4	***6.0***	1460	44.8	***7.1***	1440	72	***11.2***	1400	144	***20.5***	1290	2420	
	24.60	30.5	***4.8***	1430	36.6	***5.7***	1420	59	***9.0***	1380	118	***17.2***	1330	3550	
	30.69	24.4	***3.9***	1450	29.3	***4.6***	1430	47.2	***7.3***	1400	94	***14.0***	1340	3550	
	33.28	22.5	***2.6***	1060	27.0	***3.1***	1050	43.6	***4.9***	1030	87	***9.5***	990	2650	
	41.54	18.1	***2.1***	1080	21.7	***2.5***	1070	34.9	***4.0***	1040	70	***7.7***	1000	2650	
	51.84	14.5	***1.2***	780	17.4	***1.5***	770	28.0	***2.3***	750	56	***4.4***	720	1920	
RE 213	**51.63**	14.5	***2.5***	1490	17.4	***2.9***	1480	28.1	***4.6***	1440	56	***8.8***	1380	3550	5 (N) 6 (T) 4 (F) 10 (P)
	63.25	11.9	***2.0***	1510	14.2	***2.4***	1500	22.9	***3.8***	1460	45.9	***7.2***	1400	3550	
	69.87	10.7	***1.9***	1570	12.9	***2.3***	1550	20.8	***3.5***	1510	41.5	***6.8***	1450	2420	
	77.48	9.7	***1.7***	1530	11.6	***2.0***	1510	18.7	***3.1***	1470	37.4	***6.0***	1420	3550	
	85.59	8.8	***1.5***	1540	10.5	***1.8***	1520	16.9	***2.8***	1480	33.9	***5.4***	1420	3550	
	104.85	7.2	***1.3***	1580	8.6	***1.5***	1540	13.8	***2.3***	1500	27.7	***4.5***	1440	3550	
	106.82	7.0	***1.3***	1590	8.4	***1.5***	1540	13.6	***2.3***	1500	27.1	***4.4***	1440	3550	
	130.86	5.7	***1.1***	1630	6.9	***1.2***	1590	11.1	***1.9***	1520	22.2	***3.7***	1460	3550	
	141.90	5.3	***1.0***	1660	6.3	***1.2***	1610	10.2	***1.8***	1520	20.4	***3.4***	1460	3550	
	144.55	5.2	***1.0***	1750	6.2	***1.2***	1700	10.0	***1.8***	1590	20.1	***3.4***	1510	2420	
	177.09	4.2	***0.82***	1710	5.1	***1.0***	1660	8.2	***1.4***	1550	16.4	***2.7***	1480	3550	
	180.40	4.2	***0.63***	1330	5.0	***0.74***	1320	8.0	***1.2***	1290	16.1	***2.2***	1240	3290	
	221.00	3.4	***0.63***	1630	4.1	***0.74***	1620	6.6	***1.2***	1570	13.1	***2.2***	1500	3550	
	239.64	3.1	***0.45***	1260	3.8	***0.52***	1230	6.1	***0.78***	1150	12.1	***1.5***	1100	2650	
	299.08	2.5	***0.37***	1310	3.0	***0.43***	1270	4.8	***0.65***	1180	9.7	***1.2***	1120	2650	
RE 214	**220.10**	3.4	***0.70***	1770	4.1	***0.82***	1720	6.6	***1.22***	1600	13.2	***2.3***	1500	3550	5 (N) 5 (T) 4 (F) 8 (P)
	243.14	3.1	***0.68***	1900	3.7	***0.79***	1840	6.0	***1.19***	1720	11.9	***2.1***	1550	2420	
	269.63	2.8	***0.59***	1820	3.3	***0.69***	1770	5.4	***1.03***	1650	10.8	***1.9***	1520	3550	
	303.44	2.5	***0.56***	1960	3.0	***0.66***	1910	4.8	***0.98***	1770	9.6	***1.8***	1600	2420	
	364.89	2.1	***0.45***	1910	2.5	***0.53***	1860	4.0	***0.80***	1730	7.9	***1.4***	1560	3550	
	403.08	1.9	***0.43***	1970	2.2	***0.50***	1950	3.6	***0.77***	1850	7.2	***1.4***	1670	2420	
	447.00	1.7	***0.38***	1970	2.0	***0.45***	1920	3.2	***0.67***	1780	6.5	***1.2***	1600	3550	
	493.79	1.5	***0.35***	2000	1.8	***0.41***	1940	2.9	***0.62***	1810	5.9	***1.1***	1630	3550	
	557.86	1.3	***0.32***	2040	1.6	***0.37***	1980	2.6	***0.55***	1840	5.2	***1.0***	1660	3550	
	627.80	1.2	***0.30***	2190	1.4	***0.35***	2130	2.3	***0.53***	1980	4.6	***0.95***	1780	2420	
	818.63	0.92	***0.23***	2160	1.1	***0.27***	2100	1.8	***0.40***	1950	3.5	***0.72***	1760	3550	
	942.17	0.80	***0.20***	2200	0.96	***0.24***	2140	1.5	***0.36***	1990	3.1	***0.64***	1800	3550	
	1021.64	0.73	***0.19***	2230	0.88	***0.22***	2170	1.4	***0.33***	2020	2.8	***0.60***	1820	3550	
	1275.01	0.59	***0.16***	2310	0.71	***0.18***	2240	1.1	***0.28***	2090	2.3	***0.50***	1880	3550	
	1591.22	0.47	***0.11***	1970	0.57	***0.13***	1920	0.91	***0.19***	1790	1.8	***0.36***	1690	3550	
	1725.44	0.43	***0.09***	1700	0.52	***0.10***	1660	0.84	***0.15***	1540	1.7	***0.27***	1390	2650	
	2153.35	0.35	***0.07***	1760	0.42	***0.08***	1710	0.67	***0.12***	1590	1.3	***0.22***	1440	2650	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 212	**11.14**	67	***7.1***	940	81	***8.4***	930	130	***12.4***	850	260	***20.2***	690	2410	5 (N) 6 (T) 4 (F) 9 (P)
	13.64	55	***7.1***	1150	66	***8.4***	1140	106	***12.4***	1050	213	***20.2***	850	2950	
	18.46	40.6	***4.7***	1030	48.8	***5.6***	1020	79	***8.7***	990	157	***16.7***	950	2650	
	23.04	32.6	***2.7***	740	39.1	***3.2***	730	63	***5.0***	710	126	***9.7***	690	1920	
RA 213	**38.75**	19.4	***3.4***	1510	23.2	***4.0***	1500	37.4	***6.3***	1460	75	***12.0***	1400	2420	4 (N) 5 (T) 4 (F) 8 (P)
	47.47	15.8	***2.8***	1530	19.0	***3.2***	1470	30.5	***5.0***	1430	61	***9.6***	1380	3550	
	58.16	12.9	***2.2***	1500	15.5	***2.6***	1490	24.9	***4.1***	1450	49.9	***8.0***	1390	3550	
	64.25	11.7	***2.1***	1560	14.0	***2.5***	1540	22.6	***3.9***	1500	45.1	***7.5***	1440	2420	
	78.70	9.5	***1.7***	1530	11.4	***2.0***	1510	18.4	***3.1***	1470	36.8	***6.0***	1420	3550	
	98.22	7.6	***1.4***	1560	9.2	***1.6***	1530	14.8	***2.5***	1490	29.5	***4.9***	1430	3550	
	106.51	7.0	***0.92***	1140	8.5	***1.1***	1130	13.6	***1.7***	1100	27.2	***3.3***	1050	2650	
	132.92	5.6	***0.75***	1160	6.8	***0.89***	1140	10.9	***1.4***	1110	21.8	***2.7***	1070	2650	
	165.89	4.5	***0.43***	830	5.4	***0.51***	820	8.7	***0.80***	800	17.5	***1.5***	770	1920	
RA 214	**134.86**	5.6	***1.1***	1730	6.7	***1.3***	1690	10.8	***2.0***	1570	21.5	***3.8***	1500	2420	4 (N) 4 (T) 3 (F) 8 (P)
	165.21	4.5	***0.90***	1690	5.4	***1.1***	1650	8.8	***1.6***	1540	17.6	***3.1***	1480	3550	
	202.39	3.7	***0.76***	1750	4.4	***0.89***	1700	7.2	***1.3***	1580	14.3	***2.5***	1490	3550	
	223.58	3.4	***0.74***	1870	4.0	***0.86***	1820	6.5	***1.3***	1690	13.0	***2.4***	1550	2420	
	247.94	3.0	***0.64***	1800	3.6	***0.75***	1750	5.8	***1.1***	1630	11.7	***2.1***	1510	3550	
	273.89	2.7	***0.59***	1830	3.3	***0.69***	1780	5.3	***1.0***	1650	10.6	***1.9***	1520	3550	
	335.53	2.2	***0.50***	1890	2.7	***0.58***	1830	4.3	***0.87***	1710	8.6	***1.6***	1540	3550	
	341.82	2.2	***0.49***	1890	2.6	***0.57***	1840	4.2	***0.85***	1710	8.5	***1.5***	1540	3550	
	418.74	1.8	***0.41***	1950	2.1	***0.48***	1900	3.5	***0.72***	1760	6.9	***1.3***	1590	3550	
	454.06	1.7	***0.38***	1970	2.0	***0.45***	1920	3.2	***0.67***	1790	6.4	***1.2***	1610	3550	
	566.67	1.3	***0.32***	2040	1.6	***0.37***	1990	2.6	***0.56***	1850	5.1	***1.0***	1660	3550	
	614.47	1.2	***0.21***	1460	1.5	***0.24***	1420	2.4	***0.37***	1320	4.7	***0.66***	1190	2650	
	707.21	1.1	***0.22***	1750	1.3	***0.26***	1730	2.1	***0.41***	1680	4.1	***0.78***	1620	3550	
	766.86	1.0	***0.17***	1510	1.2	***0.20***	1470	1.9	***0.30***	1360	3.8	***0.55***	1230	2650	
	957.05	0.78	***0.14***	1560	0.94	***0.17***	1520	1.5	***0.25***	1410	3.0	***0.45***	1270	2650	
	1194.39	0.63	***0.08***	1120	0.75	***0.10***	1090	1.2	***0.14***	1010	2.4	***0.26***	910	1920	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 241	**3.82**	196	***32.8***	1550	236	***37.2***	1470	380	***51.98***	1270	760	***84***	1040	4010	13 (T) 9 (F)
	4.44	169	***29.0***	1600	203	***32.9***	1520	326	***46.01***	1310	653	***75***	1070	4010	
	5.43	138	***19.7***	1330	166	***23.4***	1310	267	***36.67***	1280	534	***64***	1110	3710	
RE 242	**13.29**	56	***12.5***	2000	68	***14.8***	1980	109	***22.27***	1850	218	***36.2***	1500	4010	8 (T) 5 (F)
	15.47	48.5	***9.4***	1760	58	***11.2***	1740	94	***17.48***	1690	188	***32.0***	1550	4010	
	16.28	46.1	***10.3***	2030	55	***12.2***	2010	89	***19.15***	1950	178	***31.4***	1600	4010	
	18.95	39.6	***7.8***	1780	47.5	***9.2***	1760	77	***14.44***	1710	153	***27.8***	1650	4010	
	22.03	34.0	***6.8***	1820	40.9	***8.1***	1800	66	***12.73***	1760	132	***24.5***	1690	4010	
	25.64	29.3	***5.8***	1810	35.1	***6.9***	1790	57	***10.85***	1740	113	***20.9***	1670	4010	
	27.49	27.3	***3.9***	1310	32.7	***4.7***	1290	53	***7.32***	1260	105	***14.1***	1210	3610	
	31.32	23.9	***3.9***	1470	28.7	***4.6***	1450	46.3	***7.20***	1410	93	***13.9***	1360	3710	
	39.09	19.2	***3.1***	1490	23.0	***3.7***	1470	37.1	***5.85***	1430	74	***11.2***	1380	3710	
RE 243	**46.24**	16.2	***3.9***	2150	19.5	***4.7***	2130	31.4	***7.34***	2070	63	***14.1***	1990	4010	6 (T) 4 (F)
	53.82	13.9	***3.0***	1890	16.7	***3.5***	1870	26.9	***5.53***	1820	54	***10.6***	1750	4010	
	56.65	13.2	***3.3***	2180	15.9	***3.9***	2150	25.6	***6.06***	2100	51	***11.7***	2010	4010	
	65.94	11.4	***2.5***	1910	13.6	***2.9***	1890	22.0	***4.57***	1840	44.0	***8.8***	1770	4010	
	69.39	10.8	***2.7***	2200	13.0	***3.2***	2180	20.9	***5.01***	2120	41.8	***9.6***	2040	4010	
	76.66	9.8	***2.4***	2210	11.7	***2.9***	2190	18.9	***4.56***	2130	37.8	***8.8***	2050	4010	
	93.91	8.0	***2.0***	2240	9.6	***2.4***	2220	15.4	***3.76***	2160	30.9	***7.2***	2070	4010	
	95.67	7.8	***2.0***	2240	9.4	***2.4***	2220	15.2	***3.70***	2160	30.3	***7.1***	2080	4010	
	111.36	6.7	***1.5***	1970	8.1	***1.8***	1950	13.0	***2.79***	1900	26.0	***5.4***	1820	4010	
	117.20	6.4	***1.7***	2300	7.7	***1.9***	2250	12.4	***3.05***	2180	24.7	***5.9***	2100	4010	
	147.93	5.1	***1.2***	2030	6.1	***1.4***	1980	9.8	***2.13***	1930	19.6	***4.1***	1850	4010	
	158.60	4.7	***1.1***	2040	5.7	***1.3***	2020	9.1	***2.03***	1960	18.3	***3.9***	1890	4010	
	184.62	4.1	***0.97***	2100	4.9	***1.1***	2050	7.9	***1.73***	1950	15.7	***3.3***	1870	4010	
	197.93	3.8	***0.63***	1460	4.5	***0.74***	1450	7.3	***1.17***	1410	14.7	***2.2***	1360	4010	
	230.40	3.3	***0.63***	1700	3.9	***0.74***	1690	6.3	***1.17***	1640	12.6	***2.2***	1580	4010	
	281.42	2.7	***0.53***	1750	3.2	***0.62***	1710	5.2	***0.93***	1600	10.3	***1.8***	1540	4010	
RE 244	**241.49**	3.1	***0.92***	2570	3.7	***1.08***	2500	6.0	***1.62***	2320	12.0	***3.0***	2190	4010	5 (T) 4 (F)
	295.84	2.5	***0.78***	2650	3.0	***0.91***	2570	4.9	***1.36***	2390	9.8	***2.5***	2210	4010	
	326.80	2.3	***0.71***	2690	2.8	***0.83***	2610	4.4	***1.25***	2430	8.9	***2.3***	2230	4010	
	344.36	2.2	***0.58***	2310	2.6	***0.68***	2250	4.2	***1.02***	2090	8.4	***1.9***	1940	4010	
	400.35	1.9	***0.60***	2770	2.2	***0.70***	2690	3.6	***1.05***	2510	7.2	***1.9***	2260	4010	
	442.25	1.7	***0.55***	2810	2.0	***0.64***	2730	3.3	***0.97***	2540	6.6	***1.7***	2290	4010	
	499.63	1.5	***0.50***	2860	1.8	***0.58***	2790	2.9	***0.87***	2590	5.8	***1.6***	2330	4010	
	551.93	1.4	***0.46***	2910	1.6	***0.53***	2830	2.6	***0.80***	2630	5.3	***1.4***	2370	4010	
	676.14	1.1	***0.39***	3000	1.3	***0.45***	2920	2.1	***0.67***	2710	4.3	***1.2***	2440	4010	
	733.18	1.0	***0.27***	2310	1.2	***0.32***	2250	2.0	***0.49***	2140	4.0	***0.94***	2060	4010	
	843.83	0.89	***0.32***	3100	1.1	***0.37***	3020	1.7	***0.56***	2810	3.4	***1.0***	2530	4010	
	915.01	0.82	***0.23***	2390	0.98	***0.27***	2330	1.6	***0.40***	2170	3.2	***0.77***	2090	4010	
	1065.09	0.70	***0.22***	2740	0.85	***0.26***	2670	1.4	***0.39***	2480	2.7	***0.70***	2230	4010	
	1141.93	0.66	***0.19***	2470	0.79	***0.22***	2410	1.3	***0.33***	2240	2.5	***0.62***	2110	4010	
	1300.93	0.58	***0.15***	2210	0.69	***0.17***	2150	1.1	***0.26***	2000	2.2	***0.47***	1800	4010	
	1329.23	0.56	***0.19***	2830	0.68	***0.22***	2760	1.1	***0.32***	2570	2.2	***0.58***	2310	4010	
	1658.88	0.45	***0.11***	2060	0.54	***0.13***	2000	0.87	***0.19***	1860	1.7	***0.36***	1770	4010	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 242	**12.22**	61	***7.1***	1030	74	***8.4***	1020	119	***12.4***	940	237	***20.2***	760	2640	6 (T) 4 (F)
	14.22	53	***7.1***	1200	63	***8.4***	1190	102	***12.4***	1090	204	***20.2***	880	3080	
	17.37	43.2	***6.9***	1420	52	***8.1***	1400	83	***12.4***	1330	167	***20.2***	1080	3710	
RA 243	**42.52**	17.6	***4.3***	2140	21.2	***5.1***	2120	34.1	***8.1***	2060	68	***15.5***	1980	3710	5 (T) 4 (F)
	49.49	15.2	***3.3***	1880	18.2	***3.9***	1860	29.3	***6.1***	1810	59	***11.7***	1740	3710	
	52.09	14.4	***3.6***	2170	17.3	***4.2***	2140	27.8	***6.7***	2090	56	***12.8***	2000	3710	
	60.63	12.4	***2.7***	1900	14.8	***3.2***	1880	23.9	***5.0***	1830	47.8	***9.7***	1760	3710	
	70.49	10.6	***2.4***	1950	12.8	***2.8***	1930	20.6	***4.4***	1880	41.1	***8.5***	1800	3710	
	82.05	9.1	***2.0***	1930	11.0	***2.4***	1910	17.7	***3.8***	1860	35.3	***7.3***	1790	3710	
	87.97	8.5	***1.4***	1400	10.2	***1.6***	1380	16.5	***2.5***	1350	33.0	***4.9***	1290	3610	
	102.40	7.3	***1.4***	1630	8.8	***1.6***	1610	14.2	***2.5***	1570	28.3	***4.9***	1510	3710	
	125.07	6.0	***1.1***	1590	7.2	***1.3***	1570	11.6	***2.0***	1530	23.2	***3.9***	1470	3710	
RA 244	**147.97**	5.1	***1.4***	2380	6.1	***1.7***	2320	9.8	***2.6***	2210	19.6	***4.9***	2130	3710	4 (T) 3 (F)
	172.24	4.4	***1.1***	2080	5.2	***1.2***	2020	8.4	***1.9***	1940	16.8	***3.7***	1870	3710	
	181.27	4.1	***1.2***	2460	5.0	***1.4***	2390	8.0	***2.1***	2240	16.0	***4.1***	2150	3710	
	211.00	3.6	***0.90***	2150	4.3	***1.0***	2090	6.9	***1.6***	1970	13.7	***3.1***	1890	3710	
	222.06	3.4	***1.0***	2530	4.1	***1.2***	2460	6.5	***1.8***	2290	13.1	***3.3***	2180	3710	
	245.30	3.1	***0.93***	2570	3.7	***1.1***	2500	5.9	***1.6***	2330	11.8	***3.0***	2190	3710	
	285.54	2.6	***0.69***	2250	3.2	***0.81***	2190	5.1	***1.2***	2030	10.2	***2.3***	1920	3710	
	306.14	2.4	***0.77***	2660	2.9	***0.89***	2590	4.7	***1.3***	2410	9.5	***2.5***	2220	3710	
	375.03	2.0	***0.65***	2740	2.4	***0.75***	2670	3.9	***1.1***	2480	7.7	***2.0***	2240	3710	
	406.67	1.8	***0.47***	2150	2.2	***0.55***	2130	3.6	***0.87***	2070	7.1	***1.7***	1990	3710	
	436.55	1.7	***0.48***	2400	2.1	***0.57***	2330	3.3	***0.85***	2170	6.6	***1.5***	1970	3710	
	507.52	1.5	***0.38***	2190	1.8	***0.45***	2160	2.9	***0.71***	2100	5.7	***1.4***	2020	3710	
	590.77	1.3	***0.37***	2510	1.5	***0.44***	2440	2.5	***0.66***	2270	4.9	***1.2***	2040	3710	
	633.39	1.2	***0.22***	1560	1.4	***0.26***	1550	2.3	***0.41***	1510	4.6	***0.78***	1450	3610	
	721.58	1.0	***0.25***	2020	1.2	***0.29***	1970	2.0	***0.43***	1830	4.0	***0.78***	1650	3710	
	900.53	0.8	***0.21***	2090	1.0	***0.24***	2040	1.6	***0.36***	1890	3.2	***0.65***	1710	3710	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RE 311	**3.60**	208	***43.9***	1960	250	***49.9***	1860	403	***70***	1610	806	***113***	1310	4320	18 (N) 22 (T) 13 (F) 36 (P)
	4.25	176	***38.5***	2030	212	***43.8***	1920	341	***61***	1670	682	***99***	1350	5630	
	5.33	141	***25.3***	1680	169	***30.1***	1660	272	***47.1***	1610	544	***82***	1410	4610	
	6.20	121	***18.4***	1410	145	***21.8***	1400	234	***34.2***	1360	468	***66***	1310	3900	
	7.50	100	***11.9***	1110	120	***14.2***	1100	193	***22.2***	1070	387	***42.7***	1030	3070	
RE 312	**12.53**	60	***14.9***	2260	72	***17.3***	2180	116	***24.1***	1890	231	***39.2***	1540	4320	10 (N) 12 (T) 8 (F) 21 (P)
	14.79	51	***12.3***	2200	61	***14.6***	2180	98	***22.9***	2120	196	***39.2***	1810	5630	
	15.35	48.9	***12.3***	2280	59	***14.6***	2260	94	***20.6***	1980	189	***33.5***	1610	4320	
	18.12	41.4	***10.2***	2230	49.7	***12.1***	2210	80	***18.9***	2150	160	***33.5***	1900	5630	
	20.77	36.1	***6.8***	1720	43.3	***8.1***	1700	70	***12.7***	1650	140	***24.5***	1590	4320	
	22.74	33.0	***6.6***	1820	39.6	***7.9***	1800	64	***12.3***	1750	128	***23.7***	1690	4610	
	24.52	30.6	***6.8***	2030	36.7	***8.1***	2010	59	***12.7***	1950	118	***24.5***	1880	5960	
	26.43	28.4	***4.8***	1540	34.1	***5.7***	1520	55	***8.9***	1480	110	***17.2***	1420	3900	
	30.77	24.4	***5.0***	1850	29.3	***5.9***	1830	47.1	***9.3***	1780	94	***17.8***	1720	4610	
	35.77	21.0	***3.6***	1560	25.2	***4.3***	1550	40.5	***6.7***	1510	81	***12.9***	1450	3900	
	38.40	19.5	***3.9***	1830	23.4	***4.7***	1810	37.8	***7.3***	1760	76	***14.1***	1690	4610	
	44.64	16.8	***2.9***	1580	20.2	***3.5***	1570	32.5	***5.5***	1520	65	***10.5***	1470	3900	
	54.00	13.9	***1.9***	1240	16.7	***2.3***	1230	26.9	***3.5***	1200	54	***6.8***	1150	3070	
RE 313	**43.60**	17.2	***4.7***	2420	20.6	***5.6***	2400	33.3	***8.8***	2330	67	***16.8***	2230	4320	8 (N) 9 (T) 6 (F) 15 (P)
	51.47	14.6	***3.9***	2370	17.5	***4.6***	2340	28.2	***7.3***	2280	56	***13.9***	2190	5630	
	53.41	14.0	***3.9***	2450	16.9	***4.6***	2430	27.1	***7.2***	2360	54	***13.9***	2270	4320	
	63.05	11.9	***3.2***	2390	14.3	***3.8***	2370	23.0	***6.0***	2310	46.0	***11.5***	2220	5630	
	72.28	10.4	***2.9***	2500	12.5	***3.5***	2470	20.1	***5.4***	2400	40.1	***10.5***	2310	4320	
	77.24	9.7	***2.7***	2420	11.7	***3.2***	2400	18.8	***4.9***	2330	37.5	***9.5***	2240	5630	
	85.33	8.8	***2.4***	2440	10.5	***2.9***	2410	17.0	***4.5***	2350	34.0	***8.7***	2250	5630	
	104.53	7.2	***2.0***	2510	8.6	***2.4***	2440	13.9	***3.7***	2370	27.7	***7.2***	2280	5630	
	106.49	7.0	***2.0***	2510	8.5	***2.3***	2440	13.6	***3.7***	2380	27.2	***7.0***	2280	5630	
	130.45	5.7	***1.7***	2590	6.9	***2.0***	2520	11.1	***3.0***	2400	22.2	***5.8***	2310	5630	
	141.46	5.3	***1.3***	2240	6.4	***1.6***	2220	10.3	***2.5***	2160	20.5	***4.8***	2080	5960	
	163.71	4.6	***1.1***	2100	5.5	***1.3***	2050	8.9	***2.0***	1960	17.7	***3.8***	1890	4610	
	176.54	4.2	***1.1***	2270	5.1	***1.3***	2250	8.2	***2.0***	2190	16.4	***3.9***	2100	5960	
	190.31	3.9	***0.79***	1770	4.7	***0.92***	1720	7.6	***1.4***	1660	15.2	***2.7***	1590	3900	
	221.54	3.4	***0.84***	2200	4.1	***0.98***	2140	6.5	***1.5***	2000	13.1	***2.8***	1920	4610	
	257.54	2.9	***0.61***	1850	3.5	***0.71***	1800	5.6	***1.1***	1680	11.3	***2.1***	1620	3900	
	276.48	2.7	***0.63***	2040	3.3	***0.74***	2020	5.2	***1.2***	1970	10.5	***2.2***	1890	4610	
	321.41	2.3	***0.50***	1920	2.8	***0.59***	1860	4.5	***0.88***	1730	9.0	***1.7***	1640	3900	
RE 314	**219.42**	3.4	***1.1***	2800	4.1	***1.30***	2730	6.6	***1.9***	2540	13.2	***3.6***	2380	5630	6 (N) 7 (T) 5 (F) 12 (P)
	268.80	2.8	***0.93***	2890	3.3	***1.09***	2810	5.4	***1.6***	2620	10.8	***3.0***	2410	5630	
	296.94	2.5	***0.86***	2930	3.0	***1.00***	2850	4.9	***1.5***	2660	9.8	***2.7***	2420	5630	
	329.29	2.3	***0.79***	2980	2.7	***0.92***	2900	4.4	***1.4***	2700	8.8	***2.5***	2440	5630	
	363.76	2.1	***0.72***	3030	2.5	***0.84***	2940	4.0	***1.3***	2740	8.0	***2.3***	2470	5630	
	416.98	1.8	***0.61***	2930	2.2	***0.71***	2850	3.5	***1.1***	2680	7.0	***2.1***	2580	4320	
	453.98	1.7	***0.60***	3130	2.0	***0.70***	3040	3.2	***1.0***	2830	6.4	***1.9***	2550	5630	
	492.27	1.5	***0.56***	3170	1.8	***0.65***	3080	2.9	***0.98***	2870	5.9	***1.8***	2580	5630	
	556.14	1.3	***0.50***	3230	1.6	***0.59***	3140	2.6	***0.88***	2920	5.2	***1.6***	2630	5630	
	614.35	1.2	***0.46***	3280	1.5	***0.54***	3190	2.4	***0.81***	2960	4.7	***1.5***	2670	5630	
	766.71	0.98	***0.38***	3390	1.2	***0.45***	3290	1.9	***0.67***	3070	3.8	***1.2***	2760	5630	
	795.61	0.94	***0.35***	3190	1.1	***0.41***	3100	1.8	***0.61***	2880	3.6	***1.1***	2700	4320	
	939.26	0.80	***0.32***	3490	0.96	***0.38***	3400	1.5	***0.57***	3160	3.1	***1.0***	2850	5630	
	1018.49	0.74	***0.23***	2660	0.88	***0.27***	2590	1.4	***0.40***	2420	2.8	***0.77***	2320	5960	
	1178.68	0.64	***0.21***	2840	0.76	***0.24***	2760	1.2	***0.37***	2570	2.5	***0.66***	2310	4610	
	1271.08	0.59	***0.19***	2750	0.71	***0.22***	2680	1.1	***0.33***	2490	2.3	***0.62***	2350	5960	
	1595.08	0.47	***0.16***	2970	0.56	***0.19***	2890	0.91	***0.28***	2690	1.8	***0.51***	2420	4610	
	1990.66	0.38	***0.11***	2470	0.45	***0.13***	2400	0.73	***0.19***	2230	1.5	***0.36***	2120	4610	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 312	**10.03**	75	***18.6***	2230	90	***22.1***	2200	145	***34.7***	2150	289	***58***	1780	4320	10 (N) 12 (T) 8 (F) 17 (P)
	11.84	63	***15.4***	2180	76	***18.3***	2150	122	***28.7***	2100	245	***50***	1840	5630	
	14.40	52	***13.3***	2270	63	***15.7***	2250	101	***24.7***	2190	201	***44.7***	1980	4320	
	17.00	44.1	***11.0***	2220	53	***13.0***	2200	85	***20.4***	2140	171	***39.2***	2050	5630	
	21.33	35.2	***7.1***	1810	42.2	***8.5***	1800	68	***13.3***	1750	136	***25.5***	1680	4610	
	24.80	30.2	***5.2***	1530	36.3	***6.1***	1510	58	***9.6***	1470	117	***18.5***	1420	3900	
	30.00	25.0	***3.4***	1200	30.0	***4.0***	1190	48.3	***6.3***	1160	97	***12.0***	1110	3070	
RA 313	**40.09**	18.7	***5.2***	2410	22.4	***6.1***	2390	36.2	***9.6***	2320	72	***18.1***	2180	4320	6 (N) 7 (T) 5 (F) 11 (P)
	47.33	15.8	***4.3***	2360	19.0	***5.1***	2330	30.6	***8.0***	2270	61	***15.3***	2180	5630	
	49.11	15.3	***4.3***	2440	18.3	***5.1***	2410	29.5	***8.0***	2350	59	***15.3***	2260	4320	
	57.98	12.9	***3.5***	2380	15.5	***4.2***	2360	25.0	***6.6***	2290	50	***12.7***	2210	5630	
	66.46	11.3	***2.4***	1840	13.5	***2.8***	1820	21.8	***4.4***	1770	43.6	***8.5***	1700	4730	
	72.76	10.3	***2.3***	1950	12.4	***2.7***	1930	19.9	***4.3***	1870	39.9	***8.2***	1800	4610	
	78.46	9.6	***2.4***	2170	11.5	***2.8***	2150	18.5	***4.4***	2090	37.0	***8.5***	2010	5590	
	84.58	8.9	***1.7***	1640	10.6	***2.0***	1620	17.1	***3.1***	1580	34.3	***6.0***	1520	3900	
	98.46	7.6	***1.7***	1980	9.1	***2.1***	1960	14.7	***3.2***	1910	29.5	***6.2***	1830	4610	
	114.46	6.6	***1.3***	1670	7.9	***1.5***	1650	12.7	***2.3***	1610	25.3	***4.5***	1550	3900	
	122.88	6.1	***1.4***	1950	7.3	***1.6***	1930	11.8	***2.5***	1880	23.6	***4.9***	1810	4610	
	142.85	5.3	***1.0***	1690	6.3	***1.2***	1670	10.2	***1.9***	1630	20.3	***3.6***	1570	3900	
	172.80	4.3	***0.66***	1330	5.2	***0.79***	1320	8.4	***1.23***	1280	16.8	***2.37***	1230	3070	
RA 314	**139.51**	5.4	***1.7***	2620	6.5	***2.0***	2590	10.4	***3.1***	2500	20.8	***5.9***	2400	4320	5 (N) 6 (T) 4 (F) 10 (P)
	164.70	4.6	***1.4***	2680	5.5	***1.7***	2610	8.8	***2.5***	2440	17.6	***4.9***	2340	5630	
	170.91	4.4	***1.4***	2680	5.3	***1.6***	2650	8.5	***2.6***	2580	17.0	***4.8***	2430	4320	
	201.77	3.7	***1.2***	2770	4.5	***1.4***	2690	7.2	***2.1***	2500	14.4	***4.0***	2370	5630	
	231.29	3.2	***1.0***	2690	3.9	***1.2***	2670	6.3	***1.9***	2590	13.9	***3.6***	2470	4320	
	247.17	3.0	***1.0***	2850	3.6	***1.2***	2780	5.9	***1.8***	2580	11.7	***3.3***	2400	5630	
	273.05	2.7	***0.94***	2900	3.3	***1.1***	2820	5.3	***1.6***	2620	10.6	***3.0***	2410	5630	
	310.18	2.4	***0.66***	2320	2.9	***0.77***	2250	4.7	***1.15***	2100	9.3	***2.15***	1960	4610	
	340.76	2.2	***0.78***	3000	2.6	***0.91***	2910	4.3	***1.36***	2710	8.5	***2.45***	2440	5630	
	417.45	1.8	***0.65***	3090	2.2	***0.76***	3010	3.5	***1.14***	2800	6.9	***2.06***	2520	5630	
	452.66	1.7	***0.47***	2400	2.0	***0.55***	2370	3.2	***0.87***	2310	6.4	***1.67***	2220	5590	
	497.11	1.5	***0.36***	2050	1.8	***0.42***	1990	2.9	***0.64***	1850	5.8	***1.15***	1680	3900	
	564.92	1.3	***0.38***	2430	1.6	***0.45***	2400	2.6	***0.71***	2340	5.1	***1.36***	2250	5590	
	608.98	1.2	***0.31***	2110	1.5	***0.36***	2050	2.4	***0.54***	1910	4.8	***0.96***	1720	3900	
	708.92	1.1	***0.33***	2630	1.3	***0.38***	2560	2.0	***0.57***	2380	4.1	***1.03***	2140	4610	
	824.12	0.91	***0.24***	2210	1.1	***0.28***	2150	1.8	***0.41***	2000	3.5	***0.75***	1800	3900	
	884.74	0.85	***0.22***	2190	1.0	***0.26***	2160	1.6	***0.41***	2100	3.3	***0.78***	2020	4610	
	1028.51	0.73	***0.20***	2280	0.88	***0.23***	2220	1.4	***0.34***	2070	2.8	***0.62***	1860	3900	
	1244.16	0.60	***0.13***	1790	0.72	***0.15***	1740	1.2	***0.22***	1620	2.3	***0.40***	1460	3070	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 511	**3.60**	208	***76***	3400	250	***86***	3220	403	***121***	2790	806	***196***	2260	11600	19 (N) 24 (T) 14 (F) 37 (P)
	4.25	176	***67***	3520	212	***76***	3330	341	***106***	2890	682	***172***	2340	11600	
	5.33	141	***52***	3450	169	***62***	3420	272	***88***	3010	544	***143***	2440	9500	
	6.20	121	***37.9***	2920	145	***45.1***	2890	234	***71***	2810	468	***127***	2530	8050	
	7.50	100	***24.6***	2290	120	***29.2***	2260	193	***45.8***	2200	387	***88***	2120	6320	
RE 512	**12.53**	60	***27.2***	4120	72	***30.9***	3900	116	***43.1***	3380	231	***70***	2750	11600	11 (N) 13 (T) 8 (F) 21 (P)
	14.79	51	***25.4***	4540	61	***30.1***	4500	98	***43.1***	3990	196	***70***	3240	11600	
	15.35	48.9	***23.2***	4320	59	***26.4***	4090	94	***36.9***	3540	189	***60***	2880	11600	
	18.12	41.4	***21.0***	4600	49.7	***24.9***	4550	80	***36.9***	4180	160	***60***	3400	11600	
	20.77	36.1	***13.8***	3470	43.3	***16.4***	3430	70	***25.7***	3340	140	***46.9***	3050	9540	
	22.74	33.0	***13.6***	3750	39.6	***16.2***	3710	64	***25.4***	3610	128	***48.8***	3470	9500	
	24.52	30.6	***13.8***	4090	36.7	***16.4***	4050	59	***25.7***	3940	118	***46.9***	3600	11300	
	26.43	28.4	***9.9***	3170	34.1	***11.8***	3140	55	***18.5***	3060	110	***35.5***	2940	8050	
	30.77	24.4	***10.2***	3820	29.3	***12.2***	3780	47.1	***19.1***	3680	94	***36.7***	3530	9500	
	35.77	21.0	***7.5***	3230	25.2	***8.9***	3190	40.5	***13.9***	3110	81	***26.7***	2990	8050	
	38.40	19.5	***8.0***	3700	23.4	***9.4***	3660	37.8	***14.8***	3560	76	***28.5***	3420	9500	
	44.64	16.8	***6.0***	3270	20.2	***7.2***	3230	32.5	***11.3***	3150	65	***21.7***	3030	8050	
	54.00	13.9	***3.9***	2560	16.7	***4.7***	2530	26.9	***7.3***	2470	54	***14.0***	2370	6320	
RE 513	**43.60**	17.2	***9.5***	4870	20.6	***11.2***	4820	33.3	***17.6***	4690	67	***30.0***	3990	11600	8 (N) 10 (T) 6 (F) 15 (P)
	51.47	14.6	***8.0***	4880	17.5	***9.5***	4830	28.2	***15.0***	4700	56	***28.7***	4520	11600	
	53.41	14.0	***7.8***	4920	16.9	***9.3***	4870	27.1	***14.5***	4740	54	***25.7***	4180	11600	
	63.05	11.9	***6.6***	4940	14.3	***7.9***	4880	23.0	***12.3***	4750	46.0	***23.7***	4570	11600	
	72.28	10.4	***5.9***	5020	12.5	***7.0***	4960	20.1	***10.9***	4820	40.1	***21.0***	4640	11600	
	77.24	9.7	***5.5***	4990	11.7	***6.5***	4940	18.8	***10.2***	4810	37.5	***19.6***	4620	11600	
	85.33	8.8	***5.0***	5020	10.5	***5.9***	4970	17.0	***9.3***	4840	34.0	***17.8***	4650	11600	
	104.53	7.2	***4.2***	5160	8.6	***4.9***	5030	13.9	***7.7***	4890	27.7	***14.7***	4700	11600	
	110.50	6.8	***4.0***	5220	8.1	***4.8***	5170	13.1	***7.3***	4940	26.2	***14.1***	4750	11600	
	130.45	5.7	***3.5***	5340	6.9	***4.0***	5200	11.1	***6.2***	4960	22.2	***12.0***	4760	11600	
	141.46	5.3	***2.7***	4520	6.4	***3.2***	4480	10.3	***5.0***	4360	20.5	***9.7***	4190	11300	
	163.71	4.6	***2.2***	4330	5.5	***2.6***	4220	8.9	***4.0***	4040	17.7	***7.8***	3890	9500	
	176.54	4.2	***2.2***	4580	5.1	***2.6***	4530	8.2	***4.1***	4410	16.4	***7.9***	4240	11300	
	190.31	3.9	***1.6***	3650	4.7	***1.9***	3550	7.6	***2.9***	3420	15.2	***5.7***	3290	8050	
	221.54	3.4	***1.7***	4540	4.1	***2.0***	4410	6.5	***3.0***	4120	13.1	***5.8***	3960	9500	
	257.54	2.9	***1.3***	3830	3.5	***1.5***	3720	5.6	***2.2***	3480	11.3	***4.3***	3340	8050	
	276.48	2.7	***1.3***	4140	3.3	***1.5***	4100	5.2	***2.4***	3990	10.5	***4.5***	3830	9500	
	321.41	2.3	***1.0***	3960	2.8	***1.2***	3850	4.5	***1.8***	3580	9.0	***3.5***	3390	8050	
RE 514	**219.42**	3.4	***2.3***	5780	4.1	***2.7***	5620	6.6	***4.0***	5230	13.2	***7.5***	4910	11600	7 (N) 8 (T) 5 (F) 12 (P)
	268.80	2.8	***1.9***	5960	3.3	***2.2***	5800	5.4	***3.4***	5390	10.8	***6.2***	4960	11600	
	296.94	2.5	***1.8***	6050	3.0	***2.1***	5880	4.9	***3.1***	5470	9.8	***5.6***	4990	11600	
	329.29	2.3	***1.6***	6140	2.7	***1.9***	5980	4.4	***2.8***	5560	8.8	***5.1***	5020	11600	
	363.76	2.1	***1.5***	6240	2.5	***1.7***	6070	4.0	***2.6***	5650	8.0	***4.7***	5080	11600	
	416.98	1.8	***1.3***	6100	2.2	***1.5***	5940	3.5	***2.2***	5580	7.0	***4.3***	5340	11600	
	453.98	1.7	***1.2***	6450	2.0	***1.4***	6270	3.2	***2.2***	5840	6.4	***3.9***	5260	11600	
	492.27	1.5	***1.2***	6530	1.8	***1.3***	6350	2.9	***2.0***	5910	5.9	***3.6***	5320	11600	
	556.14	1.3	***1.0***	6650	1.6	***1.2***	6470	2.6	***1.8***	6020	5.2	***3.3***	5420	11600	
	614.35	1.2	***0.96***	6750	1.5	***1.1***	6570	2.4	***1.7***	6110	4.7	***3.0***	5500	11600	
	766.71	0.98	***0.64***	5670	1.2	***0.76***	5610	1.9	***1.2***	5460	3.8	***2.3***	5250	11600	
	939.26	0.80	***0.64***	6950	0.96	***0.76***	6880	1.5	***1.2***	6520	3.1	***2.1***	5870	11600	
	1018.49	0.74	***0.46***	5370	0.88	***0.53***	5220	1.4	***0.80***	4880	2.8	***1.5***	4690	11300	
	1178.68	0.64	***0.43***	5840	0.76	***0.50***	5680	1.2	***0.75***	5290	2.5	***1.4***	4760	9500	
	1271.08	0.59	***0.38***	5550	0.71	***0.44***	5400	1.1	***0.66***	5030	2.3	***1.3***	4750	11300	
	1595.08	0.47	***0.33***	6120	0.56	***0.39***	5950	0.91	***0.58***	5540	1.8	***1.1***	4990	9500	
	1854.28	0.40	***0.24***	5160	0.49	***0.28***	5020	0.78	***0.42***	4670	1.6	***0.76***	4200	8050	
	1990.66	0.38	***0.22***	5000	0.45	***0.25***	4860	0.73	***0.38***	4520	1.5	***0.72***	4290	9500	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 512	**10.03**	75	***27.1***	3240	90	***30.8***	3070	145	***43.0***	2660	289	***70***	2160	11600	10 (N) 12 (T) 9 (F) 17 (P)
	11.84	63	***27.1***	3820	76	***30.8***	3620	122	***43.0***	3140	245	***70***	2550	11600	
	14.40	52	***20.0***	3440	63	***22.8***	3260	101	***31.8***	2820	201	***51.7***	2290	10000	
	17.00	44.1	***20.0***	4060	53	***22.8***	3840	85	***31.8***	3330	171	***51.7***	2710	11600	
	20.89	35.9	***9.7***	2430	43.1	***11.6***	2400	69	***18.1***	2340	139	***34.9***	2250	6320	
	21.33	35.2	***14.7***	3740	42.2	***17.5***	3700	68	***27.4***	3600	136	***51.7***	3400	9500	
	24.80	30.2	***10.7***	3160	36.3	***12.7***	3130	58	***19.9***	3040	117	***38.3***	2930	8050	
	30.00	25.0	***6.9***	2480	30.0	***8.2***	2450	48.3	***12.9***	2390	97	***24.8***	2290	6320	
RA 513	**40.09**	18.7	***7.3***	3390	22.4	***8.6***	3350	36.2	***12.7***	3070	72	***20.7***	2490	8660	7 (N) 9 (T) 5 (F) 12 (P)
	47.33	15.8	***7.3***	4000	19.0	***8.6***	3960	30.6	***12.7***	3630	61	***20.7***	2950	10300	
	49.11	15.3	***7.3***	4150	18.3	***8.6***	4110	29.5	***12.7***	3760	59	***20.7***	3060	10700	
	57.98	12.9	***7.3***	4900	15.5	***8.6***	4850	25.0	***12.7***	4440	50	***20.7***	3610	11600	
	66.46	11.3	***4.8***	3710	13.5	***5.7***	3670	21.8	***8.9***	3570	43.6	***17.2***	3430	9540	
	72.76	10.3	***4.7***	4010	12.4	***5.6***	3970	19.9	***8.8***	3860	39.9	***17.0***	3710	9500	
	78.46	9.6	***4.8***	4370	11.5	***5.7***	4330	18.5	***8.9***	4210	37.0	***17.2***	4050	11300	
	84.58	8.9	***3.4***	3390	10.6	***4.1***	3360	17.1	***6.4***	3270	34.3	***12.3***	3140	8050	
	98.46	7.6	***3.6***	4080	9.1	***4.2***	4040	14.7	***6.6***	3930	29.5	***12.8***	3780	9500	
	114.46	6.6	***2.6***	3450	7.9	***3.1***	3410	12.7	***4.8***	3320	25.3	***9.3***	3190	8050	
	122.88	6.1	***2.8***	3950	7.3	***3.3***	3910	11.8	***5.2***	3810	23.6	***9.9***	3660	9500	
	142.85	5.3	***2.1***	3500	6.3	***2.5***	3460	10.2	***3.9***	3360	20.3	***7.5***	3230	8050	
	172.80	4.3	***1.4***	2740	5.2	***1.6***	2710	8.4	***2.5***	2640	16.8	***4.9***	2530	6320	
RA 514	**139.51**	5.4	***3.4***	5440	6.5	***4.1***	5390	10.4	***6.1***	5020	20.8	***11.8***	4810	11600	6 (N) 7 (T) 5 (F) 11 (P)
	164.70	4.6	***3.0***	5530	5.5	***3.5***	5380	8.8	***5.2***	5020	17.6	***10.0***	4830	11600	
	170.91	4.4	***2.8***	5350	5.3	***3.3***	5300	8.5	***5.1***	5150	17.0	***9.7***	4870	11600	
	201.77	3.7	***2.5***	5710	4.5	***2.9***	5550	7.2	***4.4***	5160	14.4	***8.3***	4880	11600	
	231.29	3.2	***2.1***	5600	3.9	***2.5***	5540	6.3	***4.0***	5400	12.5	***7.3***	4950	11600	
	247.17	3.0	***2.1***	5880	3.6	***2.5***	5720	5.9	***3.7***	5320	11.7	***6.8***	4940	11600	
	273.05	2.7	***1.9***	5970	3.3	***2.3***	5810	5.3	***3.4***	5410	10.6	***6.2***	4970	11600	
	310.18	2.4	***1.4***	4770	2.9	***1.6***	4640	4.7	***2.4***	4320	9.3	***4.4***	4030	9500	
	340.76	2.2	***1.4***	5410	2.6	***1.7***	5360	4.3	***2.6***	5210	8.5	***5.0***	5010	11600	
	417.45	1.8	***1.3***	6370	2.2	***1.6***	6200	3.5	***2.4***	5760	6.9	***4.2***	5190	11600	
	452.66	1.7	***0.94***	4830	2.0	***1.1***	4780	3.2	***1.8***	4660	6.4	***3.4***	4480	11300	
	497.11	1.5	***0.75***	4230	1.8	***0.88***	4110	2.9	***1.3***	3820	5.8	***2.4***	3470	8050	
	564.92	1.3	***0.77***	4910	1.6	***0.91***	4850	2.6	***1.4***	4720	5.1	***2.7***	4530	11300	
	608.98	1.2	***0.63***	4360	1.5	***0.74***	4240	2.4	***1.1***	3940	4.8	***2.0***	3550	8050	
	708.92	1.1	***0.67***	5410	1.3	***0.79***	5260	2.0	***1.2***	4900	4.1	***2.1***	4410	9500	
	824.12	0.91	***0.49***	4560	1.1	***0.57***	4440	1.8	***0.85***	4130	3.5	***1.5***	3720	8050	
	884.74	0.85	***0.44***	4420	1.0	***0.52***	4380	1.6	***0.82***	4260	3.3	***1.6***	4100	9500	
	1028.51	0.73	***0.40***	4720	0.88	***0.47***	4590	1.4	***0.71***	4270	2.8	***1.3***	3840	8050	
	1244.16	0.60	***0.26***	3680	0.72	***0.31***	3580	1.2	***0.46***	3340	2.3	***0.82***	3000	6320	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 611	**4.00**	188	***93***	4630	225	***106***	4380	363	***148***	3800	725	***240***	3080	14900	20 (N) 24 (T)
	4.55	165	***84***	4730	198	***95***	4480	319	***133***	3880	638	***216***	3160	12860	14 (F) 37 (P)
RE 612	**14.40**	52	***34.3***	5970	63	***40.7***	5910	101	***62***	5580	201	***100***	4530	14900	
	16.36	45.8	***26.8***	5320	55	***31.9***	5260	89	***50***	5120	177	***90***	4630	12860	
	17.00	44.1	***29.3***	6030	53	***34.8***	5970	85	***55***	5810	171	***89***	4760	14900	
	19.32	38.8	***23.0***	5370	46.6	***27.3***	5310	75	***42.7***	5170	150	***81***	4870	12860	15 (N)
	21.33	35.2	***23.6***	6110	42.2	***28.1***	6040	68	***44.0***	5880	136	***76***	5100	14900	14 (T) 9 (F)
	24.24	30.9	***18.5***	5440	37.1	***22.0***	5380	60	***34.5***	5240	120	***66***	5030	12860	22 (P)
	28.18	26.6	***16.1***	5490	31.9	***19.1***	5430	51	***29.9***	5280	103	***58***	5080	12860	
	30.00	25.0	***12.2***	4440	30.0	***14.5***	4400	48.3	***22.8***	4280	97	***43.8***	4110	12300	
	34.09	22.0	***12.2***	5050	26.4	***14.5***	5000	42.5	***22.8***	4860	85	***43.8***	4670	12860	
RE 613	**50.11**	15.0	***10.8***	6410	18.0	***12.9***	6350	28.9	***20.2***	6180	58	***38.8***	5940	14900	
	56.95	13.2	***8.5***	5710	15.8	***10.1***	5650	25.5	***15.8***	5500	51	***30.4***	5290	12860	
	61.39	12.2	***9.0***	6490	14.7	***10.6***	6420	23.6	***16.7***	6250	47.2	***32.0***	6000	14900	
	69.76	10.8	***7.0***	5780	12.9	***8.3***	5720	20.8	***13.1***	5560	41.6	***25.1***	5350	12860	
	82.36	9.1	***6.0***	5830	10.9	***7.1***	5770	17.6	***11.2***	5620	35.2	***21.5***	5400	12860	
	90.95	8.2	***6.2***	6630	9.9	***7.3***	6570	15.9	***11.5***	6390	31.9	***22.1***	6140	14900	9 (N)
	98.08	7.6	***5.8***	6660	9.2	***6.8***	6590	14.8	***10.7***	6420	29.6	***20.6***	6170	14900	10 (T) 7 (F)
	111.45	6.7	***4.5***	5930	8.1	***5.4***	5870	13.0	***8.4***	5710	26.0	***16.1***	5490	12860	17 (P)
	123.08	6.1	***4.7***	6830	7.3	***5.5***	6680	11.8	***8.7***	6500	23.6	***16.6***	6250	14900	
	139.86	5.4	***3.7***	6060	6.4	***4.3***	5950	10.4	***6.8***	5790	20.7	***13.0***	5560	12860	
	153.60	4.9	***3.9***	7070	5.9	***4.6***	6870	9.4	***7.0***	6580	18.9	***13.5***	6330	14900	
	174.55	4.3	***3.0***	6270	5.2	***3.6***	6100	8.3	***5.5***	5860	16.6	***10.6***	5640	12860	
	202.91	3.7	***2.7***	6410	4.4	***3.1***	6240	7.1	***4.8***	5910	14.3	***9.2***	5680	12860	
RE 614	**174.39**	4.3	***3.6***	7200	5.2	***4.2***	7010	8.3	***6.4***	6630	16.6	***12.3***	6370	14900	
	205.88	3.6	***3.1***	7390	4.4	***3.6***	7190	7.0	***5.5***	6690	14.1	***10.5***	6430	14900	
	233.95	3.2	***2.4***	6550	3.8	***2.8***	6380	6.2	***4.3***	5960	12.4	***8.2***	5730	12860	
	252.21	3.0	***2.6***	7620	3.6	***3.1***	7410	5.7	***4.6***	6890	11.5	***8.7***	6510	14900	
	286.60	2.6	***2.0***	6760	3.1	***2.4***	6570	5.1	***3.6***	6120	10.1	***6.8***	5800	12860	
	316.50	2.4	***2.1***	7820	2.8	***2.5***	7670	4.6	***3.8***	7140	9.2	***7.0***	6590	14900	
	354.17	2.1	***2.0***	8020	2.5	***2.3***	7800	4.1	***3.4***	7260	8.2	***6.3***	6640	14900	
	402.47	1.9	***1.5***	7110	2.2	***1.8***	6920	3.6	***2.7***	6440	7.2	***4.9***	5910	12860	
	450.73	1.7	***1.3***	6680	2.0	***1.5***	6610	3.2	***2.4***	6430	6.4	***4.6***	6180	14900	7 (N)
	502.28	1.5	***1.3***	7360	1.8	***1.5***	7160	2.9	***2.2***	6660	5.8	***4.0***	6000	12860	9 (T) 6 (F)
	565.83	1.3	***1.3***	8610	1.6	***1.5***	8370	2.6	***2.3***	7790	5.1	***4.2***	7020	14900	13 (P)
	642.99	1.2	***1.0***	7640	1.4	***1.2***	7430	2.3	***1.8***	6910	4.5	***3.3***	6220	12860	
	706.15	1.1	***1.1***	8900	1.3	***1.3***	8660	2.1	***1.9***	8060	4.1	***3.5***	7250	14900	
	802.45	0.93	***0.86***	7900	1.1	***1.0***	7680	1.8	***1.5***	7150	3.6	***2.7***	6440	12860	
	886.15	0.85	***0.86***	8810	1.0	***1.0***	8570	1.6	***1.5***	7990	3.3	***2.8***	7510	14900	
	1006.99	0.74	***0.71***	8170	0.89	***0.82***	7950	1.4	***1.2***	7400	2.9	***2.2***	6660	12860	
	1105.92	0.68	***0.64***	8180	0.81	***0.76***	8100	1.3	***1.2***	7880	2.6	***2.3***	7570	14900	
	1256.73	0.60	***0.58***	8450	0.72	***0.68***	8220	1.2	***1.0***	7650	2.3	***1.8***	6890	12860	
	1416.08	0.53	***0.40***	6590	0.64	***0.47***	6410	1.0	***0.71***	6020	2.0	***1.4***	5780	12860	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 612	**11.14**	67	***27.1***	3600	81	***30.8***	3410	130	***43.0***	2950	260	***70***	2400	14900	11 (N) 12 (T) 9 (F) 16 (P)
	12.66	59	***27.1***	4090	71	***30.8***	3870	115	***43.0***	3350	229	***70***	2720	12800	
	16.00	46.9	***20.0***	3820	56	***22.8***	3620	91	***31.8***	3140	181	***51.7***	2550	11100	
	18.18	41.3	***20.0***	4340	49.5	***22.8***	4110	80	***31.8***	3560	160	***51.7***	2890	12800	
RA 613	**40.11**	18.7	***13.6***	6330	22.4	***16.1***	6270	36.1	***25.3***	6100	72	***48.6***	5860	14900	9 (N) 10 (T) 8 (F) 14 (P)
	45.58	16.5	***10.6***	5640	19.7	***12.6***	5580	31.8	***19.8***	5430	64	***38.1***	5220	12800	
	47.36	15.8	***11.6***	6390	19.0	***13.8***	6330	30.6	***21.6***	6160	61	***41.6***	5920	14900	
	57.60	13.0	***9.7***	6460	15.6	***11.5***	6400	25.2	***18.0***	6220	50	***34.6***	5980	14900	
	65.45	11.5	***7.6***	5760	13.8	***9.0***	5700	22.2	***14.1***	5540	44.3	***27.1***	5330	12800	
	68.00	11.0	***8.3***	6530	13.2	***9.8***	6460	21.3	***15.4***	6280	42.6	***29.6***	6040	14900	
	78.51	9.6	***6.4***	5820	11.5	***7.6***	5760	18.5	***11.9***	5600	36.9	***22.8***	5380	12800	
	85.33	8.8	***6.7***	6610	10.5	***7.9***	6540	17.0	***12.4***	6370	34.0	***23.9***	6120	14900	
	96.97	7.7	***5.2***	5890	9.3	***6.2***	5830	15.0	***9.7***	5670	29.9	***18.7***	5450	12800	
	112.73	6.7	***4.5***	5940	8.0	***5.4***	5880	12.9	***8.4***	5720	25.7	***16.2***	5500	12800	
RA 614	**160.36**	4.7	***3.9***	7110	5.6	***4.6***	6920	9.0	***7.0***	6600	18.1	***13.5***	6340	14900	6 (N) 7 (T) 5 (F) 11 (P)
	182.23	4.1	***3.1***	6310	4.9	***3.6***	6140	8.0	***5.5***	5880	15.9	***10.6***	5650	12800	
	196.45	3.8	***3.3***	7330	4.6	***3.8***	7140	7.4	***5.8***	6680	14.8	***11.1***	6420	14900	
	231.92	3.2	***2.9***	7520	3.9	***3.3***	7320	6.3	***5.0***	6810	12.5	***9.5***	6480	14900	
	263.54	2.8	***2.2***	6670	3.4	***2.6***	6490	5.5	***3.9***	6040	11.0	***7.5***	5770	12800	
	291.03	2.6	***2.4***	7780	3.1	***2.8***	7570	5.0	***4.1***	7050	10.0	***7.7***	6560	14900	
	313.85	2.4	***2.2***	7870	2.9	***2.6***	7660	4.6	***3.9***	7130	9.2	***7.2***	6590	14900	
	356.64	2.1	***1.7***	6990	2.5	***2.0***	6800	4.1	***3.0***	6320	8.1	***5.6***	5870	12800	
	393.85	1.9	***1.8***	7920	2.3	***2.1***	7840	3.7	***3.2***	7380	7.4	***5.8***	6680	14900	
	447.55	1.7	***1.4***	7230	2.0	***1.7***	7030	3.2	***2.5***	6540	6.5	***4.5***	5950	12800	
	491.52	1.5	***1.4***	7810	1.8	***1.7***	7730	3.0	***2.6***	7520	5.9	***4.8***	6870	14900	
	558.55	1.3	***1.2***	7480	1.6	***1.4***	7270	2.6	***2.1***	6770	5.2	***3.7***	6090	12800	
	629.37	1.2	***0.84***	5960	1.4	***0.99***	5900	2.3	***1.6***	5740	4.6	***3.0***	5520	12800	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RE 811	**3.56**	211	***155***	6860	253	***108***	3970	407	***150***	3440	—	—	—	18600	30 (N) 29 (T) 19 (F) 56 (P)
	4.15	181	***118***	6100	217	***95***	4090	349	***133***	3550	—	—	—	16800	
	5.10	147	***81***	5130	176	***81***	4250	284	***113***	3690	—	—	—	14200	
	5.82	129	***60***	4370	155	***72***	4330	249	***102***	3800	—	—	—	12100	
	6.86	109	***44.2***	3760	131	***52***	3720	211	***82***	3620	—	—	—	10400	
RE 812	**12.83**	58	***47.6***	7380	70	***45.1***	5830	113	***63***	5060	226	***102***	4110	18600	17 (N) 16 (T) 11 (F) 31 (P)
	15.14	49.5	***39.9***	7310	59	***40.1***	6130	96	***56***	5310	192	***91***	4320	18600	
	17.65	42.5	***31.0***	6630	51	***35.5***	6320	82	***49.5***	5470	164	***80.5***	4450	16800	
	18.36	40.8	***24.9***	5520	49.0	***29.5***	5470	79	***46.3***	5320	158	***76.5***	4400	14200	
	22.15	33.9	***25.0***	6710	40.6	***29.7***	6640	65	***42.2***	5860	131	***68.6***	4760	16800	
	25.75	29.1	***18.8***	5870	34.9	***22.4***	5810	56	***35.1***	5660	113	***61.8***	4980	16200	
	27.20	27.6	***17.2***	5650	33.1	***20.4***	5590	53	***31.9***	5440	107	***58.1***	4950	14200	
	31.62	23.7	***14.9***	5700	28.5	***17.7***	5640	45.9	***27.7***	5490	92	***52.3***	5180	14200	
	36.11	20.8	***11.1***	4850	24.9	***13.2***	4800	40.2	***20.7***	4670	80	***39.7***	4490	12100	
	38.25	19.6	***12.2***	5660	23.5	***14.5***	5610	37.9	***22.8***	5460	76	***43.8***	5240	14200	
	43.68	17.2	***9.3***	4900	20.6	***11.0***	4850	33.2	***17.3***	4720	66	***33.2***	4540	12100	
	51.43	14.6	***6.8***	4220	17.5	***8.1***	4180	28.2	***12.6***	4060	56	***24.3***	3910	10400	
RE 813	**52.69**	14.2	***12.6***	7850	17.1	***15.0***	7770	27.5	***23.5***	7560	55	***39.0***	6270	18600	12 (N) 12 (T) 8 (F) 22 (P)
	54.68	13.7	***12.4***	8020	16.5	***14.8***	7940	26.5	***21.2***	7060	53	***34.4***	5730	18600	
	63.75	11.8	***9.5***	7130	14.1	***11.3***	7060	22.7	***17.6***	6870	45.5	***33.6***	6540	16800	
	75.26	10.0	***8.1***	7200	12.0	***9.6***	7120	19.3	***15.1***	6930	38.5	***29.0***	6660	16800	
	77.10	9.7	***7.9***	7210	11.7	***9.4***	7130	18.8	***14.8***	6940	37.6	***28.4***	6670	16800	
	87.35	8.6	***7.0***	7230	10.3	***8.3***	7150	16.6	***13.1***	6960	33.2	***25.1***	6690	18600	
	101.85	7.4	***6.2***	7450	8.8	***7.2***	7250	14.2	***11.3***	7050	28.5	***21.8***	6780	16800	
	109.62	6.8	***5.1***	6600	8.2	***6.1***	6530	13.2	***9.5***	6360	26.5	***18.3***	6110	16500	
	127.81	5.9	***5.1***	7700	7.0	***6.0***	7500	11.3	***9.2***	7150	22.7	***17.6***	6870	16800	
	134.80	5.6	***4.0***	6310	6.7	***4.6***	6130	10.8	***7.2***	5960	21.5	***13.9***	5730	14200	
	156.92	4.8	***3.5***	6450	5.7	***4.1***	6280	9.2	***6.3***	6010	18.5	***12.1***	5780	14200	
	182.42	4.1	***3.1***	6600	4.9	***3.6***	6420	7.9	***5.4***	6060	15.9	***10.5***	5830	14200	
	195.84	3.8	***2.9***	6670	4.6	***3.4***	6490	7.4	***5.1***	6090	14.8	***9.8***	5850	14200	
	227.66	3.3	***2.5***	6830	4.0	***3.0***	6640	6.4	***4.4***	6180	12.7	***8.5***	5900	14200	
	251.98	3.0	***1.9***	5770	3.6	***2.3***	5610	5.8	***3.4***	5220	11.5	***6.5***	5020	12100	
	275.40	2.7	***2.0***	6340	3.3	***2.3***	6280	5.3	***3.6***	6110	10.5	***7.0***	5870	14200	
	314.47	2.4	***1.6***	5960	2.9	***1.9***	5800	4.6	***2.8***	5400	9.2	***5.3***	5080	12100	
RE 814	**183.36**	4.1	***4.0***	8430	4.9	***4.7***	8340	7.9	***7.4***	8120	15.8	***14.3***	7800	18600	9 (N) 9 (T) 7 (F) 17 (P)
	224.62	3.3	***3.3***	8530	4.0	***3.9***	8440	6.5	***6.1***	8210	12.9	***11.8***	7900	18600	
	261.91	2.9	***2.9***	8590	3.4	***3.3***	8360	5.5	***5.0***	7780	11.1	***9.2***	7160	16800	
	275.17	2.7	***2.7***	8630	3.3	***3.2***	8540	5.3	***5.1***	8310	10.5	***9.8***	7990	18600	
	320.85	2.3	***2.4***	8860	2.8	***2.8***	8620	4.5	***4.2***	8020	9.0	***7.6***	7240	16800	
	354.43	2.1	***2.2***	9000	2.5	***2.6***	8750	4.1	***3.9***	8140	8.2	***7.0***	7330	16800	
	393.66	1.9	***2.1***	9300	2.3	***2.4***	9200	3.7	***3.7***	8770	7.4	***7.2***	8430	18600	
	459.00	1.6	***1.8***	9350	2.0	***2.1***	9100	3.2	***3.1***	8470	6.3	***5.6***	7620	16800	
	503.94	1.5	***1.4***	7990	1.8	***1.6***	7910	2.9	***2.6***	7690	5.8	***4.9***	7390	18600	
	541.88	1.4	***1.5***	9590	1.7	***1.8***	9330	2.7	***2.7***	8680	5.4	***4.8***	7820	16800	
	634.83	1.2	***1.1***	7970	1.4	***1.3***	7750	2.3	***1.9***	7210	4.6	***3.4***	6500	14200	
	733.31	1.0	***1.1***	9430	1.2	***1.3***	9330	2.0	***2.1***	9080	4.0	***3.8***	8180	16800	
	792.27	0.95	***0.90***	8240	1.1	***1.1***	8020	1.8	***1.6***	7460	3.7	***2.8***	6720	14200	
	905.33	0.83	***0.81***	8410	0.99	***0.94***	8180	1.6	***1.4***	7610	3.2	***2.5***	6850	14200	
	1052.44	0.71	***0.71***	8600	0.86	***0.83***	8370	1.4	***1.2***	7790	2.8	***2.2***	7010	14200	
	1129.85	0.66	***0.67***	8700	0.80	***0.78***	8460	1.3	***1.2***	7870	2.6	***2.1***	7090	14200	
	1313.45	0.57	***0.59***	8900	0.69	***0.69***	8660	1.1	***1.0***	8050	2.2	***1.9***	7250	14200	
	1410.05	0.53	***0.55***	8990	0.64	***0.65***	8750	1.0	***0.97***	8140	2.1	***1.7***	7330	14200	
	1639.18	0.46	***0.49***	9200	0.55	***0.57***	8950	0.88	***0.85***	8330	1.8	***1.5***	7500	14200	
	1814.25	0.41	***0.37***	7780	0.50	***0.43***	7560	0.80	***0.65***	7040	1.6	***1.2***	6340	12100	
	1982.88	0.38	***0.34***	7650	0.45	***0.39***	7440	0.73	***0.59***	6920	1.5	***1.1***	6570	14200	
	2264.19	0.33	***0.31***	8040	0.40	***0.36***	7820	0.64	***0.54***	7280	1.3	***0.97***	6550	12100	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 812	**10.41**	72	***46.6***	5790	86	***53***	5480	139	***74***	4750	278	***120***	3860	18600	16 (N) 16 (T) 13 (F) 29 (P)
	12.14	62	***41.2***	5960	74	***46.8***	5650	119	***65.4***	4890	239	***106***	3970	16800	
	14.25	53	***37.4***	6360	63	***42.5***	6020	102	***59.4***	5220	204	***96***	4240	18600	
	16.62	45.1	***33.1***	6550	54	***37.6***	6200	87	***52.5***	5380	175	***85***	4370	16800	
	20.40	36.8	***22.9***	5560	44.1	***27.1***	5500	71	***42.5***	5350	142	***72***	4540	14200	
	23.29	32.2	***17.0***	4730	38.6	***20.2***	4680	62	***31.7***	4560	124	***61***	4380	12100	
	27.43	27.3	***12.5***	4070	32.8	***14.8***	4030	53	***23.2***	3920	106	***44.6***	3770	10400	
RA 813	**35.73**	21.0	***18.9***	7830	25.2	***22.4***	7750	40.6	***32.0***	6870	81	***52***	5580	18600	12 (N) 12 (T) 9 (F) 25 (P)
	41.66	18.0	***14.4***	6960	21.6	***17.1***	6890	34.8	***26.8***	6700	70	***46.0***	5750	16800	
	51.30	14.6	***13.4***	7990	17.5	***15.9***	7910	28.3	***24.8***	7660	57	***40.4***	6220	18600	
	60.56	12.4	***11.2***	7910	14.9	***13.4***	7830	23.9	***20.9***	7620	47.9	***35.9***	6540	18600	
	70.62	10.6	***8.7***	7170	12.7	***10.4***	7100	20.5	***16.3***	6910	41.1	***31.3***	6640	16800	
	76.00	9.9	***7.3***	6460	11.8	***8.7***	6400	19.1	***13.6***	6230	38.2	***26.2***	5980	16500	
	88.62	8.5	***7.1***	7290	10.2	***8.4***	7190	16.4	***13.1***	7000	32.7	***25.3***	6730	16800	
	103.02	7.3	***5.3***	6360	8.7	***6.3***	6290	14.1	***9.9***	6120	28.2	***19.0***	5890	16200	
	108.80	6.9	***4.8***	6110	8.3	***5.7***	6050	13.3	***9.0***	5890	26.7	***17.3***	5660	14200	
	126.48	5.9	***4.2***	6240	7.1	***5.0***	6100	11.5	***7.8***	5940	22.9	***15.0***	5710	14200	
	144.42	5.2	***3.2***	5300	6.2	***3.7***	5200	10.0	***5.8***	5060	20.1	***11.2***	4860	12100	
	153.00	4.9	***3.4***	6130	5.9	***4.1***	6070	9.5	***6.4***	5910	19.0	***12.3***	5680	14200	
	174.71	4.3	***2.7***	5460	5.2	***3.1***	5310	8.3	***4.9***	5110	16.6	***9.4***	4910	12100	
RA 814	**142.82**	5.3	***5.3***	8590	6.3	***6.3***	8500	10.2	***9.8***	8210	20.3	***18.5***	7760	18600	8 (N) 8 (T) 6 (F) 15 (P)
	168.61	4.4	***4.4***	8390	5.3	***5.2***	8300	8.6	***8.2***	8080	17.2	***15.7***	7770	18600	
	174.96	4.3	***4.4***	8690	5.1	***5.2***	8600	8.3	***8.2***	8370	16.6	***15.5***	7940	18600	
	206.55	3.6	***3.6***	8490	4.4	***4.3***	8400	7.0	***6.8***	8180	14.0	***13.0***	7860	18600	
	211.58	3.5	***2.9***	6850	4.3	***3.4***	6780	6.9	***5.3***	6600	13.7	***10.2***	6340	16500	
	246.71	3.0	***2.9***	7990	3.6	***3.4***	7910	5.9	***5.3***	7700	11.8	***9.9***	7130	16800	
	279.52	2.7	***2.4***	7720	3.2	***2.9***	7640	5.2	***4.5***	7440	10.4	***8.7***	7150	18600	
	302.23	2.5	***2.4***	8090	3.0	***2.8***	8000	4.8	***4.4***	7790	9.6	***8.1***	7210	16800	
	352.12	2.1	***1.8***	7290	2.6	***2.1***	7090	4.1	***3.2***	6600	8.2	***5.9***	6050	14200	
	408.99	1.8	***1.8***	8230	2.2	***2.1***	8140	3.5	***3.3***	7920	7.1	***6.3***	7490	16800	
	431.36	1.7	***1.5***	7520	2.1	***1.8***	7310	3.4	***2.7***	6800	6.7	***4.8***	6130	14200	
	502.15	1.5	***1.4***	7690	1.8	***1.6***	7480	2.9	***2.4***	6960	5.8	***4.3***	6270	14200	
	583.75	1.3	***1.2***	7870	1.5	***1.4***	7660	2.5	***2.1***	7120	5.0	***3.7***	6410	14200	
	626.69	1.2	***1.1***	7960	1.4	***1.3***	7740	2.3	***2.0***	7200	4.6	***3.5***	6480	14200	
	728.52	1.0	***0.99***	8140	1.2	***1.2***	7920	2.0	***1.7***	7370	4.0	***3.1***	6630	14200	
	806.33	0.93	***0.75***	6880	1.1	***0.88***	6690	1.8	***1.3***	6230	3.6	***2.4***	5610	12100	
	881.28	0.85	***0.68***	6780	1.0	***0.81***	6710	1.6	***1.3***	6530	3.3	***2.4***	6270	14200	
	1006.31	0.75	***0.62***	7110	0.89	***0.73***	6920	1.4	***1.1***	6440	2.9	***2.0***	5800	12100	
	1184.91	0.63	***0.45***	6100	0.76	***0.53***	5940	1.2	***0.80***	5520	2.4	***1.4***	4970	10400	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RE 1021	**3.56**	211	***130***	5750	253	***148***	5440	407	***206***	4720	—	—	—	27200	36 (T) 22 (F) 58 (P)
	4.15	181	***115***	5920	217	***131***	5610	349	***182***	4860	—	—	—	24200	
	5.10	147	***97***	6160	176	***111***	5830	284	***154***	5050	—	—	—	20400	
	5.82	129	***87***	6320	155	***100***	6010	249	***139***	5200	—	—	—	17400	
	6.86	109	***64***	5440	131	***76***	5380	211	***119***	5240	—	—	—	15000	
RE 1022	**12.83**	58	***54***	8440	70	***62***	8000	113	***86***	6930	226	***140***	5630	27200	20 (T) 13 (F) 33 (P)
	15.14	49.5	***48.4***	8880	59	***55***	8400	96	***77***	7280	192	***125***	5920	27200	
	17.65	42.5	***42.8***	9140	51	***48.6***	8660	82	***68***	7500	164	***110***	6090	24200	
	19.00	39.5	***41.3***	9500	47.4	***46.9***	9000	76	***66***	7800	153	***106***	6330	27200	
	22.15	33.9	***36.3***	9720	40.6	***41.5***	9270	65	***58***	8030	131	***94***	6520	24200	
	25.75	29.1	***31.5***	9810	34.9	***37.3***	9700	56	***52***	8400	113	***85***	6830	24200	
	27.20	27.6	***24.8***	8170	33.1	***29.5***	8080	53	***46.2***	7870	107	***79.7***	6780	20400	
	31.62	23.7	***21.5***	8240	28.5	***25.6***	8150	45.9	***40.1***	7930	92	***71.7***	7100	20400	
	36.11	20.8	***16.1***	7020	24.9	***19.1***	6940	40.2	***29.9***	6760	80	***57.5***	6490	17400	
	38.25	19.6	***18.0***	8330	23.5	***21.4***	8240	37.9	***33.5***	8020	76	***62.7***	7510	20400	
	43.68	17.2	***13.4***	7090	20.6	***15.9***	7020	33.2	***25.0***	6830	66	***48.0***	6570	17400	
	51.43	14.6	***9.8***	6110	17.5	***11.6***	6040	28.2	***18.3***	5880	56	***35.1***	5650	15000	
RE 1023	**52.69**	14.2	***18.6***	11600	17.1	***22.1***	11500	27.5	***32.9***	10600	55	***53.5***	8600	27200	15 (T) 10 (F) 22 (P)
	54.68	13.7	***18.0***	11600	16.5	***21.4***	11500	26.5	***32.1***	10700	53	***52.1***	8700	27200	
	63.75	11.8	***13.7***	10300	14.1	***16.3***	10200	22.7	***25.6***	9950	45.5	***46.0***	8960	24200	
	73.99	10.1	***13.6***	11900	12.2	***16.1***	11700	19.6	***25.2***	11400	39.2	***42.2***	9500	27200	
	81.00	9.3	***12.6***	12100	11.1	***14.8***	11800	17.9	***23.1***	11400	35.8	***39.6***	9800	27200	
	87.35	8.6	***11.8***	12200	10.3	***13.8***	11900	16.6	***21.5***	11500	33.2	***37.5***	10000	27200	
	89.62	8.4	***10.0***	10600	10.0	***11.8***	10400	16.2	***18.5***	10100	32.4	***35.6***	9750	24200	
	101.85	7.4	***9.0***	10800	8.8	***10.5***	10500	14.2	***16.4***	10200	28.5	***31.6***	9820	24200	
	109.62	6.8	***9.8***	12600	8.2	***11.4***	12300	13.2	***17.4***	11600	26.5	***32.0***	10700	27200	
	127.81	5.9	***7.4***	11200	7.0	***8.6***	10900	11.3	***13.3***	10300	22.7	***25.5***	9950	24200	
	148.58	5.0	***6.5***	11400	6.1	***7.6***	11100	9.8	***11.5***	10400	19.5	***22.1***	10000	24200	
	159.51	4.7	***6.1***	11500	5.6	***7.2***	11200	9.1	***10.8***	10500	18.2	***20.7***	10100	24200	
	185.43	4.0	***5.4***	11800	4.9	***6.3***	11500	7.8	***9.4***	10700	15.6	***18.0***	10200	24200	
	195.84	3.8	***4.2***	9650	4.6	***4.9***	9390	7.4	***7.4***	8810	14.8	***14.2***	8460	20400	
	227.66	3.3	***3.7***	9870	4.0	***4.3***	9600	6.4	***6.4***	8930	12.7	***12.3***	8540	20400	
	275.40	2.7	***3.1***	10160	3.3	***3.6***	9880	5.3	***5.5***	9190	10.5	***10.3***	8630	20400	
	314.47	2.4	***2.3***	8630	2.9	***2.7***	8390	4.6	***4.1***	7810	9.2	***7.7***	7350	17400	
RE 1024	**190.27**	3.9	***6.3***	13700	4.7	***7.3***	13300	7.6	***11.0***	12400	15.2	***20.4***	11500	27200	12 (T) 8 (F) 17 (P)
	224.62	3.3	***5.4***	14100	4.0	***6.4***	13700	6.5	***9.5***	12700	12.9	***17.4***	11700	27200	
	257.49	2.9	***4.8***	14400	3.5	***5.7***	14000	5.6	***8.5***	13000	11.3	***15.3***	11700	27200	
	275.17	2.7	***4.6***	14500	3.3	***5.3***	14100	5.3	***8.0***	13100	10.5	***14.4***	11800	27200	
	315.43	2.4	***4.1***	14800	2.9	***4.8***	14400	4.6	***7.1***	13400	9.2	***12.9***	12100	27200	
	345.32	2.2	***3.7***	14500	2.6	***4.3***	14400	4.2	***6.6***	13600	8.4	***11.9***	12200	27200	
	393.66	1.9	***3.4***	15300	2.3	***3.9***	14900	3.7	***5.9***	13900	7.4	***10.7***	12500	27200	
	503.94	1.5	***2.7***	15900	1.8	***3.2***	15500	2.9	***4.8***	14400	5.8	***8.6***	13000	27200	
	583.20	1.3	***2.3***	15400	1.5	***2.7***	15000	2.5	***4.2***	14400	5.0	***7.6***	13200	27200	
	632.40	1.2	***2.1***	15600	1.4	***2.5***	15200	2.3	***3.8***	14500	4.6	***7.1***	13400	27200	
	733.31	1.0	***1.7***	14500	1.2	***2.0***	14100	2.0	***3.0***	13200	4.0	***5.4***	11900	24200	
	857.19	0.87	***1.5***	14900	1.0	***1.8***	14500	1.7	***2.6***	13500	3.4	***4.8***	12100	24200	
	920.24	0.82	***1.4***	15100	0.98	***1.7***	14600	1.6	***2.5***	13600	3.2	***4.5***	12300	24200	
	984.96	0.76	***1.3***	14700	0.91	***1.5***	14600	1.5	***2.4***	14200	2.9	***4.7***	13700	27200	
	1148.46	0.65	***1.2***	15600	0.78	***1.4***	15100	1.3	***2.1***	14100	2.5	***3.7***	12700	24200	
	1273.11	0.59	***0.87***	12800	0.71	***1.0***	12500	1.1	***1.5***	11600	2.3	***2.8***	10400	20400	
	1410.05	0.53	***0.80***	13000	0.64	***0.94***	12700	1.0	***1.4***	11800	2.1	***2.5***	10600	20400	
	1588.85	0.47	***0.72***	13200	0.57	***0.85***	12900	0.91	***1.3***	12000	1.8	***2.3***	10800	20400	
	1814.25	0.41	***0.54***	11200	0.50	***0.63***	10900	0.80	***0.94***	10200	1.6	***1.70***	9170	17400	
	1982.88	0.38	***0.60***	13700	0.45	***0.70***	13300	0.73	***1.05***	12400	1.5	***1.89***	11200	20400	
	2264.19	0.33	***0.45***	11600	0.40	***0.52***	11300	0.64	***0.78***	10500	1.3	***1.41***	9480	17400	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 1022	**10.41**	72	***64***	7930	86	***73***	7510	139	***101***	6510	278	***165***	5290	27200	19 (T) 14 (F) 29 (P)
	12.14	61	***56***	8170	74	***64***	7740	119	***90***	6707	239	***146***	5450	24200	
	14.25	53	***51.3***	8720	63	***58***	8250	102	***81***	7152	204	***132***	5810	24700	
	16.62	45	***45.3***	8980	54	***52***	8500	87	***72***	7369	175	***117***	5990	24200	
	20.40	36.8	***33.0***	8030	44.1	***39.2***	7950	71	***61***	7660	142	***99***	6220	20400	
	23.29	32.2	***24.6***	6840	38.6	***29.3***	6770	62	***45.9***	6590	124	***88***	6330	17400	
	27.43	27.3	***18.0***	5890	32.8	***21.4***	5830	53	***33.5***	5672	106	***64***	5450	15000	
RA 1023	**35.73**	21.0	***27.3***	11300	25.2	***31.4***	10900	40.6	***43.9***	9423	81	***71***	7650	27200	14 (T) 10 (F) 25 (P)
	41.66	18.0	***20.8***	10100	21.6	***24.7***	9980	34.8	***38.8***	9707	70	***63***	7890	24200	
	49.18	15.3	***17.8***	10200	18.3	***21.1***	10100	29.5	***33.2***	9800	59	***56***	8290	24200	
	59.82	12.5	***14.8***	10300	15.0	***17.6***	10200	24.2	***27.6***	9910	48.5	***48.9***	8790	24200	
	61.71	12.2	***14.4***	10300	14.6	***17.1***	10200	23.5	***26.8***	9927	47.0	***47.8***	8870	24200	
	70.62	10.6	***12.7***	10400	12.7	***15.0***	10300	20.5	***23.6***	10004	41.1	***43.5***	9240	24200	
	76.00	9.9	***13.5***	11900	11.8	***15.9***	11700	19.1	***24.9***	11396	38.2	***42.0***	9600	27200	
	88.62	8.5	***8.5***	8740	10.2	***12.1***	10400	16.4	***19.0***	10135	32.7	***36.6***	9740	24200	
	103.02	7.3	***9.0***	10800	8.7	***10.5***	10500	14.1	***16.5***	10222	28.2	***31.7***	9830	24200	
	108.80	6.9	***7.0***	8840	8.3	***8.3***	8750	13.3	***13.0***	8514	26.7	***25.0***	8180	20400	
	126.48	5.9	***6.1***	9030	7.1	***7.2***	8830	11.5	***11.3***	8588	22.9	***21.7***	8250	20400	
	153.00	4.9	***5.2***	9290	5.9	***6.1***	9040	9.5	***9.4***	8682	19.0	***18.1***	8340	20400	
	174.71	4.3	***3.9***	7890	5.2	***4.5***	7680	8.3	***7.0***	7394	16.6	***13.5***	7110	17400	
RA 1024	**142.82**	5.3	***7.5***	12100	6.3	***8.9***	11900	10.2	***13.1***	10941	20.3	***21.2***	8890	27200	10 (T) 7 (F) 15 (P)
	168.61	4.5	***7.1***	13500	5.3	***8.2***	13100	8.6	***12.3***	12190	17.2	***21.2***	10500	27200	
	174.96	4.3	***6.8***	13500	5.1	***8.0***	13200	8.3	***12.0***	12258	16.6	***21.2***	10900	27200	
	206.55	3.6	***5.9***	13900	4.4	***6.9***	13500	7.0	***10.4***	12570	14.0	***19.2***	11600	27200	
	236.77	3.2	***4.9***	13200	3.8	***5.8***	13100	6.1	***9.2***	12711	12.2	***16.8***	11700	27200	
	259.20	2.9	***4.9***	14300	3.5	***5.7***	14000	5.6	***8.6***	13009	11.2	***15.5***	11700	27200	
	302.23	2.5	***3.7***	12700	3.0	***4.3***	12400	4.8	***6.5***	11511	9.6	***11.8***	10400	24200	
	350.77	2.1	***3.7***	14500	2.6	***4.3***	14400	4.1	***6.6***	13618	8.3	***11.9***	12300	27200	
	408.99	1.8	***2.9***	13300	2.2	***3.4***	13000	3.5	***5.0***	12050	7.1	***9.1***	10900	24200	
	475.46	1.6	***2.5***	13600	1.9	***3.0***	13200	3.0	***4.4***	12327	6.1	***8.0***	11100	24200	
	510.42	1.5	***2.4***	13800	1.8	***2.8***	13400	2.8	***4.2***	12460	5.7	***7.5***	11200	24200	
	593.37	1.3	***2.1***	14100	1.5	***2.4***	13700	2.4	***3.7***	12748	4.9	***6.6***	11500	24200	
	706.15	1.1	***1.5***	11700	1.3	***1.7***	11400	2.1	***2.6***	10602	4.1	***4.6***	9550	20400	
	806.33	0.93	***1.1***	9950	1.1	***1.3***	9680	1.8	***1.9***	9004	3.6	***3.4***	8110	17400	
	881.28	0.85	***1.2***	12100	1.0	***1.4***	11800	1.6	***2.1***	10963	3.3	***3.8***	9870	20400	
	1006.31	0.75	***0.90***	10300	0.89	***1.1***	10000	1.4	***1.6***	9311	2.9	***2.8***	8380	17400	
	1184.91	0.63	***0.66***	8830	0.76	***0.77***	8590	1.2	***1.15***	7991	2.4	***2.1***	7200	15000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 1521	**4.09**	183	***193***	9800	220	***219***	9280	354	***306***	8040	—	—	—	39000	44 (T)
	5.25	143	***158***	10300	171	***179***	9730	276	***250***	8430	—	—	—	30500	36 (H)
	6.23	120	***114***	8780	144	***135***	8690	233	***211***	8460	—	—	—	24200	28 (F)
RE 1522	**14.73**	51	***78***	13900	61	***89***	13200	98	***124***	11400	197	***201***	9270	39000	25 (T) 21 (H) 16 (F)
	17.39	43.1	***68***	14400	52	***78***	13600	83	***108***	11800	167	***176***	9590	39000	
	21.82	34.4	***53***	14100	41.3	***64***	14000	66	***90***	12300	133	***146***	9990	38900	
	25.36	29.6	***38.9***	11900	35.5	***46.2***	11800	57	***72***	11500	114	***130***	10400	32900	
	28.00	26.8	***35.9***	12200	32.1	***42.7***	12100	52	***67***	11700	104	***129***	11300	30500	
	32.55	23.0	***31.2***	12300	27.6	***37.0***	12200	44.5	***58***	11800	89	***112***	11400	30500	
	33.23	22.6	***24.0***	9700	27.1	***28.5***	9570	43.6	***44.7***	9310	87	***86***	8950	24200	
	39.38	19.0	***25.2***	12000	22.9	***29.9***	11900	36.8	***46.9***	11600	74	***90***	11100	30500	
	46.73	16.0	***17.4***	9900	19.3	***20.7***	9750	31.0	***32.4***	9490	62	***62***	9120	24200	
RE 1523	**51.25**	14.6	***27.2***	16400	17.6	***31.7***	16000	28.3	***44.2***	13800	57	***72***	11200	39000	17 (T) 15 (H) 12 (F)
	60.50	12.4	***23.2***	16600	14.9	***27.6***	16400	24.0	***43.2***	16000	47.9	***72***	13300	39000	
	62.78	11.9	***22.4***	16600	14.3	***26.6***	16400	23.1	***37.8***	14500	46.2	***61***	11800	39000	
	74.12	10.1	***19.2***	16800	12.1	***22.8***	16600	19.6	***35.7***	16200	39.1	***61***	13900	39000	
	80.57	9.3	***13.6***	12900	11.2	***16.2***	12800	18.0	***25.3***	12500	36.0	***49***	12000	30500	
	93.01	8.1	***14.0***	15300	9.7	***16.6***	15200	15.6	***26.0***	14800	31.2	***50***	14200	38900	
	100.31	7.5	***14.1***	16700	9.0	***16.8***	16600	14.5	***26.3***	16100	28.9	***48.1***	14700	39000	
	109.04	6.9	***10.2***	13200	8.3	***12.1***	13000	13.3	***19.0***	12700	26.6	***36.6***	12200	30500	
	125.87	6.0	***10.5***	15600	7.2	***12.5***	15500	11.5	***19.6***	15000	23.0	***37.6***	14500	38900	
	146.33	5.1	***7.6***	13200	6.2	***9.1***	13100	9.9	***14.2***	12700	19.8	***27.4***	12200	32900	
	157.09	4.8	***8.2***	15100	5.7	***9.7***	15000	9.2	***15.2***	14600	18.5	***29.2***	14000	38900	
	182.62	4.1	***6.2***	13400	4.9	***7.4***	13200	7.9	***11.6***	12900	15.9	***22.2***	12400	32900	
	201.60	3.7	***6.0***	14400	4.5	***7.1***	14000	7.2	***10.7***	13100	14.4	***20.5***	12600	30500	
	234.36	3.2	***5.3***	14700	3.8	***6.2***	14300	6.2	***9.3***	13300	12.4	***17.8***	12700	30500	
	239.26	3.1	***4.0***	11400	3.8	***4.7***	11100	6.1	***7.1***	10400	12.1	***13.7***	10000	24200	
	278.14	2.7	***3.5***	11600	3.2	***4.1***	11300	5.2	***6.2***	10500	10.4	***11.9***	10100	24200	
RE 1524	**210.56**	3.6	***8.0***	19400	4.3	***9.4***	18900	6.9	***14.0***	17600	13.8	***26.3***	16500	39000	14 (T) 12 (F) 9 (P)
	218.49	3.4	***7.8***	19500	4.1	***9.1***	19000	6.6	***13.6***	17700	13.3	***25.4***	16500	39000	
	257.94	2.9	***6.7***	20000	3.5	***7.9***	19500	5.6	***11.8***	18100	11.2	***21.7***	16700	39000	
	280.40	2.7	***4.7***	15100	3.2	***5.5***	14700	5.2	***8.2***	13700	10.3	***15.4***	12900	30500	
	315.99	2.4	***5.6***	20400	2.8	***6.6***	20100	4.6	***9.9***	18700	9.2	***17.9***	16900	39000	
	349.06	2.1	***5.1***	20500	2.6	***6.1***	20300	4.2	***9.1***	19000	8.3	***16.5***	17100	39000	
	396.53	1.9	***3.7***	16700	2.3	***4.3***	16500	3.7	***6.8***	16100	7.3	***13.1***	15400	38900	
	452.05	1.7	***4.1***	21400	2.0	***4.9***	21100	3.2	***7.3***	19700	6.4	***13.2***	17800	39000	
	508.89	1.5	***2.8***	16500	1.8	***3.3***	16100	2.8	***4.9***	15000	5.7	***8.9***	13500	30500	
	578.69	1.3	***2.8***	18500	1.6	***3.3***	18300	2.5	***5.2***	17800	5.0	***9.9***	17100	39000	
	629.07	1.2	***2.4***	17100	1.4	***2.8***	16600	2.3	***4.1***	15500	4.6	***7.4***	13900	30500	
	722.20	1.0	***2.3***	18700	1.2	***2.7***	18500	2.0	***4.2***	18000	4.0	***8.1***	17300	39000	
	800.57	0.94	***1.9***	17700	1.1	***2.2***	17200	1.8	***3.4***	16000	3.6	***6.1***	14400	30500	
	906.29	0.83	***1.8***	18600	0.99	***2.1***	18100	1.6	***3.1***	16800	3.2	***6.0***	16200	38900	
	999.11	0.75	***1.6***	18300	0.90	***1.9***	17800	1.5	***2.8***	16600	2.9	***5.0***	14900	30500	
	1156.68	0.65	***1.3***	17300	0.78	***1.5***	17100	1.3	***2.4***	16700	2.5	***4.4***	15300	30500	
	1285.79	0.58	***0.99***	14700	0.70	***1.2***	14300	1.1	***1.7***	13300	2.3	***3.1***	12000	24200	
	1451.52	0.52	***1.2***	19400	0.62	***1.4***	18900	1.0	***2.0***	17500	2.0	***3.7***	15800	30500	
	1635.58	0.46	***0.83***	15700	0.55	***0.97***	15300	0.89	***1.5***	14300	1.8	***2.8***	13800	30500	
	1722.68	0.44	***0.77***	15300	0.52	***0.90***	14900	0.84	***1.4***	13900	1.7	***2.4***	12500	24200	
	2041.20	0.37	***0.69***	16200	0.44	***0.81***	15800	0.71	***1.2***	14700	1.4	***2.3***	13900	30500	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 1522	**12.56**	60	***91.7***	13700	72	***104***	13000	115	***145***	11300	231	***236***	9150	39000	24 (T) 20 (H) 18 (F)
	16.13	46.5	***61.4***	11800	56	***73***	11700	90	***114***	11400	180	***193***	9590	30500	
	19.09	39.3	***53.9***	12300	47.1	***64***	12100	76	***100***	11800	152	***176***	10400	31600	
	24.50	30.6	***41.4***	12100	36.7	***49.2***	12000	59	***77***	11600	118	***144***	10900	30500	
	29.08	25.8	***27.7***	9600	31.0	***32.9***	9500	49.9	***52***	9200	100	***99***	8880	24200	
RA 1523	**34.38**	21.8	***27.8***	11100	26.2	***31.6***	10500	42.2	***44.1***	9100	84	***72***	7400	34100	15 (T) 13 (H) 11 (F)
	41.03	18.3	***27.8***	13200	21.9	***31.6***	12500	35.3	***44.1***	10900	71	***72***	8830	39000	
	48.43	15.5	***27.8***	15600	18.6	***31.6***	14800	29.9	***44.1***	12800	60	***72***	10400	39000	
	58.91	12.7	***20.6***	14100	15.3	***23.4***	13300	24.9	***32.6***	11400	49.2	***53.0***	9380	39000	
	62.16	12.1	***17.6***	12700	14.5	***21.0***	12600	23.3	***32.9***	12300	46.7	***63***	11800	30500	
	70.66	10.6	***15.4***	12700	12.7	***18.3***	12500	20.5	***28.7***	12200	41.0	***55***	11700	24200	
	78.00	9.6	***14.2***	12900	11.5	***16.9***	12800	18.6	***26.5***	12400	37.2	***51***	12000	32900	
	89.25	8.4	***12.5***	13000	10.1	***14.9***	12900	16.2	***23.4***	12500	32.5	***44.9***	12000	30500	
	101.45	7.4	***11.0***	12900	8.9	***13.0***	12800	14.3	***20.4***	12500	28.6	***39.3***	12000	30500	
	112.00	6.7	***10.1***	13200	8.0	***12.0***	13000	12.9	***18.9***	12700	25.9	***36.2***	12200	32900	
	130.20	5.8	***8.9***	13500	6.9	***10.4***	13200	11.1	***16.4***	12800	22.3	***31.5***	12300	30500	
	154.52	4.9	***5.9***	10600	5.8	***7.0***	10400	9.4	***10.9***	10200	18.8	***21.0***	9770	30500	
	186.92	4.0	***5.0***	11000	4.8	***5.9***	10700	7.8	***9.1***	10300	15.5	***17.6***	9880	24200	
RA 1524	**164.00**	4.6	***7.5***	13900	5.5	***8.9***	13700	8.8	***13.1***	12600	17.7	***21.2***	10200	24200	11 (T) 9 (H) 8 (F)
	193.61	3.9	***7.5***	16400	4.6	***8.9***	16200	7.5	***13.1***	14800	15.0	***21.2***	12000	35500	
	200.91	3.7	***7.5***	17000	4.5	***8.9***	16800	7.2	***13.1***	15400	14.4	***21.2***	12500	39000	
	237.19	3.2	***7.4***	19800	3.8	***8.6***	19200	6.1	***12.9***	17900	12.2	***21.2***	14800	39000	
	248.47	3.0	***5.3***	14800	3.6	***6.2***	14400	5.8	***9.2***	13400	11.7	***17.5***	12800	39000	
	271.89	2.8	***4.9***	15200	3.3	***5.8***	15000	5.3	***9.2***	14600	10.7	***17.6***	14000	30500	
	297.65	2.5	***4.9***	16400	3.0	***5.8***	16200	4.9	***9.1***	15800	9.7	***17.4***	15200	39000	
	320.98	2.3	***4.9***	17900	2.8	***5.8***	17700	4.5	***9.2***	17200	9.0	***17.6***	16600	38900	
	348.92	2.1	***4.0***	15600	2.6	***4.6***	15200	4.2	***6.9***	14100	8.3	***12.7***	13000	39000	
	402.80	1.9	***3.7***	16700	2.2	***4.3***	16500	3.6	***6.8***	16100	7.2	***13.1***	15400	30500	
	444.05	1.7	***3.2***	16200	2.0	***3.8***	15800	3.3	***5.6***	14700	6.5	***10.1***	13200	38900	
	516.92	1.5	***2.8***	16600	1.7	***3.3***	16100	2.8	***5.0***	15000	5.6	***8.9***	13500	30500	
	600.92	1.2	***2.5***	17000	1.5	***2.9***	16500	2.4	***4.4***	15300	4.8	***7.8***	13800	30500	
	645.12	1.2	***2.3***	17100	1.4	***2.7***	16700	2.2	***4.1***	15500	4.5	***7.4***	14000	30500	
	749.95	1.0	***2.1***	17500	1.2	***2.4***	17100	1.9	***3.6***	15900	3.9	***6.5***	14300	30500	
	907.20	0.83	***1.4***	14400	0.99	***1.7***	14200	1.6	***2.6***	13800	3.2	***5.0***	13300	30500	
	1076.68	0.70	***1.2***	14300	0.84	***1.4***	13900	1.3	***2.0***	12900	2.7	***3.7***	11600	30500	

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM			T_{2max}	P_t
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	[Nm]	[kW]
RE 2001		**3.83**	196	***272***	12900	235	***309***	12200	378	***431***	10600	—	—	—	44100	44 (T) 36 (H) 28 (F)
		5.25	143	***210***	13700	171	***239***	13000	276	***333***	11200	—	—	—	40300	
RE 2002	**L**	**13.80**	54	***78***	13000	65	***89***	12300	105	***124***	10700	210	***201***	8680	44000	25 (T) 21 (H) 16 (F)
		15.33	48.9	***96***	17700	59	***109***	16800	95	***152***	14600	189	***246***	11800	44100	
		17.42	43.0	***86***	18100	52	***98***	17200	83	***136***	14900	166	***222***	12100	44100	
		21.00	35.7	***61***	15600	42.9	***73***	15400	69	***114***	15000	138	***210***	13800	40300	
	L	**22.31**	33.6	***58***	15600	40.3	***69***	15500	65	***108***	15100	130	***176***	12300	40300	
	L	**28.00**	26.8	***46.7***	15800	32.1	***55***	15700	52	***87***	15300	104	***146***	12800	40300	
	L	**32.55**	23.0	***38.9***	15300	27.6	***46.2***	15200	44.5	***72***	14800	89	***130***	13300	40300	
	L	**39.38**	19.0	***25.2***	12000	22.9	***29.9***	11900	36.8	***47***	11600	74	***90***	11100	33200	
RE 2003	**L**	**48.02**	15.6	***27.9***	15800	18.7	***31.7***	15000	30.2	***44***	13000	60	***72***	10500	44000	18 (T) 15 (H) 12 (F)
		55.20	13.6	***35.1***	22900	16.3	***41.7***	22700	26.3	***63***	21400	53	***103***	17400	44100	
		65.17	11.5	***30.0***	23100	13.8	***35.7***	22900	22.3	***56***	22300	44.5	***92***	18200	44100	
		74.05	10.1	***23.5***	20600	12.2	***28.0***	20400	19.6	***43.8***	19800	39.2	***83***	18700	44100	
		81.78	9.2	***24.3***	23400	11.0	***28.8***	23200	17.7	***45.2***	22500	35.5	***78***	19500	44100	
		92.93	8.1	***19.0***	20800	9.7	***22.6***	20600	15.6	***35.4***	20100	31.2	***68***	19300	44100	
		101.42	7.4	***14.2***	17000	8.9	***16.9***	16900	14.3	***26.5***	16400	28.6	***51***	15800	40300	
		112.00	6.7	***13.0***	17100	8.0	***15.4***	17000	12.9	***24.1***	16500	25.9	***46.4***	15900	40300	
	L	**128.73**	5.8	***11.4***	17300	7.0	***13.5***	17100	11.3	***21.2***	16600	22.5	***40.7***	16000	40300	
		147.95	5.1	***10.0***	17400	6.1	***11.8***	17200	9.8	***18.6***	16800	19.6	***35.7***	16100	40300	
		157.50	4.8	***9.4***	17500	5.7	***11.2***	17300	9.2	***17.5***	16800	18.4	***33.7***	16200	40300	
		178.98	4.2	***8.5***	17900	5.0	***9.9***	17400	8.1	***15.5***	17000	16.2	***29.8***	16300	40300	
	L	**201.60**	3.7	***7.6***	18200	4.5	***8.9***	17700	7.2	***13.9***	17100	14.4	***26.7***	16400	40300	
RE 2004		**192.10**	3.9	***11.1***	24600	4.7	***13.2***	24300	7.5	***20.7***	23700	15.1	***39.8***	22800	44100	14 (T) 12 (H) 10 (F)
		226.78	3.3	***9.5***	24800	4.0	***11.3***	24600	6.4	***17.7***	23900	12.8	***34.0***	23000	44100	
		257.70	2.9	***7.5***	22100	3.5	***8.8***	21900	5.6	***13.9***	21300	11.3	***26.7***	20500	44100	
		284.59	2.6	***7.7***	25100	3.2	***9.1***	24900	5.1	***14.3***	24200	10.2	***27.5***	23300	44100	
		315.70	2.4	***6.2***	22400	2.9	***7.3***	22100	4.6	***11.5***	21500	9.2	***22.0***	20700	44100	
		348.63	2.2	***6.3***	25400	2.6	***7.5***	25200	4.2	***4.7***	24500	8.3	***22.7***	23500	44100	
		396.17	1.9	***5.0***	22600	2.3	***5.9***	22400	3.7	***9.2***	21800	7.3	***17.8***	21000	44100	
	L	**447.97**	1.7	***4.0***	20500	2.0	***4.6***	20000	3.2	***7.0***	18600	6.5	***12.9***	17200	40100	
	L	**500.07**	1.5	***3.6***	20500	1.8	***4.2***	19900	2.9	***6.4***	19000	5.8	***12.3***	18300	40100	
	L	**562.15**	1.3	***3.3***	21200	1.6	***3.8***	20700	2.6	***5.7***	19200	5.2	***10.4***	17400	40100	
	L	**629.07**	1.2	***2.8***	20100	1.4	***3.3***	19900	2.3	***5.2***	19400	4.6	***9.4***	17600	40100	
	L	**701.57**	1.1	***2.7***	22000	1.3	***3.2***	21400	2.1	***4.8***	19900	4.1	***8.6***	17900	40100	
		806.40	0.93	***2.4***	22400	1.1	***2.8***	21800	1.8	***4.2***	20300	3.6	***7.6***	18300	40300	
		908.65	0.83	***2.2***	22800	0.99	***2.6***	22200	1.6	***3.8***	20700	3.2	***6.9***	18600	40300	
		1032.56	0.73	***2.0***	23300	0.87	***2.3***	22700	1.4	***3.4***	21100	2.8	***6.2***	19000	40300	
		1134.00	0.66	***1.8***	23600	0.79	***2.1***	23000	1.3	***3.2***	21400	2.6	***5.7***	19300	40300	
		1288.64	0.58	***1.6***	24100	0.70	***1.9***	23400	1.1	***2.8***	21800	2.3	***5.1***	19600	40300	
	L	**1451.52**	0.52	***1.3***	21700	0.62	***1.5***	21500	1.0	***2.4***	20900	2.0	***4.6***	20000	40100	

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RA 2002		**11.77**	64	***107***	15000	76	***121***	14200	123	***169***	12300	246	***275***	9970	44100	24 (T) 20 (H) 18 (F)
		16.13	46.5	***80***	15300	56	***95***	15200	90	***149***	14800	180	***257***	12800	40300	
		17.89	41.9	***54***	11500	50	***64***	11400	81	***100***	11100	162	***191***	10500	29600	
		24.50	30.6	***54***	15700	36.7	***64***	15600	59	***100***	15100	118	***191***	14400	40300	
RA 2003	**L**	**38.44**	19.5	***27.1***	12400	23.4	***31.6***	11800	37.7	***44.1***	10200	75	***72***	8270	44000	15 (T) 13 (H) 11 (F)
		42.71	17.6	***27.1***	13800	21.1	***31.6***	13100	33.9	***44.1***	11300	68	***72***	9190	44100	
	L	**45.38**	16.5	***27.8***	14700	19.8	***31.6***	13900	31.9	***44.1***	12000	64	***72***	9770	44000	
	L	**52.65**	14.2	***26.8***	16400	17.1	***31.6***	16100	27.5	***44.1***	13900	55	***72***	11300	40300	
	L	**55.20**	13.6	***20.6***	13200	16.3	***23.4***	12500	26.3	***32.6***	10800	53	***53***	8790	38200	
	L	**62.16**	12.1	***22.9***	16600	14.5	***27.3***	16400	23.3	***42.7***	16000	46.7	***72***	13400	40300	
		69.70	10.8	***20.6***	16600	12.9	***23.4***	15800	20.8	***32.6***	13700	41.6	***53.0***	11100	44100	
	L	**78.00**	9.6	***18.5***	16800	11.5	***22.0***	16600	18.6	***34.5***	16200	37.2	***66***	15500	40300	
	L	**89.25**	8.4	***16.3***	16900	10.1	***19.4***	16700	16.2	***30.4***	16300	32.5	***53.0***	14200	40300	
		95.45	7.9	***15.3***	17000	9.4	***18.2***	16800	15.2	***28.5***	16400	30.4	***53.0***	15200	40300	
	L	**112.00**	6.7	***13.2***	17100	8.0	***15.6***	17000	12.9	***24.5***	16500	25.9	***47.1***	15900	40300	
	L	**130.20**	5.8	***11.0***	16600	6.9	***13.0***	16400	11.1	***20.4***	16000	22.3	***39.3***	15400	40300	
	L	**157.50**	4.8	***7.1***	13000	5.7	***8.4***	12900	9.2	***13.2***	12500	18.4	***25.4***	12000	33200	
RA 2004		**153.77**	4.9	***13.9***	24300	5.9	***16.5***	24000	9.4	***25.9***	23400	18.9	***49.9***	22500	44100	13 (T) 9 (H) 10 (F)
		181.54	4.1	***11.9***	24500	5.0	***14.1***	24200	8.0	***22.2***	23600	16.0	***42.6***	22700	44100	
		206.29	3.6	***9.3***	21800	4.4	***11.1***	21600	7.0	***17.4***	21000	14.1	***33.4***	20200	44100	
		220.80	3.4	***9.9***	24800	4.1	***11.8***	24500	6.6	***18.4***	23900	13.1	***35.4***	22900	44100	
	L	**248.47**	3.0	***6.7***	18800	3.6	***7.8***	18300	5.8	***11.9***	17300	11.7	***21.2***	15500	40300	
		282.53	2.7	***6.0***	19100	3.2	***5.8***	15200	5.1	***10.5***	17400	10.3	***20.2***	16700	40300	
	L	**311.81**	2.4	***5.5***	19400	3.2	***7.0***	18600	4.7	***9.6***	17600	9.3	***18.4***	16800	40300	
	L	**348.92**	2.1	***4.9***	19500	2.6	***5.8***	19200	4.2	***8.7***	17900	8.3	***16.6***	16900	40300	
	L	**411.92**	1.8	***4.3***	20300	2.2	***5.1***	19700	3.5	***7.6***	18300	7.0	***14.2***	17100	40300	
		448.00	1.7	***4.0***	20500	2.0	***4.7***	20000	3.2	***7.1***	18600	6.5	***13.1***	17200	40300	
		498.58	1.5	***3.7***	20900	1.8	***4.3***	20300	2.9	***6.5***	18900	5.8	***11.8***	17300	40300	
	L	**547.58**	1.4	***2.2***	13400	1.6	***2.6***	13300	2.6	***4.0***	12900	5.3	***7.7***	12400	30900	
		591.82	1.3	***3.2***	21400	1.5	***3.7***	20800	2.5	***5.6***	19400	4.9	***10.1***	17500	40300	
		630.00	1.2	***3.0***	21600	1.4	***3.5***	21000	2.3	***5.3***	19600	4.6	***9.5***	17600	40300	
		715.91	1.0	***2.7***	22000	1.3	***3.2***	21400	2.0	***4.8***	19900	4.1	***8.6***	18000	40300	
	L	**907.20**	0.83	***1.4***	14400	1.0	***1.7***	14200	1.6	***2.6***	13800	3.2	***5.0***	13300	33200	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 2521	**4.00**	188	***294***	14600	225	***334***	13800	363	***467***	12000	—	—	—	63000	46 (H) 41 (F)
	5.20	144	***238***	15300	173	***270***	14500	279	***377***	12600	—	—	—	50100	
	6.25	120	***184***	14300	144	***218***	14100	232	***327***	13100	—	—	—	39300	
RE 2522	**14.25**	53	***97***	16800	63	***111***	15900	102	***154***	13800	—	—	—	47700	26 (H) 24 (F)
	16.62	45.1	***86***	17300	54	***98***	16400	87	***136***	14200	—	—	—	47700	
	18.53	40.5	***87***	19600	48.6	***104***	19400	78	***154***	17900	—	—	—	50100	
	21.60	34.7	***76***	19700	41.7	***90***	19500	67	***136***	18400	—	—	—	50100	
	26.52	28.3	***62***	20000	33.9	***74***	19800	55	***115***	19200	—	—	—	50100	
	30.28	24.8	***55***	20100	29.7	***65***	19900	47.9	***102***	19400	—	—	—	50100	
	35.66	21.0	***45.3***	19600	25.2	***54***	19400	40.7	***84***	18800	—	—	—	50100	
	42.86	17.5	***30.7***	15900	21.0	***36.5***	15800	33.8	***57***	15300	—	—	—	39300	
RE 2523	**51.30**	14.6	***40.7***	24600	17.5	***46.2***	23300	28.3	***65***	20200	57	***105***	16400	47700	19 (H) 17 (F)
	59.82	12.5	***36.0***	25400	15.0	***40.9***	24000	24.2	***57***	20800	48.5	***93***	16900	47700	
	60.56	12.4	***36.2***	25900	14.9	***41.2***	24500	23.9	***57***	21300	47.9	***93***	17300	47700	
	70.62	10.6	***31.8***	26500	12.7	***36.4***	25300	20.5	***51***	21900	41.1	***83***	17800	47700	
	78.73	9.5	***22.9***	21300	11.4	***27.2***	21000	18.4	***42.6***	20500	36.8	***82***	19700	50100	
	86.70	8.7	***21.8***	22300	10.4	***25.9***	22100	16.7	***40.6***	21500	33.4	***70***	18500	47700	
	103.02	7.3	***19.3***	23500	8.7	***22.9***	23300	14.1	***36.0***	22600	28.2	***63***	19900	47700	
	112.71	6.7	***16.3***	21700	8.0	***19.4***	21500	12.9	***30.4***	20900	25.7	***58***	20100	50100	
	128.70	5.8	***14.6***	22100	7.0	***17.1***	21600	11.3	***26.8***	21100	22.5	***52***	20200	50100	
	141.44	5.3	***13.4***	22400	6.4	***15.7***	21800	10.3	***24.5***	21200	20.5	***47.1***	20400	50100	
	164.42	4.6	***11.8***	23000	5.5	***13.8***	22300	8.8	***21.3***	21400	17.6	***40.9***	20500	50100	
	187.75	4.0	***10.6***	23400	4.8	***12.3***	22800	7.7	***18.8***	21500	15.4	***36.1***	20700	50100	
	198.90	3.8	***10.1***	23600	4.5	***11.8***	23000	7.3	***17.8***	21600	14.6	***34.2***	20800	50100	
	221.07	3.4	***8.3***	21700	4.1	***9.9***	21500	6.6	***15.5***	20900	13.1	***29.8***	20100	50100	
	239.06	3.1	***6.5***	18500	3.8	***7.6***	18000	6.1	***11.6***	16900	12.1	***22.3***	16300	39300	
	267.43	2.8	***7.0***	21900	3.4	***8.3***	21700	5.4	***12.9***	21100	10.8	***24.9***	20300	50100	
	321.43	2.3	***5.1***	19300	2.8	***5.9***	18800	4.5	***8.9***	17500	9.0	***16.9***	16500	39300	
RE 2524	**210.76**	3.6	***13.0***	31400	4.3	***15.4***	31100	6.9	***23.7***	29700	13.8	***40.0***	25100	47700	15 (H) 14 (F)
	218.70	3.4	***12.7***	32100	4.1	***15.1***	31800	6.6	***21.7***	28200	13.3	***35.2***	22900	47700	
	245.74	3.1	***10.1***	28500	3.7	***12.0***	28200	5.9	***18.7***	27400	11.8	***35.4***	25900	47700	
	301.04	2.5	***8.3***	28800	3.0	***9.9***	28500	4.8	***15.5***	27700	9.6	***29.8***	26700	47700	
	308.38	2.4	***8.1***	28800	2.9	***9.7***	28500	4.7	***15.1***	27800	9.4	***29.1***	26700	47700	
	345.09	2.2	***7.2***	28600	2.6	***8.5***	28300	4.2	***13.4***	27500	8.4	***25.7***	26400	47700	
	407.40	1.8	***6.4***	29800	2.2	***7.4***	29000	3.6	***11.6***	28200	7.1	***22.4***	27100	47700	
	448.62	1.7	***5.2***	26700	2.0	***6.0***	26000	3.2	***9.1***	24200	6.5	***16.3***	21800	50100	
	500.19	1.5	***4.3***	24900	1.8	***5.1***	24400	2.9	***8.0***	23700	5.8	***15.3***	22800	47700	
	550.80	1.4	***4.4***	27600	1.6	***5.1***	26800	2.6	***7.6***	25000	5.3	***13.7***	22500	50100	
	638.03	1.2	***4.1***	30400	1.4	***4.9***	30000	2.3	***7.6***	28900	4.5	***14.7***	27800	47700	
	711.36	1.1	***3.5***	28700	1.3	***4.1***	27900	2.0	***6.1***	25900	4.1	***11.0***	23400	50100	
	800.41	0.94	***3.0***	27800	1.1	***3.5***	27100	1.8	***5.5***	26400	3.6	***10.0***	23800	50100	
	910.66	0.82	***2.6***	27300	0.99	***3.0***	26600	1.6	***4.6***	24700	3.2	***8.7***	23600	47700	
	1018.37	0.74	***2.6***	30300	0.88	***3.0***	29400	1.4	***4.5***	27400	2.8	***8.1***	24700	50100	
	1147.50	0.65	***2.3***	30800	0.78	***2.7***	30000	1.3	***4.1***	27900	2.5	***7.4***	25100	50100	
	1310.29	0.57	***2.0***	30000	0.69	***2.3***	29200	1.1	***3.5***	27100	2.2	***6.6***	25600	50100	
	1432.08	0.52	***1.9***	31900	0.63	***2.3***	31000	1.0	***3.4***	28800	2.0	***6.1***	26000	50100	
	1635.25	0.46	***1.6***	31000	0.55	***1.9***	30200	0.89	***2.9***	28100	1.8	***5.4***	26400	50100	
	1925.49	0.39	***1.2***	26600	0.47	***1.4***	25900	0.75	***2.1***	24100	1.5	***4.0***	22700	50100	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 2522	**12.29**	61	***107***	15600	73	***121***	14800	118	***169***	12800	236	***275***	10400	48300	24 (H) 22 (F)
	15.97	47.0	***102***	19400	56	***121***	19200	91	***169***	16700	182	***275***	13500	50100	
	19.20	39.1	***66***	15200	48.2	***64***	11900	76	***124***	14600	151	***238***	14100	39300	
	24.27	30.9	***54***	15600	37.1	***64***	15400	60	***100***	15000	120	***191***	14300	40200	
	29.17	25.7	***44.8***	15600	30.9	***53***	15400	49.7	***83***	15000	99	***160***	14400	39300	
RA 2523	**41.65**	18.0	***47.8***	23100	21.6	***54***	21900	34.8	***76***	19000	70	***123***	15400	57300	18 (H) 17 (F)
	44.01	17.0	***42.3***	21600	20.4	***48.0***	20500	32.9	***67***	17700	66	***109***	14400	51900	
	51.66	14.5	***38.4***	23000	17.4	***43.6***	21800	28.1	***61***	18900	56	***99***	15400	51900	
	57.00	13.2	***38.4***	25400	15.8	***43.6***	24100	25.4	***61***	20900	51	***99***	17000	57300	
	66.46	11.3	***33.9***	26200	13.5	***38.5***	24800	21.8	***54***	21500	43.6	***87***	17500	57300	
	68.09	11.0	***23.5***	18600	13.2	***27.9***	18400	21.3	***43.7***	17900	42.6	***83***	17000	57300	
	81.60	9.2	***23.4***	22200	11.0	***27.8***	22000	17.8	***43.6***	21400	35.5	***74***	18200	57300	
	88.52	8.5	***20.8***	21400	10.2	***24.7***	21200	16.4	***38.7***	20600	32.8	***74***	19800	50100	
	103.85	7.2	***13.9***	16700	8.7	***16.5***	16600	14.0	***25.8***	16100	27.9	***49.7***	15500	39300	
	109.71	6.8	***12.8***	16300	8.2	***15.2***	16100	13.2	***23.8***	15700	26.4	***45.7***	15100	41500	
	125.27	6.0	***11.6***	16900	7.2	***13.8***	16800	11.6	***21.7***	16300	23.1	***41.6***	15700	39300	
	142.63	5.3	***12.8***	21200	6.3	***15.2***	21000	10.2	***23.8***	20400	20.3	***45.7***	19600	50100	
	171.43	4.4	***8.8***	17500	5.3	***10.3***	17100	8.5	***16.1***	16600	16.9	***31.0***	16000	39300	
RA 2524	**129.51**	5.8	***17.8***	26200	6.9	***20.8***	25400	11.2	***31.4***	23800	22.4	***53***	20200	51900	14 (H) 13 (F)
	142.91	5.2	***19.1***	31000	6.3	***22.3***	30100	10.1	***32.8***	27500	20.3	***53***	22300	57300	
	152.89	4.9	***15.5***	26800	5.9	***18.1***	26100	9.5	***27.1***	24300	19.0	***47.5***	21300	51900	
	196.71	3.8	***12.6***	28100	4.6	***15.0***	27800	7.4	***23.5***	27100	14.7	***42.0***	24200	57300	
	219.54	3.4	***11.4***	28300	4.1	***13.3***	27600	6.6	***19.9***	25600	13.2	***36.7***	23600	51900	
	255.98	2.9	***9.0***	26000	3.5	***10.6***	25700	5.7	***16.7***	25000	11.3	***31.7***	23800	51900	
	282.46	2.7	***9.0***	28700	3.2	***10.6***	28400	5.1	***16.7***	27600	10.3	***32.1***	26600	57300	
	314.93	2.4	***7.1***	25300	2.9	***8.3***	24600	4.6	***12.4***	22900	9.2	***23.1***	21300	50100	
	354.46	2.1	***7.3***	29200	2.5	***8.6***	28800	4.1	***13.5***	28000	8.2	***25.9***	26900	57300	
	395.20	1.9	***5.9***	26200	2.3	***6.8***	25500	3.7	***10.2***	23700	7.3	***18.6***	21600	50100	
	449.91	1.7	***5.2***	26500	2.0	***6.1***	26000	3.2	***9.2***	24200	6.4	***16.5***	21800	50100	
	505.92	1.5	***4.4***	25000	1.8	***5.1***	24400	2.9	***8.0***	23800	5.7	***15.4***	22800	57300	
	565.76	1.3	***4.3***	27700	1.6	***5.0***	26900	2.6	***7.6***	25100	5.1	***13.6***	22600	50100	
	632.68	1.2	***3.8***	27000	1.4	***4.5***	26800	2.3	***6.9***	25500	4.6	***12.4***	22900	50100	
	698.82	1.1	***2.8***	21800	1.3	***3.2***	21200	2.1	***5.0***	20400	4.1	***9.6***	19700	57300	
	795.60	0.94	***3.2***	29200	1.1	***3.8***	28400	1.8	***5.7***	26400	3.6	***10.2***	23800	50100	
	884.30	0.85	***2.4***	23700	1.0	***2.8***	23300	1.6	***4.4***	22600	3.3	***8.4***	21700	50100	
	956.25	0.78	***2.1***	22800	0.94	***2.5***	22100	1.5	***3.7***	20600	3.0	***6.6***	18500	39300	
	1091.91	0.69	***1.9***	23200	0.82	***2.2***	22600	1.3	***3.3***	21000	2.7	***5.9***	18900	39300	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 3001	**4.00**	188	***392***	19500	225	***446***	18500	363	***623***	16000	—	—	—	78800	46 (H)
	4.71	159	***344***	20100	191	***390***	19000	308	***545***	16500	—	—	—	71700	41 (F)
RE 3002	**14.25**	53	***133***	23000	63	***152***	21800	102	***212***	18900	—	—	—	78800	27 (H) 24 (F)
	16.62	45.1	***118***	23700	54	***134***	22400	87	***187***	19400	—	—	—	78800	
	19.55	38.4	***118***	27900	46.0	***134***	26400	74	***187***	22900	—	—	—	71700	
	23.29	32.2	***90***	25300	38.6	***102***	24000	62	***143***	20800	—	—	—	69600	
	24.00	31.3	***97***	28200	37.5	***113***	27400	60	***158***	23800	—	—	—	71700	
	27.40	27.4	***86***	28400	32.8	***102***	28100	53	***143***	24500	—	—	—	71700	
	32.27	23.2	***66***	25600	27.9	***78***	25300	44.9	***122***	24700	—	—	—	70600	
RE 3003	**51.30**	14.6	***56***	33800	17.5	***63***	32000	28.3	***89***	27700	57	***144***	22500	78800	19 (H) 18 (F)
	60.56	12.4	***49.7***	35500	14.9	***56***	33600	23.9	***79***	29100	47.9	***128***	23700	78800	
	76.00	9.9	***40.4***	36200	11.8	***48.0***	35900	19.1	***67***	31200	38.2	***109***	25300	78800	
	88.62	8.5	***35.0***	36600	10.2	***41.5***	36200	16.4	***59***	32100	32.7	***96***	26100	78800	
	103.02	7.3	***30.3***	36900	8.7	***36.0***	36500	14.1	***53***	33600	28.2	***87***	27300	78800	
	108.80	6.9	***25.4***	32700	8.3	***30.2***	32300	13.3	***47.4***	31500	26.7	***81.7***	27100	78800	
	124.62	6.0	***25.7***	37800	7.2	***30.1***	36900	11.6	***46.8***	35600	23.3	***76.0***	28900	78800	
	144.42	5.2	***16.5***	28100	6.2	***19.6***	27800	10.0	***30.7***	27000	20.1	***58.9***	26000	69600	
	153.00	4.9	***18.4***	33300	5.9	***21.9***	33000	9.5	***34.4***	32100	19.0	***64.4***	30100	78800	
	180.00	4.2	***15.3***	32600	5.0	***17.9***	31700	8.1	***27.7***	30500	16.1	***53.3***	29300	71700	
	205.54	3.6	***13.7***	33200	4.4	***16.0***	32300	7.1	***24.5***	30700	14.1	***47.0***	29500	71700	
	242.02	3.1	***10.1***	28700	3.7	***11.9***	28400	6.0	***18.7***	27700	12.0	***36.0***	26600	70600	
RE 3004	**178.52**	4.2	***19.4***	39900	5.0	***22.7***	38800	8.1	***34.5***	36700	16.2	***61.6***	32700	78800	15 (H) 14 (F)
	208.16	3.6	***17.0***	40800	4.3	***19.9***	39700	7.0	***29.8***	37000	13.9	***54.4***	33700	78800	
	218.70	3.4	***16.3***	41100	4.1	***19.1***	40000	6.6	***28.6***	37200	13.3	***53.4***	34800	78800	
	255.00	2.9	***14.1***	41300	3.5	***16.7***	40900	5.7	***25.1***	38100	11.4	***47.2***	35800	78800	
	289.11	2.6	***10.5***	35000	3.1	***12.3***	34000	5.0	***18.4***	31700	10.0	***35.0***	30100	71700	
	324.00	2.3	***11.7***	43700	2.8	***13.7***	42500	4.5	***20.5***	39500	9.0	***37.8***	36400	78800	
	349.40	2.1	***11.0***	44200	2.6	***12.8***	43000	4.1	***19.2***	40000	8.3	***35.2***	36600	78800	
	381.18	2.0	***8.3***	36500	2.4	***9.7***	35500	3.8	***14.5***	33000	7.6	***27.0***	30600	71700	
	439.17	1.7	***8.6***	43600	2.0	***10.1***	42500	3.3	***15.7***	41000	6.6	***28.5***	37300	78800	
	508.43	1.5	***7.6***	44600	1.8	***8.9***	43400	2.9	***13.7***	41400	5.7	***25.2***	38100	78800	
	569.18	1.3	***5.4***	35400	1.6	***6.4***	35000	2.5	***10.1***	34100	5.1	***18.6***	31600	71700	
	636.12	1.2	***6.4***	46600	1.4	***7.6***	46100	2.3	***11.6***	43800	4.6	***20.8***	39400	78800	
	699.20	1.1	***5.0***	40000	1.3	***5.8***	38900	2.1	***8.7***	36200	4.1	***15.7***	32600	71700	
	783.36	0.96	***4.3***	38600	1.1	***5.0***	37500	1.9	***7.6***	35200	3.7	***14.5***	33900	78800	
	897.23	0.84	***4.1***	42600	1.0	***4.9***	42100	1.6	***7.7***	41000	3.2	***14.8***	39400	78800	
	1007.92	0.74	***2.9***	33400	0.89	***3.4***	32500	1.4	***5.0***	30200	2.9	***9.7***	29000	69600	
	1101.60	0.68	***3.2***	40600	0.82	***3.7***	39500	1.3	***5.6***	36800	2.6	***10.5***	34500	78800	
	1257.88	0.60	***2.4***	34500	0.72	***2.8***	33600	1.2	***4.2***	31200	2.3	***7.9***	29400	69600	
	1396.25	0.54	***2.1***	33700	0.64	***2.4***	32800	1.0	***3.7***	30600	2.1	***7.1***	29400	70600	
	1742.52	0.43	***1.7***	34800	0.52	***2.0***	33900	0.83	***3.0***	31500	1.7	***5.7***	29800	70600	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 3002	**12.29**	61	***107***	15600	73	***121***	14800	118	***169***	12800	236	***275***	10400	48300	24 (H) 22 (F)
	14.45	52	***107***	18400	62	***121***	17400	100	***169***	15100	201	***275***	12200	56900	
	18.67	40.2	***54***	12000	48.2	***64***	11900	78	***100***	11500	155	***191***	11000	30900	
	21.96	34.2	***54***	14100	41.0	***64***	14000	66	***100***	13600	132	***191***	12900	36400	
RA 3003	**41.65**	18.0	***66***	31700	21.6	***74***	30000	34.8	***104***	26000	70	***169***	21100	78800	15 (H) 17 (F)
	48.57	15.4	***58***	32700	18.5	***66***	31000	29.9	***92***	26800	60	***149***	21800	78800	
	57.00	13.2	***52.6***	34900	15.8	***60***	33000	25.4	***84***	28600	51	***136***	23200	78800	
	66.46	11.3	***46.5***	35900	13.5	***53***	34000	21.8	***74***	29500	43.6	***120***	23900	78800	
	70.15	10.7	***36.8***	30000	12.8	***43.7***	29700	20.7	***68***	28900	41.3	***126***	26700	71700	
	78.19	9.6	***33.2***	30200	11.5	***39.4***	29900	18.5	***62***	29100	37.1	***119***	27900	71700	
	93.18	8.0	***25.3***	27400	9.7	***30.0***	27100	15.6	***47.1***	26400	31.1	***90***	25300	69600	
	109.62	6.8	***24.1***	30800	8.2	***28.7***	30400	13.2	***45.0***	29600	26.5	***86***	28500	71700	
	129.08	5.8	***18.5***	27700	7.0	***21.9***	27400	11.2	***34.4***	26700	22.5	***66***	25700	70600	
RA 3004	**142.91**	5.2	***23.2***	38600	6.3	***27.8***	37500	10.1	***43.2***	36200	20.3	***73***	30600	78800	14 (H) 13 (F)
	166.63	4.5	***20.4***	39500	5.4	***24.4***	38400	8.7	***37.4***	36500	17.4	***65***	31500	78800	
	196.71	3.8	***17.7***	40500	4.6	***21.2***	39400	7.4	***32.0***	36900	14.7	***58***	33200	78800	
	231.43	3.2	***12.6***	33800	3.9	***15.1***	32900	6.3	***22.8***	30900	12.5	***43.8***	29700	71700	
	246.86	3.0	***14.4***	41200	3.7	***17.5***	40700	5.9	***26.2***	37900	11.7	***49.1***	35500	71700	
	282.46	2.7	***12.7***	41600	3.2	***15.4***	41100	5.1	***23.4***	38700	10.3	***43.7***	36200	78800	
	304.00	2.5	***12.2***	43200	3.0	***14.7***	42100	4.8	***22.0***	39100	9.5	***40.8***	36300	78800	
	347.14	2.2	***10.0***	40300	2.6	***12.2***	39900	4.2	***19.1***	38800	8.4	***36.0***	36600	78800	
	407.16	1.8	***7.3***	34700	2.2	***8.9***	34300	3.6	***14.0***	33300	7.1	***19.7***	23500	71700	
	435.20	1.7	***7.0***	35400	2.1	***8.5***	35000	3.3	***13.4***	34100	6.7	***25.7***	32700	78800	
	502.94	1.5	***6.5***	38000	1.8	***7.8***	37000	2.9	***11.7***	34400	5.8	***21.1***	31100	71700	
	572.57	1.3	***5.3***	35400	1.6	***6.5***	35000	2.5	***10.2***	34100	5.1	***18.8***	31600	71700	
	612.00	1.2	***5.2***	37200	1.5	***6.3***	36200	2.4	***9.7***	34700	4.7	***18.6***	33400	78800	
	720.00	1.0	***4.8***	40100	1.3	***5.7***	39100	2.0	***8.6***	36300	4.0	***15.5***	32700	71700	
	800.27	0.94	***3.3***	31000	1.1	***4.0***	30400	1.8	***6.3***	29600	3.6	***12.1***	28500	70600	
	968.07	0.77	***2.8***	31900	0.93	***3.4***	31000	1.5	***5.3***	29900	3.0	***10.1***	28800	70600	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 3511	**3.84**	195	***451***	21500	234	***512***	20300	378	***715***	17600	—	—	—	96500	
	4.74	158	***379***	22300	190	***431***	21100	306	***602***	18300	—	—	—	79800	53 (H) 54 (F)
	5.44	138	***340***	22900	166	***386***	21700	267	***539***	18800	—	—	—	64100	
	6.46	116	***253***	20300	139	***301***	20100	224	***467***	19400	—	—	—	56000	
RE 3512	**13.68**	55	***133***	22100	66	***152***	20900	106	***212***	18100	—	—	—	96500	
	16.88	44.4	***133***	27200	53	***152***	25800	86	***212***	22400	—	—	—	79800	
	19.68	38.1	***118***	28100	45.7	***134***	26600	74	***187***	23000	—	—	—	79800	
	22.59	33.2	***92***	25300	39.8	***110***	25000	64	***172***	24300	—	—	—	64100	
	24.16	31.0	***100***	29200	37.3	***113***	27600	60	***158***	23900	—	—	—	79800	31 (H) 31 (F)
	27.73	27.0	***76***	25600	32.5	***90***	25300	52	***142***	24600	—	—	—	64100	
	31.67	23.7	***67***	25800	28.4	***80***	25500	45.8	***125***	24800	—	—	—	64100	
	37.29	20.1	***58***	26000	24.1	***68***	25700	38.9	***107***	25000	—	—	—	64100	
	44.31	16.9	***42***	22700	20.3	***50***	22400	32.7	***79***	21800	—	—	—	56000	
RE 3513	**49.25**	15.2	***56***	32400	18.3	***63***	30700	29.4	***89***	26600	59	***144***	21600	96500	
	58.14	12.9	***49.7***	34100	15.5	***56***	32300	24.9	***79***	28000	49.9	***128***	22700	96500	
	60.75	12.3	***46.9***	33600	14.8	***56***	33300	23.9	***87***	32400	47.7	***144***	26700	79800	
	72.96	10.3	***42.4***	36500	12.3	***48.1***	34500	19.9	***67***	29900	39.7	***109***	24300	96500	
	82.33	9.1	***28.0***	27200	10.9	***33.3***	26900	17.6	***52***	26200	35.2	***100***	25200	64100	
	90.00	8.3	***32.4***	34400	10.0	***38.4***	34000	16.1	***60***	33100	32.2	***109***	30000	79800	
	98.89	7.6	***32.3***	37700	9.1	***38.3***	37200	14.7	***53***	32300	29.3	***87***	26200	92900	
	104.94	7.1	***28.1***	34800	8.6	***33.3***	34300	13.8	***52***	33400	27.6	***96***	30900	79800	
	121.99	6.1	***24.7***	35600	7.4	***28.9***	34600	11.9	***45.2***	33700	23.8	***87***	32300	79800	22 (H) 22 (F)
	149.78	5.0	***20.8***	36700	6.0	***24.3***	35700	9.7	***37.3***	34100	19.4	***72***	32800	79800	
	168.88	4.4	***14.7***	29300	5.3	***17.1***	28500	8.6	***26.5***	27300	17.2	***51***	26200	64100	
	181.18	4.1	***17.7***	37800	5.0	***20.6***	36800	8.0	***31.2***	34500	16.0	***60***	33100	79800	
	207.98	3.6	***12.3***	30200	4.3	***14.4***	29400	7.0	***21.8***	27600	13.9	***41.8***	26600	64100	
	237.49	3.2	***11.0***	30800	3.8	***12.8***	30000	6.1	***19.2***	27900	12.2	***36.9***	26800	64100	
	247.15	3.0	***9.0***	26300	3.6	***10.5***	25500	5.9	***16.0***	24100	11.7	***30.7***	23200	56000	
	279.64	2.7	***9.6***	31600	3.2	***11.2***	30700	5.2	***16.8***	28600	10.4	***31.6***	27000	64100	
	332.31	2.3	***7.0***	27500	2.7	***8.2***	26700	4.4	***12.3***	24900	8.7	***23.2***	23600	56000	
RE 3514	**202.33**	3.7	***19.1***	44500	4.4	***22.7***	44000	7.2	***33.8***	40700	14.3	***54.8***	33000	96500	
	209.95	3.6	***18.5***	44600	4.3	***21.9***	44100	6.9	***32.9***	41100	13.8	***53.4***	33400	96500	
	247.86	3.0	***15.8***	45000	3.6	***18.7***	44600	5.9	***29.3***	43200	11.7	***47.6***	35100	96500	
	291.01	2.6	***12.1***	40600	3.1	***14.2***	39500	5.0	***21.2***	36800	10.0	***39.3***	34000	79800	
	311.04	2.4	***12.9***	46300	2.9	***15.1***	45100	4.7	***23.7***	43900	9.3	***40.6***	37600	96500	
	350.48	2.1	***10.4***	41800	2.6	***12.1***	40600	4.1	***18.1***	37800	8.3	***33.0***	34400	79800	
	408.66	1.8	***9.1***	42800	2.2	***10.6***	41600	3.5	***15.9***	38700	7.1	***28.7***	34800	79800	
	447.37	1.7	***8.4***	43300	2.0	***9.8***	42200	3.2	***14.7***	39200	6.5	***26.5***	35300	79800	
	501.74	1.5	***7.2***	41800	1.8	***8.6***	41400	2.9	***13.4***	39900	5.8	***24.1***	35900	79800	
	570.55	1.3	***6.7***	43900	1.6	***7.8***	42700	2.5	***11.8***	40100	5.1	***22.7***	38500	92900	
	648.00	1.2	***6.1***	45800	1.4	***7.2***	44600	2.2	***10.8***	41500	4.5	***19.4***	37400	79800	17 (H)
	703.80	1.1	***5.7***	46400	1.3	***6.7***	45200	2.1	***10.0***	42000	4.1	***18.1***	37800	79800	18 (F)
	807.90	0.93	***4.0***	37100	1.1	***4.7***	36100	1.8	***7.0***	33600	3.6	***12.6***	30200	64100	
	878.34	0.85	***4.7***	48000	1.0	***5.5***	46700	1.7	***8.3***	43400	3.3	***15.0***	39100	79800	
	1045.29	0.72	***3.9***	46500	0.86	***4.5***	45300	1.4	***6.8***	42100	2.8	***12.9***	40200	79800	
	1140.94	0.66	***2.8***	36900	0.79	***3.3***	35900	1.3	***5.1***	34600	2.5	***9.4***	31900	64100	
	1304.53	0.57	***3.2***	48100	0.69	***3.7***	46800	1.1	***5.6***	43600	2.2	***10.5***	40900	79800	
	1413.55	0.53	***2.5***	40400	0.64	***2.9***	39300	1.0	***4.3***	36500	2.1	***7.8***	32900	64100	
	1613.32	0.46	***2.1***	38900	0.56	***2.4***	37900	0.90	***3.7***	35300	1.8	***7.0***	33600	64100	
	1779.51	0.42	***1.7***	35400	0.51	***2.0***	34400	0.81	***3.0***	32000	1.6	***5.4***	28900	56000	
	2013.43	0.37	***0.2***	40300	0.45	***2.0***	39200	0.72	***3.0***	36400	1.4	***5.7***	34400	64100	
	2392.62	0.31	***0.1***	37000	0.38	***1.6***	36000	0.61	***2.4***	33500	1.2	***4.2***	30200	56000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 3512	**12.48**	60	***206***	30600	72	***234***	29000	116	***326***	25100	232	***530***	20400	88500	30 (H) 31 (F)
	15.39	48.7	***169***	31100	58	***197***	30100	94	***275***	26100	188	***446***	21200	79800	
	17.67	42.4	***118***	24900	51	***141***	24700	82	***220***	24000	164	***399***	21800	64100	
	21.00	35.7	***87***	21700	42.9	***103***	21500	69	***162***	20900	138	***311***	20100	56000	
RA 3513	**39.99**	18.8	***66***	30500	22.5	***74***	28800	36.3	***104***	25000	73	***169***	20300	96500	20 (H) 20 (F)
	46.63	16.1	***58***	31400	19.3	***66***	29700	31.1	***92***	25800	62	***149***	20900	92900	
	49.33	15.2	***58***	33200	18.2	***69***	32900	29.4	***104***	30800	59	***169***	25000	79800	
	57.51	13.0	***50***	33500	15.6	***60***	33200	25.2	***92***	31800	50	***149***	25800	79800	
	63.80	11.8	***46.5***	34500	14.1	***53***	32600	22.7	***74***	28300	45.5	***120***	23000	92900	
	70.62	10.6	***41.3***	33900	12.7	***49.1***	33600	20.5	***77***	32600	41.1	***126***	26800	79800	
	78.70	9.5	***37.3***	34100	11.4	***44.3***	33800	18.4	***69***	32900	36.8	***120***	28400	79800	
	90.35	8.3	***26.1***	27400	10.0	***30.9***	27100	16.0	***48.5***	26300	32.1	***93***	25300	64100	
	96.63	7.8	***30.7***	34500	9.3	***36.5***	34200	15.0	***57***	33200	30.0	***101***	29500	79800	
	110.34	6.8	***25.3***	32400	8.2	***30.0***	32100	13.1	***47.1***	31200	26.3	***90***	30000	79800	
	126.66	5.9	***19.0***	28000	7.1	***22.5***	27600	11.4	***35.3***	26900	22.9	***68***	25800	64100	
	131.82	5.7	***15.8***	24100	6.8	***18.7***	23900	11.0	***29.3***	23200	22.0	***56***	22300	56000	
	149.14	5.0	***16.6***	28700	6.0	***19.4***	28000	9.7	***30.2***	27100	19.4	***58***	26100	64100	
	177.23	4.2	***12.1***	25000	5.1	***14.2***	24300	8.2	***22.2***	23600	16.4	***43***	22700	56000	
RA 3514	**137.19**	5.5	***28.0***	43500	6.6	***32.2***	41700	10.6	***45.0***	36200	21.1	***73***	29400	96500	16 (H) 16 (F)
	161.96	4.6	***23.9***	43900	5.6	***28.4***	43500	9.0	***40.1***	38000	17.9	***65***	30900	96500	
	196.99	3.8	***19.9***	44400	4.6	***23.6***	44000	7.4	***33.4***	38600	14.7	***52.3***	30100	96500	
	229.69	3.3	***15.2***	39500	3.9	***18.0***	39100	6.3	***28.3***	38100	12.6	***50.1***	33800	92900	
	250.71	3.0	***14.0***	39700	3.6	***16.3***	38600	5.8	***24.5***	35900	11.6	***45.9***	33700	79800	
	283.34	2.6	***12.6***	40400	3.2	***14.7***	39300	5.1	***22.0***	36600	10.2	***40.9***	34000	79800	
	317.56	2.4	***9.0***	32200	2.8	***10.5***	31300	4.6	***15.7***	29200	9.1	***29.2***	27200	56000	
	358.92	2.1	***10.1***	41000	2.5	***12.0***	40600	4.0	***18.0***	37900	8.1	***32.7***	34400	79800	
	395.58	1.9	***9.3***	41500	2.3	***10.8***	40400	3.7	***16.9***	39300	7.3	***32.6***	37700	92900	
	445.50	1.7	***5.7***	28700	2.0	***6.6***	27900	3.3	***10.0***	26000	6.5	***18.3***	23900	56000	
	504.73	1.5	***7.3***	41800	1.8	***8.7***	41400	2.9	***13.5***	40000	5.7	***24.3***	36000	79800	
	561.00	1.3	***4.8***	30300	1.6	***5.7***	30000	2.6	***8.9***	29200	5.2	***17.1***	28100	56000	
	633.86	1.2	***4.8***	34800	1.4	***5.8***	34400	2.3	***8.7***	32400	4.6	***15.7***	29200	64100	
	724.74	1.0	***5.4***	44000	1.2	***6.3***	42800	2.0	***9.7***	41100	4.0	***17.9***	38000	79800	
	795.43	0.94	***3.9***	35200	1.1	***4.6***	34900	1.8	***7.2***	33500	3.6	***12.9***	30200	64100	
	924.69	0.81	***3.4***	35800	1.0	***4.0***	35200	1.6	***6.3***	34200	3.1	***11.4***	30900	64100	
	988.62	0.76	***2.9***	32400	0.91	***3.4***	31500	1.5	***5.1***	29300	2.9	***9.1***	26400	56000	
	1118.57	0.67	***2.9***	36800	0.80	***3.4***	35800	1.3	***5.3***	34600	2.6	***9.7***	31800	64100	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RE 4801	**3.84**	195	***601***	28700	234	***683***	27100	378	***953***	23500	—	—	—	111000	53 (H)
	5.18	145	***471***	30200	174	***535***	28600	280	***746***	24800	—	—	—	93500	54 (F)
RE 4802	**13.17**	57	***227***	36200	68	***258***	34300	110	***361***	29700	—	—	—	111000	
	15.71	47.7	***198***	37600	57	***225***	35600	92	***314***	30900	—	—	—	111000	
	17.75	42.3	***167***	35900	51	***198***	35500	82	***311***	34600	—	—	—	93500	
	20.16	37.2	***162***	39400	44.6	***184***	37300	72	***256***	32400	—	—	—	111000	34 (H)
	21.18	35.4	***141***	36300	42.5	***168***	35900	68	***263***	34900	—	—	—	93500	34 (F)
	23.93	31.3	***116***	33700	37.6	***138***	33400	61	***217***	32500	—	—	—	92900	
	27.18	27.6	***112***	36800	33.1	***133***	36400	53	***208***	35400	—	—	—	93500	
	32.25	23.3	***95***	37100	27.9	***113***	36800	45.0	***177***	35800	—	—	—	93500	
RE 4803	**47.40**	15.8	***80***	44700	19.0	***91***	42400	30.6	***127***	36700	61	***206***	29800	111000	
	56.55	13.3	***79***	52700	15.9	***91***	50500	25.6	***127***	43800	51	***206***	35600	111000	
	66.76	11.2	***67***	53200	13.5	***80***	52300	21.7	***111***	45300	43.4	***181***	36800	111000	
	72.58	10.3	***53***	45700	12.4	***63***	45300	20.0	***99***	44000	40.0	***174***	38600	111000	
	83.78	9.0	***54***	53900	10.7	***65***	53300	17.3	***92***	47200	34.6	***150***	38400	111000	
	90.00	8.3	***37.1***	39400	10.0	***44.0***	39000	16.1	***69***	37900	32.2	***133***	36400	93500	
	101.69	7.4	***30.5***	36600	8.9	***36.3***	36300	14.3	***57***	35300	28.5	***109***	33900	92900	24 (H)
	112.94	6.6	***29.9***	39900	8.0	***35.5***	39500	12.8	***56***	38400	25.7	***107***	36900	93500	25 (F)
	124.99	6.0	***32.0***	47200	7.2	***38.0***	46700	11.6	***60***	45400	23.2	***114***	43700	111000	
	144.94	5.2	***23.7***	40500	6.2	***28.1***	40000	10.0	***44.0***	39000	20.0	***85***	37500	93500	
	158.82	4.7	***21.8***	40900	5.7	***25.8***	40300	9.1	***40.4***	39200	18.3	***78***	37700	93500	
	172.02	4.4	***20.4***	41400	5.2	***23.9***	40400	8.4	***37.5***	39400	16.9	***72***	37800	93500	
	199.97	3.8	***17.9***	42300	4.5	***20.9***	41200	7.3	***32.5***	39700	14.5	***63***	38200	93500	
	241.90	3.1	***15.3***	43600	3.7	***17.8***	42400	6.0	***27.2***	40100	12.0	***52***	38600	93500	
RE 4804	**164.94**	4.5	***27.9***	54300	5.5	***32.5***	51400	8.8	***45.4***	44500	17.6	***74***	36200	111000	
	196.80	3.8	***25.9***	60100	4.6	***31.0***	58500	7.4	***45.4***	53100	14.7	***74***	43200	111000	
	232.34	3.2	***22.5***	61700	3.9	***26.9***	60000	6.2	***40.4***	55800	12.5	***74***	50900	111000	
	252.56	3.0	***16.5***	49100	3.6	***20.1***	48600	5.7	***31.5***	47300	11.5	***60***	45400	111000	
	284.62	2.6	***18.9***	63600	3.2	***22.7***	61900	5.1	***34.0***	57600	10.2	***63***	53400	111000	
	322.81	2.3	***14.1***	53900	2.8	***17.2***	53300	4.5	***27.0***	51900	9.0	***49.4***	47400	111000	
	357.18	2.1	***14.0***	58900	2.5	***17.0***	58300	4.1	***26.7***	56800	8.1	***50.9***	54200	111000	
	401.94	1.9	***9.9***	47100	2.2	***11.9***	45800	3.6	***17.8***	42600	7.2	***33.2***	39700	93500	
	456.90	1.6	***8.9***	48000	2.0	***10.7***	46700	3.2	***16.0***	43400	6.3	***29.4***	40000	93500	
	504.40	1.5	***8.2***	48700	1.8	***9.8***	47400	2.9	***14.7***	44100	5.7	***26.8***	40200	93500	19 (H)
	564.43	1.3	***7.4***	49500	1.6	***8.9***	48200	2.6	***13.3***	44800	5.1	***24.1***	40500	93500	19 (F)
	634.83	1.2	***6.7***	50400	1.4	***8.1***	49100	2.3	***12.1***	45600	4.6	***21.8***	41100	93500	
	709.31	1.1	***6.1***	51300	1.3	***7.3***	49900	2.0	***11.0***	46400	4.1	***19.8***	41800	93500	
	792.27	0.95	***5.6***	52100	1.1	***6.7***	50700	1.8	***10.0***	47200	3.7	***18.0***	42500	93500	
	899.94	0.83	***5.3***	56500	1.0	***6.4***	54900	1.6	***9.5***	51100	3.2	***18.2***	48900	111000	
	992.41	0.76	***4.6***	53900	0.91	***5.5***	52500	1.5	***8.3***	48800	2.9	***14.9***	44000	93500	
	1143.53	0.66	***4.0***	54200	0.79	***4.9***	53600	1.3	***7.3***	49900	2.5	***13.2***	44900	93500	
	1238.53	0.61	***3.8***	55800	0.73	***4.6***	54300	1.2	***6.8***	50500	2.3	***12.3***	45500	93500	
	1439.79	0.52	***3.4***	57100	0.63	***4.0***	55500	1.0	***6.0***	51700	2.0	***10.9***	46500	93500	
	1741.68	0.43	***2.9***	58700	0.52	***3.4***	57100	0.83	***5.1***	53200	1.7	***9.2***	47900	93500	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
RA 4802	**12.48**	60	***233***	34600	72	***273***	33800	116	***381***	29300	232	***619***	23800	88500	30 (H) 31 (F)
	16.82	44.6	***178***	35800	53	***212***	35400	86	***332***	34500	172	***553***	28700	93500	
RA 4803	**40.44**	18.5	***108***	50800	22.3	***123***	48100	35.9	***171***	41600	72	***278***	33800	111000	24 (H) 18 (F)
	48.25	15.5	***93***	52200	18.7	***107***	49900	30.1	***149***	43200	60	***242***	35100	111000	
	54.51	13.8	***60***	38300	16.5	***72***	37900	26.6	***112***	36900	53	***216***	35400	93500	
	61.92	12.1	***63***	45300	14.5	***75***	44800	23.4	***117***	43600	46.8	***198***	36800	111000	
	73.31	10.2	***55***	47100	12.3	***66***	46600	19.8	***103***	45300	39.6	***181***	39800	111000	
	94.08	8.0	***42.4***	46400	9.6	***50***	45900	15.4	***79***	44700	30.8	***148***	41700	111000	
	99.06	7.6	***34.4***	39600	9.1	***40.8***	39200	14.6	***64***	38100	29.3	***123***	36700	93500	
	111.66	6.7	***28.4***	36800	8.1	***33.7***	36500	13.0	***53***	35500	26.0	***102***	34100	92900	
	126.82	5.9	***27.2***	40200	7.1	***32.4***	39700	11.4	***51***	38700	22.9	***98***	37200	93500	
	150.52	5.0	***23.2***	40600	6.0	***27.5***	40100	9.6	***43.2***	39100	19.3	***83***	37500	93500	
RA 4804	**132.03**	5.7	***28.5***	42600	6.8	***32.4***	40400	11.0	***45.2***	35000	22.0	***73***	28400	111000	17 (H) 15 (F)
	157.54	4.8	***28.5***	50900	5.7	***32.4***	48200	9.2	***45.2***	41700	18.4	***73***	33900	111000	
	177.99	4.2	***20.6***	41600	5.1	***24.1***	40500	8.1	***37.8***	39400	16.3	***73***	37900	93500	
	202.18	3.7	***21.2***	48500	4.5	***25.1***	48000	7.2	***39.4***	46700	14.3	***73***	43500	111000	
	223.82	3.4	***21.1***	53500	4.0	***24.0***	50600	6.5	***33.4***	43900	13.0	***54.3***	35600	111000	
	250.71	3.0	***15.4***	43800	3.6	***18.0***	42600	5.8	***27.4***	40200	11.6	***53***	38600	93500	
	280.87	2.7	***15.5***	49200	3.2	***18.4***	48700	5.2	***28.8***	47400	10.3	***54.3***	44700	111000	
	314.62	2.4	***12.7***	45300	2.9	***14.8***	44100	4.6	***22.3***	41000	9.2	***42.5***	39200	93500	
	348.19	2.2	***12.7***	50000	2.6	***15.1***	49500	4.2	***23.6***	48200	8.3	***45.4***	46300	111000	
	403.76	1.9	***10.3***	47100	2.2	***12.0***	45800	3.6	***18.0***	42600	7.2	***33.6***	39700	93500	
	442.44	1.7	***9.5***	47700	2.0	***11.1***	46400	3.3	***16.7***	43200	6.6	***30.8***	39900	93500	
	499.97	1.5	***9.1***	51700	1.8	***10.7***	50500	2.9	***16.8***	49200	5.8	***32.3***	47300	111000	
	567.79	1.3	***7.7***	49600	1.6	***9.0***	48200	2.6	***13.5***	44900	5.1	***24.3***	40500	93500	
	635.29	1.2	***7.0***	50400	1.4	***8.2***	49100	2.3	***12.3***	45600	4.6	***22.1***	41100	93500	
	688.07	1.1	***6.5***	51000	1.3	***7.6***	49700	2.1	***11.5***	46200	4.2	***20.6***	41600	93500	
	799.88	0.94	***5.8***	52200	1.1	***6.7***	50800	1.8	***10.1***	47300	3.6	***18.2***	42600	93500	
	967.60	0.78	***4.9***	53700	0.93	***5.7***	52300	1.5	***8.6***	48600	3.0	***15.4***	43800	93500	

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RE 6001		**4.14**	181	***576***	29600	217	***654***	28100	350	***910***	24300	—	—	—	136000	70 (H) 63 (F)
		5.40	139	***467***	31300	167	***530***	29600	269	***740***	25700	—	—	—	112000	
		6.50	115	***383***	30900	138	***452***	30400	223	***630***	26400	—	—	—	85300	
RE 6002	L	**14.20**	53	***227***	39100	63	***258***	37000	102	***361***	32100	—	—	—	114000	40 (H) 36 (F)
		15.88	47.2	***231***	44400	57	***262***	42000	91	***366***	36400	—	—	—	135000	
	L	**16.95**	44.3	***198***	40600	53	***225***	38400	86	***314***	33300	—	—	—	114000	
		20.70	36.2	***175***	43900	43.5	***212***	43400	70	***296***	38400	—	—	—	112000	
		21.75	34.5	***185***	48700	41.4	***210***	46200	67	***294***	40000	—	—	—	135000	
	L	**22.09**	34.0	***165***	44100	40.7	***196***	43600	66	***283***	39200	—	—	—	85300	
	L	**25.81**	29.1	***116***	36400	34.9	***138***	36000	56	***217***	35000	—	—	—	114000	
	L	**28.35**	26.5	***130***	44700	31.7	***155***	44200	51	***238***	42200	—	—	—	112000	
	L	**33.65**	22.3	***111***	45100	26.7	***132***	44700	43.1	***206***	43500	—	—	—	112000	
	L	**40.50**	18.5	***70***	34300	22.2	***83***	34000	35.8	***130***	33100	—	—	—	85300	
RE 6003	L	**51.13**	14.7	***80***	48300	17.6	***91***	45700	28.4	***127***	39600	57	***206***	32200	114000	28 (H) 28 (F)
		63.52	11.8	***77***	57700	14.2	***102***	57100	22.8	***142***	55200	45.7	***231***	44800	135000	
	L	**72.03**	10.4	***68***	58200	12.5	***80***	56400	20.1	***111***	48900	40.3	***181***	39700	114000	
	L	**79.53**	9.4	***51***	47400	11.3	***60***	46900	18.2	***94***	45600	36.5	***181***	43900	112000	
		98.86	7.6	***51***	60100	9.1	***75***	58600	14.7	***104***	57000	29.3	***169***	51200	135000	
	L	**114.79**	6.5	***35.7***	48400	7.8	***42.4***	47900	12.6	***67***	46600	25.3	***128***	44800	112000	
	L	**120.49**	6.2	***34.2***	48600	7.5	***40.5***	48000	12.0	***64***	46700	24.1	***122***	44900	112000	
	L	**141.82**	5.3	***22.0***	36900	6.3	***26.2***	36500	10.2	***41.0***	35500	20.4	***79***	34100	85300	
	L	**160.04**	4.7	***21.4***	40400	5.6	***25.4***	40000	9.1	***39.8***	38900	18.1	***77***	37400	100000	
	L	**175.77**	4.3	***24.8***	51500	5.1	***29.0***	50100	8.2	***44.5***	47800	16.5	***86***	45900	112000	
	L	**199.43**	3.8	***16.4***	38700	4.5	***19.2***	37600	7.3	***29.7***	36200	14.5	***57***	34800	85300	
	L	**216.00**	3.5	***15.4***	39100	4.2	***17.9***	38100	6.7	***27.6***	36400	13.4	***53***	35000	85300	
	L	**251.10**	3.0	***13.5***	40000	3.6	***15.8***	38900	5.8	***23.9***	36700	11.5	***46***	35300	85300	
RE 6004	L	**177.95**	4.2	***28.6***	58500	5.1	***32.5***	55400	8.1	***45.4***	48000	16.3	***74***	39000	114000	22 (H) 21 (F)
	L	**212.33**	3.5	***27.6***	67400	4.2	***32.2***	65600	6.8	***45.4***	57300	13.7	***74***	46600	114000	
		228.69	3.3	***25.9***	68200	3.9	***42.6***	66300	6.3	***59***	61700	12.7	***97***	57500	135000	
	L	**250.66**	3.0	***23.8***	68700	3.6	***28.0***	67300	5.8	***42.0***	62600	11.6	***74***	55000	114000	
	L	**284.15**	2.6	***16.9***	55300	3.2	***19.8***	53800	5.1	***29.6***	50100	10.2	***56***	47200	112000	
		313.20	2.4	***19.3***	69400	2.9	***34.2***	68700	4.6	***47.7***	64700	9.3	***78***	58500	135000	
		355.91	2.1	***17.1***	69900	2.5	***31.3***	69200	4.1	***43.6***	66000	8.1	***71***	59400	135000	
		393.85	1.9	***16.3***	74000	2.3	***29.1***	72000	3.7	***40.7***	67000	7.4	***66***	60300	135000	
		447.55	1.7	***14.7***	75500	2.0	***26.6***	73400	3.2	***37.2***	68300	6.5	***60***	61500	135000	
	L	**502.28**	1.5	***10.4***	60300	1.8	***12.2***	58700	2.9	***18.3***	54600	5.8	***32.9***	49200	112000	
	L	**569.67**	1.3	***9.4***	61500	1.6	***10.9***	59800	2.5	***16.4***	55600	5.1	***29.6***	50100	112000	
		621.00	1.2	***8.7***	62300	1.4	***20.6***	60600	2.3	***28.8***	56400	4.7	***46.8***	50800	112000	
		703.08	1.1	***7.8***	63500	1.3	***18.9***	61700	2.1	***26.4***	57400	4.1	***42.9***	51700	112000	
	L	**790.17**	0.95	***7.1***	64600	1.1	***8.3***	62800	1.8	***12.4***	58500	3.7	***22.4***	52600	112000	
	L	**906.45**	0.83	***6.3***	66000	1.0	***7.4***	64200	1.6	***11.1***	59700	3.2	***19.9***	53800	112000	
	L	**986.14**	0.76	***5.9***	66800	0.91	***6.9***	65000	1.5	***10.3***	60500	2.9	***18.6***	54400	112000	
	L	**1088.64**	0.69	***5.4***	67800	0.83	***6.3***	66000	1.3	***9.5***	61400	2.7	***17.1***	55300	112000	
	L	**1265.54**	0.59	***4.8***	69400	0.71	***5.6***	67500	1.1	***8.3***	62800	2.3	***15.0***	56500	112000	
	L	**1435.91**	0.52	***3.2***	52100	0.63	***3.7***	50700	1.0	***5.5***	47200	2.0	***9.9***	42500	85300	

			n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
		ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RA 6002		**13.46**	56	***233***	37300	67	***273***	36500	108	***381***	31600	215	***619***	25700	95500	36 (H) 34 (F)
		17.55	42.7	***208***	43500	51	***242***	42200	83	***338***	36600	165	***549***	29700	112000	
		21.13	35.5	***131***	33100	42.6	***156***	32700	69	***245***	31900	137	***469***	30500	85300	
RA 6003	L	**43.63**	17.2	***108***	54800	20.6	***123***	51800	33.2	***171***	44900	66	***278***	36500	114000	27 (H) 25 (F)
	L	**52.05**	14.4	***94***	56900	17.3	***107***	53800	27.9	***149***	46700	56	***242***	37900	114000	
	L	**56.87**	13.2	***70***	46500	15.8	***84***	46000	25.5	***131***	44800	51	***247***	42300	112000	
		66.80	11.2	***75***	57900	13.5	***89***	57300	21.7	***139***	55800	43.4	***227***	45500	135000	
		74.11	10.1	***55***	47600	12.1	***66***	47100	19.6	***103***	45800	39.1	***196***	43600	135000	
	L	**79.09**	9.5	***55***	50800	11.4	***66***	50200	18.3	***103***	48900	36.7	***181***	43000	114000	
	L	**87.08**	8.6	***47.1***	47600	10.3	***56***	47200	16.7	***88***	45900	33.3	***169***	44100	112000	
		101.50	7.4	***51***	60300	8.9	***60***	58700	14.3	***94***	57100	28.6	***169***	51600	135000	
		116.28	6.5	***27.0***	36500	7.7	***32.1***	36100	12.5	***50***	35100	24.9	***97***	33800	85300	
	L	**132.30**	5.7	***32.1***	49300	6.8	***37.7***	48300	11.0	***59***	47000	21.9	***114***	45200	112000	
	L	**157.02**	4.8	***27.7***	50600	5.7	***32.4***	49200	9.2	***50***	47500	18.5	***97***	45600	112000	
RA 6004	L	**142.45**	5.3	***28.5***	46000	6.3	***32.4***	43500	10.2	***45.2***	37700	20.4	***73***	30600	114000	20 (H) 18 (F)
	L	**168.17**	4.5	***28.5***	54300	5.4	***32.4***	51400	8.6	***45.2***	44500	17.2	***73***	36200	114000	
		176.96	4.2	***28.5***	57100	5.1	***32.4***	54100	8.2	***45.2***	46900	16.4	***73***	38100	135000	
	L	**200.65**	3.7	***28.5***	64800	4.5	***32.4***	61300	7.2	***45.2***	53200	14.5	***73***	43200	114000	
	L	**221.54**	3.4	***21.2***	53300	4.1	***24.8***	51800	6.5	***37.3***	48400	13.1	***72***	46500	112000	
	L	**251.80**	3.0	***21.8***	62100	3.6	***25.8***	61400	5.8	***40.5***	59800	11.5	***73***	54200	114000	
	L	**284.31**	2.6	***17.2***	55300	3.2	***20.1***	53800	5.1	***30.1***	50100	10.2	***57***	47200	112000	
	L	**314.74**	2.4	***15.8***	56200	2.9	***18.4***	54700	4.6	***27.6***	50900	9.2	***51.5***	47500	112000	
		348.00	2.2	***17.7***	69900	2.6	***21.0***	69100	4.2	***32.3***	65800	8.3	***54.3***	55400	135000	
		395.45	1.9	***15.7***	70400	2.3	***18.7***	69600	3.7	***28.9***	67100	7.3	***52.1***	60400	135000	
		453.60	1.7	***11.6***	59400	2.0	***10.0***	42600	3.2	***14.9***	39600	6.4	***36.5***	48500	85300	
		515.45	1.5	***10.4***	60600	1.7	***12.1***	58900	2.8	***18.1***	54800	5.6	***32.7***	49400	112000	
	L	**547.85**	1.4	***9.8***	61100	1.6	***11.5***	59500	2.6	***17.2***	55300	5.3	***31.0***	49800	112000	
	L	**640.17**	1.2	***6.1***	44100	1.4	***7.2***	43300	2.3	***11.2***	42100	4.5	***21.6***	40500	114000	
	L	**703.08**	1.1	***8.0***	63500	1.3	***9.3***	61700	2.1	***13.9***	57400	4.1	***25.1***	51700	112000	
	L	**797.73**	0.94	***5.3***	47700	1.1	***6.2***	46400	1.8	***9.2***	43200	3.6	***16.6***	38900	85300	
	L	**1009.38**	0.74	***5.2***	59200	0.89	***6.0***	57500	1.4	***9.4***	55500	2.9	***18.0***	53300	112000	

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RE 8001		**4.00**	188	***789***	39200	225	***897***	37100	363	***1252***	32200	—	—	—	198000	77 (H-F)
		4.67	161	***696***	40300	193	***790***	38200	311	***1104***	33100	—	—	—	175000	
RE 8002	L	**14.50**	52	***329***	57700	62	***373***	54600	100	***521***	47300	—	—	—	198000	45 (H-F)
	L	**16.00**	46.9	***302***	58500	56	***343***	55400	91	***479***	48000	—	—	—	198000	
		18.82	39.8	***274***	62400	47.8	***311***	59100	77	***434***	51200	—	—	—	198000	
	L	**20.80**	36.1	***244***	61400	43.3	***277***	58100	70	***387***	50300	—	—	—	198000	
		21.96	34.2	***241***	64200	41.0	***274***	60700	66	***383***	52600	—	—	—	175000	
	L	**24.27**	30.9	***225***	66100	37.1	***256***	62600	60	***357***	54200	—	—	—	175000	
	L	**29.17**	25.7	***189***	66600	30.9	***224***	65900	49.7	***314***	57300	—	—	—	175000	
RE 8003	L	**51.66**	14.5	***100***	60800	17.4	***113***	57600	28.1	***158***	49900	—	—	—	198000	33 (H-F)
	L	**57.00**	13.2	***100***	67100	15.8	***113***	63500	25.4	***158***	55100	—	—	—	198000	
	L	**66.46**	11.3	***88***	69200	13.5	***100***	65500	21.8	***140***	56700	—	—	—	198000	
	L	**70.27**	10.7	***87***	72500	12.8	***100***	69200	20.6	***140***	60000	—	—	—	175000	
		78.19	9.6	***92***	85200	11.5	***110***	84300	18.5	***164***	78500	—	—	—	198000	
		93.18	8.0	***78***	86000	9.7	***93***	85100	15.6	***145***	82700	—	—	—	198000	
	L	**100.80**	7.4	***62***	74000	8.9	***74***	73200	14.4	***116***	71200	—	—	—	175000	
		112.00	6.7	***56***	74400	8.0	***67***	73700	12.9	***105***	71700	—	—	—	175000	
		129.08	5.8	***58***	89100	7.0	***68***	86700	11.2	***107***	84400	—	—	—	198000	
	L	**141.32**	5.3	***45.5***	75900	6.4	***54***	74600	10.3	***84***	72600	—	—	—	175000	
	L	**166.40**	4.5	***39.6***	77800	5.4	***46.3***	75700	8.7	***72***	73300	—	—	—	175000	
RE 8004	L	**185.96**	4.0	***41.7***	89300	4.8	***47.4***	84600	7.8	***66***	73300	15.6	***108***	59500	198000	26 (H-F)
	L	**205.20**	3.7	***40.5***	95600	4.4	***47.3***	93000	7.1	***66***	80900	14.1	***108***	65700	198000	
	L	**219.54**	3.4	***37.2***	93900	4.1	***42.2***	88900	6.6	***59***	77000	13.2	***96***	62600	198000	
	L	**255.98**	2.9	***32.2***	95000	3.5	***37.3***	91600	5.7	***52***	79400	11.3	***85***	64500	198000	
	L	**282.46**	2.7	***30.9***	100000	3.2	***36.0***	97600	5.1	***52***	87600	10.3	***85***	71100	198000	
	L	**321.23**	2.3	***26.3***	97300	2.8	***30.9***	95200	4.5	***44.4***	85000	9.0	***72***	69000	198000	
	L	**354.46**	2.1	***25.5***	104000	2.5	***29.7***	101000	4.1	***44.4***	93800	8.2	***72***	76200	198000	
		394.63	1.9	***23.2***	106000	2.3	***27.1***	103000	3.7	***40.7***	95500	7.3	***74***	86500	198000	
		435.20	1.7	***21.4***	107000	2.1	***25.0***	104000	3.3	***37.4***	96900	6.7	***67***	87300	198000	
		502.94	1.5	***18.9***	109000	1.8	***22.1***	106000	2.9	***33.1***	99100	5.8	***60***	89200	198000	
		577.69	1.3	***16.8***	112000	1.6	***19.6***	109000	2.5	***29.4***	101000	5.0	***53***	91100	198000	
		612.00	1.2	***16.0***	113000	1.5	***18.7***	110000	2.4	***28.0***	102000	4.7	***50***	91900	198000	
		698.82	1.1	***14.1***	113000	1.3	***16.7***	112000	2.1	***25.0***	104000	4.1	***45.1***	93800	198000	
		800.27	0.94	***12.3***	114000	1.1	***14.7***	113000	1.8	***22.3***	106000	3.6	***40.2***	95700	198000	
	L	**887.47**	0.85	***9.8***	100000	1.0	***11.5***	97500	1.6	***17.2***	90700	3.3	***30.9***	81700	175000	
		933.65	0.80	***9.4***	101000	1.0	***11.0***	98300	1.6	***16.5***	91400	3.1	***29.6***	82300	175000	
	L	**1031.68**	0.73	***8.5***	101000	0.9	***10.1***	99800	1.4	***15.1***	92800	2.8	***27.2***	83600	175000	
		1129.41	0.66	***8.0***	104000	0.8	***9.3***	101000	1.3	***14.0***	94100	2.6	***25.2***	84700	175000	
	L	**1248.00**	0.60	***7.1***	102000	0.7	***8.5***	101000	1.2	***12.9***	95500	2.3	***23.2***	86000	175000	
RE 8005	L	**647.15**	1.16	***14.9***	108000	1.4	***17.4***	105000	2.2	***26.0***	97700	4.5	***42.3***	79400	198000	22 (H-F)
	L	**714.10**	1.05	***14.4***	115000	1.3	***16.8***	112000	2.0	***25.2***	104000	4.1	***42.3***	87600	198000	
	L	**792.79**	0.95	***12.5***	112000	1.1	***14.6***	109000	1.8	***22.0***	101000	3.7	***36.1***	83100	198000	
	L	**890.81**	0.84	***10.3***	103000	1.0	***12.3***	102000	1.6	***19.2***	99400	3.3	***36.3***	93700	198000	
		991.80	0.76	***10.9***	121000	0.91	***12.7***	118000	1.5	***19.1***	110000	2.9	***34.4***	98900	198000	
	L	**1117.88**	0.67	***8.3***	105000	0.81	***9.9***	103000	1.3	***15.5***	101000	2.6	***29.5***	95800	198000	
	L	**1266.57**	0.59	***7.4***	105000	0.71	***8.8***	104000	1.1	***13.7***	101000	2.3	***26.4***	97000	198000	
		1416.68	0.53	***8.1***	128000	0.64	***9.4***	125000	1.0	***14.1***	116000	2.0	***25.4***	104000	198000	
	L	**1589.42**	0.47	***5.4***	95700	0.57	***6.4***	94700	0.91	***10.0***	92200	1.8	***19.2***	88600	198000	
		1777.79	0.42	***6.6***	133000	0.51	***7.8***	129000	0.82	***11.6***	120000	1.6	***20.9***	108000	198000	
		1993.85	0.38	***6.0***	135000	0.45	***7.0***	131000	0.73	***10.5***	122000	1.5	***19.0***	110000	198000	
	L	**2236.25**	0.34	***4.2***	106000	0.40	***5.0***	104000	0.65	***7.8***	101000	1.3	***14.5***	93900	175000	
		2510.77	0.30	***5.0***	140000	0.36	***5.8***	136000	0.58	***8.7***	126000	1.2	***15.6***	114000	198000	
	L	**2813.91**	0.27	***3.8***	119000	0.32	***4.4***	116000	0.52	***6.6***	108000	1.0	***11.9***	97300	175000	
		3164.84	0.24	***3.5***	124000	0.28	***4.1***	122000	0.46	***6.4***	118000	0.92	***12.4***	114000	198000	

			n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
		ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
RA 8002		**13.00**	58	***233***	36000	69	***273***	35200	112	***381***	30500	223	***619***	24800	92200	35 (H-F)
		15.17	49.5	***233***	42000	59	***273***	41100	96	***381***	35600	191	***619***	28900	108000	
RA 8003	**L**	**44.54**	16.8	***109***	56600	20.2	***124***	53600	32.6	***173***	46400	65	***282***	37700	175000	29 (H-F)
	L	**49.14**	15.3	***109***	62400	18.3	***124***	59100	29.5	***173***	51200	59	***282***	41600	175000	
	L	**57.33**	13.1	***108***	71600	15.7	***124***	69000	25.3	***173***	59800	51	***282***	48600	175000	
	L	**63.89**	11.7	***105***	77600	14.1	***124***	76800	22.7	***173***	66600	45.4	***282***	54100	175000	
		67.45	11.1	***92***	72300	13.3	***110***	71600	21.5	***172***	69600	43.0	***282***	57100	175000	
	L	**76.79**	9.8	***68***	60800	11.7	***81***	60200	18.9	***127***	58600	37.8	***244***	56300	158000	
	L	**89.58**	8.4	***68***	71000	10.0	***81***	70200	16.2	***127***	68400	32.4	***242***	65200	175000	
	L	**97.07**	7.7	***55***	62300	9.3	***66***	61700	14.9	***103***	60000	29.9	***196***	57100	161000	
	L	**113.24**	6.6	***55***	72700	7.9	***66***	71900	12.8	***103***	70000	25.6	***196***	66700	175000	
RA 8004	**L**	**151.00**	5.0	***49.1***	83900	6.0	***56***	79500	9.6	***78***	68900	19.2	***126***	55900	175000	24 (H-F)
	L	**166.62**	4.5	***49.1***	92600	5.4	***56***	87700	8.7	***78***	76000	17.4	***126***	61700	175000	
	L	**176.06**	4.3	***43.3***	86500	5.1	***49.2***	81900	8.2	***69***	70900	16.5	***112***	57600	175000	
	L	**194.27**	3.9	***43.1***	94800	4.6	***49.2***	90300	7.5	***69***	78300	14.9	***112***	63600	175000	
	L	**228.00**	3.3	***37.6***	97100	3.9	***43.9***	94500	6.4	***62***	83500	12.7	***101***	67800	175000	
	L	**252.19**	3.0	***29.0***	82900	3.6	***33.9***	80600	5.7	***51***	75100	11.5	***95***	69900	175000	
		265.85	2.8	***33.0***	99400	3.4	***38.5***	96700	5.5	***58***	90000	10.9	***109***	84500	198000	
		280.62	2.7	***31.5***	100000	3.2	***36.8***	97500	5.2	***55***	90700	10.3	***103***	84800	198000	
		312.76	2.4	***28.8***	102000	2.9	***33.6***	99100	4.6	***50***	92200	9.3	***93***	85300	198000	
	L	**361.76**	2.1	***21.4***	87500	2.5	***24.9***	85100	4.0	***37.4***	79200	8.0	***69***	73700	175000	
		384.00	2.0	***24.2***	105000	2.3	***28.2***	102000	3.8	***42.3***	95100	7.6	***77***	86300	198000	
		438.48	1.7	***21.6***	107000	2.1	***25.2***	104000	3.3	***37.8***	97000	6.6	***68***	87400	198000	
		516.30	1.5	***18.8***	110000	1.7	***21.9***	107000	2.8	***32.9***	99500	5.6	***59***	89600	198000	
		602.35	1.2	***13.9***	94500	1.5	***16.2***	92000	2.4	***24.2***	85600	4.8	***43.6***	77000	175000	
	L	**685.71**	1.1	***9.0***	70200	1.3	***10.5***	68300	2.1	***16.5***	66400	4.2	***31.8***	63800	158000	
	L	**800.00**	0.94	***9.0***	81900	1.1	***10.5***	79700	1.8	***16.5***	77500	3.6	***31.8***	74500	175000	

GB 12010

dinamic oil

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM			T_{2max}	P_t
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	[Nm]	[kW]
GB 12011		**4.09**	183	***1389***	70600	220	***1578***	66800	354	***2204***	57900	—	—	—	281000	102 (H-F)
		5.25	143	***1132***	73800	171	***1286***	69800	276	***1795***	60500	—	—	—	233000	
		6.23	120	***886***	68500	144	***1052***	67800	233	***1574***	63000	—	—	—	189000	
GB 12012	L	**14.83**	51	***330***	59200	61	***375***	56100	98	***524***	48600	—	—	—	226000	59 (H-F)
		16.36	45.8	***403***	79700	55	***457***	75500	89	***639***	65400	—	—	—	281000	
	L	**19.03**	39.4	***330***	76000	47.3	***375***	72000	76	***524***	62400	—	—	—	233000	
	L	**21.00**	35.7	***302***	76700	42.9	***343***	72700	69	***479***	63000	—	—	—	233000	
	L	**22.59**	33.2	***270***	73800	39.8	***320***	73000	64	***502***	71000	—	—	—	189000	
	L	**24.92**	30.1	***246***	74200	36.1	***292***	73400	58	***458***	71400	—	—	—	189000	
	L	**27.30**	27.5	***244***	80500	33.0	***277***	76200	53	***387***	66100	—	—	—	233000	
	L	**32.40**	23.1	***192***	75300	27.8	***228***	74500	44.8	***357***	72500	—	—	—	189000	
	L	**38.94**	19.3	***161***	76100	23.1	***192***	75300	37.2	***301***	73300	—	—	—	189000	
GB 12013	L	**52.83**	14.2	***100***	62200	17.0	***113***	58900	27.4	***158***	51000	—	—	—	212000	42 (H-F)
		58.30	12.9	***137***	94100	15.4	***155***	89100	24.9	***217***	77200	—	—	—	281000	
	L	**61.60**	12.2	***88***	64100	14.6	***100***	60700	23.5	***140***	52600	—	—	—	212000	
	L	**67.80**	11.1	***100***	79800	13.3	***113***	75600	21.4	***158***	65500	—	—	—	268000	
	L	**79.05**	9.5	***88***	82300	11.4	***100***	77900	18.3	***140***	67500	—	—	—	268000	
	L	**87.23**	8.6	***88***	90800	10.3	***100***	85900	16.6	***140***	74500	—	—	—	233000	
		102.62	7.3	***83***	100000	8.8	***98***	99300	14.1	***154***	96600	—	—	—	233000	
		112.11	6.7	***88***	116000	8.0	***104***	115000	12.9	***146***	100000	—	—	—	281000	
		126.00	6.0	***69***	102000	7.1	***81***	100000	11.5	***127***	97800	—	—	—	233000	
		143.88	5.2	***62***	105000	6.3	***72***	102000	10.1	***112***	98500	—	—	—	233000	
	L	**158.98**	4.7	***56***	106000	5.7	***66***	103000	9.1	***102***	99100	—	—	—	233000	
	L	**170.90**	4.4	***41.8***	84300	5.3	***48.8***	82000	8.5	***76***	79700	—	—	—	189000	
	L	**198.61**	3.8	***36.8***	86200	4.5	***42.9***	83900	7.3	***66***	80400	—	—	—	189000	
	L	**222.17**	3.4	***33.5***	87700	4.1	***39.0***	85300	6.5	***60***	80900	—	—	—	189000	
GB 12014		**209.86**	3.6	***57***	138000	4.3	***65***	131000	6.9	***91***	113000	13.8	***147***	92100	281000	33 (H-F)
	L	**224.53**	3.3	***37.2***	96000	4.0	***42.2***	90900	6.5	***59***	78800	12.9	***96***	64000	212000	
		247.76	3.0	***51***	145000	3.6	***58***	138000	5.9	***81***	119000	11.7	***131***	96800	281000	
		288.88	2.6	***44.4***	148000	3.1	***51***	142000	5.0	***71***	123000	10.0	***116***	99700	281000	
		310.91	2.4	***41.4***	148000	2.9	***49.2***	147000	4.7	***69***	128000	9.3	***112***	104000	281000	
		354.68	2.1	***32.3***	132000	2.5	***38.4***	131000	4.1	***60***	127000	8.2	***98***	104000	281000	
	L	**399.00**	1.9	***26.6***	122000	2.3	***31.0***	119000	3.6	***46.5***	110000	7.3	***82***	97000	233000	
		445.09	1.7	***26.1***	134000	2.0	***31.0***	132000	3.3	***48.6***	129000	6.5	***84***	111000	281000	
		495.80	1.5	***22.2***	127000	1.8	***26.3***	125000	2.9	***41.3***	122000	5.8	***79***	117000	281000	
		561.09	1.3	***19.9***	128000	1.6	***23.2***	125000	2.6	***34.8***	116000	5.2	***63***	105000	233000	
		636.27	1.2	***17.9***	131000	1.4	***20.9***	127000	2.3	***31.3***	118000	4.6	***56***	107000	233000	
		720.00	1.0	***16.1***	133000	1.3	***18.8***	130000	2.0	***28.2***	121000	4.0	***51***	109000	233000	
		803.25	0.93	***14.7***	136000	1.1	***17.1***	132000	1.8	***25.7***	123000	3.6	***46.2***	110000	233000	
		892.03	0.84	***13.4***	138000	1.0	***15.7***	134000	1.6	***23.5***	125000	3.3	***42.3***	112000	233000	
	L	**998.40**	0.75	***9.8***	113000	0.90	***11.7***	112000	1.5	***18.3***	109000	2.9	***35.2***	105000	233000	
		1050.35	0.71	***11.7***	141000	0.86	***13.6***	137000	1.4	***20.4***	128000	2.8	***36.8***	115000	233000	
	L	**1134.89**	0.66	***8.4***	110000	0.79	***9.9***	107000	1.3	***15.0***	102000	2.6	***27.1***	91000	189000	
		1270.59	0.59	***9.9***	145000	0.71	***11.6***	141000	1.1	***17.4***	132000	2.3	***31.3***	118000	233000	
	L	**1415.12**	0.53	***7.1***	116000	0.64	***8.3***	113000	1.0	***12.5***	105000	2.0	***22.5***	95000	189000	
		1507.95	0.50	***6.8***	117000	0.60	***7.9***	114000	1.0	***11.8***	106000	1.9	***21.3***	96000	189000	
GB 12015	L	**661.86**	1.13	***14.9***	111000	1.36	***17.4***	108000	2.2	***26.0***	100000	4.4	***42.3***	81000	212000	27 (H-F)
		730.33	1.03	***19.9***	163000	1.23	***23.3***	159000	2.0	***35.4***	150000	4.0	***63.2***	134000	281000	
		894.68	0.84	***16.8***	168000	1.01	***19.6***	164000	1.6	***29.3***	152000	3.2	***54.8***	142000	281000	
		1005.31	0.75	***15.0***	169000	0.90	***17.7***	167000	1.4	***26.6***	155000	2.9	***49.7***	145000	281000	
		1148.18	0.65	***11.1***	143000	0.78	***13.0***	139000	1.3	***19.4***	130000	2.5	***35.0***	117000	233000	
		1257.78	0.60	***12.6***	177000	0.72	***14.7***	172000	1.2	***22.0***	160000	2.3	***40.7***	149000	281000	
		1411.73	0.53	***10.9***	172000	0.64	***12.9***	170000	1.03	***19.9***	163000	2.1	***36.5***	150000	281000	
	L	**1580.48**	0.47	***8.5***	150000	0.57	***9.9***	146000	0.92	***14.8***	136000	1.8	***26.7***	122000	233000	
		1783.84	0.42	***8.6***	172000	0.50	***10.2***	170000	0.81	***16.0***	165000	1.6	***29.4***	152000	281000	
		2001.18	0.37	***6.9***	156000	0.45	***8.1***	151000	0.72	***12.1***	141000	1.4	***21.8***	127000	233000	
		2238.55	0.34	***7.7***	193000	0.40	***9.0***	188000	0.65	***13.5***	175000	1.3	***24.3***	158000	281000	
		2516.27	0.30	***5.7***	161000	0.36	***6.7***	157000	0.58	***10.0***	146000	1.2	***18.0***	131000	233000	
		2814.15	0.27	***5.2***	164000	0.32	***6.1***	159000	0.52	***9.1***	148000	1.0	***16.4***	134000	233000	
		3157.67	0.24	***4.7***	167000	0.29	***5.5***	162000	0.46	***8.2***	151000	0.92	***14.8***	136000	233000	
	L	**3544.35**	0.21	***3.4***	133000	0.25	***3.9***	130000	0.41	***5.9***	121000	0.82	***10.6***	109000	189000	

GBA 12010

		ie	n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
			n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
GBA 12013	L	45.55	16.5	***109***	57900	19.8	***124***	54800	31.8	***173***	47500	64	***282***	38600	180000	36 (H-F)
	L	50.26	14.9	***109***	63900	17.9	***124***	60500	28.9	***173***	52400	58	***282***	42600	198000	
	L	58.45	12.8	***109***	74300	15.4	***124***	70300	24.8	***173***	60900	49.6	***282***	49500	230000	
	L	64.50	11.6	***109***	82000	14.0	***124***	77600	22.5	***173***	67200	45.0	***282***	54600	233000	
	L	69.37	10.8	***98***	78600	13.0	***116***	77800	20.9	***173***	72300	41.8	***282***	58700	189000	
		75.88	9.9	***109***	96400	11.9	***124***	91300	19.1	***173***	79100	38.2	***282***	64300	233000	
	L	83.85	8.9	***102***	99200	10.7	***121***	98200	17.3	***173***	87400	34.6	***282***	71000	233000	
		90.06	8.3	***76***	79800	10.0	***91***	79000	16.1	***142***	76900	32.2	***273***	73900	189000	
	L	99.51	7.5	***69***	80300	9.0	***82***	79400	14.6	***129***	77300	29.1	***248***	74300	189000	
	L	116.31	6.4	***55***	74700	7.7	***66***	73900	12.5	***103***	71900	24.9	***196***	68500	189000	
	L	127.40	5.9	***55***	81800	7.1	***66***	80900	11.4	***103***	78800	22.8	***196***	75000	211000	
		136.83	5.5	***51***	81800	6.6	***61***	80900	10.6	***96***	78700	21.2	***184***	75700	189000	
GBA 12014	L	154.43	4.9	***49.1***	85800	5.8	***56***	81300	9.4	***78***	70400	18.8	***126***	57200	200000	30 (H-F)
		170.40	4.4	***67***	130000	5.3	***76***	123000	8.5	***107***	107000	17.0	***173***	86500	281000	
		198.69	3.8	***59***	134000	4.5	***68***	127000	7.3	***94***	110000	14.6	***153***	89100	281000	
	L	218.68	3.4	***44.9***	111000	4.1	***52***	108000	6.6	***78***	99700	13.3	***126***	81000	233000	
	L	254.98	2.9	***39.4***	114000	3.5	***46.1***	111000	5.7	***69***	103000	11.4	***112***	83500	233000	
		286.99	2.6	***37.7***	123000	3.1	***44.8***	121000	5.1	***70***	118000	10.1	***130***	109000	281000	
	L	313.06	2.4	***32.3***	115000	2.9	***38.4***	113000	4.6	***58***	106000	9.3	***95***	86800	233000	
	L	348.92	2.1	***30.2***	120000	2.6	***35.3***	116000	4.2	***53***	108000	8.3	***90***	91700	233000	
		392.73	1.9	***28.1***	125000	2.3	***33.3***	124000	3.7	***52***	120000	7.4	***100***	116000	281000	
		448.44	1.7	***24.8***	126000	2.0	***29.4***	125000	3.2	***46.1***	121000	6.5	***89***	116000	281000	
		504.00	1.5	***22.1***	126000	1.8	***25.8***	123000	2.9	***38.7***	114000	5.8	***70***	103000	233000	
		575.50	1.3	***19.8***	129000	1.6	***23.1***	125000	2.5	***34.6***	117000	5.0	***62***	105000	233000	
	L	635.93	1.2	***16.0***	115000	1.4	***18.9***	113000	2.3	***29.6***	110000	4.6	***57***	106000	233000	
		677.65	1.1	***11.7***	106000	1.3	***20.1***	129000	2.1	***30.1***	120000	4.3	***54***	108000	233000	
	L	794.42	0.94	***17.2***	132000	1.1	***13.8***	103000	1.8	***20.7***	96300	3.7	***37.2***	86700	189000	
	L	888.69	0.84	***10.7***	108000	1.0	***12.5***	105000	1.6	***18.8***	97900	3.3	***33.9***	88200	189000	
GBA 12015		584.62	1.3	***24.4***	158000	1.5	***28.5***	154000	2.5	***44.3***	148000	5.0	***75***	125000	281000	25 (H-F)
	L	625.47	1.2	***15.9***	110000	1.4	***18.5***	107000	2.3	***27.8***	99300	4.6	***48.7***	87000	200000	
		690.18	1.1	***21.2***	162000	1.3	***24.8***	157000	2.1	***37.9***	149000	4.2	***67***	132000	281000	
		804.74	0.93	***18.6***	166000	1.1	***21.8***	161000	1.8	***32.8***	151000	3.6	***59***	136000	281000	
	L	885.73	0.85	***14.1***	138000	1.0	***16.4***	134000	1.6	***24.6***	125000	3.3	***44.3***	112000	232000	
		991.02	0.76	***15.6***	171000	0.91	***18.2***	166000	1.5	***27.3***	155000	2.9	***51.8***	147000	281000	
		1124.31	0.67	***11.2***	139000	0.80	***13.3***	137000	1.3	***20.0***	128000	2.6	***38.2***	123000	281000	
		1243.64	0.60	***12.9***	177000	0.72	***15.0***	172000	1.2	***22.5***	160000	2.3	***41.8***	149000	281000	
		1413.82	0.53	***9.4***	147000	0.64	***11.0***	143000	1.0	***16.5***	133000	2.1	***30.8***	124000	281000	
		1591.20	0.47	***8.6***	150000	0.57	***10.0***	146000	0.91	***15.0***	136000	1.8	***27.0***	123000	233000	
		1780.36	0.42	***7.4***	145000	0.51	***8.7***	143000	0.81	***13.7***	139000	1.6	***26.3***	134000	281000	
		1983.18	0.38	***7.1***	155000	0.45	***8.2***	150000	0.73	***12.4***	140000	1.5	***22.4***	127000	281000	
	L	2237.63	0.34	***5.1***	126000	0.40	***6.1***	125000	0.65	***9.5***	121000	1.3	***18.3***	117000	189000	
		2342.31	0.32	***5.6***	145000	0.38	***6.6***	143000	0.62	***10.4***	139000	1.2	***19.3***	129000	262000	
		2516.97	0.30	***5.6***	157000	0.36	***6.7***	155000	0.58	***10.1***	146000	1.2	***18.3***	131000	233000	
		2816.20	0.27	***4.0***	125000	0.32	***4.8***	123000	0.51	***7.5***	120000	1.0	***14.4***	115000	281000	
	L	3161.48	0.24	***3.7***	129000	0.28	***4.3***	125000	0.46	***6.5***	117000	0.92	***11.7***	106000	189000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
GB 16001	**3.83**	196	***1956***	93100	235	***2222***	88100	378	***3103***	76400	—	—	—	345000	109 (H-F)
	4.40	170	***1746***	95400	205	***1983***	90300	330	***2770***	78300	—	—	—	357000	
GB 16002	**14.72**	51	***616***	110000	61	***700***	104000	99	***977***	90100	—	—	—	345000	66 (H-F)
	L 16.90	44.4	***462***	94600	53	***525***	89500	86	***733***	77600	—	—	—	357000	
	L 18.16	41.3	***389***	85500	49.6	***442***	81000	80	***617***	70200	—	—	—	306000	
	L 20.84	36.0	***389***	98200	43.2	***442***	93000	70	***617***	80600	—	—	—	357000	
	22.78	32.9	***482***	133000	39.5	***548***	126000	64	***765***	109000	—	—	—	357000	
	L 23.93	31.3	***348***	101000	37.6	***396***	95500	61	***552***	82800	—	—	—	282000	
GB 16003	**50.47**	14.9	***233***	139000	17.8	***265***	132000	28.7	***370***	114000	—	—	—	345000	48 (H-F)
	57.93	12.9	***217***	149000	15.5	***258***	147000	25.0	***370***	131000	—	—	—	357000	
	L 64.69	11.6	***137***	104000	13.9	***155***	98900	22.4	***217***	85700	—	—	—	306000	
	69.12	10.9	***184***	150000	13.0	***218***	149000	21.0	***322***	136000	—	—	—	357000	
	78.09	9.6	***164***	151000	11.5	***195***	150000	18.6	***305***	146000	—	—	—	357000	
	88.70	8.5	***145***	152000	10.1	***173***	151000	16.3	***263***	142000	—	—	—	357000	
	L 106.29	7.1	***102***	128000	8.5	***116***	122000	13.6	***162***	105000	—	—	—	357000	
	123.64	6.1	***98***	142000	7.3	***116***	141000	11.7	***182***	137000	—	—	—	345000	
	141.91	5.3	***95***	159000	6.3	***111***	155000	10.2	***174***	151000	—	—	—	357000	
	L 164.06	4.6	***59***	114000	5.5	***70***	113000	8.8	***110***	110000	—	—	—	282000	
GB 16004	**181.69**	4.1	***82***	172000	5.0	***93***	162000	8.0	***130***	141000	16.0	***211***	114000	345000	37 (H-F)
	208.54	3.6	***70***	168000	4.3	***82***	163000	7.0	***124***	154000	13.9	***211***	131000	357000	
	L 222.87	3.4	***51***	131000	4.0	***58***	124000	6.5	***81***	107000	13.0	***131***	87100	345000	
	255.93	2.9	***68***	201000	3.5	***80***	195000	5.7	***114***	174000	11.3	***185***	141000	345000	
	281.13	2.7	***52***	170000	3.2	***62***	168000	5.2	***95***	159000	10.3	***180***	150000	357000	
	319.33	2.3	***49.0***	179000	2.8	***57***	174000	4.5	***85***	162000	9.1	***160***	152000	357000	
	359.16	2.1	***41.0***	169000	2.5	***48.6***	167000	4.0	***76***	163000	8.1	***137***	147000	357000	
	L 396.00	1.9	***33.2***	151000	2.3	***39.4***	150000	3.7	***62***	146000	7.3	***112***	132000	350000	
	L 451.75	1.7	***29.4***	153000	2.0	***34.8***	151000	3.2	***55***	147000	6.4	***98***	132000	357000	
	496.94	1.5	***30.6***	176000	1.8	***36.5***	174000	2.9	***57***	169000	5.8	***106***	156000	357000	
	561.47	1.3	***25.2***	163000	1.6	***30.0***	162000	2.6	***47.0***	157000	5.2	***90***	151000	357000	
	637.74	1.2	***24.4***	178000	1.4	***28.8***	176000	2.3	***45.1***	171000	4.5	***85***	162000	357000	
	698.82	1.1	***22.3***	180000	1.3	***26.4***	177000	2.1	***41.4***	172000	4.1	***79***	164000	357000	
	L 797.21	0.94	***18.1***	166000	1.1	***21.2***	162000	1.8	***31.9***	152000	3.6	***61***	146000	357000	
	896.82	0.84	***18.1***	187000	1.0	***21.1***	182000	1.6	***32.7***	175000	3.2	***63***	168000	357000	
	1064.36	0.70	***15.6***	192000	0.85	***18.3***	187000	1.4	***27.8***	177000	2.7	***54***	170000	357000	
	L 1241.76	0.60	***8.3***	118000	0.72	***9.6***	115000	1.2	***14.5***	107000	2.3	***27.8***	103000	247000	
GB 16005	**632.27**	1.2	***29.3***	208000	1.4	***33.3***	197000	2.3	***46.4***	171000	4.6	***76***	139000	345000	31 (H-F)
	725.74	1.0	***25.0***	203000	1.2	***29.1***	197000	2.0	***43.5***	184000	4.0	***76***	159000	357000	
	L 804.82	0.93	***18.9***	171000	1.1	***22.5***	169000	1.8	***33.7***	158000	3.6	***55***	128000	345000	
	890.63	0.84	***23.6***	236000	1.0	***27.6***	230000	1.6	***41.3***	214000	3.3	***76***	195000	345000	
	978.32	0.77	***17.2***	189000	0.92	***20.1***	184000	1.5	***31.0***	176000	3.0	***59***	169000	357000	
	1117.65	0.67	***17.8***	223000	0.81	***21.2***	221000	1.3	***33.1***	215000	2.6	***63***	204000	345000	
	1252.35	0.60	***15.6***	220000	0.72	***18.3***	214000	1.2	***27.4***	199000	2.3	***49.4***	180000	357000	
	1414.88	0.53	***12.6***	200000	0.64	***14.7***	195000	1.0	***22.0***	181000	2.0	***42.0***	172000	357000	
	L 1595.75	0.47	***10.1***	180000	0.56	***11.8***	177000	0.91	***18.6***	172000	1.8	***35.7***	165000	357000	
	1782.44	0.42	***11.0***	221000	0.50	***13.1***	219000	0.81	***20.3***	210000	1.6	***36.6***	189000	357000	
	2003.10	0.37	***8.6***	193000	0.45	***10.2***	191000	0.72	***16.0***	186000	1.4	***30.7***	179000	345000	
	2224.48	0.34	***8.6***	214000	0.40	***10.2***	212000	0.65	***16.0***	206000	1.3	***30.4***	196000	357000	
	L 2510.41	0.30	***6.8***	193000	0.36	***8.0***	188000	0.58	***12.1***	176000	1.2	***23.3***	170000	357000	
	L 2809.54	0.27	***6.1***	190000	0.32	***7.0***	185000	0.52	***11.0***	180000	1.0	***20.1***	164000	357000	
	3172.87	0.24	***6.7***	240000	0.28	***7.9***	234000	0.46	***12.0***	221000	0.91	***22.5***	207000	357000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	n_2 [RPM]	P_1 [kW]	T_2 [Nm]	T_{2max} [Nm]	P_t [kW]
L	**47.84**	15.7	***211***	117000	18.8	***240***	111000	30.3	***335***	96300	61	***544***	78200	338000	
L	**54.91**	13.7	***211***	135000	16.4	***240***	127000	26.4	***335***	111000	53	***544***	89800	356000	
GBA 16003	**64.49**	11.6	***183***	137000	14.0	***217***	136000	22.5	***341***	132000	45.0	***568***	110000	338000	42 (H-F)
	74.02	10.1	***175***	151000	12.2	***208***	149000	19.6	***326***	145000	39.2	***568***	126000	356000	
L	**77.76**	9.6	***121***	110000	11.6	***144***	109000	18.6	***226***	106000	37.3	***410***	95700	282000	
L	**92.40**	8.1	***89***	95600	9.7	***106***	95000	15.7	***166***	92000	31.4	***319***	88500	247000	
	155.01	4.8	***106***	186000	5.8	***124***	181000	9.4	***176***	160000	18.7	***285***	130000	338000	
	184.96	4.1	***91***	191000	4.9	***106***	186000	7.8	***153***	166000	15.7	***248***	135000	338000	
	212.30	3.5	***70***	169000	4.2	***82***	164000	6.8	***124***	154000	13.7	***238***	148000	356000	
L	**220.47**	3.4	***51***	128000	4.1	***61***	127000	6.6	***94***	122000	13.2	***153***	98900	306000	
	249.33	3.0	***52***	148000	3.6	***62***	147000	5.8	***98***	143000	11.6	***188***	137000	338000	
	281.02	2.7	***57***	180000	3.2	***67***	179000	5.2	***105***	174000	10.3	***185***	153000	338000	
GBA 16004	**317.49**	2.4	***41.8***	150000	2.8	***49.6***	149000	4.6	***78***	145000	9.1	***149***	139000	338000	35 (H-F)
	360.64	2.1	***43.5***	178000	2.5	***52***	176000	4.0	***81***	171000	8.0	***151***	160000	338000	
	413.95	1.8	***39.7***	186000	2.2	***46.4***	181000	3.5	***70***	169000	7.0	***127***	154000	356000	
	435.88	1.7	***35.3***	174000	2.1	***41.9***	172000	3.3	***66***	168000	6.7	***121***	154000	356000	
	491.28	1.5	***29.1***	162000	1.8	***34.6***	160000	3.0	***54***	156000	5.9	***104***	150000	356000	
	558.02	1.3	***27.9***	177000	1.6	***33.2***	175000	2.6	***52***	170000	5.2	***97***	159000	356000	
	662.27	1.1	***23.8***	178000	1.4	***28.2***	177000	2.2	***44.3***	172000	4.4	***84***	163000	356000	
	506.13	1.5	***29.2***	163000	1.8	***33.2***	155000	2.9	***46.4***	134000	5.7	***75***	109000	338000	
	580.95	1.3	***29.2***	188000	1.5	***33.2***	178000	2.5	***46.4***	154000	5.0	***75***	125000	356000	
L	**620.85**	1.2	***24.6***	168000	1.4	***29.2***	167000	2.3	***41.1***	146000	4.7	***67***	118000	338000	
	712.94	1.1	***29.0***	229000	1.3	***33.2***	218000	2.0	***46.4***	189000	4.1	***75***	153000	338000	
	783.14	0.96	***21.2***	183000	1.1	***24.7***	178000	1.9	***38.8***	173000	3.7	***75***	167000	356000	
	894.67	0.84	***22.3***	221000	1.0	***26.5***	218000	1.6	***41.5***	212000	3.2	***75***	193000	338000	
	995.33	0.75	***19.4***	213000	0.90	***22.6***	207000	1.5	***33.9***	193000	2.9	***55.7***	158000	356000	
	1124.51	0.67	***15.6***	193000	0.80	***18.2***	188000	1.3	***27.6***	177000	2.6	***53.0***	170000	356000	
L	**1258.45**	0.60	***12.8***	178000	0.72	***15.0***	173000	1.2	***22.4***	161000	2.3	***41.6***	150000	356000	
GBA 16005	**1415.70**	0.53	***12.8***	200000	0.64	***14.9***	195000	1.0	***22.4***	181000	2.0	***42.6***	172000	356000	27 (H-F)
L	**1584.00**	0.47	***10.5***	185000	0.57	***12.3***	180000	0.92	***18.5***	167000	1.8	***33.5***	152000	356000	
	1776.56	0.42	***10.6***	207000	0.51	***12.3***	202000	0.82	***18.5***	188000	1.6	***34.4***	175000	356000	
	1987.76	0.38	***9.6***	211000	0.45	***11.2***	205000	0.73	***16.8***	191000	1.5	***31.0***	176000	356000	
	2245.87	0.33	***7.1***	177000	0.40	***8.5***	175000	0.65	***13.3***	170000	1.3	***25.5***	164000	356000	
	2498.29	0.30	***7.9***	218000	0.36	***9.2***	212000	0.58	***13.8***	197000	1.2	***25.0***	178000	356000	
	2795.29	0.27	***7.2***	222000	0.32	***8.4***	216000	0.52	***12.6***	201000	1.0	***22.6***	181000	356000	
	3158.25	0.24	***5.3***	185000	0.28	***6.2***	180000	0.46	***9.6***	174000	0.92	***18.5***	167000	356000	
L	**3544.35**	0.21	***3.5***	137000	0.25	***4.1***	135000	0.41	***6.5***	131000	0.82	***12.5***	126000	338000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 21001	**3.68**	204	***2071***	94600	245	***2353***	89600	394	***3285***	77600	—	—	—	406000	133 (H-F)
	4.94	152	***1627***	99800	182	***1848***	94500	293	***2581***	81900	—	—	—	361000	
	5.79*	129	***1111***	77426	155	***1262***	73305	250	***1763***	63533	—	—	—	215000	
GB 21002	**15.25**	49.2	***591***	109000	59	***672***	103000	95	***938***	89500	—	—	—	406000	78 (H-F)
	20.47	36.6	***565***	140000	44.0	***671***	138000	71	***938***	120000	—	—	—	361000	
	23.92	31.4	***393***	114000	37.6	***464***	112000	61	***648***	97100	—	—	—	314000	
	26.68	28.1	***440***	142000	33.7	***522***	141000	54	***759***	127000	—	—	—	361000	
	32.12	23.4	***369***	144000	28.0	***439***	142000	45.1	***648***	130000	—	—	—	361000	
GB 21003	**58.44**	12.8	***237***	163000	15.4	***269***	155000	24.8	***375***	134000	—	—	—	406000	56 (H-F)
	80.04	9.4	***190***	179000	11.2	***216***	170000	18.1	***301***	147000	—	—	—	406000	
	91.69	8.2	***114***	123000	9.8	***135***	122000	15.8	***211***	118000	—	—	—	314000	
	102.28	7.3	***127***	153000	8.8	***151***	152000	14.2	***237***	148000	—	—	—	361000	
	107.47	7.0	***121***	154000	8.4	***144***	152000	13.5	***226***	148000	—	—	—	361000	
	123.12	6.1	***107***	155000	7.3	***127***	153000	11.8	***199***	149000	—	—	—	361000	
	140.08	5.4	***94***	156000	6.4	***112***	155000	10.4	***176***	150000	—	—	—	361000	
GB 21004	**233.77**	3.2	***79***	212000	3.8	***94***	210000	6.2	***146***	203000	12.4	***237***	165000	406000	44 (H-F)
	265.65	2.8	***70***	214000	3.4	***83***	212000	5.5	***130***	206000	10.9	***217***	171000	406000	
	313.88	2.4	***48.8***	176000	2.9	***57***	171000	4.6	***85***	160000	9.2	***162***	151000	361000	
	356.68	2.1	***43.8***	180000	2.5	***51***	175000	4.1	***77***	163000	8.1	***144***	153000	361000	
	409.13	1.8	***39.0***	183000	2.2	***45.5***	178000	3.5	***68***	166000	7.1	***126***	154000	361000	
	464.92	1.6	***35.0***	187000	1.9	***40.8***	182000	3.1	***61***	169000	6.2	***112***	155000	361000	
	502.32	1.5	***23.4***	135000	1.8	***27.8***	134000	2.9	***43.6***	130000	5.8	***84***	125000	314000	
	560.33	1.3	***29.8***	192000	1.6	***34.8***	187000	2.6	***52***	174000	5.2	***94***	157000	361000	
	636.74	1.2	***26.8***	196000	1.4	***31.3***	191000	2.3	***46.8***	178000	4.6	***84***	160000	361000	
	766.44	0.98	***20.9***	184000	1.2	***24.7***	181000	1.9	***38.7***	176000	3.8	***72***	164000	361000	
GB 21005	**841.56**	0.89	***26.6***	251000	1.1	***31.0***	244000	1.7	***46.5***	227000	3.4	***87***	212000	406000	36 (H-F)
	993.51	0.75	***23.1***	257000	0.91	***27.0***	250000	1.5	***40.4***	233000	2.9	***74***	214000	406000	
	1128.99	0.66	***20.7***	262000	0.80	***24.2***	255000	1.3	***36.2***	237000	2.6	***66***	215000	406000	
	1246.76	0.60	***19.0***	266000	0.72	***22.2***	259000	1.2	***33.3***	241000	2.3	***60***	217000	406000	
	1416.77	0.53	***17.1***	272000	0.64	***19.9***	264000	1.0	***29.9***	246000	2.0	***54***	221000	406000	
	1625.09	0.46	***11.9***	218000	0.55	***13.9***	212000	0.89	***20.9***	197000	1.8	***37.8***	178000	406000	
	1773.58	0.42	***11.1***	221000	0.51	***12.9***	215000	0.82	***19.4***	200000	1.6	***34.9***	180000	406000	
	1992.34	0.38	***12.8***	286000	0.45	***14.9***	278000	0.73	***22.4***	259000	1.5	***40.3***	233000	406000	
	2255.67	0.33	***10.5***	266000	0.40	***12.5***	263000	0.64	***19.5***	256000	1.3	***36.3***	237000	406000	
	2536.60	0.30	***8.5***	242000	0.35	***9.9***	235000	0.57	***14.9***	219000	1.1	***26.8***	197000	361000	
	2882.50	0.26	***7.6***	247000	0.31	***8.9***	240000	0.50	***13.3***	223000	1.0	***24.0***	201000	361000	
	3129.84	0.24	***6.8***	240000	0.29	***8.0***	234000	0.46	***12.0***	218000	0.93	***21.6***	196000	406000	

*** GB 18001**

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 21003	**49.55**	15.1	***239***	137000	18.2	***280***	134000	29.3	***391***	116000	59	***634***	94500	351000	49 (H-F)
	66.53	11.3	***194***	150000	13.5	***230***	148000	21.8	***360***	144000	43.6	***634***	127000	361000	
	77.74	9.6	***135***	122000	11.6	***160***	120000	18.7	***251***	117000	37.3	***481***	112000	314000	
	86.72	8.6	***151***	152000	10.4	***179***	150000	16.7	***281***	146000	33.4	***540***	141000	361000	
	104.38	7.2	***127***	154000	8.6	***150***	152000	13.9	***236***	148000	27.8	***453***	142000	361000	
GBA 21004	**179.50**	4.2	***103***	209000	5.0	***122***	207000	8.1	***178***	187000	16.2	***289***	152000	351000	40 (H-F)
	233.97	3.2	***65***	172000	3.8	***77***	170000	6.2	***121***	166000	12.4	***233***	159000	351000	
	245.84	3.1	***77***	213000	3.7	***91***	211000	5.9	***142***	205000	11.8	***232***	167000	351000	
	272.73	2.7	***57***	175000	3.3	***67***	173000	5.3	***105***	169000	10.6	***201***	161000	351000	
	314.15	2.4	***49.5***	176000	2.9	***58***	171000	4.6	***87***	160000	9.2	***164***	151000	361000	
	355.49	2.1	***43.8***	176000	2.5	***52***	175000	4.1	***82***	170000	8.2	***157***	163000	351000	
	385.71	1.9	***30.5***	133000	2.4	***48.8***	174000	3.8	***74***	164000	7.5	***109***	123000	314000	
	430.25	1.7	***37.9***	185000	2.1	***44.3***	180000	3.4	***66***	167000	6.7	***122***	154000	361000	
	501.53	1.5	***33.3***	189000	1.8	***38.9***	184000	2.9	***58***	171000	5.8	***106***	156000	361000	
	574.55	1.3	***27.7***	180000	1.6	***32.9***	178000	2.5	***52***	174000	5.0	***93***	157000	361000	
	653.72	1.1	***26.6***	197000	1.4	***31.0***	192000	2.2	***46.5***	178000	4.4	***84***	161000	361000	
	786.88	1.0	***20.7***	185000	1.1	***24.4***	182000	1.8	***38.3***	177000	3.7	***72***	165000	361000	
GBA 21005	**651.21**	1.2	***29.2***	210000	1.4	***33.2***	199000	2.2	***46.4***	173000	4.5	***75***	140000	351000	32 (H-F)
	740.01	1.0	***29.2***	239000	1.2	***33.2***	226000	2.0	***46.4***	196000	3.9	***75***	159000	351000	
	891.87	0.84	***25.6***	252000	1.0	***30.0***	246000	1.6	***45.0***	229000	3.3	***75***	192000	351000	
	993.62	0.75	***19.1***	210000	0.91	***22.3***	204000	1.5	***33.4***	190000	2.9	***60***	171000	361000	
	1139.72	0.66	***17.0***	214000	0.79	***19.9***	208000	1.3	***29.8***	194000	2.5	***54***	175000	361000	
	1255.53	0.60	***15.7***	217000	0.72	***18.3***	211000	1.2	***27.4***	197000	2.3	***49.4***	177000	361000	
	1426.74	0.53	***14.1***	222000	0.63	***16.4***	216000	1.0	***24.6***	201000	2.0	***44.3***	181000	361000	
	1560.92	0.48	***13.0***	225000	0.58	***15.2***	219000	0.93	***22.8***	203000	1.9	***41.1***	183000	361000	
	1773.77	0.42	***11.7***	229000	0.51	***13.6***	223000	0.82	***20.5***	207000	1.6	***36.8***	187000	361000	
	1969.88	0.38	***9.8***	212000	0.46	***11.4***	206000	0.74	***17.1***	192000	1.5	***31.8***	179000	361000	
	2241.32	0.33	***9.6***	237000	0.40	***11.2***	231000	0.65	***16.8***	215000	1.3	***30.2***	193000	361000	
	2546.95	0.29	***8.6***	242000	0.35	***10.0***	235000	0.57	***15.0***	219000	1.1	***27.1***	197000	361000	
	3065.78	0.24	***6.7***	227000	0.29	***7.8***	221000	0.47	***11.7***	205000	0.95	***21.1***	185000	361000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 26001	**3.68**	204	***2405***	110000	245	***2733***	104000	394	***3816***	90200	—	—	—	540000	136 (H-F)
	4.94	152	***1890***	116000	182	***2147***	110000	293	***2998***	95100	—	—	—	414000	
GB 26002	**14.72**	51	***810***	144000	61	***920***	137000	99	***1284***	118000	—	—	—	540000	85 (H-F)
	17.17	43.7	***714***	148000	52	***811***	140000	84	***1132***	122000	—	—	—	540000	
	19.76	37.9	***670***	160000	45.5	***796***	159000	73	***1165***	144000	—	—	—	414000	
	23.06	32.5	***580***	162000	39.0	***688***	160000	63	***1046***	151000	—	—	—	414000	
GB 26003	**58.88**	12.7	***315***	219000	15.3	***357***	207000	24.6	***499***	179000	—	—	—	540000	61 (H-F)
	69.27	10.8	***281***	230000	13.0	***319***	217000	20.9	***445***	188000	—	—	—	540000	
	80.82	9.3	***244***	233000	11.1	***281***	224000	17.9	***393***	194000	—	—	—	540000	
	92.24	8.1	***161***	175000	9.8	***191***	173000	15.7	***300***	169000	—	—	—	414000	
	108.51	6.9	***138***	177000	8.3	***164***	175000	13.4	***257***	170000	—	—	—	414000	
GB 26004	**209.76**	3.6	***110***	264000	4.3	***128***	257000	6.9	***192***	239000	13.8	***342***	213000	540000	48 (H-F)
	246.78	3.0	***95***	271000	3.6	***111***	264000	5.9	***167***	245000	11.8	***305***	224000	540000	
	287.74	2.6	***84***	277000	3.1	***98***	270000	5.0	***147***	251000	10.1	***271***	232000	540000	
	328.40	2.3	***54***	204000	2.7	***63***	198000	4.4	***94***	184000	8.8	***178***	174000	414000	
	353.28	2.1	***70***	286000	2.5	***82***	278000	4.1	***123***	259000	8.2	***223***	234000	540000	
	400.04	1.9	***59***	273000	2.2	***71***	271000	3.6	***111***	263000	7.2	***200***	238000	540000	
	450.74	1.7	***41.2***	214000	2.0	***48.1***	208000	3.2	***72***	194000	6.4	***132***	177000	414000	
	554.16	1.4	***44.2***	282000	1.6	***52***	276000	2.6	***81***	268000	5.2	***151***	250000	540000	
	631.92	1.2	***30.9***	225000	1.4	***36.1***	219000	2.3	***54***	204000	4.6	***98***	183000	414000	
	744.08	1.0	***26.9***	231000	1.2	***31.4***	224000	1.9	***47.1***	209000	3.9	***85***	188000	414000	
GB 26005	**755.14**	0.99	***37.9***	321000	1.2	***44.2***	312000	1.9	***66***	290000	3.8	***119***	262000	540000	40 (H-F)
	891.48	0.84	***32.9***	329000	1.0	***38.4***	320000	1.6	***58***	298000	3.3	***104***	268000	540000	
	1013.93	0.74	***21.2***	242000	0.89	***24.8***	235000	1.4	***37.2***	219000	2.9	***67***	197000	414000	
	1118.72	0.67	***27.1***	341000	0.80	***31.7***	331000	1.3	***47.5***	308000	2.6	***86***	278000	540000	
	1261.21	0.59	***22.6***	319000	0.71	***26.4***	311000	1.1	***39.5***	289000	2.3	***74***	270000	540000	
	1426.71	0.53	***20.3***	325000	0.63	***23.7***	317000	1.0	***35.6***	295000	2.0	***66***	272000	540000	
	1601.54	0.47	***20.0***	360000	0.56	***23.4***	350000	0.91	***35.0***	325000	1.8	***63***	293000	540000	
	1783.98	0.42	***18.3***	366000	0.50	***21.3***	356000	0.81	***32.0***	331000	1.6	***58***	298000	540000	
	1994.99	0.38	***15.3***	342000	0.45	***17.9***	333000	0.73	***26.8***	310000	1.5	***48.2***	279000	540000	
	2252.16	0.33	***15.0***	379000	0.40	***17.5***	368000	0.64	***26.2***	343000	1.3	***47.2***	309000	540000	
	2503.24	0.30	***12.7***	356000	0.36	***15.0***	352000	0.58	***23.6***	342000	1.2	***43.2***	314000	540000	
	2854.49	0.26	***8.8***	283000	0.32	***10.3***	275000	0.51	***15.4***	256000	1.0	***27.8***	230000	414000	
	3091.20	0.24	***10.5***	366000	0.29	***12.3***	356000	0.47	***18.5***	331000	0.94	***33.2***	298000	540000	
	3532.80	0.21	***9.4***	373000	0.25	***11.0***	363000	0.41	***16.5***	338000	0.82	***29.7***	304000	540000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 26003	**55.81**	13.4	***239***	155000	16.1	***280***	151000	26.0	***391***	131000	52	***634***	106000	396000	49 (H-F)
	64.24	11.7	***230***	172000	14.0	***273***	170000	22.6	***391***	151000	45.1	***634***	122000	414000	
	74.94	10.0	***199***	173000	12.0	***236***	171000	19.3	***370***	167000	38.7	***634***	143000	414000	
GBA 26004	**180.85**	4.1	***112***	230000	5.0	***127***	218000	8.0	***178***	189000	16.0	***289***	153000	540000	42 (H-F)
	212.76	3.5	***110***	265000	4.2	***127***	256000	6.8	***178***	222000	13.6	***289***	180000	540000	
	248.22	3.0	***95***	266000	3.6	***112***	263000	5.8	***169***	245000	11.7	***289***	210000	540000	
	285.67	2.6	***62***	200000	3.2	***72***	194000	5.1	***108***	181000	10.2	***207***	173000	414000	
	320.57	2.3	***57***	206000	2.8	***67***	204000	4.5	***105***	198000	9.0	***201***	189000	540000	
	368.94	2.0	***50***	207000	2.4	***58***	202000	3.9	***87***	188000	7.9	***162***	175000	414000	
	434.05	1.7	***43.2***	213000	2.1	***50***	207000	3.3	***76***	192000	6.7	***139***	177000	414000	
	506.39	1.5	***37.9***	218000	1.8	***44.3***	212000	2.9	***66***	197000	5.7	***120***	179000	414000	
GBA 26005	**613.14**	1.2	***45.9***	311000	1.5	***54***	303000	2.4	***80***	281000	4.7	***145***	253000	540000	36 (H-F)
	714.92	1.0	***40.3***	318000	1.3	***47.0***	310000	2.0	***71***	288000	4.1	***127***	259000	540000	
	834.08	0.90	***32.6***	300000	1.1	***38.0***	292000	1.7	***58***	275000	3.5	***111***	264000	540000	
	877.76	0.85	***33.9***	328000	1.0	***39.5***	319000	1.7	***59***	297000	3.3	***107***	268000	540000	
	987.11	0.76	***30.7***	334000	0.91	***35.8***	325000	1.5	***54***	303000	2.9	***97***	272000	540000	
	1119.92	0.67	***19.8***	245000	0.80	***23.2***	239000	1.3	***34.7***	222000	2.6	***62***	200000	414000	
	1201.15	0.62	***25.9***	344000	0.75	***30.3***	335000	1.2	***45.4***	312000	2.4	***82***	281000	540000	
	1413.12	0.53	***22.6***	353000	0.64	***26.4***	343000	1.0	***39.6***	319000	2.1	***71***	288000	540000	
	1600.15	0.47	***18.7***	331000	0.56	***21.9***	322000	0.91	***32.8***	300000	1.8	***60***	274000	540000	
	1802.97	0.42	***13.2***	264000	0.50	***15.5***	257000	0.80	***23.2***	239000	1.6	***41.7***	215000	414000	
	1899.99	0.39	***17.6***	369000	0.47	***20.5***	359000	0.76	***30.8***	334000	1.5	***55***	301000	540000	
	2216.66	0.34	***14.2***	348000	0.41	***16.6***	338000	0.65	***24.9***	315000	1.3	***44.8***	283000	540000	
	2527.69	0.30	***9.9***	278000	0.36	***11.6***	270000	0.57	***17.4***	251000	1.1	***31.3***	226000	414000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 31001	**3.43**	219	***3309***	141000	263	***3760***	133000	—	—	—	—	—	—	549000	
	4.09	183	***2891***	147000	220	***3285***	139000	—	—	—	—	—	—	650000	214 (H-F)
	5.25	143	***2357***	154000	171	***2678***	145000	—	—	—	—	—	—	526000	
	6.23	120	***1968***	152000	144	***2338***	151000	—	—	—	—	—	—	420000	
GB 31002	**14.03**	53	***1266***	215000	64	***1438***	204000	103	***2008***	176000	—	—	—	549000	
	18.00	41.7	***1015***	221000	50	***1205***	219000	81	***1687***	190000	—	—	—	549000	
	21.48	34.9	***929***	242000	41.9	***1055***	229000	68	***1474***	198000	—	—	—	650000	125 (H-F)
	25.49	29.4	***824***	254000	35.3	***936***	241000	57	***1307***	209000	—	—	—	650000	
	32.71	22.9	***536***	212000	27.5	***636***	210000	44.3	***998***	204000	—	—	—	526000	
	38.82	19.3	***360***	169000	23.2	***427***	167000	37.3	***670***	163000	—	—	—	420000	
GB 31003	**56.10**	13.4	***356***	236000	16.0	***423***	233000	25.8	***655***	224000	—	—	—	549000	
	66.94	11.2	***363***	287000	13.4	***431***	284000	21.7	***655***	268000	—	—	—	650000	
	78.76	9.5	***311***	289000	11.4	***370***	286000	18.4	***573***	276000	—	—	—	650000	
	85.91	8.7	***221***	224000	10.5	***263***	222000	16.9	***412***	216000	—	—	—	526000	
	101.07	7.4	***251***	299000	8.9	***292***	291000	14.3	***458***	283000	—	—	—	650000	89 (H-F)
	110.25	6.8	***175***	227000	8.2	***208***	225000	13.2	***326***	219000	—	—	—	526000	
	129.71	5.8	***152***	232000	6.9	***178***	227000	11.2	***279***	221000	—	—	—	526000	
	153.94	4.9	***131***	238000	5.8	***153***	232000	9.4	***238***	223000	—	—	—	526000	
	182.69	4.1	***88***	189000	4.9	***102***	184000	7.9	***159***	178000	—	—	—	420000	
GB 31004	**199.87**	3.8	***122***	282000	4.5	***143***	274000	7.3	***214***	255000	14.5	***362***	215000	549000	
	233.05	3.2	***108***	288000	3.9	***126***	280000	6.2	***188***	261000	12.4	***319***	222000	549000	
	256.50	2.9	***99***	293000	3.5	***116***	285000	5.7	***173***	265000	11.3	***312***	238000	549000	
	280.57	2.7	***108***	349000	3.2	***126***	339000	5.2	***189***	316000	10.3	***345***	288000	650000	
	327.14	2.3	***95***	357000	2.8	***111***	347000	4.4	***166***	323000	8.9	***299***	291000	650000	
	356.85	2.1	***88***	362000	2.5	***103***	352000	4.1	***154***	327000	8.1	***278***	295000	650000	
	401.65	1.9	***80***	368000	2.2	***93***	358000	3.6	***139***	333000	7.2	***251***	300000	650000	
	438.14	1.7	***74***	373000	2.1	***86***	363000	3.3	***129***	338000	6.6	***233***	304000	650000	69 (H-F)
	500.29	1.5	***66***	381000	1.8	***77***	370000	2.9	***116***	345000	5.8	***208***	310000	650000	
	562.28	1.3	***44.8***	290000	1.6	***52***	282000	2.6	***78***	262000	5.2	***141***	236000	526000	
	639.43	1.2	***40.2***	296000	1.4	***46.9***	288000	2.3	***70***	268000	4.5	***127***	241000	526000	
	699.14	1.1	***42.9***	345000	1.3	***50***	335000	2.1	***78***	326000	4.1	***151***	314000	650000	
	785.08	0.96	***33.8***	305000	1.1	***39.4***	297000	1.8	***59***	276000	3.7	***106***	249000	526000	
	897.23	0.84	***30.1***	311000	1.0	***35.2***	303000	1.6	***53***	282000	3.2	***95***	254000	526000	
	1055.57	0.71	***26.3***	319000	0.9	***30.7***	310000	1.4	***45.9***	289000	2.7	***83***	260000	526000	
	1252.76	0.60	***17.6***	253000	0.7	***20.5***	246000	1.2	***30.7***	229000	2.3	***55***	206000	420000	
GB 31005	**719.53**	1.04	***42.4***	342000	1.3	***49.4***	333000	2.0	***74***	309000	4.0	***133***	279000	549000	
	858.53	0.87	***42.9***	413000	1.0	***50.1***	402000	1.7	***75***	374000	3.4	***135***	337000	650000	
	1001.04	0.75	***37.6***	423000	0.90	***43.9***	411000	1.4	***66***	383000	2.9	***119***	345000	650000	
	1101.78	0.68	***34.7***	429000	0.82	***40.5***	417000	1.3	***61***	388000	2.6	***109***	350000	650000	
	1254.09	0.60	***26.4***	372000	0.72	***30.9***	362000	1.2	***46.3***	337000	2.3	***83***	303000	549000	
	1403.42	0.53	***28.3***	445000	0.64	***33.0***	433000	1.0	***49.4***	403000	2.1	***89***	363000	650000	
	1577.29	0.48	***25.6***	453000	0.57	***29.9***	441000	0.92	***44.8***	410000	1.8	***81***	369000	650000	57 (H-F)
	1784.27	0.42	***23.0***	461000	0.50	***20.1***	336000	0.81	***40.3***	418000	1.6	***73***	376000	650000	
	1981.09	0.38	***15.8***	351000	0.45	***18.4***	341000	0.73	***27.6***	318000	1.5	***50***	286000	526000	
	2239.08	0.33	***19.0***	478000	0.40	***22.2***	465000	0.65	***33.3***	432000	1.3	***60***	389000	650000	
	2516.91	0.30	***14.8***	419000	0.36	***17.3***	407000	0.58	***25.9***	379000	1.2	***46.7***	341000	650000	
	2811.38	0.27	***11.7***	370000	0.32	***13.7***	360000	0.52	***20.5***	335000	1.0	***37.0***	301000	526000	
	3148.70	0.24	***14.2***	503000	0.29	***16.6***	489000	0.46	***24.9***	455000	0.92	***44.8***	410000	650000	
	3559.02	0.21	***9.6***	383000	0.25	***11.2***	373000	0.41	***16.8***	347000	0.81	***30.3***	312000	526000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 31004	**172.32**	4.4	***112***	219000	5.2	***127***	207000	8.4	***178***	180000	16.8	***289***	146000	549000	60 (H-F)
	205.61	3.6	***112***	261000	4.4	***127***	247000	7.1	***178***	214000	14.1	***289***	174000	650000	
	221.14	3.4	***112***	281000	4.1	***127***	266000	6.6	***178***	231000	13.1	***289***	187000	549000	
	263.86	2.8	***112***	335000	3.4	***127***	317000	5.5	***178***	275000	11.0	***289***	223000	526000	
	310.43	2.4	***101***	354000	2.9	***118***	344000	4.7	***176***	321000	9.3	***289***	263000	526000	
	368.42	2.0	***78***	327000	2.4	***93***	323000	3.9	***146***	314000	7.9	***274***	296000	650000	
	398.38	1.9	***61***	275000	2.3	***71***	268000	3.6	***107***	249000	7.3	***194***	227000	549000	
	469.14	1.6	***53***	280000	1.9	***63***	277000	3.1	***98***	270000	6.2	***189***	259000	549000	
	514.50	1.5	***49***	286000	1.7	***57***	278000	2.8	***86***	259000	5.6	***155***	233000	526000	
	561.13	1.3	***35***	224000	1.6	***41***	218000	2.6	***62***	203000	5.2	***111***	183000	420000	
	610.62	1.2	***42***	294000	1.5	***50***	286000	2.4	***74***	266000	4.7	***134***	239000	526000	
	718.37	1.0	***37***	301000	1.3	***43***	293000	2.0	***65***	272000	4.0	***117***	245000	526000	
	852.57	0.88	***25***	239000	1.1	***29***	232000	1.7	***43***	216000	3.4	***78***	195000	549000	
GBA 31005	**584.24**	1.3	***51***	331000	1.5	***60***	322000	2.5	***90***	300000	5.0	***162***	270000	650000	50 (H-F)
	697.10	1.1	***52***	400000	1.3	***61***	389000	2.1	***91***	362000	4.2	***164***	326000	650000	
	812.81	0.92	***45.6***	410000	1.1	***53***	398000	1.8	***80***	371000	3.6	***144***	334000	420000	
	894.61	0.84	***42.1***	416000	1.0	***49.1***	404000	1.6	***74***	376000	3.2	***133***	339000	650000	
	997.95	0.75	***38.3***	423000	0.90	***44.7***	411000	1.5	***67***	382000	2.9	***121***	344000	650000	
	1122.27	0.67	***34.7***	430000	0.80	***40.5***	418000	1.3	***61***	389000	2.6	***109***	351000	650000	
	1262.77	0.59	***26.7***	372000	0.71	***31.2***	362000	1.1	***46.7***	337000	2.3	***84***	303000	549000	
	1427.41	0.53	***28.3***	446000	0.63	***33.0***	434000	1.0	***37.0***	302000	2.0	***89***	364000	650000	
	1578.57	0.48	***26.0***	453000	0.57	***30.3***	441000	0.92	***45.4***	410000	1.8	***82***	369000	650000	
	1788.19	0.42	***20.1***	397000	0.50	***23.5***	387000	0.81	***35.2***	360000	1.6	***65***	331000	650000	
	2001.18	0.37	***21.2***	469000	0.45	***18.6***	342000	0.72	***37.2***	425000	1.4	***67***	383000	650000	
	2227.34	0.34	***14.5***	357000	0.40	***16.9***	347000	0.65	***25.4***	323000	1.3	***45.7***	291000	526000	
	2557.72	0.29	***12.9***	365000	0.35	***15.1***	355000	0.57	***22.6***	330000	1.1	***40.7***	297000	526000	
	2796.56	0.27	***13.8***	425000	0.32	***16.1***	414000	0.52	***24.1***	385000	1.0	***43.4***	347000	650000	
	3140.31	0.24	***10.8***	376000	0.29	***12.7***	366000	0.46	***19.0***	340000	0.92	***34.2***	307000	526000	
	3557.65	0.21	***9.8***	383000	0.25	***11.4***	373000	0.41	***17.1***	347000	0.82	***30.7***	312000	526000	
	4222.26	0.18	***8.4***	393000	0.21	***9.8***	383000	0.34	***14.8***	356000	0.69	***26.6***	321000	526000	
	5011.04	0.15	***5.6***	312000	0.18	***6.6***	304000	0.29	***9.9***	283000	0.58	***17.8***	255000	420000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 40001	**3.43**	219	***3905***	166000	263	***4436***	157000	—	—	—	—	—	—	650000	
	4.09	183	***3412***	173000	220	***3876***	164000	—	—	—	—	—	—	650000	224 (H-F)
	5.25	143	***2782***	181000	171	***3160***	172000	—	—	—	—	—	—	650000	
	6.23	120	***2436***	188000	144	***2768***	178000	—	—	—	—	—	—	522000	
GB 40002	**14.03**	53	***1425***	242000	64	***1619***	229000	103	***2260***	198000	—	—	—	650000	
	16.74	44.8	***1305***	264000	54	***1483***	250000	87	***2071***	217000	—	—	—	650000	
	18.00	41.7	***1161***	253000	50	***1319***	239000	81	***1842***	208000	—	—	—	650000	
	21.48	34.9	***1096***	285000	41.9	***1245***	270000	68	***1739***	234000	—	—	—	650000	130 (H-F)
	25.49	29.4	***909***	280000	35.3	***1079***	277000	57	***1542***	246000	—	—	—	650000	
	27.56	27.2	***783***	261000	32.7	***930***	258000	53	***1418***	245000	—	—	—	650000	
	32.71	22.9	***666***	264000	27.5	***791***	261000	44.3	***1240***	254000	—	—	—	650000	
	38.82	19.3	***447***	210000	23.2	***531***	208000	37.3	***832***	202000	—	—	—	522000	
GB 40003	**56.10**	13.4	***413***	273000	16.0	***469***	259000	25.8	***655***	224000	52	***1064***	182000	650000	
	66.94	11.2	***413***	326000	13.4	***469***	309000	21.7	***655***	268000	43.3	***1064***	217000	650000	
	72.00	10.4	***352***	300000	12.5	***415***	294000	20.1	***650***	286000	40.3	***1064***	234000	650000	
	78.76	9.5	***361***	336000	11.4	***411***	318000	18.4	***573***	276000	36.8	***932***	224000	650000	
	85.91	8.7	***357***	362000	10.5	***423***	358000	16.9	***655***	343000	33.8	***1064***	279000	650000	76 (H-F)
	101.07	7.4	***311***	371000	8.9	***363***	361000	14.3	***569***	351000	28.7	***932***	287000	650000	
	110.25	6.8	***217***	283000	8.2	***258***	280000	13.2	***404***	272000	26.3	***778***	262000	650000	
	129.71	5.8	***189***	289000	6.9	***221***	282000	11.2	***347***	275000	22.4	***667***	264000	650000	
	155.29	4.8	***125***	229000	5.8	***147***	225000	9.3	***231***	219000	18.7	***444***	211000	522000	
	182.69	4.1	***109***	235000	4.9	***127***	229000	7.9	***198***	221000	15.9	***381***	212000	522000	
GB 40004	**199.87**	3.8	***140***	323000	4.5	***159***	305000	7.3	***223***	265000	14.5	***362***	215000	650000	
	235.14	3.2	***132***	358000	3.8	***155***	348000	6.2	***223***	311000	12.3	***362***	253000	650000	
	256.50	2.9	***114***	338000	3.5	***136***	334000	5.7	***213***	325000	11.3	***362***	276000	650000	
	280.57	2.7	***134***	433000	3.2	***157***	421000	5.2	***223***	372000	10.3	***362***	302000	650000	
	306.05	2.5	***93***	329000	2.9	***109***	320000	4.7	***163***	297000	9.5	***362***	329000	650000	
	351.86	2.1	***85***	344000	2.6	***101***	341000	4.1	***158***	331000	8.2	***296***	310000	650000	
	401.65	1.9	***99***	457000	2.2	***116***	445000	3.6	***166***	398000	7.2	***270***	323000	650000	
	438.14	1.7	***82***	412000	2.1	***97***	407000	3.3	***152***	396000	6.6	***270***	353000	650000	72 (H-F)
	500.29	1.5	***72***	417000	1.8	***86***	410000	2.9	***134***	399000	5.8	***244***	363000	650000	
	562.28	1.3	***56***	360000	1.6	***65***	351000	2.6	***97***	326000	5.2	***175***	294000	650000	
	639.43	1.2	***49.9***	367000	1.4	***58***	357000	2.3	***87***	333000	4.5	***157***	299000	650000	
	699.14	1.1	***42.9***	345000	1.3	***50***	335000	2.1	***78***	326000	4.1	***151***	314000	650000	
	791.98	0.95	***32.2***	294000	1.1	***37.6***	286000	1.8	***56***	266000	3.7	***102***	239000	522000	
	889.41	0.84	***37.7***	386000	1.0	***44.1***	376000	1.6	***66***	350000	3.3	***119***	315000	650000	
	1055.57	0.71	***32.6***	396000	0.85	***38.1***	386000	1.4	***57***	359000	2.7	***103***	323000	650000	
GB 40005	**719.53**	1.0	***52.6***	424000	1.25	***61.4***	413000	2.0	***92***	384000	4.0	***151***	316000	650000	
	858.53	0.87	***53.3***	513000	1.05	***62.2***	499000	1.7	***93***	464000	3.4	***151***	377000	650000	
	999.35	0.75	***37.5***	421000	0.90	***44.6***	417000	1.5	***70***	404000	2.9	***125***	363000	650000	
	1101.78	0.68	***38.0***	470000	0.82	***44.4***	457000	1.3	***67***	425000	2.6	***126***	402000	650000	
	1254.09	0.60	***30.3***	426000	0.72	***36.0***	422000	1.2	***56***	411000	2.3	***103***	376000	650000	
	1413.96	0.53	***26.1***	414000	0.64	***30.5***	403000	1.0	***45.7***	375000	2.1	***82***	338000	650000	
	1577.29	0.48	***28.0***	496000	0.57	***32.7***	483000	0.92	***49.1***	449000	1.8	***90***	410000	650000	59 (H-F)
	1784.27	0.42	***25.3***	506000	0.50	***29.5***	492000	0.81	***44.2***	458000	1.6	***80***	413000	650000	
	1981.09	0.38	***19.6***	436000	0.45	***22.9***	424000	0.73	***34.3***	395000	1.5	***62***	355000	650000	
	2239.08	0.33	***20.8***	520000	0.40	***24.3***	509000	0.65	***36.5***	474000	1.3	***66***	427000	650000	
	2514.73	0.30	***14.8***	419000	0.36	***17.3***	407000	0.58	***26.0***	379000	1.2	***46.7***	341000	650000	
	2811.38	0.27	***14.6***	460000	0.32	***17.0***	447000	0.52	***25.5***	416000	1.0	***45.9***	375000	650000	
	3166.70	0.24	***12.2***	433000	0.28	***14.2***	422000	0.46	***21.3***	392000	0.92	***38.4***	353000	650000	
	3559.02	0.21	***11.9***	476000	0.25	***13.9***	463000	0.41	***20.9***	431000	0.81	***37.6***	388000	650000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 40004	**172.32**	4.4	***112***	219000	5.2	***127***	207000	8.4	***178***	180000	16.8	***289***	146000	650000	62 (H-F)
	205.61	3.6	***112***	261000	4.4	***127***	247000	7.1	***178***	214000	14.1	***289***	174000	650000	
	221.14	3.4	***112***	281000	4.1	***127***	266000	6.6	***178***	231000	13.1	***289***	187000	650000	
	260.17	2.9	***112***	331000	3.5	***127***	313000	5.6	***178***	271000	11.1	***289***	220000	650000	
	310.43	2.4	***112***	394000	2.9	***127***	373000	4.7	***178***	324000	9.3	***289***	263000	650000	
	368.42	2.0	***78***	327000	2.4	***93***	323000	3.9	***146***	314000	7.9	***280***	302000	650000	
	398.38	1.9	***76***	342000	2.3	***88***	333000	3.6	***133***	310000	7.3	***241***	282000	650000	
	469.14	1.6	***53***	280000	1.9	***63***	277000	3.1	***98***	270000	6.2	***189***	259000	648000	
	514.50	1.5	***57***	330000	1.7	***67***	327000	2.8	***105***	318000	5.6	***192***	290000	650000	
	559.77	1.3	***53***	334000	1.6	***63***	331000	2.6	***98***	322000	5.2	***189***	310000	650000	
	610.62	1.2	***53***	365000	1.5	***62***	355000	2.4	***92***	330000	4.7	***166***	297000	650000	
	718.37	1.0	***45.9***	374000	1.3	***54***	364000	2.0	***80***	338000	4.0	***145***	305000	650000	
	852.57	0.88	***30.7***	297000	1.1	***35.9***	289000	1.7	***54***	269000	3.4	***97***	242000	522000	
GBA 40005	**584.24**	1.3	***64***	411000	1.5	***74***	400000	2.5	***109***	365000	5.0	***178***	297000	650000	54 (H-F)
	697.10	1.1	***65***	497000	1.3	***75***	484000	2.1	***109***	436000	4.2	***178***	354000	650000	
	799.48	0.94	***48.8***	431000	1.1	***57***	419000	1.8	***85***	390000	3.6	***143***	326000	650000	
	894.61	0.84	***46.1***	456000	1.0	***54***	443000	1.6	***81***	413000	3.2	***155***	397000	650000	
	997.95	0.75	***47.6***	520000	0.90	***56***	511000	1.5	***82***	467000	2.9	***133***	379000	650000	
	1122.27	0.67	***40.4***	501000	0.80	***48.0***	495000	1.3	***75***	482000	2.6	***136***	435000	650000	
	1262.77	0.59	***29.6***	413000	0.71	***34.6***	402000	1.1	***52***	374000	2.3	***95***	343000	650000	
	1427.41	0.53	***31.0***	489000	0.63	***36.2***	476000	1.0	***54***	442000	2.0	***100***	408000	650000	
	1578.57	0.48	***26.1***	456000	0.57	***31.0***	451000	0.92	***48.6***	439000	1.8	***94***	422000	650000	
	1788.19	0.42	***20.1***	397000	0.50	***19.6***	323000	0.81	***35.2***	360000	1.6	***65***	331000	650000	
	1993.03	0.38	***18.4***	404000	0.45	***21.4***	393000	0.73	***32.1***	366000	1.5	***58***	333000	650000	
	2227.34	0.34	***18.0***	444000	0.40	***21.1***	432000	0.65	***31.6***	402000	1.3	***57***	362000	650000	
	2557.72	0.29	***16.0***	453000	0.35	***18.7***	441000	0.57	***28.1***	410000	1.1	***51***	369000	650000	
	2796.56	0.27	***13.8***	425000	0.32	***16.1***	414000	0.52	***24.1***	385000	1.0	***43.4***	347000	650000	
	3140.31	0.24	***13.5***	467000	0.29	***15.7***	455000	0.46	***23.6***	423000	0.92	***42.5***	381000	650000	
	3557.65	0.21	***12.1***	476000	0.25	***14.1***	463000	0.41	***21.2***	431000	0.82	***38.2***	388000	650000	
	4222.26	0.18	***10.5***	489000	0.21	***12.2***	476000	0.34	***18.3***	442000	0.69	***33.0***	398000	650000	
	5011.04	0.15	***7.0***	388000	0.18	***8.2***	378000	0.29	***12.3***	351000	0.58	***22.1***	316000	522000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 45001	**3.83**	196	***4792***	228000	235	***5444***	216000	—	—	—	—	—	—	650000	224 (H-F)
GB 45002	**14.69**	51	***1919***	341000	61	***2180***	323000	99	***3044***	280000	—	—	—	650000	133 (H-F)
	16.87	44.5	***1742***	356000	53	***1979***	337000	86	***2764***	292000	—	—	—	650000	
GB 45003	**56.43**	13.3	***632***	421000	15.9	***718***	399000	25.7	***1003***	345000	—	—	—	650000	98 (H-F)
	64.77	11.6	***594***	454000	13.9	***705***	449000	22.4	***1003***	397000	—	—	—	650000	
	76.07	9.9	***495***	444000	11.8	***562***	421000	19.1	***785***	365000	—	—	—	650000	
	87.31	8.6	***448***	462000	10.3	***532***	457000	16.6	***785***	418000	—	—	—	650000	
GB 45004	**193.46**	3.9	***231***	513000	4.7	***269***	499000	7.5	***380***	437000	—	—	—	650000	76 (H-F)
	222.06	3.4	***205***	520000	4.1	***239***	510000	6.5	***359***	474000	—	—	—	650000	
	260.80	2.9	***176***	520000	3.5	***209***	520000	5.6	***313***	486000	—	—	—	650000	
	299.35	2.5	***159***	520000	3.0	***186***	520000	4.8	***279***	496000	—	—	—	650000	
	311.18	2.4	***149***	520000	2.9	***177***	520000	4.7	***270***	499000	—	—	—	650000	
	357.18	2.1	***137***	520000	2.5	***160***	520000	4.1	***240***	510000	—	—	—	650000	
	399.34	1.9	***118***	520000	2.3	***140***	520000	3.6	***218***	518000	—	—	—	650000	
	458.38	1.6	***111***	520000	2.0	***129***	520000	3.2	***194***	520000	—	—	—	650000	
	544.01	1.4	***96***	520000	1.7	***112***	520000	2.7	***168***	520000	—	—	—	650000	
GB 45005	**696.47**	1.1	***80***	520000	1.3	***93***	520000	2.1	***133***	520000	4.2	***217***	438000	650000	63 (H-F)
	799.42	0.94	***71***	520000	1.1	***83***	520000	1.8	***124***	520000	3.6	***217***	503000	650000	
	981.05	0.76	***60***	520000	0.92	***70***	520000	1.5	***104***	520000	3.0	***188***	520000	650000	
	1126.08	0.67	***53***	520000	0.80	***62***	520000	1.3	***93***	520000	2.6	***167***	520000	650000	
	1259.02	0.60	***48.0***	520000	0.71	***56***	520000	1.2	***84***	520000	2.3	***152***	520000	650000	
	1413.12	0.53	***43.7***	520000	0.64	***51***	520000	1.0	***77***	520000	2.1	***138***	520000	650000	
	1579.95	0.47	***38.8***	520000	0.57	***46.0***	520000	0.92	***70***	520000	1.8	***125***	520000	650000	
	1813.50	0.41	***35.4***	520000	0.50	***41.3***	520000	0.80	***62***	520000	1.6	***112***	520000	650000	
	1987.20	0.38	***27.2***	520000	0.45	***32.3***	520000	0.73	***51***	520000	1.5	***97***	520000	650000	
	2245.11	0.33	***27.0***	520000	0.40	***32.0***	520000	0.65	***50***	520000	1.3	***93***	520000	650000	
	2502.04	0.30	***22.5***	520000	0.36	***26.7***	520000	0.58	***41.9***	520000	1.2	***81***	520000	650000	
	2841.93	0.26	***21.8***	520000	0.32	***25.6***	520000	0.51	***40.2***	520000	1.0	***76***	520000	650000	
	3372.84	0.22	***18.9***	520000	0.27	***22.0***	520000	0.43	***34.2***	520000	0.9	***66***	520000	650000	
	3554.59	0.21	***16.1***	520000	0.25	***18.7***	520000	0.41	***28.6***	520000	0.8	***55***	520000	650000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 45004	**210.50**	3.6	***218***	520000	4.3	***255***	506000	6.9	***382***	471000	13.8	***651***	401000	650000	66 (H-F)
	247.21	3.0	***188***	520000	3.6	***222***	518000	5.9	***333***	482000	11.7	***582***	422000	650000	
	283.76	2.6	***169***	520000	3.2	***198***	520000	5.1	***296***	492000	10.2	***550***	457000	650000	
GBA 45005	**594.21**	1.3	***93***	520000	1.5	***108***	520000	2.4	***162***	520000	4.9	***292***	496000	650000	57 (H-F)
	709.00	1.1	***80***	520000	1.3	***93***	520000	2.0	***140***	520000	4.1	***251***	509000	650000	
	813.81	0.92	***71***	520000	1.1	***83***	520000	1.8	***124***	520000	3.6	***224***	520000	650000	
	902.83	0.83	***58***	520000	1.0	***69***	520000	1.6	***108***	520000	3.2	***205***	520000	650000	
	1036.29	0.72	***58***	520000	0.87	***67***	520000	1.4	***101***	520000	2.8	***182***	520000	650000	
	1097.04	0.68	***54***	520000	0.82	***64***	520000	1.3	***96***	520000	2.6	***174***	520000	650000	
	1236.48	0.61	***49.8***	520000	0.73	***58***	520000	1.2	***87***	520000	2.3	***157***	520000	650000	
	1407.87	0.53	***42.5***	520000	0.64	***50***	520000	1.0	***78***	520000	2.1	***140***	520000	650000	
	1586.82	0.47	***40.3***	520000	0.57	***47.0***	520000	0.91	***70***	520000	1.8	***127***	520000	650000	
	1670.88	0.45	***36.2***	520000	0.54	***43.0***	520000	0.87	***67***	520000	1.7	***121***	520000	650000	
	1883.25	0.40	***29.9***	520000	0.48	***35.5***	520000	0.77	***56***	520000	1.5	***107***	520000	650000	
	2211.75	0.34	***24.4***	520000	0.41	***29.0***	520000	0.66	***45.4***	520000	1.3	***87***	520000	650000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 53001	**3.84**	195	***6576***	313000	234	***7471***	477000	—	—	—	—	—	—	1191000	324 (H-F)
	5.44	138	***4311***	291000	166	***5120***	288000	—	—	—	—	—	—	801000	
GB 53002	**14.13**	53	***2124***	363000	64	***2413***	514000	—	—	—	—	—	—	1191000	185 (H-F)
	18.97	39.5	***1669***	383000	47.4	***1896***	490000	—	—	—	—	—	—	1191000	
GB 53003	**111.31**	6.7	***263***	346000	8.1	***313***	342000	13.0	***490***	333000	—	—	—	801000	132 (H-F)
	145.09	5.2	***209***	357000	6.2	***244***	348000	10.0	***382***	338000	—	—	—	801000	
	174.64	4.3	***178***	368000	5.2	***208***	358000	8.3	***321***	342000	—	—	—	801000	
GB 53004	**200.72**	3.7	***239***	553000	4.5	***272***	523000	7.2	***380***	453000	—	—	—	1191000	103 (H-F)
	400.62	1.9	***137***	631000	2.2	***163***	625000	3.6	***250***	597000	—	—	—	1191000	
	475.46	1.6	***117***	638000	1.9	***138***	631000	3.0	***217***	614000	—	—	—	1191000	
	647.49	1.2	***83***	616000	1.4	***97***	600000	2.2	***151***	584000	—	—	—	1191000	
	768.45	0.98	***72***	632000	1.2	***83***	615000	1.9	***129***	589000	—	—	—	1191000	
GB 53005	**1437.38**	0.52	***43.1***	695000	0.63	***50***	676000	1.0	***75***	629000	2.0	***141***	587000	1191000	84 (H-F)
	1639.22	0.46	***38.8***	713000	0.55	***46.0***	706000	0.88	***72***	687000	1.8	***139***	660000	1191000	
	1936.50	0.39	***33.5***	727000	0.46	***39.1***	707000	0.75	***59***	658000	1.5	***106***	597000	1191000	
	2341.28	0.32	***27.2***	714000	0.38	***32.0***	701000	0.62	***50***	673000	1.2	***95***	647000	1191000	
	2766.43	0.27	***22.6***	701000	0.33	***26.8***	694000	0.52	***42.0***	675000	1.0	***78***	625000	1191000	
	3143.67	0.24	***22.2***	782000	0.29	***25.9***	761000	0.46	***38.8***	708000	0.9	***70***	638000	1191000	
	3335.08	0.22	***21.1***	789000	0.30	***24.6***	768000	0.43	***36.9***	715000	0.9	***66***	643000	1191000	
	3673.37	0.20	***18.8***	775000	0.25	***22.3***	767000	0.39	***34.0***	725000	0.8	***61***	653000	1191000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 53004	**190.27**	3.9	***245***	527000	4.7	***287***	515000	7.6	***401***	447000	15.2	***651***	363000	1191000	89 (H-F)
	248.00	3.0	***219***	614000	3.6	***255***	596000	5.8	***356***	517000	11.7	***578***	420000	1191000	
	361.75	2.1	***100***	410000	2.5	***117***	399000	4.0	***175***	372000	8.0	***323***	342000	801000	
	471.53	1.6	***80***	427000	1.9	***93***	416000	3.1	***140***	387000	6.2	***252***	348000	801000	
	567.58	1.3	***68***	439000	1.6	***80***	427000	2.6	***120***	398000	5.1	***215***	358000	801000	
GBA 53005	**616.50**	1.2	***114***	773000	1.5	***129***	733000	2.4	***180***	635000	4.7	***293***	516000	1191000	75 (H-F)
	735.60	1.0	***99***	804000	1.2	***112***	761000	2.0	***157***	659000	3.9	***255***	536000	1191000	
	1117.65	0.67	***58***	717000	0.81	***69***	710000	1.3	***108***	691000	2.6	***190***	607000	1191000	
	1500.68	0.50	***42.2***	700000	0.60	***49***	681000	1.0	***74***	633000	1.9	***137***	589000	1191000	
	2360.24	0.32	***26.6***	695000	0.38	***32***	687000	0.61	***50***	669000	1.2	***91***	611000	1191000	
	2979.23	0.25	***23.6***	776000	0.30	***28***	755000	0.49	***41***	702000	1.0	***74***	632000	1191000	
	3334.03	0.22	***15.6***	574000	0.27	***18.2***	559000	0.43	***27***	520000	0.87	***49***	468000	801000	
	3781.89	0.20	***14.0***	585000	0.24	***16.4***	570000	0.38	***25***	530000	0.77	***44***	477000	801000	
	4218.63	0.18	***12.8***	595000	0.21	***14.9***	579000	0.34	***22***	539000	0.69	***40***	485000	801000	
	5077.99	0.15	***10.9***	612000	0.18	***12.7***	595000	0.29	***19***	554000	0.57	***34***	499000	801000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 61001	**3.84**	195	***8767***	418000	—	—	—	—	—	—	—	—	—	1310000	324 (H-F)
GB 61002	**14.13**	53	***2124***	363000	64	***2413***	344000	—	—	—	—	—	—	1310000	185 (H-F)
	18.97	39.5	***1669***	383000	47.4	***1896***	363000	—	—	—	—	—	—	1310000	
GB 61003	**102.46**	7.3	***451***	546000	8.8	***536***	540000	14.2	***779***	487000				1310000	132 (H-F)
	123.33	6.1	***379***	551000	7.3	***450***	546000	11.8	***665***	501000				1310000	
GB 61004	**224.42**	3.3	***243***	627000	4.0	***276***	593000	6.5	***385***	514000	—	—	—	1310000	103 (H-F)
	292.52	2.6	***184***	620000	3.1	***219***	614000	5.0	***312***	543000	—	—	—	1310000	
	307.35	2.4	***195***	689000	2.9	***221***	652000	4.7	***309***	565000	—	—	—	1310000	
	400.62	1.9	***137***	631000	2.2	***163***	625000	3.6	***250***	597000	—	—	—	1310000	
	537.92	1.4	***97***	600000	1.7	***115***	594000	2.7	***180***	578000	—	—	—	1310000	
	647.49	1.2	***83***	616000	1.4	***97***	600000	2.2	***151***	584000	—	—	—	1310000	
GB 61005	**897.67**	0.84	***81***	816000	1.0	***96***	807000	1.6	***150***	780000	3.2	***243***	633000	1310000	84 (H-F)
	1020.08	0.74	***72***	822000	0.88	***85***	813000	1.4	***134***	791000	2.8	***222***	658000	1310000	
	1170.06	0.64	***51***	671000	0.77	***61***	664000	1.2	***95***	647000	2.5	***183***	621000	1310000	
	1229.41	0.61	***60***	833000	0.73	***72***	822000	1.2	***112***	800000	2.4	***195***	696000	1310000	
	1397.06	0.54	***54***	849000	0.64	***63***	828000	1.0	***99***	806000	2.1	***178***	723000	1310000	
	1571.06	0.48	***40.0***	704000	0.57	***46.7***	685000	0.92	***70***	638000	1.8	***129***	590000	1310000	
	1785.29	0.42	***35.9***	718000	0.50	***41.9***	699000	0.81	***63***	650000	1.6	***115***	595000	1310000	
	1928.91	0.39	***24.0***	520000	0.47	***28.5***	515000	0.75	***44.7***	501000	1.5	***86***	481000	1310000	
	2151.66	0.35	***30.6***	739000	0.42	***35.7***	719000	0.67	***53.6***	669000	1.3	***96***	602000	1310000	
	2589.97	0.29	***24.0***	698000	0.35	***28.5***	691000	0.56	***44.7***	672000	1.1	***82***	619000	1310000	
	2943.14	0.25	***21.4***	706000	0.31	***25.3***	696000	0.49	***39.7***	677000	1.0	***74***	631000	1310000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 61004	**190.27**	3.9	***245***	527000	4.7	***287***	515000	7.6	***401***	447000	15.2	***651***	363000	1310000	89 (H-F)
	333.00	2.3	***155***	584000	2.7	***184***	577000	4.4	***288***	562000	8.7	***554***	540000	1310000	
	400.83	1.9	***130***	590000	2.2	***154***	584000	3.6	***242***	568000	7.2	***465***	546000	1310000	
GBA 61005	**898.44**	0.83	***67***	661000	1.0	***79***	654000	1.6	***124***	637000	3.2	***238***	612000	1310000	75 (H-F)
	944.01	0.79	***78***	818000	1.0	***93***	810000	1.5	***146***	788000	3.1	***238***	643000	1310000	
	1047.28	0.72	***58***	672000	0.83	***69***	665000	1.3	***108***	647000	2.8	***206***	617000	1310000	
	1230.47	0.61	***49.5***	673000	0.71	***59***	666000	1.1	***92***	648000	2.4	***177***	623000	1310000	
	1434.32	0.52	***54***	852000	0.63	***63***	829000	1.0	***98***	807000	2.0	***178***	729000	1310000	
	1652.17	0.40	***38.9***	710000	0.54	***45.4***	691000	0.88	***68***	642000	1.8	***125***	592000	1310000	
	1988.72	0.38	***31.3***	688000	0.45	***37.2***	681000	0.73	***58***	661000	1.5	***105***	598000	1310000	
	2206.27	0.34	***28.4***	692000	0.41	***33.7***	685000	0.66	***53***	666000	1.3	***96***	604000	1310000	
	2510.28	0.30	***27.3***	756000	0.36	***31.8***	736000	0.58	***47.7***	684000	1.2	***85.9***	616000	1310000	
	3021.63	0.25	***21.2***	709000	0.30	***25.1***	697000	0.58	***39.3***	678000	0.96	***73.4***	634000	1310000	
GBA 61006	**3259.46**	0.23	***21.6***	758000	0.28	***24.6***	737000	0.44	***37.8***	686000	0.89	***72.6***	659000	1310000	63 (H-F)
	3590.67	0.21	***22.2***	858000	0.25	***25.2***	812000	0.40	***35.2***	704000	0.81	***57.2***	572000	1310000	
	3923.43	0.19	***13.6***	574000	0.23	***15.9***	559000	0.37	***23.9***	522000	0.74	***45.9***	501000	1310000	
	4464.05	0.17	***16.5***	795000	0.20	***19.3***	773000	0.32	***28.9***	719000	0.65	***54.0***	671000	1310000	
	5072.78	0.15	***14.8***	810000	0.18	***17.3***	788000	0.29	***25.9***	733000	0.57	***47.8***	676000	1310000	
	5588.25	0.13	***16.5***	994000	0.16	***19.6***	984000	0.26	***30.4***	948000	0.52	***54.8***	853000	1310000	
	6284.23	0.12	***12.8***	869000	0.14	***15.0***	845000	0.23	***22.5***	786000	0.46	***40.5***	708000	1310000	
	7141.17	0.11	***11.5***	886000	0.13	***13.4***	862000	0.20	***20.2***	802000	0.41	***36.3***	722000	1310000	
	8198.76	0.09	***9.3***	825000	0.11	***10.9***	802000	0.18	***16.3***	746000	0.35	***30.2***	690000	1310000	
	8767.77	0.09	***6.9***	649000	0.10	***8.0***	631000	0.17	***12.0***	587000	0.33	***21.6***	529000	1310000	
	10359.87	0.07	***7.7***	854000	0.09	***8.9***	831000	0.14	***13.4***	773000	0.28	***24.2***	700000	1310000	
	11772.58	0.06	***6.9***	871000	0.08	***8.0***	847000	0.12	***12.0***	788000	0.25	***21.6***	710000	1310000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 85001	**3.84**	195	***10959***	522000	—	—	—	—	—	—	—	—	—	1310000	336 (H-F)
GB 85002	**14.13**	53	***2467***	422000	64	***2803***	400000	—	—	—	—	—	—	1310000	193 (H-F)
	18.97	39.5	***1938***	445000	47.4	***2202***	421000	—	—	—	—	—	—	1310000	
GB 85003	**56.52**	13.3	***830***	554000	15.9	***943***	524000	25.7	***1317***	455000	—	—	—	1310000	141 (H-F)
	65.95	11.4	***732***	570000	13.6	***832***	539000	22.0	***1161***	467000	—	—	—	1310000	
	75.90	9.9	***688***	616000	11.9	***817***	609000	19.1	***1195***	554000	—	—	—	1310000	
	88.55	8.5	***595***	621000	10.2	***706***	615000	16.4	***1073***	580000	—	—	—	1310000	
GB 85004	**226.10**	3.3	***323***	840000	4.0	***367***	795000	6.4	***512***	689000	12.8	***832***	560000	1310000	110 (H-F)
	266.00	2.8	***288***	882000	3.4	***327***	835000	5.5	***457***	723000	10.9	***742***	588000	1310000	
	310.33	2.4	***250***	894000	2.9	***288***	858000	4.7	***403***	744000	9.3	***654***	604000	1310000	
	354.18	2.1	***165***	673000	2.5	***196***	666000	4.1	***307***	648000	8.2	***591***	623000	1310000	
	416.69	1.8	***142***	679000	2.2	***168***	672000	3.5	***264***	654000	7.0	***507***	628000	1310000	
GB 85005	**805.48**	0.93	***112***	1015000	1.1	***131***	988000	1.8	***197***	919000	3.6	***351***	819000	1310000	91 (H-F)
	947.62	0.79	***98***	1041000	0.95	***114***	1012000	1.5	***171***	942000	3.1	***313***	860000	1310000	
	1153.11	0.65	***83***	1072000	0.78	***97***	1043000	1.3	***145***	970000	2.5	***267***	892000	1310000	
	1261.05	0.59	***55***	783000	0.71	***65***	761000	1.1	***97***	708000	2.3	***183***	669000	1310000	
	1356.60	0.55	***72***	1048000	0.66	***84***	1048000	1.1	***126***	994000	2.1	***229***	900000	1310000	
	1582.69	0.47	***59***	1048000	0.57	***70***	1041000	0.92	***110***	1013000	1.8	***200***	917000	1310000	
	1767.94	0.42	***41.5***	824000	0.51	***48.5***	801000	0.82	***73***	745000	1.6	***133***	682000	1310000	
	2062.60	0.36	***36.4***	843000	0.44	***42.5***	820000	0.70	***64***	763000	1.4	***115***	688000	1310000	
	2449.10	0.31	***31.5***	865000	0.37	***36.8***	842000	0.59	***55***	783000	1.2	***99***	705000	1310000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 85004	**214.32**	3.5	***245***	594000	4.2	***287***	580000	6.8	***401***	503000	13.5	***651***	409000	1310000	92 (H-F)
	246.66	3.0	***236***	659000	3.6	***280***	652000	5.9	***401***	579000	11.8	***651***	470000	1310000	
	287.77	2.6	***204***	665000	3.1	***242***	658000	5.0	***380***	640000	10.1	***651***	549000	1310000	
GBA 85005	**694.45**	1.1	***115***	882000	1.3	***131***	835000	2.1	***182***	724000	4.2	***296***	588000	1310000	79 (H-F)
	810.19	0.93	***113***	1012000	1.1	***131***	975000	1.8	***182***	845000	3.6	***296***	686000	1310000	
	953.16	0.79	***97***	1022000	0.94	***115***	1011000	1.5	***173***	943000	3.0	***296***	807000	1310000	
	1096.99	0.68	***63***	766000	0.82	***74***	745000	1.3	***111***	694000	2.6	***212***	664000	1310000	
	1241.33	0.60	***58***	797000	0.73	***69***	789000	1.2	***108***	767000	2.3	***206***	731000	1310000	
	1448.22	0.52	***58***	930000	0.62	***69***	920000	1.0	***108***	895000	2.0	***206***	853000	1310000	
	1652.86	0.45	***44.7***	815000	0.54	***52***	793000	0.88	***78***	738000	1.8	***144***	680000	1310000	
	1944.54	0.39	***38.9***	836000	0.46	***45.4***	813000	0.75	***68***	756000	1.7	***124***	686000	1310000	
GBA 85006	**2354.48**	0.32	***47.1***	1048000	0.38	***55.0***	1048000	0.62	***82***	1048000	1.5	***148***	973000	1310000	69 (H-F)
	2745.30	0.27	***41.3***	1048000	0.33	***48.3***	1048000	0.53	***72***	1048000	1.2	***130***	996000	1310000	
	3202.85	0.23	***33.4***	1048000	0.28	***39.0***	1048000	0.45	***59***	1048000	1.1	***114***	1014000	1310000	
	3686.14	0.20	***23.2***	920000	0.24	***27.1***	895000	0.39	***40.6***	833000	0.91	***73***	750000	1310000	
	3965.43	0.19	***30.3***	1048000	0.23	***35.3***	1048000	0.37	***52.9***	1048000	0.79	***95***	1048000	1310000	
	4490.27	0.17	***25.1***	1048000	0.20	***29.3***	1048000	0.32	***43.9***	1048000	0.65	***83***	1033000	1310000	
	5156.29	0.15	***22.3***	1048000	0.17	***26.0***	1048000	0.28	***39.0***	1048000	0.56	***73***	1042000	1310000	
	5426.38	0.14	***23.2***	1048000	0.17	***27.1***	1048000	0.27	***40.6***	1048000	0.53	***73***	1104000	1310000	
	6330.78	0.12	***18.7***	1048000	0.14	***21.9***	1048000	0.23	***32.8***	1048000	0.46	***60***	1048000	1310000	
	7099.24	0.11	***13.3***	1016000	0.13	***15.5***	989000	0.20	***23.3***	920000	0.41	***41.9***	828000	1310000	
	8250.39	0.09	***11.7***	1040000	0.11	***13.7***	1012000	0.18	***20.5***	941000	0.35	***36.9***	847000	1310000	
	9796.38	0.08	***10.1***	1048000	0.09	***11.8***	1038000	0.15	***17.7***	966000	0.30	***31.9***	870000	1310000	
	11429.12	0.07	***8.9***	1048000	0.08	***10.4***	1048000	0.13	***15.5***	989000	0.25	***28.0***	890000	1310000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 110001	**4.32**	174	***10073***	540000	—	—	—	—	—	—	—	—	—	2250000	584 (H-F)
GB 110002	**14.81**	51	***4005***	718000	61	***4550***	680000	—	—	—	—	—	—	2250000	340 (H-F)
	17.67	42.4	***3499***	749000	51	***3976***	709000	—	—	—	—	—	—	2250000	
	22.68	33.1	***2853***	783000	39.7	***3241***	742000	—	—	—	—	—	—	2250000	
	26.92	27.9	***2499***	814000	33.4	***2839***	771000	—	—	—	—	—	—	2250000	
GB 110003	**60.59**	12.4	***1336***	955000	14.9	***1587***	945000	23.9	***2318***	857000	—	—	—	2250000	241 (H-F)
	77.76	9.6	***1056***	969000	11.6	***1254***	959000	18.6	***1889***	897000	—	—	—	2250000	
	92.78	8.1	***897***	982000	9.7	***1062***	969000	15.6	***1664***	943000	—	—	—	2250000	
	110.11	6.8	***776***	1008000	8.2	***905***	980000	13.2	***1416***	952000	—	—	—	2250000	
	119.07	6.3	***726***	1020000	7.6	***847***	992000	12.2	***1316***	956000	—	—	—	2250000	
	141.31	5.3	***628***	1047000	6.4	***733***	1018000	10.3	***1119***	966000	—	—	—	2250000	
	167.71	4.5	***459***	908000	5.4	***545***	898000	8.6	***854***	874000	—	—	—	2250000	
GB 110004	**242.37**	3.1	***407***	1136000	3.7	***475***	1105000	6.0	***672***	969000	12.0	***1091***	787000	2250000	186 (H-F)
	289.19	2.6	***351***	1166000	3.1	***409***	1135000	5.0	***613***	1056000	10.0	***1091***	939000	2250000	
	311.04	2.4	***330***	1179000	2.9	***385***	1147000	4.7	***577***	1067000	9.3	***1049***	971000	2250000	
	365.93	2.0	***287***	1209000	2.5	***335***	1176000	4.0	***502***	1094000	7.9	***905***	985000	2250000	
	440.46	1.7	***245***	1243000	2.0	***286***	1209000	3.3	***429***	1125000	6.6	***773***	1013000	2250000	
	518.19	1.4	***214***	1274000	1.7	***249***	1239000	2.8	***374***	1153000	5.6	***673***	1038000	2250000	
	560.33	1.3	***193***	1247000	1.6	***227***	1220000	2.6	***350***	1167000	5.2	***630***	1051000	2250000	
	665.01	1.1	***167***	1280000	1.4	***195***	1245000	2.2	***303***	1197000	4.4	***545***	1078000	2250000	
	789.24	0.95	***112***	1016000	1.1	***131***	988000	1.8	***203***	955000	3.7	***391***	918000	2250000	
GB 110005	**863.44**	0.87	***142***	1376000	1.0	***163***	1320000	1.7	***228***	1144000	3.4	***371***	929000	2250000	152 (H-F)
	1015.81	0.74	***124***	1411000	0.89	***144***	1372000	1.4	***217***	1277000	2.9	***371***	1093000	2250000	
	1108.08	0.68	***115***	1429000	0.81	***134***	1390000	1.3	***201***	1294000	2.6	***362***	1165000	2250000	
	1236.08	0.61	***105***	1453000	0.73	***122***	1413000	1.2	***171***	1225000	2.3	***277***	995000	2250000	
	1413.24	0.53	***94***	1483000	0.64	***109***	1442000	1.0	***164***	1342000	2.1	***295***	1208000	2250000	
	1474.87	0.51	***90***	1492000	0.61	***105***	1452000	0.98	***158***	1351000	2.0	***277***	1187000	2250000	
	1586.30	0.47	***84***	1490000	0.57	***99***	1468000	0.91	***148***	1366000	1.8	***267***	1230000	2250000	
	1735.14	0.43	***79***	1530000	0.52	***92***	1488000	0.84	***137***	1384000	1.7	***248***	1247000	2250000	
	1996.17	0.38	***67***	1511000	0.45	***79***	1470000	0.73	***118***	1368000	1.5	***213***	1231000	2250000	
	2246.34	0.33	***57***	1439000	0.40	***68***	1424000	0.65	***106***	1386000	1.3	***199***	1296000	2250000	
	2509.23	0.30	***56***	1587000	0.36	***66***	1544000	0.58	***101***	1464000	1.2	***181***	1318000	2250000	
	2857.68	0.26	***49.8***	1595000	0.31	***58***	1552000	0.51	***87***	1444000	1.0	***157***	1300000	2250000	
	3263.09	0.23	***44.5***	1628000	0.28	***52***	1583000	0.44	***78***	1473000	0.89	***140***	1327000	2250000	
	3553.28	0.21	***38.3***	1527000	0.25	***44.7***	1485000	0.41	***69***	1422000	0.82	***133***	1367000	2250000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 110005	**744.42**	1.0	***115***	946000	1.2	***131***	896000	1.9	***182***	776000	3.9	***296***	630000	2250000	131 (H-F)
	888.23	0.84	***115***	1129000	1.0	***131***	1069000	1.6	***182***	926000	3.3	***296***	752000	2250000	
	1044.97	0.72	***115***	1328000	0.86	***131***	1257000	1.4	***182***	1090000	2.8	***296***	885000	2250000	
	1123.93	0.67	***115***	1428000	0.80	***131***	1352000	1.3	***182***	1172000	2.6	***296***	952000	2250000	
	1333.89	0.56	***80***	1182000	0.67	***95***	1170000	1.1	***149***	1139000	2.2	***296***	960000	2250000	
	1462.86	0.51	***89***	1442000	0.62	***104***	1402000	0.99	***156***	1305000	2.0	***288***	1205000	2250000	
	1591.57	0.47	***80***	1411000	0.57	***95***	1396000	0.91	***149***	1359000	1.8	***271***	1230000	2250000	
	1736.14	0.43	***77***	1479000	0.52	***90***	1439000	0.84	***135***	1339000	1.7	***245***	1217000	2250000	
	2042.52	0.37	***67***	1516000	0.44	***78***	1475000	0.71	***118***	1372000	1.4	***212***	1236000	2250000	
	2222.64	0.34	***54***	1445000	0.40	***69***	1412000	0.65	***108***	1374000	1.3	***197***	1252000	2250000	
	2418.20	0.31	***54***	1576000	0.37	***64***	1430000	0.60	***101***	1391000	1.2	***190***	1311000	2250000	
	2637.86	0.28	***47***	1615000	0.34	***63***	1533000	0.55	***95***	1427000	1.1	***170***	1285000	2250000	
	3103.36	0.24	***36.5***	1250000	0.29	***55***	1571000	0.47	***82***	1462000	0.93	***148***	1316000	2250000	
	3683.11	0.20	***31.5***	1283000	0.24	***36.8***	1248000	0.39	***55***	1161000	0.79	***99***	1045000	2250000	
GBA 110006	**2523.90**	0.30	***60***	1619000	0.36	***70***	1575000	0.57	***104***	1465000	1.1	***182***	1282000	2250000	114 (H-F)
	2969.29	0.25	***52***	1659000	0.30	***61***	1614000	0.49	***91***	1502000	1.0	***163***	1352000	2250000	
	3239.00	0.23	***47.3***	1649000	0.28	***55***	1604000	0.45	***83***	1495000	0.90	***152***	1370000	2250000	
	3542.91	0.21	***44.7***	1704000	0.25	***52***	1658000	0.41	***78***	1542000	0.82	***141***	1389000	2250000	
	3864.72	0.19	***41.5***	1727000	0.23	***48.4***	1680000	0.38	***73***	1563000	0.75	***131***	1407000	2250000	
	4506.23	0.17	***36.4***	1767000	0.20	***42.5***	1719000	0.32	***62***	1547000	0.64	***115***	1440000	2250000	
	5071.95	0.15	***32.9***	1799000	0.18	***38.4***	1750000	0.29	***58***	1628000	0.57	***104***	1466000	2250000	
	5652.95	0.13	***30.0***	1800000	0.16	***35.1***	1779000	0.26	***53***	1655000	0.51	***95***	1490000	2250000	
	6317.56	0.12	***27.3***	1800000	0.14	***31.9***	1800000	0.23	***47.8***	1683000	0.46	***86***	1516000	2250000	
	7100.24	0.11	***23.9***	1800000	0.13	***27.9***	1781000	0.20	***41.9***	1657000	0.41	***75***	1492000	2250000	
	7925.21	0.09	***22.5***	1800000	0.11	***26.3***	1800000	0.18	***39.5***	1742000	0.37	***71***	1569000	2250000	
	8907.05	0.08	***20.4***	1800000	0.10	***23.8***	1800000	0.16	***34.6***	1715000	0.33	***64***	1597000	2250000	
	9913.71	0.08	***18.0***	1800000	0.09	***21.1***	1800000	0.15	***31.6***	1743000	0.29	***57***	1569000	2250000	
	11231.22	0.07	***16.2***	1800000	0.08	***18.9***	1800000	0.13	***28.4***	1776000	0.26	***51***	1599000	2250000	
	12081.15	0.06	***14.1***	1800000	0.07	***16.5***	1787000	0.12	***24.7***	1663000	0.24	***44.5***	1497000	2250000	
	14213.12	0.05	***12.3***	1800000	0.06	***14.4***	1800000	0.10	***21.5***	1704000	0.20	***38.8***	1535000	2250000	
	15819.46	0.05	***9.4***	1599000	0.06	***11.0***	1556000	0.09	***16.4***	1447000	0.18	***29.6***	1303000	2250000	
	18240.17	0.04	***10.7***	1800000	0.05	***12.5***	1800000	0.08	***18.8***	1800000	0.16	***33.9***	1721000	2250000	
	21647.68	0.03	***7.2***	1677000	0.04	***8.4***	1631000	0.07	***12.6***	1518000	0.13	***22.7***	1367000	2250000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 130001	**4.32**	174	***13431***	720000	—	—	—	—	—	—	—	—	—	2720000	585 (H-F)
GB 130002	**16.56**	45.3	***4914***	985000	54	***5583***	933000	—	—	—	—	—	—	2720000	340 (H-F)
GB 130003	**63.48**	11.8	***1551***	1162000	14.2	***1842***	1150000	22.8	***2888***	1119000	—	—	—	2720000	243 (H-F)
	72.86	10.3	***1362***	1171000	12.4	***1618***	1159000	19.9	***2536***	1128000	—	—	—	2720000	
GB 130004	**243.76**	3.1	***479***	1342000	3.7	***559***	1306000	5.9	***837***	1215000	—	—	—	2720000	190 (H-F)
	279.80	2.7	***426***	1370000	3.2	***497***	1333000	5.2	***745***	1240000	—	—	—	2720000	
	328.60	2.3	***371***	1404000	2.7	***434***	1366000	4.4	***650***	1271000	—	—	—	2720000	
	377.18	2.0	***330***	1434000	2.4	***386***	1395000	3.8	***578***	1298000	—	—	—	2720000	
GB 130005	**835.76**	0.90	***172***	1617000	1.1	***201***	1573000	1.7	***302***	1464000	3.5	***544***	1318000	2720000	156 (H-F)
	997.21	0.75	***148***	1661000	0.90	***173***	1616000	1.5	***260***	1503000	2.9	***468***	1354000	2720000	
	1126.64	0.67	***134***	1692000	0.80	***156***	1646000	1.3	***234***	1531000	2.6	***422***	1379000	2720000	
	1293.18	0.58	***119***	1728000	0.70	***139***	1681000	1.1	***208***	1564000	2.2	***375***	1408000	2720000	
	1468.94	0.51	***107***	1761000	0.61	***125***	1713000	0.99	***187***	1594000	2.0	***337***	1435000	2720000	
	1543.00	0.49	***102***	1774000	0.58	***120***	1726000	0.94	***179***	1606000	1.9	***323***	1446000	2720000	
	1725.16	0.43	***93***	1805000	0.52	***109***	1756000	0.84	***163***	1633000	1.7	***294***	1471000	2720000	
	1980.19	0.38	***83***	1843000	0.45	***97***	1793000	0.73	***145***	1668000	1.5	***261***	1502000	2720000	
	2350.11	0.32	***72***	1891000	0.38	***84***	1840000	0.62	***125***	1712000	1.2	***226***	1541000	2720000	

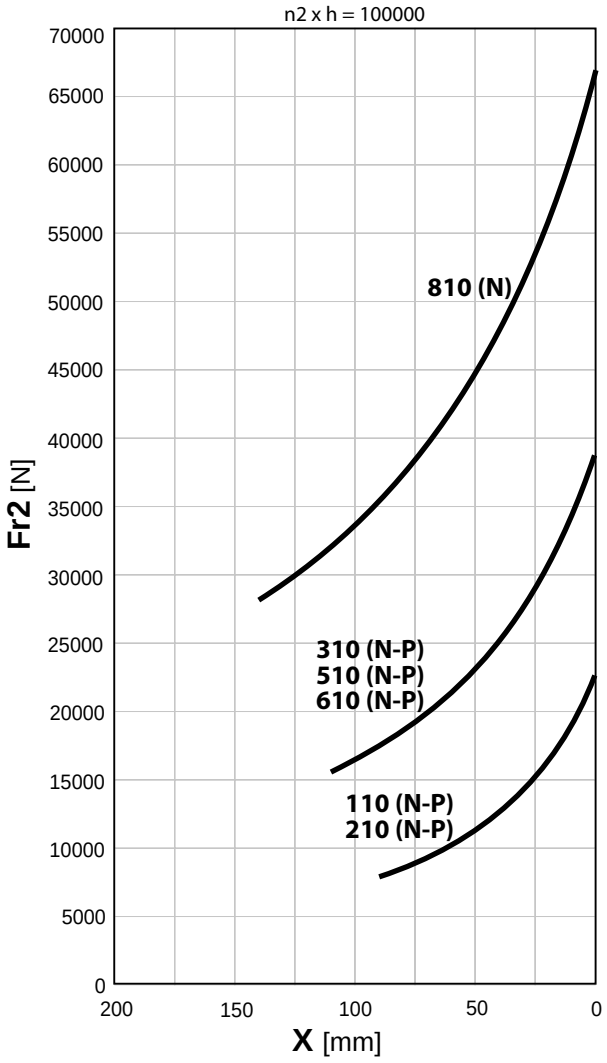
		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GBA 130005	**909.34**	0.82	***163***	1638000	0.99	***190***	1593000	1.6	***285***	1483000	3.2	***514***	1335000	2720000	135 (H-F)
	1067.96	0.70	***142***	1678000	0.84	***166***	1633000	1.4	***249***	1519000	2.7	***448***	1368000	2720000	
	1225.83	0.61	***127***	1714000	0.73	***148***	1667000	1.2	***221***	1551000	2.4	***399***	1397000	2720000	
GBA 130006	**2566.98**	0.29	***69***	1916000	0.35	***81***	1864000	0.56	***121***	1735000	1.1	***218***	1562000	2720000	118 (H-F)
	3062.87	0.24	***60***	1968000	0.29	***70***	1915000	0.47	***104***	1782000	0.95	***188***	1604000	2720000	
	3515.64	0.21	***53***	2010000	0.26	***62***	1955000	0.41	***93***	1819000	0.82	***167***	1638000	2720000	
	3971.92	0.19	***47.9***	2047000	0.23	***56***	1992000	0.37	***84***	1853000	0.73	***151***	1668000	2720000	
	4476.76	0.17	***43.2***	2085000	0.20	***50***	2028000	0.32	***76***	1887000	0.65	***136***	1699000	2720000	
	5257.64	0.14	***37.7***	2136000	0.17	***44.0***	2078000	0.28	***66***	1933000	0.55	***119***	1741000	2720000	
	5972.20	0.13	***33.9***	2176000	0.15	***39.5***	2118000	0.24	***59***	1971000	0.49	***107***	1775000	2720000	
	6288.58	0.12	***32.4***	2176000	0.14	***37.8***	2135000	0.23	***57***	1986000	0.46	***102***	1789000	2720000	
	7087.88	0.11	***29.3***	2176000	0.13	***34.2***	2174000	0.20	***51***	2023000	0.41	***92***	1821000	2720000	
	8050.76	0.09	***26.3***	2176000	0.11	***30.7***	2176000	0.18	***46.0***	2062000	0.36	***83***	1857000	2720000	
	9554.75	0.08	***22.7***	2176000	0.09	***26.5***	2176000	0.15	***39.8***	2116000	0.30	***72***	1905000	2720000	
	10967.19	0.07	***20.2***	2176000	0.08	***23.6***	2176000	0.13	***35.4***	2161000	0.26	***64***	1946000	2720000	

		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 150001	**4.07**	—	—	—	—	—	—	—	—	—	—	—	—	2720000	585 (H-F)
GB 150002	**15.62**	48.0	***4914***	929000	58	***5583***	880000	—	—	—	—	—	—	2720000	340 (H-F)
GB 150003	**59.87**	12.5	***1968***	1390000	15.0	***2236***	1316000	24.2	***3122***	1141000	—	—	—	2720000	246 (H-F)
	68.72	10.9	***1742***	1413000	13.1	***2030***	1372000	21.1	***2834***	1189000	—	—	—	2720000	
GB 150004	**248.02**	3.0	***563***	1607000	3.6	***657***	1563000	5.8	***986***	1456000	—	—	—	2720000	192 (H-F)
	284.68	2.6	***501***	1640000	3.2	***585***	1596000	5.1	***876***	1485000	—	—	—	2720000	
	323.28	2.3	***450***	1672000	2.8	***525***	1627000	4.5	***787***	1513000	—	—	—	2720000	
	371.07	2.0	***400***	1707000	2.4	***467***	1661000	3.9	***700***	1545000	—	—	—	2720000	
	389.13	1.9	***384***	1720000	2.3	***448***	1673000	3.7	***672***	1557000	—	—	—	2720000	
	446.65	1.7	***342***	1756000	2.0	***399***	1708000	3.2	***598***	1589000	—	—	—	2720000	
GB 150005	**950.73**	0.79	***185***	1969000	0.95	***215***	1915000	1.5	***323***	1782000	3.05	***582***	1604000	2720000	158 (H-F)
	1091.28	0.69	***164***	2010000	0.82	***192***	1955000	1.3	***287***	1819000	2.66	***517***	1638000	2720000	
	1239.23	0.61	***147***	2049000	0.73	***172***	1993000	1.2	***258***	1855000	2.34	***464***	1670000	2720000	
	1302.09	0.58	***141***	2065000	0.69	***165***	2008000	1.1	***247***	1869000	2.23	***445***	1683000	2720000	
	1422.42	0.53	***131***	2092000	0.63	***153***	2035000	1.0	***229***	1894000	2.04	***413***	1705000	2720000	
	1491.67	0.50	***119***	1999000	0.60	***142***	1978000	0.97	***220***	1907000	1.94	***397***	1718000	2720000	
	1494.57	0.50	***126***	2108000	0.60	***147***	2051000	0.97	***220***	1908000	1.94	***396***	1718000	2720000	
	1697.21	0.44	***113***	2149000	0.53	***132***	2091000	0.85	***197***	1945000	1.71	***356***	1751000	2720000	
	1712.17	0.44	***112***	2152000	0.53	***131***	2093000	0.85	***196***	1948000	1.69	***353***	1754000	2720000	
	1948.10	0.38	***100***	2176000	0.46	***117***	2135000	0.74	***176***	1986000	1.49	***316***	1788000	2720000	
	2042.94	0.37	***89***	2035000	0.44	***105***	2014000	0.71	***165***	1960000	1.42	***304***	1801000	2720000	
	2344.94	0.32	***86***	2176000	0.38	***100***	2176000	0.62	***150***	2043000	1.24	***270***	1839000	2720000	

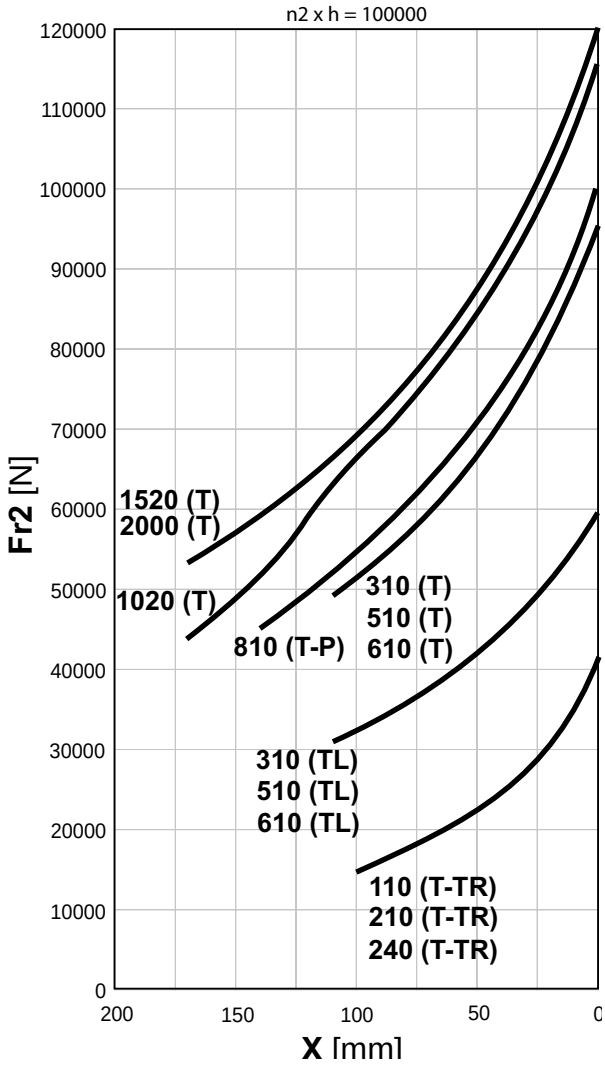
		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 205001	**4.14**	—	—	—	—	—	—	—	—	—	—	—	—	3620000	870 (H-F)
GB 205002	**15.89**	47.2	***6744***	1297000	—	—	—	—	—	—	—	—	—	3620000	498 (H-F)
	22.50	33.3	***4422***	1204000	—	—	—	—	—	—	—	—	—	3620000	
GB 205003	**58.47**	12.8	***2530***	1746000	15.4	***2875***	1653000	—	—	—	—	—	—	3620000	357 (H-F)
	78.51	9.6	***1988***	1842000	11.5	***2259***	1744000	—	—	—	—	—	—	3620000	
	82.80	9.1	***1328***	1297000	10.9	***1577***	1284000	—	—	—	—	—	—	3620000	
	111.18	6.7	***1006***	1319000	8.1	***1194***	1306000	—	—	—	—	—	—	3620000	
GB 205004	**239.21**	3.1	***834***	2296000	3.8	***974***	2234000	6.1	***1460***	2078000	—	—	—	3620000	280 (H-F)
	306.99	2.4	***669***	2362000	2.9	***788***	2320000	4.7	***1181***	2158000	—	—	—	3620000	
	321.19	2.3	***642***	2371000	2.8	***758***	2336000	4.5	***1137***	2173000	—	—	—	3620000	
	338.73	2.2	***361***	1406000	2.7	***428***	1392000	4.3	***672***	1354000	—	—	—	3620000	
	364.34	2.1	***576***	2417000	2.5	***676***	2361000	4.0	***1021***	2215000	—	—	—	3310000	
	412.20	1.8	***519***	2462000	2.2	***606***	2395000	3.5	***920***	2257000	—	—	—	3620000	
	434.70	1.7	***285***	1426000	2.1	***339***	1411000	3.3	***531***	1374000	—	—	—	3620000	
	454.81	1.6	***273***	1430000	2.0	***324***	1415000	3.2	***509***	1377000	—	—	—	3620000	
	489.20	1.5	***449***	2527000	1.8	***524***	2458000	3.0	***795***	2316000	—	—	—	3310000	
	515.91	1.5	***244***	1446000	1.7	***288***	1425000	2.8	***452***	1387000	—	—	—	3620000	
	583.68	1.3	***219***	1473000	1.5	***256***	1435000	2.5	***402***	1397000	—	—	—	3620000	
	692.71	1.1	***190***	1512000	1.3	***221***	1470000	2.1	***342***	1411000	—	—	—	3620000	
GB 205005	**956.85**	0.78	***261***	2797000	0.94	***304***	2721000	1.5	***456***	2532000	3.0	***831***	2308000	3620000	230 (H-F)
	1125.70	0.67	***227***	2867000	0.80	***265***	2789000	1.3	***397***	2595000	2.6	***721***	2355000	3620000	
	1227.95	0.61	***211***	2896000	0.73	***246***	2826000	1.2	***369***	2629000	2.4	***664***	2367000	3620000	
	1284.77	0.58	***192***	2762000	0.70	***228***	2733000	1.1	***355***	2647000	2.3	***639***	2383000	3620000	
	1354.91	0.55	***110***	2896000	0.66	***128***	2896000	1.1	***193***	1514000	2.1	***358***	1409000	3620000	
	1444.65	0.52	***184***	2896000	0.62	***214***	2900000	1.0	***321***	2694000	2.0	***579***	2426000	3620000	
	1457.35	0.51	***182***	2788000	0.62	***213***	2759000	0.99	***319***	2698000	2.0	***575***	2429000	3620000	
	1511.49	0.50	***164***	1715000	0.60	***195***	1668000	0.96	***306***	2685000	1.9	***557***	2443000	3310000	
	1594.01	0.47	***96***	2802000	0.56	***112***	2773000	0.91	***168***	1552000	1.8	***307***	1422000	3620000	
	1648.79	0.45	***151***	2896000	0.55	***180***	2896000	0.88	***282***	2698000	1.8	***517***	2475000	3620000	
	1714.53	0.44	***159***	1737000	0.52	***185***	1690000	0.85	***278***	2765000	1.7	***500***	2490000	3310000	
	1738.80	0.43	***89***	1749000	0.52	***104***	1702000	0.83	***156***	1573000	1.7	***283***	1429000	3310000	
	1819.25	0.41	***86***	2828000	0.49	***100***	2798000	0.80	***150***	1583000	1.6	***271***	1433000	3620000	
	1939.75	0.39	***130***	2829000	0.46	***154***	2800000	0.75	***242***	2723000	1.5	***451***	2537000	3620000	
	1956.80	0.38	***129***	1783000	0.46	***153***	1735000	0.74	***240***	2725000	1.5	***447***	2540000	3310000	
	2045.65	0.37	***78***	1793000	0.44	***91***	1744000	0.71	***136***	1612000	1.4	***244***	1451000	3310000	
	2063.63	0.36	***77***	2861000	0.44	***90***	2826000	0.70	***135***	1614000	1.4	***243***	1453000	3620000	
	2140.30	0.35	***75***	1827000	0.42	***87***	1778000	0.68	***131***	1623000	1.4	***235***	1461000	3310000	
	2302.12	0.33	***111***	1862000	0.39	***131***	1811000	0.63	***206***	2750000	1.3	***390***	2603000	3310000	
	2334.71	0.32	***69***	1864000	0.39	***81***	1814000	0.62	***121***	1644000	1.2	***219***	1481000	3310000	
	2427.80	0.31	***67***	1911000	0.37	***78***	1859000	0.60	***117***	1654000	1.2	***211***	1489000	3310000	
	2746.71	0.27	***60***	1862000	0.33	***71***	1811000	0.53	***106***	1685000	1.1	***190***	1517000	3293000	
	2770.86	0.27	***60***	1864000	0.32	***70***	1814000	0.52	***105***	1687000	1.0	***189***	1519000	3293000	
	3259.83	0.23	***52***	1911000	0.28	***61***	1859000	0.44	***91***	1729000	0.89	***165***	1557000	3293000	

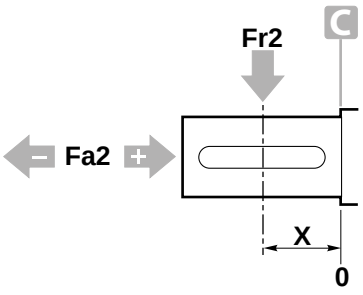
		n_1= **750** RPM			n_1= **900** RPM			n_1= **1450** RPM			n_1= **2900** RPM				
	ie	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**n_2** [RPM]	**P_1** [kW]	**T_2** [Nm]	**T_{2max}** [Nm]	**P_t** [kW]
GB 235001	**4.14**	—	—	—	—	—	—	—	—	—	—	—	—	3620000	870 (H-F)
GB 235002	**15.89**	47.2	***8992***	1730000	—	—	—	—	—	—	—	—	—	3620000	508 (H-F)
GB 235003	**54.48**	13.8	***3467***	2229000	16.5	***4118***	2206000	—	—	—	—	—	—	3620000	371 (H-F)
	65.00	11.5	***2936***	2252000	13.8	***3486***	2229000	—	—	—	—	—	—	3620000	
	83.42	9.0	***2320***	2284000	10.8	***2755***	2261000	—	—	—	—	—	—	3620000	
	99.00	7.6	***1974***	2307000	9.1	***2345***	2283000	—	—	—	—	—	—	3620000	
GB 235004	**222.87**	3.4	***984***	2522000	4.0	***1148***	2454000	6.5	***1754***	2327000	—	—	—	3620000	291 (H-F)
	265.92	2.8	***847***	2591000	3.4	***988***	2520000	5.5	***1485***	2351000	—	—	—	3620000	
	286.01	2.6	***796***	2619000	3.1	***929***	2548000	5.1	***1393***	2371000	—	—	—	3620000	
	339.44	2.2	***688***	2688000	2.7	***803***	2615000	4.3	***1204***	2433000	—	—	—	3620000	
	341.27	2.2	***685***	2690000	2.6	***800***	2617000	4.2	***1199***	2435000	—	—	—	3620000	
	341.27	2.2	***685***	2690000	2.2	***692***	2686000	4.2	***1199***	2435000	—	—	—	3620000	
	405.02	1.9	***592***	2761000	2.1	***647***	2718000	3.6	***1037***	2499000	—	—	—	3620000	
	437.96	1.7	***554***	2794000	1.7	***560***	2789000	3.3	***970***	2529000	—	—	—	3620000	
	519.78	1.4	***479***	2867000	1.7	***560***	2789000	2.8	***839***	2595000	—	—	—	3620000	
	616.88	1.2	***415***	2896000	1.5	***484***	2862000	2.4	***725***	2663000	—	—	—	3620000	
GB 235005	**891.47**	0.84	***311***	2896000	1.0	***363***	2896000	1.6	***544***	2816000	3.3	***980***	2535000	3620000	238 (H-F)
	1048.79	0.72	***271***	2896000	0.86	***316***	2896000	1.4	***474***	2886000	2.8	***854***	2599000	3620000	
	1063.69	0.71	***268***	2896000	0.85	***313***	2896000	1.4	***469***	2892000	2.7	***844***	2604000	3620000	
	1144.06	0.66	***252***	2896000	0.79	***294***	2896000	1.3	***440***	2896000	2.5	***793***	2633000	3620000	
	1251.40	0.60	***233***	2896000	0.72	***272***	2896000	1.2	***408***	2896000	2.3	***735***	2669000	3620000	
	1345.95	0.56	***219***	2896000	0.67	***256***	2896000	1.1	***384***	2896000	2.2	***691***	2698000	3620000	
	1357.78	0.55	***218***	2896000	0.66	***254***	2896000	1.1	***381***	2896000	2.1	***686***	2702000	3620000	
	1365.07	0.55	***217***	2896000	0.66	***253***	2896000	1.1	***379***	2896000	2.1	***683***	2704000	3620000	
	1597.39	0.47	***190***	2896000	0.56	***221***	2896000	0.91	***332***	2896000	1.8	***597***	2769000	3620000	
	1605.96	0.47	***189***	2896000	0.56	***220***	2896000	0.90	***330***	2896000	1.8	***595***	2772000	3620000	
	1620.08	0.46	***187***	2896000	0.56	***219***	2896000	0.90	***328***	2896000	1.8	***590***	2775000	3620000	
	1751.83	0.43	***175***	2896000	0.51	***205***	2896000	0.83	***307***	2896000	1.7	***552***	2808000	3620000	
	1905.97	0.39	***163***	2896000	0.47	***191***	2896000	0.76	***286***	2896000	1.5	***514***	2844000	3620000	
	2060.98	0.36	***153***	2896000	0.44	***178***	2896000	0.70	***267***	2896000	1.4	***481***	2878000	3620000	
	2079.10	0.36	***152***	2896000	0.43	***177***	2896000	0.70	***265***	2896000	1.4	***478***	2882000	3620000	
	2446.00	0.31	***132***	2896000	0.37	***154***	2896000	0.59	***231***	2896000	1.2	***416***	2896000	3620000	
	2467.50	0.30	***131***	2896000	0.36	***153***	2896000	0.59	***229***	2896000	1.2	***413***	2896000	3620000	
	2902.95	0.26	***114***	2896000	0.31	***133***	2896000	0.50	***200***	2896000	1.0	***360***	2896000	3620000	

N (110-210-310-510-810) - P (110-210-310-510-610)



T (240-310-510-810-1020-1520-2000) - TL (310-510) - P (810-1020)





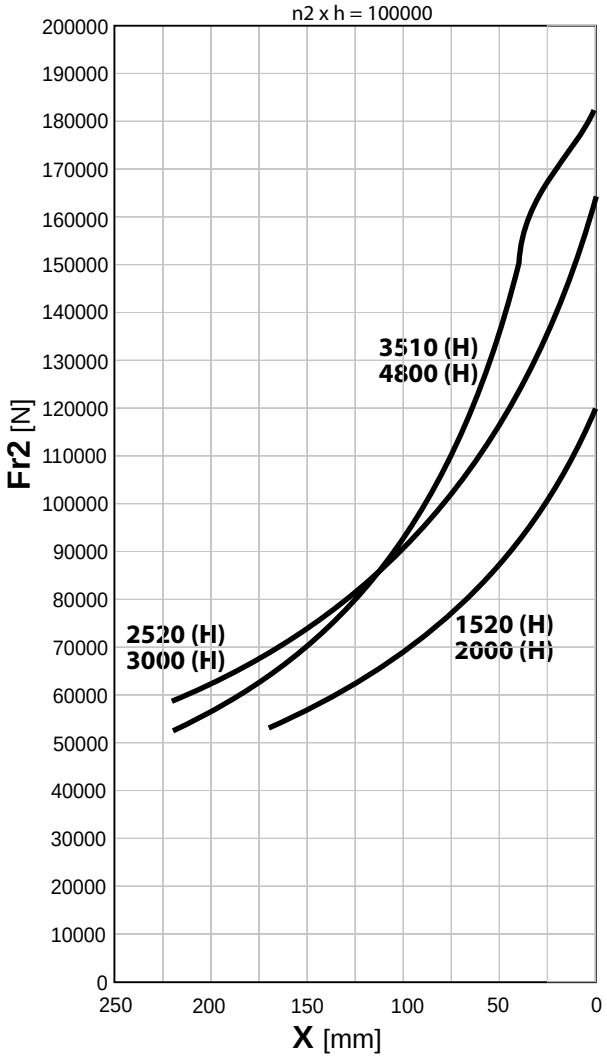
n2 x h = 100000

Fa2 [N]

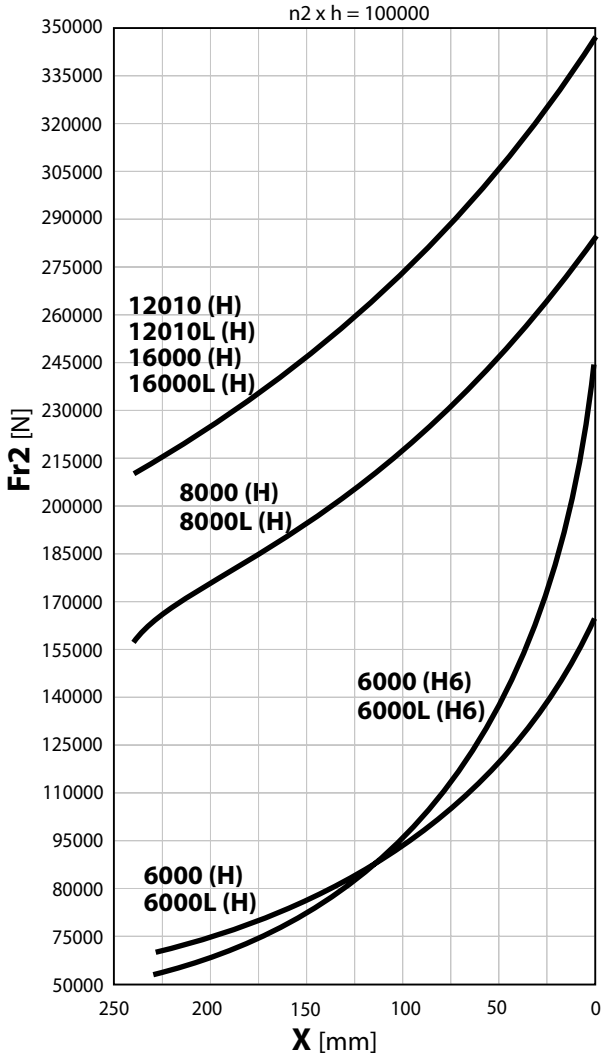
RE-RA	FS		N		P		T		TL	
	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)
110	6800	6800	19250	19250	19250	19250	22500	35500	—	—
210	6800	6800	19250	19250	19250	19250	22500	35500	—	—
240	7350	7350	—	—	—	—	25700	34400	—	—
310	10500	10500	39500	39500	58400	58400	57500	78500	48500	48500
510	10500	10500	39500	39500	58400	58400	57500	78500	48500	48500
610	10500	10500	39500	39500	58400	58400	57500	78500	48500	48500
810	21500	21500	58400	58400	58400	88500	58400	88500	—	—
1020	19000	19000	—	—	58400	88000	60500	104500	—	—
1520	27000	27000	—	—	—	—	73400	104500	—	—
2000	27000	27000	—	—	—	—	73400	104500	—	—

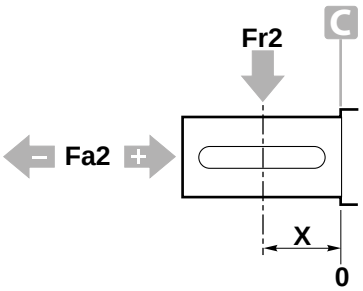
	n_2 x h						
	20000	40000	60000	80000	100000	200000	400000
K_f	1.7	1.3	1.15	1.06	1	0.8	0.63

H (1520-2000-2520-3000-3510)



H (6000-8000-12010-16000) - H6 (6000)





n2 x h = 100000

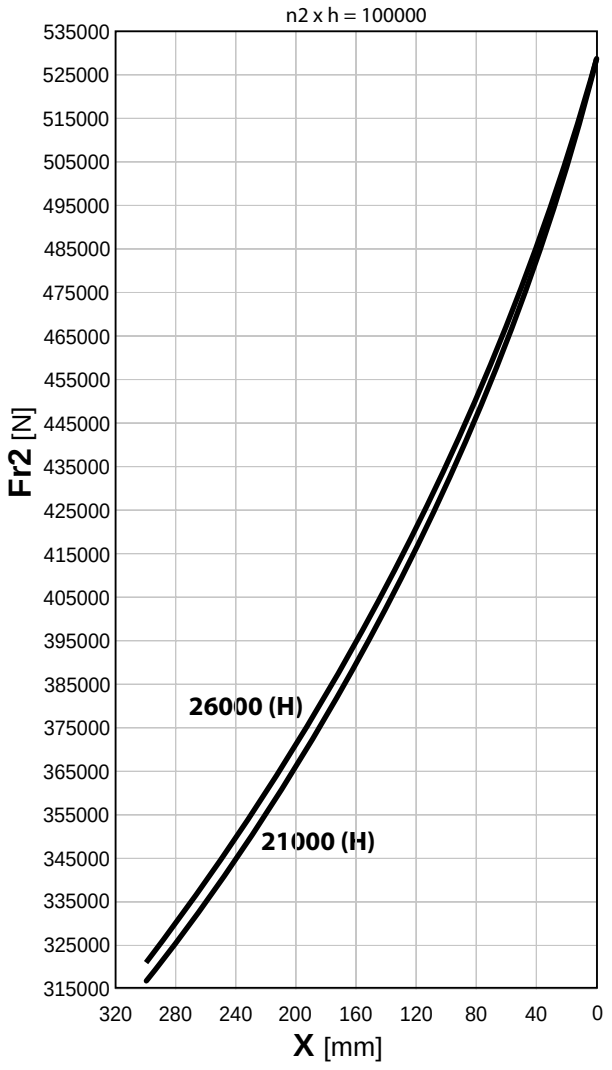
Fa2 [N]

RE-RA	FS		FS1		H		H6	
	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)
1520	27000	27000	—	—	73400	104500	—	—
2000	27000	27000	—	—	73400	104500	—	—
2520	29500	29500	—	—	112600	149000	—	—
3000	29500	29500	—	—	112600	149000	—	—
3500	44000	44000	—	—	59000	44000	—	—
4800	44000	44000	65250*	44000	59000	44000	—	—
6000	52000	42000	—	—	148500	131000	94000	42000
8000	67000	56000*	82200*	56000*	94000	56000*	—	—
12010	75000	65250*	—	—	114000	65250*	—	—
16000	75000	65250*	113600*	65250*	114000	65250*	—	—

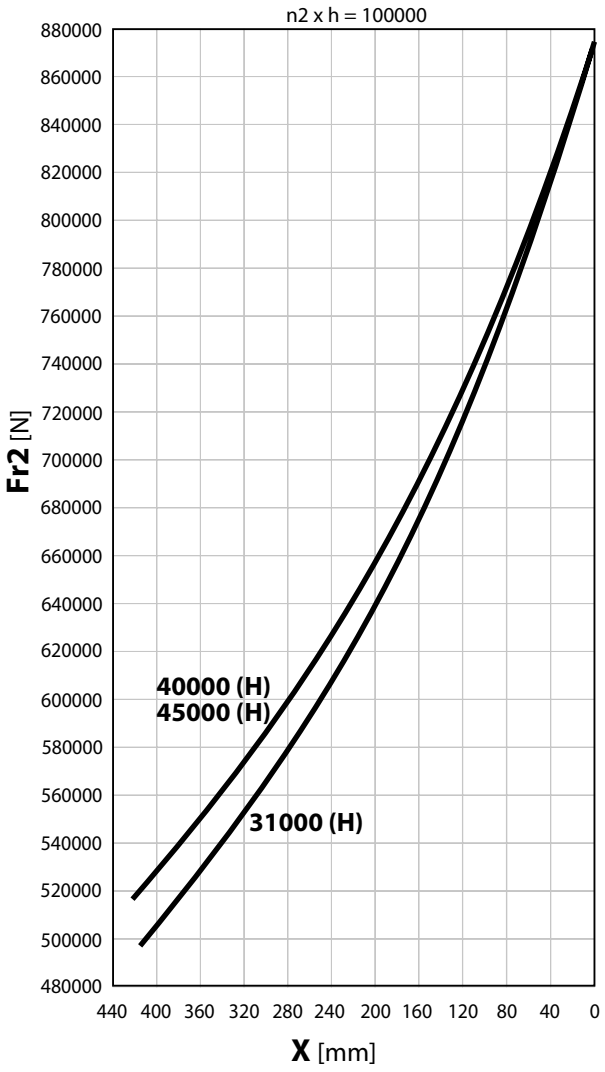
*** Fa/Fr < 0.4**

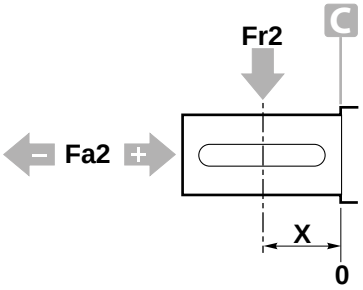
	n_2 x h						
	20000	40000	60000	80000	100000	200000	400000
K_f	1.7	1.3	1.15	1.06	1	0.8	0.63

H (21000-26000)



H (31000-40000-45000)





n2 x h = 100000

Fa2 [N]				
GB	FS		H	
	Fa2 (-)	Fa2 (+)	Fa2 (-)	Fa2 (+)
21000	113600*	113600*	170000	113600*
26000	160500*	113600*	170000	113600*
31000	240000*	160500*	275000	160500*
40000	240000*	160500*	275000	160500*
45000	260000*	160500*	275000	160500*
53000	185000	185000	—	—
61000	185000	185000	—	—
85000	225000	185000	—	—
110000	315000	230000	—	—
130000	315000	230000	—	—
150000	315000	230000	—	—
205000	550000	315000	—	—
235000	550000	315000	—	—

*** Fa/Fr < 0.4**

	n_2 x h						
	20000	40000	60000	80000	100000	200000	400000
K_f	1.7	1.3	1.15	1.06	1	0.8	0.63

dinamic oil

I DIMENSIONI

UK DIMENSIONS

G


S	N	NS	110 - 210 - 310 - 510 - 610 - 810	G-4
	P	PS	110 - 210 - 310 - 510 - 610 - 810 - 1020	G-6
	T	TS/T1S/TLS/TRS/TR1S	110 - 210 - 240 - 310 - 510 - 610	G-8
		TS	810 - 1020 - 1520 - 2000 - 2000L	G-10
	H	HS	1520 - 2000 - 2000L - 2520 - 3000 - 3510 - 4800	G-12
		HS/H6S	6000 - 8000 - 12010 - 16000	G-14
		HS/H6S	6000L - 8000L - 12010L - 16000L	G-16
		HS	21000 - 26000 - 31000 - 40000 - 45000	G-18


C	N	NC/NK/NK1	110 - 210 - 310 - 510 - 610 - 810	G-20
	P	PC/PK/PK1	110 - 210 - 310 - 510 - 610 - 810 - 1020	G-22
	T	TC/T1C/TLC/TRC/TLK/TR1C	110 - 210 - 240 - 310 - 510 - 610 - 810	G-24
		TC	810 - 1020 - 1520 - 2000 - 2000L	G-26
	H	HC	1520 - 2000 - 2000L - 2520 - 3000 - 3510 - 4800	G-28
		HC/H6C	6000 - 8000 - 12010 - 16000	G-30
		HC/H6C	6000L - 8000L - 12010L - 16000L	G-32
		HC	21000 - 26000 - 31000 - 40000 - 45000	G-34


E	N	NE	110 - 210 - 310 - 510 - 610	G-36
	T	TE/T1E/TRE/TR1E/TLE	110 - 210 - 240 - 310 - 510 - 610	G-38
		TE	810 - 1020 - 1520 - 2000 - 2000L	G-40
	H	HE	1520 - 2000 - 2000L - 2520 - 3000	G-42

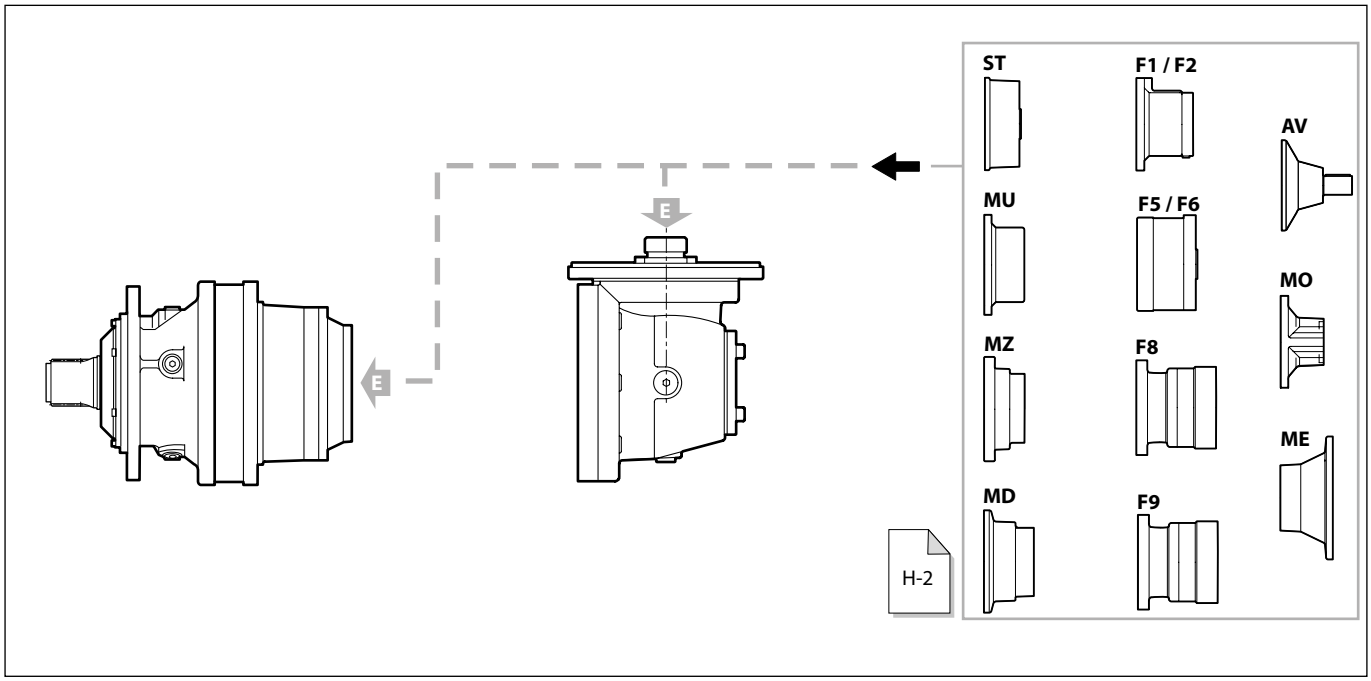

S	F	FS	110 - 210 - 240 - 310 - 510 - 810 - 1020	G-44
			1520 - 2000 - 2000L - 2520 - 3000 - 3510 - 4800	G-46
			6000 - 8000 - 12010 - 16000	G-48
			6000L - 8000L - 12010L - 16000L	G-50
			21000 - 26000 - 31000 - 40000 - 45000 53000 - 61000 - 85000	G-52
			110000 - 130000 - 150000 205000 - 235000	G-54

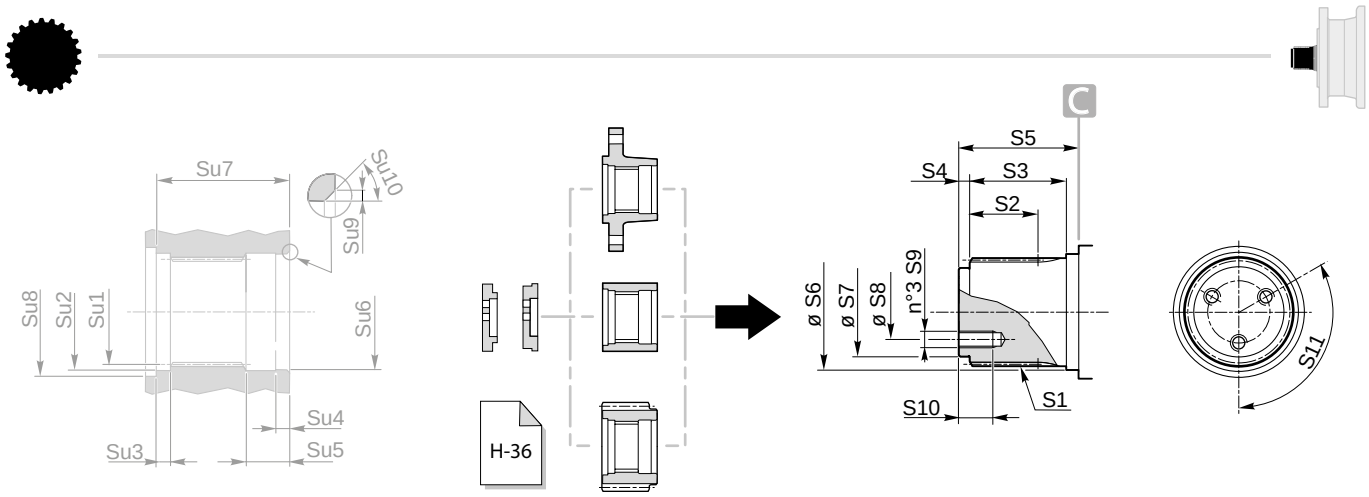
F	N	NF	310 - 510 - 610 - 810	G-56

Q	N	NQ	110 - 210 - 310 - 510 - 610	G-58
	T	TQ/TRQ	240 - 810 - 1020 - 1520 - 2000 - 2000L	G-60
	H	HQ	1520 - 2000 - 2000L - 2520 - 3000 - 3510 - 4800	G-62
		HQ/H6Q	6000 - 8000 - 12010 - 16000	G-64
		HQ/H6Q	6000L - 8000L - 12010L - 16000L	G-66
		HQ	21000 - 26000 - 31000 - 40000 - 45000 53000 - 61000 - 85000	G-68
		HQ	110000 - 130000 - 150000 205000 - 235000	G-70

U		TU/NU/NU2	110 - 210 - 310 - 510 - 610	G-72

C		FC	110 - 210	G-74



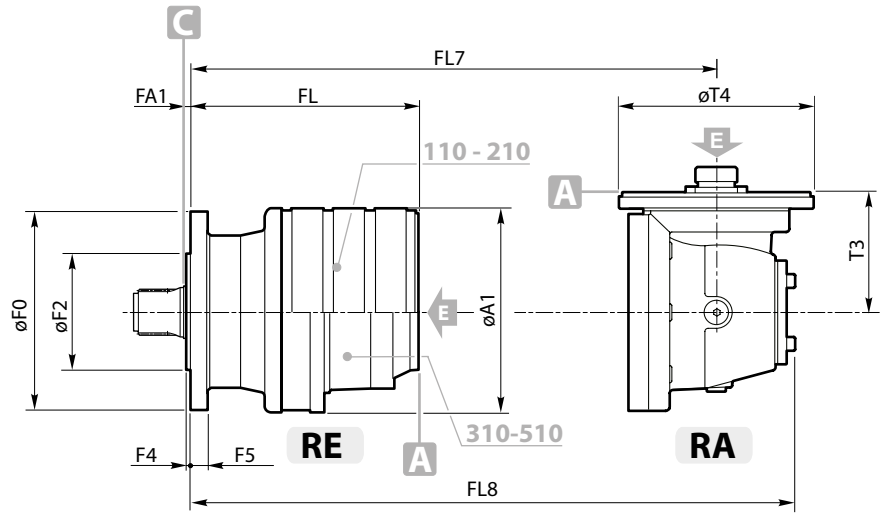


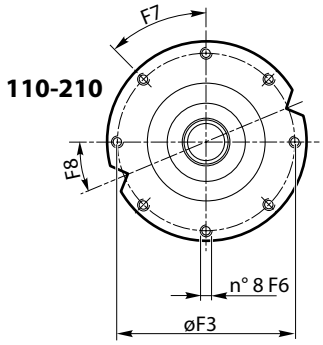
	RE - RA					
	110	210	310	510	610	810
S1	B40x36 DIN5482	B40x36 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B70x64 DIN5482
S2	30	30	37	37	37	51
S3	43	43	50	50	50	70
S4	5	5	8	8	8	10
S5	55	55	68.5	68.5	68.5	90
S6	42 f7	42 f7	60 f7	60 f7	60 f7	72 f7
S7	35 f7	35 f7	50 f7	50 f7	50 f7	62 f7
S8	24	24	32	32	32	40
S9	M6	M6	M10	M10	M10	M10
S10	13	13	20	20	20	22
S11	120°	120°	120°	120°	120°	120°

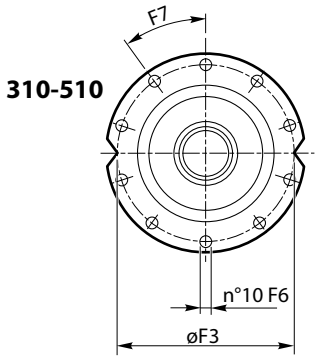
	RE - RA					
	110	210	310	510	610	810
Su1	A40x36 DIN5482	A40x36 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A70x64 DIN5482
Su2	Ø42 H7	Ø42 H7	Ø60 H7	Ø60 H7	Ø60 H7	Ø72 H7
Su3	6	6	7	7	7	11
Su4	6	6	10	10	10	10
Su5	20.5	20.5	25	25	25	29
Su6	Ø42 H7	Ø42 H7	Ø60 H7	Ø60 H7	Ø60 H7	Ø72 H7
Su7	49	49	69	69	69	80
Su8	Ø52	Ø52	Ø72	Ø72	Ø72	Ø80
Su9	1	1	1	1	1	1
Su10	1	1	1	1	1	1

		RE - RA					
	stages	110	210	310	510	610	810
A1		186	186	244	244	244	295
F0		185	185	222	222	222	280
F2		110 h7	110 h7	150 f7	150 f7	150 f7	200 f7
F3		165	165	195	195	195	250
F4		5	5	13.5	13.5	13.5	10.5
F5		12	12	16	16	16	18
F6		Ø10.5	Ø10.5	Ø12.5	Ø12.5	Ø12.5	Ø15
		M.. - 12.9					
		M10	M10	M12	M12	M12	M14
F7		45°	45°	36°	36°	36°	30°
F8		22.5°	22.5°	—	—	—	—
FA1		6.5	6.5	15	15	15	40
FL	1	95	107	133	151	151	162.5
	2	138	150	185.5	215.5	209.5	229.5
	3	181	193	228.5	258.5	262	282
	4	224	236	271.5	301.5	305	325
FL7	2	176	188	255	273	273	304.5
	3	219	231	266.5	296.5	331.5	351.5
	4	262	274	309.5	339.5	343	363
FL8	2	250.5	262.5	346	364	364	412.5
	3	293.5	305.5	341	371	422.5	442.5
	4	336.5	348.5	384	414	417.5	437.5
T3	2	113.8	113.8	171.5	171.5	171.5	277
	3	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183	242
	3	184	184	184	184	183	183
	4	184	184	184	184	184	184

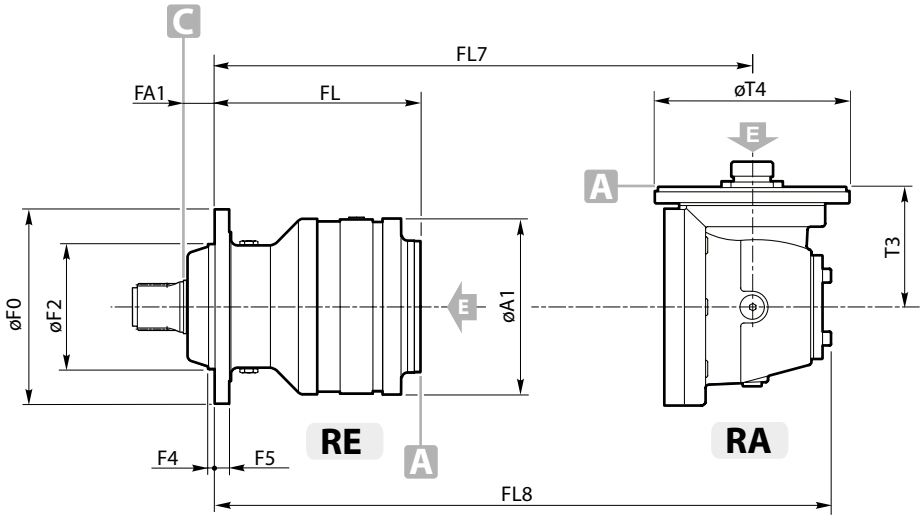
110 - 210
310 - 510

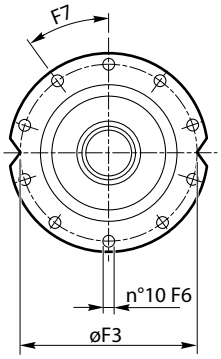




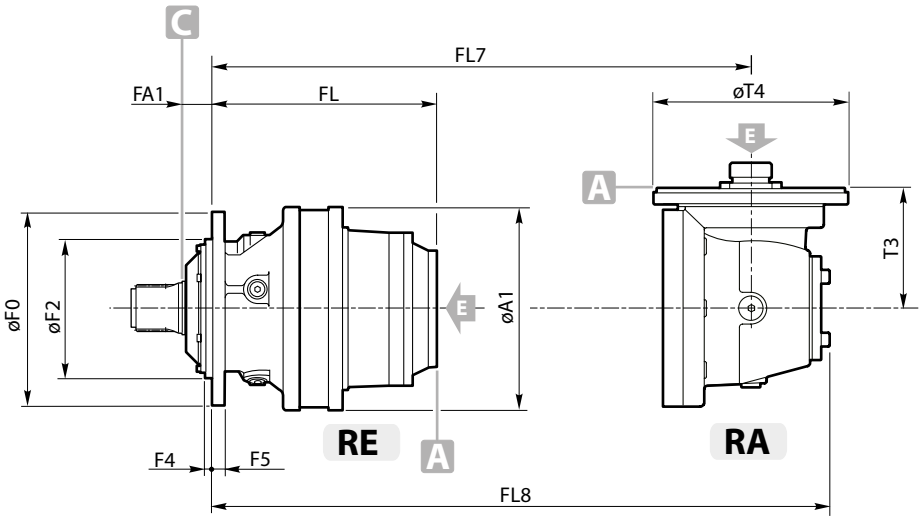


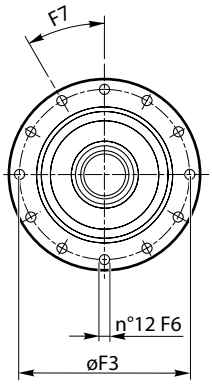
610

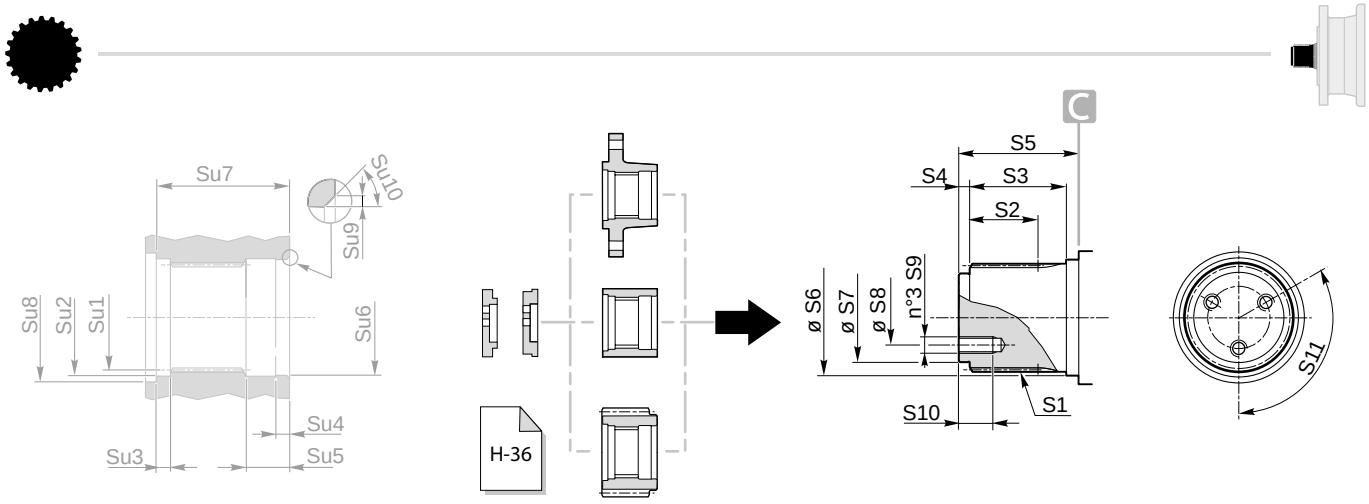




810



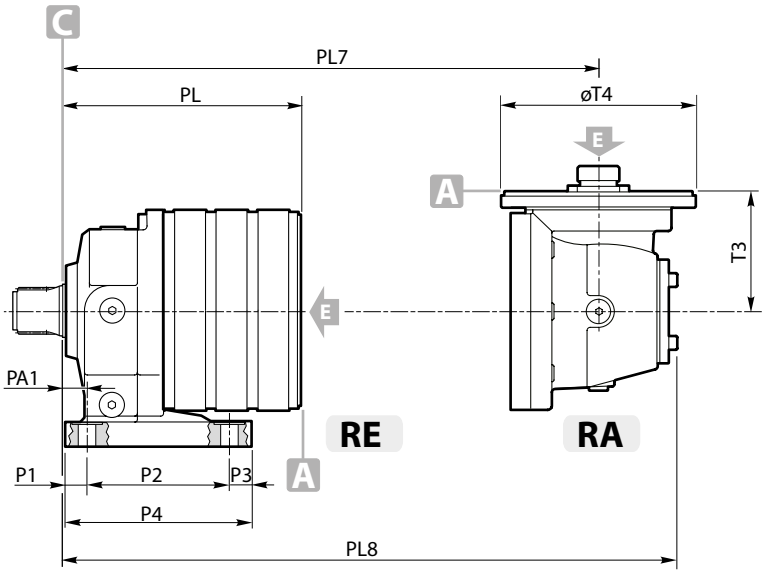




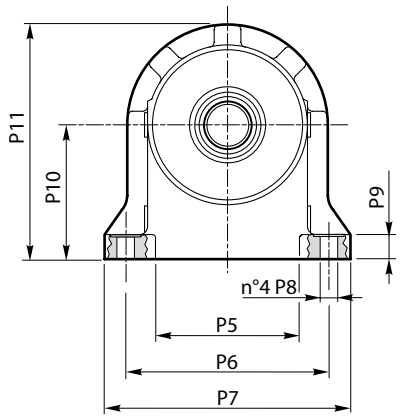
	RE - RA						
	110	210	310	510	610	810	1020
S1	B40x36 DIN5482	B40x36 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B70x64 DIN5482	B70x64 DIN5482
S2	30	30	37	37	37	51	51
S3	43	43	50	50	50	70	70
S4	5	5	8	8	8	10	10
S5	55	55	68.5	68.5	68.5	90	90
S6	42 f7	42 f7	60 f7	60 f7	60 f7	72 f7	72 f7
S7	35 f7	35 f7	50 f7	50 f7	50 f7	62 f7	62 f7
S8	24	24	32	32	32	40	40
S9	M6	M6	M10	M10	M10	M10	M10
S10	13	13	20	20	20	22	22
S11	120°	120°	120°	120°	120°	120°	120°

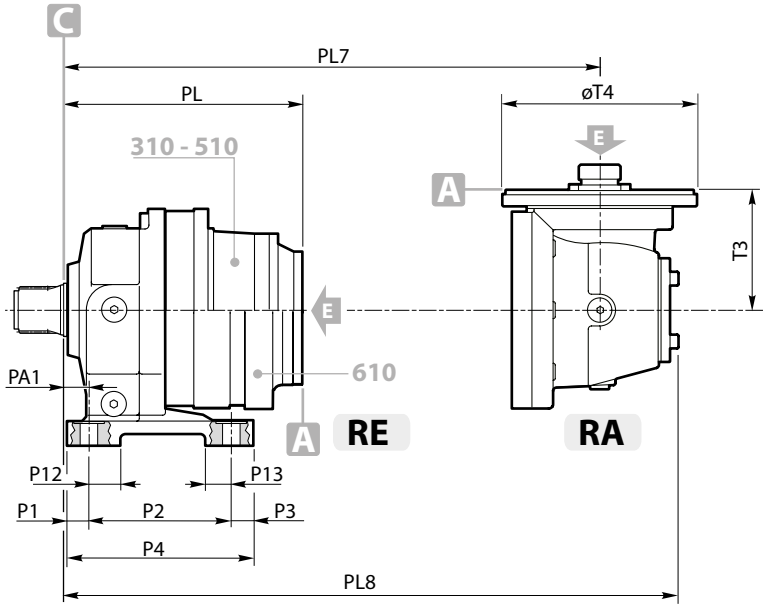
	RE - RA						
	110	210	310	510	610	810	1020
Su1	A40x36 DIN5482	A40x36 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A70x64 DIN5482	A70x64 DIN5482
Su2	Ø42 H7	Ø42 H7	Ø60 H7	Ø60 H7	Ø60 H7	Ø72 H7	Ø72 H7
Su3	6	6	7	7	7	11	11
Su4	6	6	10	10	10	10	10
Su5	20.5	20.5	25	25	25	29	29
Su6	Ø42 H7	Ø42 H7	Ø60 H7	Ø60 H7	Ø60 H7	Ø72 H7	Ø72 H7
Su7	49	49	69	69	69	80	80
Su8	Ø52	Ø52	Ø72	Ø72	Ø72	Ø80	Ø80
Su9	1	1	1	1	1	1	1
Su10	1	1	1	1	1	1	1

		RE - RA						
	stages	110	210	310	510	610	810	1020
P1		20	20	28	28	28	35	35
P2		132	132	180	180	180	225	225
P3		20	20	28	28	28	35	35
P4		172	172	236	236	236	295	295
P5		134	134	180	180	180	206	206
P6		190	190	250	250	250	300	300
P7		230	230	310	310	310	370	370
P8		Ø14	Ø14	Ø22	Ø22	Ø22	Ø26	Ø26
		M.. - 12.9						
		M12	M12	M20	M20	M20	M24	M24
P9		23	23	26.5	26.5	26.5	36	36
P10		125	125	160	160	160	200	200
P11		218	218	282	282	282	347.5	347.5
P12		—	—	21	21	21	45	45
P13		—	—	21	21	21	45	45
PA1		20	20	29	29	29	35	35
PL	1	101.5	113.5	148	166	166	225	242
	2	144.5	156.5	200.5	230.5	224.5	292	327
	3	187.5	199.5	243.5	273.5	277	344.5	391.5
	4	230.5	242.5	286.5	316.5	320	387.5	434.5
PL7	2	182.5	194.5	297	315	288	367	384
	3	225.5	237.5	281.5	311.5	346.5	414	449
	4	268.5	280.5	324.5	354.5	358	425.5	472.5
PL8	2	257	269	361	379	379	475	492
	3	300	312	356	386	437.5	505	540
	4	343	355	399	429	432.5	500	547
T3	2	113.8	113.8	171.5	171.5	171.5	277	277
	3	113.8	113.8	113.8	113.8	171.5	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183	242	242
	3	184	184	184	184	183	183	183
	4	184	184	184	184	184	184	184

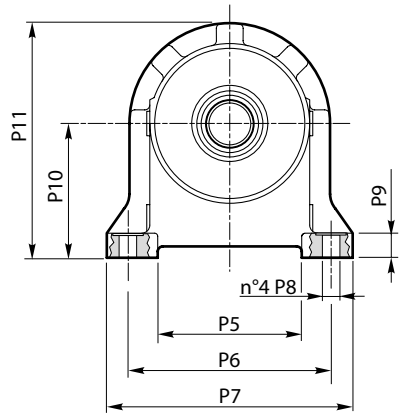


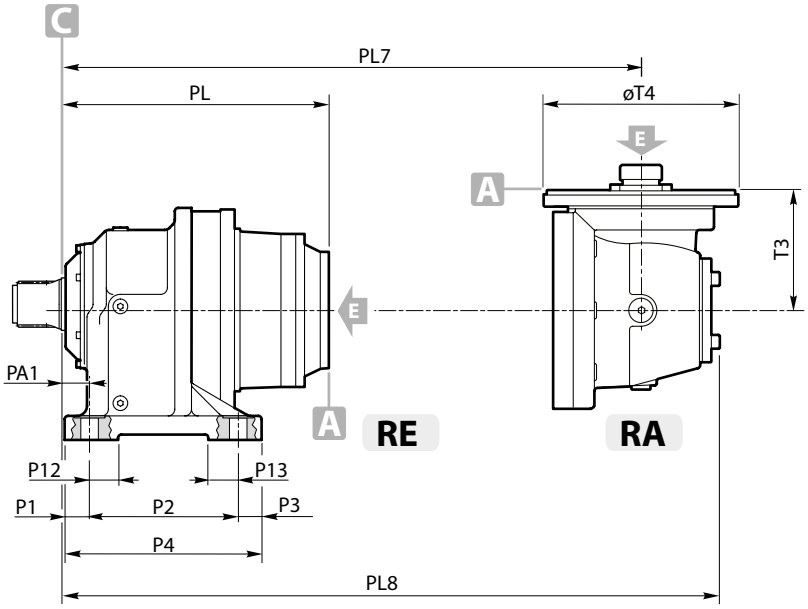
110 - 210



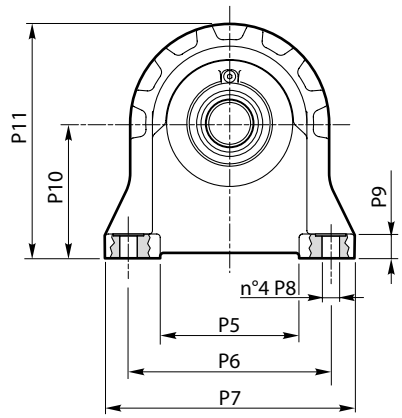


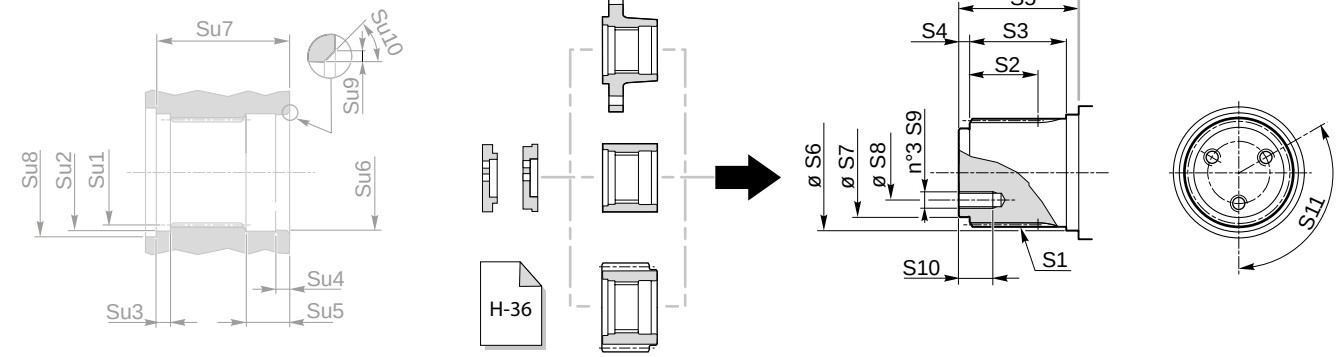
310 - 510
610





810 - 1020



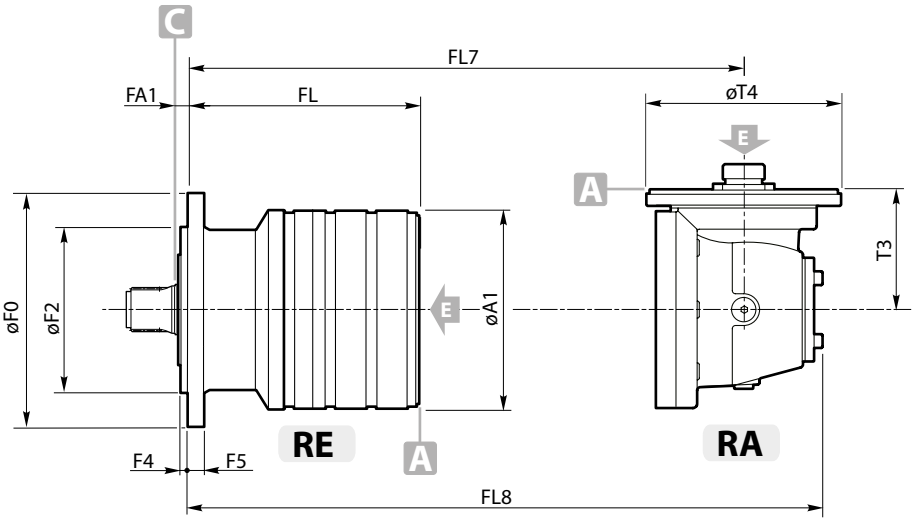


	RE - RA					
	110	210	240	310	510	610
Su1	A40x36 DIN5482	A40x36 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A58x53 DIN5482	A58x53 DIN5482
Su2	42 H7	42 H7	60 H7	60 H7	60 H7	60 H7
Su3	7	7	7	7	7	7
Su4	6	6	10	10	10	10
Su5	20.5	20.5	25	25	25	25
Su6	42 H7	42 H7	60 H7	60 H7	60 H7	60 H7
Su7	62.5	62.5	69	69	69	69
Su8	51	51	72	72	72	72
Su9	1	1	1	1	1	1
Su10	1	1	1	1	1	1

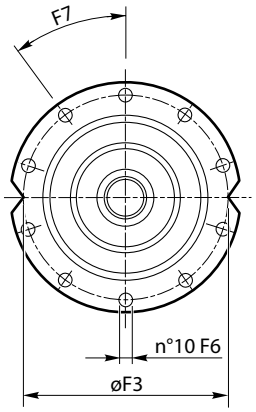
	RE - RA					
	110	210	240	310	510	610
S1	B40x36 DIN5482	B40x36 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B58x53 DIN5482	B58x53 DIN5482
S2	35	35	37	46	46	46
S3	50	50	50	60	60	60
S4	7	7	8	8	8	8
S5	62	62	68.5	78	78	78
S6	42 f7	42 f7	60 f7	60 f7	60 f7	60 f7
S7	35 f7	35 f7	50 f7	50 f7	50 f7	50 f7
S8	24	24	32	32	32	32
S9	M6	M6	M10	M10	M10	M10
S10	13	13	20	20	20	20
S11	120°	120°	120°	120°	120°	120°

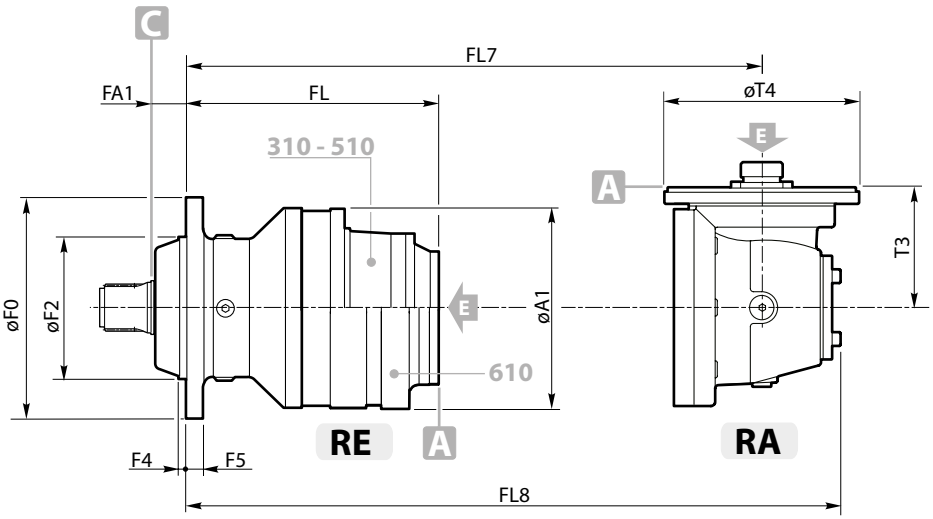
		RE - RA															
	stages	110				210				240		310		510		610	
		TS	T1S	TRS	TR1S	TS	T1S	TRS	TR1S	TS	TRS	TS	TLS	TS	TLS	TS	TLS
A1		186	186	186	186	186	186	186	186	186	186	244	244	244	244	244	244
F0		219	219	219	219	219	219	219	219	219	219	272	272	272	272	272	272
F2		155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	150 f7	155 f7	175 h8	175 h8	175 h8	175 h8	175 h8	175 h8
F3		194	195	194	195	194	195	194	195	195	194	245	245	245	245	245	245
F4		7	7	10	10	7	7	10	10	7	10	12	9	12	9	12	9
F5		15	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20
F6		Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø12.5	Ø11	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5
		M.. - 12.9															
		M10	M12	M10	M12	M10	M12	M10	M12	M12	M10	M12	M12	M12	M12	M12	M12
F7		36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°
FA1		13	13	30	30	13	13	30	30	13	30	39	39	39	39	39	39
FL	1	102	102	85	85	114	114	97	97	114	97	157	157	175	175	175	175
	2	145	145	128	128	157	157	140	140	157	140	209.5	209.5	239.5	239.5	233.5	233.5
	3	188	188	171	171	200	200	183	183	200	183	252.5	252.5	282.5	282.5	286	286
	4	231	231	214	214	243	243	226	226	243	226	295.5	295.5	325.5	325.5	329	329
FL7	2	183	183	166	166	195	195	178	178	195	178	279	279	297	297	297	297
	3	226	226	209	209	238	238	221	221	238	221	290.5	290.5	320.5	320.5	355.5	355.5
	4	269	269	252	252	281	281	264	264	281	264	333.5	333.5	363.5	363.5	367	367
FL8	2	257.5	257.5	240.5	240.5	269.5	269.5	252.5	252.5	269.5	252.5	370	370	388	388	388	388
	3	300.5	300.5	283.5	283.5	312.5	312.5	295.5	295.5	312.5	295.5	365	365	395	395	446.5	446.5
	4	343.5	343.5	326.5	326.5	355.5	355.5	338.5	338.5	355.5	338.5	408	408	438	438	441.5	441.5
T3	2	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5	171.5	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	184	184	184	184	184	184	184	184	183	183	183	183	183	183
	3	184	184	184	184	184	184	184	184	184	184	184	184	184	184	183	183
	4	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184

S

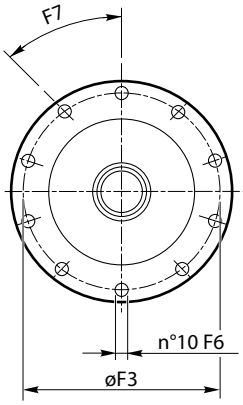


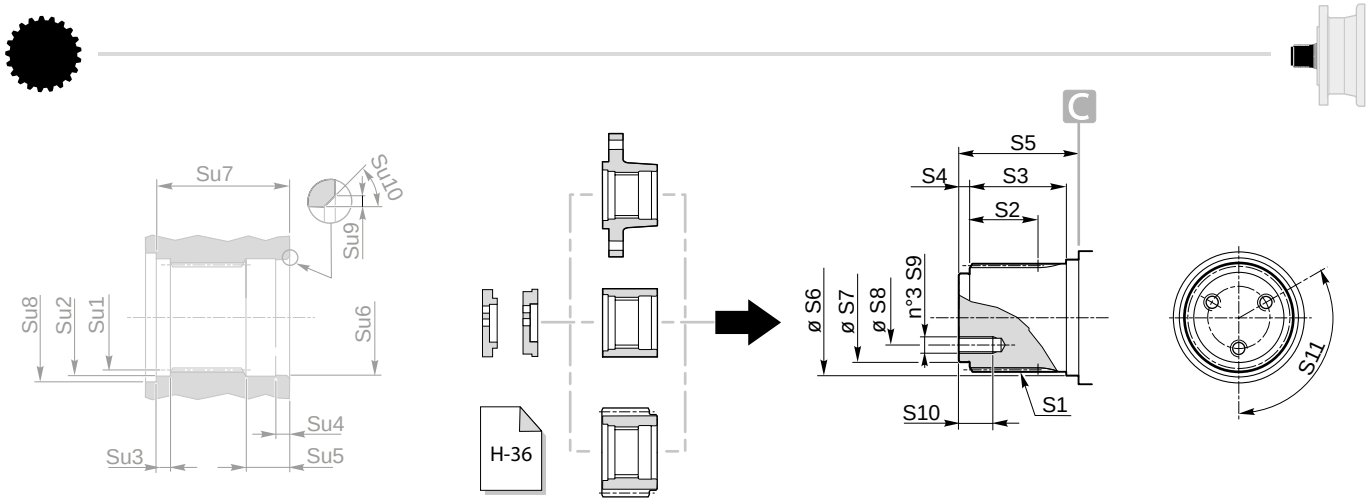
110 ÷ 240





310 - 510
610



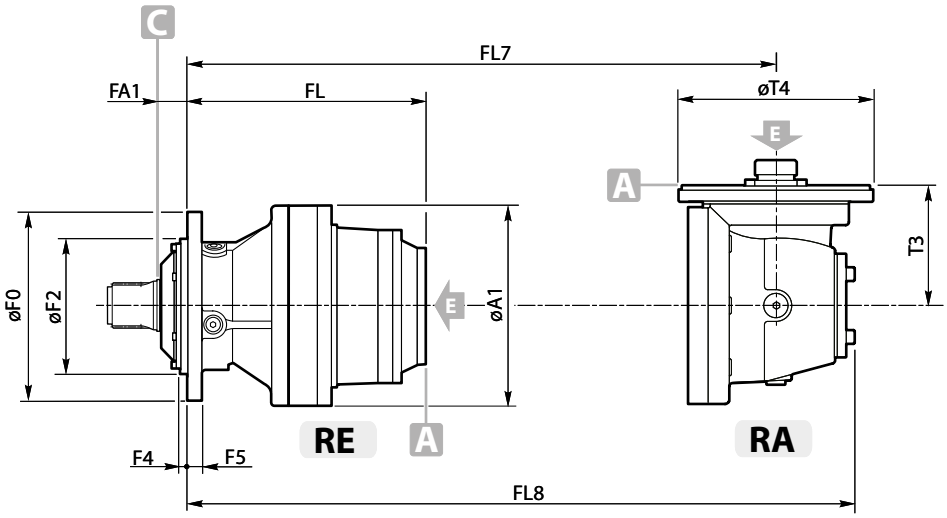


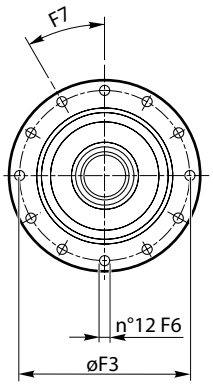
	RE - RA			
	810	1020	1520	2000 2000L
S1	B70x64 DIN5482	B80x74 DIN5482	B80x74 DIN5482	B80x74 DIN5482
S2	51	50	50	50
S3	70	70	70	70
S4	10	10	10	10
S5	90	90	90	90
S6	72 f7	85 f7	85 f7	85 f7
S7	62 f7	70 f7	70 f7	70 f7
S8	40	45	45	45
S9	M10	M10	M10	M10
S10	22	25	25	25
S11	120°	120°	120°	120°

	RE - RA			
	810	1020	1520	2000 2000L
Su1	A70x64 DIN5482	A80x74 DIN5482	A80x74 DIN5482	A80x74 DIN5482
Su2	72 H7	85 H7	85 H7	85 H7
Su3	10	10.5	10.5	10.5
Su4	11	10.5	10.5	10.5
Su5	29	30.5	30.5	30.5
Su6	72 H7	85 H7	85 H7	85 H7
Su7	90	90.5	90.5	90.5
Su8	82	100	100	100
Su9	1	1	1	1
Su10	1	1	1	1

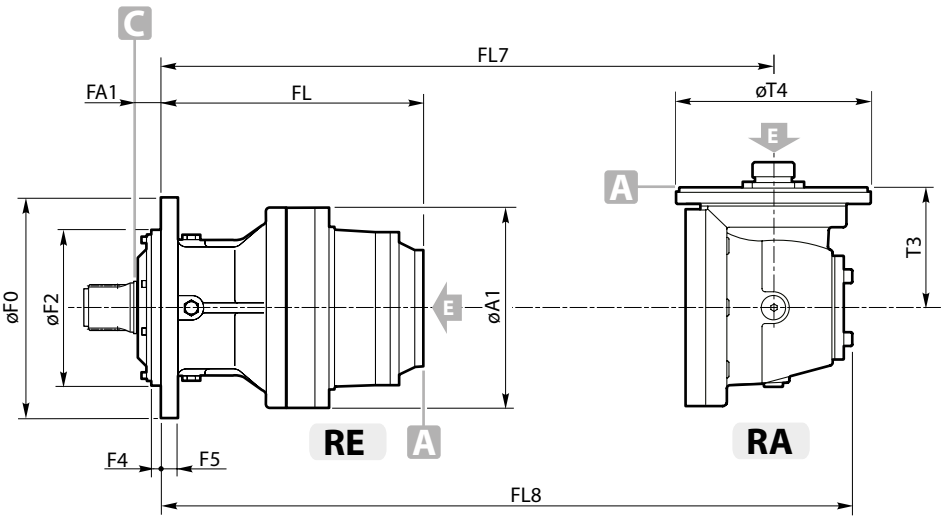
		RE - RA				
	stages	810	1020	1520	2000	2000L
A1		295	295	350	350	350
F0		280	325	325	325	325
F2		200 f7	230 f7	230 f7	230 f7	230 f7
F3		250	295	295	295	295
F4		10.5	15	15	15	15
F5		22	25	28	28	28
F6		Ø15	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9				
		M14	M16	M16	M16	M16
F7		30°	36°	36°	36°	36°
FA1		40	36	36	36	36
FL	1	185	237	240	240	240
	2	252	322	333	333	333
	3	304.5	386.5	397.5	391.5	397.5
	4	347.5	429.5	440	444	440
FL7	2	326.5	379	446	446	446
	3	374	444	455	455	455
	4	385.5	467.5	478.5	513.5	478.5
FL8	2	435	487	574	574	574
	3	465	535	546	546	546
	4	460	542	553	604.5	553
T3	2	277	277	310	310	310
	3	171.5	171.5	171.5	171.5	171.5
	4	113.8	113.8	113.8	171.5	113.8
T4	2	242	242	293	293	293
	3	183	183	183	183	183
	4	184	184	184	183	184

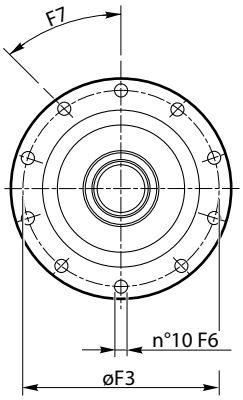
810

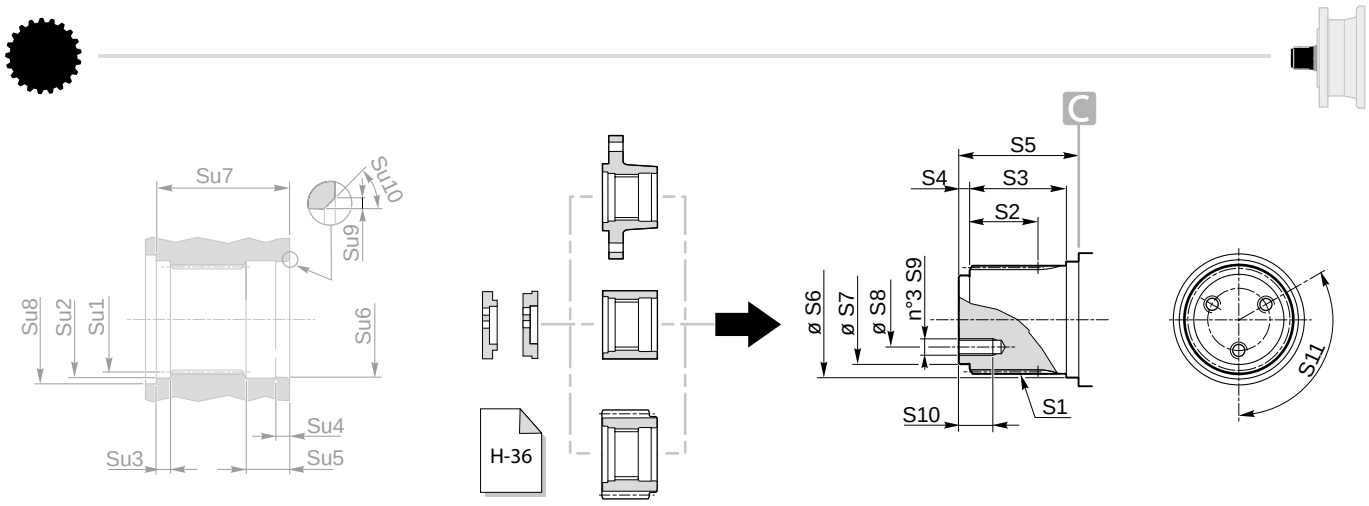




1020 - 1520
2000 - 2000L



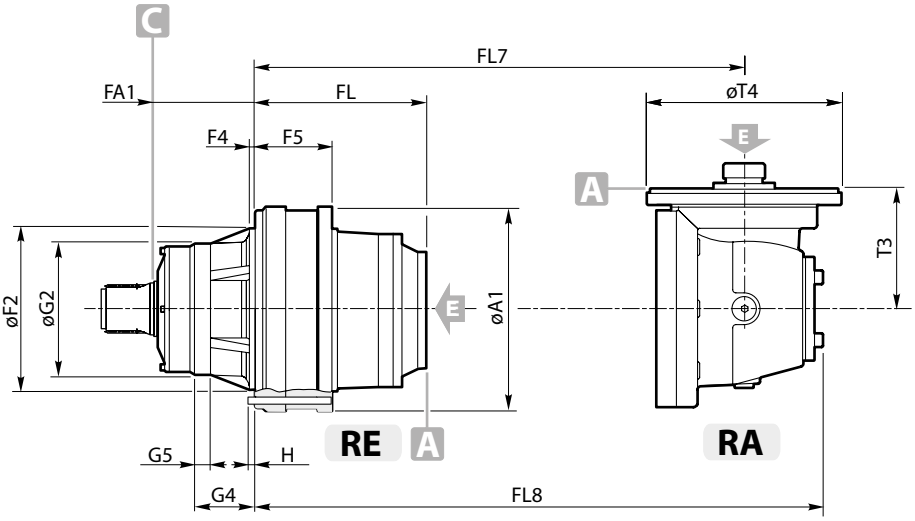




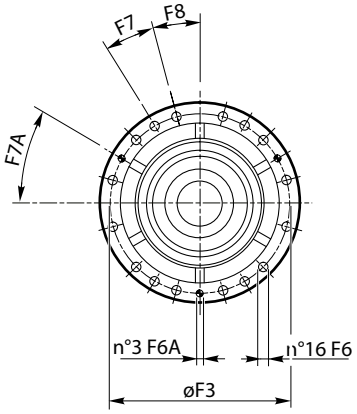
RE - RA						
	1520	2000 2000L	2520	3000	3510	4800
S1	B80x74 DIN 5482	B80x74 DIN 5482	B100x94 DIN 5482	B100x94 DIN 5482	W120x3x8f DIN 5480	W120x3x8f DIN 5480
S2	50	50	65	65	95	95
S3	70	70	85	85	111	111
S4	10	10	12	12	15	15
S5	90	90	110	110	136	136
S6	85 f7	85 f7	105 h7	105 h7	124 f7	124 f7
S7	70 f7	70 f7	85 h7	85 h7	90 f7	90 f7
S8	45	45	52	52	50	50
S9	M10	M10	M14	M14	M16	M16
S10	25	25	30	30	30	30
S11	120°	120°	120°	120°	120°	120°

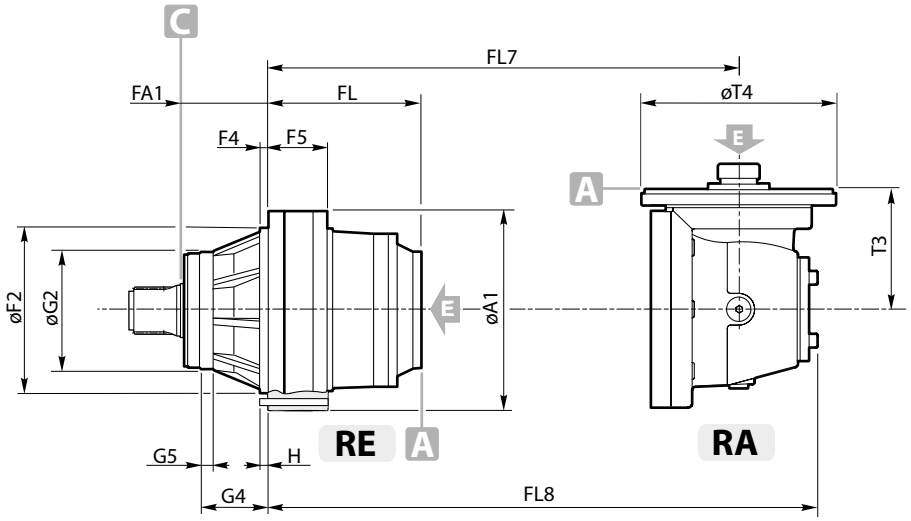
RE - RA						
	1520	2000 2000L	2520	3000	3510	4800
Su1	A80x74 DIN 5482	A80x74 DIN 5482	A100x94 DIN 5482	A100x94 DIN 5482	N120x3x9H DIN 5480	N120x3x9H DIN 5480
Su2	85 H7	85 H7	105 H7	105 H7	130 H7	130 H7
Su3	10.5	10.5	12	12	28	28
Su4	10.5	10.5	13	13	12	12
Su5	30.5	30.5	33	33	29	29
Su6	85 H7	85 H7	105 H7	105 H7	124 H7	124 H7
Su7	90.5	90.5	110	110	150	150
Su8	100	100	116	116	132	132
Su9	1	1	1.5	1.5	3	3
Su10	1	1	1.5	1.5	3	3

RE - RA								
	stages	1520	2000	2000L	2520	3000	3510	4800
A1		350	350	350	409	409	452	452
FA1		169	169	169	180	180	109	109
F2		278 f7	278 f7	278 f7	340 f7	340 f7	390 f8	390 f8
F3		314	314	314	370	370	424	424
F4		10	10	10	17	17	15	15
F5		133	133	133	131	131	120	120
F6		Ø16.5	Ø16.5	Ø16.5	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9						
		M16	M16	M16	M16	M16	M16	M16
F6A		Ø12	Ø12	Ø12	Ø16	Ø16	—	—
F7		15°	15°	15°	12°	12°	20°	20°
F7A		30°	30°	30°	30°	30°	—	—
F8		15°	15°	15°	24°	24°	10°	10°
FL	1	107	107	107	98	98	85	85
	2	200	200	200	209	226	277	326
	3	264.5	258.5	264.5	276	311	362	419
	4	307.5	311	307.5	328.5	375.5	426.5	483.5
FL7	2	313	313	313	292	292	339	339
	3	322	322	322	351	368	419	532
	4	345.5	380.5	345.5	398	433	484	541
FL8	2	441	441	441	420	420	529	529
	3	413	413	413	459	476	527	660
	4	420	472	420	489	524	575	632
G2		225 f7	225 f7	225 f7	245 f7	245 f7	—	—
G4		104.5	104.5	104.5	142	142	—	—
G5		27.5	27.5	27.5	29	29	—	—
H		15	15	15	29	29	—	—
T3	2	310	310	310	310	310	432	432
	3	171	171	171	227	227	227	310
	4	113.8	171	113.8	171	171	171	171
T4	2	293	293	293	293	293	295	295
	3	183	183	183	242	242	242	293
	4	184	183	184	183	183	183	183

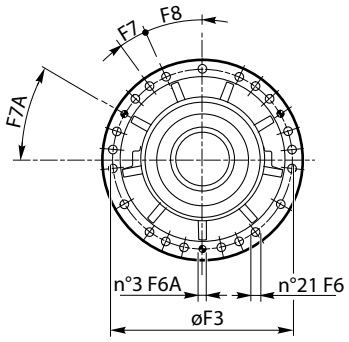


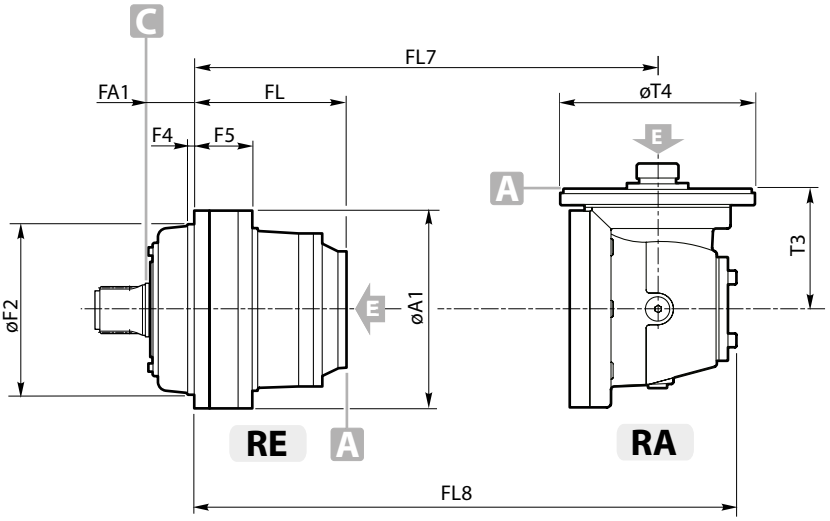
1520 - 2000
2000L



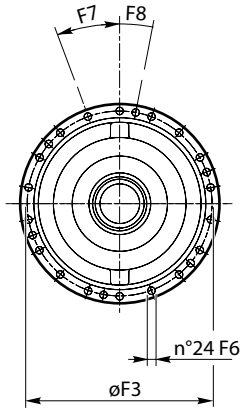


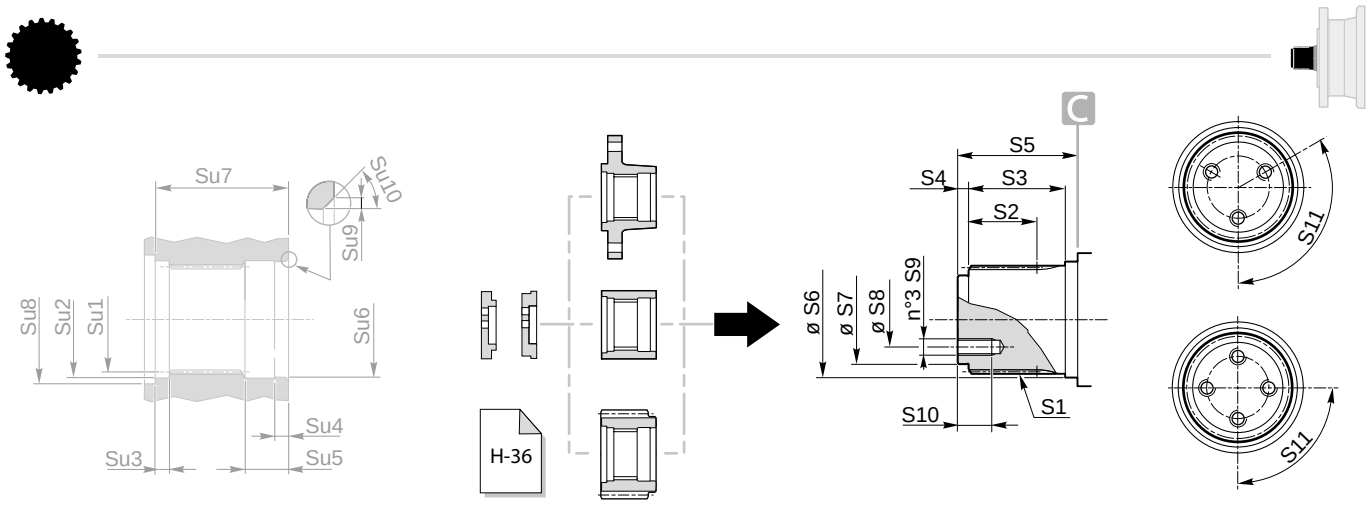
2520 - 3000





3510 - 4800

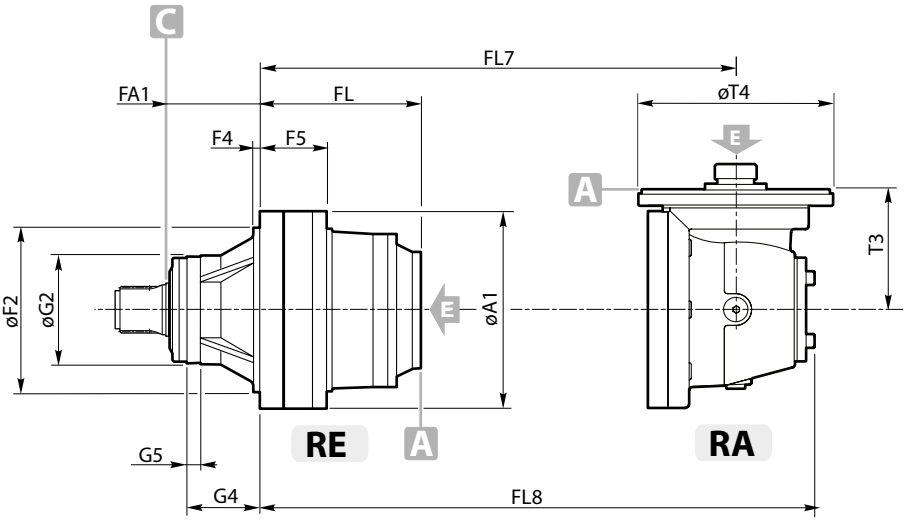




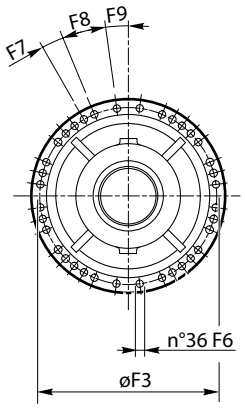
	RE - RA			GB - GBA	
	6000		8000	12010	16000
	HS	H6S	HS	HS	HS
S1	W120x3x8f DIN 5480	W150x5x8f DIN 5480	W150x5x8f DIN 5480	W170x5x8f DIN 5480	W170x5x8f DIN 5480
S2	85	107	107	110	110
S3	103	124	124	135	135
S4	10	12	12	15	15
S5	125	150	150	165	165
S6	120 h7	151 f7	151 f7	170 f7	170 f7
S7	100 h7	125 f7	125 f7	150 f7	150 f7
S8	70	80	80	110	110
S9	M16 (3)	M16 (3)	M16 (3)	M16 (4)	M16 (4)
S10	35	35	35	35	35
S11	120°	120°	120°	90°	90°

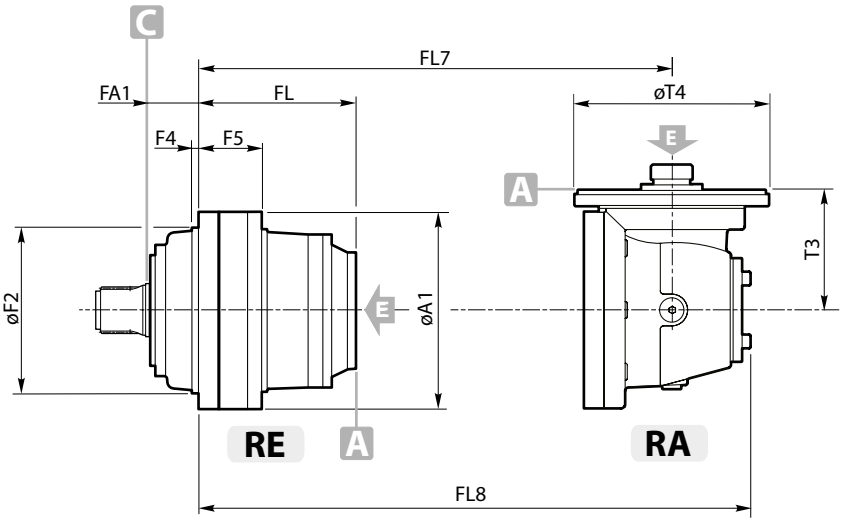
	RE - RA			GB - GBA	
	6000		8000	12010	16000
	HS	H6S	HS	HS	HS
Su1	N120x3x9H DIN 5480	N150x5x9H DIN 5480	N150x5x9H DIN 5480	N170x5x9H DIN 5480	N170x5x9H DIN 5480
Su2	120 H7	151 H7	151 H7	175 H7	175 H7
Su3	10.5	11	11	14	14
Su4	12	33	33	15	15
Su5	31	33	33	42	42
Su6	120 H7	151 H7	151 H7	170 H7	170 H7
Su7	124.5	150	150	163	163
Su8	137	172	172	200	200
Su9	3	3	3	3	3
Su10	3	3	3	3	3

		RE - RA			GB - GBA	
		6000		8000	12010	16000
	stages	HS	H6S	HS	HS	HS
A1		490	490	490	610	610
F2		410 f7	410 h8	410 h8	515 h8	515 h8
F3		445	445	445	560	560
F4		15	15	15	20	20
F5		187	178.5	181.5	230	230
F6		Ø19	Ø19	Ø19	Ø25	Ø25
		M.. - 12.9			M.. - 10.9	
		M18	M18	M18	M24	M24
F7		7°30′	7°30	7°30	15°	15°
F8		15°	15°	15°	7°30'	7°30'
F9		7°30′	7°30′	7°30	7°30'	7°30'
FA1		226	126	126	145	145
FL	1	145	136.5	136.5	160.5	160.5
	2	313.5	305	390.5	410	427
	3	406.5	398	518.5	538	668
	4	465	456.5	603.5	623	761
	5	—	—	668	687.5	825.5
FL7	2	399	390.5	390.5	—	—
	3	519.5	511	584.5	604	681
	4	528.5	520	660.5	680	874
	5	—	—		745	883
FL8	2	589	580.5	580.5	—	—
	3	647.5	639	712.5	732	871
	4	619.5	611	768.5	788	1002
	5	—	—	—	836	974
G2		260 f7	—	—	—	—
G4		181	—	—	—	—
G5		33	—	—	—	—
T3	2	432	432	432	—	—
	3	310	310	310	310	432
	4	171	171	227	227	310
	5	—	—	—	171	171
T4	2	295	295	295	—	—
	3	293	293	293	293	295
	4	183	183	242	242	293
	5	—	—	—	183	183



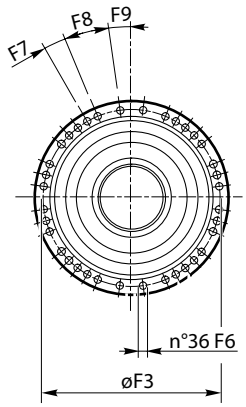
HS **6000**

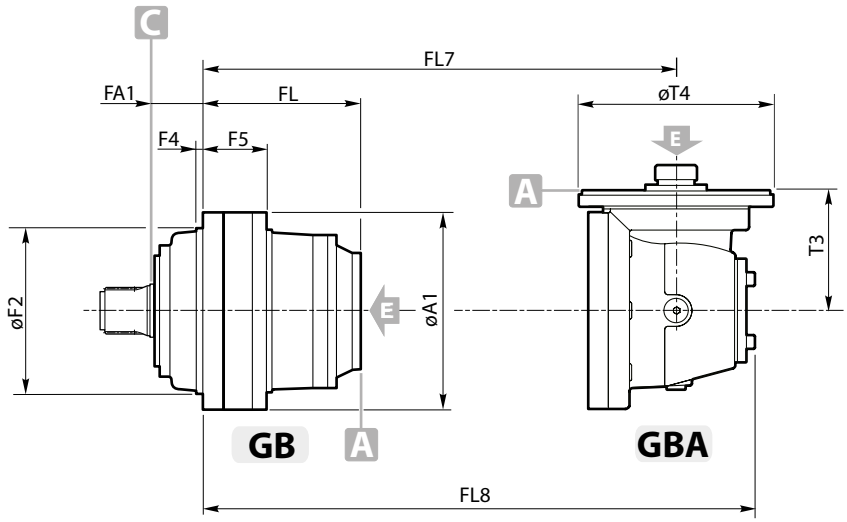




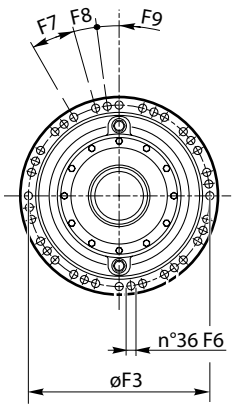
H6S **6000**

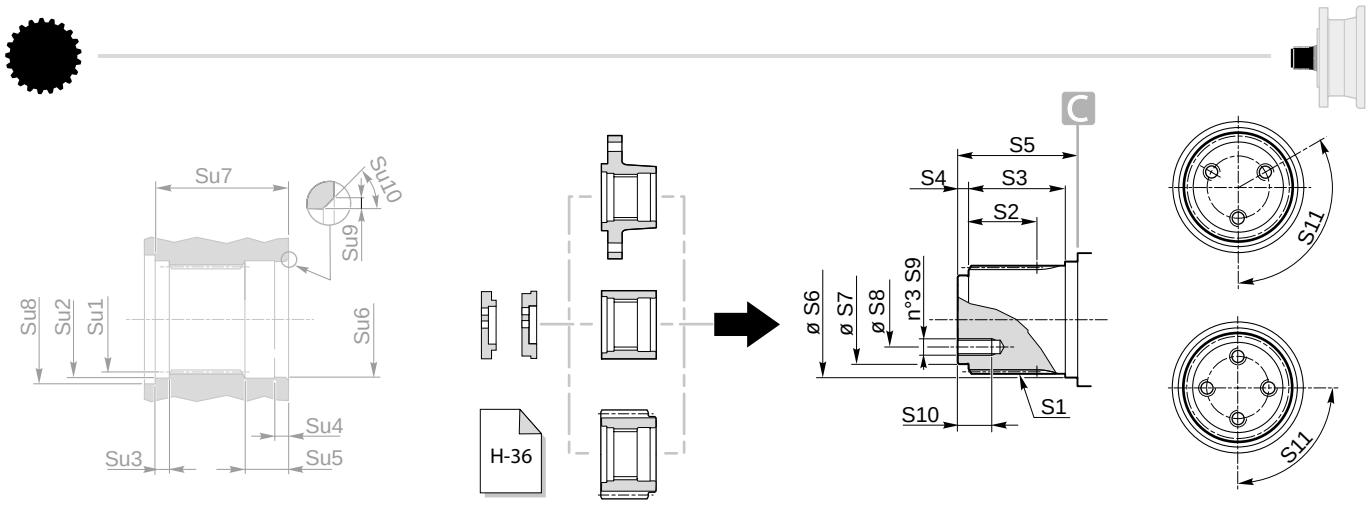
HS **8000**





HS **12010 - 16000**

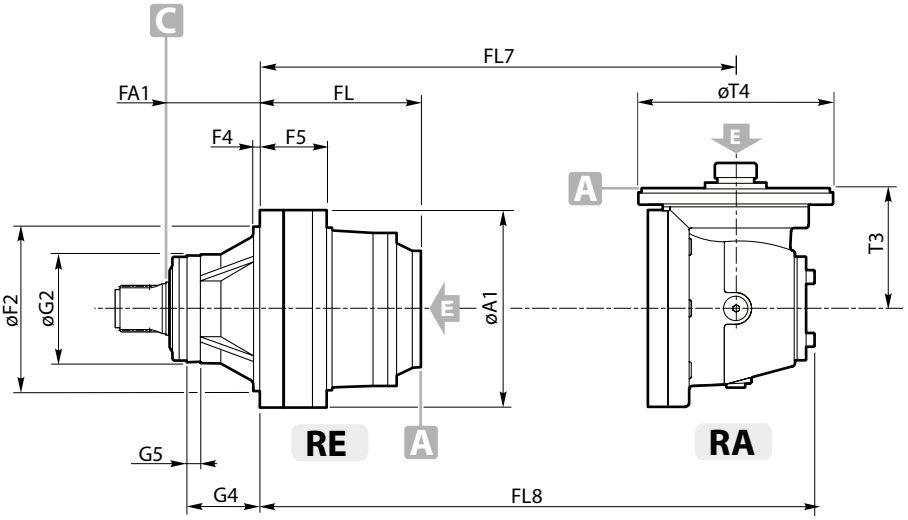




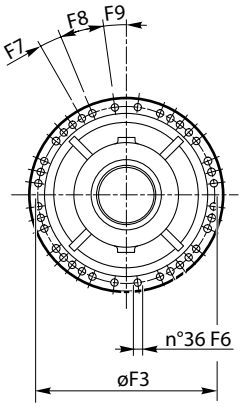
	RE - RA			GB - GBA	
	6000L		8000L	12010L	16000L
	HS	H6S	HS	HS	HS
S1	W120x3x8f DIN 5480	W150x5x8f DIN 5480	W150x5x8f DIN 5480	W170x5x8f DIN 5480	W170x5x8f DIN 5480
S2	85	107	107	110	110
S3	103	124	124	135	135
S4	10	12	12	15	15
S5	125	150	150	165	165
S6	120 h7	151 f7	151 f7	170 f7	170 f7
S7	100 h7	125 f7	125 f7	150 f7	150 f7
S8	70	80	80	110	110
S9	M16 (3)	M16 (3)	M16 (3)	M16 (4)	M16 (4)
S10	35	35	35	35	35
S11	120°	120°	120°	90°	90°

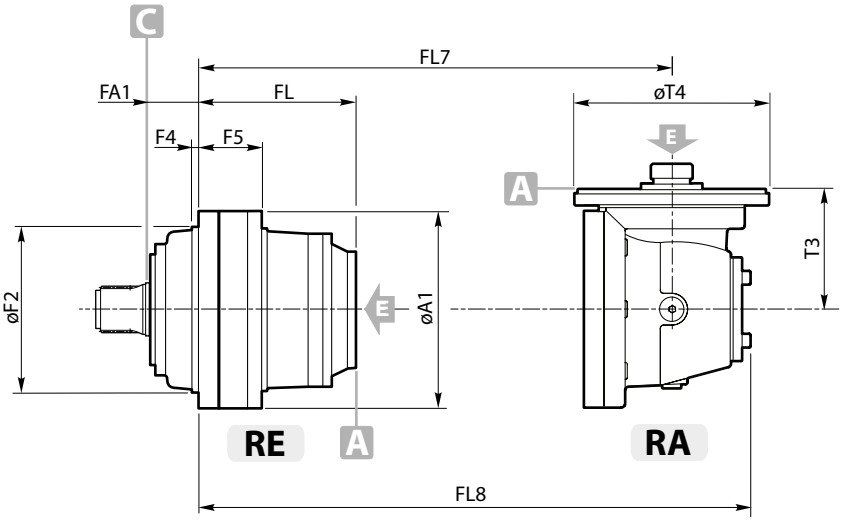
	RE - RA			GB - GBA	
	6000L		8000L	12010L	16000L
	HS	H6S	HS	HS	HS
Su1	N120x3x9H DIN 5480	N150x5x9H DIN 5480	N150x5x9H DIN 5480	N170x5x9H DIN 5480	N170x5x9H DIN 5480
Su2	120 H7	151 H7	151 H7	175 H7	175 H7
Su3	10.5	11	11	14	14
Su4	12	33	33	15	15
Su5	31	33	33	42	42
Su6	120 H7	151 H7	151 H7	170 H7	170 H7
Su7	124.5	150	150	163	163
Su8	137	172	172	200	200
Su9	3	3	3	3	3
Su10	3	3	3	3	3

		RE - RA			GB - GBA	
		6000L		8000L	12010L	16000L
	stages	HS	H6S	HS	HS	HS
A1		490	490	490	610	610
F2		410 f7	410 h8	410 h8	515 h8	515 h8
F3		445	445	445	560	560
F4		15	15	15	20	20
F5		187	178.5	181.5	230	230
F6		Ø19	Ø19	Ø19	Ø25	Ø25
		M.. - 12.9			M.. - 10.9	
		M18	M18	M18	M24	M24
F7		7°30′	7°30′	7°30′	15°	15°
F8		15°	15°	15°	7°30'	7°30'
F9		7°30′	7°30′	7°30′	7°30'	7°30'
FA1		226	126	126	145	145
FL	1	145	136.5	136.5	160.5	160.5
	2	313.5	305	390.5	410	427
	3	406.5	398	501.5	521	619
	4	471	462.5	568.5	588	704
	5	—	—	621	640.5	768.5
FL7	2	399	390.5	390.5	—	—
	3	519.5	511	584.5	604	681
	4	528.5	520	643.5	663	761
	5	—	—	—	710	826
FL8	2	589	580.5	580.5	—	—
	3	647.5	639	712.5	732	871
	4	619.5	611	751.5	771	869
	5	—	—	—	801	917
G2		260 f7	—	—	—	—
G4		181	—	—	—	—
G5		33	—	—	—	—
T3	2	432	432	432	/	/
	3	310	310	310	310	432
	4	171	171	227	227	227
	5	—	—	—	171	171
T4	2	295	295	295	—	—
	3	293	293	293	293	295
	4	183	183	242	242	242
	5	—	—	—	183	183



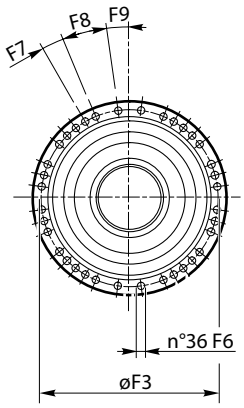
HS **6000L**

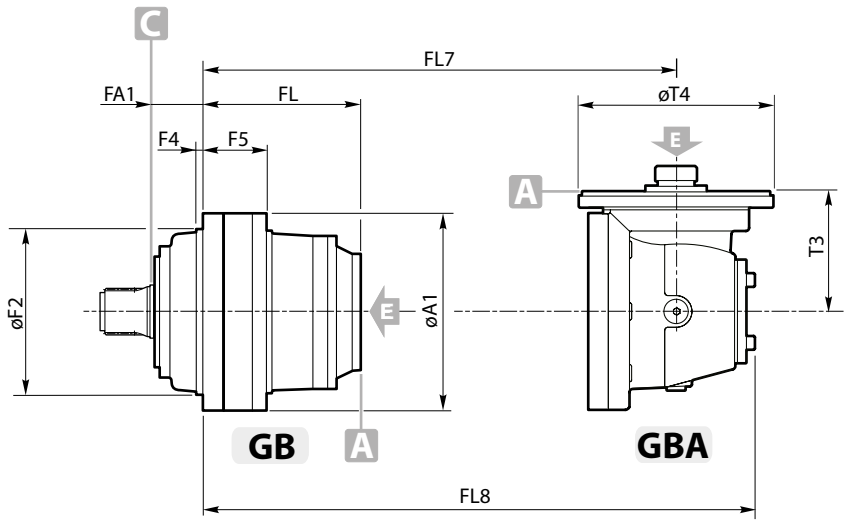




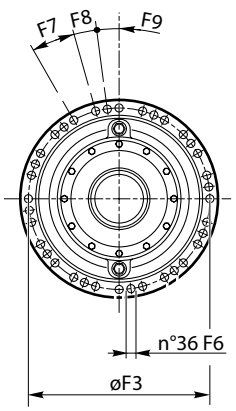
H6S **6000L**

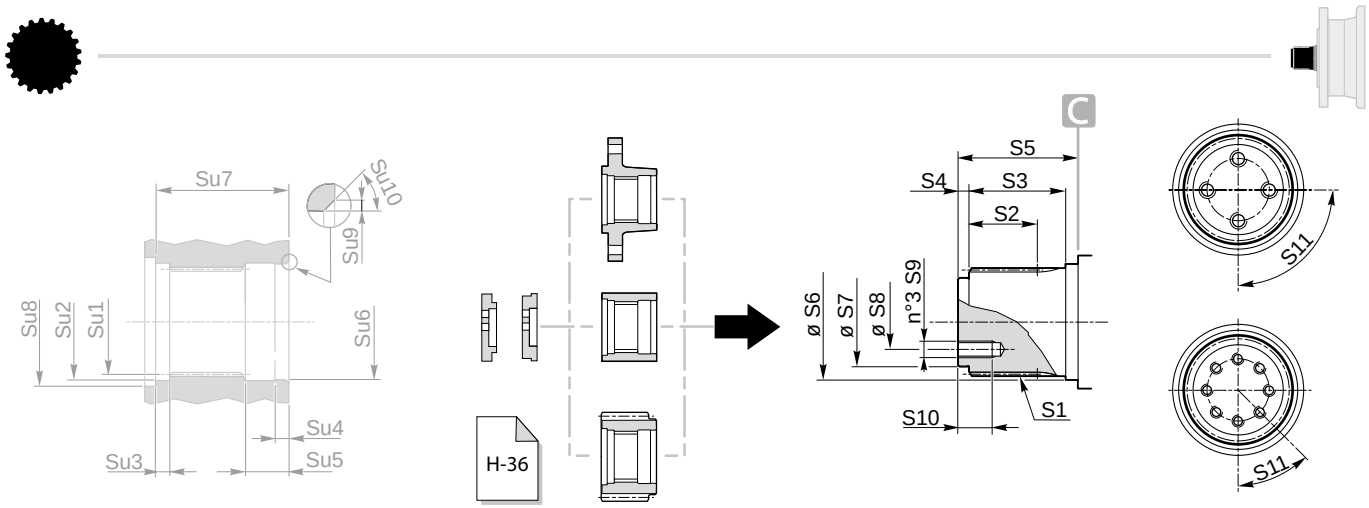
HS **8000L**





HS **12010L-16000L**

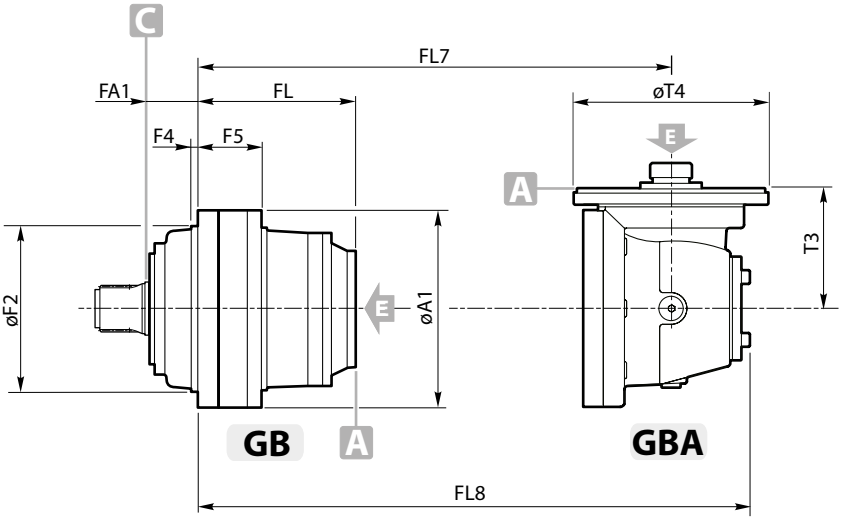




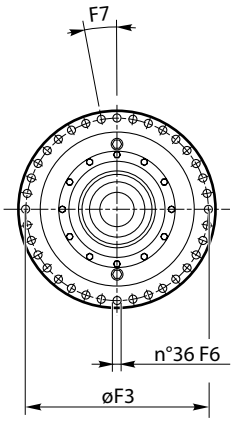
	RE - RA				
	21000	26000	31000	40000	45000
S1	W220x5x8f DIN 5480	W220x5x8f DIN 5480	W280x5x8f DIN 5480	W280x5x8f DIN 5480	W280x5x8f DIN 5480
S2	140	140	175	175	175
S3	167	167	210	210	210
S4	20	20	25	25	25
S5	210	210	260	260	260
S6	220 f7	220 f7	283 f7	283 f7	283 f7
S7	200 f7	200 f7	260 f7	260 f7	260 f7
S8	150	150	200	200	200
S9	M24(x4)	M24(x4)	M24(x8)	M24(x8)	M24(x8)
S10	50	50	50	50	50
S11	90°	90°	45°	45°	45°

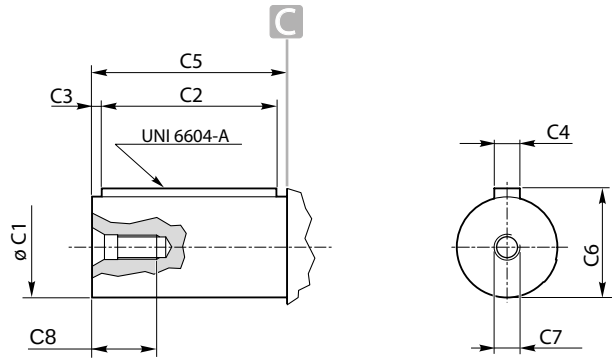
	RE - RA				
	21000	26000	31000	40000	45000
Su1	N220x5x9H DIN 5480	N220x5x9H DIN 5480	N280x5x9H DIN 5480	N280x5x9H DIN 5480	N280x5x9H DIN 5480
Su2	230 H7	230 H7	300 H7	300 H7	300 H7
Su3	16	16	24.5	24.5	24.5
Su4	23	23	25	25	25
Su5	51.5	51.5	65	65	65
Su6	220 H7	220 H7	283 H7	283 H7	283 H7
Su7	205	205	260	260	260
Su8	262	262	302	302	302
Su9	3	3	3	3	3
Su10	3	3	3	3	3

		RE - RA				
	stages	21000	26000	31000	40000	45000
A1		710	710	870	870	870
F2		600 h8	600 h8	760 h8	760 h8	760 h8
F3		660	660	810	810	810
F4		23.5	23.5	35	35	35
F5		196	216	250	290	290
F6		Ø28	Ø28	Ø32	Ø32	Ø32
		M.. - 10.9				
		M27	M27	M30	M30	M30
F7		10°	10°	10°	10°	10°
FA1		180	180	225	225	225
FL	1	138	158	180	220	220
	2	443	463	588.5	628.5	628.5
	3	611.5	717	838	878	895
	4	704.5	845	966	1006	1136
	5	763	930	1051	1091	1229
FL7	3	697	717	/	/	/
	4	817.5	911	1032	1072	1149
	5	826.5	987	1108	1148	1342
FL8	3	887	907	/	/	/
	4	945.5	1039	1160	1200	1339
	5	917.5	1095	1216	1256	1470
T3	3	432	432	/	/	/
	4	310	310	310	310	432
	5	171	227	227	227	310
T4	3	295	295	/	/	/
	4	293	293	293	293	295
	5	183	242	242	242	293



21000 ÷ 45000





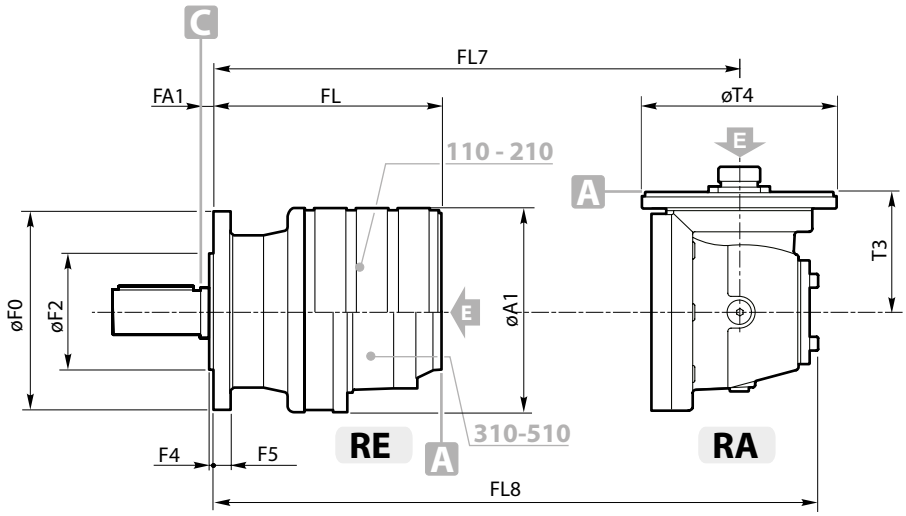
		RE - RA					
		110	210	310	510	610	810
NC	C1	38 h7	38 h7	50 h7	50 h7	50 h7	80 h6
	C2	50	50	90	90	90	110
	C3	4	4	8	8	8	8
	C4	10	10	14	14	14	22
	C5	58	58	105	105	105	130
	C6	41	41	53.5	53.5	53.5	85
	C7	M12	M12	M14	M14	M14	M20
	C8	20	20	30	30	30	45

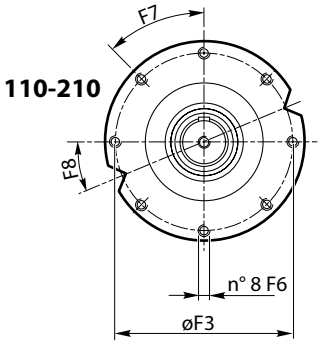
		RE - RA					
		110	210	310	510	610	810
NK	C1	42 h7	42 h7	60 h7	60 h7	60 h7	—
	C2	70	70	90	90	90	—
	C3	6	6	8	8	8	—
	C4	12	12	18	18	18	—
	C5	82	82	105	105	105	—
	C6	45	45	64	64	64	—
	C7	M16	M16	M16	M16	M16	—
	C8	30	30	30	30	30	—

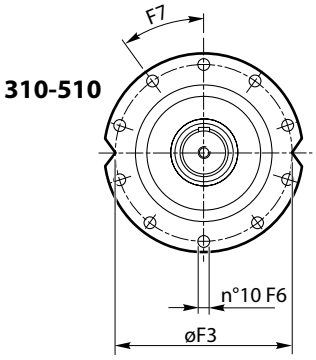
		RE - RA					
		110	210	310	510	610	810
NK1	C1	—	—	65 h7	65 h7	65 h7	—
	C2	—	—	90	90	90	—
	C3	—	—	8	8	8	—
	C4	—	—	18	18	18	—
	C5	—	—	105	105	105	—
	C6	—	—	69	69	69	—
	C7	—	—	M20	M20	M20	—
	C8	—	—	40	40	40	—

		RE - RA					
	stages	110	210	310	510	610	810
A1		186	186	244	244	244	295
F0		185	185	222	222	222	280
F2		110 h7	110 h7	150 f7	150 f7	150 f7	200 f7
F3		165	165	195	195	195	250
F4		5	5	13.5	13.5	13.5	10.5
F5		12	12	16	16	16	18
F6		10.5	10.5	12.5	12.5	12.5	15
		M.. - 12.9					
		M10	M10	M12	M12	M12	M14
F7		45°	45°	36°	36°	36°	30°
F8		22.5°	22.5°	—	—	—	—
FA1		6.5	6.5	15	15	15	40
FL	1	95	107	133	151	151	162.5
	2	138	150	185.5	215.5	209.5	229.5
	3	181	193	228.5	258.5	262	282
	4	224	236	271.5	301.5	305	325
FL7	2	176	188	255	273	273	304.5
	3	219	231	266.5	296.5	331.5	351.5
	4	262	274	309.5	339.5	343	363
FL8	2	250.5	262.5	346	364	364	412.5
	3	293.5	305.5	341	371	422.5	442.5
	4	336.5	348.5	384	414	417.5	437.5
T3	2	113.8	113.8	171.5	171.5	171.5	277
	3	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183	242
	3	184	184	184	184	183	183
	4	184	184	184	184	184	184

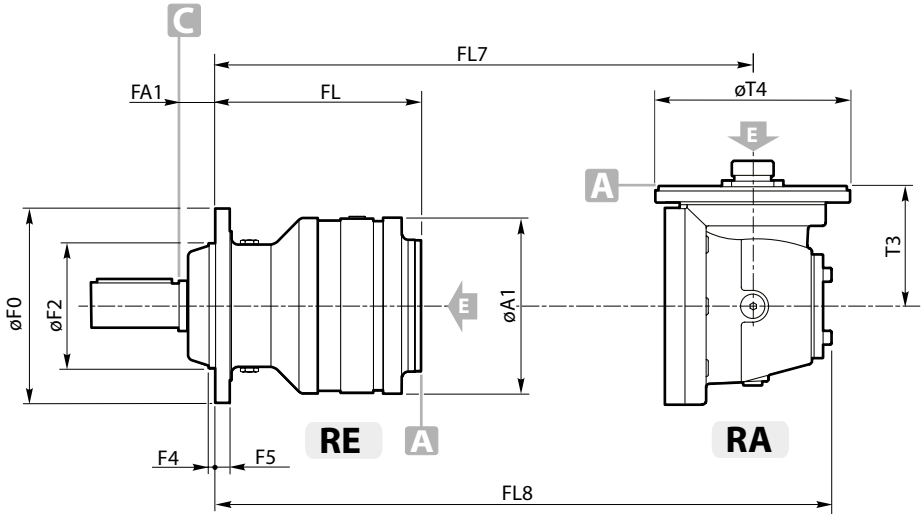
110 - 210
310 - 510

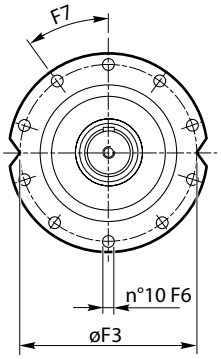




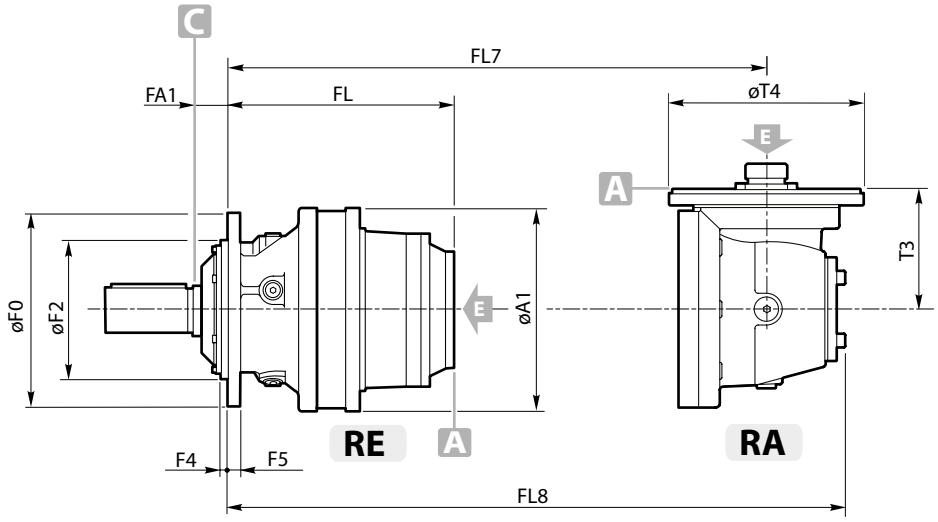


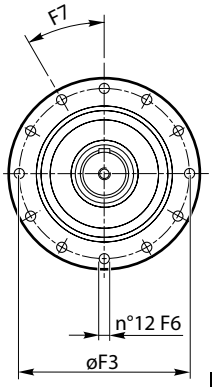
610





810





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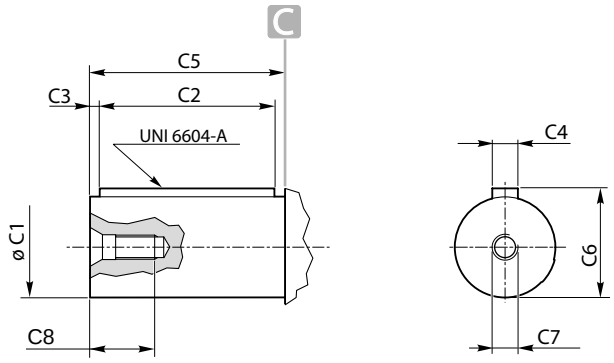
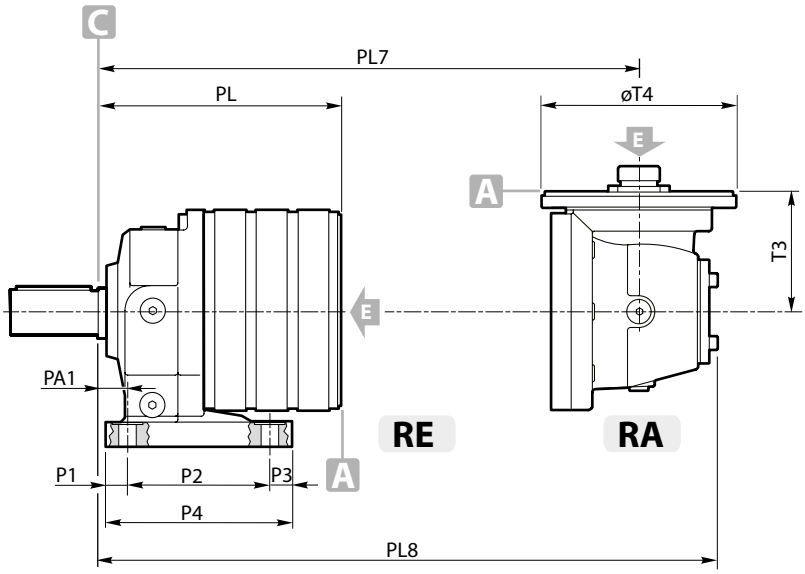


		RE - RA						
		110	210	310	510	610	810	1020
PC	C1	38 h7	38 h7	50 h7	50 h7	50 h7	80 h6	80 h6
	C2	50	50	90	90	90	110	110
	C3	4	4	8	8	8	8	8
	C4	10	10	14	14	14	22	22
	C5	58	58	105	105	105	130	130
	C6	41	41	53.5	53.5	53.5	85	85
	C7	M12	M12	M14	M14	M14	M20	M20
	C8	20	20	30	30	30	45	45

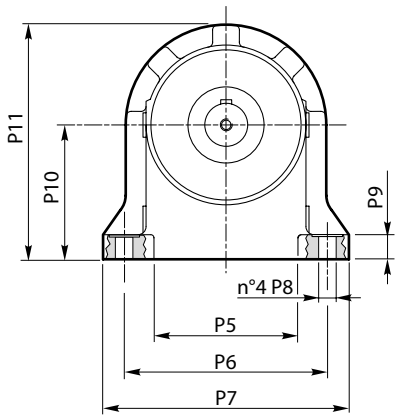
		RE - RA						
		110	210	310	510	610	810	1020
PK	C1	42 h7	42 h7	60 h7	60 h7	60 h7	—	—
	C2	70	70	90	90	90	—	—
	C3	6	6	8	8	8	—	—
	C4	12	12	18	18	18	—	—
	C5	82	82	105	105	105	—	—
	C6	45	45	53.5	53.5	53.5	—	—
	C7	M16	M16	M16	M16	M16	—	—
	C8	30	30	30	30	30	—	—

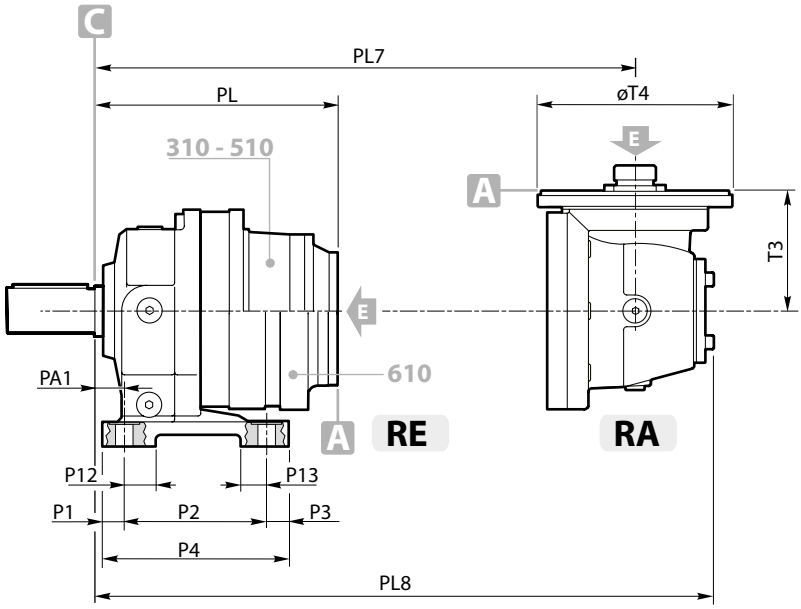
		RE - RA						
		110	210	310	510	610	810	1020
PK1	C1	/	/	65 h7	65 h7	65 h7	—	—
	C2	/	/	90	90	90	—	—
	C3	/	/	8	8	8	—	—
	C4	/	/	18	18	18	—	—
	C5	/	/	105	105	105	—	—
	C6	/	/	69	69	69	—	—
	C7	/	/	M20	M20	M20	—	—
	C8	/	/	40	40	40	—	—

		RE - RA						
	stages	110	210	310	510	610	810	1020
P1		20	20	28	28	28	35	35
P2		132	132	180	180	180	225	225
P3		20	20	28	28	28	35	35
P4		172	172	236	236	236	295	295
P5		134	134	180	180	180	206	206
P6		190	190	250	250	250	300	300
P7		230	230	310	310	310	370	370
P8		Ø14	Ø14	Ø22	Ø22	Ø22	Ø26	Ø26
		 M.. - 12.9						
		M12	M12	M20	M20	M20	M24	M24
P9		23	23	26.5	26.5	26.5	36	36
P10		125	125	160	160	160	200	200
P11		218	218	282	282	282	347.5	347.5
P12		—	—	21	21	21	45	45
P13		—	—	21	21	21	45	45
PA1		20	20	29	29	29	35	35
PL	1	101.5	113.5	148	166	166	225	242
	2	144.5	156.5	200.5	230.5	224.5	292	327
	3	187.5	199.5	243.5	273.5	277	344.5	391.5
	4	230.5	242.5	286.5	316.5	320	387.5	434.5
PL7	2	182.5	194.5	297	315	288	367	384
	3	225.5	237.5	281.5	311.5	346.5	414	449
	4	268.5	280.5	324.5	354.5	358	425.5	472.5
PL8	2	257	269	361	379	379	475	492
	3	300	312	356	386	437.5	505	540
	4	343	355	399	429	432.5	500	547
T3	2	113.8	113.8	171.5	171.5	171.5	277	277
	3	113.8	113.8	113.8	113.8	171.5	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183	242	242
	3	184	184	184	184	183	183	183
	4	184	184	184	184	184	184	184

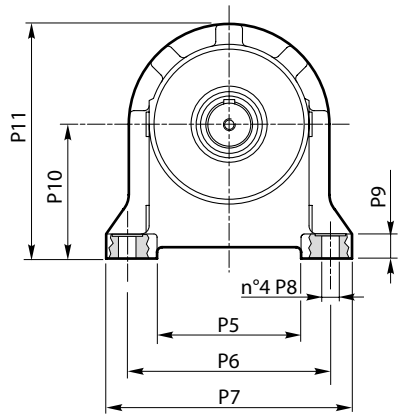


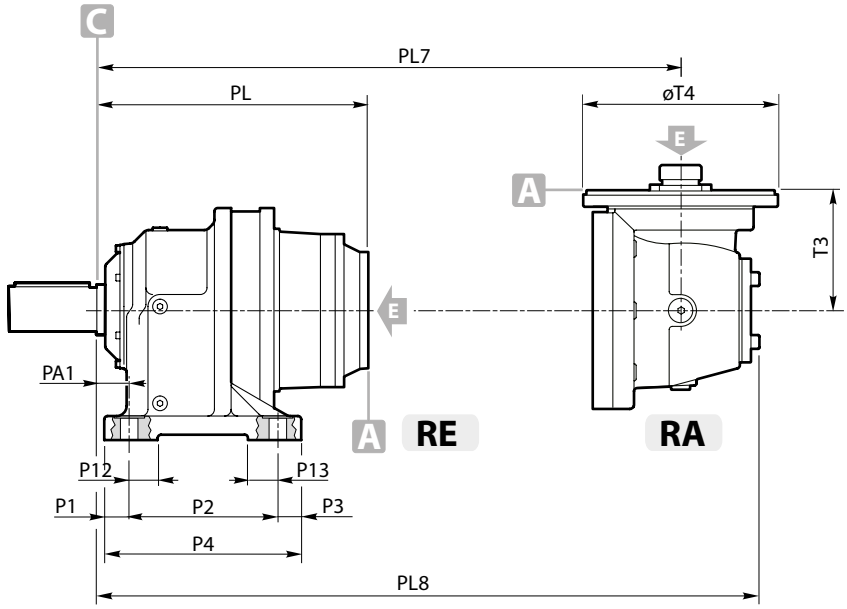
110 - 210



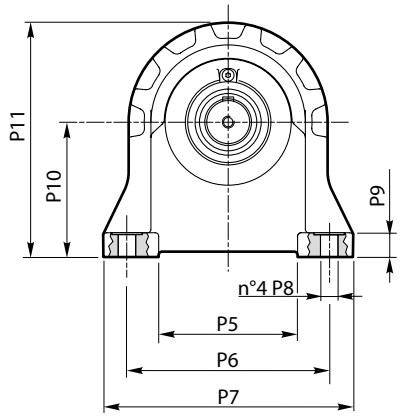


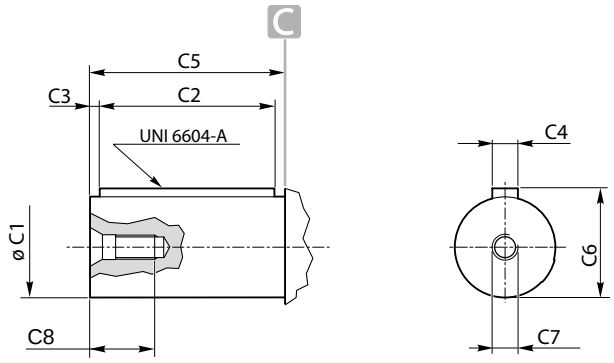
310 - 510
610





810 - 1020

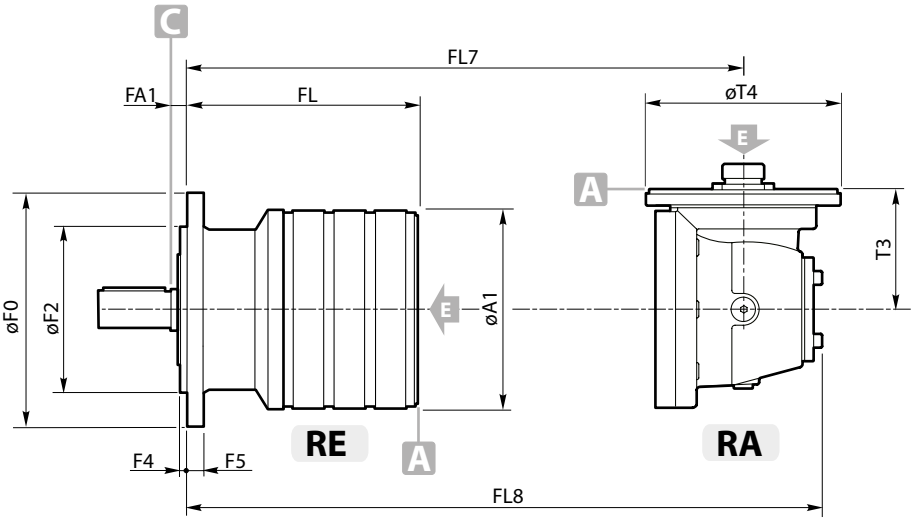




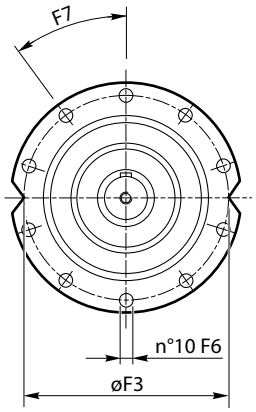
		RE - RA					
		110	210	240	310	510	610
TC T1C TRC TR1C TLC	C1	50 h7	50 h7	50 h7	60 h7	60 h7	60 h7
	C2	90	90	90	90	90	90
	C3	5	5	5	8	8	8
	C4	14	14	14	18	18	18
	C5	100	100	100	105	105	105
	C6	53.5	53.5	53.5	64	64	64
	C7	M12	M12	M12	M16	M16	M16
	C8	30	30	30	30	30	30

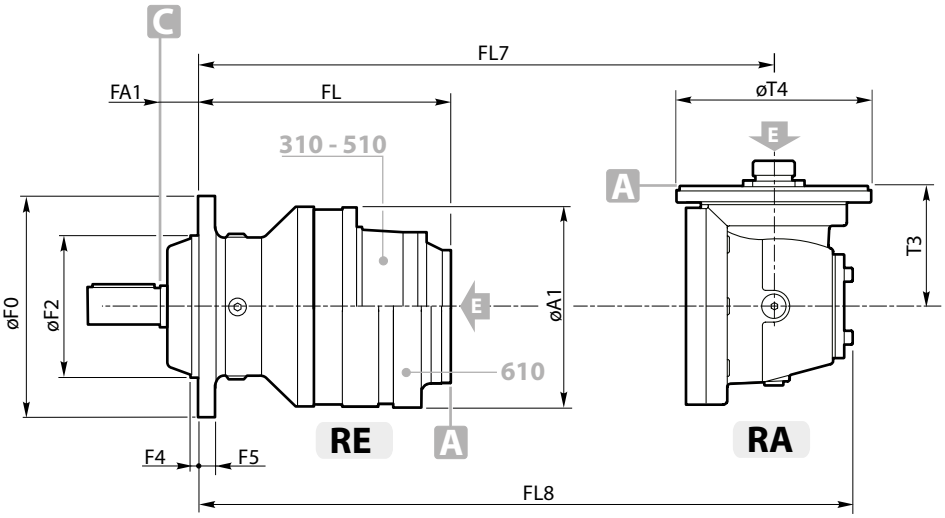
		RE - RA					
		110	210	240	310	510	610
TK TLK	C1	/	/	/	65 h7	65 h7	65 h7
	C2	/	/	/	90	90	90
	C3	/	/	/	8	8	8
	C4	/	/	/	18	18	18
	C5	/	/	/	105	105	105
	C6	/	/	/	69	69	69
	C7	/	/	/	M20	M20	M20
	C8	/	/	/	40	40	40

		RE - RA															
	stages	110				210				240		310		510		610	
		T_	T1_	TR_	TR1_	T_	T1_	TR_	TR1_	T_	TR_	T_	TL_	T_	TL_	T_	TL_
A1		186	186	186	186	186	186	186	186	186	186	244	244	244	244	244	244
F0		219	219	219	219	219	219	219	219	219	219	272	272	272	272	272	272
F2		155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	150 f7	155 f7	175 h8	175 h8	175 h8	175 h8	175 h8	175 h8
F3		194	195	194	195	194	195	194	195	195	194	245	245	245	245	245	245
F4		7	7	10	10	7	7	10	10	7	10	12	9	12	9	12	9
F5		15	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20
F6		Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø12.5	Ø11	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5
		M.. - 12.9															
		M10	M12	M10	M12	M10	M12	M10	M12	M12	M10	M12	M12	M12	M12	M12	M12
F7		36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°
FA1		13	13	30	30	13	13	30	30	13	30	39	39	39	39	39	39
FL	1	102	102	85	85	114	114	97	97	114	97	157	157	175	175	175	175
	2	145	145	128	128	157	157	140	140	157	140	209.5	209.5	239.5	239.5	233.5	233.5
	3	188	188	171	171	200	200	183	183	200	183	252.5	252.5	282.5	282.5	286	286
	4	231	231	214	214	243	243	226	226	243	226	295.5	295.5	325.5	325.5	329	329
FL7	2	183	183	166	166	195	195	178	178	195	178	279	279	297	297	297	297
	3	226	226	209	209	238	238	221	221	238	221	290.5	290.5	320.5	320.5	355.5	355.5
	4	269	269	252	252	281	281	264	264	281	264	333.5	333.5	363.5	363.5	367	367
FL8	2	257.5	257.5	240.5	240.5	269.5	269.5	252.5	252.5	269.5	252.5	370	370	388	388	388	388
	3	300.5	300.5	283.5	283.5	312.5	312.5	295.5	295.5	312.5	295.5	365	365	395	395	446.5	446.5
	4	343.5	343.5	326.5	326.5	355.5	355.5	338.5	338.5	355.5	338.5	408	408	438	438	441.5	441.5
T3	2	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5	171.5	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	184	184	184	184	184	184	184	184	183	183	183	183	183	183
	3	184	184	184	184	184	184	184	184	184	184	184	184	184	184	183	183
	4	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184

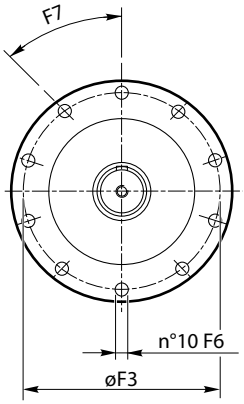


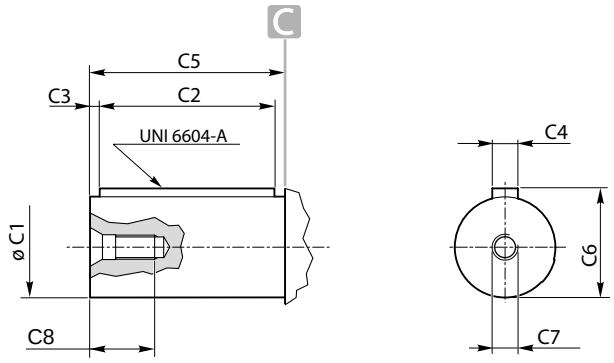
110 ÷ 240





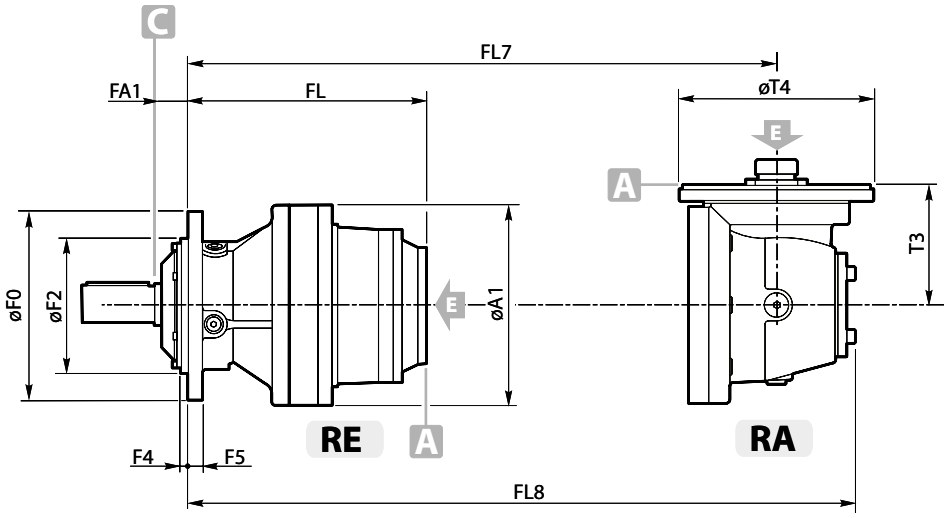
310 - 510
610



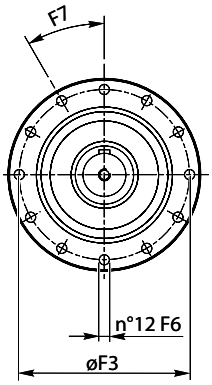


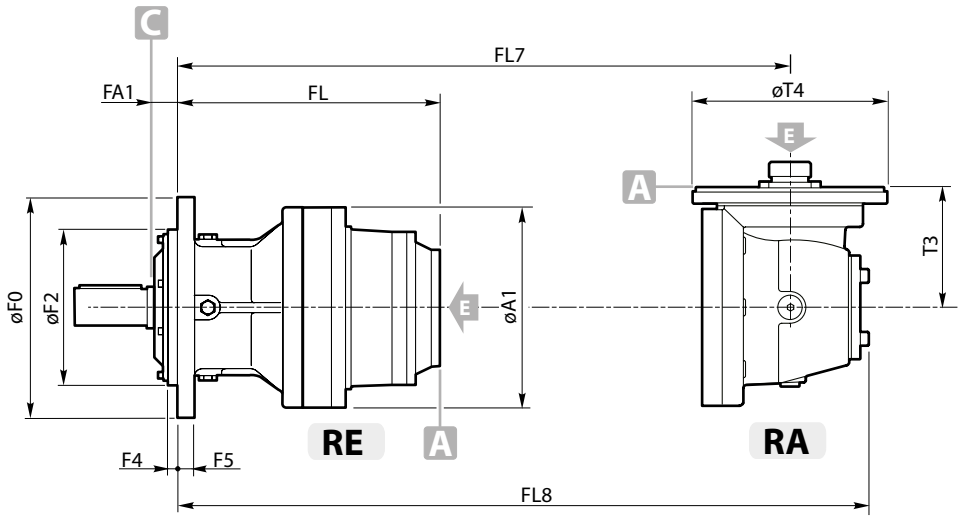
TC	RE - RA				
	810	1020	1520	2000	2000L
C1	80 h6	90 h7	90 h7	90 h7	90 h7
C2	110	160	160	160	160
C3	8	5	5	5	5
C4	22	25	25	25	25
C5	130	170	170	170	170
C6	85	95	95	95	95
C7	M20	M24	M24	M24	M24
C8	45	50	50	50	50

	RE - RA					
	stages	810	1020	1520	2000	2000L
A1		295	295	350	350	350
F0		280	325	325	325	325
F2		200 f7	230 f7	230 f7	230 f7	230 f7
F3		250	295	295	295	295
F4		10.5	15	15	15	15
F5		22	25	28	28	28
F6		Ø15	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9				
		M14	M16	M16	M16	M16
F7		30°	36°	36°	36°	36°
FA1		40	36	36	36	36
FL	1	185	237	240	240	240
	2	252	322	333	333	333
	3	304.5	386.5	397.5	391.5	397.5
	4	347.5	429.5	440	444	440
FL7	2	326.5	379	446	446	446
	3	374	444	455	455	455
	4	385.5	467.5	478.5	513.5	478.5
FL8	2	435	487	574	574	574
	3	465	535	546	546	546
	4	460	542	553	604.5	553
T3	2	277	277	310	310	310
	3	171.5	171.5	171.5	171.5	171.5
	4	113.8	113.8	113.8	171.5	113.8
T4	2	242	242	293	293	293
	3	183	183	183	183	183
	4	184	184	184	183	184

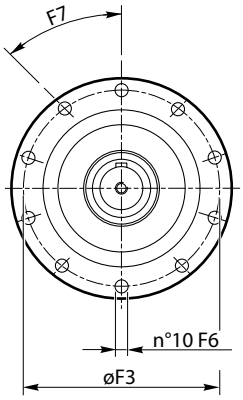


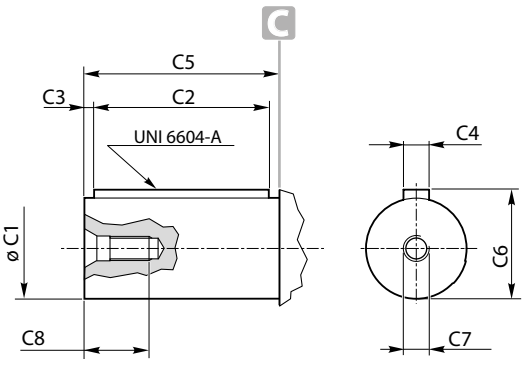
810



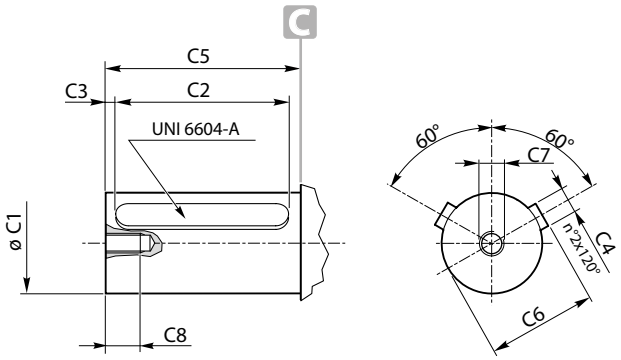


1020 - 1520
2000 - 2000L





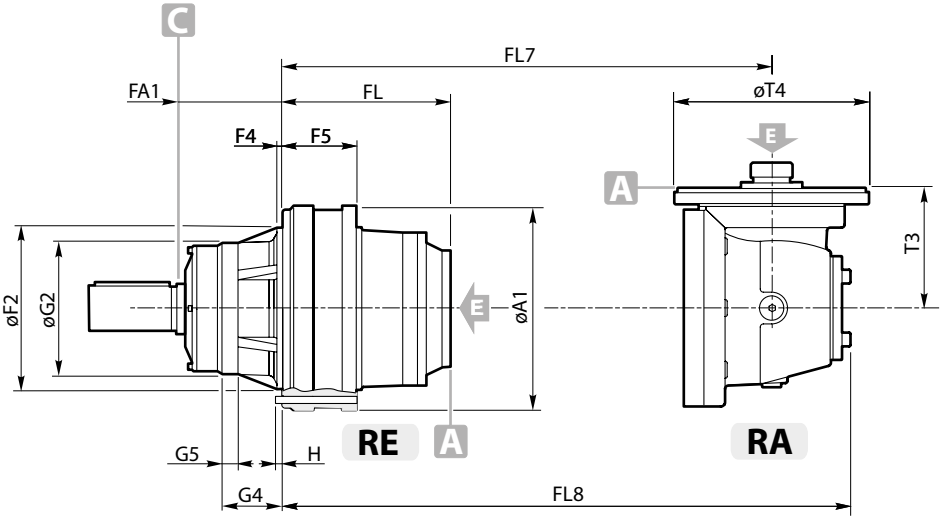
1520 ÷ 3000



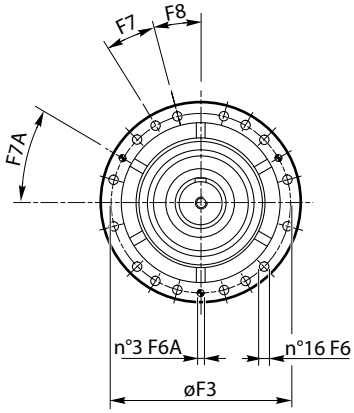
3510 - 4800

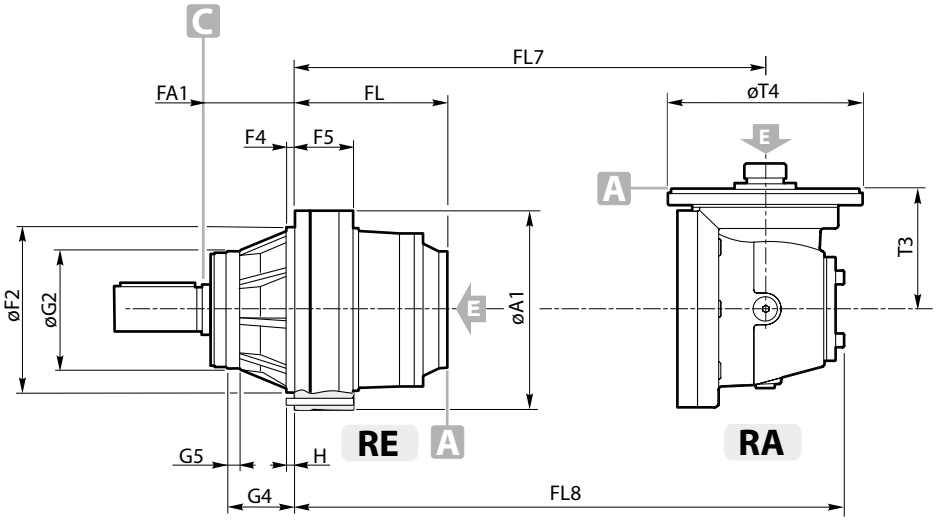
		RE - RA						
		1520	2000	2000L	2520	3000	3510	4800
HC	C1	90 h6	90 h6	90 h6	110 h6	110 h6	120 h7	120 h7
	C2	160	160	160	200	200	200	200
	C3	5	5	5	5	5	5	5
	C4	25	25	25	28	28	32	32
	C5	170	170	170	210	210	210	210
	C6	95	95	95	116	116	127	127
	C7	M24	M24	M24	M24	M24	M24	M24
	C8	50	50	50	50	50	50	50

		RE - RA						
	stages	1520	2000	2000L	2520	3000	3510	4800
A1		350	350	350	409	409	452	452
FA1		169	169	169	180	180	109	109
F2		278 f7	278 f7	278 f7	340 f7	340 f7	390 f8	390 f8
F3		314	314	314	370	370	424	424
F4		10	10	10	17	17	15	15
F5		133	133	133	131	131	120	120
F6		Ø16.5	Ø16.5	Ø16.5	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9						
		M16	M16	M16	M16	M16	M16	M16
F6A		Ø12	Ø12	Ø12	Ø16	Ø16	/	/
F7		15°	15°	15°	12°	12°	20°	20°
F7A		30°	30°	30°	30°	30°	/	/
F8		15°	15°	15°	24°	24°	10°	10°
FL	1	107	107	107	98	98	85	85
	2	200	200	200	209	226	277	326
	3	264.5	258.5	264.5	276	311	362	419
	4	307.5	311	307.5	328.5	375.5	426.5	483.5
FL7	2	313	313	313	292	292	339	339
	3	322	322	322	351	368	419	532
	4	345.5	380.5	345.5	398	433	484	541
FL8	2	441	441	441	420	420	529	529
	3	413	413	413	459	476	527	660
	4	420	472	420	489	524	575	632
G2		225 f7	225 f7	225 f7	245 f7	245 f7	/	/
G4		104.5	104.5	104.5	142	142	/	/
G5		27.5	27.5	27.5	29	29	/	/
H		15	15	15	29	29	/	/
T3	2	310	310	310	310	310	432	432
	3	171	171	171	227	227	227	310
	4	113.8	171	113.8	171	171	171	171
T4	2	293	293	293	293	293	295	295
	3	183	183	183	242	242	242	293
	4	184	183	184	183	183	183	183

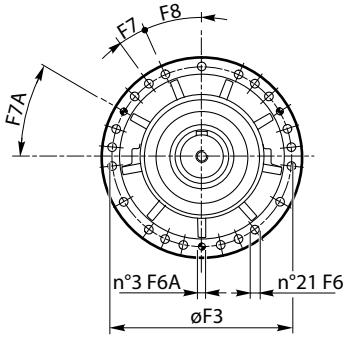


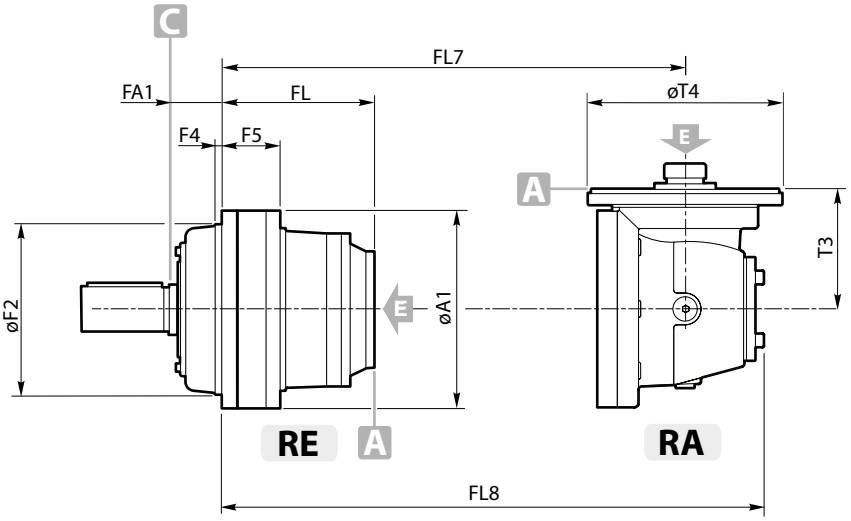
1520 - 2000
2000L



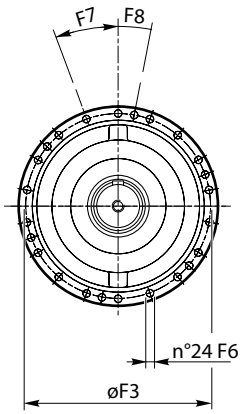


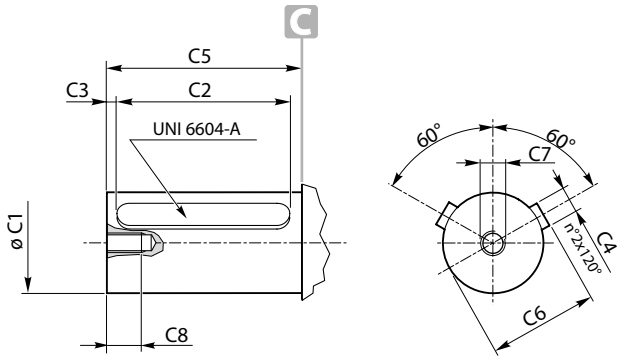
2520 - 3000



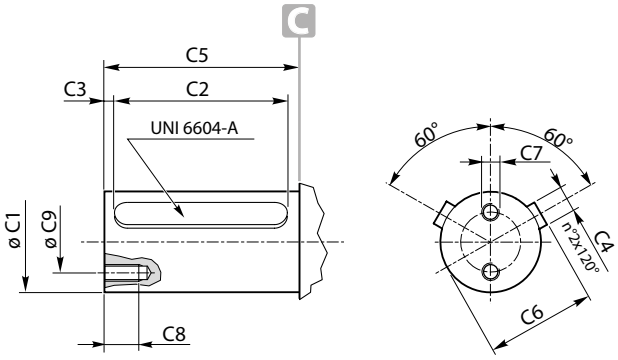


3510 - 4800





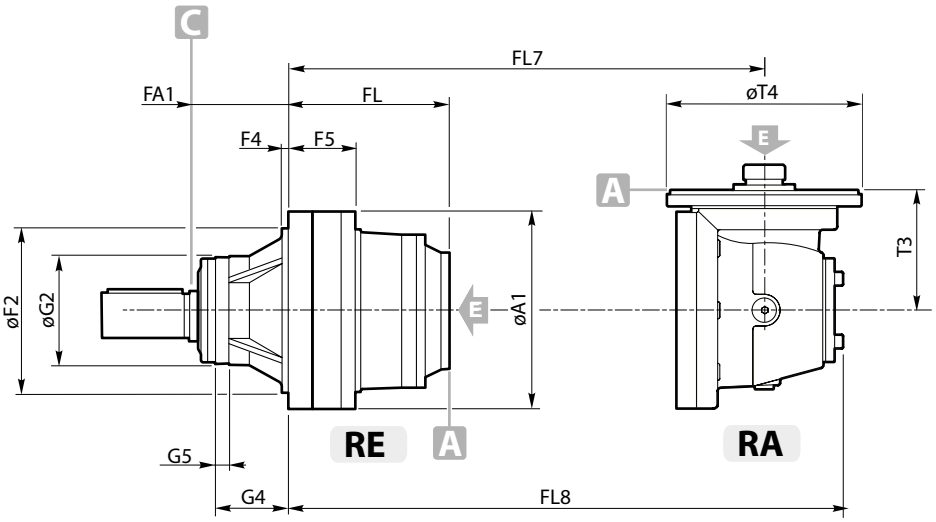
6000 - 8000



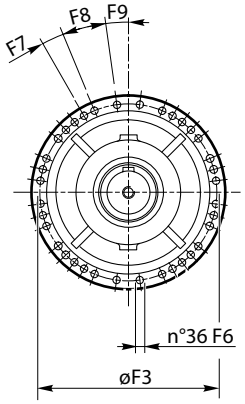
12010 - 16000

		RE - RA			GB - GBA	
		6000		8000	12010	16000
		HC	H6C	HC	HC	HC
HC H6C	C1	140 h6	160 h7	160 h7	180 h7	180 h7
	C2	200	210	210	220	220
	C3	10	10	10	10	10
	C4	36	40	40	45	45
	C5	220	230	230	240	240
	C6	148	169	169	190	190
	C7	M24	M24	M24	M16(2)	M16(2)
	C8	50	50	50	35	35
	C9	—	—	—	110	110

		RE - RA			GB - GBA	
		6000		8000	12010	16000
	stages	HC	H6C	HC	HC	HC
A1		490	490	490	610	610
F2		410 f7	410 h8	410 h8	515 h8	515 h8
F3		445	445	445	560	560
F4		15	15	15	20	20
F5		187	178.5	181.5	230	230
F6		Ø19	Ø19	Ø19	Ø25	Ø25
		M.. - 12.9			M.. - 10.9	
		M18	M18	M18	M24	M24
F7		7°30′	7°30′	7°30′	15°	15°
F8		15°	15°	15°	7°30'	7°30'
F9		7°30′	7°30′	7°30′	7°30'	7°30'
FA1		226	126	126	145	145
FL	1	145	136.5	136.5	160.5	160.5
	2	313.5	305	390.5	410	427
	3	406.5	398	518.5	538	668
	4	465	456.5	603.5	623	761
	5	—	—	668	687.5	825.5
FL7	2	399	390.5	390.5	—	—
	3	519.5	511	584.5	604	681
	4	528.5	520	660.5	680	874
	5	—	—		745	883
FL8	2	589	580.5	580.5	—	—
	3	647.5	639	712.5	732	871
	4	619.5	611	768.5	788	1002
	5	—	—	—	836	974
G2		260 f7	—	—	—	—
G4		181	—	—	—	—
G5		33	—	—	—	—
T3	2	432	432	432	—	—
	3	310	310	310	310	432
	4	171	171	227	227	310
	5	—	—	—	171	171
T4	2	295	295	295	—	—
	3	293	293	293	293	295
	4	183	183	242	242	293
	5	—	—	—	183	183

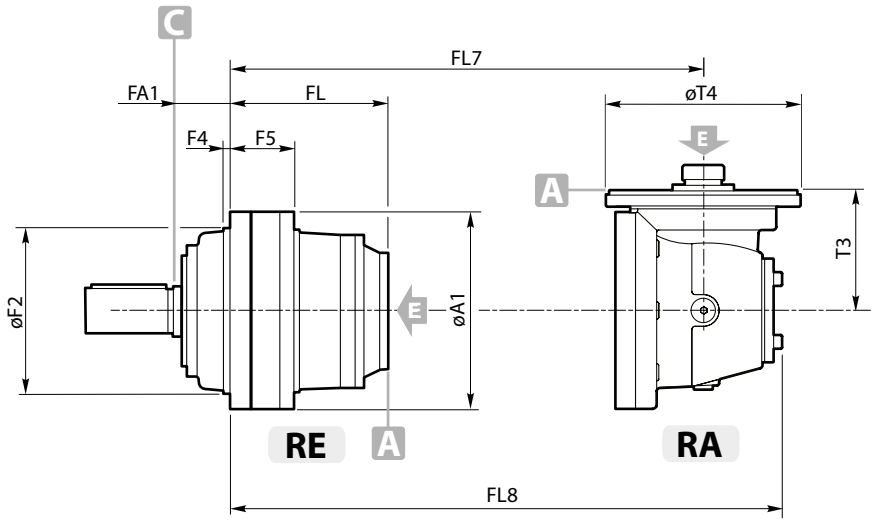


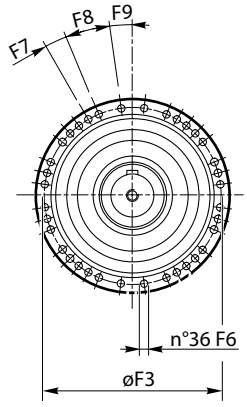
HC **6000**



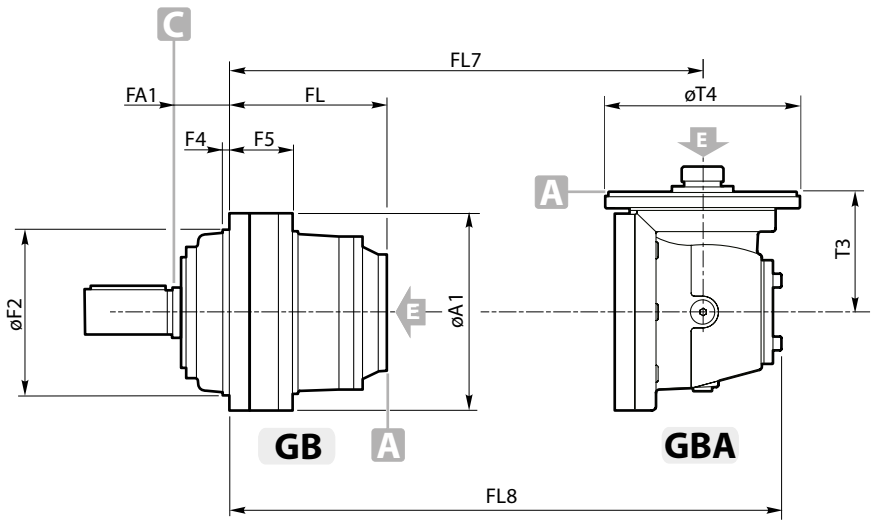
H6C **6000**

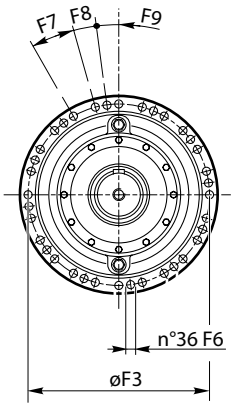
HC **8000**

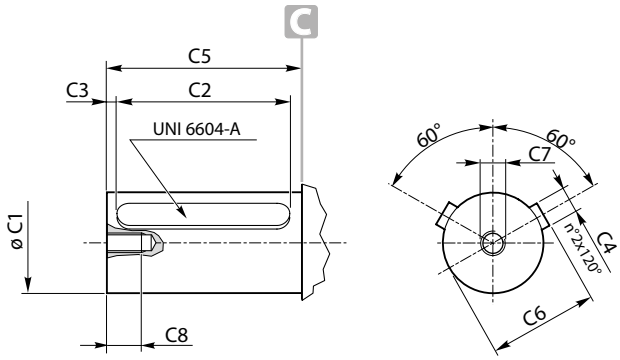




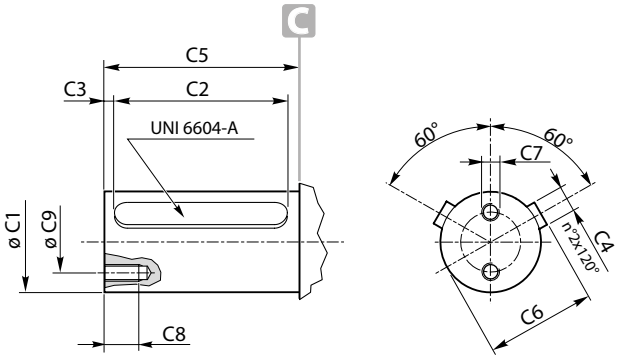
HC **12010 - 16000**







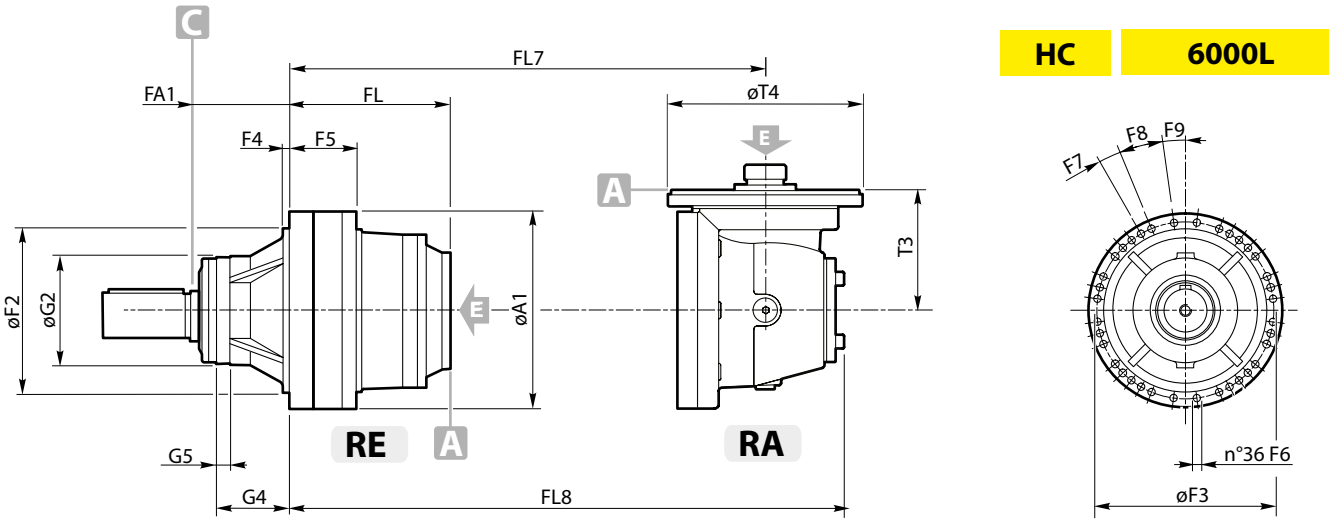
6000L - 8000L



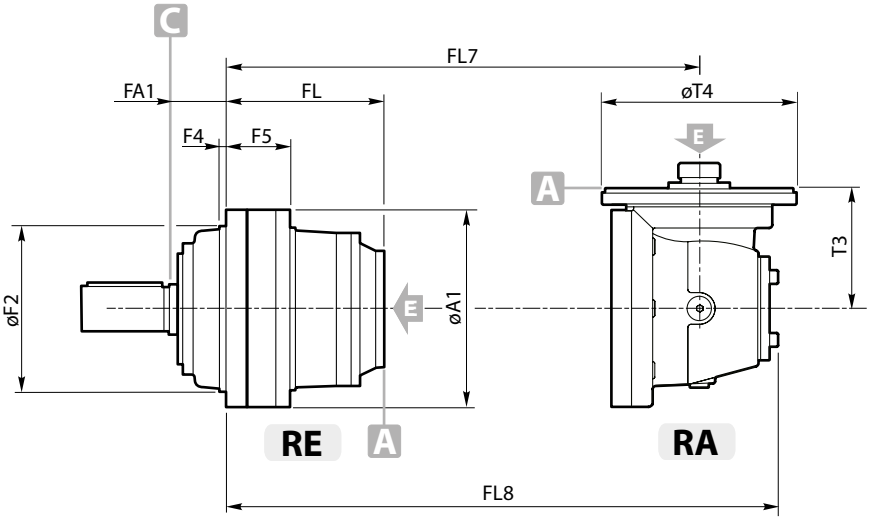
12010L - 16000L

		RE - RA			GB - GBA	
		6000L		8000L	12010L	16000L
		HC	H6C	HC	HC	HC
HC H6C	C1	140 h6	160 h7	160 h7	180 h7	180 h7
	C2	200	210	210	220	220
	C3	10	10	10	10	10
	C4	36	40	40	45	45
	C5	220	230	230	240	240
	C6	148	169	169	190	190
	C7	M24	M24	M24	M16(2)	M16(2)
	C8	50	50	50	35	35
	C9	—	—	—	110	110

		RE - RA			GB - GBA	
		6000L		8000L	12010L	16000L
	stages	HS	HS	HS	HS	HS
A1		490	490	490	610	610
F2		410 f7	410 h8	410 h8	515 h8	515 h8
F3		445	445	445	560	560
F4		15	15	15	20	20
F5		187	178.5	181.5	230	230
F6		Ø19	Ø19	Ø19	Ø25	Ø25
		M.. - 12.9			M.. - 10.9	
		M18	M18	M18	M24	M24
F7		7°30′	7°30′	7°30′	15°	15°
F8		15°	15°'	15°	7°30'	7°30'
F9		7°30′	7°30′	7°30′	7°30'	7°30'
FA1		226	126	126	145	145
FL	1	145	136.5	136.5	160.5	160.5
	2	313.5	305	390.5	410	427
	3	406.5	398	501.5	521	619
	4	471	462.5	568.5	588	704
	5	—	—	621	640.5	768.5
FL7	2	399	390.5	390.5	—	—
	3	519.5	511	584.5	604	681
	4	528.5	520	643.5	663	761
	5	—	—	—	710	826
FL8	2	589	580.5	580.5	—	—
	3	647.5	639	712.5	732	871
	4	619.5	611	751.5	771	869
	5	—	—	—	801	917
G2		260 f7	—	—	—	—
G4		181	—	—	—	—
G5		33	—	—	—	—
T3	2	432	432	432	—	—
	3	310	310	310	310	432
	4	171	171	227	227	227
	5	—	—	—	171	171
T4	2	295	295	295	—	—
	3	293	293	293	293	295
	4	183	183	242	242	242
	5	—	—	—	183	183

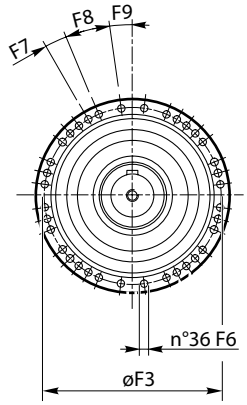


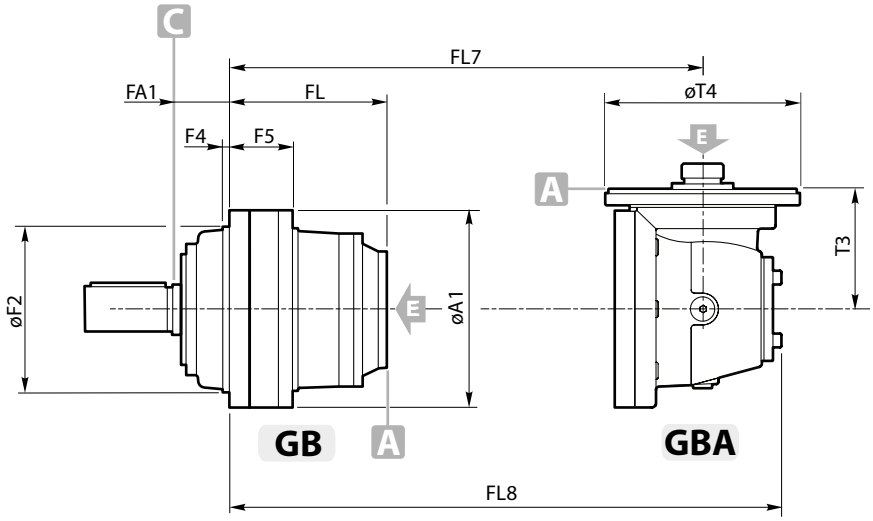
HC **6000L**



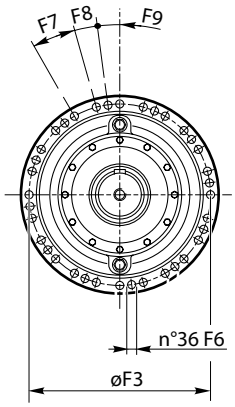
H6C **6000L**

HC **8000L**

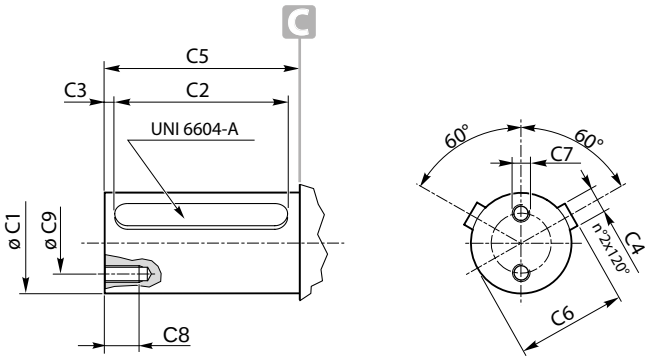




HC **12010L-16000L**

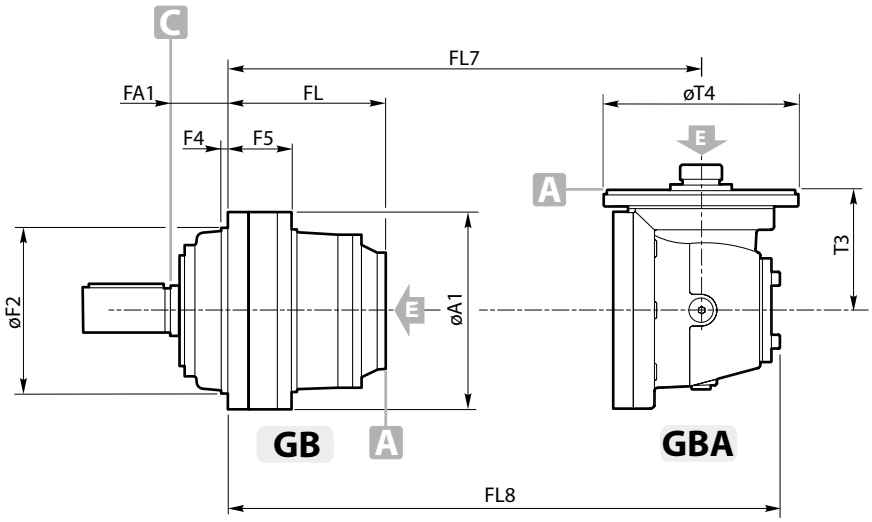


C

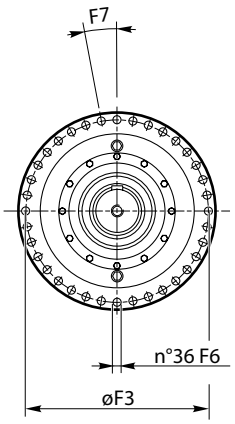


		GB - GBA				
		21000	26000	31000	40000	45000
TC	C1	230 h7	230 h7	290 h7	290 h7	290 h7
	C2	280	280	400	400	400
	C3	10	10	12.5	12.5	12.5
	C4	50	50	63	63	63
	C5	300	300	425	425	425
	C6	241	241	302	302	302
	C7	M24(2)	M24(2)	M24(2)	M24(2)	M24(2)
	C8	50	50	50	50	50
	C9	150	150	200	200	200

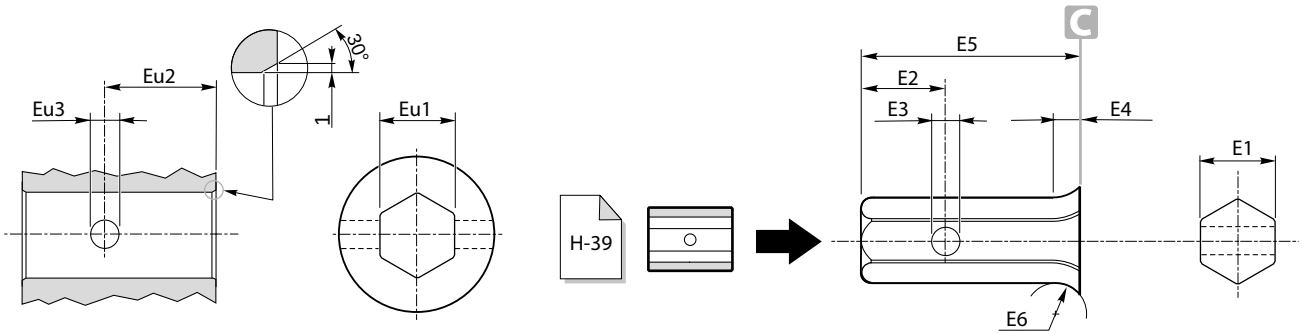
		GB - GBA				
	stages	21000	26000	31000	40000	45000
A1		710	710	870	870	870
F2		600 h8	600 h8	760 h8	760 h8	760 h8
F3		660	660	810	810	810
F4		23.5	23.5	35	35	35
F5		196	216	250	290	290
F6		Ø28	Ø28	Ø32	Ø32	Ø32
		M.. - 10.9				
		M27	M27	M30	M30	M30
F7		10°	10°	10°	10°	10°
FA1		180	180	225	225	225
FL	1	138	158	180	220	220
	2	443	463	588.5	628.5	628.5
	3	611.5	717	838	878	895
	4	704.5	845	966	1006	1136
	5	763	930	1051	1091	1229
FL7	3	697	717	—	—	—
	4	817.5	911	1032	1072	1149
	5	826.5	987	1108	1148	1342
FL8	3	887	907	—	—	—
	4	945.5	1039	1160	1200	1339
	5	917.5	1095	1216	1256	1470
T3	3	432	432	—	—	—
	4	310	310	310	310	432
	5	171	227	227	227	310
T4	3	295	295	—	—	—
	4	293	293	293	293	295
	5	183	242	242	242	293



21000 ÷ 45000



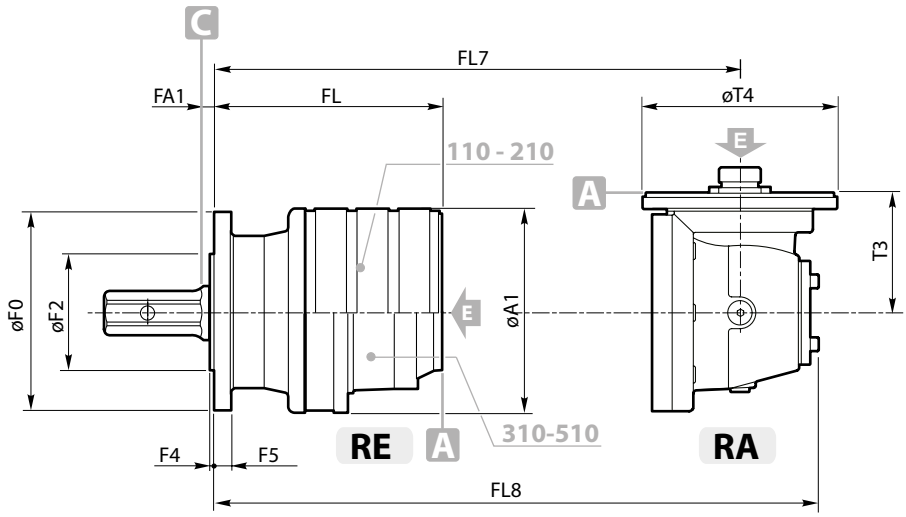
C



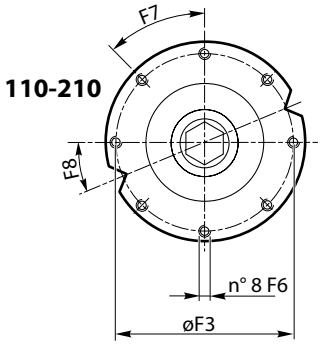
E

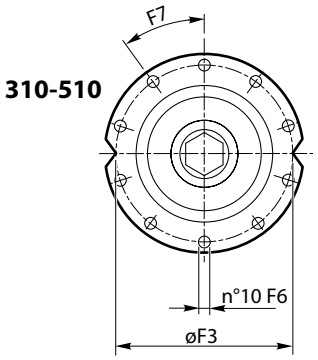
NE		RE - RA				
		110	210	310	510	610
	E1	50	50	50	50	50
	E2	54	54	54	54	54
	E3	Ø 18	Ø 18	Ø 18	Ø 18	Ø 18
	E4	6.5	6.5	13	13	13
	E5	121	121	132	132	132
	E6	r 24	r 24	r 24	r 24	r 24
	Eu1	50	50	50	50	50
	Eu2	54	54	60	60	60
	Eu3	Ø 18	Ø 18	Ø 18	Ø 18	Ø 18

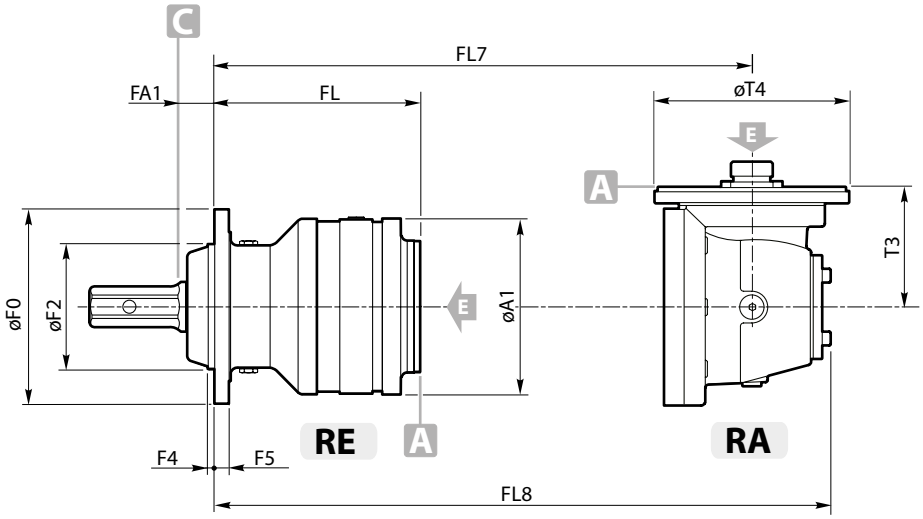
		RE - RA				
	stages	110	210	310	510	610
A1		186	186	244	244	244
F0		185	185	222	222	222
F2		110 h7	110 h7	150 f7	150 f7	150 f7
F3		165	165	195	195	195
F4		3	3	13.5	13.5	13.5
F5		14	14	16	16	16
F6		10.5	10.5	12.5	12.5	12.5
		M.. - 12.9				
		M10	M10	M12	M12	M12
F7		45°	45°	36°	36°	36°
F8		22.5°	22.5°	—	—	—
FA1		7	7	22	22	22
FL	1	97	109	134	152	152
	2	140	152	186.5	216.5	210.5
	3	183	195	229.5	259.5	263
	4	226	238	272.5	302.5	306
FL7	2	178	190	256	274	274
	3	221	233	267.5	297.5	332.5
	4	264	276	310.5	340.5	344
FL8	2	252.5	264.5	347	365	365
	3	295.5	307.5	342	372	423.5
	4	338.5	350.5	385	415	418.5
T3	2	113.8	113.8	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	171.5
	4	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183
	3	184	184	184	184	183
	4	184	184	184	184	184



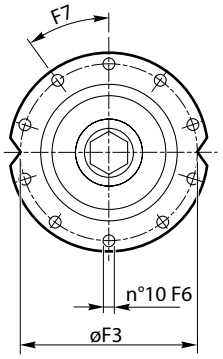
110 - 210
310 - 510



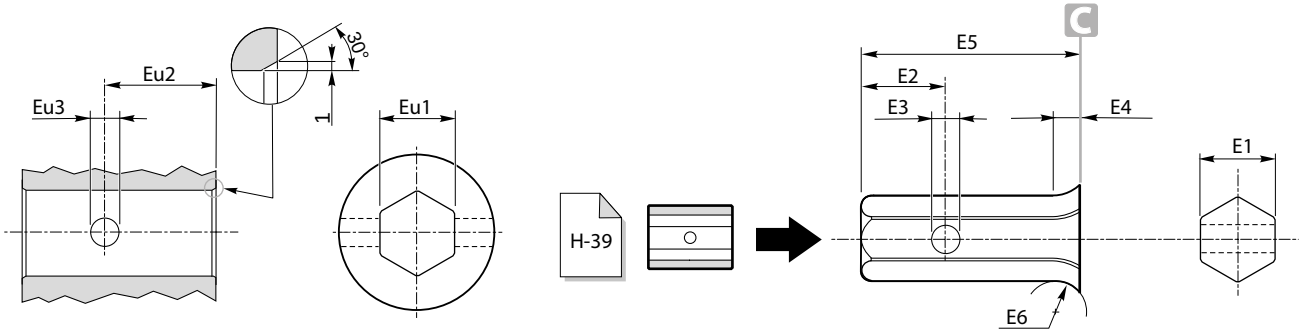




610

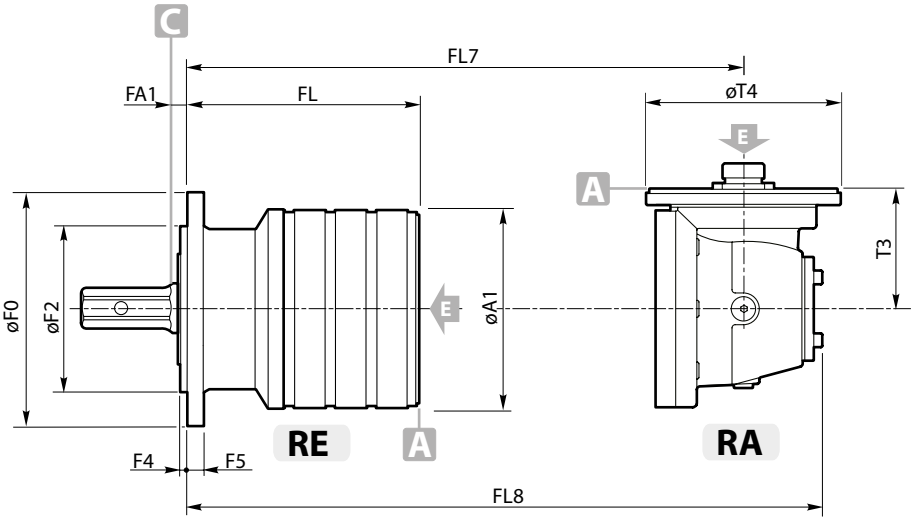


E

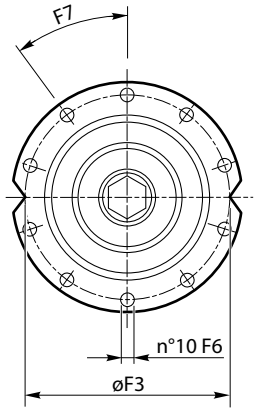


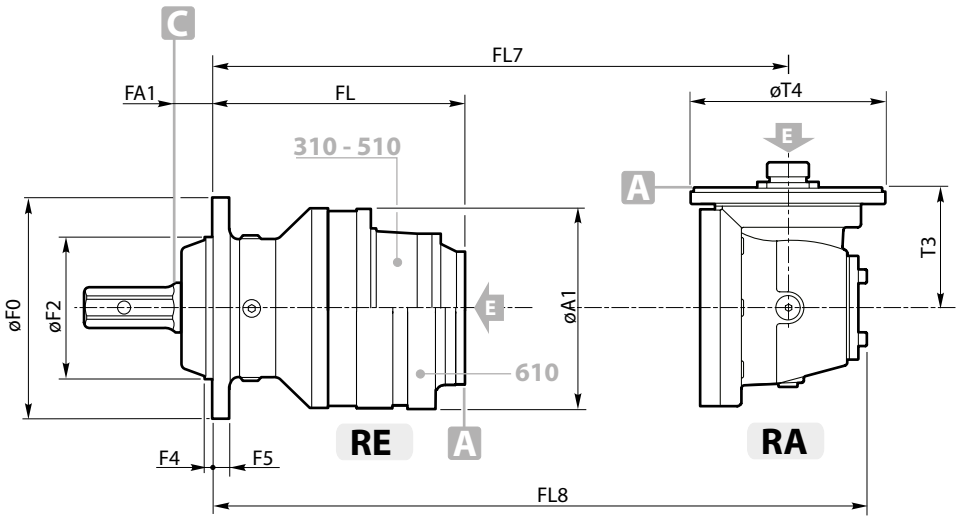
		RE - RA					
		110	210	240	310	510	610
TE T1E TRE TR1E TLE	E1	50	50	50	70	70	70
	E2	54	54	54	65	65	65
	E3	Ø 18	Ø 18	Ø 18	Ø 22	Ø 22	Ø 22
	E4	9	9	15	15	15	15
	E5	121	121	119.5	138	138	138
	E6	r 15	r 15	r 24	r 30	r 30	r 30
	Eu1	50	50	50	70	70	70
	Eu2	54	54	54	50	50	50
	Eu3	Ø 18	Ø 18	Ø 18	Ø 22	Ø 22	Ø 22

		RE - RA															
	stages	110				210				240		310		510		610	
		TE	T1E	TRE	TR1E	TE	T1E	TRE	TR1E	TE	TRE	TE	TLE	TE	TLE	TE	TLE
A1		186	186	186	186	186	186	186	186	186	186	244	244	244	244	244	244
F0		219	219	219	219	219	219	219	219	219	219	272	272	272	272	272	272
F2		155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	155 h7	150 f7	150 f7	155 f7	175 h8	175 h8	175 h8	175 h8	175 h8	175 h8
F3		194	195	194	195	194	195	194	195	195	194	245	245	245	245	245	245
F4		7	7	10	10	7	7	10	10	7	10	12	9	12	9	12	9
F5		15	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20
F6		Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø11	Ø13	Ø12.5	Ø11	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5	Ø12.5
		M.. - 12.9															
		M10	M12	M10	M12	M10	M12	M10	M12	M12	M10	M12	M12	M12	M12	M12	M12
F7		36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°	36°
FA1		17	17	34	34	17	17	34	34	17.5	34.5	47.5	47.5	47.5	47.5	47.5	47.5
FL	1	102	102	85	85	114	114	97	97	114	97	157	157	175	175	175	175
	2	145	145	128	128	157	157	140	140	157	140	209.5	209.5	239.5	239.5	233.5	233.5
	3	188	188	171	171	200	200	183	183	200	183	252.5	252.5	282.5	282.5	286	286
	4	231	231	214	214	243	243	226	226	243	226	295.5	295.5	325.5	325.5	329	329
FL7	2	183	183	166	166	195	195	178	178	195	178	279	279	297	297	297	297
	3	226	226	209	209	238	238	221	221	238	221	290.5	290.5	320.5	320.5	355.5	355.5
	4	269	269	252	252	281	281	264	264	281	264	333.5	333.5	363.5	363.5	367	367
FL8	2	257.5	257.5	240.5	240.5	269.5	269.5	252.5	252.5	269.5	252.5	370	370	388	388	388	388
	3	300.5	300.5	283.5	283.5	312.5	312.5	295.5	295.5	312.5	295.5	365	365	395	395	446.5	446.5
	4	343.5	343.5	326.5	326.5	355.5	355.5	338.5	338.5	355.5	338.5	408	408	438	438	441.5	441.5
T3	2	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5	171.5	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	184	184	184	184	184	184	184	184	183	183	183	183	183	183
	3	184	184	184	184	184	184	184	184	184	184	184	184	184	184	183	183
	4	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184

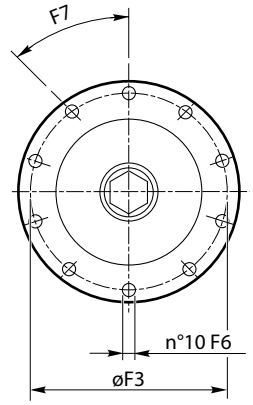


110 ÷ 240

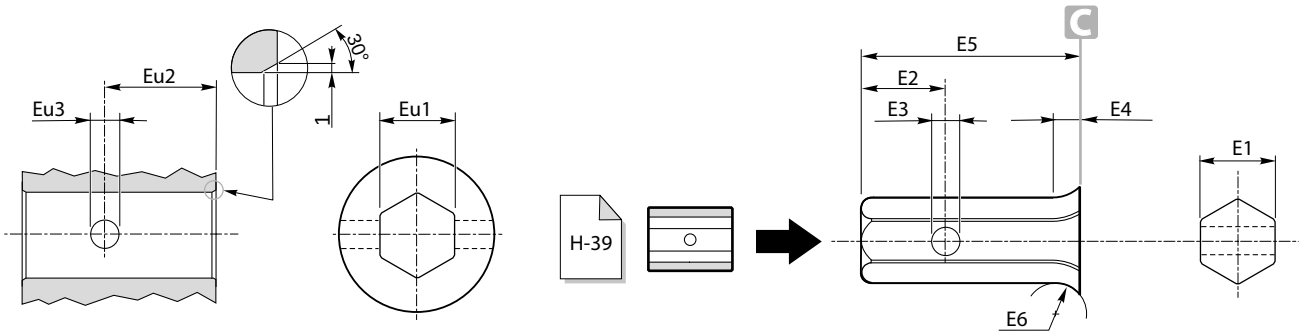




310 - 510
610



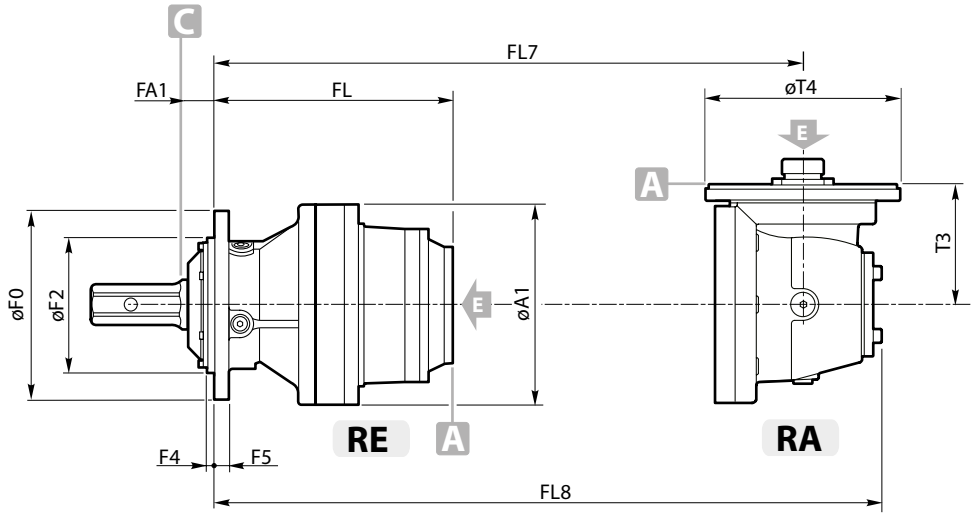
E



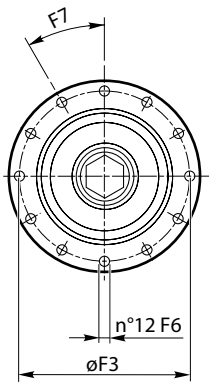
E

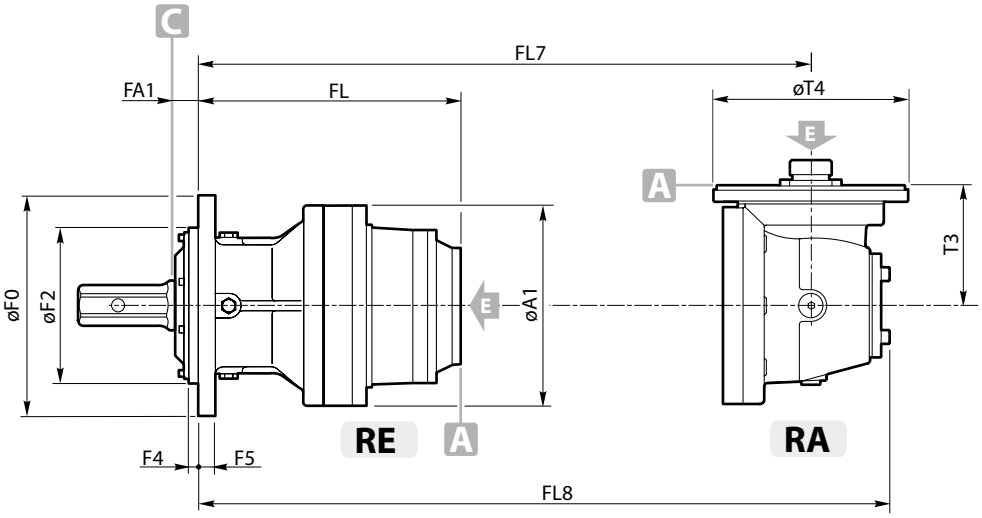
TE		RE - RA				
		810	1020	1520	2000	2000L
	E1	70	70	70	70	70
	E2	40	65	65	65	65
	E3	Ø 22	Ø 22	Ø 22	Ø 22	Ø 22
	E4	3	25	25	25	25
	E5	141	142.5	142.5	142.5	142.5
	E6	r 30	r 30	r 30	r 30	r 30
	Eu1	70	70	70	70	70
	Eu2	95	50	50	50	50
	Eu3	Ø 22	Ø 22	Ø 22	Ø 22	Ø 22

		RE - RA				
	stages	810	1020	1520	2000	2000L
A1		295	295	350	350	350
F0		280	325	325	325	325
F2		200 f7	230 f7	230 f7	230 f7	230 f7
F3		250	295	295	295	295
F4		10.5	15	15	15	15
F5		22	25	28	28	28
F6		Ø15	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9				
		M14	M16	M16	M16	M16
F7		30°	36°	36°	36°	36°
FA1		41	43.5	43.5	43.5	43.5
FL	1	185	237	240	240	240
	2	252	322	333	333	333
	3	304.5	386.5	397.5	391.5	397.5
	4	347.5	429.5	440	444	440
FL7	2	326.5	379	446	446	446
	3	374	444	455	455	455
	4	385.5	467.5	478.5	513.5	478.5
FL8	2	435	487	574	574	574
	3	465	535	546	546	546
	4	460	542	553	604.5	553
T3	2	277	277	310	310	310
	3	171.5	171.5	171.5	171.5	171.5
	4	113.8	113.8	113.8	171.5	113.8
T4	2	242	242	293	293	293
	3	183	183	183	183	183
	4	184	184	184	183	184

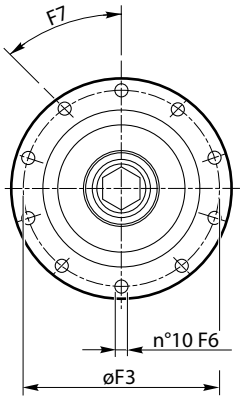


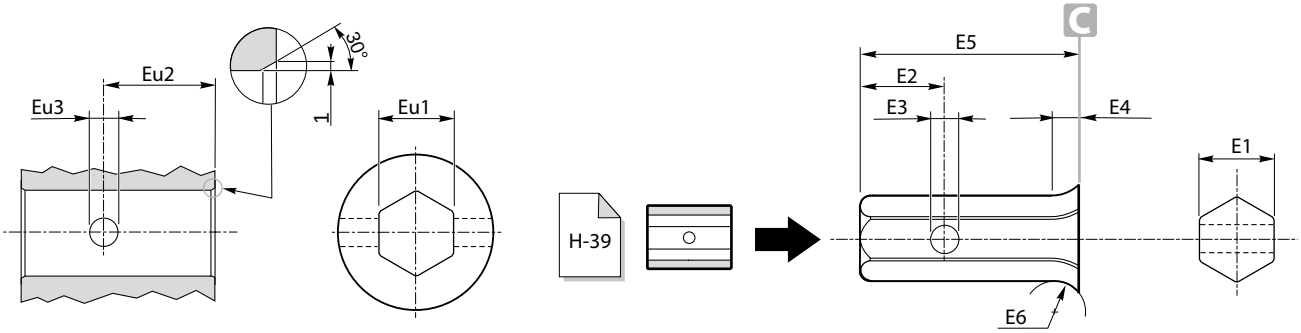
810





1020 - 1520
2000 - 2000L

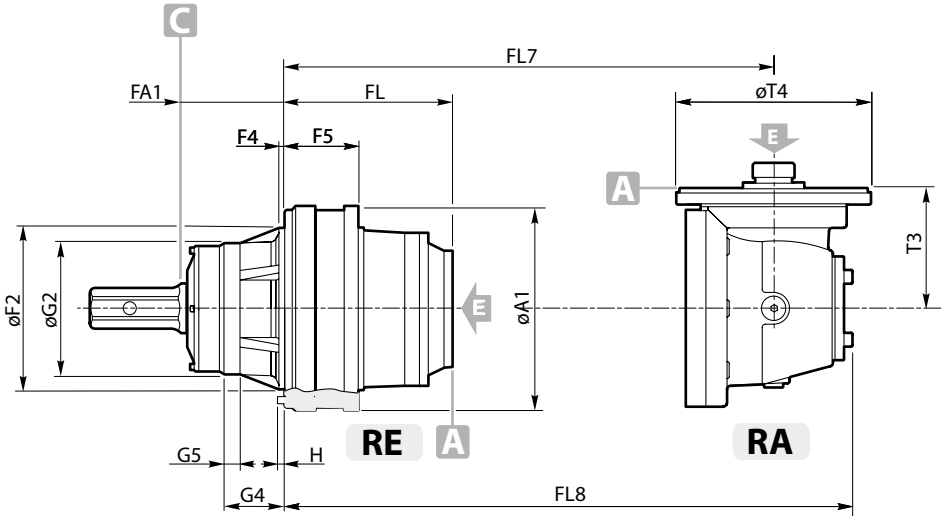


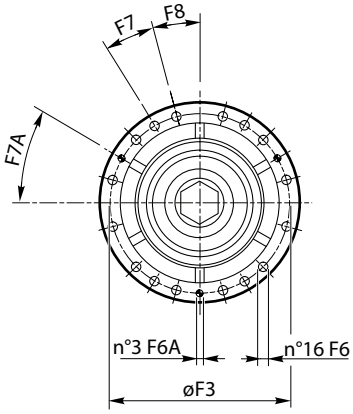


HE	RE - RA				
	1520	2000	2000L	2520	3000
E1	70	70	70	100	100
E2	65	65	65	170.5	170.5
E3	Ø 22	Ø 22	Ø 22	Ø 32	Ø 32
E4	25	25	25	20	20
E5	142.5	142.5	142.5	160	160
E6	r 30	r 30	r 30	r 35	r 35
Eu1	70	70	70	100	100
Eu2	50	50	50	65	65
Eu3	Ø 22	Ø 22	Ø 22	Ø 32	Ø 32

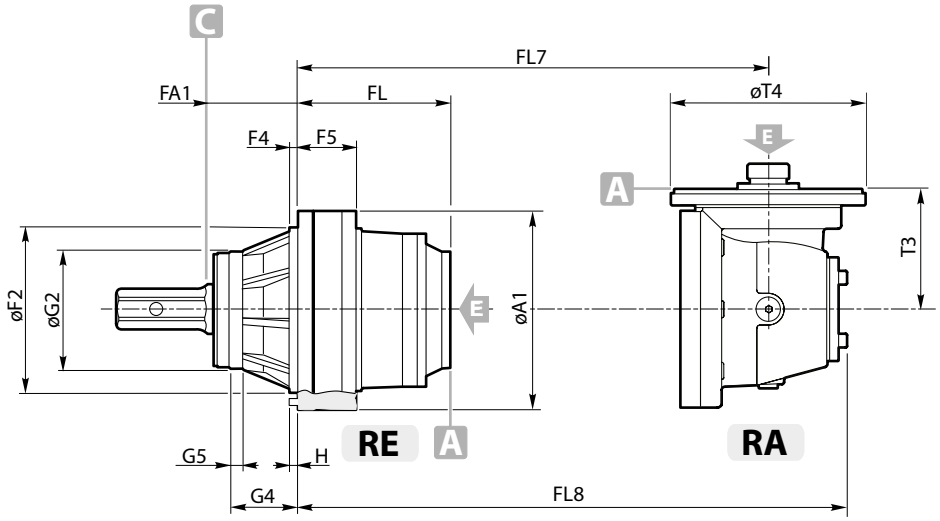
	RE - RA					
	stages	1520	2000	2000L	2520	3000
A1		350	350	350	409	409
FA1		176.5	176.5	176.5	210	210
F2		278 f7	278 f7	278 f7	340 f7	340 f7
F3		314	314	314	370	370
F4		10	10	10	17	17
F5		133	133	133	131	131
F6		Ø16.5	Ø16.5	Ø16.5	Ø17	Ø17
		M.. - 12.9				
		M16	M16	M16	M16	M16
F6A		Ø12	Ø12	Ø12	Ø16	Ø16
F7		15°	15°	15°	12°	12°
F7A		30°	30°	30°	30°	30°
F8		15°	15°	15°	24°	24°
FL	1	107	107	107	98	98
	2	200	200	200	209	226
	3	264.5	258.5	264.5	276	311
	4	307.5	311	307.5	328.5	375.5
FL7	2	313	313	313	292	292
	3	322	322	322	351	368
	4	345.5	380.5	345.5	398	433
FL8	2	441	441	441	420	420
	3	413	413	413	459	476
	4	420	472	420	489	524
G2		225 f7	225 f7	225 f7	245 f7	245 f7
G4		104.5	104.5	104.5	142	142
G5		27.5	27.5	27.5	29	29
H		15	15	15	29	29
T3	2	310	310	310	310	310
	3	171	171	171	227	227
	4	113.8	171	113.8	171	171
T4	2	293	293	293	293	293
	3	183	183	183	242	242
	4	184	183	184	183	183

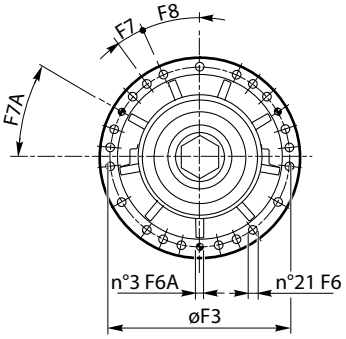
1520 - 2000
2000L



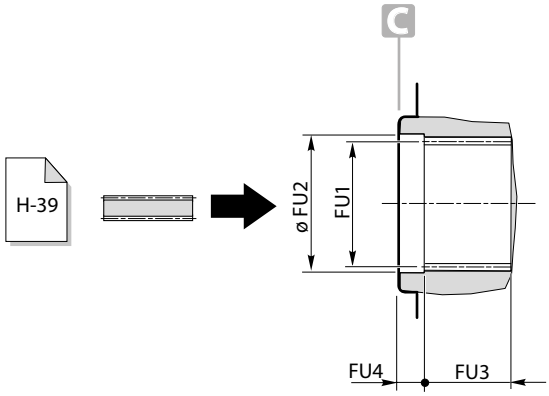


2520 - 3000



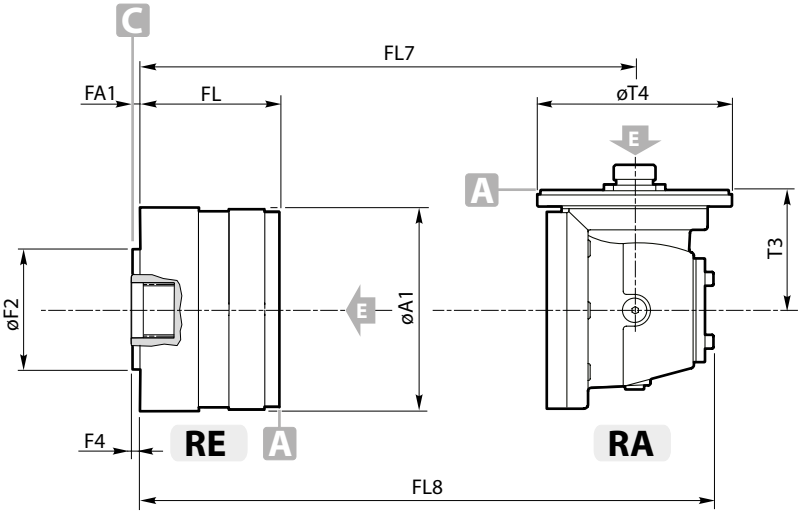


E

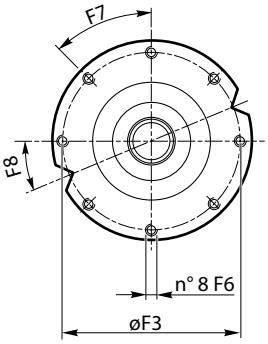


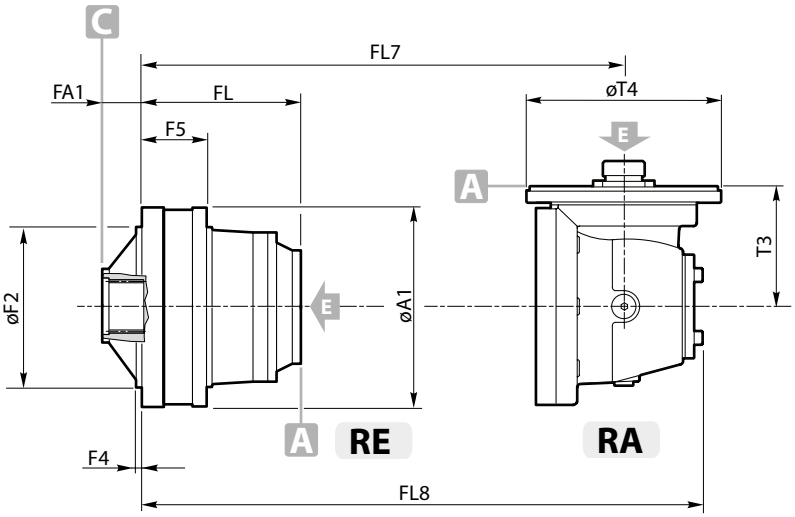
		RE - RA						
		110	210	240	310	510	810	1020
FS	FU1	A 40x36 DIN 5482	A 40x36 DIN 5482	A 45x41 DIN 5482	A 58x53 DIN 5482	A 58x53 DIN 5482	A 70x64 DIN 5482	A 80x74 DIN 5482
	FU2	42 H7	42 H7	46 H7	60 H7	60 H7	72 H7	85 H8
	FU3	29	29	29	41	41	50	59
	FU4	6	6	6	7	7	11.5	10

		RE - RA						
	stages	110	210	240	310	510	810	1020
A1		186	186	186	244	244	295	295
F2		110 h7	110 h7	110 h7	200 h8	200 h8	240 f7	240 f7
F3		165	165	165	222	222	265	265
F4		5	5	5	9	9	10	10
F5		—	—	—	62	80	83	101
F6		Ø10.5	Ø10.5	Ø10.5	Ø10.5	Ø10.5	Ø13	Ø13
		M.. - 12.9						
		M10	M10	M10	M10	M10	M12	M12
F7		45°	45°	45°	30°	30°	30°	15°
F8		22.5°	22.5°	22.5°	—	—	—	15°
F9		—	—	—	—	—	—	30°
FA1		5	5	5	51	51	50	57
FL	1	59	71	71	39.5	57.5	67	85
	2	102	114	114	92	122	134	170
	3	145	157	157	135	165	186.5	234.5
	4	188	200	200	178	208	229.5	277.5
FL7	2	140	152	152	188.5	179.5	209	227
	3	183	195	195	173	203	256.5	292
	4	226	238	238	216	246	267.5	315.5
FL8	2	214.5	226.5	226.5	252.5	270.5	317	335
	3	257.5	269.5	269.5	247.5	277.5	347.5	383
	4	300.5	312.5	312.5	290.5	320.5	342	390
T3	2	113.8	113.8	113.8	113.8	171.5	277	277
	3	113.8	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	184	184	183	242	242
	3	184	184	184	184	184	183	183
	4	184	184	184	184	184	184	184

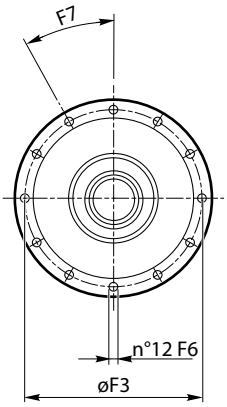


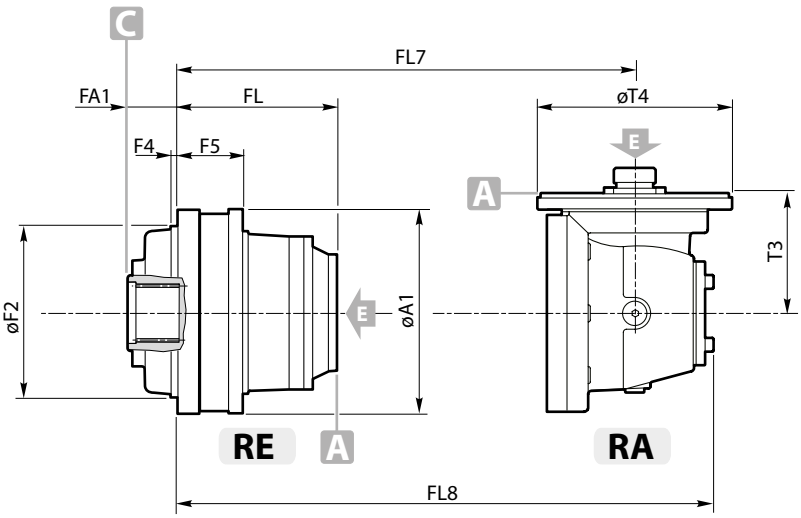
110 - 210 - 240



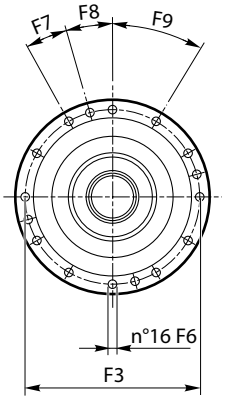


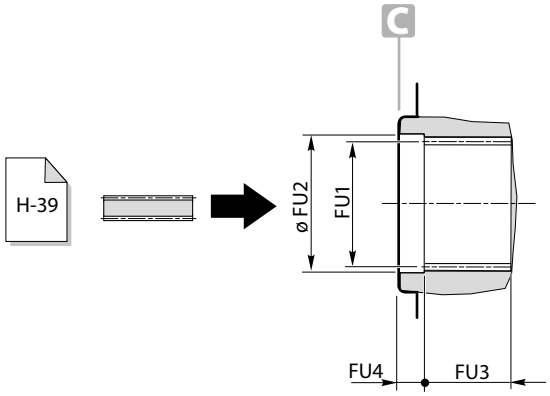
310 - 510 - 810





1020

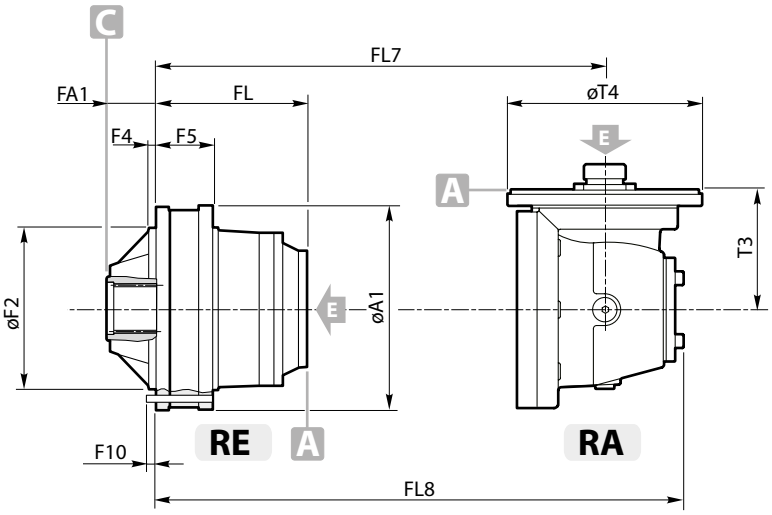


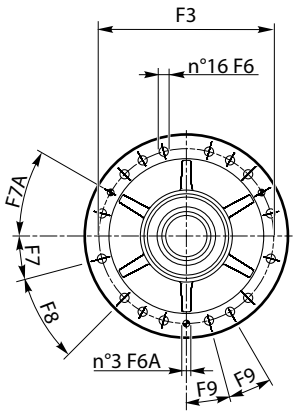


		RE - RA						
		1520	2000	2000L	2520	3000	3510	4800
FS	FU1	A 80x74 DIN 5482	A 80x74 DIN 5482"	A 80x74 DIN 5482"	A 100x94 DIN 5482"	A 100x94 DIN 5482	N120x3x9H DIN5480	N120x3x9H DIN5480
	FU2	88 H8	88 H8	88 H8	102 H8	102 H8	121.5 H7	121.5 H7
	FU3	77	77	77	86	86	85	85
	FU4	7	7	7	10	10	10	10

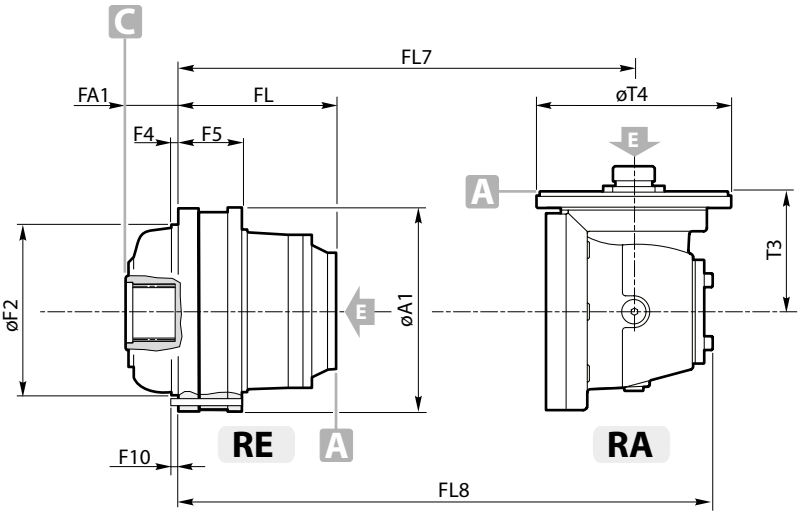
		RE - RA						
	stages	1520	2000	2000L	2520	3000	3510	4800
A1		350	350	350	409	409	452	452
F2		278 f7	278 f7	278 f7	340 f7	340 f7	390 f7	390 f7
F3		314	314	314	370	370	424	424
F4		12	12	12	18	18	15	15
F5		103.5	103.5	103.5	126	126	120	120
F6		Ø16.5	Ø16.5	Ø16.5	Ø17	Ø17	Ø17	Ø17
					M.. - 12.9			
		M16	M16	M16	M16	M16	M16	M16
F6A		Ø12	Ø12	Ø12	Ø16	Ø16	—	—
F7		15°	15°	15°	24°	24°	20°	20°
F7A		30°	30°	30°	30°	30°	—	—
F8		30°	30°	30°	12°	12°	10°	10°
F9		15°	15°	15°	12°	12°	—	—
F10		15	15	15	34	34	—	—
FA1		83	83	83	95	95	109.5	109.5
FL	1	77.5	77.5	77.5	93	93	85	85
	2	170.5	170.5	170.5	204	221	277	326
	3	235	229	235	271	306	362	419
	4	278	281.5	278	323.5	370.5	426.5	483.5
FL7	2	283.5	283.5	283.5	287	287	339	339
	3	292.5	292.5	292.5	346	363	419	532
	4	316	351	316	393	428	484	541
FL8	2	411.5	411.5	411.5	415	415	529	529
	3	383.5	383.5	383.5	454	471	527	660
	4	390.5	442	390.5	484	519	575	632
T3	2	310	310	310	310	310	432	432
	3	171	171	171	227	227	227	310
	4	113.8	171	113.8	171	171	171	171
T4	2	293	293	293	293	293	295	295
	3	183	183	183	242	242	242	293
	4	184	183	184	183	183	183	183

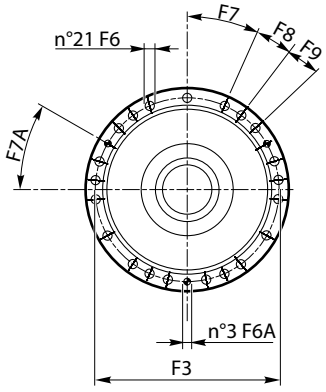
1520 - 2000 2000L



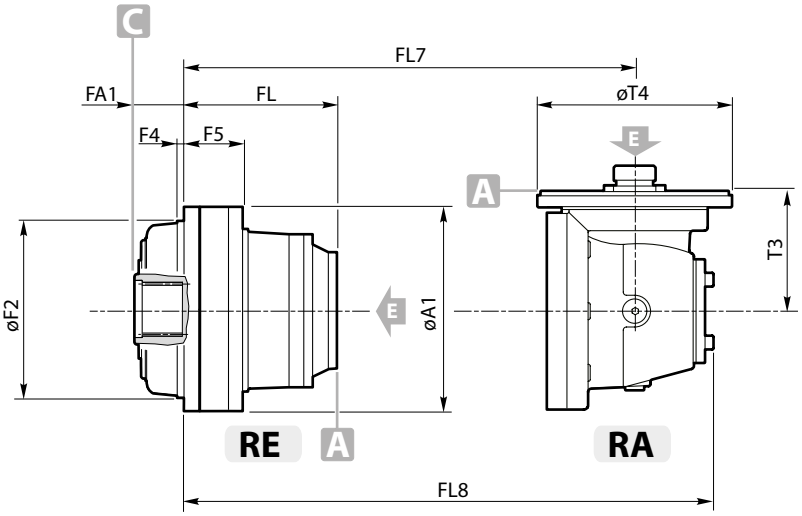


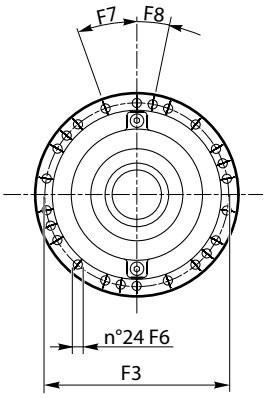
2520 - 3000

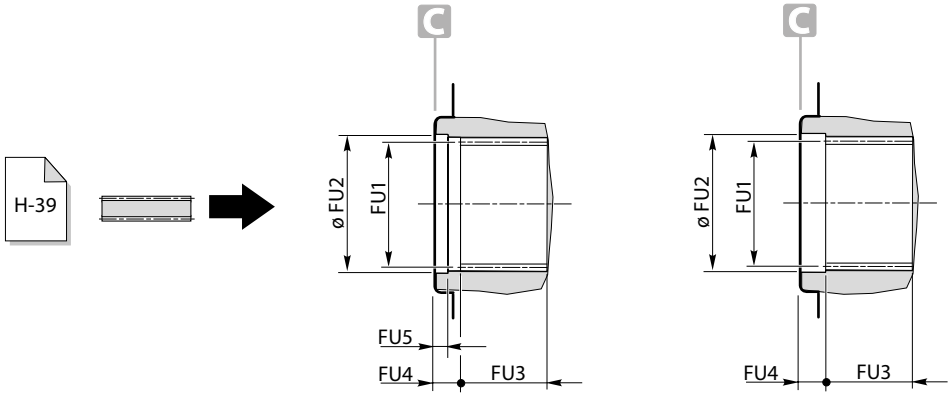




3510 - 4800





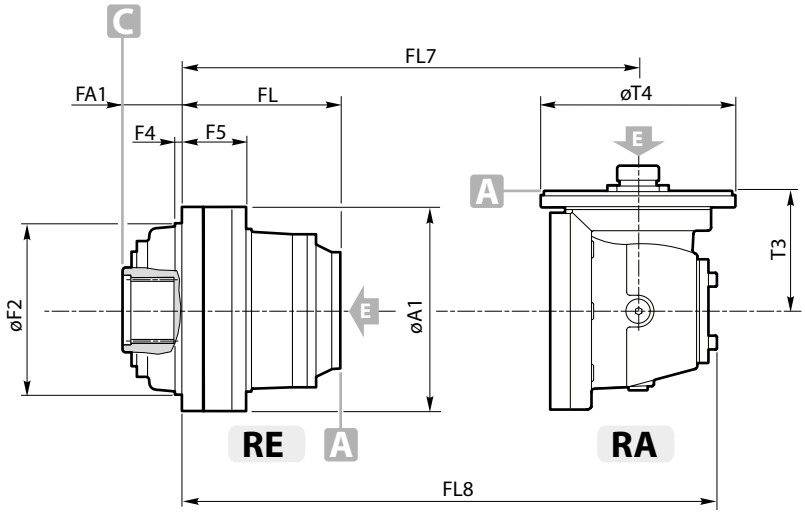


		RE - RA		GB - GBA	
		6000	8000	12010	16000
FS	FU1	N140x5x9H DIN 5480	N140x5x9H DIN 5480	N160x5x9H DIN 5480	N160x5x9H DIN 5480
	FU2	142 H9	142 H9	165 H7	165 H7
	FU3	97	122	100	100
	FU4	—	—	40	40
	FU5	12	12	20	20

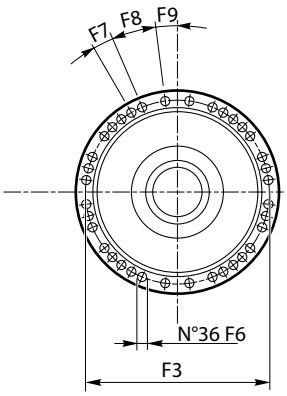
		RE - RA		GB - GBA	
		6000	8000	12010	16000
FS1	FU1	N150x5x9H DIN 5480	N150x5x9H DIN 5480	—	—
	FU2	152 H7	152 H7	—	—
	FU3	74	74	—	—
	FU4	41	41	—	—
	FU5	20	20	—	—

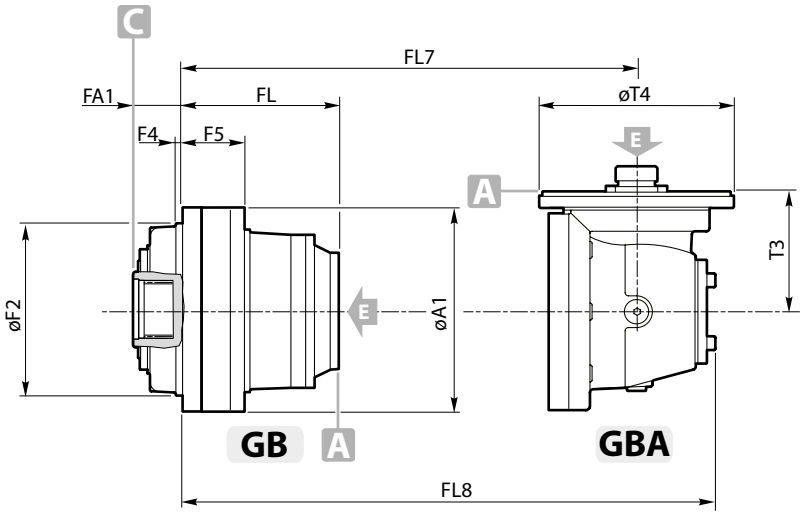
		RE - RA		GB - GBA	
		6000	8000	12010	16000
FS4	FU1	—	—	N180x5x9H DIN 5480	N180x5x9H DIN 5480
	FU2	—	—	185 H7	185 H7
	FU3	—	—	100	100
	FU4	—	—	—	—
	FU5	—	—	40	40

		stages	RE - RA 6000	RE - RA 8000	GB - GBA 12010	GB - GBA 16000
A1			490	490	610	610
F2			410 f7	410 h8	515 h8	515 h8
F3			445	445	560	560
F4			15	15	20	20
F5			178.5	181.5	230	230
F6			Ø19	Ø19	Ø25	Ø25
			M.. - 12.9		M.. - 10.9	
			M18	M18	M24	M24
F7			7°30′	7°30′	15°	15°
F8			15°	15°	7°30'	7°30'
F9			7°30′	7°30′	7°30'	7°30'
FA1	FS		100	125	152	152
	FS1		106	125	—	—
	FS4		—	—	152	152
FL		1	136.5	136.5	160.5	160.5
		2	305	390.5	410	427
		3	398	518.5	538	668
		4	456.5	603.5	623	761
		5	—	668	687.5	825.5
FL7		2	390.5	390.5	—	—
		3	511	584.5	604	681
		4	520	660.5	680	874
		5	—	—	745	883
FL8		2	580.5	580.5	—	—
		3	639	712.5	732	871
		4	611	768.5	788	1002
		5	—	—	836	974
T3		2	432	432	—	—
		3	310	310	310	432
		4	171	227	227	310
		5	—	—	171	171
T4		2	295	295	—	—
		3	293	293	293	295
		4	183	242	242	293
		5	—	—	183	183

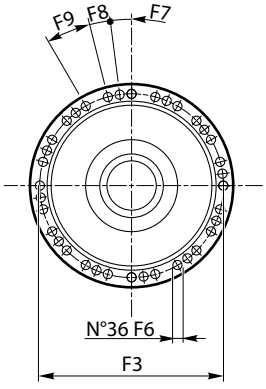


6000 - 8000





12010 - 16000



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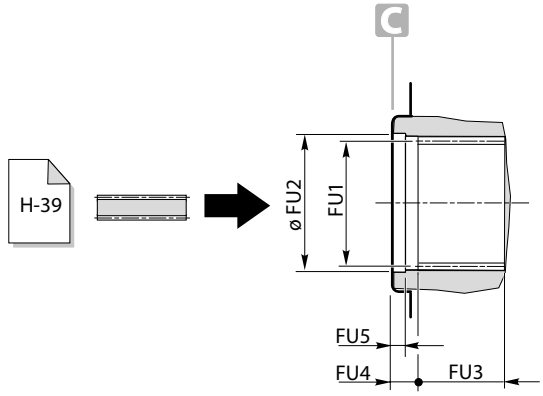
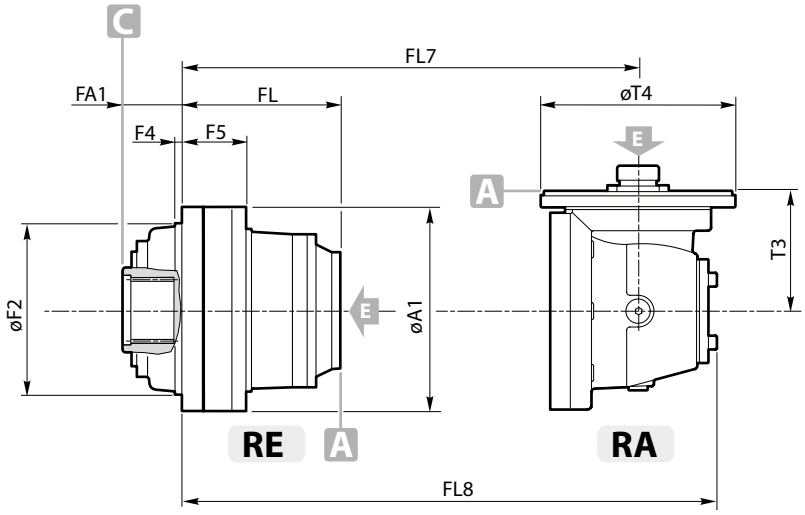


		RE - RA		GB - GBA	
		6000L	8000L	12010L	16000L
FS	FU1	N140x5x9H DIN 5480	N140x5x9H DIN 5480	N160x5x9H DIN 5480	N160x5x9H DIN 5480
	FU2	142 H9	142 H9	165 H7	165 H7
	FU3	97	122	100	100
	FU4	—	—	40	40
	FU5	12	12	20	20

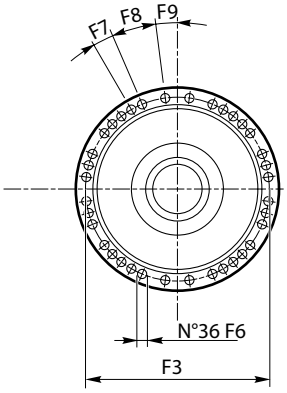
		RE - RA		GB - GBA	
		6000L	8000L	12010L	16000L
FS1	FU1	N150x5x9H DIN 5480	N150x5x9H DIN 5480	—	—
	FU2	152 H7	152 H7	—	—
	FU3	74	74	—	—
	FU4	41	41	—	—
	FU5	20	20	—	—

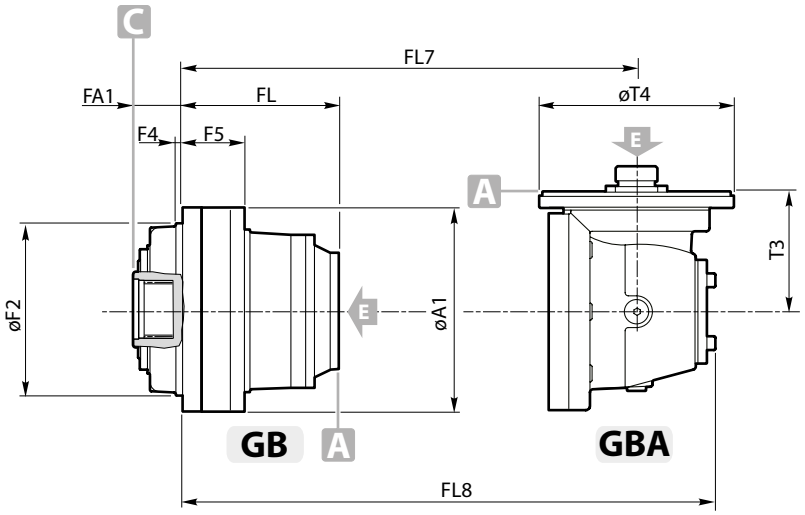
		RE - RA		GB - GBA	
		6000L	8000L	12010L	16000L
FS4	FU1	—	—	N180x5x9H DIN 5480	N180x5x9H DIN 5480
	FU2	—	—	185 H7	185 H7
	FU3	—	—	100	100
	FU4	—	—	40	40
	FU5	—	—	—	—

		stages	RE - RA 6000L	RE - RA 8000L	GB - GBA 12010L	GB - GBA 16000L
A1			490	490	610	610
F2			410 f7	410 h8	515 h8	515 h8
F3			445	445	560	560
F4			15	15	20	20
F5			178.5	181.5	230	230
F6			Ø19	Ø19	Ø25	Ø25
			M.. - 12.9		M.. - 10.9	
			M18	M18	M24	M24
F7			7°30′	7°30′	15°	15°
F8			15°	15°	7°30'	7°30'
F9			7°30′	7°30′	7°30'	7°30'
FA1	FS		100	100	152	152
	FS1		106	106	—	—
	FS4		—	—	152	152
FL		1	136.5	136.5	160.5	160.5
		2	305	390.5	410	427
		3	398	501.5	521	619
		4	462.5	568.5	588	704
		5	—	621	640.5	768.5
FL7		2	390.5	390.5	—	—
		3	511	584.5	604	681
		4	520	643.5	663	761
		5	—	—	710	826
FL8		2	580.5	580.5	—	—
		3	639	712.5	732	871
		4	611	751.5	771	869
		5	—	—	801	917
T3		2	432	432	—	—
		3	310	310	310	432
		4	171	227	227	310
		5	—	—	171	171
T4		2	295	295	—	—
		3	293	293	293	295
		4	183	242	242	293
		5	—	—	183	183

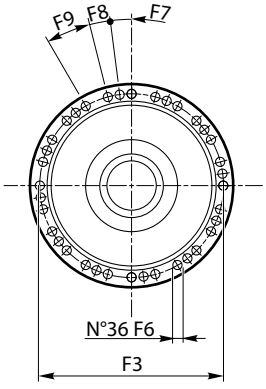


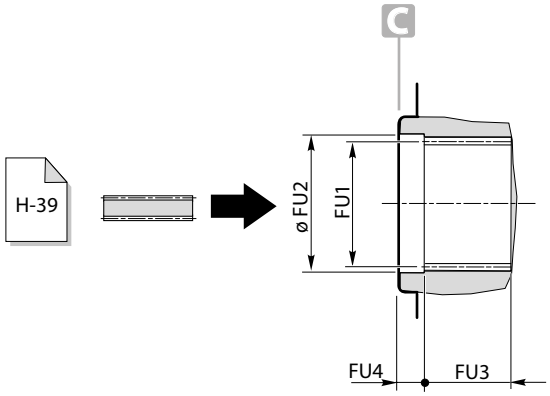
6000L - 8000L





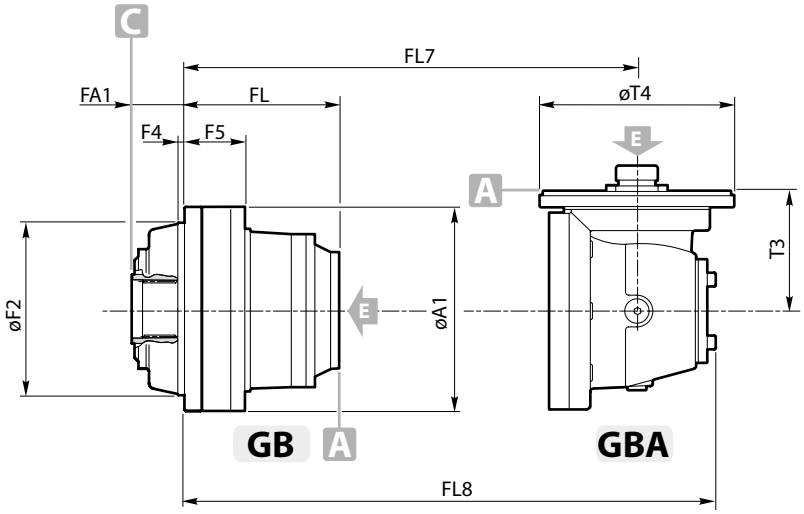
12010L - 16000L



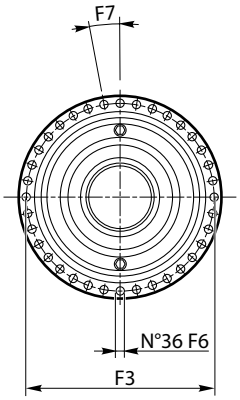


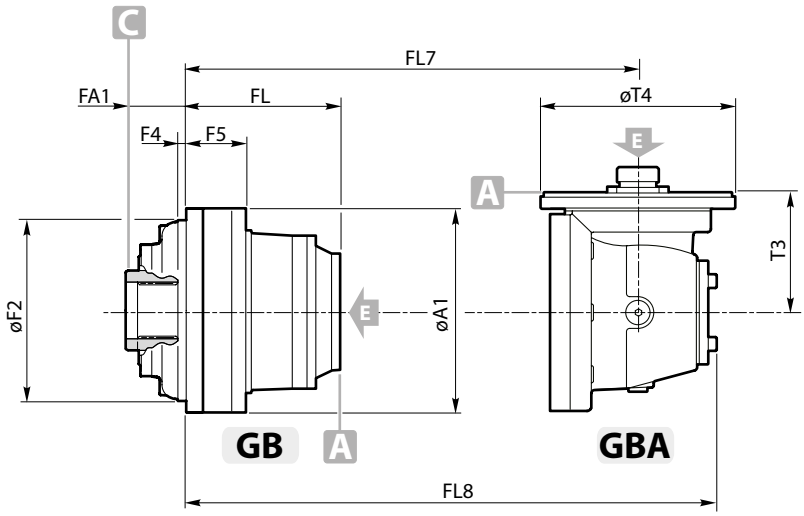
		GB - GBA							
		21000	26000	31000	40000	45000	53000	61000	85000
FS	FU1	N200x5x9H DIN 5480	N220x5x9H DIN 5480	N240x5x9H DIN 5480	N240x5x9H DIN 5480	N280x6x9H DIN 5480	N300x8x9H DIN 5480	N300x8x9H DIN 5480	N340x8x9H DIN 5480
	FU2	202 H7	222 H7	242 H7	242 H7	281 H8	303 H7	303 H7	343 H7
	FU3	120	120	170	170	175	190	190	190
	FU4	38	38	50	50	50	70	70	70

		GB - GBA							
	stages	21000	26000	31000	40000	45000	53000	61000	85000
A1		710	710	870	870	870	1090	1090	1090
F2		600 h8	600 h8	760 h8	760 h8	760 h8	930 h8	930 h8	930 h8
F3		660	660	810	810	810	1020	1020	1020
F4		23.5	23.5	35	35	35	50	50	50
F5		196	216	250	290	290	305	305	353
F6		Ø28	Ø28	Ø32	Ø32	Ø32	Ø39	Ø39	Ø39
		M.. - 10.9							
		M27	M27	M30	M30	M30	M36	M36	M36
F7		10°	10°	10°	10°	10°	10°	10°	10°
FA1		185	185	255	255	260	300	300	300
FL	1	138	158	180	220	220	225	225	273
	2	443	463	588.5	628.5	628.5	700	700	768
	3	611.5	717	838	878	895	1005	1005	1073
	4	704.5	845	966	1006	1136	1173.5	1173.5	1327
	5	763	930	1051	1091	1229	1266.5	1266.5	1455
FL7	3	697	717	—	—	—	—	—	—
	4	817.5	911	1032	1072	1149	1259	1259	1327
	5	826.5	987	1108	1148	1342	1379.5	1379.5	1521
	6	—	—	—	—	—	—	1388.5	1597
FL8	3	887	907	—	—	—	—	—	
	4	945.5	1039	1160	1200	1339	1449	1449	1517
	5	917.5	1095	1216	1256	1470	1507.5	1507.5	1649
	6	—	—	—	—	—	—	1479.5	1705
T3	3	432	432	—	—	—	—	—	—
	4	310	310	310	310	432	432	432	432
	5	171	227	227	227	310	310	310	310
	6	—	—	—	—	—	—	171	171
T4	3	295	295	—	—	—	—	—	—
	4	293	293	293	293	295	295	295	295
	5	183	242	242	242	293	293	293	293
	6	—	—	—	—	—	—	183	183

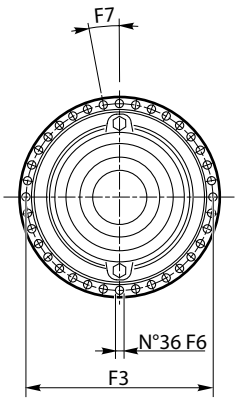


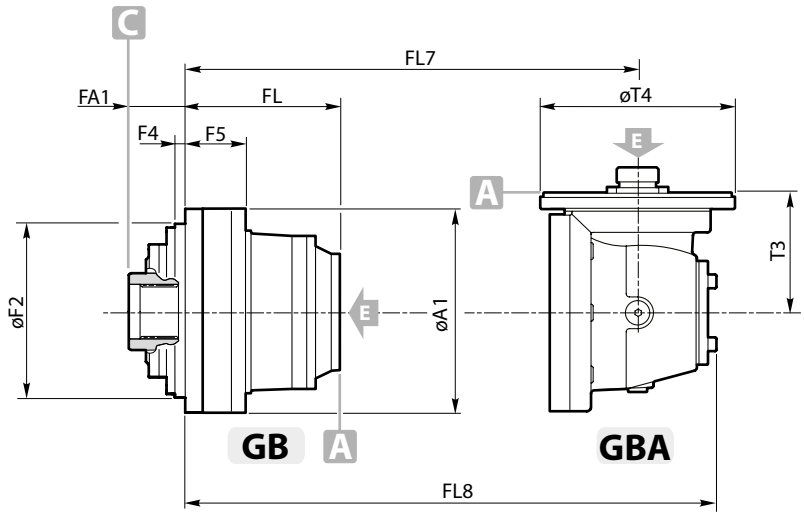
21000 - 26000



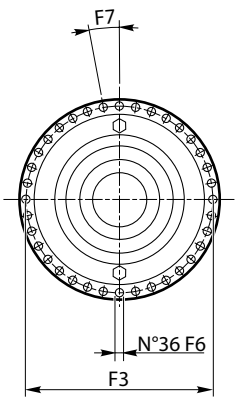


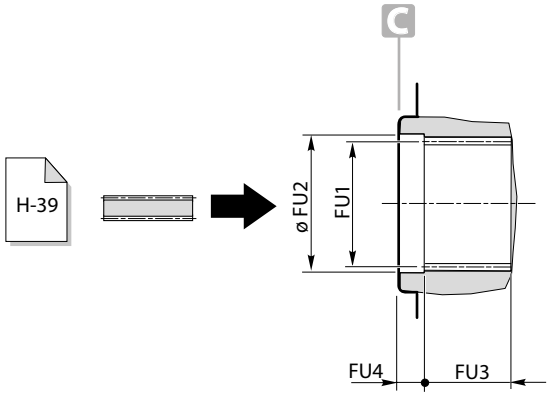
31000 ÷ 45000





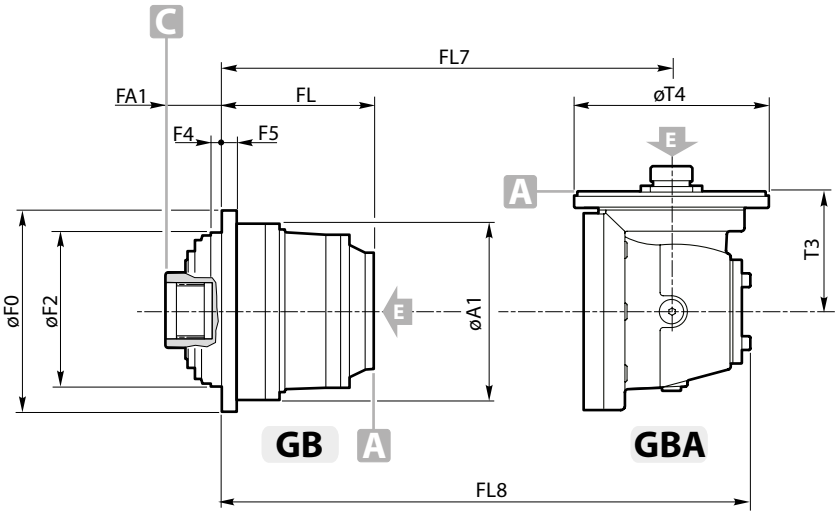
53000 ÷ 85000



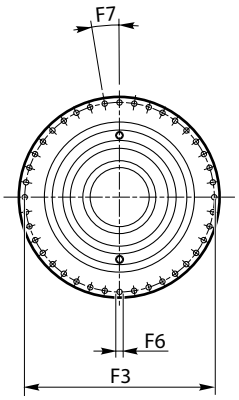


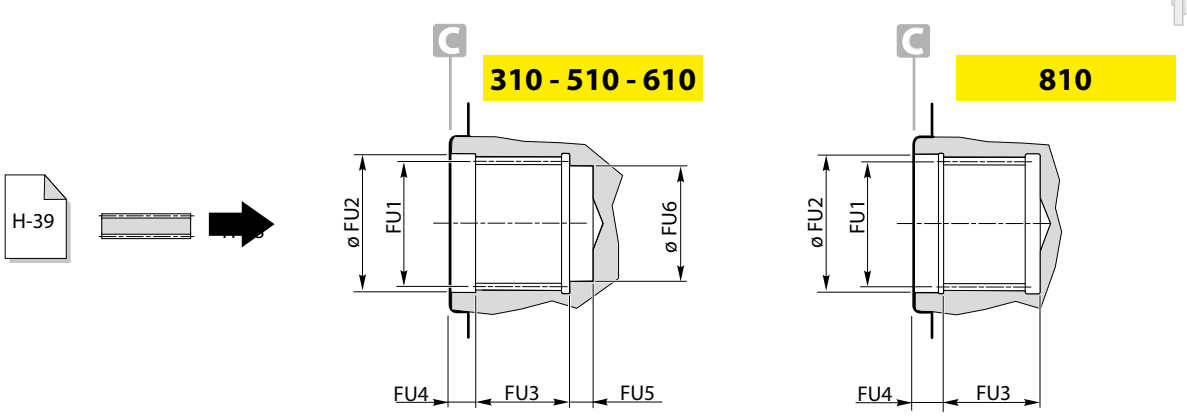
		GB - GBA				
		110000	130000	150000	205000	235000
FS	FU1	N420x8x9H DIN 5480	N420x8x9H DIN 5480	N420x8x9H DIN 5480	N500x8x9H DIN 5480	N500x8x9H DIN 5480
	FU2	430 H7	430 H7	430 H7	510 H8	510 H8
	FU3	210	210	210	265	265
	FU4	80	80	80	73	73

		GB - GBA				
	stages	110000	130000	150000	205000	235000
A1		1320	1320	1320	1630	1630
F0		1538	1538	1538	1880	1880
F2		1150 h9	1150 h9	1150 h9	1440 h8	1440 h8
F3		1450	1450	1450	1780	1780
F4		80	80	80	80	80
F5		110	110	110	110	110
F6		Ø44 (x40)	Ø44 (x40)	Ø44 (x40)	Ø44 (x48)	Ø44 (x48)
		M.. - 10.9				
		M42	M42	M42	M42	M42
F7		9°	9°	9°	7°30'	7°30'
FA1		402.5	402.5	402.5	375	375
FL	1	315	315	315	303	303
	2	966.5	966.5	966.5	1016	1016
	3	1375	1375	1375	1511	1590.5
	4	1624.5	1641.5	1721.5	1852	1986.5
	5	1752.5	1882.5	1890	2101.5	2236
FL7	5	1818.5	1895.5	—	—	—
	6	1894.5	2088.5	—	—	—
FL8	5	1946.5	2085.5	—	—	—
	6	2002.5	2216.5	—	—	—
T3	5	310	432	—	—	—
	6	227	310	—	—	—
T4	5	293	295	—	—	—
	6	242	293	—	—	—



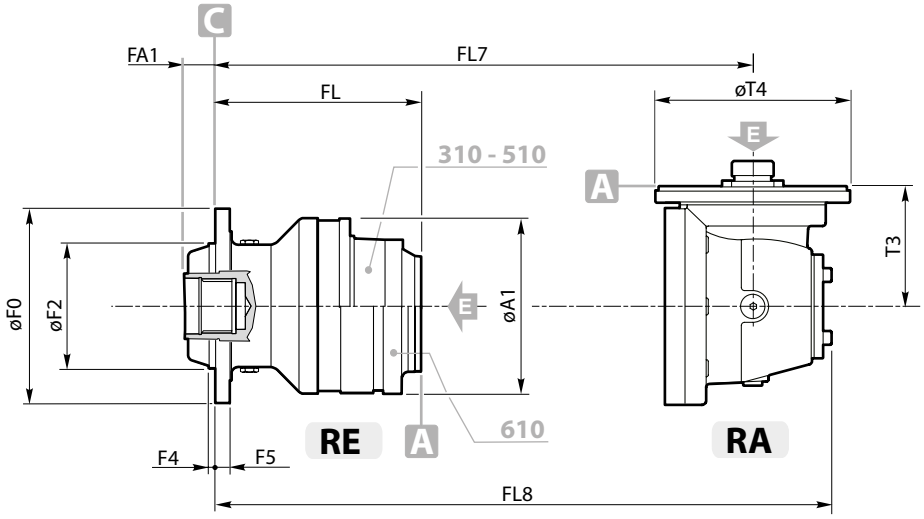
110000 ÷ 235000



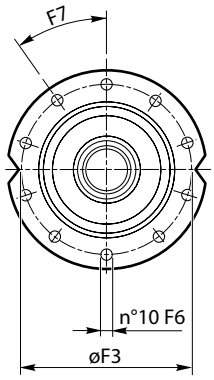


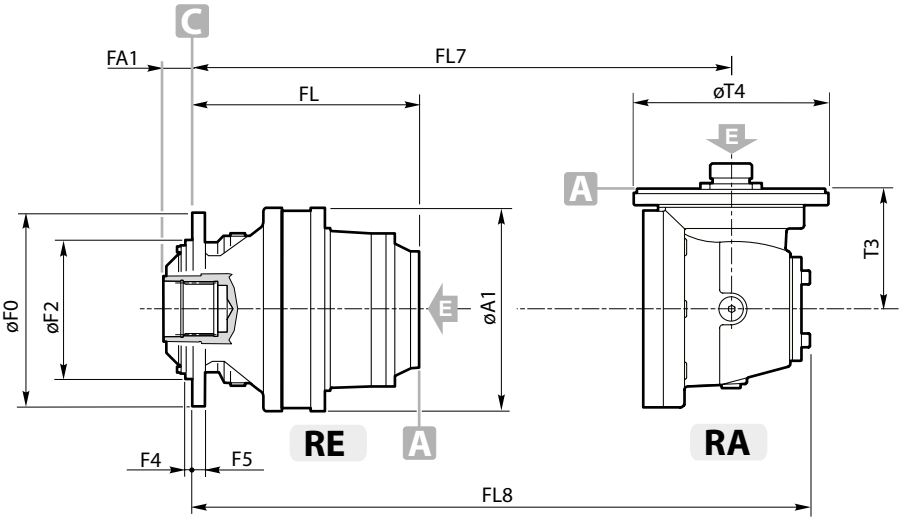
NF		RE - RA 310	510	610	810
	FU1	A 58x53 DIN 5482	A 58x53 DIN 5482	A 58x53 DIN 5482	A 70x64 DIN 5482
	FU2	60 H8	60 H8	60 H8	72 H8
	FU3	29	29	29	45
	FU4	15	15	15	22
	FU5	10	10	10	—
	FU6	50 H8	50 H8	50 H8	—

RE - RA	stages	310	510	610	810
A1		244	244	244	295
F0		222	222	222	280
F2		150 f7	150 f7	150 f7	200 f7
F3		195	195	195	250
F4		13.5	13.5	13.5	10.5
F5		16	16	16	18
F6		Ø12.5	Ø12.5	12.5	Ø15
		M.. - 12.9			
		M12	M12	M12	M14
F7		36°	36°	36°	30°
FA1		15	15	15	40
FL	1	133	151	151	162.5
	2	185.5	215.5	209.5	229.5
	3	228.5	258.5	262	282
	4	271.5	301.5	305	325
FL7	2	255	273	273	304.5
	3	266.5	296.5	331.5	351.5
	4	309.5	339.5	343	363
FL8	2	346	364	364	412.5
	3	341	371	422.5	442.5
	4	384	414	417.5	437.5
T3	2	171.5	171.5	171.5	277
	3	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8
T4	2	183	183	183	242
	3	184	184	183	183
	4	184	184	184	184

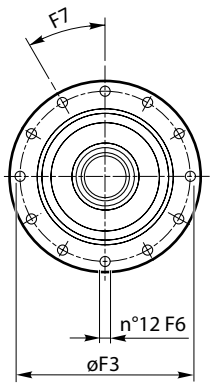


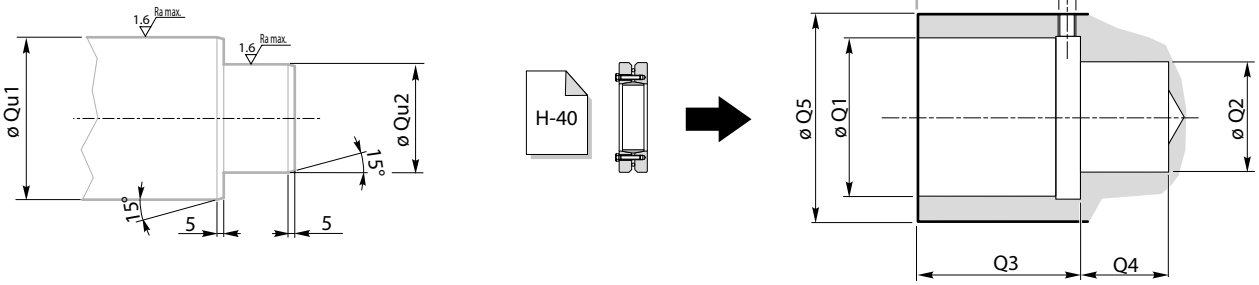
310 - 510 - 610





810

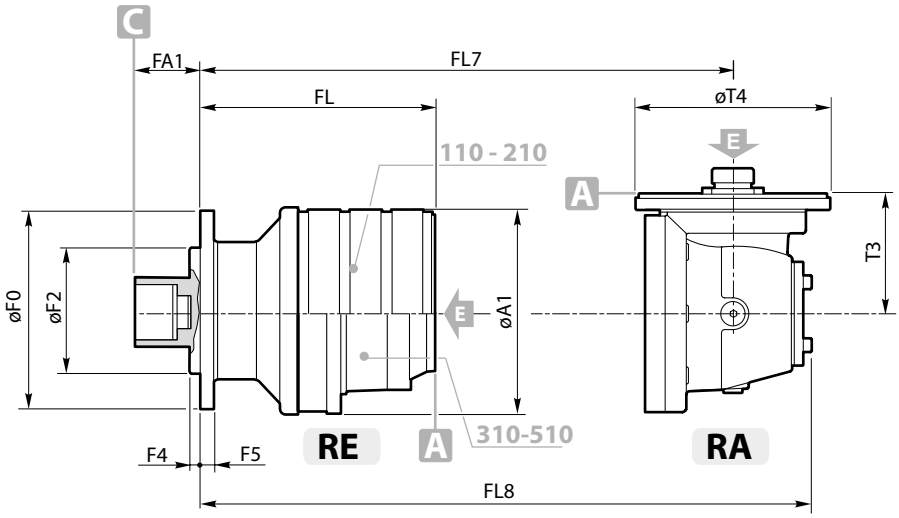


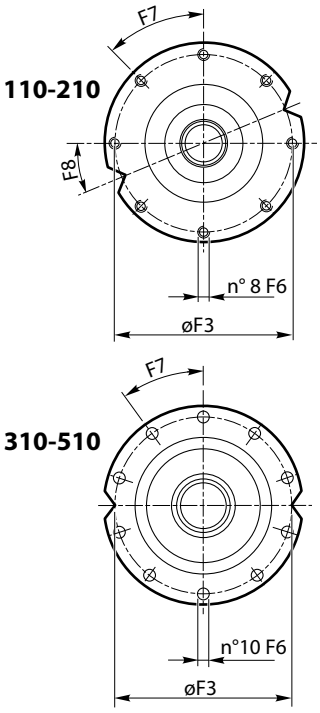


NQ		RE - RA			
		110	210	310	510
	Q1	50 H7	50 H7	75 H7	75 H7
	Q2	30 H7	30 H7	40 H7	40 H7
	Q3	38	38	55	55
	Q4	12	12	20	20
	Q5	62 f7	62 f7	100 f7	100 f7
	Q6	—	—	1/8"G	1/8"G
	Q7	—	—	52	52
	Qu1	50 g6	50 g6	75 g6	75 g6
	Qu2	30 f6	30 f6	40 f6	40 f6

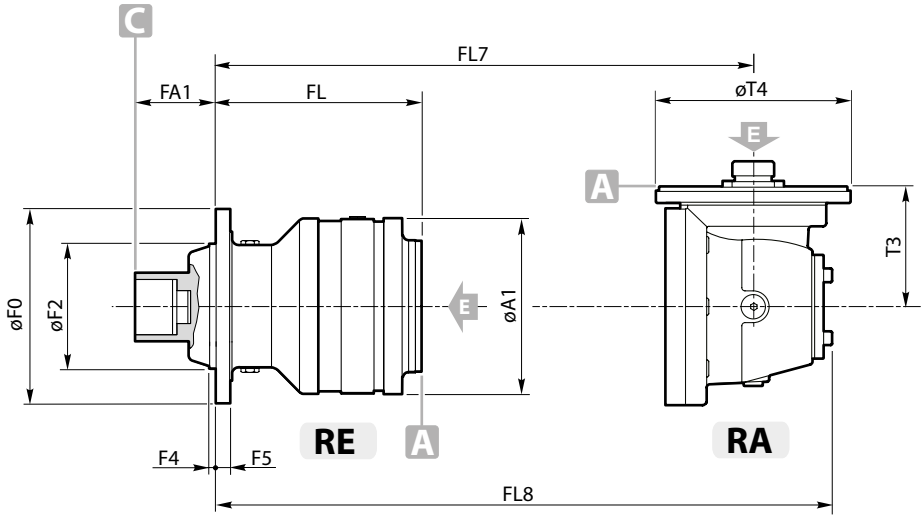
		RE - RA				
	stages	110	210	310	510	610
A1		186	186	244	244	244
F0		185	185	222	222	222
F2		110 h7	110 h7	150 f7	150 f7	150 f7
F3		165	165	195	195	195
F4		5	5	13.5	13.5	13.5
F5		12	12	16	16	16
F6		10.5	10.5	12.5	12.5	12.5
		 M.. - 12.9				
		M10	M10	M12	M12	M12
F7		45°	45°	36°	36°	36°
F8		22.5°	22.5°	—	—	—
FA1		55	55	87	87	87
FL	1	95	107	133	151	151
	2	138	150	185.5	215.5	209.5
	3	181	193	228.5	258.5	262
	4	224	236	271.5	301.5	305
FL7	2	176	188	255	273	273
	3	219	231	266.5	296.5	331.5
	4	262	274	309.5	339.5	343
FL8	2	250.5	262.5	346	364	364
	3	293.5	305.5	341	371	422.5
	4	336.5	348.5	384	414	417.5
T3	2	113.8	113.8	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	171.5
	4	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183
	3	184	184	184	184	183
	4	184	184	184	184	184

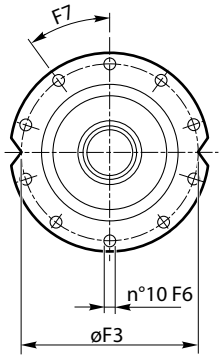
110 ÷ 510

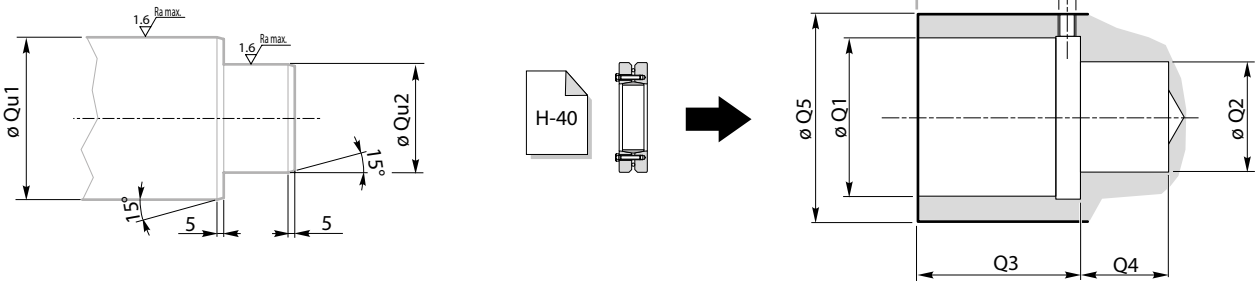

C
FA1
FL7
FL
øT4
110 - 210
E
A
øF0
øF2
E
øA1
T3
310-510
F4
F5
RE
A
RA
FL8


110-210
F7
F8
n° 8 F6
øF3
310-510
F7
n°10 F6
øF3

610

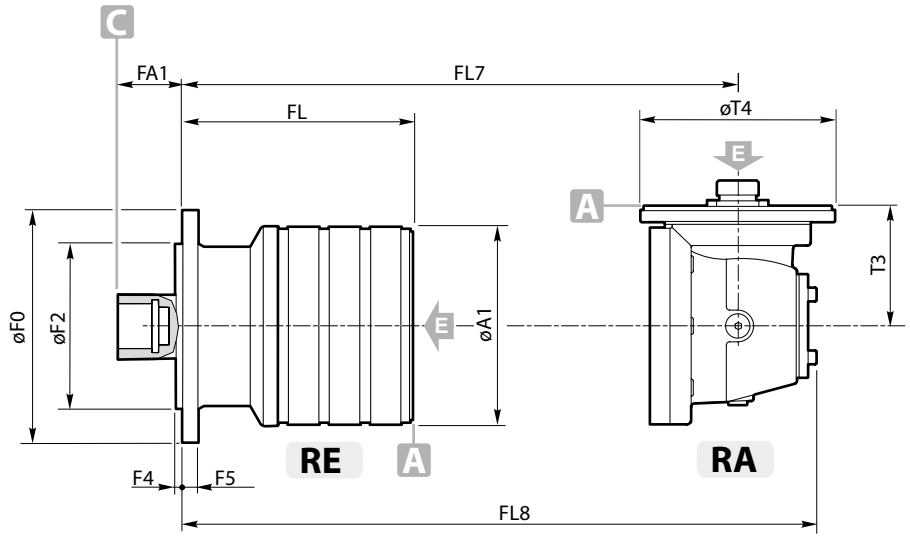

C
FL7
FA1
FL
øT4
E
A
øF0
øF2
E
øA1
T3
F4
F5
RE
A
RA
FL8


F7
n°10 F6
øF3

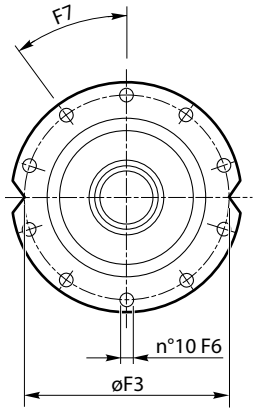


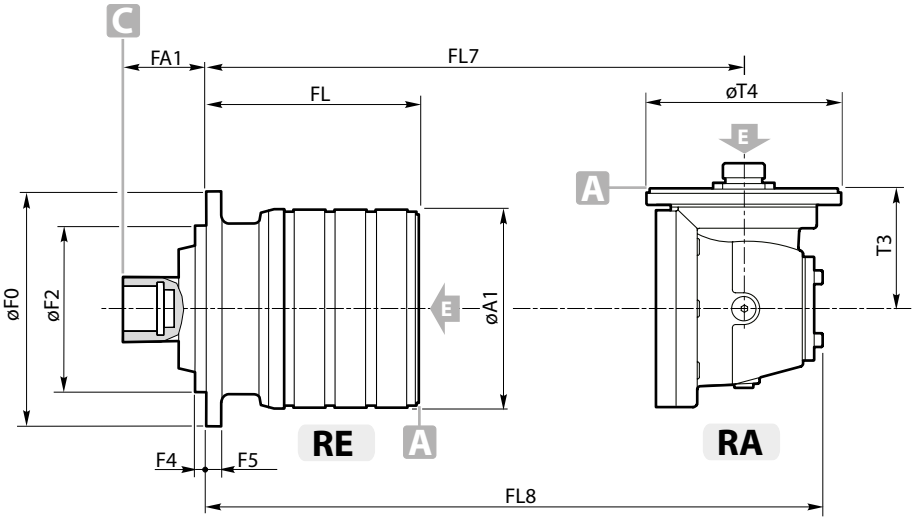
		RE - RA					
		240		810	1020	1520	2000 2000L
		TQ	TRQ	TQ	TQ	TQ	TQ
TQ TRQ	Q1	75 H7	75 H7	90 H7	120 H7	120 H7	120 H7
	Q2	40 H7	40 H7	50 H7	80 H7	80 H7	80 H7
	Q3	55	55	72	85	85	85
	Q4	17	17	25	30	30	30
	Q5	100 f7	100 f7	125 f7	165 f7	165 f7	165 f7
	Q6	—	—	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	—	—	81.5	97.5	97.5	97.5
	Qu1	75 g6	75 g6	90 g6	120 g6	120 g6	120 g6
	Qu2	40 f6	40 f6	50 f6	80 f6	80 f6	80 f6

		RE - RA						
	stages	240		810	1020	1520	2000	2000L
		TQ	TRQ	TQ	TQ	TQ	TQ	TQ
A1		186	186	295	295	350	350	350
F0		219	219	280	325	325	325	325
F2		150 h7	155 f7	200 f7	230 f7	230 f7	230 f7	230 f7
F3		195	194	250	295	295	295	295
F4		7	10	10.5	15	15	15	15
F5		15	15	22	25	28	28	28
F6		Ø12.5	Ø11	Ø15	Ø17	Ø17	Ø17	Ø17
		M.. - 12.9						
		M12	M10	M14	M16	M16	M16	M16
F7		36°	36°	30°	36°	36°	36°	36°
FA1		87	104	131	140	140	140	104
FL	1	114	97	185	237	240	240	240
	2	157	140	252	322	333	333	333
	3	200	183	304.5	386.5	397.5	391.5	397.5
	4	243	226	347.5	429.5	440	444	440
FL7	2	195	178	326.5	379	446	446	446
	3	238	221	374	444	455	455	455
	4	281	264	385.5	467.5	478.5	513.5	478.5
FL8	2	269.5	252.5	435	487	574	574	574
	3	312.5	295.5	465	535	546	546	546
	4	355.5	338.5	460	542	553	604.5	553
T3	2	113.8	113.8	277	277	310	310	310
	3	113.8	113.8	171.5	171.5	171.5	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	171.5	113.8
T4	2	184	184	242	242	293	293	293
	3	184	184	183	183	183	183	183
	4	184	184	184	184	184	183	184

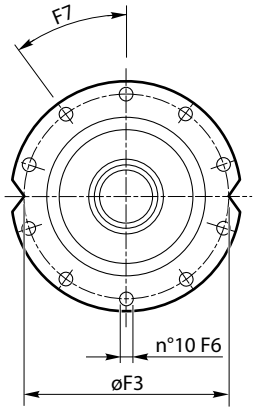


TQ **240**

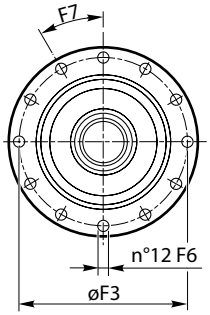


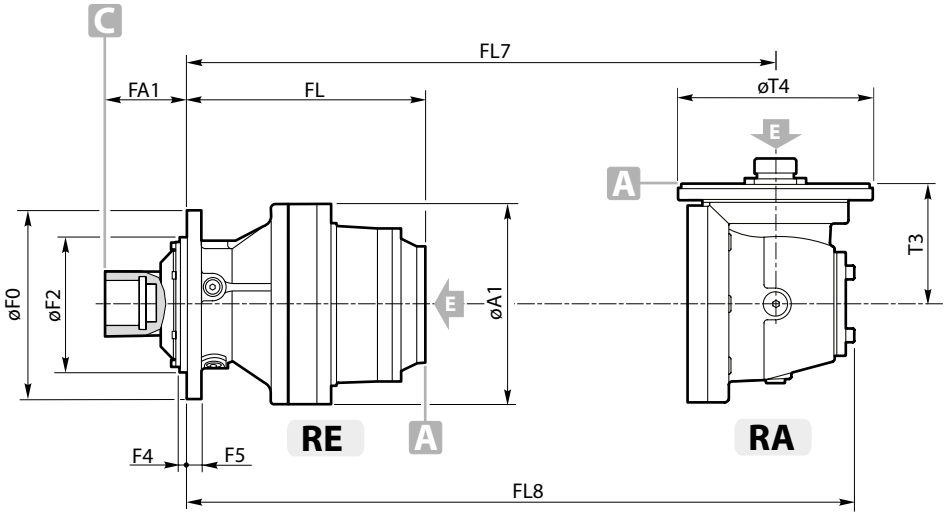


TRQ **240**

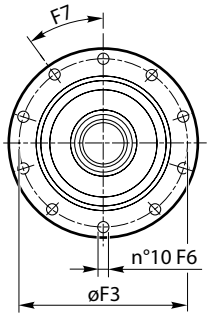


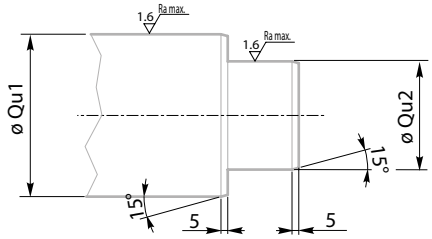
TQ **810**

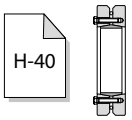


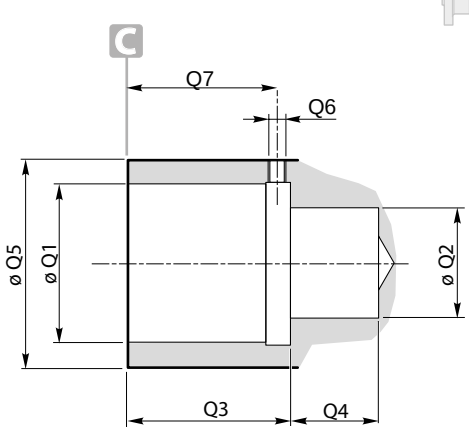


TQ **1020 ÷ 2000L**







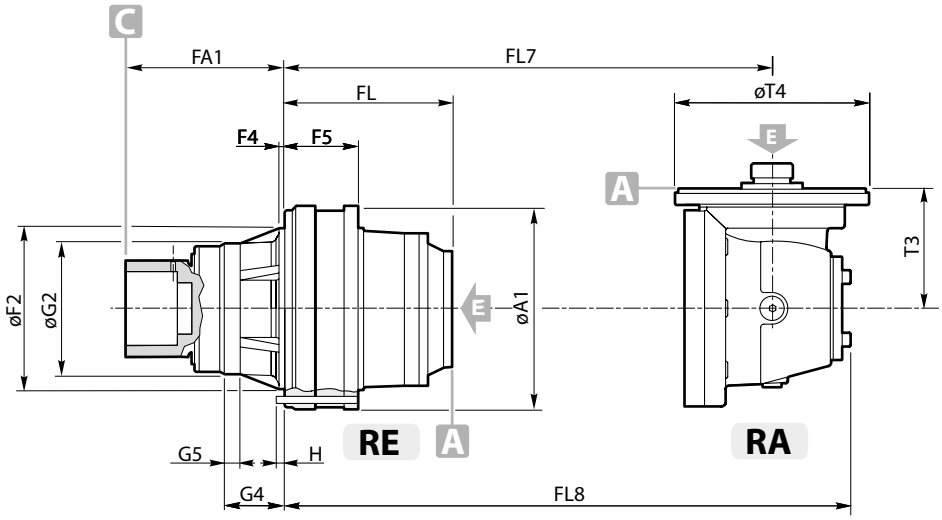


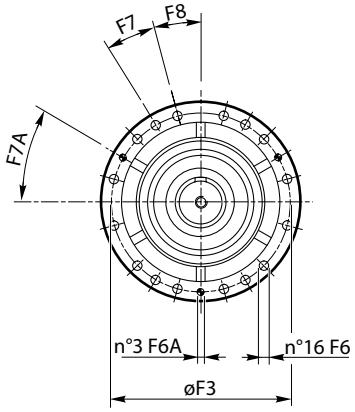
		RE - RA					
		1520	2000 2000L	2520	3000	3510	4800
HQ	Q1	120 H7	120 H7	130 H7	130 H7	145 H7	145 H7
	Q2	80 H7	80 H7	80 H7	80 H7	100 H7	100 H7
	Q3	85	85	100	100	146	146
	Q4	30	30	30	30	89.5	89.5
	Q5	165 f7	165 f7	175 f7	175 f7	185 f7	185 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	97.5	97.5	99	99	136	136
	Qu1	120 g6	120 g6	130 g6	130 g6	145 g6	145 g6
	Qu2	80 f6	80 f6	80 f6	80 f6	100 f6	100 f6

		RE - RA
		4800
HQ1	Q1	155 H7
	Q2	100 H7
	Q3	146
	Q4	99.5
	Q5	200 f7
	Q6	1/8"G
	Q7	136
	Qu1	155 g6
	Qu2	100 f6

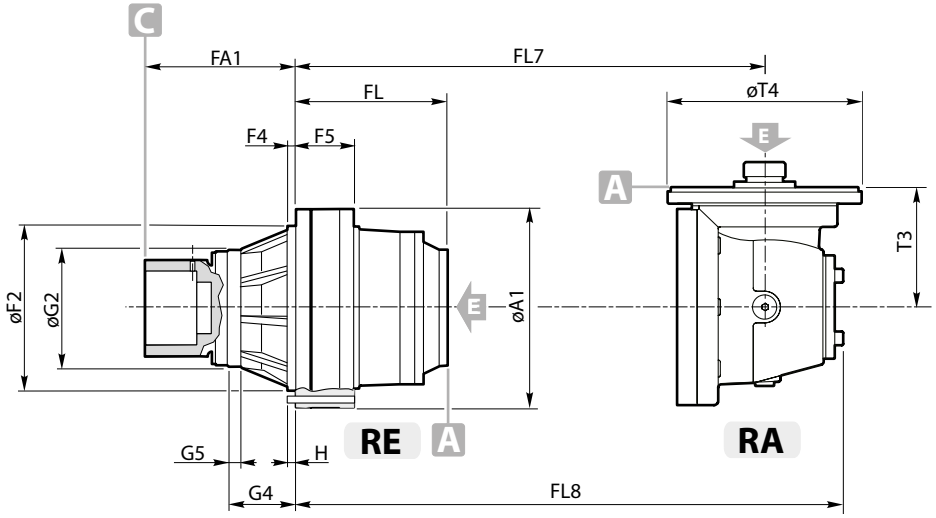
		stages	RE - RA 1520	2000	2000L	2520	3000	3510	4800
A1			350	350	350	409	409	452	452
FA1	Q		273	273	273	310	310	250	250
	Q1		—	—	—	—	—	—	260
F2			278 f7	278 f7	278 f7	340 f7	340 f7	390 f8	390 f8
F3			314	314	314	370	370	424	424
F4			10	10	10	17	17	15	15
F5			133	133	133	131	131	120	120
F6			Ø16.5	Ø16.5	Ø16.5	Ø17	Ø17	Ø17	Ø17
			M.. - 12.9						
			M16	M16	M16	M16	M16	M16	M16
F6A			Ø12	Ø12	Ø12	Ø16	Ø16	—	—
F7			15°	15°	15°	12°	12°	20°	20°
F7A			30°	30°	30°	30°	30°	—	—
F8			15°	15°	15°	24°	24°	10°	10°
FL		1	107	107	107	98	98	85	85
		2	200	200	200	209	226	277	326
		3	264.5	258.5	264.5	276	311	362	419
		4	307.5	311	307.5	328.5	375.5	426.5	483.5
FL7		2	313	313	313	292	292	339	339
		3	322	322	322	351	368	419	532
		4	345.5	380.5	345.5	398	433	484	541
FL8		2	441	441	441	420	420	529	529
		3	413	413	413	459	476	527	660
		4	420	472	420	489	524	575	632
G2			225 f7	225 f7	225 f7	245 f7	245 f7	—	—
G4			104.5	104.5	104.5	142	142	—	—
G5			27.5	27.5	27.5	29	29	—	—
H			15	15	15	29	29	—	—
T3		2	310	310	310	310	310	432	432
		3	171	171	171	227	227	227	310
		4	113.8	171	113.8	171	171	171	171
T4		2	293	293	293	293	293	295	295
		3	183	183	183	242	242	242	293
		4	184	183	184	183	183	183	183

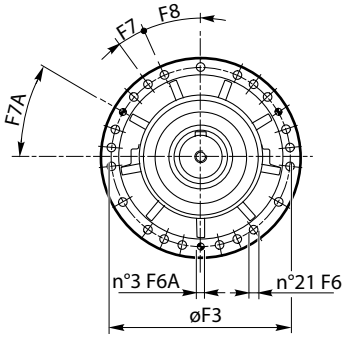
1520 ÷ 2000L



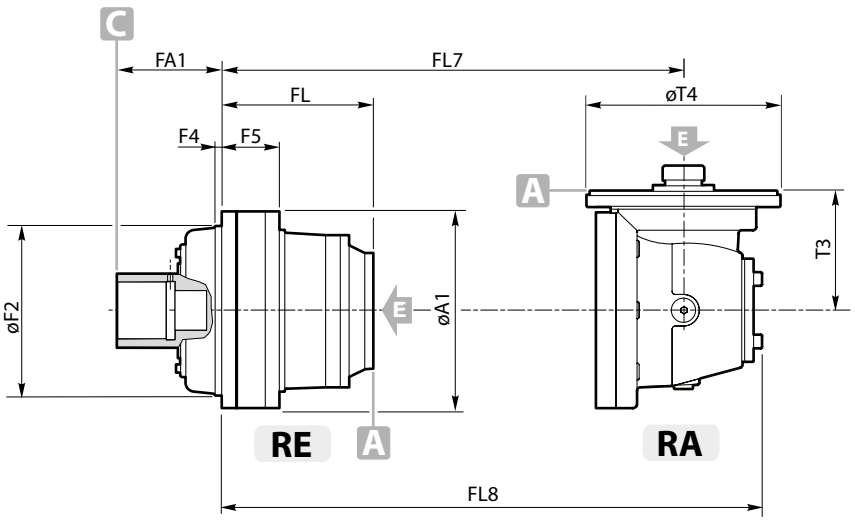


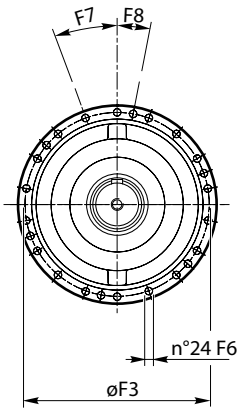
2520 - 3000

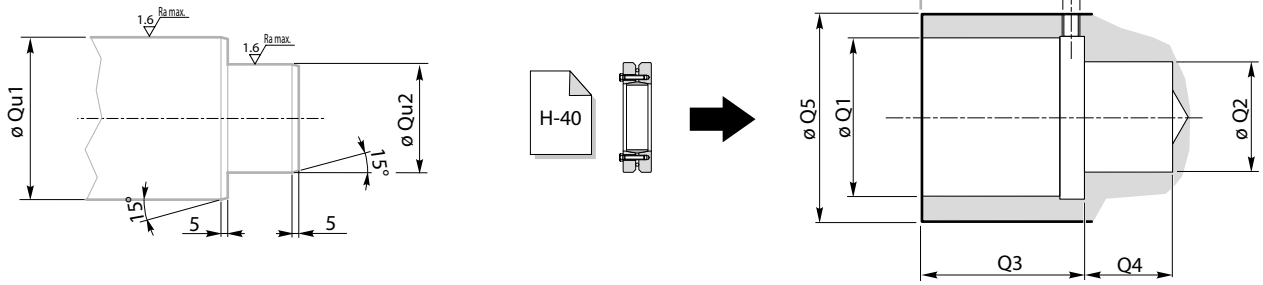




3510 - 4800





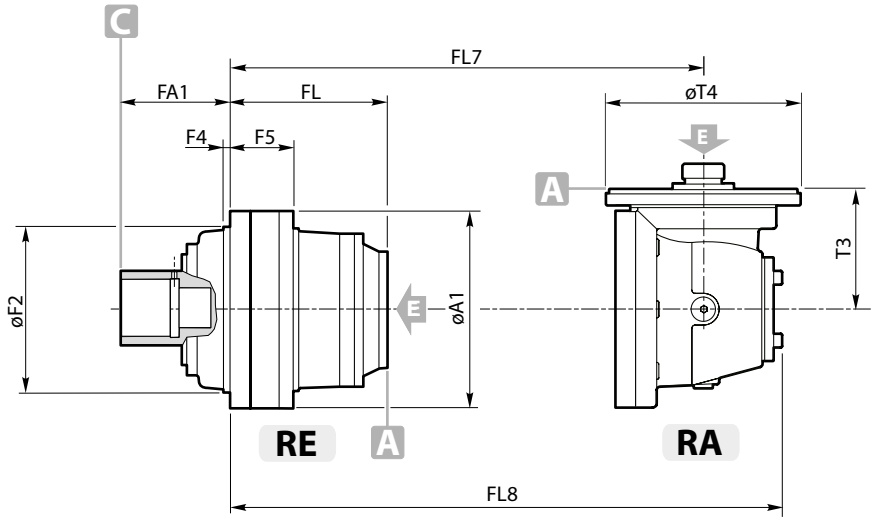


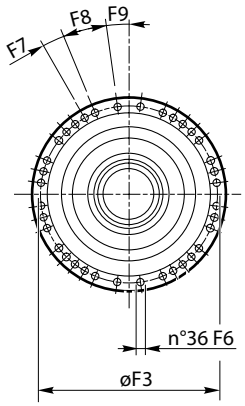
		RE - RA		GB - GBA	
		6000	8000	12010	16000
		H6Q	HQ	HQ	HQ
HQ H6Q	Q1	155 H7	155 H7	190 H7	190 H7
	Q2	85 F8	85 F8	90 H7	90 H7
	Q3	125	125	190	190
	Q4	70	70	40	40
	Q5	195 f7	195 f7	240 f7	240 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	107	107	160	160
	Qu1	155 g6	155 g6	190 g6	190 g6
	Qu2	85 f6	85 f6	90 f6	90 f6

		RE - RA		GB - GBA	
		6000	8000	12010	16000
		H6Q1	HQ1	HQ1	HQ1
HQ1 H6Q1	Q1	180 H7	180 H7	210 H7	210 H7
	Q2	110 H7	110 H7	110 H7	110 H7
	Q3	183	183	210	210
	Q4	70	70	50	50
	Q5	240 f7	240 f7	260 f7	260 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	164	164	187	187
	Qu1	180 g6	180 g6	210 g6	210 g6
	Qu2	110 f6	110 f6	110 f6	110 f6

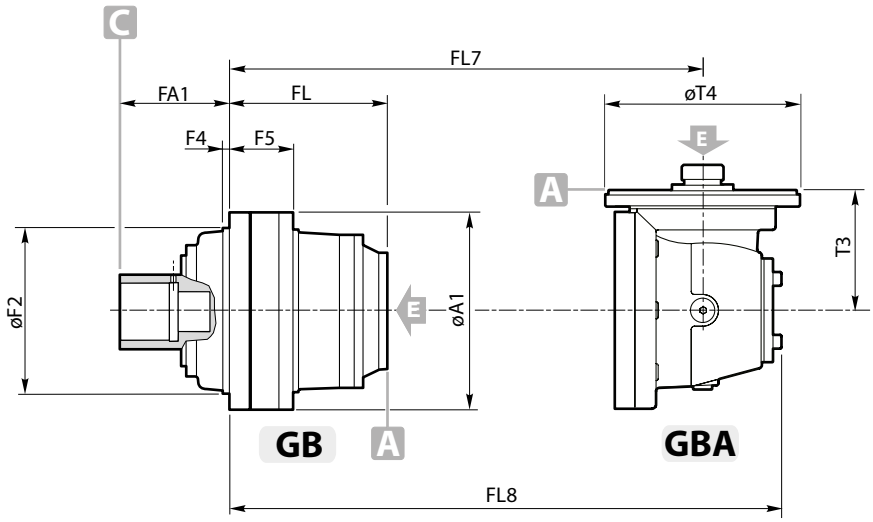
			RE - RA		GB - GBA	
			6000	8000	12010	16000
		stages	H6_	H_	H_	H_
A1			490	490	610	610
F2			410 h8	410 h8	515 h8	515 h8
F3			445	445	560	560
F4			15	15	20	20
F5			178.5	181.5	230	230
F6			Ø19	Ø19	Ø25	Ø25
			M.. - 12.9		M.. - 10.9	
			M18	M18	M24	M24
F7			7°30	7°30	15°	15°
F8			15°'	15°	7°30'	7°30'
F9			7°30	7°30	7°30'	7°30'
FA1	Q		240	240	300	300
	Q1		298	298	330	330
FL		1	136.5	136.5	160.5	160.5
		2	305	390.5	410	427
		3	398	518.5	538	668
		4	456.5	603.5	623	761
		5	—	668	687.5	825.5
FL7		2	390.5	390.5	—	—
		3	511	584.5	604	681
		4	520	660.5	680	874
		5	—		745	883
FL8		2	580.5	580.5	—	—
		3	639	712.5	732	871
		4	611	768.5	788	1002
		5	—	—	836	974
G2			—	—	—	—
G4			—	—	—	—
G5			—	—	—	—
T3		2	432	432	—	—
		3	310	310	310	432
		4	171	227	227	310
		5	—	—	171	171
T4		2	295	295	—	—
		3	293	293	293	295
		4	183	242	242	293
		5	—	—	183	183

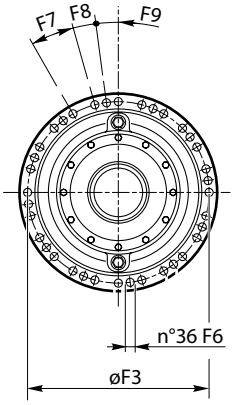
H6Q	6000
HQ	8000

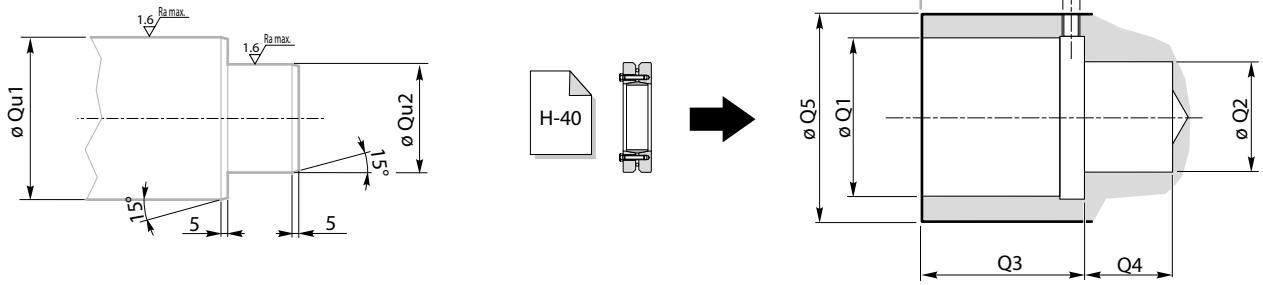




HQ	12010 - 16000







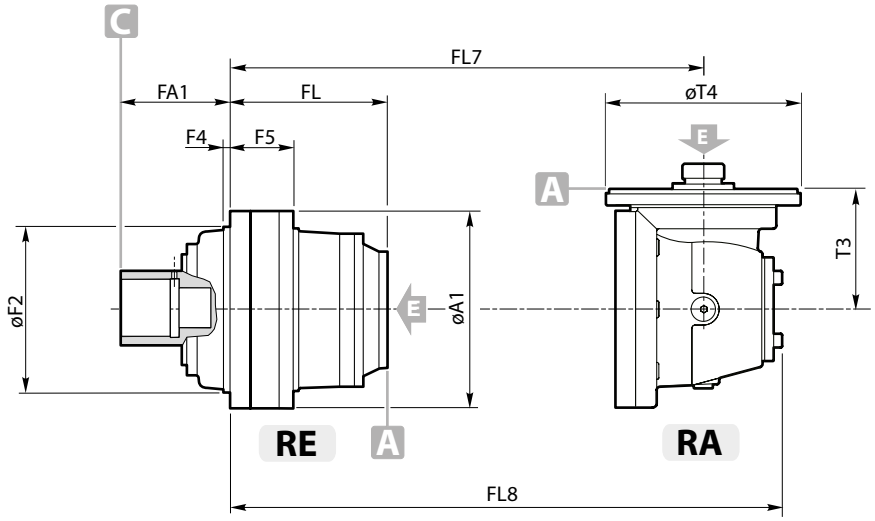
		RE - RA		GB - GBA	
		6000L	8000L	12010L	16000L
		H6Q	HQ	HQ	HQ
HQ H6Q	Q1	155 H7	155 H7	190 H7	190 H7
	Q2	85 F8	85 F8	90 H7	90 H7
	Q3	125	125	190	190
	Q4	70	70	40	40
	Q5	195 f7	195 f7	240 f7	240 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	107	107	160	160
	Qu1	155 g6	155 g6	190 g6	190 g6
	Qu2	85 f6	85 f6	90 f6	90 f6

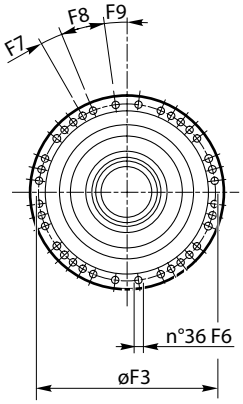
		RE - RA		GB - GBA	
		6000L	8000L	12010L	16000L
		H6Q1	HQ1	HQ1	HQ1
HQ1 H6Q1	Q1	180 H7	180 H7	210 H7	210 H7
	Q2	110 H7	110 H7	110 H7	110 H7
	Q3	183	183	210	210
	Q4	70	70	50	50
	Q5	240 f7	240 f7	260 f7	260 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G
	Q7	164	164	187	187
	Qu1	180 g6	180 g6	210 g6	210 g6
	Qu2	110 f6	110 f6	110 f6	110 f6

			RE - RA		GB - GBA	
			6000L	8000L	12010L	16000L
		stages	H6_	H_	H_	H_
A1			490	490	610	610
F2			410 h8	410 h8	515 h8	515 h8
F3			445	445	560	560
F4			15	15	20	20
F5			178.5	181.5	230	230
F6			Ø19	Ø19	Ø25	Ø25
			M.. - 12.9		M.. - 10.9	
			M18	M18	M24	M24
F7			7°30	7°30	15°	15°
F8			15°'	15°	7°30'	7°30'
F9			7°30	7°30	7°30'	7°30'
FA1	Q		240	240	300	300
	Q1		298	298	330	330
FL		1	136.5	136.5	160.5	160.5
		2	305	390.5	410	427
		3	398	501.5	521	619
		4	462.5	568.5	588	704
		5	—	621	640.5	768.5
FL7		2	390.5	390.5	—	—
		3	511	584.5	604	681
		4	520	643.5	663	761
		5	—	—	710	826
FL8		2	580.5	580.5	—	—
		3	639	712.5	732	871
		4	611	751.5	771	869
		5	—	—	801	917
G2			432	432	—	—
G4			310	310	310	432
G5			171	227	227	310
T3		2	—	—	171	171
		3	295	295	—	—
		4	293	293	293	295
		5	183	242	242	293
T4		2	—	—	183	183
		3	293	293	293	295
		4	183	242	242	293
		5	—	—	183	183

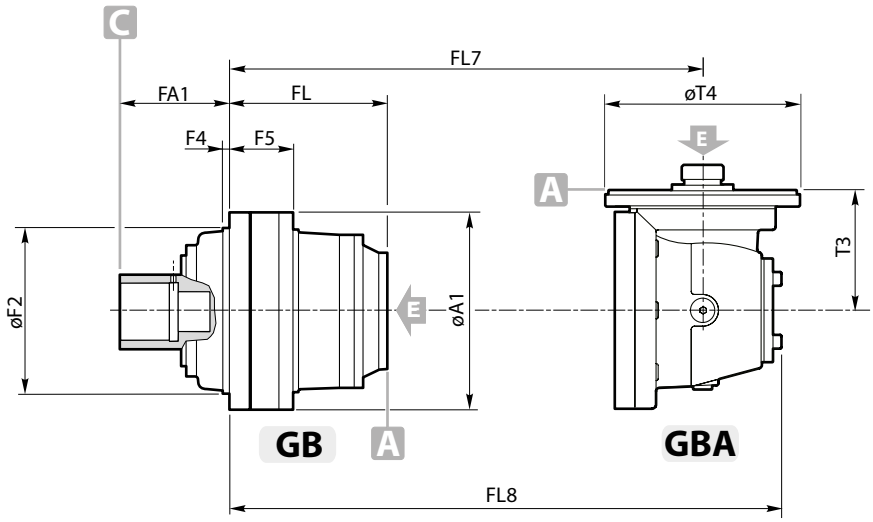
H6Q **6000L**

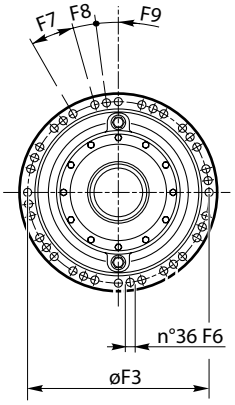
HQ **8000L**

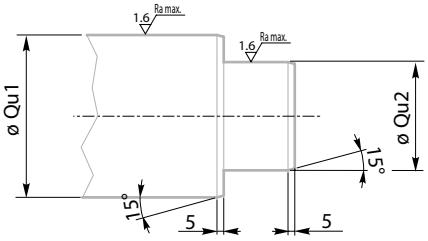


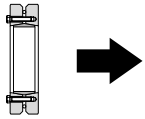


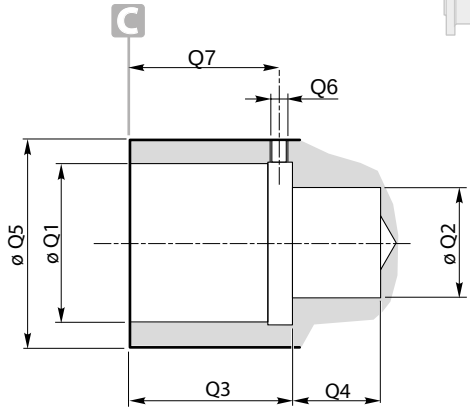
HQ **12010L - 16000L**





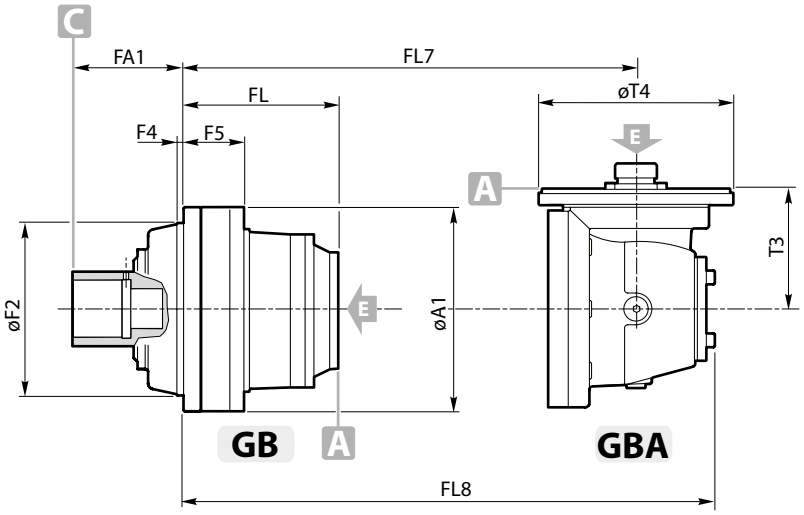




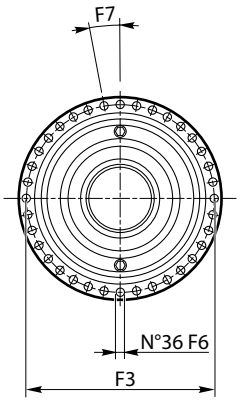


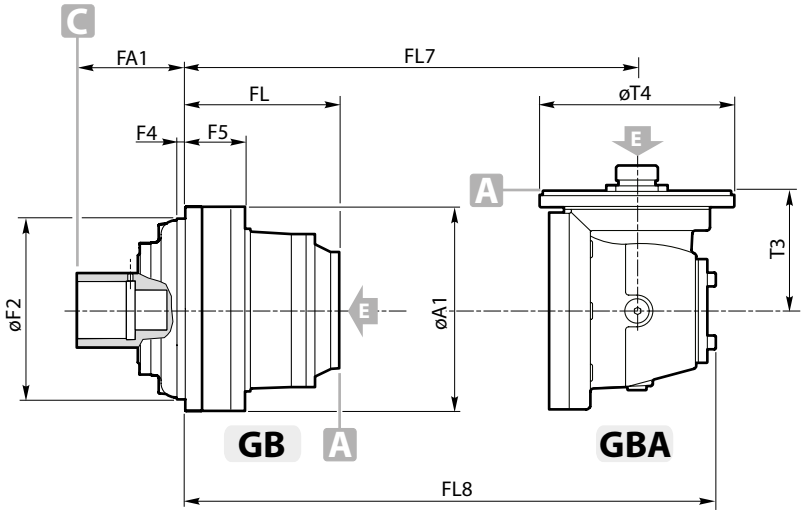
		GB - GBA							
		21000	26000	31000	40000	45000	53000	61000	85000
HQ	Q1	230 H7	230 H7	295 H7	295 H7	300 H7	320 H7	320 H7	380 H7
	Q2	120 H7	120 H7	210 H7	210 H7	210 H7	190 H7	190 H7	260 H7
	Q3	230	230	300	300	300	335	335	335
	Q4	101	101	155	155	155	175	175	170
	Q5	280 f7	280 f7	360 f7	360 f7	380 f7	390 f7	390 f7	460 f7
	Q6	1/8"G	1/8"G	1/8"G	1/8"G	1/8"G	1/4"G	1/4"G	1/4"G
	Q7	225	225	265	265	265	305	305	323
	Qu1	230 g6	230 g6	295 g6	295 g6	300 g6	320 h6	320 h6	380 g6
	Qu2	120 f6	120 f6	210 f6	210 f6	210 f6	190 f6	190 f6	260 f6

		GB - GBA							
	stages	21000	26000	31000	40000	45000	53000	61000	85000
A1		710	710	870	870	870	1090	1090	1090
F2		600 h8	600 h8	760 h8	760 h8	760 h8	930 h8	930 h8	930 h8
F3		660	660	810	810	810	1020	1020	1020
F4		23.5	23.5	35	35	35	50	50	50
F5		196	216	250	290	290	305	305	353
F6		Ø28	Ø28	Ø32	Ø32	Ø32	Ø39	Ø39	Ø39
		M.. - 10.9							
		M27	M27	M30	M30	M30	M36	M36	M36
F7		10°	10°	10°	10°	10°	10°	10°	10°
FA1		440	440	490	490	490	550	550	550
FL	1	138	158	180	220	220	225	225	273
	2	443	463	588.5	628.5	628.5	700	700	768
	3	611.5	717	838	878	895	1005	1005	1073
	4	704.5	845	966	1006	1136	1173.5	1173.5	1327
	5	763	930	1051	1091	1229	1266.5	1266.5	1455
FL7	3	697	717	—	—	—	—	—	—
	4	817.5	911	1032	1072	1149	1259	1259	1327
	5	826.5	987	1108	1148	1342	1379.5	1379.5	1521
	6	—	—	—	—	—	—	1388.5	1597
FL8	3	887	907	—	—	—	—	—	
	4	945.5	1039	1160	1200	1339	1449	1449	1517
	5	917.5	1095	1216	1256	1470	1507.5	1507.5	1649
	6	—	—	—	—	—	—	1479.5	1705
T3	3	432	432	—	—	—	—	—	—
	4	310	310	310	310	432	432	432	432
	5	171	227	227	227	310	310	310	310
	6	—	—	—	—	—	—	171	171
T4	3	295	295	—	—	—	—	—	—
	4	293	293	293	293	295	295	295	295
	5	183	242	242	242	293	293	293	293
	6	—	—	—	—	—	—	183	183

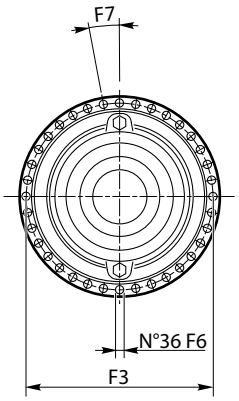


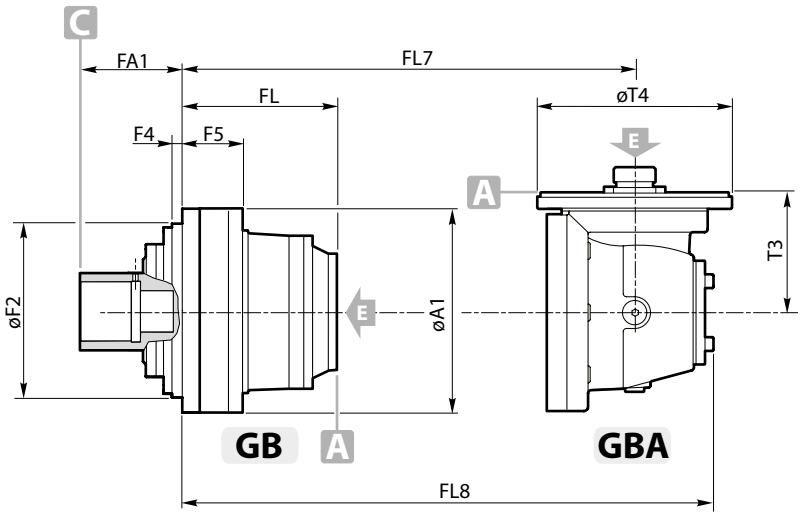
21000 - 26000





31000 ÷ 45000





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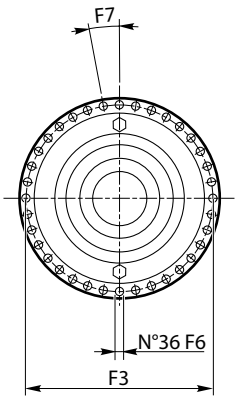
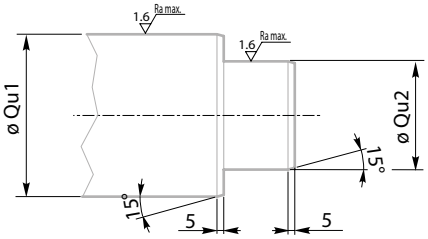
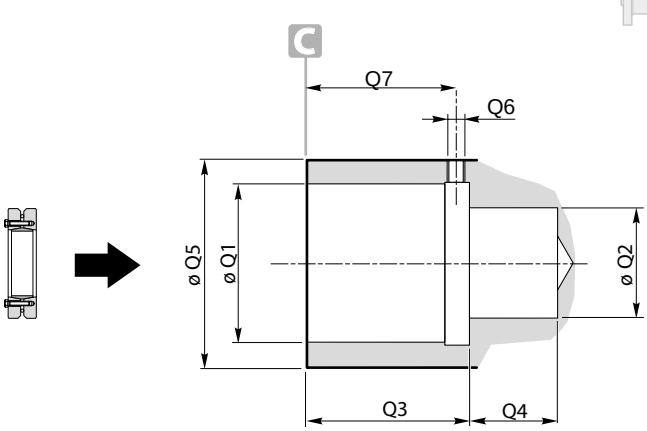
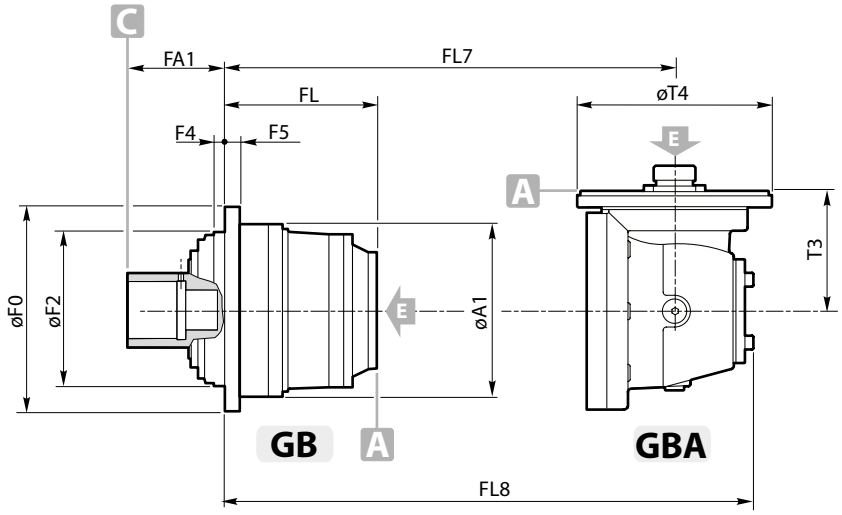




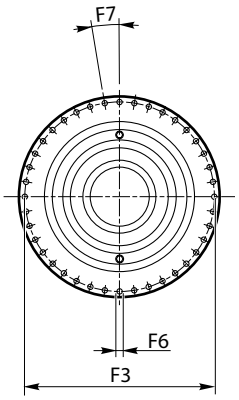


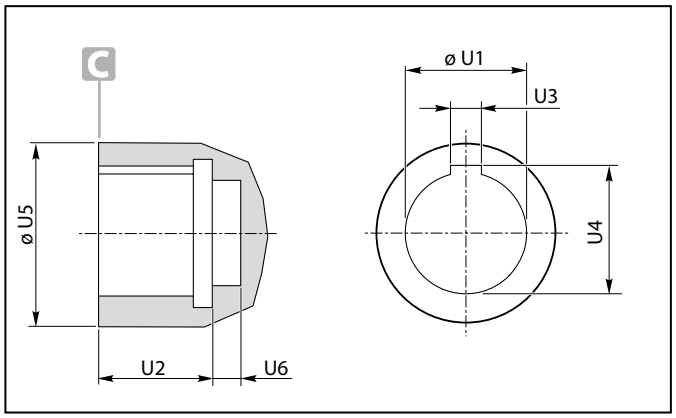
		GB - GBA				
		110000	130000	150000	205000	235000
HQ	Q1	450 H7	450 H7	450 H7	600 H7	600 H7
	Q2	320 H7	320 H7	320 H7	590 H7	590 H7
	Q3	450	450	450	277	277
	Q4	150	150	150	282	282
	Q5	560 f7	560 f7	560 f7	700 f7	700 f7
	Q6	1/4"G	1/4"G	1/4"G	—	—
	Q7	420	420	420	—	—
	Qu1	450 h6	450 h6	450 h6	600 g6	600 g6
	Qu2	320 f6	320 f6	320 f6	590 g6	590 g6

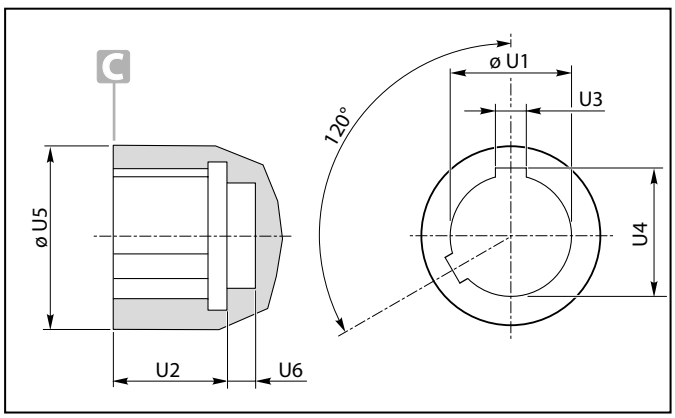
		GB - GBA				
	stages	110000	130000	150000	205000	235000
A1		1320	1320	1320	1630	1630
F0		1538	1538	1538	1880	1880
F2		1150 h9	1150 h9	1150 h9	1440 h8	1440 h8
F3		1450	1450	1450	1780	1780
F4		80	80	80	80	80
F5		110	110	110	110	110
F6		Ø44 (x40)	Ø44 (x40)	Ø44 (x40)	Ø44 (x48)	Ø44 (x48)
				M.. - 10.9		
		M42	M42	M42	M42	M42
F7		9°	9°	9°	7°30'	7°30'
FA1		722.5	722.5	722.5	675	675
FL	1	315	315	315	303	303
	2	966.5	966.5	966.5	1016	1016
	3	1375	1375	1375	1511	1590.5
	4	1624.5	1641.5	1721.5	1852	1986.5
	5	1752.5	1882.5	1890	2101.5	2236
FL7	5	1818.5	1895.5	—	—	—
	6	1894.5	2088.5	—	—	—
FL8	5	1946.5	2085.5	—	—	—
	6	2002.5	2216.5	—	—	—
T3	5	310	432	—	—	—
	6	227	310	—	—	—
T4	5	293	295	—	—	—
	6	242	293	—	—	—



110000 ÷ 235000





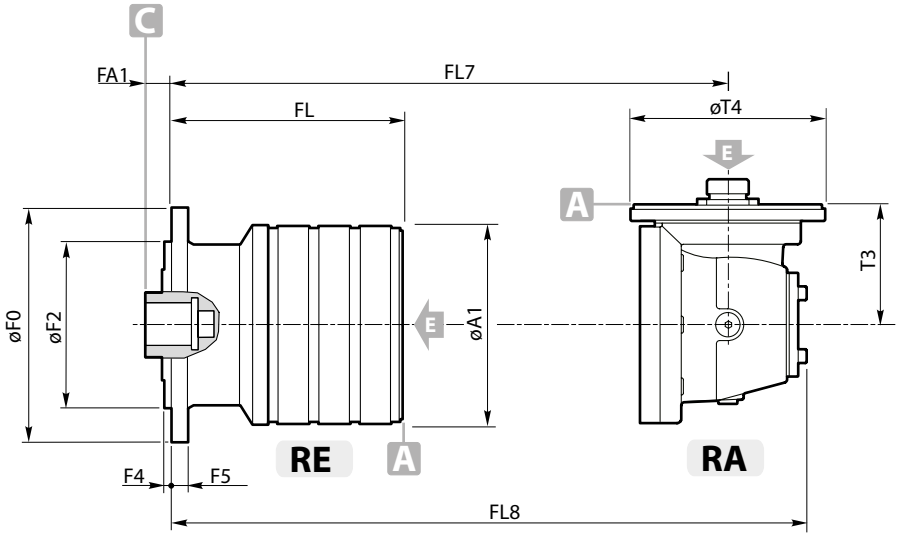


		RE - RA				
		110	210	310	510	610
TU	U1	40 H7	40 H7	—	—	—
	U2	49	49	—	—	—
	U3	12	12	—	—	—
	U4	43.3	43.3	—	—	—
	U5	60	60	—	—	—
	U6	15	15	—	—	—

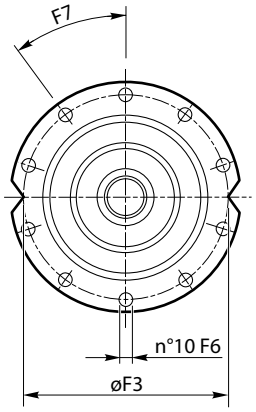
		RE - RA		
		310	510	610
NU	U1	60 H7	60 H7	60 H7
	U2	60	60	60
	U3	18	18	18
	U4	64.5	64.5	64.5
	U5	85	85	85
	U6	15	15	15

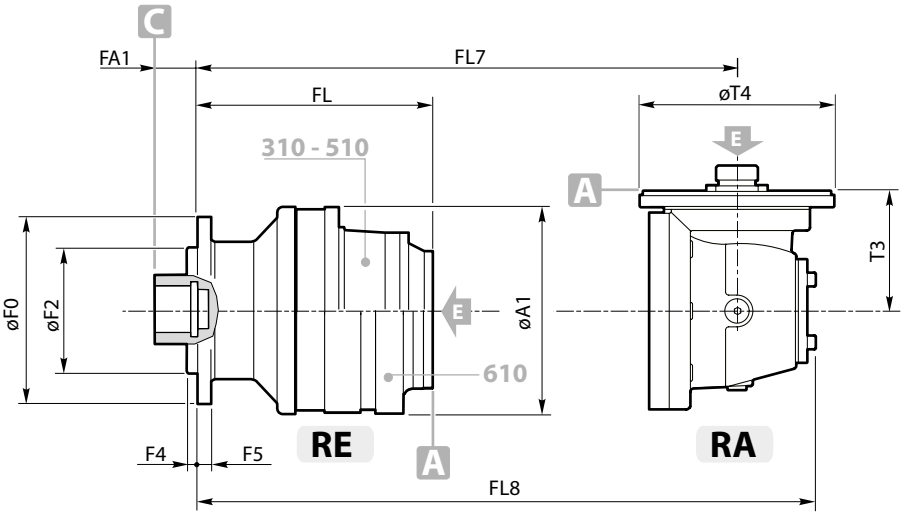
NU2	U1	—	—	70 G6	70 G6	70 G6
	U2	—	—	75	75	75
	U3	—	—	20	20	20
	U4	—	—	75	75	75
	U5	—	—	99.5	99.5	99.5
	U6	—	—	20	20	20

		RE - RA							
	stages	110	210	310		510		610	
		TU	TU	NU	NU2	NU	NU2	NU	NU2
A1		186	186	244	244	244	244	244	244
F0		219	219	222	222	222	222	222	222
F2		155 h7	155 h7	168 f7	168 f7	168 f7	168 f7	168 f7	168 f7
F3		194	194	195	190	195	190	195	190
F4		7	7	20.5	13.5	20.5	13.5	20.5	13.5
F5		15	15	16	16	16	16	16	16
F6		Ø11	Ø11	Ø12.5	Ø14.5	Ø12.5	Ø14.5	Ø12.5	Ø14.5
		M.. - 10.9							
		M10	M10	M12	M14	M10	M14	M10	M14
F7		36°	36°	36°	45°	36°	45°	36°	45°
F8		—	—	—	22°30′	—	22°30′	—	22°30′
FA1		25	25	52	130	52	130	52	130
FL	1	102	114	133	133	151	151	151	151
	2	145	157	185.5	185.5	215.5	215.5	209.5	209.5
	3	188	200	228.5	228.5	258.5	258.5	262	262
	4	231	243	271.5	271.5	301.5	301.5	305	305
FL7	2	183	195	255	255	273	273	273	273
	3	226	238	266.5	266.5	296.5	296.5	331.5	331.5
	4	269	281	309.5	309.5	339.5	339.5	343	343
FL8	2	257.5	269.5	346	346	364	364	364	364
	3	300.5	312.5	341	341	371	371	422.5	422.5
	4	343.5	355.5	384	384	414	414	417.5	417.5
T3	2	113.8	113.8	171.5	171.5	171.5	171.5	171.5	171.5
	3	113.8	113.8	113.8	113.8	113.8	113.8	171.5	171.5
	4	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8
T4	2	184	184	183	183	183	183	183	183
	3	184	184	184	184	184	184	183	183
	4	184	184	184	184	184	184	184	184

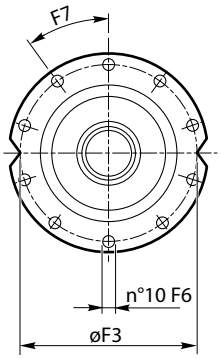


TU **110 - 210**

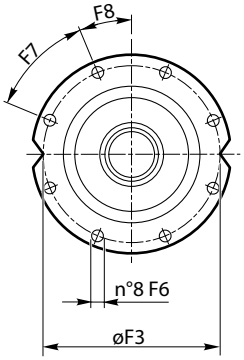


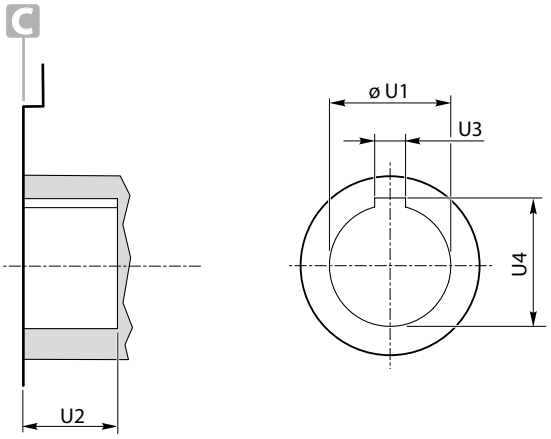


NU **310 - 510 - 610**



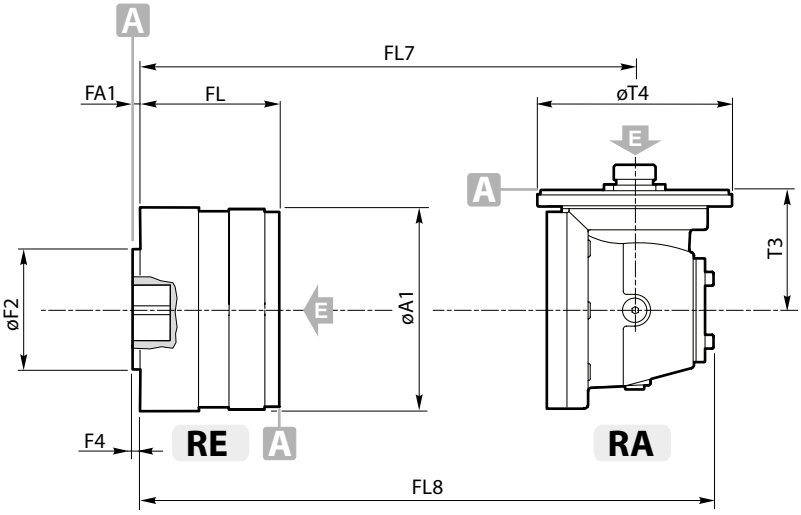
NU2 **310 - 510 - 610**



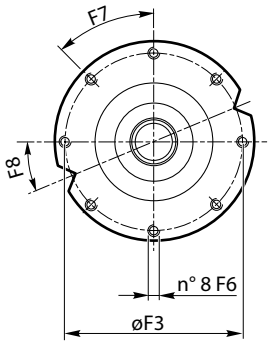


		RE - RA	
		110	210
FC	U1	40 H7	40 H7
	U2	38	38
	U3	12	12
	U4	43.3	43.3

		RE - RA	
	stages	110	210
A1		186	186
F2		110 h7	110 h7
F3		165	165
F4		5	5
F6		Ø10.5	Ø10.5
F7		45°	45°
F8		22.5°	22.5°
FA1		5	5
FL	1	59	71
	2	102	114
	3	145	157
	4	188	200
FL7	2	140	152
	3	183	195
	4	226	238
FL8	2	214.5	226.5
	3	257.5	269.5
	4	300.5	312.5
T3	2	113.8	113.8
	3	113.8	113.8
	4	113.8	113.8
T4	2	184	184
	3	184	184
	4	184	184



110 - 210



I

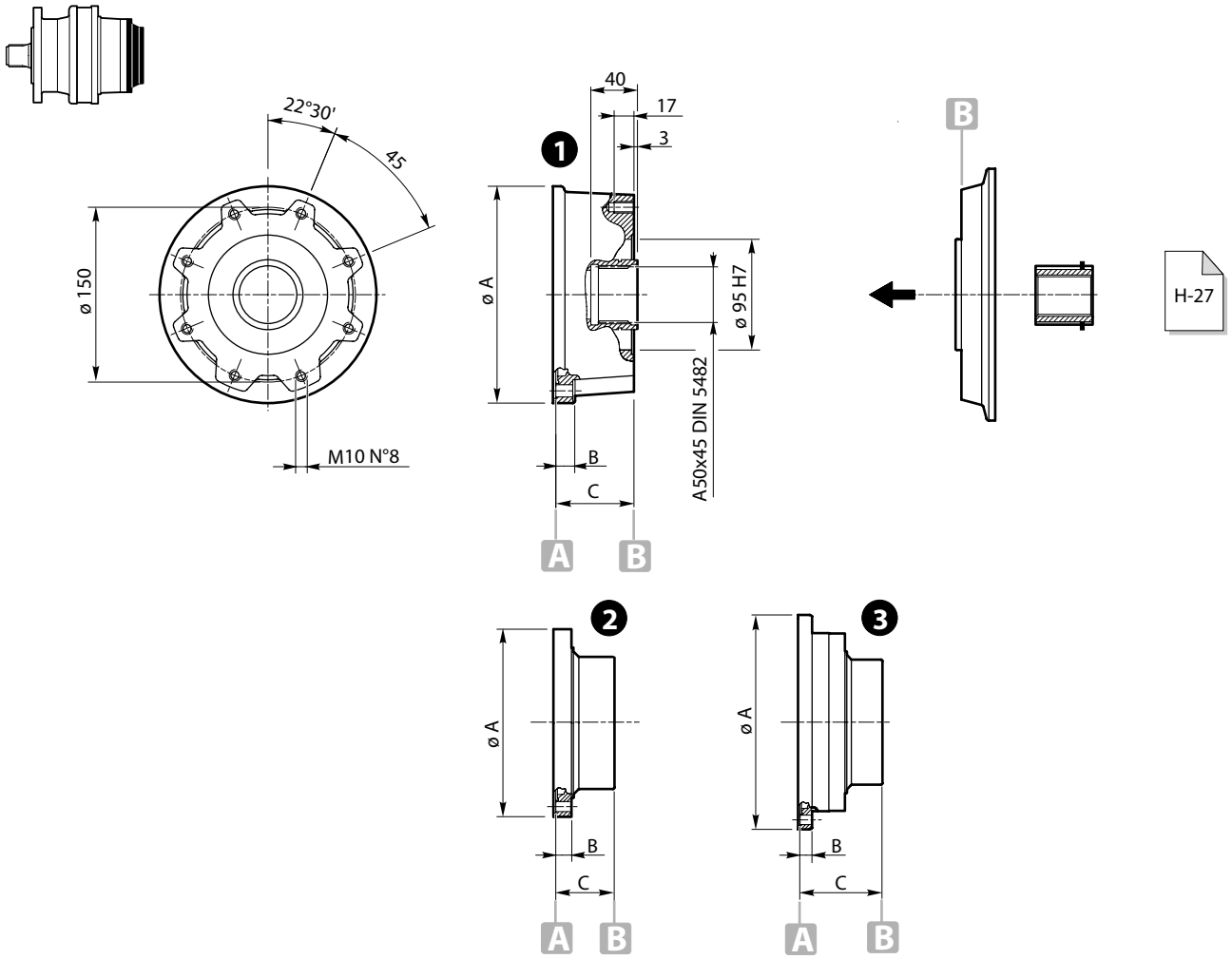
ENTRATE, ACCESSORI, POSIZIONI DI MONTAGGIO, PESI E VOLUMI

Le tavole degli accessori comprendono flange di adattamento e freni. In questa sezione sono inoltre rappresentate le varie posizioni di lavoro dei riduttori e le relative posizioni dei tappi di carico, scarico e livello olio e quelli di sfiato aria.
I pesi dei riduttori ed i volumi di olio sono puramente indicativi in quanto variano al variare del rapporto e degli accessori installati.
Qualora si desideri un'informazione precisa si contatti la rete vendita Dinamic Oil comunicando il codice di ordinazione in modo completo.

UK

INPUTS, ACCESSORIES, WEIGHTS, VOLUMES AND MOUNTING POSITIONS

The accessory tables include motor, adapter flanges and brakes. This section also shows the gearboxes working positions options; the location for oil filling, oil level and oil drain ports, as well as breather plugs.
Weights and oil volumes are purely indicatives because they vary with respect to the installed accessories and the reduction ratio.
When a precise figure is needed please contact Dinamic Oil sales network specifying the complete ordering code.



1

ø A	B	C	Code
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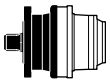

RE 111 - 112 - 113 - 114
RE 211 - 212 - 213 - 214
RE 241 - 242 - 243 - 244
RE 312 - 313 - 314
RE 512 - 513 - 514
RE 613 - 614
RE 813 - 814
RE 1023 - 1024
RE 1523 - 1524
RE 2004
RE 2524
RE 3004
RE 3514-4804
RE 6004L
RE 8005 - 8005L
GB 12015 - 12015L
GB 16005 - 16005L
CC30-CC120

2

ø A	B	C	Code
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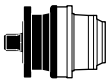

RE 311-511
RE 611 - 612
RE 812-1022
RE 1522-2003
RE 2523-3003
RE 3513-4803
RE 6003 - 6003L
RE 6004 - 6004L
RE 8004 - 8004L
GB 12014 - 12014L
GB 16004 - 16004L
GB 21004 - 21005
GB 26005-31005
GB 40005-45005
GB 53005
CC350

3

ø A	B	C	Code
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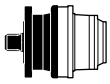
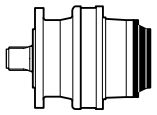
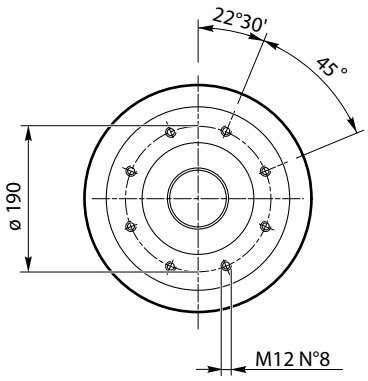
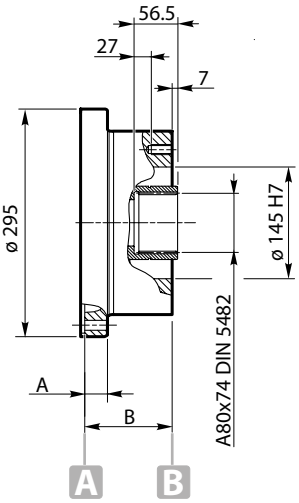
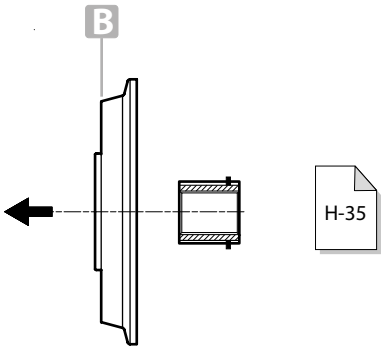


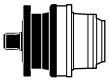
RE 811
RE 1021
RE 2522
RE 3002
RE 3512
RE 8003 - 8003L
GB 12013 - 12013L
GB 16003L
GB 26004
GB 31004
GB 40004
GB 85005
GB 110005
CC1000
CC600



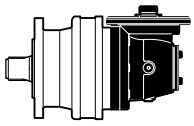


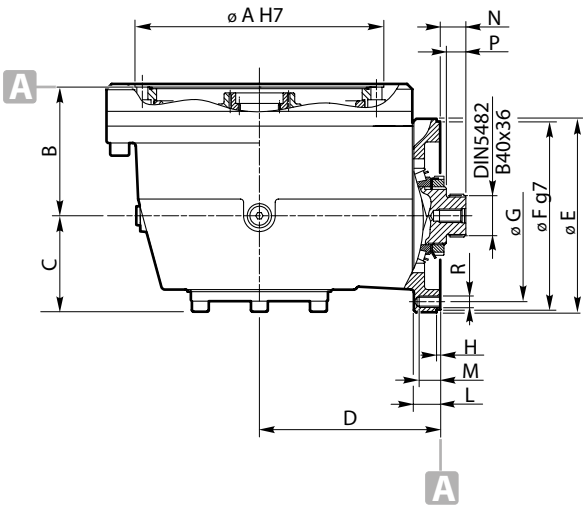


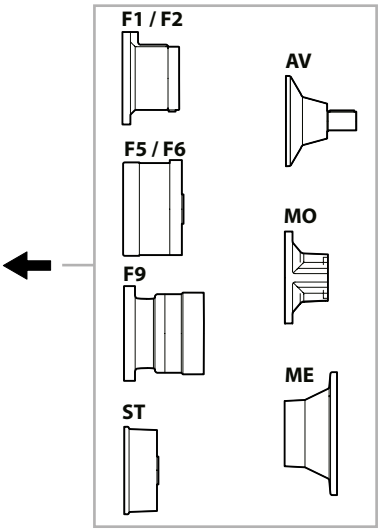


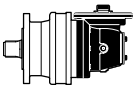


	A	B	Code
RE 811	30	114	K0700D3
RE 1021			
RE 2522			
RE 3002			
RE 3512			
RE 8003 - 8003L			
GB 12013 - 12013L			
GB 16003L			
GB 26004			
GB 31004			
GB 40004			
GB 85005			
GB 110005			
CC600	50	134	
CC1000	61	145	





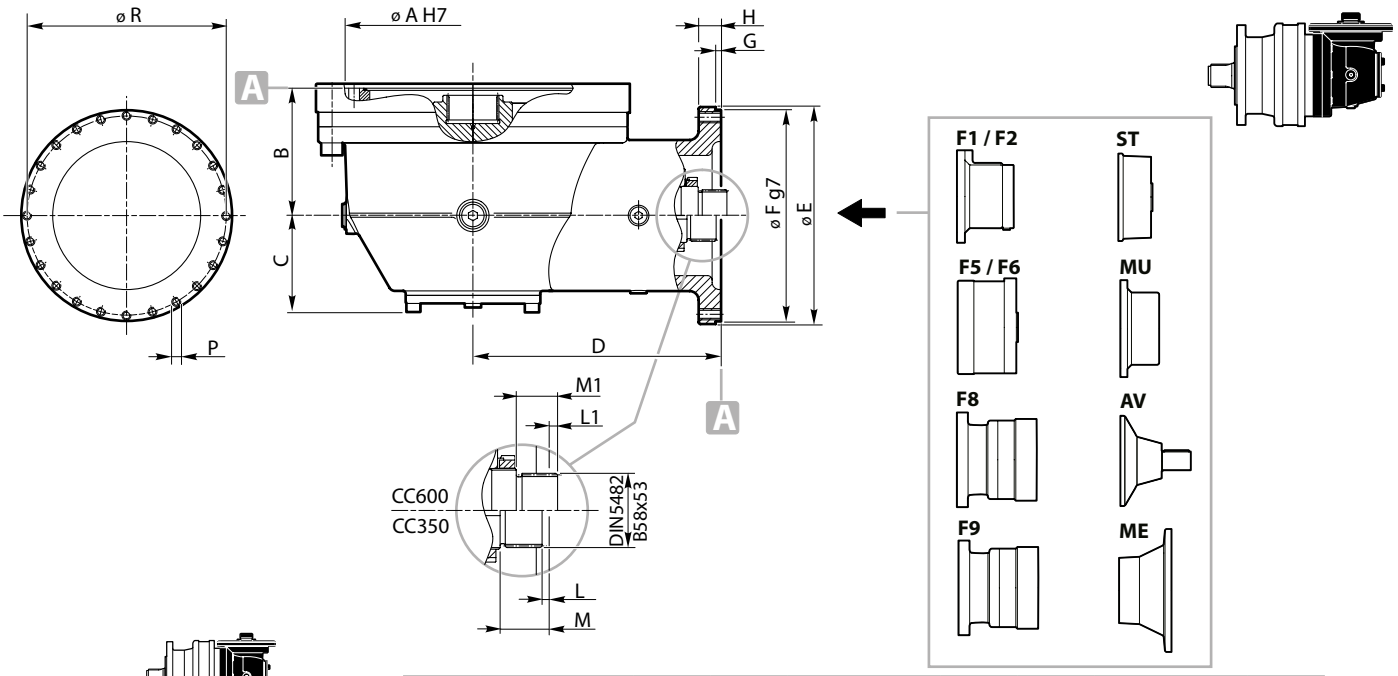


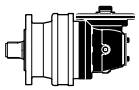


		øA	B	C	D	øE	øF	øG	H	L	N	P	R
CC30 **110/210/240**	**RA 112-113-114** **RA 212-213-214** **RA 242-243-244** **RA 313-314** **RA 513-514** **RA 814** **RA 1024** **RA 1524** **RA 2004L**	178	84	71.5	113.8	184	178	165	4	15.7	23.75	18.25	N°8-M10 AT 45°

		øA	B	C	D	øE	øF	øG	H	L	M	P	R
CC120 **310/510/610**	**RA 312** **RA 512-612** **RA 613-813** **RA 1023** **RA 1523** **RA 2003-2003L** **RA 2524** **RA 3004** **RA 3514** **RA 4804** **RA 6004-6004L** **GBA 12015-12015L** **GBA 16005-16005L** **GBA 21005**	236	122	91	171.5	183	178	165	3.5	25	24.25	18.5	N°8-M10 AT 45°

CC350 - CC600



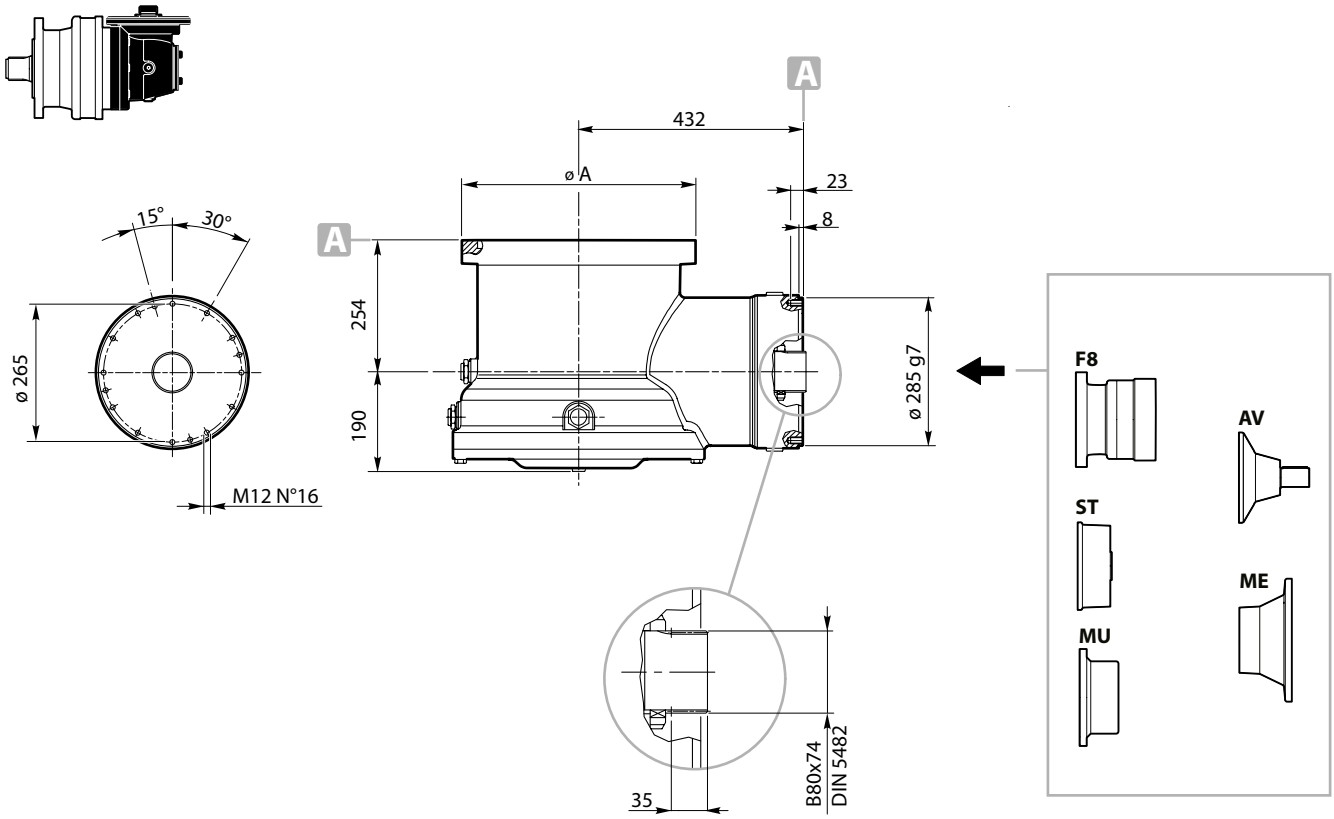


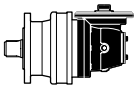
		øA	B	C	D	øE	øF	G	H	L	M	P	R
CC350 810/1020	**RA 812** **RA 1022** **RA 2523** **RA 3023** **RA 3523** **RA 8004-8004L** **GBA 12014-12014L** **GB 16004L** **GBA 26005** **GBA 31005** **GBA 40005**	285	142	108	276.75	242	236	6	25	5,5	38	N°24-M10 AT 15°	222

		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 810/1020	**RA 812** **RA 1022** **RA 2523** **RA 3023** **RA 3523** **RA 8004** **GBA 12014** **GBA 16004** **GBA 26005** **GBA 31005** **GBA 40005**	285	198	128	310	293	285	8	27	6,5	25,5	N°12-M10 AT 30°	265

		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 1520/2000	**RA 1522** **RA 2002** **RA 4803** **RA 6003-6003L** **GBA 16014** **GBA 21004** **GBA 45005** **GBA 53005** **GBA 61005**	340	206	128	310	293	285	8	27	6,5	25,5	N°12-M10 AT 30°	265

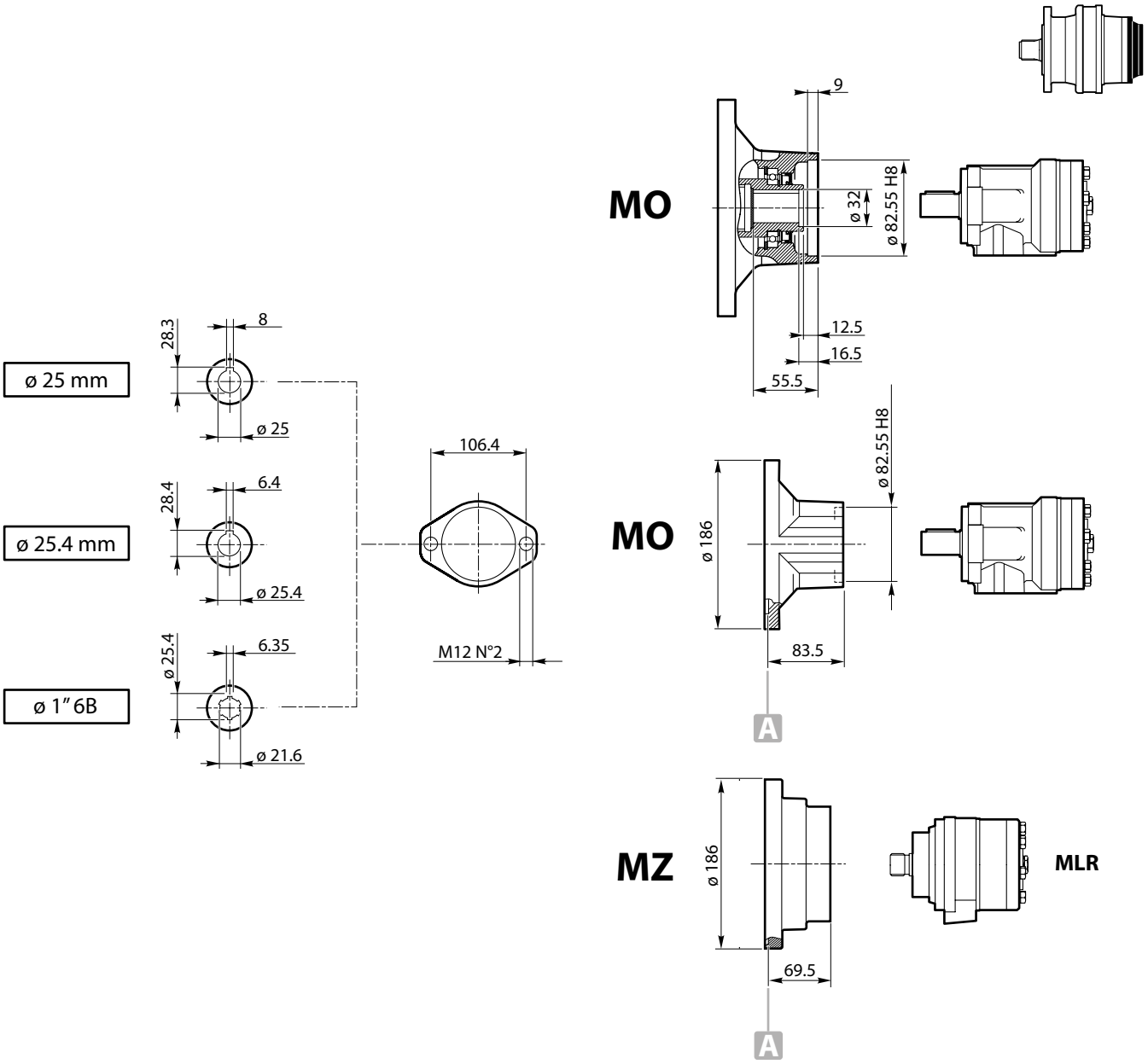
		øA	B	C	D	øE	øF	G	H	L1	M1	P	R
CC600 2520/3000	**RA 2522** **RA 3002** **RA 8003-8003L** **GBA 12013-12013L** **GBA 26004** **GBA 31004** **GBA 40004** **GBA 85005** **GBA 110005**	395	194	128	310	293	285	8	27	6,5	25,5	N°12-M10 AT 30°	265

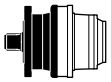




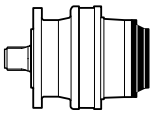
	ø A
RA 3512-4802	452
RA 6002-8002	490
GBA 16003-16003L	452
GBA 21003-26003	490
GBA 45004	452
GBA 53004-61004	490
GBA 85004	490
GBA 130005	452

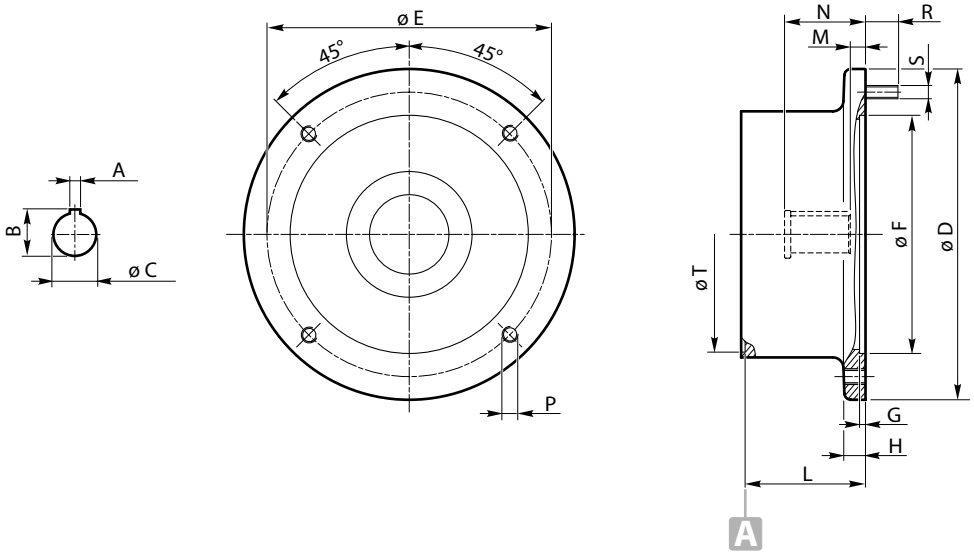
CC1000

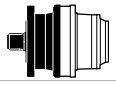




	Type	Code
RE 111 - 112 - 113 - 114	MO 25 MO 25.4 MO 1″6B MZ	K0700AA K0700AB K0700AC —
RE 211 - 212 - 213 - 214		
RE 241 - 242 - 243 - 244		
RE 312 - 313 - 314		
RE 512 - 513 - 514		
RE 613 - 614		
RE 813 - 814		
RE 1023 - 1024		
RE 1523 - 1524		
RE 2004		
RE 2524		
RE 3004		
RE 3514-4804		
RE 6004L		
RE 8005 - 8005L		
GB 12015 - 12015L		
GB 16005 - 16005L		
CC30-CC120		



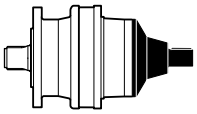


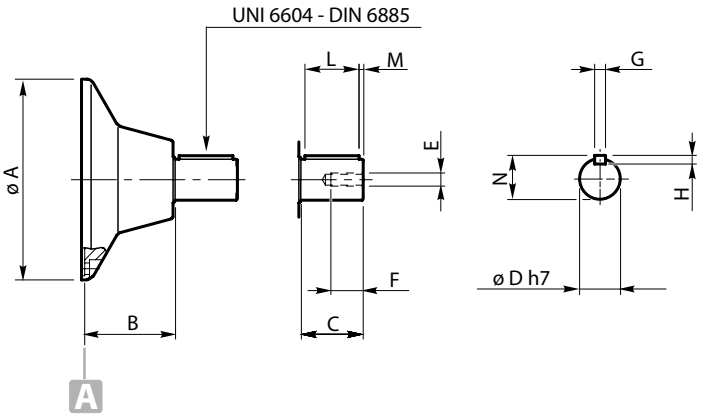


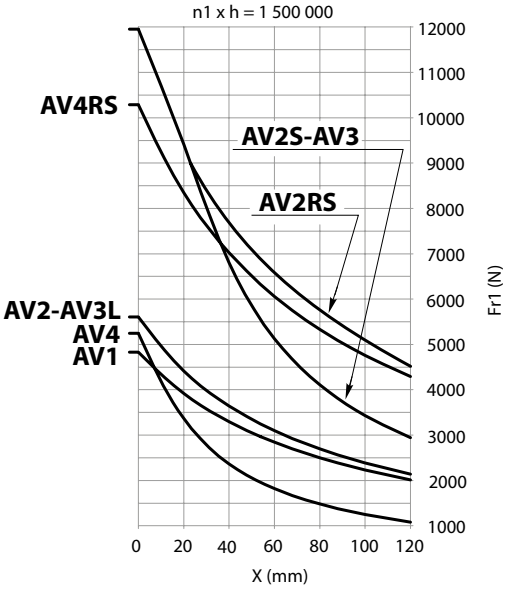
	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 111 - 112 - 113 - 114 RE 211 - 212 - 213 - 214 RE 241 - 242 - 243 - 244 RE 312 - 313 - 314 RE 512 - 513 - 514 RE 613 - 614 RE 813 - 814 RE 1023 - 1024 RE 1523 - 1524 RE 2004 - RE 2004L RE 2524 RE 3004 RE 3514 - 4804 RE 6004L RE 8005 - 8005L GB 12015 - 12015L GB 16005 - 16005L CC30-CC120	**ME 80**	6	21.8	19	200	165	130	4	16	82.5	6.5	44.5	—	25	N'4-M10	178
	ME 90	8	27.3	24	200	165	130	4	16	82.5	11.5	52	—	25	N'4-M10	
	ME 100/112	8	31.3	28	250	215	180	4.5	16	91	11.5	61	N°4-M12	—	—	
	ME 132	10	41.3	38	300	265	230	5	20	115.5	8	82.5	N°4-M12	—	—	
	ME 160	12	45.3	42	350	300	250	6	20	145	23	110.5	N°4-M16	—	—	
	ME 180	14	51.8	48	350	300	250	6	20	145	23	110.5	N°4-M16	—	—	

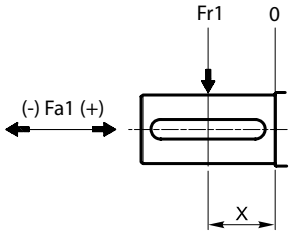
	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 311-511 RE 611 - 612 RE 812 -1022 RE 1522 - 2002 - 2002L RE 2003 RE 2523 - 3003 RE 3513 - 4803 RE 6003 - 6003L RE 6004 - 6004L RE 8004 - 8004L GB 12004 - 12004L GB 16004 - 16004L GB 21004 - 21005 GB 26005 - 31005 GB 40005 - 45005 GB 53005 CC350	**ME132**	10	41.3	38	300	265	230	5	20	125.5	8	82.5	N°4-M12	—	—	236
	ME160	12	45.3	42	344	300	250	7	20	154.5	23	110.5	N°4-M16	—	—	
	ME180	14	51.8	48	344	300	250	7	20	154.5	23	110.5	N°4-M16	—	—	
	ME225	18	64.4	60	450	400	350	7	20	191.5	30	143.5	N°4-M16	—	—	

	Input type	Shaft			Flange											
		A	B	C	D	E	F	G	H	L	M	N	P	R	S	T
RE 811 RE 1021 RE 2522 RE 3002 RE 3512 RE 8003 - 8003L GB 12013 - 12013L GB 16003L GB 26004 GB 31004 GB 40004 GB 85005 GB 110005 CC600 - CC1000	**ME200**	16	59.3	55	400	350	300	7	18	165	11.5	114.5	N°4-M18	—	—	285
	ME225	18	64.4	60	450	400	350	7	20	194	30.5	143.5	N°8-M18	—	—	
	ME250	18	6.4	65	550	500	450	7	22	195	17	145	N°8-ø19	—	—	
	ME280	20	79.9	75	550	500	450	7	22	195	12	145	N°8-ø19	—	—	

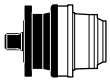








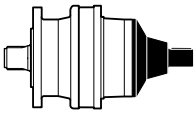
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1	4 800	4 800
AV2 - AV3L - AV4	7 800	7 800
AV2S - AV3	4 900	7 800
AV2RS - AV4RS	4 900	4 900

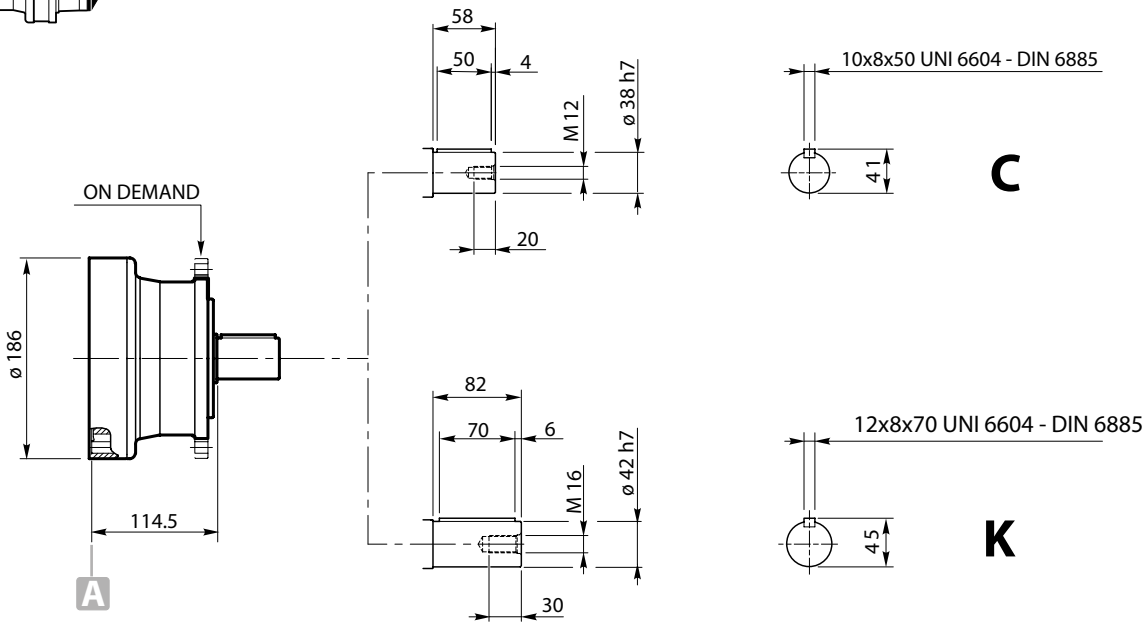


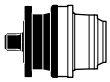
	Type	øA	B	C	øD	E	F	G	H	L	M	N	Code
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614 - 813 - 814** **RE 1023 - 1024 -1523 - 1524** **RE 2000 - 2524 - 3004 -3514** **RE 4804 - 6004L - 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L** **CC30-CC120**	**AV1**	186	83.5	58	38	M12	30	10	8	50	4	41	K0700AH
	AV2	186	96.5	82	42	M12	30	12	8	70	6	45	K0700AI
	AV3L	186	96.5	82	48	M16	40	14	9	70	6	51.5	K0700AI
	AV4	186	108.5	65	40	M12	30	12	8	60	2.5	43	K0700AX
	AV4RS	186	108.5	65	40	M12	30	12	8	60	2.5	43	K0700AX

	Type	øA	B	C	øD	E	F	G	H	L	M	N	Code
RE 311-511-611-612 **RE 812-1022-1522-2003** **RE 2523-3003-3513-4803** **RE 6003-6003L-6004-6004L** **RE 8004-8004L** **GB 12014-12014L-16004-16004L** **GB 21004-21005-26005-31005** **GB 40005-45005-53005** **GB 61005** **CC350-CC600**	**AV2**	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV2S	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV2RS	244	106	82	42	M12	30	12	8	70	6	45	K0700DL
	AV3	244	106	82	48	M16	40	14	9	70	6	51.5	K0700DM
	AV4	244	118	65	40	M12	30	12	8	60	2.5	43	K0700DJ
	AV4RS	244	118	65	40	M12	30	12	8	60	2.5	43	K0700DJ

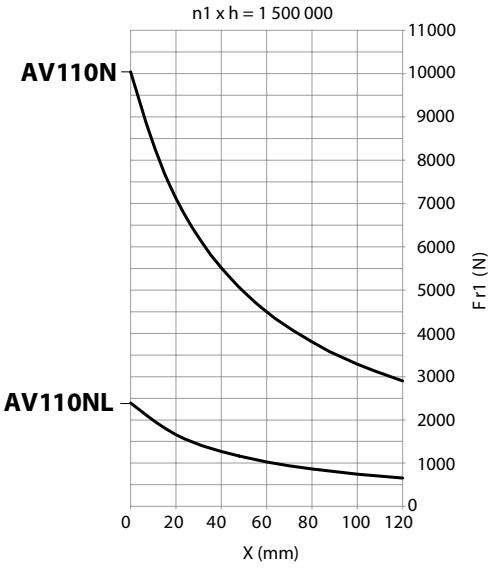
AVF-AV110N-NL

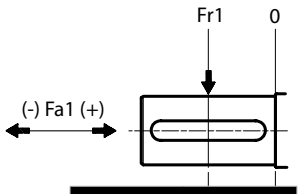






	Code
RE 111 - 112 - 113 - 114	K0700AY
RE 211 - 212 - 213 - 214	
RE 241 - 242 - 243 - 244	
RE 312 - 313 - 314	
RE 512 - 513 - 514	
RE 613 - 614	
RE 813 - 814	
RE 1023 - 1024	
RE 1523 - 1524	
RE 2004	
RE 2524	
RE 3004	
RE 3514	
RE 4804	
RE 6004L	
RE 8005 - 8005L	
GB 12015 - 12015L	
GB 16005 - 16005L	
CC30-CC120	





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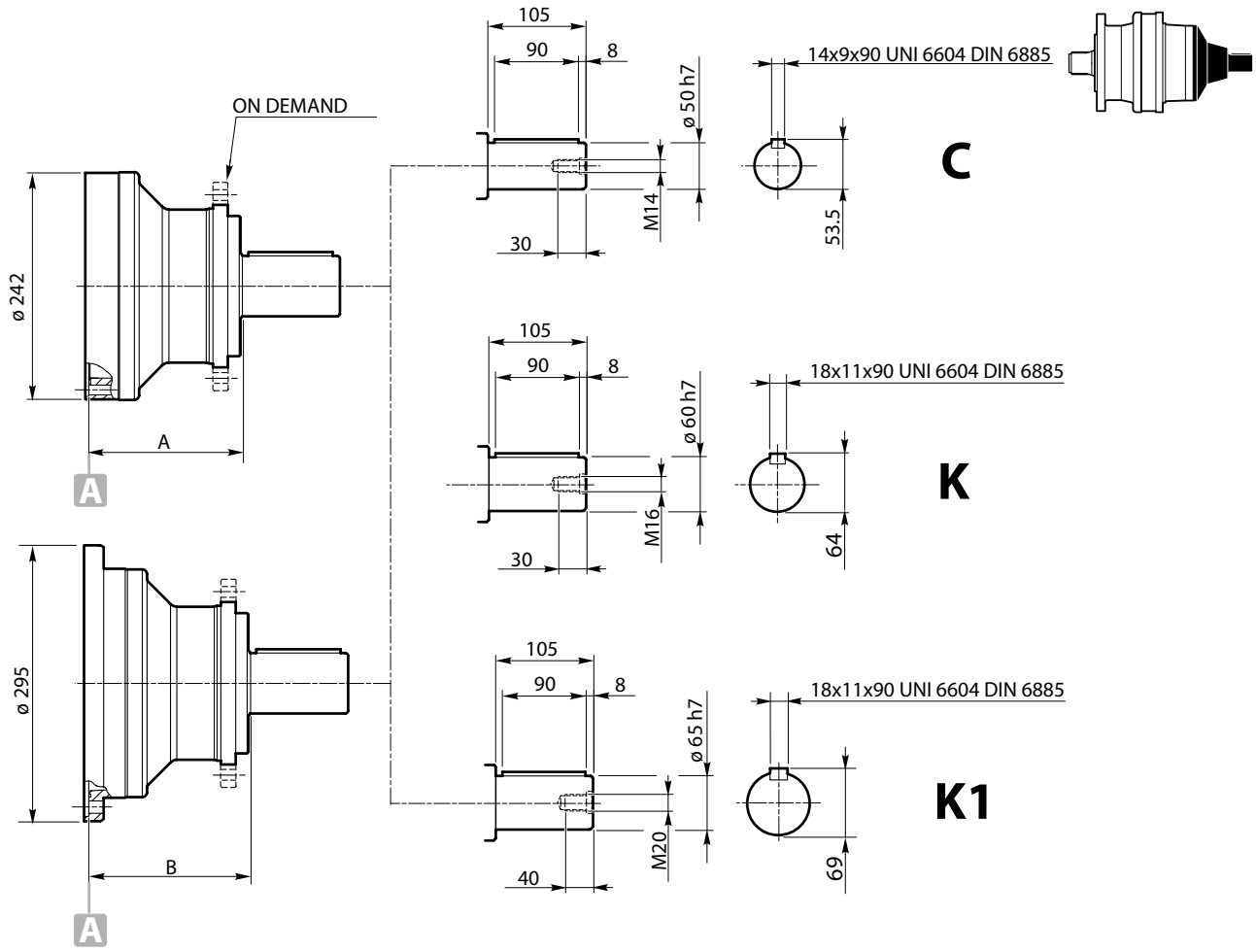
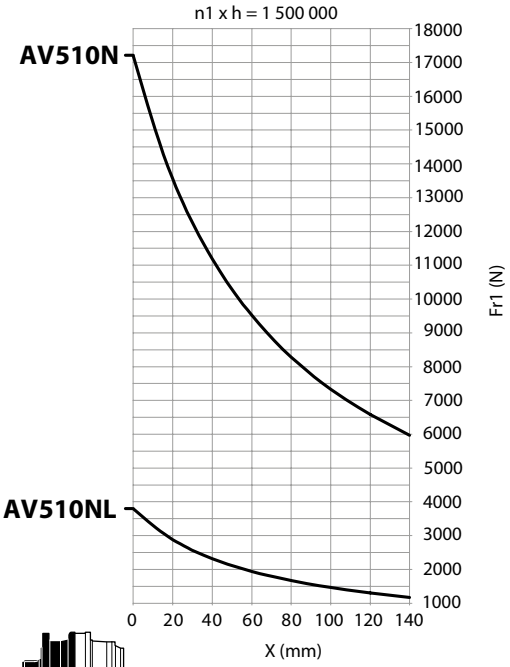
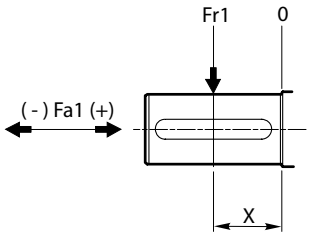
	Fa1 (+)	Fa1 (-)
AV110N	4 900	7 800
AV110NL	3 750	3 750

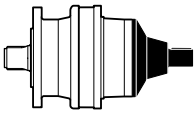


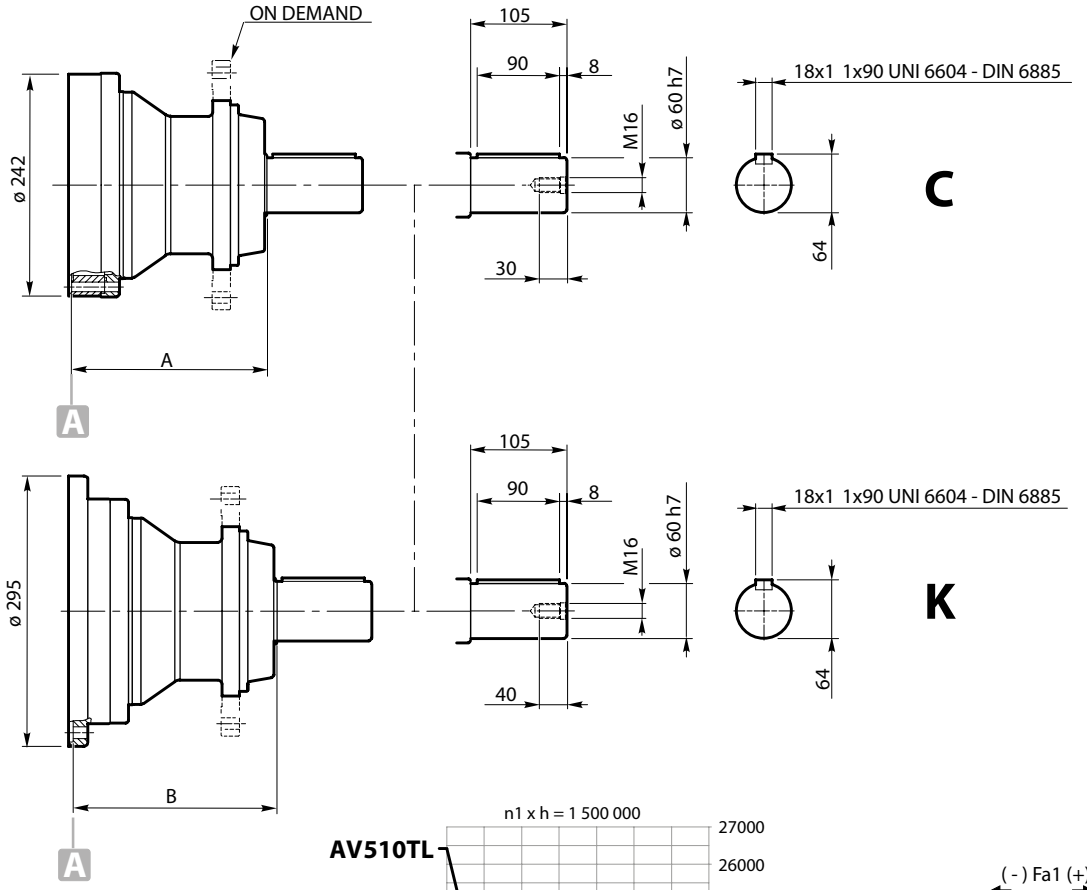


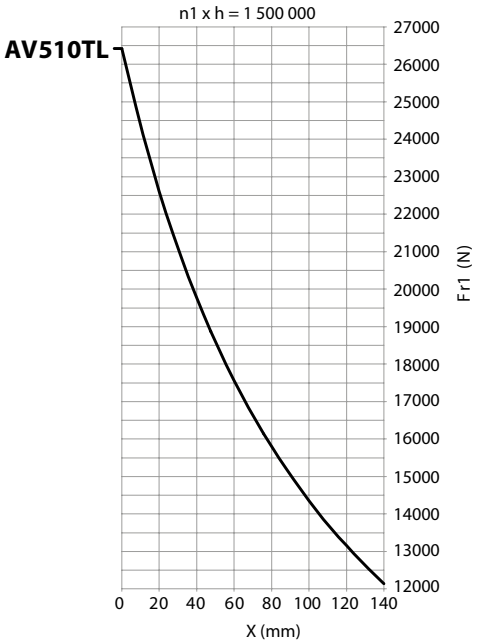


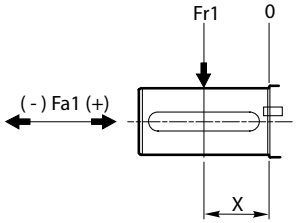
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV510NL	6 600	6 600
AV510N	15 250	15 250

	A	B
RE 311-511-611-612-812-1022-1522-2003-2523-3003-3513-4803-6003-6003L	164	—
RE 6004-6004L-8004-8004L	164	—
GB 12014-12014L-16004-16004L-21004-21005-26005-31005-40005-45005	164	—
GB 53005-61005	—	172.5
RE 811-1021-2522-3002-3512-8003-8003L	—	172.5
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	—	172.5
CC350	128	—
CC600	—	153

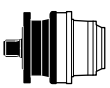






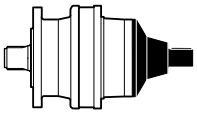


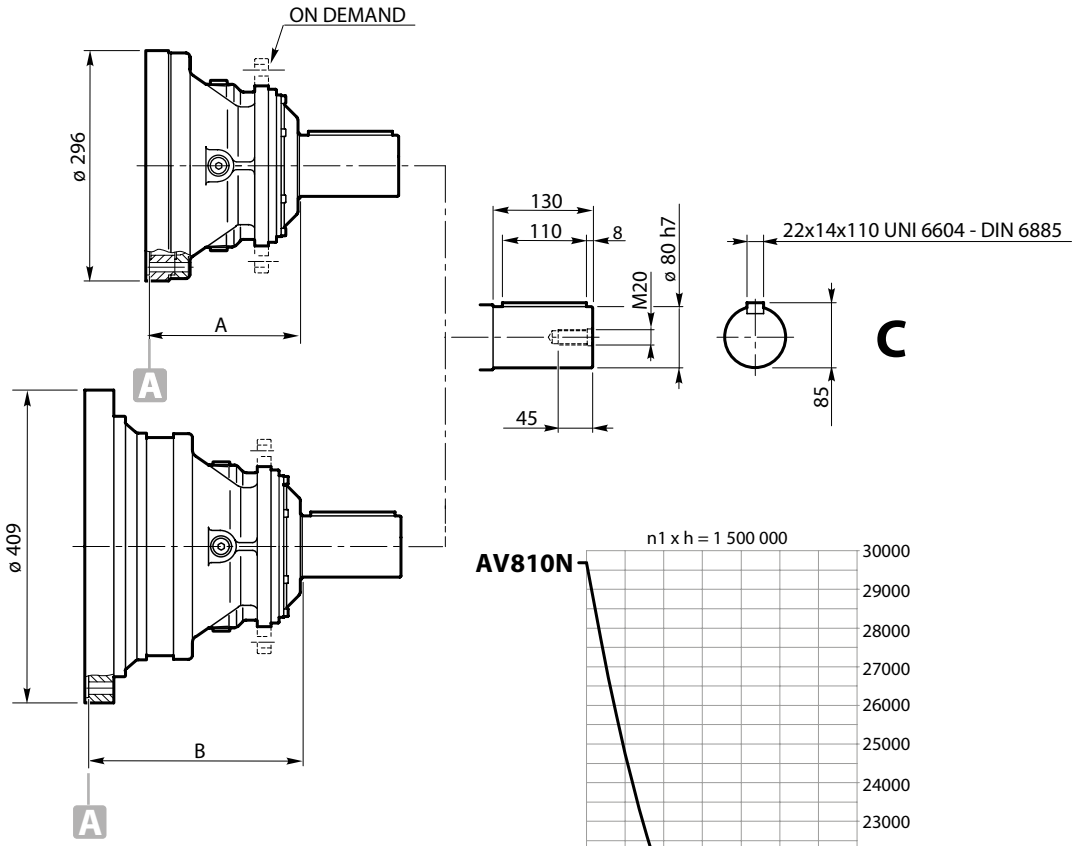
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV510TL	21 600	21 600

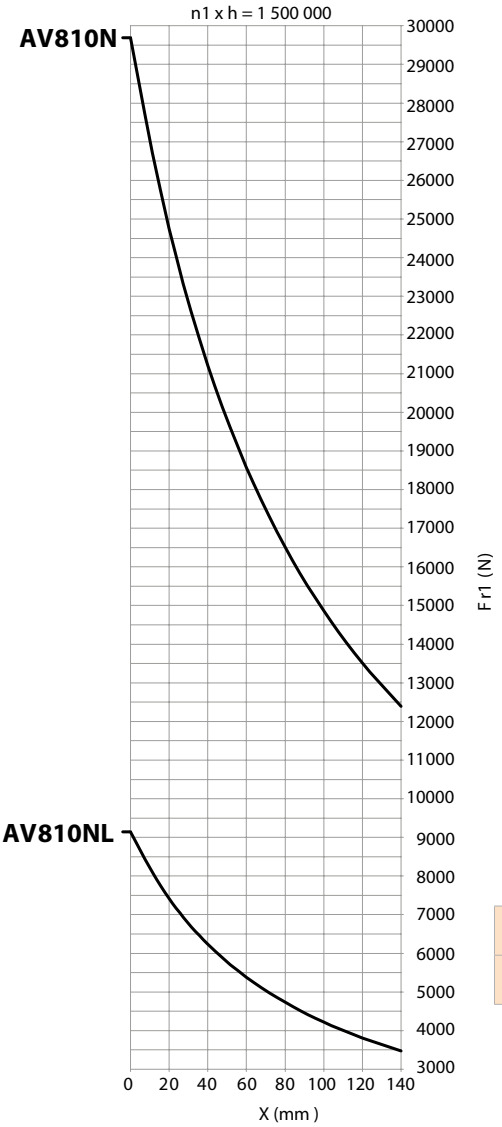


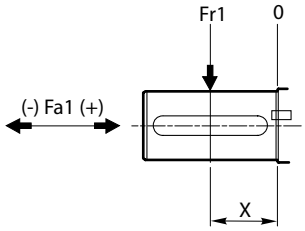
	A	B
RE 311-511-611-612-812-1022-1522-2003-2523-3003-3513-4803-6003-6003L	212	—
RE 6004-6004L-8004-8004L	212	—
GB 12014-12014L-16004-16004L-21004-21005-26005-31005-40005-45005	212	—
GB 53005-61005	212	—
RE 811-1021-2522-3002-3512-8003-8003L	—	221
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	—	221
CC350	176	—
CC600	—	201

AVF-AV810N-NL

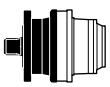






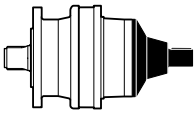


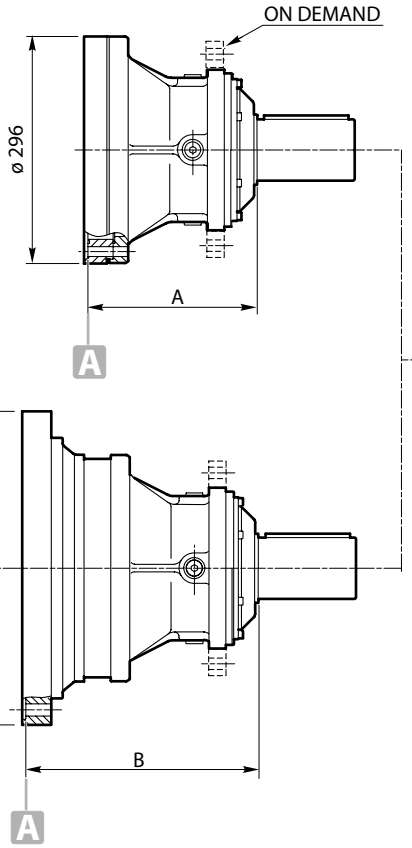
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV810NL	14 800	14 800
AV810N	25 900	25 900

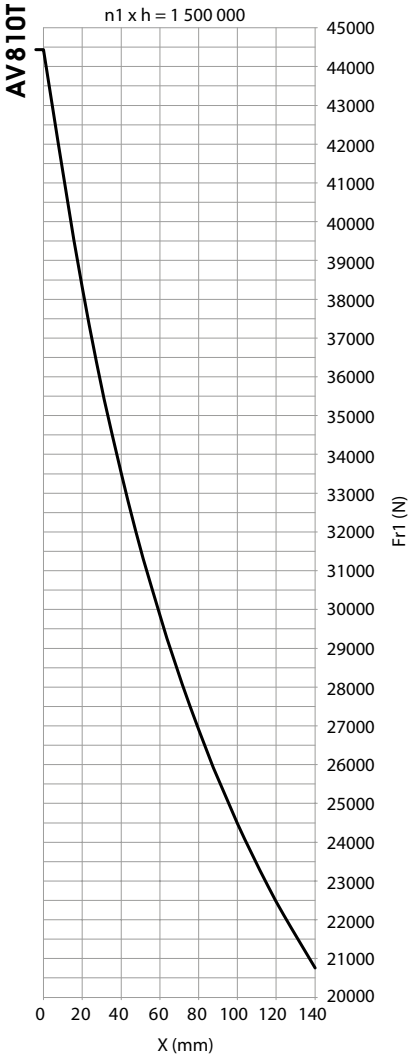


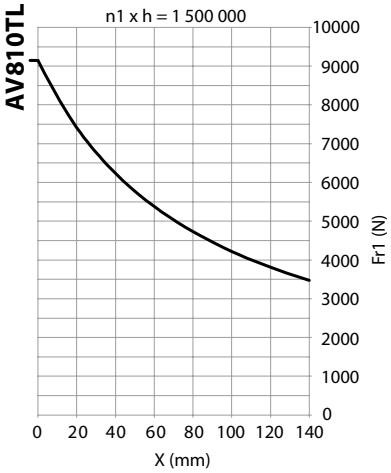
	A	B
RE 811-1021-2522-3002-3512-8003-8003L	195.5	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	195.5	—
RE 2521-3001-8002-8002L	—	278
GB 12012-12012L-26003-31003-40003-85004-110004-205005-235005	—	278
CC600	162.5	—
CC1000	162.5	—

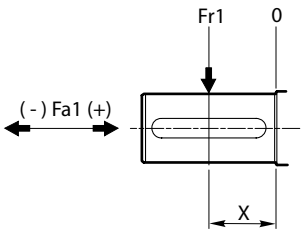
AVF-AV810T-TL



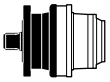






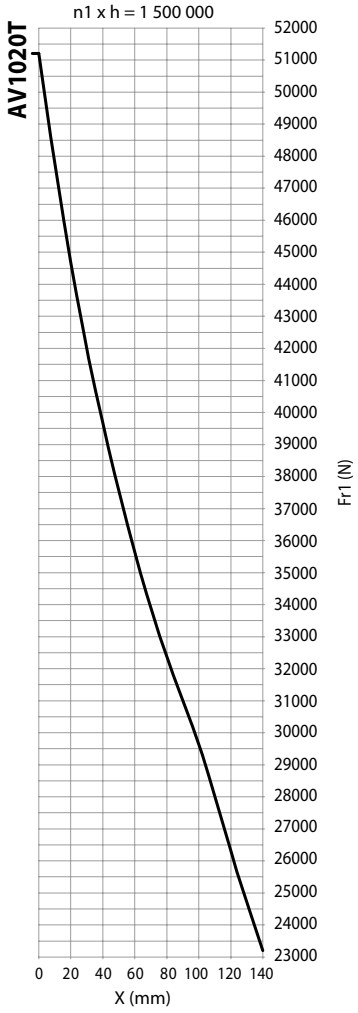


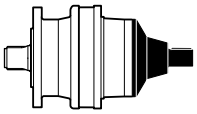
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV810T	39 200	25 900

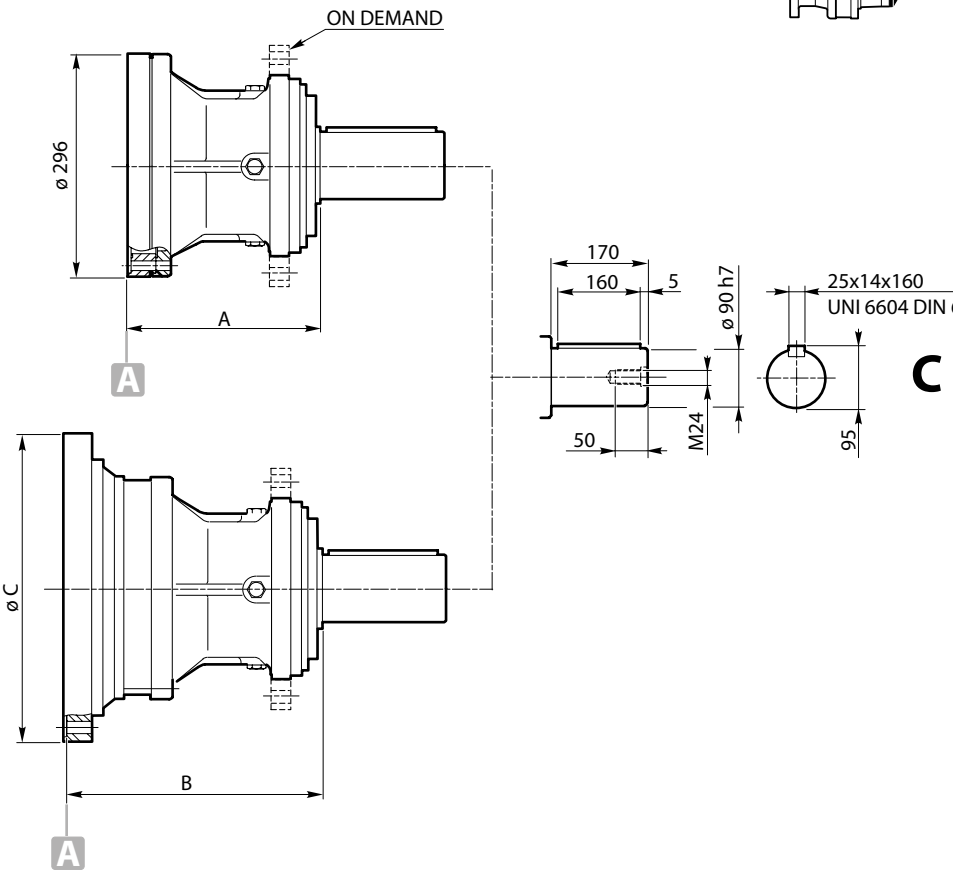


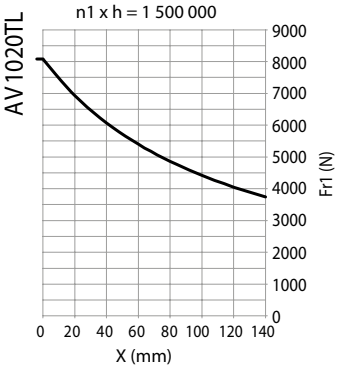
	A	B
RE 811-1021-2522-3002-3512-8003-8003L	218	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	218	—
RE 2521-3001-8002-8002L	—	296
GB 12012-12012L-26003-31003-40003-85004-110004-205005-235005	—	296
CC600	185	—
CC1000	185	—

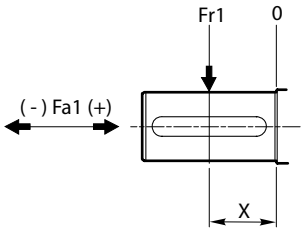
AVF-AV1020T-TL



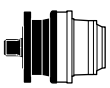






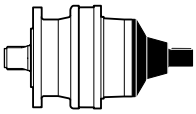


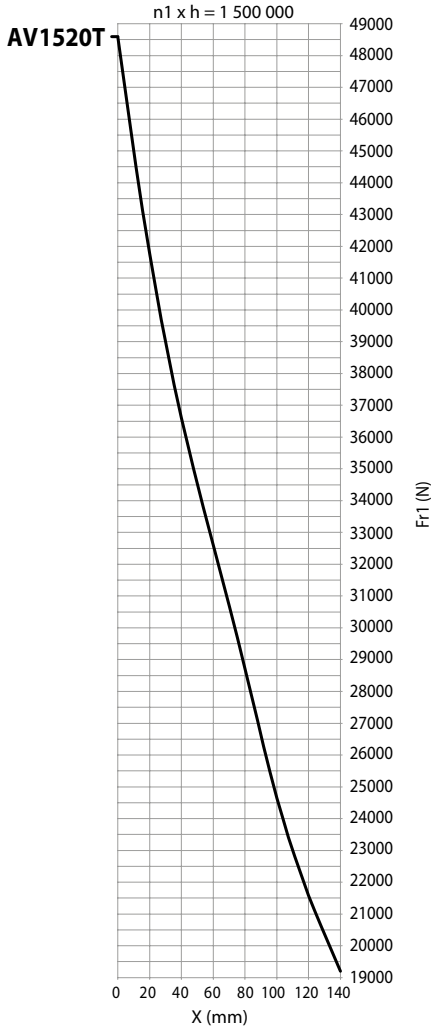
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1020T	46 450	26 850

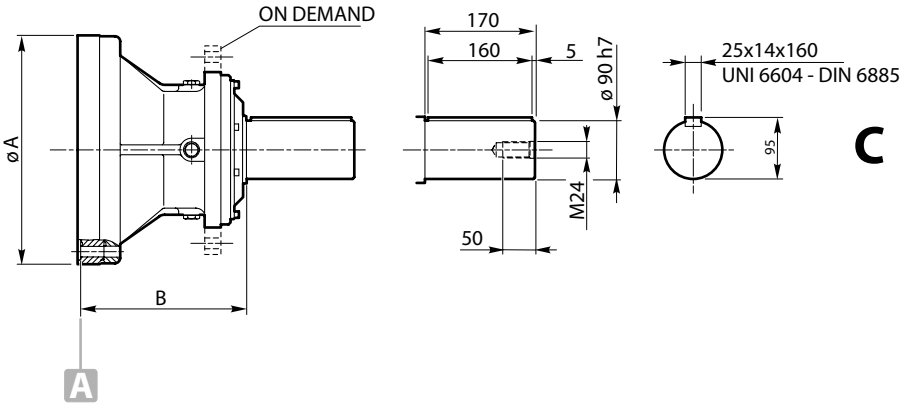


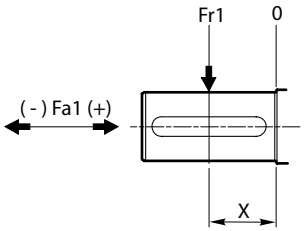
	A	B	C
RE 811-1021-2522-3002-3512-8003-8003L	249	—	—
GB 12013-12013L-16003L-26004-31004-40004-85005-110005	249	—	—
RE 2521-3001-8002-8002L	—	327	409
GB 12012-12012L-26003-31003-40003-85004-110004	—	327	409
RE 3511-4801	—	348	452
GB 16002-16002L-45003-130004	—	348	452
CC1000	216	—	—

AVF-AV1520T

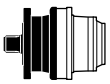




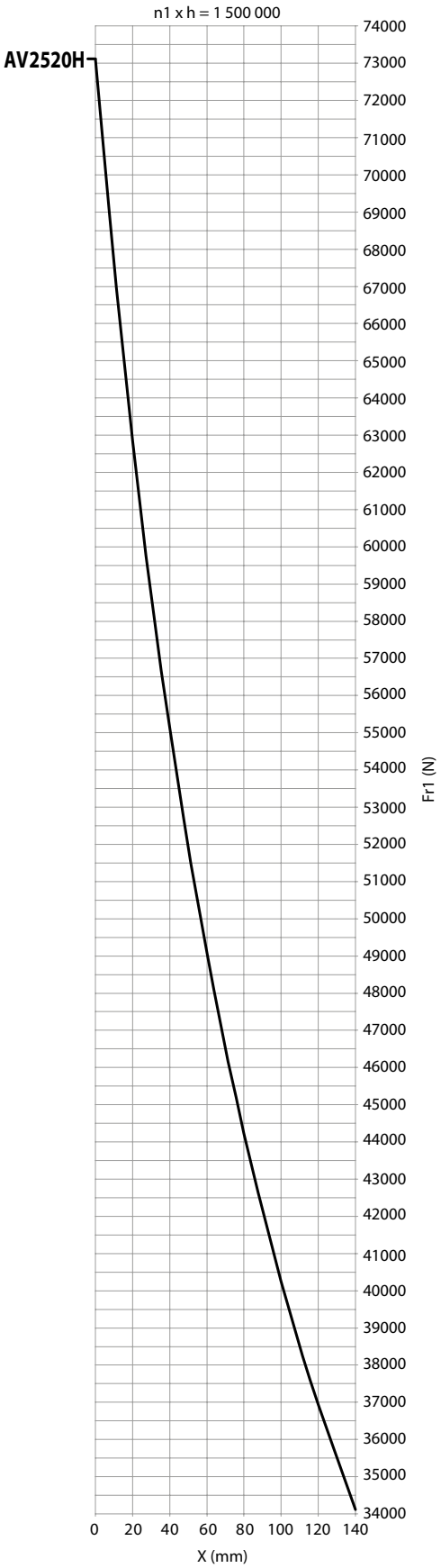


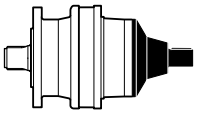


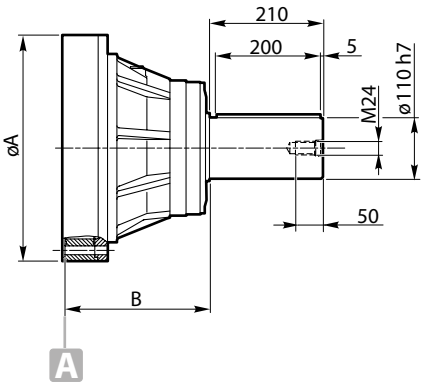
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV1520T	26 000	8 500

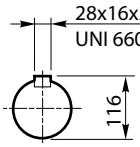


	A	B
RE 1521-2001-6002-6002L	353	252
GB 21003-45004-53004-61004-130005	353	252
RE 6001	490	321
GB 21002-53003-61003-150004	490	321



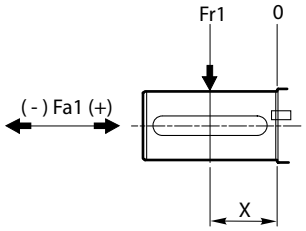


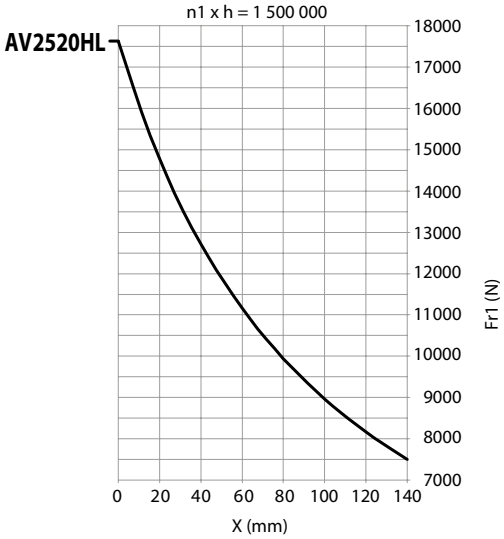


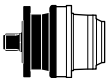


C

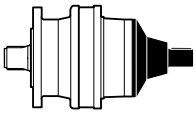
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV2520H	66 000	50 000
AV2520HL	29 700	29 700

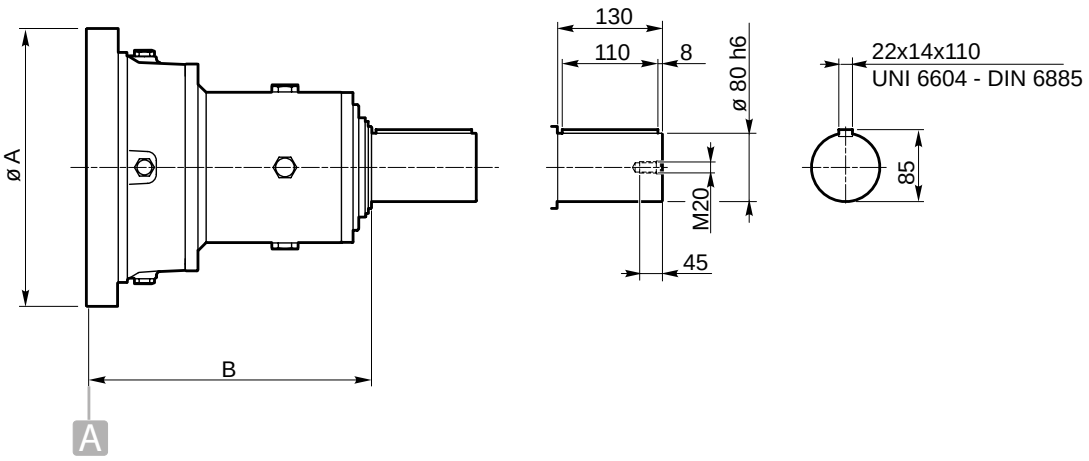


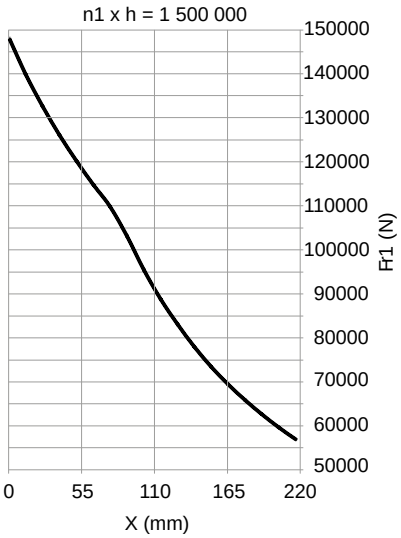




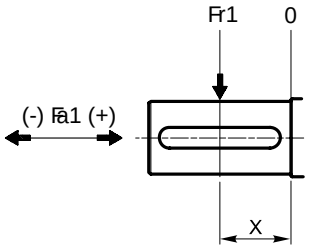
	A	B
RE 2521-3001-8002-8002L	409	257
GB 12012-12012L--26003-31003-40003 GB 85004-110004-205005-235005	409	257
RE 3511-4801	452	320
GB 16002-16002L-45003-130004	452	320
RE 6001	490	293
GB 21002-53003-61003-150004	490	293
RE 8001	490	385
GB 26002-85003	490	385
GB 12011-16001-31002-40002-45002-110003 GB 130003-205004-235004	368	610

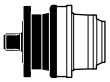




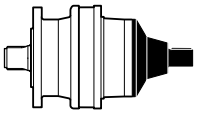


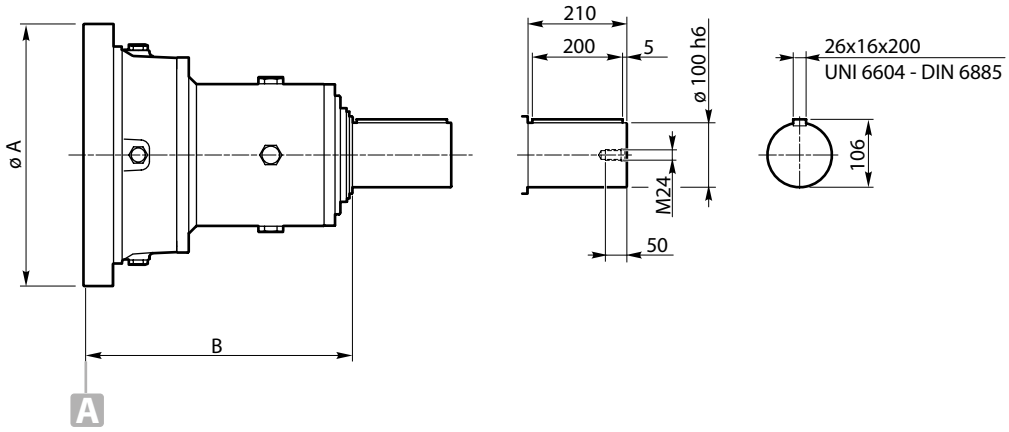
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV80	31 700	31 700

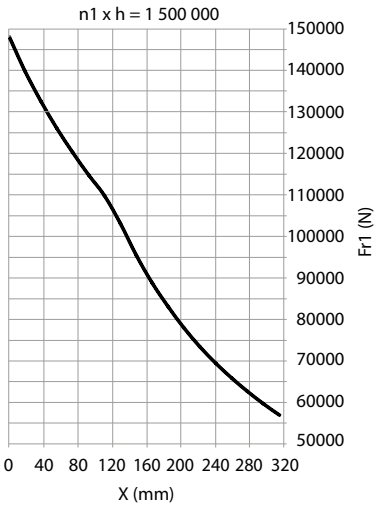




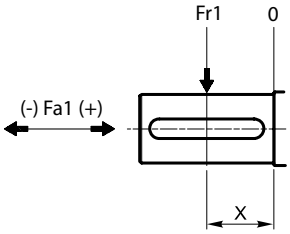
	A	B
RE 811-1021-2522-3002-3512-80003-8003L	295	187.5
GB 12013-12013L-16003L-260004-31004-40004-85005-110005	295	187.5
RE 2521-3001-8002-8002L	409	298
GB 12012-12012L-26003-31003-40003-85004-110004-205003	409	298

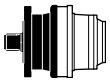






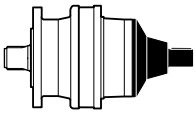
	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV100	52 000	-

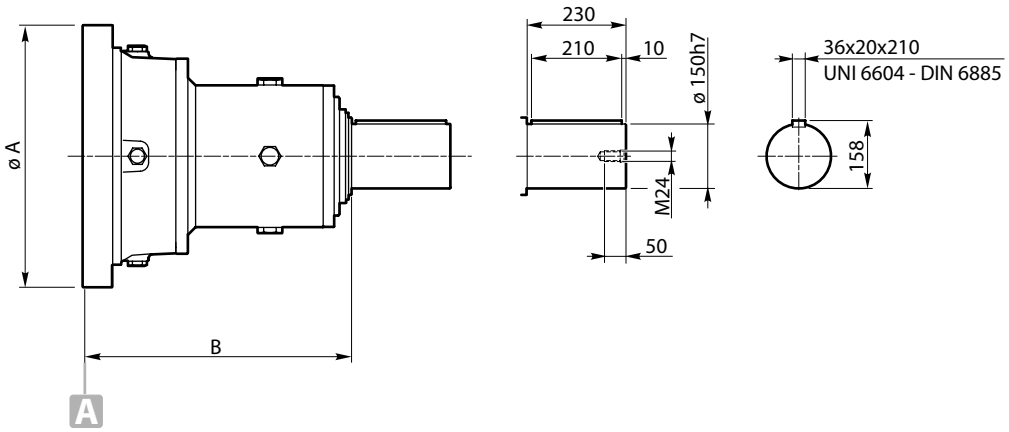


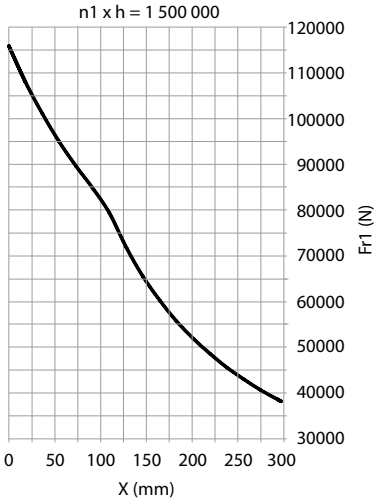


	A	B
RE 3511-4801	452	464.5
GB 16002-45003-130004	452	464.5
RE 6001-8001	490	437
GB 21002-26002-53003-61003-85003-150004	490	437
GB 12011-16001	610	550
GB 31002-40002-45002-110003-130003-150003-205004-235004	610	550

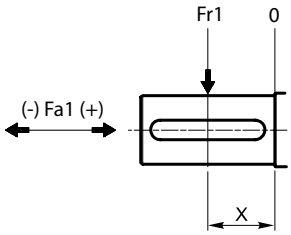
AV150

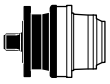




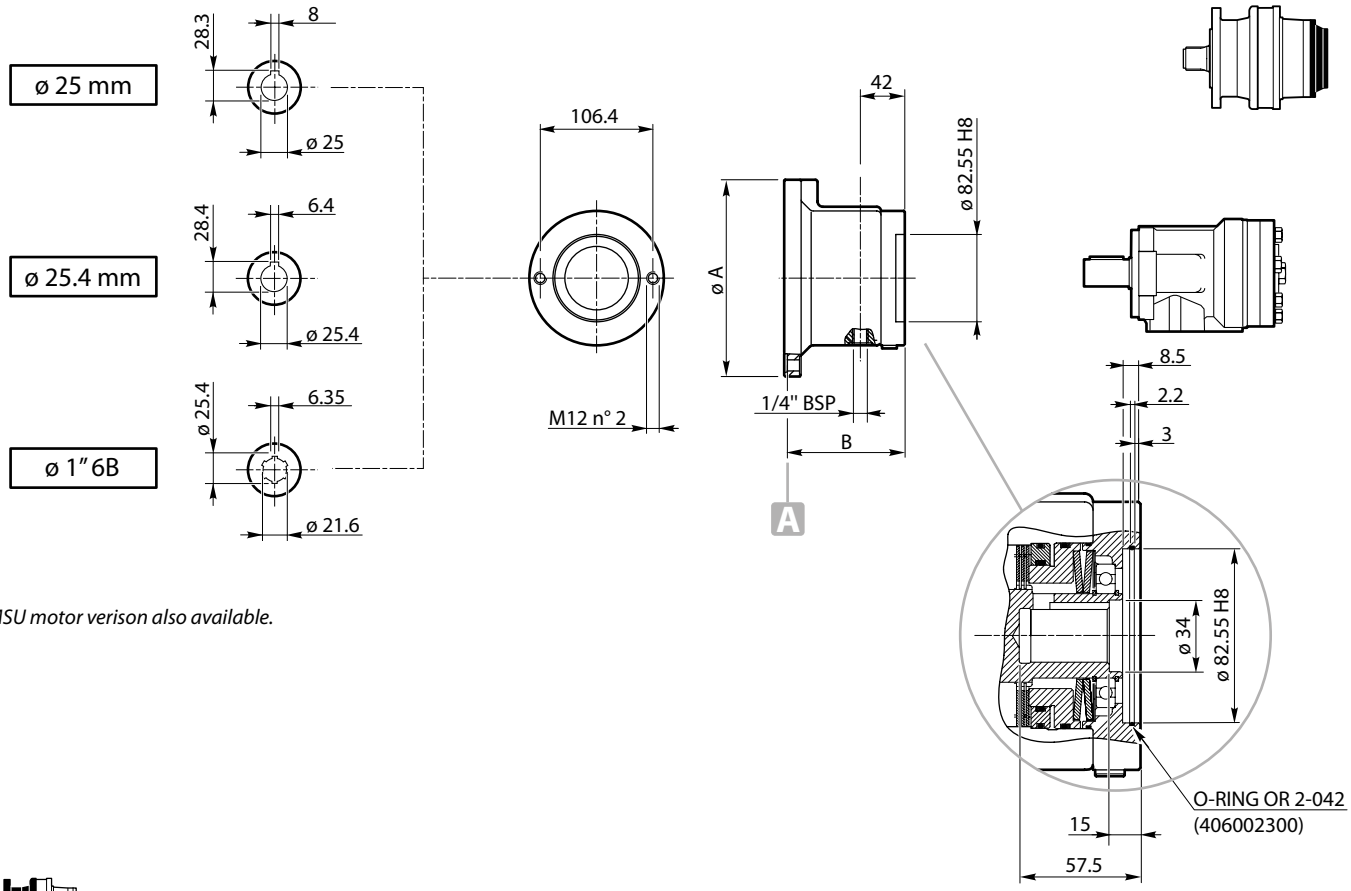


	n1 x h = 1 500 000 Fa1 max (Fr1 = 0)	
	Fa1 (+)	Fa1 (-)
AV150	63 000	-

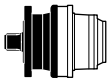




	A	B
RE 6001-8001	490	634
GB 21002-26002-53003-61003-150004	490	634
GB 12011-16001	610	626
GB 31002-40002-45002-110003-130003-15000-205004-235004	610	626

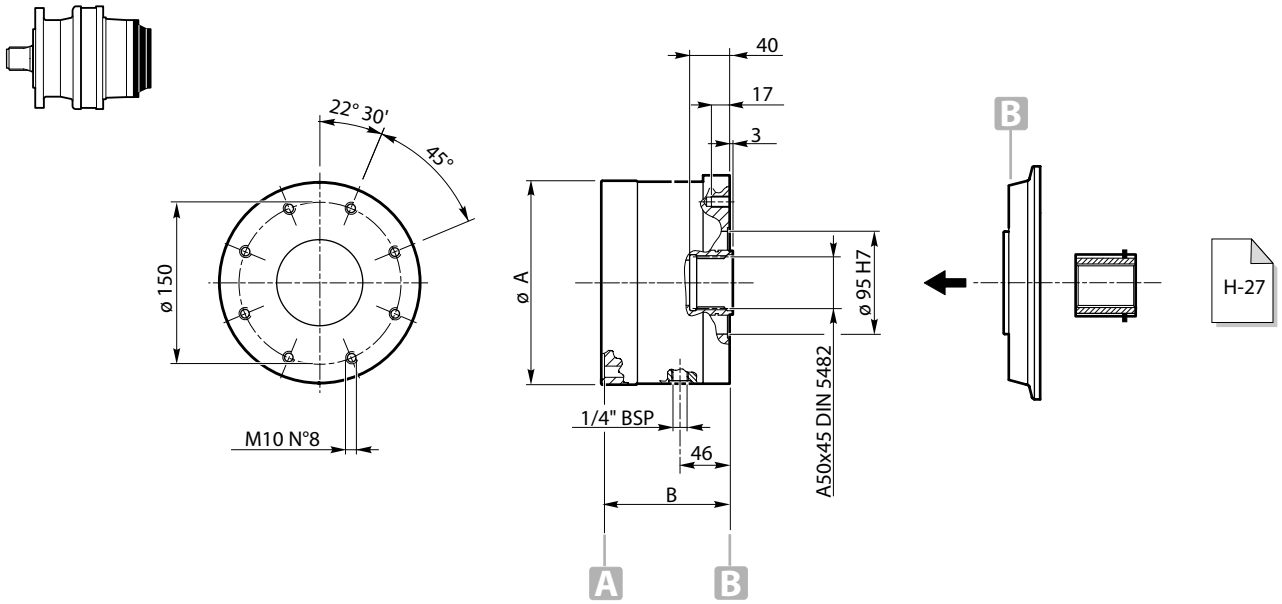


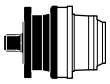
OMSU motor verison also available.



	ø A	B		F 01	F 10	F 11	F 12	F 13	F 14	F 05	F 16	
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614** **RE 813 - 814** **RE 1023 - 1024** **RE 1523 - 1524** **RE 2004** **RE 2524** **RE 3004** **RE 3514-4804** **RE 6004L** **RE 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L** **CC30-CC120**	186	109.5	**Tb** (Nm)	132	133	182	235	332	468	530	608	±5%
			pb (bar)	23	29	34	26	30	36	39	42	
			p max (bar)	300								
			n1 max (RPM)	700								

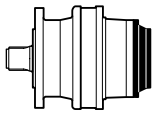
	ø A	B		F 02	F 20	F 21	F 22	F 23	F 24	F 25	F 26	
RE 311-511 **RE 611 - 612** **RE 812-1022** **RE 1522-2003** **RE 2523-3003** **RE 3513-4803** **RE 6003 - 6003L** **RE 6004 - 6004L** **RE 8004 - 8004L** **GB 12014 - 12014L** **GB 16004 - 16004L** **GB 21004 - 21005** **GB 26005-31005** **GB 40005-45005** **GB 53005** **CC350**	244	118.5	**Tb** (Nm)	132	133	182	235	332	468	530	608	±5%
			pb (bar)	23	29	34	26	30	36	39	42	
			p max (bar)	300								
			n1 max (RPM)	700								

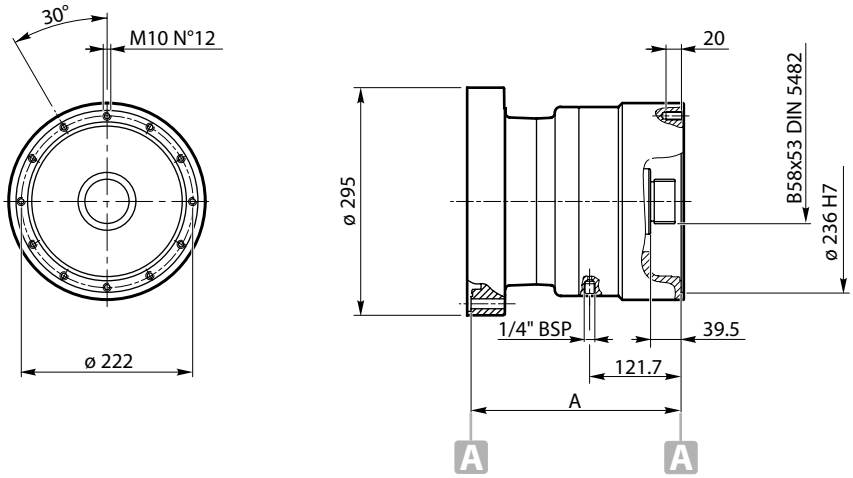


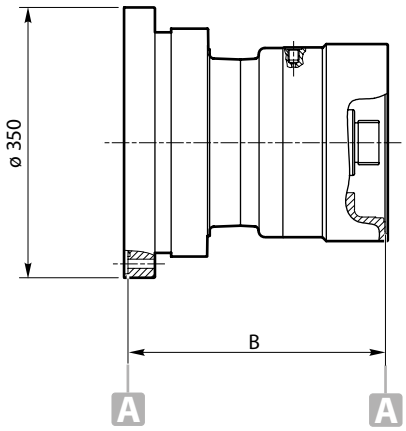


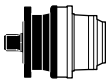
ø A	B		F 501	F 502	F 503	F504	F505	F506	F 508	
RE 111 - 112 - 113 - 114 RE 211 - 212 - 213 - 214 RE 241 - 242 - 243 - 244 RE 312 - 313 - 314 RE 512 - 513 - 514 RE 613 - 614 RE 813 - 814 RE 1023 - 1024 RE 1523 - 1524 RE 2004 RE 2524 RE 3004 RE 3514-4804 RE 6004L RE 8005 - 8005L GB 12015 - 12015L GB 16005 - 16005L CC30 CC120	186	115	**Tb** (Nm)	110	215	325	405	500	630	818	±5%
			pb (bar)	10	20	30	38	28	35	33	
			p max (bar)	300							
			n1 max (RPM)	1500 (standard)							
				3500 (special)							

ø A	B		F 601	F 602	F 603	F604	F 605	F 606	F608	F610	F612	
RE 311-511 RE 611 - 612 RE 812-1022 RE 1522-2003 RE 2523-3003 RE 3513-4803 RE 6003 - 6003L RE 6004 - 6004L RE 8004 - 8004L GB 12014 - 12014L GB 16004 - 16004L GB 21004 - 21005 GB 26005-31005 GB 40005-45005 GB 53005 CC350	244	125	**Tb** (Nm)	110	215	325	405	500	630	818	1005	1150	±5%
			pb (bar)	10	20	30	38	28	35	33	40	40	
			p max (bar)	300									
			n1 max (RPM)	1500 (standard)									
				3500 (special)									



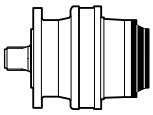


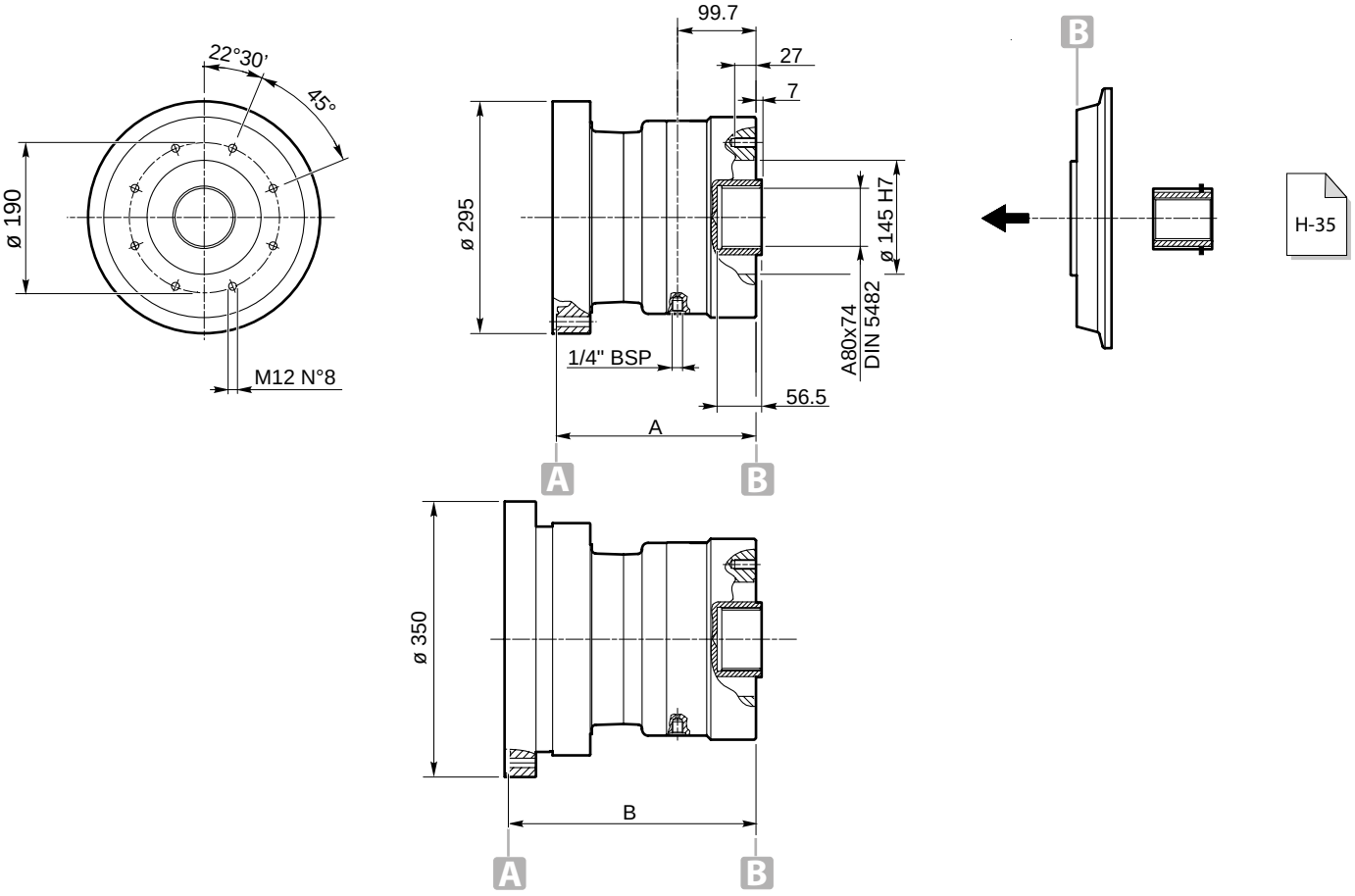


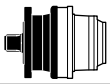


	A	B		F 813	F 815	F 818	F 820	F 823	F 827	F 830	
RE 811	272.5	-	**Tb** (Nm)	1271	1525	1780	2034	2288	2670	3051	±5%
RE 1021	272.5	-									
RE 1521-2001	-	314.5									
RE 2522-3002	272.5	-									
RE 3512-4801	272.5	-									
RE 6002-6002L	-	314.5									
RE 8003-8003L	272.5	-	**pb** (bar)	54	65	76	58	65	76	87	
GB 12013-12013L	272.5	-									
GB 16003L	-	314.5									
GB 16003	-	314.5									
GB 21003	272.5	-									
GB 26004	272.5	-									
GB 31004	272.5	-	**p max** (bar)	300							
GB 40004	-	314.5									
GB 45004	-	314.5									
GB 53004	-	314.5									
GB 61004	272.5	-									
GB 85005	272.5	-									
GB 110005	-	314.5	**n1 max** (RPM)	1500 (standard)							
GB 130005	-	314.5									
GB 150005	272.5	-									
CC600	272.5	-		3500 (special)							
CC1000	292.5	-									
	292.5	-									

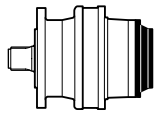
F8-MU

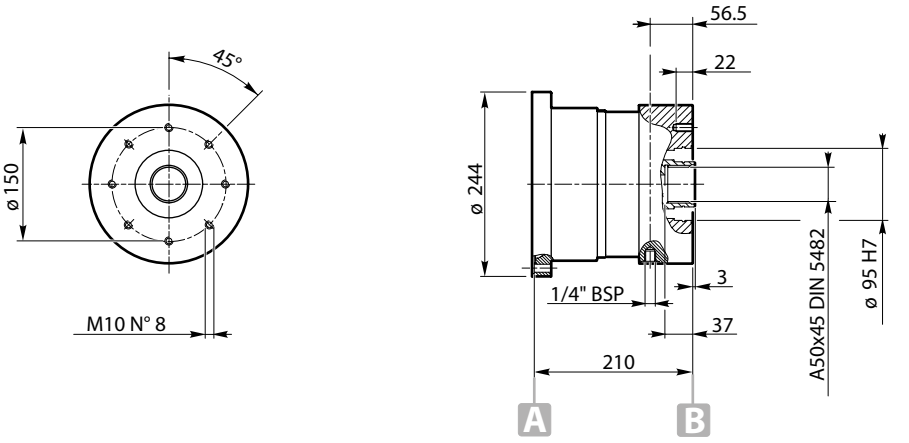






	A	B		F 813	F 815	F 818	F 820	F 823	F 827	F 830	
	253.5	-									
RE 811	253.5	-									
RE 1021	-	314.5	**Tb** (Nm)	1271	1525	1780	2034	2288	2670	3051	
RE 1521-2001	253.5	-									
RE 2522-3002	253.5	-									
RE 3512-4801	-	314.5									
RE 6002-6002L	253.5	-									
RE 8003-8003L	253.5	-									
GB 12013-12013L	253.5	-	**pb** (bar)	54	65	76	58	65	76	87	
GB 16003L	-	314.5									
GB 16003	-	314.5									
GB 21003	253.5	-									
GB 26004	253.5	-									±5%
GB 31004	253.5	-									
GB 40004	-	314.5	**p max** (bar)	300							
GB 45004	-	314.5									
GB 53004	-	314.5									
GB 61004	253.5	-									
GB 85005	253.5	-									
GB 110005	-	314.5									
GB 130005	-	314.5	**n1 max** (RPM)	1500 (standard)							
GB 150005	253.5	-									
CC600	253.5	-		3500 (special)							
CC1000	253.5	-									
	253.5	-									





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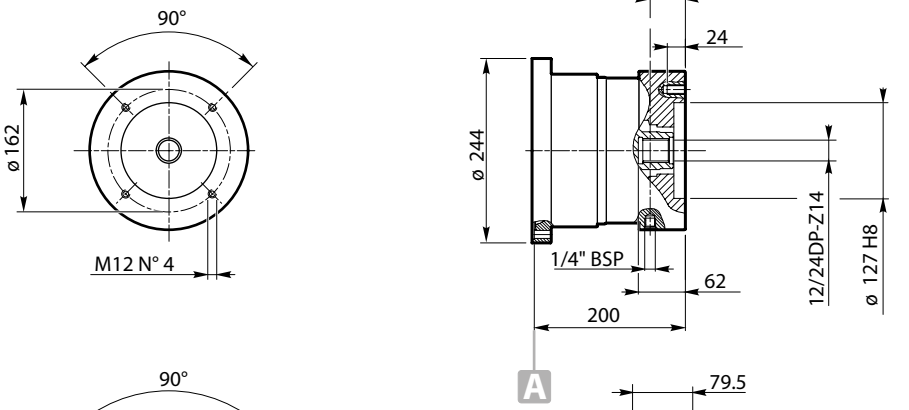
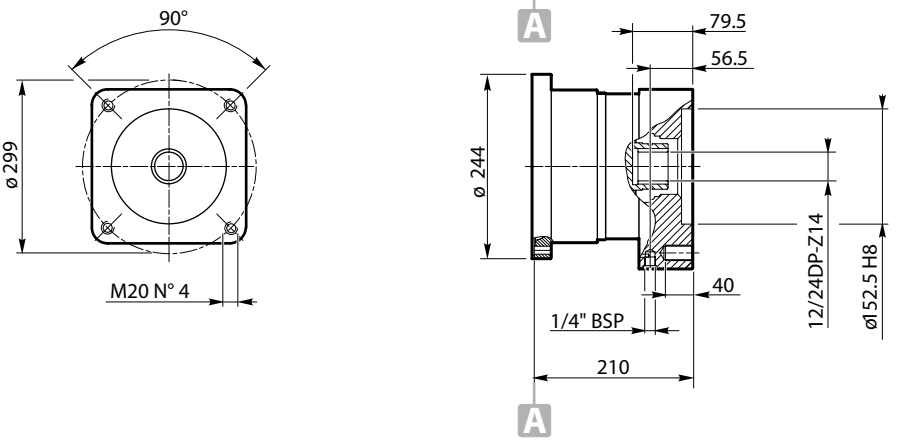
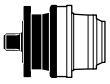


SAE "C"

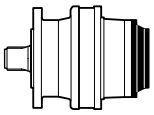


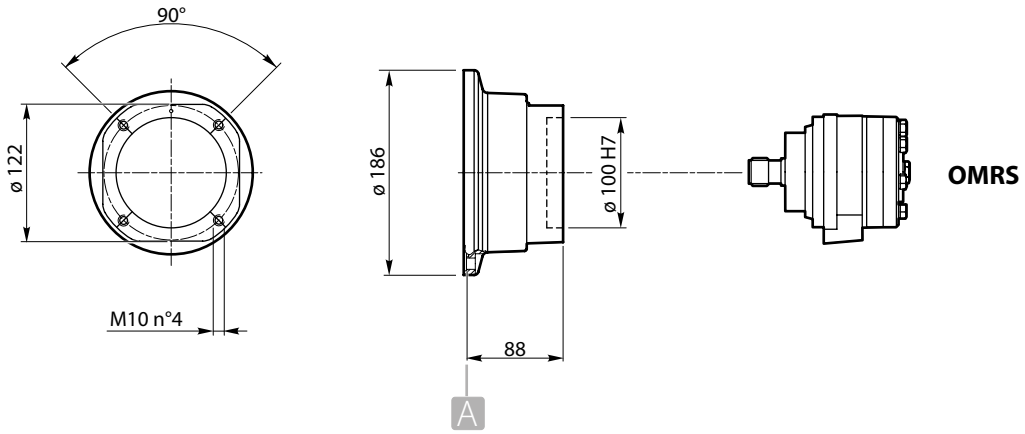
SAE "D"



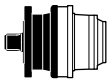
		F 902	F 903	F 904	F 905	F 906	F 908	F 910	F 912	F 915	
RE 311-511 **RE 611 - 612** **RE 812-1022** **RE 1522-2003** **RE 2523-3003** **RE 3513-4803** **RE 6003 - 6003L** **RE 6004 - 6004L** **RE 8004 - 8004L** **GB 12014 - 12014L** **GB 16004 - 16004L** **GB 21004 - 21005** **GB 26005-31005** **GB 40005-45005** **GB 53005** **CC350**	**Tb** (Nm)	200	310	400	485	620	770	990	1160	1325	±5%
	pb (bar)	14	22	19	18	23	23	29	34	38	
	p max (bar)	300									
	n1 max (RPM)	1500 (standard)									
		3500 (special)									

Upon request, brakes up to size F912 can be equipped with freewheeling clutch.

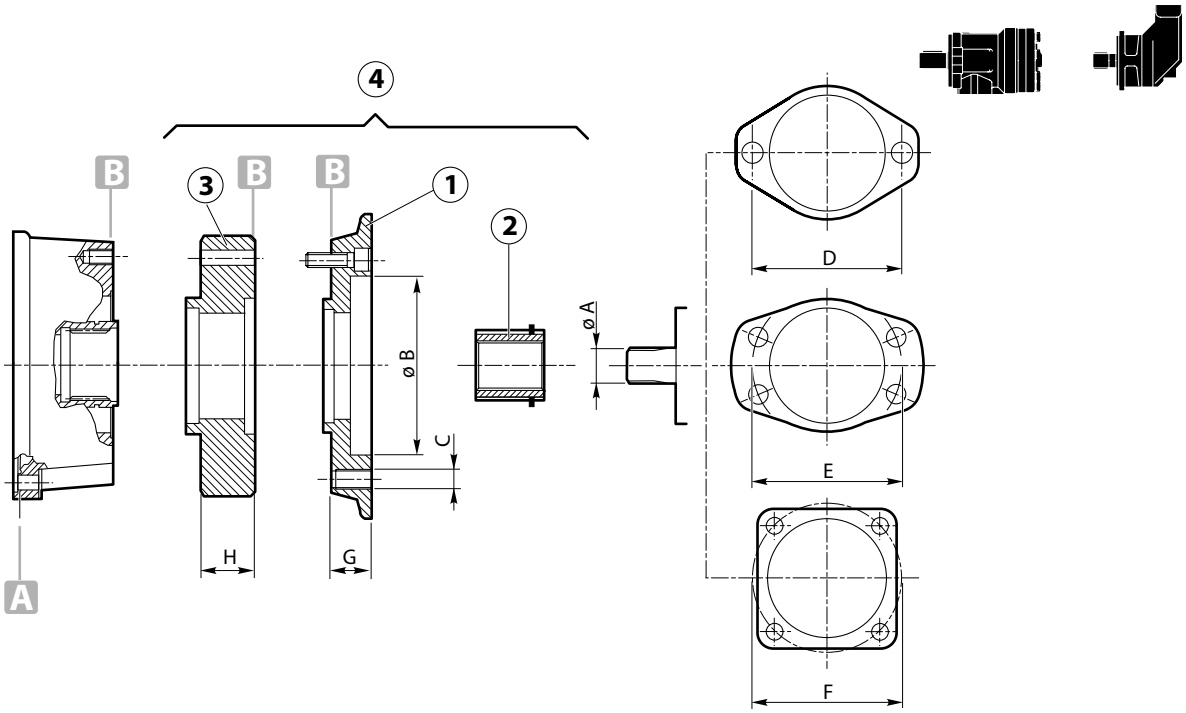




OMRS



		20	30	40	45	
RE 111 - 112 - 113 - 114 **RE 211 - 212 - 213 - 214** **RE 241 - 242 - 243 - 244** **RE 312 - 313 - 314** **RE 512 - 513 - 514** **RE 613 - 614** **RE 813 - 814** **RE 1023 - 1024** **RE 1523 - 1524** **RE 2004** **RE 2524** **RE 3004** **RE 3514-4804** **RE 6004L** **RE 8005 - 8005L** **GB 12015 - 12015L** **GB 16005 - 16005L**	**Tb** **(Nm)**	220	308	396	459	+5%
	pb **(bar)**	24	24	24	26	
	p max **(bar)**	150				
	n1 max **(RPM)**	700				



AXIAL PUMP	øA	øB	øC	øD	E	F	G	H	1	2	3	4
M1 15-21	ø 19	82.55	M12	106.4	—	—	26	—	20300047	40000659	—	AQ
M2 24-50	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M2 24-50	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M3 40-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M3 40-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB

DANFOSS	øA	øB	øC	øD	E	F	G	H	1	2	3	4
OMM	ø 16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
OMP 25-400	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
OMP 25-400	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
OMP 25-400	1" B6	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
OMP 25-400	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
OMR 50-375	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
OMR 50-375	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
OMR 50-375	1" B6	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
OMR 50-375	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMH 200-500	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMH 200-500	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
OMS 80-400	ø 31.75	82.55	M12	1064	—	—	38	—	02511001	40000664	—	UL
OMS 80-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
OMS 80-400	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
OMS 80-400 SPEC.	12/24-14	82.55	M10	106.4			30		40000681	40000672		CV
OMSS 80-400	12/24-12	100	M10	—	—	125	21	—	02511017	02241030	—	TR
OMTS 160-500	12/24-16	125	M12	160			42		02511081	02241082		UR
OMT 160-500	12/24-17	125	M12	—	—	160	86	—	40001833	40000674	—	CI
OMT 160-500	ø 40	125	M12	—	—	160	78	—	02511041	02241051	—	TW
OMT 160-500(US)	12/24-17	127	M12			150	79.5		02511166	40000674		DF
OMV 315-800	Ø50	160	M16			200	140		02511006	02591003		VM
OMVS 315-800	10/20-16	125	M12	—	—	160	66.5	—	02511085	02241086	—	US
MTM	12/24-17	127	M12	—	—	162	29	38	02511108	40000674	02731111	UY

EATON (CHAR-LYNN)	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SERIE 2000	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
SERIE 2000	Ø25	82.55	M12		106.4		26		40000680	40000649		BN
SERIE 2000	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
SERIE 2000	ø 31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
SERIE 2000	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
SERIE 2000	1"6B	82.55	M12	106,4	—	—	26	—	20300047	40000648	—	AM
SERIE 2000	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	AU
SERIE 4000	12/24-14	101.6	M12			127	20		40000635	40000672		EH
SERIE 4000	12/24-17	127	M12	—	—	162	29	—	02511108	40000674	—	BH
SERIE 6000	12/24-17	127	M12	—	—	162	29	14	02511108	02971179	02731096	CQ
SERIE 6000	ø 40	127	M12	—	—	162	29	38	02511108	02241057	02731111	TV
SERIE 6000	8.5/17	127	M12	—	—	162	29	38	02511108	02241076	02731111	UH

HP HYDRAULIC	øA	øB	øC	øD	E	F	G	H	1	2	3	4
M4PV21-28	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4PV21-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4PV21-28	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MF 21-28	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
M4MF 21-28	16/32- 1 3	82.55	M12	106.4	—	—	26	—	20300047	40000657	—	AP
M4MF 21-28	16/32-15	82.55	M12	106.4	—	—	26	—	20300047	40000671	—	AT
M4PV 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4PV 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4PV 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MF 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4MF 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4MF 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M4MV 34-65	ø 25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
M4MV 34-65	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M4MV 34-65	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB

LINDE	øA	øB	øC	øD	E	F	G	H	1	2	3	4
HMF 35	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
HMF 50-75	16/32-21	127	M16	181	—	—	34	—	02511108	40000654	—	CF
HMF 105	16/32-23	127	M16	181	—	—	34	—	40001811	40000686	—	CH
HMF 135	16/32-27	152.4	M20	228.5	—	—	35	—	40001844	02241123	—	CZ
HMR 135	16/32-27	152.4	M20	228.5	—	—	35	—	40001844	02241123	—	CZ
BPV 70	W35x2	127	M12	162	—	—	25	—	02511108	40000670	—	VK

M + S	øA	øB	øC	øD	E	F	G	H	1	2	3	4
EPMM 8-50	ø 14	63	M8	80	—	—	14	—	40000698	40000658	—	CD
EPM M 8-50	ø 16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
EPM 40-630	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
EPM 40-630	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
EPM 40-630	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
EPM 40-630	25/22-14	82.55	M12	106.4	—	—	26	—	20300047	40000647	—	AL
EPM 40-630	12/24-14	82.55	M12	106.4	—	—	38	—	2511001	40000672	—	AE
EPM 40-630	ø 32	82.55	M12	106.4	—	—	38	—	2511001	40000665	—	AD
EPRM 50-400	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
EPRM 50-400	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
EPRM 50-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
EPRM 50-400	25/22-14	82.55	M12	106.4	—	—	26	—	20300047	40000647	—	AL
EPRM 50-400	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
EPRM 50-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
EPMS 80-400	ø 31.75	82.55	M12	106.4	—	—	38	—	02511001	40000664	—	AC
EPMS 80-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
EPMS 80-400	12/24-17	82.55	M12	106.4	—	—	38	—	02511001	40000674	—	AF
EPMT 160-500	12/24-17	125	M12	—	—	160	86	—	40001833	40000674	—	CI
MTS 250	12/24-16	125	M12	160			42		02511081	02241082		UR

REXROTH	øA	øB	øC	øD	E	F	G	H	1	2	3	4
A2FE 45	W30x2	160	M16	200			107.5		02511250	40000669		ER
A2FE 56	W30x2	160	M16	200			107.5		02511250	40000669		ER
A2FE 80	W35x3	190	M20	224			133		02511281	40000670		ES
A2FM 10-16	ø 25	80	M8	—	—	100	36.5	—	40001842	40000649	—	CL
A2FM 10-16	W25x1.25	80	M8	—	—	100	36.5	—	40001842	40000668	—	CM
A2FM 23-32	ø 25	100	M10	—	—	125	48	—	40000682	40000649	—	BS
A2FM 23-32	W25X1.25	100	M10	—	—	125	48	—	40000682	40000668	—	BT
A2FM 23-32	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
A2FM 45-63	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
A2FM 45-63	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
A2FM 80-90	W35x2	140	M12	—	—	180	53	—	40001852	40000670	—	CN
A2FM 80-90	W40x2	140	M12	—	—	180	53	—	40001852	40001858	—	CP
A2FM 107	W40x2	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
A2FM 125	W40x2	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
A2FM 160	W50x2	180	M16	—	—	224	62	—	02511109	02591102	—	CT
A2FM 200	W50x2	200	M20	—	—	250	73	—	02511232	02591102	—	DB
A4FM 22-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
A4FM 22-28	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
A4FM 40	W30x2	101.6	M14	146	—	—	20	—	40000635	40000669	—	BA
A4FM 56	W30x2	127	M16	181	—	—	34	—	40001811	40000669	—	CG
A10FM 23-28	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
A10FM 37-45	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
A6VM 28	W25x1.25	100	M10	—	—	125	48	—	40000682	40000668	—	BT
A6VM 28	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
A6VM 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
A6VM 55	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
A6VM 80	W35x2	140	M12	—	—	180	53	—	40001818	40000670	—	CN
A6VM 80	W40x2	140	M12	—	—	180	53	—	40001818	40001858	—	CP
A6VM 107	W45x2	160	M16	—	—	200	56.5	—	02511039	02591073	—	VN
A6VM 140	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
A6VM 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
A6VM 160	W50x2	180	M16	—	—	224	62	—	02511109	02591102	—	CT
A6VM 250	W50x2	200	M20	—	—	250	73	—	02511232	02591102	—	DB
AA6VM 55, 80	12/24-12	127	M14	—	—	162	29	—	02511108	40000672	—	BG
AA6VM 107, 160	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX
AA2FM 10, 12, 16	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
AA2FM 23, 28, 32	12/24-12	127	M12	—	—	—	29	—	02511108	40000672	—	BG
AA2FM 45, 56 ,63	12/24-12	127	M12	—	—	162	29	—	02511108	40000672	—	BG
AA2FM 80, 90	12/24-12	127	M12	—	—	162	29	—	02511108	40000672	—	BG
AA2FM 56 ,63	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
AA2FM 80, 90	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
AA2FM 107, 125	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX
AA2FM 160, 180	8/16-13	152.4	M20	—	—	228.5	41	—	40001844	02241043	—	UX

SAE STANDARD	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SAE A	ø 25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	—
	ø 25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	—
	ø 31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	—
	ø 32	82.55	M12	106.4	—	—	26	—	20300047	40000665	—	—
	1"6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	—
	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	—
SAE B	ø 25	101.6	M14	146	—	—	20	—	40000635	40000649	—	—
	ø 25.4	101.6	M14	148	—	—	20	—	40000635	40000645	—	—
	ø 31.75	101.6	M14	146	—	—	20	—	40000635	40000664	—	—
	ø 32	101.6	M14	146	—	—	20	—	40000635	40000665	—	—
	1" 6B	101.6	M14	146	—	—	20	—	40000635	40000648	—	—
	12/24-14	101.6	M14	146	—	—	20	—	40000635	40000672	—	—

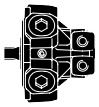
SAE STANDARD	øA	øB	øC	øD	E	F	G	H	1	2	3	4
MAGNETO	ø 25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	—
	ø 25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	—
	ø 31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	—
	ø 32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	—
	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	—
	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	—
SAE C	ø 31.75	127	M12	—	—	162	29	—	02511108	40000664	—	—
	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	—
	12/24-17	127	M12	—	—	162	29	—	02511108	40000674	—	—

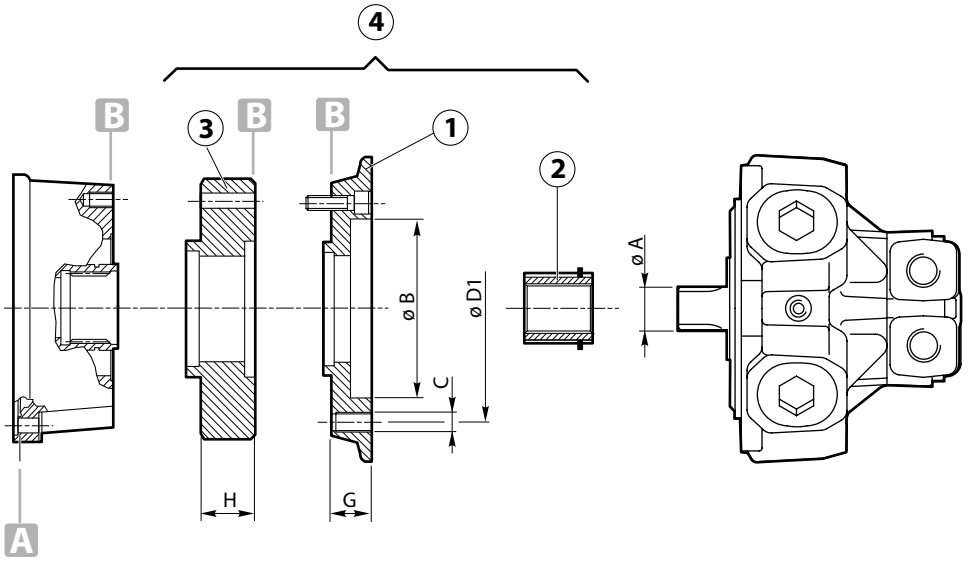
SAMHYDRAULIK	øA	øB	øC	øD	E	F	G	H	1	2	3	4
BGM 13-50	ø16	63	M8	80	—	—	14	—	40000698	40000694	—	CE
BG 40-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BG 40-400	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
BG 40-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
AGF 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
ARF 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BR 50-400	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
BR 50-400	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
BR 50-400	ø31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
BR 50-400	ø 32	82.55	M12	106.4	—	—	38	—	20300047	40000665	—	AS
BR 50-400	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
H1C 12	Ø20	80	M8	—	—	100	36.5	—	02971201	02591008	—	CS
H1C 30	W25x1,25	100	M10	—	—	125	31	—	02511221	40000668	—	DW
H1C 55	12/24-17	127	M14	—	—	162	29	—	40000653	40000672	—	UT
H1C 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
H1C 55	Ø30	125	M12	—	—	160	44	—	40000684	02591040	—	DU
H1C 75	W35x2	140	M12	—	—	180	53	—	40001818	40000670	—	TQ
H1C 90-108	W40x2	160	M16	—	—	200	57	—	02511039	40001858	—	TP
H1C 90-108	Ø40	160	M16	—	—	200	56.5	—	02511039	02241057	—	EF
H1C 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ
HPR 80-400	ø31.75	82.55	M12	106.4	—	—	38	—	02511001	40000664	—	AC
HPR 80-400	ø 32	82.55	M12	106.4	—	—	38	—	02511001	40000665	—	AD
HPR 80-400	12/24-14	82.55	M12	106.4	—	—	38	—	02511001	40000672	—	AE
H2V 55	W30x2	125	M12	—	—	160	44	—	40000684	40000669	—	CA
H2V 160	W45x2	180	M16	—	—	224	62	—	02511109	02591073	—	VQ

SAUER	øA	øB	øC	øD	E	F	G	H	1	2	3	4
SMF2 033-070	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
SMF2 089	16/32-23	127	M14	—	—	162	29	—	40000653	40000686	—	BI
M25MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M35MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M35/M44 MF	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
M44MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
M46MF	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
51D 80	W40x2	140	M12	—	—	180	53	—	40001818	40001858	—	CP
51D 110	W40x3	160	M16	—	—	200	56.5	—	02511039	40001858	—	TP
51V 080	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
51V 080	16/32-23	127	M12	—	—	162	29	—	02511108	40000686	—	BI
51V 110/160A	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
51V 160/A	8/16-13	152.4	M20	—	—	228.5	40	—	40001844	02241043	—	UX
51V 250	16/32-27	161.5	M20	—	—	317.15	35	—	02511147	02241123	—	EJ
90M 030	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
90M 030	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
90M 042	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
90M 042	16/32-15	101.6	M14	146	—	—	20	—	40000635	40000671	—	BB
90M 055	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
90M 075	16/32-21	127	M12	—	—	162	29	—	02511108	40000654	—	BD
90M 100	16/32-23	127	M12	—	—	162	29	—	02511108	40000686	—	BI
90M 100	8/16-13	127	M12	—	—	162	29	—	02511108	02241013	—	EV
90M 130	8/16-Z13	152.4	M20	—	—	228.5	40	—	40001844	022411043	—	UX

VOAC	øA	øB	øC	øD	E	F	G	H	1	2	3	4
F11-150 SAE	8/16-13	152.4	M20	228.5	—	—	41	—	40001844	02241043	—	UX
F12-30 SAE	ø25.4	101.6	M14	146	—	—	20	—	40000635	40000645	—	AV
F12-30 SAE	16/32-13	101.6	M14	146	—	—	20	—	40000635	40000657	—	AZ
F12-40 SAE	ø31.75	127	M12	—	—	162	29	—	02511108	40000664	—	BF
F12-40 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-60 SAE	ø31.75	127	M12	—	—	162	29	—	02511108	40000664	—	BF
F12-60 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-80 SAE	12/24-17	127	M12	—	—	162	29	—	02511108	40000674	—	BH
V12-60 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
V12-80 SAE	12/24-14	127	M12	—	—	162	29	—	02511108	40000672	—	BG
F12-110 SAE	8/16-13	152.4	M20	228.5	—	—	41	—	40001844	02241043	—	UX
V14-160 ISO	W45x2	180	M16	224	—	—	62	—	02511109	02591073	—	VQ
F12-80 ISO	ø40	140	M12	—	—	180	53	38	40001852	02241057	2731111	UW
TK	12/24-17	127	M12	—	—	162	29	14	02511108	40000674	2731096	CQ
F12-30 ISO	W30x2	100	M10	—	—	125	48	—	40000682	40000669	—	BU
F12-40 MF-HI ISO	W30x2	125	M12	160	—	—	44	—	40000684	40000669	—	CA
F12-60 ISO	W35x2	125	M12	—	—	160	44	—	40000684	40000670	—	CB
F12-80 ISO	W40x2	140	M12	—	—	180	53	—	40001852	40001858	—	CP
F12-110 ISO	W45x2	160	M16	200	—	—	56.5	—	02511039	02591073	—	VN

WHITE	øA	øB	øC	øD	E	F	G	H	1	2	3	4
RS 03-24	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
RS 03-24	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
RS 03-24	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
HB 03-24	ø25	82.55	M12	106.4	—	—	26	—	20300047	40000649	—	AN
HB 03-24	ø25.4	82.55	M12	106.4	—	—	26	—	20300047	40000645	—	AI
HB 03-24	ø31.75	82.55	M12	106.4	—	—	26	—	20300047	40000664	—	AR
HB 03-24	ø32	82.55	M12	106.4	—	—	26	—	20300047	40000665	—	AS
HB 03-24	1" 6B	82.55	M12	106.4	—	—	26	—	20300047	40000648	—	AM
HB 03-24	12/24-14	82.55	M12	106.4	—	—	26	—	20300047	40000672	—	AU
HB 03-24	16/32-13	82.55	M12	106.4	—	—	26	—	20300047	40000657	—	AP
RE 07-45	ø25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	BN
RE 07-45	ø25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	BL
RE 07-45	ø31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	BP
RE 07-45	ø32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	BQ
RE 07-45	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	BM
RE 07-45	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	BR
DR 12-46	ø25	82.55	M12	—	106.4	—	26	—	40000680	40000649	—	BN
DR 12-46	ø25.4	82.55	M12	—	106.4	—	26	—	40000680	40000645	—	BL
DR 12-46	ø31.75	82.55	M12	—	106.4	—	26	—	40000680	40000664	—	BP
DR 12-46	ø32	82.55	M12	—	106.4	—	26	—	40000680	40000665	—	BQ
DR 12-46	1" 6B	82.55	M12	—	106.4	—	26	—	40000680	40000648	—	BM
DR 12-46	12/24-14	82.55	M12	—	106.4	—	26	—	40000680	40000672	—	BR

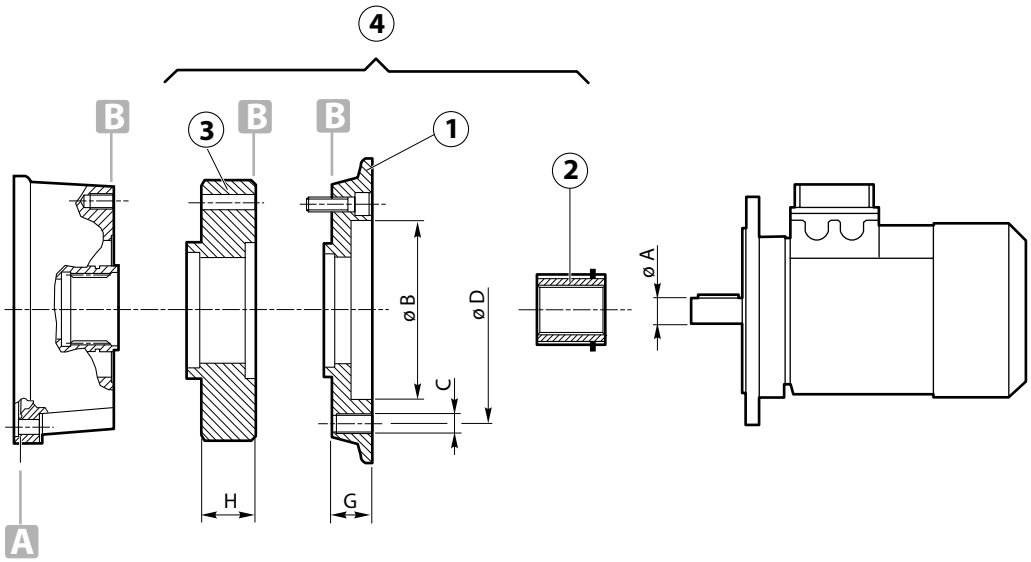




INTERMOT	øA	øB	C	øD1	E	F	G	H	1	2	3	4
G34/A-AA	ø30	82.55	M12	106.4	—	—	10.5	26	02511082	2591040	02511018	UM
G 100	W40x2	125	M8	175	—	—	44	—	02511282	40001858	—	EQ
G 100	A40x36	125	M8	175	—	—	44	—	02511282	40001858	—	ET
IAM 195	6x26x32	172	M10	190	—	—	39.5	—	02511170	40001829	—	DE

SAI	øA	øB	C	øD1	E	F	G	H	1	2	3	4
BD2	W40x2	150	M12	250	—	—	38	—	02511070	02591049	—	UE
BV2	W40x2	150	M12	250	—	—	38	—	02511070	02591049	—	UE
GM05 40-200	28x34x6	125	M10	160	—	—	40	—	02511045	40000646	—	TZ
GM05 40-200	35x2x16	125	M10	160	—	—	40	—	02511045	40000670	—	TT
GM05 40-200	ø30	125	M10	160	—	—	40	—	02511045	02591040	—	TM
GM1 100-320	28x34x6	175	M12	210	—	—	29	—	02971466	40000646	—	VB
GM1 100-320	35x2x16	175	M12	210	—	—	29	—	02971466	40000670	—	TJ
GM2 200-630	40x3x12	150	M12	250	—	—	38	—	02511070	02591044	—	UB
GM2 200-630	36x40	150	M12	250	—	—	38	—	02511070	02591063	—	VA
GM3	W40x3	265	M18	310			43.5		02511151	02591044		DS

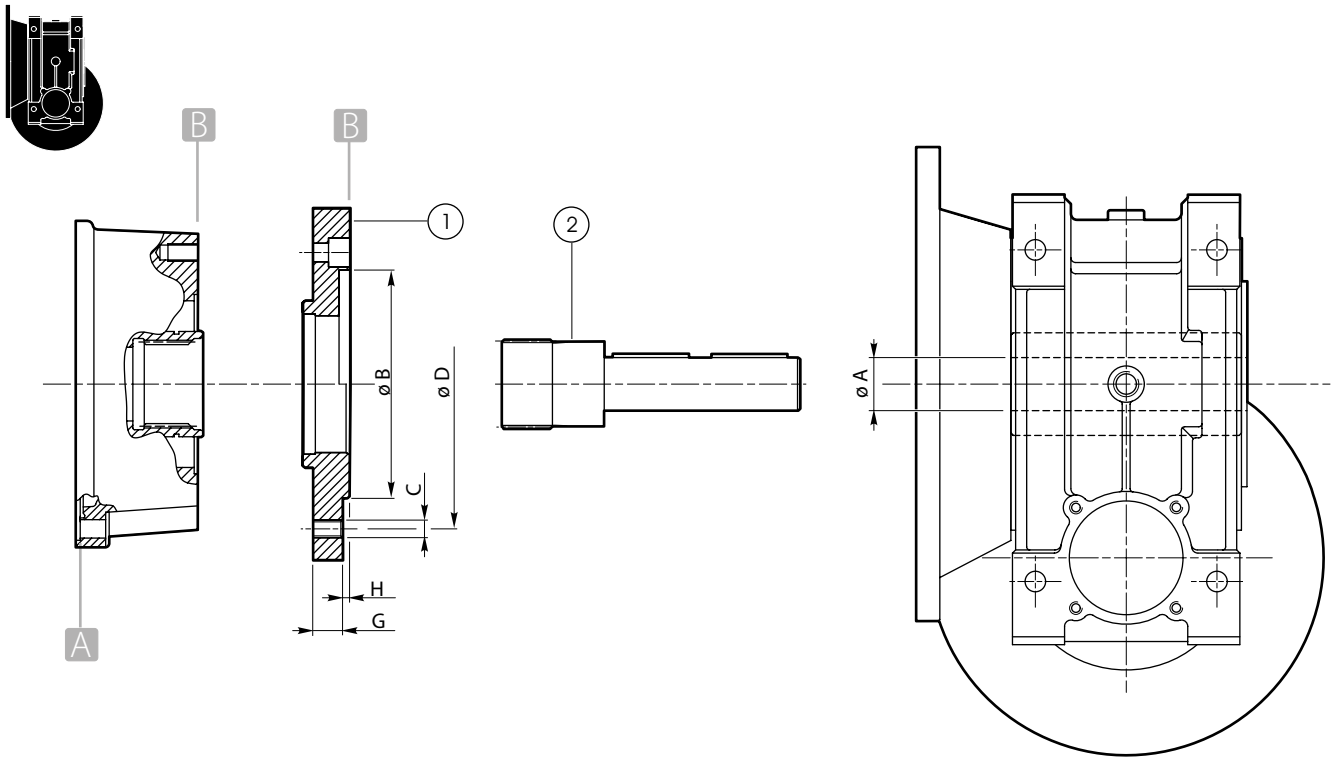
CALZONI	øA	øB	øC	øD1	E	F	G	H	1	2	3	4
MR 250-300	42x48x8	175	M10	232	—	—	92	—	02511030	02591016	—	FA



IEC	øA	øB	C	øD	E	F	G	H	1	2	3	4
63 B5	ø11	95	M8	115	—	—	20	—	02511000	02591001	—	TL
71 B5	ø14	110	M8	130	—	—	16	—	40000690	40000658	—	CC
80 B5	ø19	130	M10	165	—	—	16	—	40000683	40000659	—	BV
90 B5	ø24	130	M10	165	—	—	16	—	40000683	40000660	—	BZ
100 B5 ø24	ø24	180	M12	215	—	—	16	—	02511018	40000660	—	UÀ
100/112 B5	ø28	180	M12	215	—	—	24.5	—	02511018	40000661	—	AH
112 B5	ø38	180	M12	215	—	—	24	38	02511018	02241029	02731111	UU
132 B5	ø38	230	M12	265	—	—	49	—	02511016	—	—	AG
132 B14	ø38	130	ø 11	165	—	—	69	—	02511076	—	—	UF
200 B5	ø55	300	M18	350	—	—	130	—	02511067	02241066	—	TX

NEMA	øA	øB	C	øD	E	F	G	H	1	2	3	4
56 H	ø15.88 (0.625)	114.3 (4.500)	Ø10 (0.394)	149.2 (5.874)	—	—	53 (2.087)	—	02511122	02591085	—	VX
143-145 TC	ø22.22 (0.875)	114.3 (4.500)	Ø10 (0.394)	149.2 (5.874)	—	—	53 (2.087)	—	02511122	02591084	—	VZ
182-184 TC	ø28.57 (1.125)	215.9 (8.500)	Ø14 (0.551)	206 (8.110)	—	—	38 (1.496)	—	02511073	02591045	—	UC
213-215 TC	ø34.925 (1.375)	215.9 (8.500)	Ø14 (0.551)	184.5 (7.264)	—	—	55.5 (2.185)	—	02511037	02241048	—	VT
254-256 TC	ø41.275 (1.625)	215.9 (8.500)	Ø14 (0.551)	150 (5.906)	—	—	70 (2.756)	—	02511141	02241131	—	VJ
284-286 TC	ø47.625 (1.875)	266.7 (10.500)	Ø14 (0.551)	228.6 (9.000)	—	—	86 (3.386)	—	02511142	02241132	—	CR

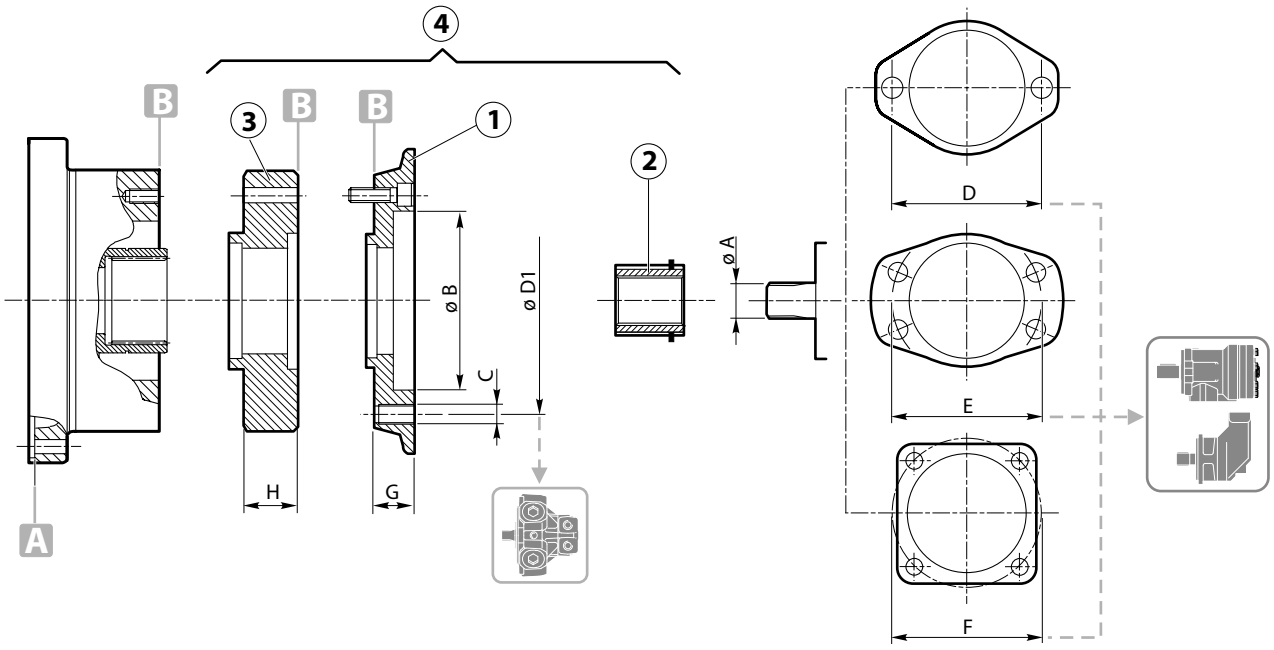
mm (inch)



VARVEL	øA	øB	øC	øD	E	F	G	H	1	2	3	4
FRS 50 FL	Ø24	110	M10	130	—	—	16	—	02511022	40000660	—	VR
FRS 60 FL	Ø25	115	M10	150	—	—	16	—	02511095	40000649	—	UZ
FRS 70 FL	Ø28	130	M12	165	—	—	13.5	—	40000644	40000650	—	TI
FRS 85 FL	Ø32	130	M12	165	—	—	13.5	—	40000644	40000655	—	TG
FRS 130 PC	Ø48	180	Ø13	215	—		20	—	40001804	40000652	—	VI

STM	øA	øB	øC	øD	E	F	G	H	1	2	3	4
RMI 50 FL	Ø24	110	M10	130	—	—	16	—	02511022	40000660	—	VR
RMI 60 FL	Ø25	115	M10	150	—	—	16	—	02511095	40000649	—	UZ
RMI 70 FL	Ø28	130	M12	165	—	—	13.5	—	40000644	40000650	—	TI
RMI 85 FL	Ø32	130	M12	165	—	—	13.5	—	40000644	40000655	—	TG
RMI 110 F1	Ø42	130	M10	165	—	—	17	—	40001810	40001809	—	VH
RMI 130 P	Ø48	180	Ø13	215	—	—	20	—	40001804	40000652	—	VI
RMI 150 P	Ø55	180	Ø13	215	—	—	20	—	40001804	40001808	—	EN

MOTOVARIO	øA	øB	øC	øD	E	F	G	H	1	2	3	4
NMRV 110	Ø42	180	M12	215	—	—	24.5	—	02511018	40001890	—	FE
NMRV 90	Ø35	130	M10	165	—	—	17	4	40001810	02591038	—	UQ



CALZONI	A	øB	øC	øD1	E	F	G	H	1	2	3	4
MR700	8x52x60	220	M12	290	—	—	55.5	—	02511229	02591156	—	4J

DANFOSS	A	øB	øC	øD	E	F	G	H	1	2	3	4
OMV	16/32-16	160	M16	—	—	200	73	—	025110102	025910102	—	5U
OMT 160-500	12/24-17	125	M12	—	—	160	66.5	—	025110117	02591123	—	3I
OMT 160-500	Ø40	125	M12	—	—	160	66.5	—	025110117	025910109	—	7W

EATON	A	øB	øC	øD	E	F	G	H	1	2	3	4
SERIE 6000	12/24-17	127	M14	—	—	162	29	—	02511192	02591123	—	3Q
SERIE 6000	12/24-14	127	M12	—	—	162	37	—	02511192	02591163	—	2G

INTERMOT	A	øB	øC	øD1	E	F	G	H	1	2	3	4
IAM H3 400-700	36x42x8	230	M14	254	—	—	43	—	02511197	02591128	—	8I
IAM300	8x32x38	190	M12	210	—	—	38.5	—	02511248	02591166	—	4N

LINDE	A	øB	øC	øD	E	F	G	H	1	2	3	4
HMF 135	16/32-27	152.4	M20	228.5	—	—	35	—	02511164	02631166	—	3Z
HMR 135	16/32-27	152.4	M20	228.5	—	—	35	—	02511164	02631166	—	3Z
HMF 105	16/32-23	127	M16	181	—	—	34	—	02511192	02631203	—	3H

M+S	A	øB	øC	øD	E	F	G	H	1	2	3	4
EPMT 160-500	12/24-17	125	M12	—	—	160	66.5	—	025110117	02591123	—	3I
EPMT 160-500	Ø40	125	M12	—	—	160	66.5	—	025110117	025910109	—	7W

REXROTH	A	øB	øC	øD	E	F	G	H	1	2	3	4
A2FM 107	W40x2	160	M16	—	—	200	51.5	—	02511230	02631193	—	3U
A2FM 160	W50x2	180	M16	—	—	224	62	—	02511163	02631150	—	3T
A2FM 200	W50x2	200	M20	—	—	250	73	—	02511165	02631150	—	4B
A6VM 107	W45x2	160	M16	—	—	200	53	—	02511167	02631160	—	9N
A6VM 160	W45x2	180	M16	—	—	224	62	—	02511163	02631151	—	9Q
A6VM 160	W50x2	180	M16	—	—	224	62	—	02511163	02631150	—	3T
A6VM 250	W50x2	200	M 20	—	—	250	73	—	02511165	02631150	—	4B
A6VM 355	W60x2	280	M16	—	—	320	84.5	—	02511261	02631210	—	5L
AA6VM 107, 160	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
AA2FM 107, 125	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
AA2FM 160, 180	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X

SAI	A	øB	øC	øD	E	F	G	H	1	2	3	4
GM1	28x34x6	175	M12	210	—	—	29	—	02511263	02591176	—	6B
GM2	36x40	150	M12	250	—	—	38	—	02511209	02591141	—	9A
GM2	W40x3	150	M12	250	—	—	38	—	02511209	02591170	—	8B
GM3	W40x3	265	M18	310	—	—	43.5	—	02511151	02591044	—	4S

SAMHYDRAULIK	A	øB	øC	øD	E	F	G	H	1	2	3	4
H1C 160 M	W45x2	180	M16	—	—	224	62	—	02511039	02631151	—	9Q
H1C 226 M	W50x2	200	M20	—	—	250	73	—	02511165	02631150	—	4B
H2V 160 M	W45x2	1801	M16	—	—	224	62	—	02511163	02631151	—	9Q

SAUER	A	øB	øC	øD	E	F	G	H	1	2	3	4
51V250	16/32-27	165.1	M20	—	—	317.5	38	—	02511201	02631166	—	5J
90M 130	8/16-13	152.4	M 20	—	—	228.5	40	—	02511164	02631152	—	8X

VOAC	A	øB	øC	øD	E	F	G	H	1	2	3	4
F11-50 CETOP	W45x2	200	M20	250	—	—	73	—	02511165	02631151	—	5P
F11-150 SAE	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
F12-110 SAE	8/16-13	152.4	M20	—	—	228.5	40	—	02511164	02631152	—	8X
V14-160 ISO	W45x2	180	M16	—	—	224	62	—	02511163	02631151	—	9Q
F12-110 ISO	W45x2	160	M116	—	—	200	53	—	02511167	02631160	—	9N

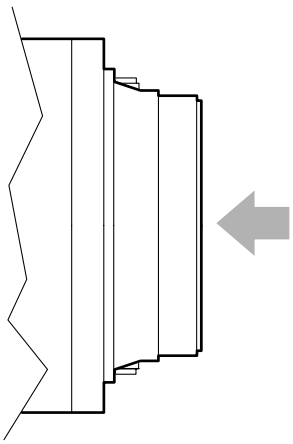
Direct motor adapters available for:

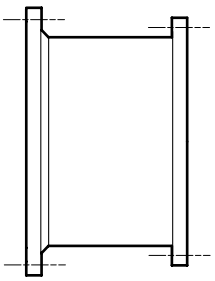
KAWASAKY	Shaft
KAWASAKY HMC 80	6/12-14
KAWASAKY HMC/HMB/HPC 125	6/12-20
KAWASAKY HMB 200	6/12 -14
KAWASAKY HMB 200	W85x3

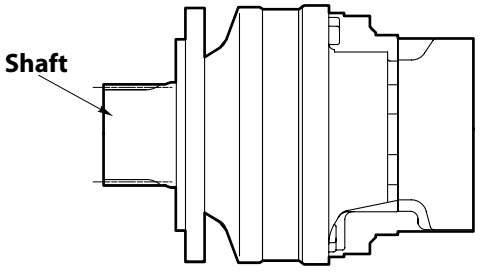
SAI	Shaft
GM3	W40x3
GM3	8x46x54
GM4/5	8x56x65
GM4/5	W65x3
GM6	N80x3

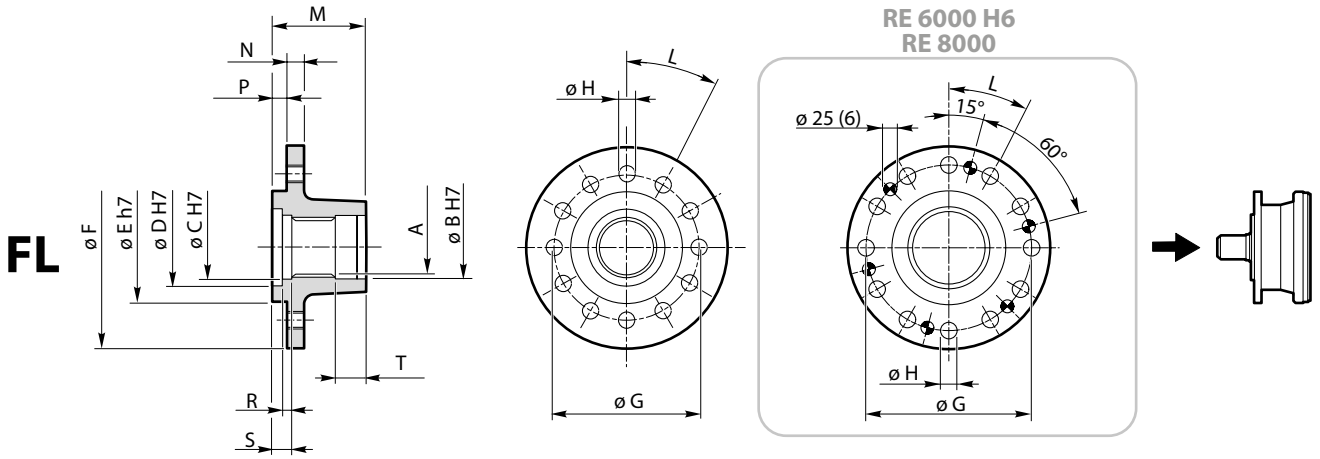
POCLAIN	Shaft
MS08/MSE08	W70x3
MS18/MSE18	W90x3
MS18/MSE18	NF E-22 141 (m2.5 z34)
MS50	NF E-22 141 (m3.75 z33)
MS02/MSE02	W50x2

POCLAIN HYDROBASE	Shaft
MS18/MSE18	NF E-22 141 (m2.5 z34)
MS35	NF E-22 141 (m2.5 z34)
MS50	NF E-22 141 (m2.5 z38)







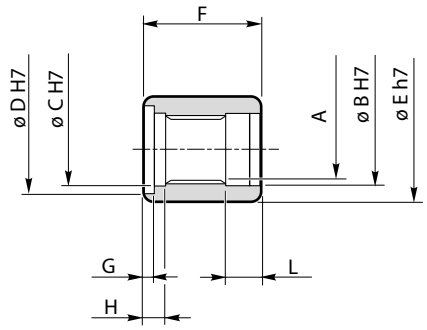


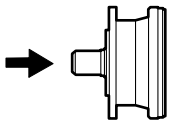
	VERSION	A	ø B	ø C	ø D	ø E	ø F	ø G	ø H	L
RE 110-210	N-P-T-TR	A40x36 DIN 5482	42	42	52	75	135	98	M12x1.5 (4)	90°
RE 240	T-TR	A58x53 DIN 5482	60	60	—	95	165	145	12.5 (12)	30°
RE 310-510-610	N-P-T-TL	A58x53 DIN 5482	60	60	—	95	165	145	12.5 (12)	30°
RE 810	N-P-T	A70x64 DIN 5482	72	72	—	125	208	175	19(12)	30°
RE 1020-1520-2000	T-H	A80x74 DIN 5482	85	85	—	125	208	175	19(12)	30°
RE 2520-3000	H	A100x94 DIN 5482	105	105	—	170	254	212	21 (12)	30°
RE 3510-4800	H	N 120x3 DIN 5480	124	130	—	160	298	250	21 (12)	30°
RE 6000	H	N 120x3 DIN 5480	120	120	—	200	308	260	25 (12)	30°
RE 6000	H6	N 150x5 DIN 5480	151	151	—	240	385	320	32 (12)	30°
RE 8000	H	N 150x5 DIN 5480	151	151	—	240	385	320	32 (12)	30°
GB 12010-16000	H	N 170x5 DIN 5480	170	175	—	250	450	400	28 (18)	20°
GB 21000	H	N220x5 DIN 5480	220	230	—	315	500	450	32 (18)	20°

	VERSION	M	N	P	R	S	T	CODE
RE 110-210	N-P-T-TR	63	12	10	7.5	13.5	20.5	40000618
RE 240	T-TR	74	14	10	8	—	24	02571148
RE 310-510-610	N-P-T-TL	74	14	16	8	—	24	02571148
RE 810	N-P-T	90	21	14	10	—	29	40001838
RE 1020-1520-2000	T-H	90.5	21	14	9.5	—	30.5	40001848
RE 2520-3000	H	110	24	20	12	—	37	40001851
RE 3510-4800	H	150	30	20	28	—	29	02571068
RE 6000	H	125	31	19	11	—	30	02571054
RE 6000	H6	150	35	25	11	—	33	02571063
RE 8000	H	150	35	25	11	—	33	02571063
GB 12010-16000	H	163	42	48	14	—	42	02571048
GB 21000	H	205	47	70	16	—	51.5	02571049

On demand for different size

BS

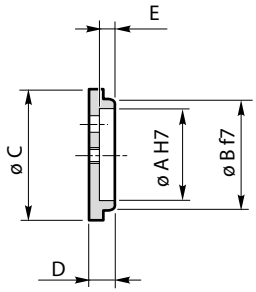


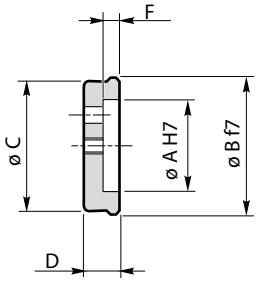


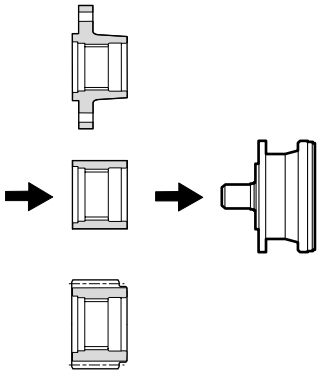
	VERSION	A	ø B	ø C	ø D	ø E	F	G	H	L	CODE
RE 110-210	N-P	A40x36 DIN 5482	42	42	—	60	55	—	7	20.5	40000608
RE 110-210	T-TR	A40x36 DIN 5482	42	42	51	60	67.5	5	12	20.5	40000617
RE 240	T-TR	A58x53 DIN 5482	60	60	72	94	85	16	23	25	40000642
RE 310-510-610	N-P-T-TL	A58x53 DIN 5482	60	60	72	94	85	16	23	25	40000642
RE 810	N-P-T	A70x64 DIN 5482	72	72	—	95	90	—	10	29	40001836
RE 1020-1520-2000	T-H	A80x74 DIN 5482	85	85	—	108	90.5	—	10.5	30.5	40001847
RE 2520-3000	H	A100x94 DIN 5482	105	105	—	136	110	—	12	33	40001850
RE 3510-4800	H	N120x3x9H DIN 5480	124	130	—	175	150	—	28	29	02631054
RE 6000	H	N120x3x9H DIN 5480	120	120	—	160	124.5	—	10.5	31	02631082
RE 6000	H6	N150x5x9H DIN 5480	151	151	—	220	150	—	11	33	02631092
RE 8000	H	N150x5x9H DIN 5480	151	151	—	220	150	—	11	33	02631092
GB 12010-16000	H	N170x5x9H DIN 5480	170	175	—	235	163	—	14	42	02631026
GB 21000	H	N220x5x9H DIN 5480	220	230	—	295	205	—	16	51.5	02631027

On demand for different size

EP



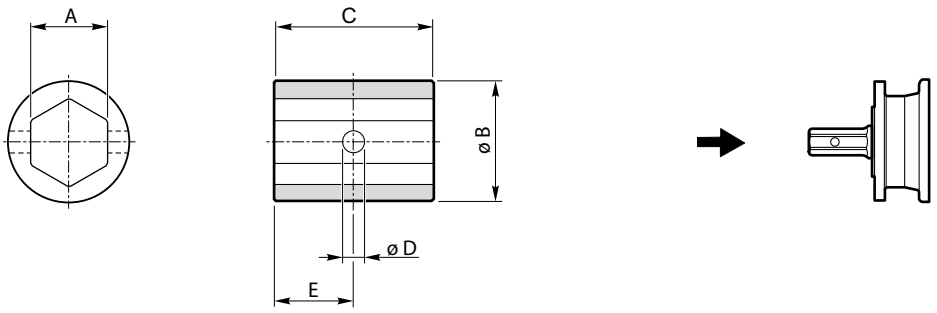




	VERSION	ø A	ø B	ø C	D	E	F	CODE
RE 110-210	N-P	35	42	50	9.5	4.5	—	40000609
RE 110-210	T-TR	35	52	50	14	—	6.8	40000614
RE 240	T-TR	50	60	70	13	5.5	—	40000613
RE 310-510	N-P	50	60	70	13	5.5	—	40000613
RE 310-510-610	T-TL	50	72	—	18	—	9	40000616
RE 810	N-P-T	62	72	80	18	9.25	—	40001832
RE 1020-1520-2000	T-H	70	85	98	19.5	8.5	—	40001840
RE 2520-3000	H	85	105	114	20	10	—	40001849
RE 3510-4800	H	90	130	—	26	—	14	02551072
RE 6000	H	100	120	135	21	9.5	—	02551060
RE 6000	H6	125	151	170	25	9	—	02551077
RE 8000	H	125	151	170	25	9	—	02551077
GB 12010-16000	H	150	175	198	31	13.5	—	02551044
GB 21000	H	200	230	260	43.5	19	—	02551046

On demand for different size

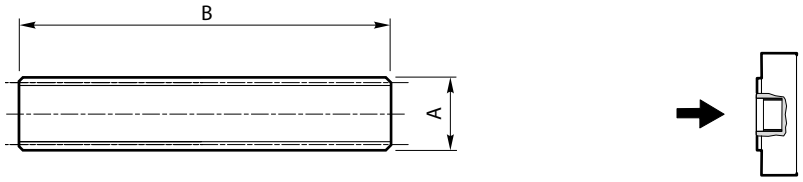
ES



	VERSION	A	ø B	C	ø D	E	CODE
RE 110-210	NE	50	80	108	18	54	40001831
RE 240	TE	50	80	108	18	54	40001831
RE 310-510-610	NE	50	80	108	18	54	40001831
RE 310-510-610	TE-TLE	70	100	115	—	—	40001813
RE 810	TE	70	100	115	—	—	40001813
RE 1020-1520-2000	TE	70	100	115	—	—	40001813

On demand for different size

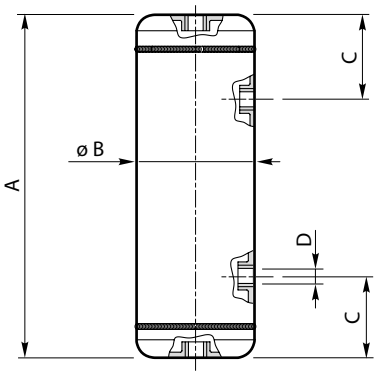
BF



	VERSION	A	B	CODE	Tmax [Nm]
RE 110-210	FS	B40x36 DIN 5482	250	40100901	2240
RE 240	FS	B45x41 DIN 5482	250	02631093	3255
RE 310-510-610	FS - NF	A58x53 DIN 5482	250	40100904	7055
RE 810	FS - NF	A70x64 DIN 548	250	40001855	12600
RE 1020-1520-2000	FS	A80xx74 DIN 5482	250	40001856	19250
RE 2520-3000	FS	A100x94 DIN 5482	250	02631012	39450
RE 3510-4800	FS	W120x3x8f DIN 5480	250	02631086	97500
RE 6000-8000	FS	W140x5x8f DIN 5480	250	02631134	146000

On demand for different size

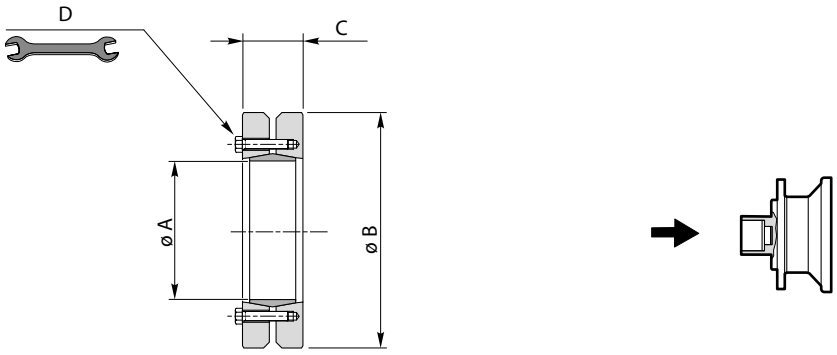
VE



A	ø B	C	D	Capacity [Liters]	CODE
230	80	55	1/4" GAS (4)	1.0	40000712
330	130	85	1/4" GAS (4)	3.8	40000711
330	160	85	1/4" GAS (4)	5.5	40000710
510	150	85	1/4" GAS (4)	7.7	40000704
690	150	85	1/4" GAS (4)	10.7	40000706

On demand for different size

GA



	VERSION	ø A	ø B	C	D	[Nm]	T max [Nm]
RE 110-210	NQ	62	110	29	M6-10.9 (10)	12	3000
RE 240-310-510-610	NQ-TQ	100	170	43	M8-10.9 (12)	30	9300
RE 810	TQ	125	215	53	M10-10.9 (12)	59	15800
RE 1020-1520-2000	HQ-TQ	165	290	68	M16-10.9 (8)	250	43600
RE 2520-3000	HQ	175	300	88	M16-10.9 (10)	250	59400
RE 3510-4800	HQ	185	330	85	M16-10.9 (10)	250	73100
RE 4800	HQ1	200	350	85	M16-10.9 (12)	250	94800
RE 6000-8000	HQ	195	350	112	M16-10.9 (15)	250	123000
RE 6000-8000	HQ1	240	405	108	M20-10.9 (12)	490	168000
GB 12010-16000	HQ	240	405	144	M20-10.9 (15)	490	236000
GB 12010-16000	HQ1	260	430	160	M20-10.9 (18)	490	325000
GB 21000-26000	HQ	280	460	172	M20-10.9 (20)	490	407000
GB 31000-40000	HQ	360	590	204	M24-10.9 (20)	840	753000
GB 45000	HQ	380	645	164	M24-10.9 (20)	840	739000
GB 53000-61000	HQ	390	660	212	M24-10.9 (24)	840	986000
GB 85000	HQ	460	770	252	M27-10.9 (28)	1250	1870000

On demand for different size

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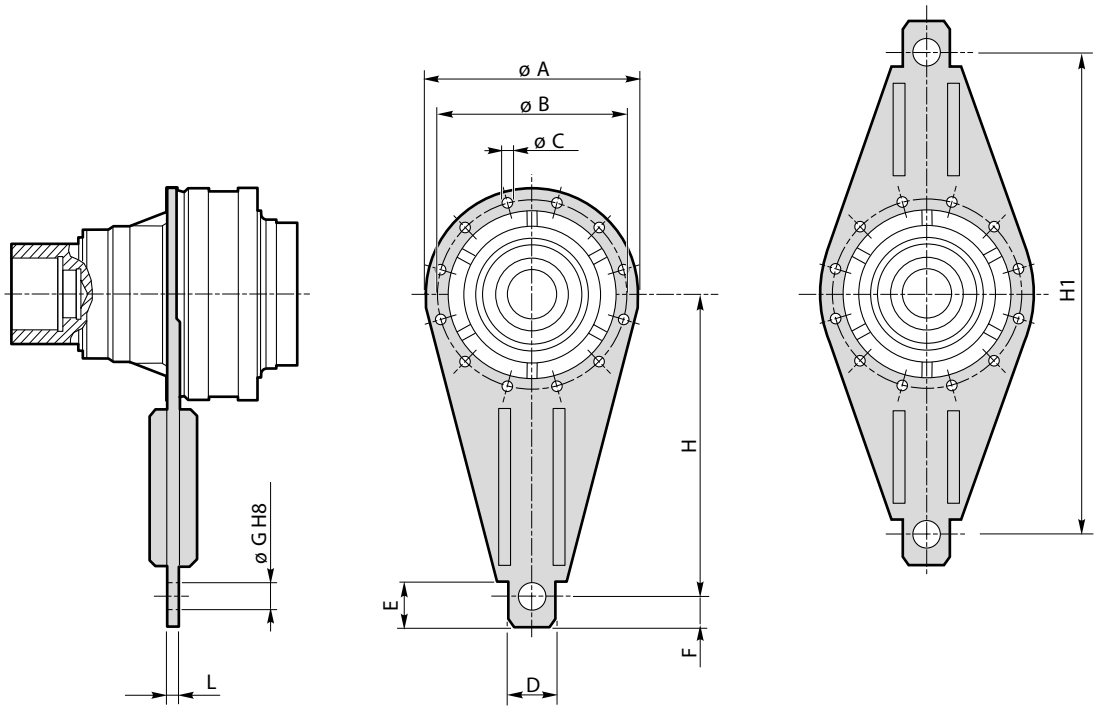

	VERSION	ø A	ø B	ø C	D	E	F	ø G	H	H1	L
RE 110-210	N	185	165	11 (8)	60	50	35	25	300	450	15
RE 110-210	T-TR	219	194	11 (10)	70	50	35	35	300	450	15
RE 240	TR	219	194	11 (10)	70	50	35	35	300	450	15
RE 240	T	219	195	13 (10)	60	50	35	30	350	500	15
RE 310-510-610	N-NU*	222	195	13 (10)	70	60	40	35	350	500	15
RE 810	T	280	250	15(12)	75	65	45	40	400	600	16
RE 1020	T	325	295	17 (10)	80	75	50	45	500	800	17
RE 1520-2000	T	325	295	17 (10)	80	75	50	45	500	800	17
RE 1520-2000	H	350	314	17(16)	80	75	50	45	500	800	17
RE 2520-3000	H	409	370	17(21)	95	125	60	50	700	1000	18
RE 3510-4800	H	452	424	17 (24)	100	130	65	50	800	1100	20
RE 6000-8000	H	490	445	19 (36)	110	140	70	55	900	1200	20
GB 12010-16000	H	610	560	25 (36)	120	120	80	60	1100	1400	22
GB 21000-26000	H	710	660	28 (36)	130	145	90	65	1300	1600	35
GB 31000	H	870	810	32 (36)	140	160	100	70	1500	2000	40
GB 40000-45000	H	870	810	32 (36)	140	160	100	70	1500	2000	40
GB 53000-61000-85000	H	1090	1020	39 (36)	160	170	110	75	1500	2000	80
GB 110000-130000	H	1540	1450	44 (40)	200	180	120	100	1800	2500	50

* NU Torque arm code 02531016
On demand for different size

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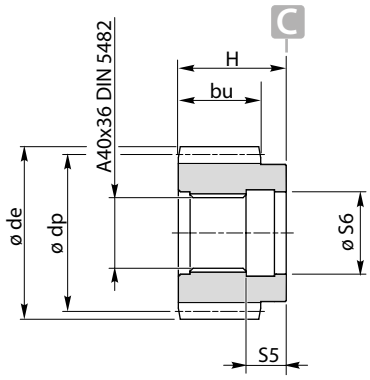

	M	z	x	ø de	ø dp	bu	H	S5	ø S6	Code
RE 110 RE 210	4	20	0	88	80	42	55	20.5	ø 42 H7	40100882
	4	24	0	104	96	45	57	20.5	ø 42 H7	40100889
	4.5	14	0.5	76.5	63	55	55	20.5	ø 42 H7	40100835
	4.5	16	0	81	72	70	80	20.5	ø 42 H7	40100802
	4.5	16	0	81	72	45	55	20.5	ø 42 H7	40100926
	4.5	16	0	81	72	45	75	20.5	ø 42 H7	40100943
	5	14	0	80	70	60	60	20.5	ø 42 H7	40100810
	5	14	0	80	70	70	80	20.5	ø 42 H7	40100812
	5	14	0.5	85	70	65	65	20.5	ø 42 H7	40100811
	5	14	0.5	85	70	60	90	20.5	ø 42 H7	40100885
	5	14	0.5	85	70	55	78	20.5	ø 42 H7	40100888
	5	14	0.5	84.5	70	47	55	20.5	ø 42 H7	02571014
	5	16	0	90	80	70	80	20.5	ø 42 H7	40100813
	5	17	0	95	85	70	80	20.5	ø 42 H7	40100815
	5	18	0	100	90	70	80	20.5	ø 42 H7	40100814
	5	20	0	109.5	100	45	74	20.5	ø 42 H7	40100918
	5	22	0	120	110	50	76	20.5	ø 42 H7	40100934
	6	12	0.5	89	72	70	80	20.5	ø 42 H7	40100825
	6	13	0	90	78	60	85	20.5	ø 42 H7	40100914
	6	13	0	90	78	50	80	20.5	ø 42 H7	40100915
	6	13	0.5	95	78	61	97	20.5	ø 42 H7	40100823
	6	14	0	96	84	50	60	20.5	ø 42 H7	40100824
	6	14	0	96	84	70	80	20.5	ø 42 H7	40100826
	6	14	0	96	84	70	100	20.5	ø 42 H7	40100827
	6	15	0	102	90	60	82.5	20.5	ø 42 H7	40100935
	6	15	0.5	108	90	40	73	20.5	ø 42 H7	40100819
	6	17	0	114	102	80	110	20.5	ø 42 H7	40100913
	6	18	0	120	108	70	80	20.5	ø 42 H7	40100830
	6	20	0	132	120	60	85	20.5	ø 42 H7	40100894
	8	12	0.5	118	96	60	65	20.5	ø 42 H7	40100841
	8	14	0.5	136	112	80	110	20.5	ø 42 H7	40100912
	8	15	0	136	120	70	80	20.5	ø 42 H7	40100846

On demand for different size

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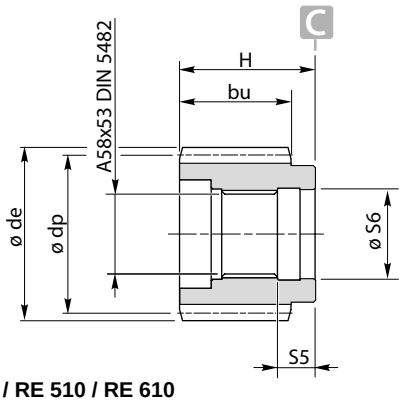
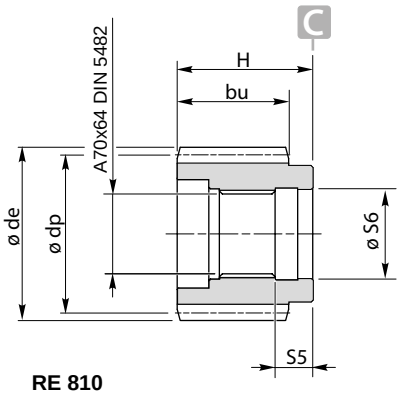


RE 240 / RE 310 / RE 510 / RE 610



RE 810

	M	z	x	ø de	ø dp	bu	H	S5	ø S6	Code
RE 240 RE 310 RE 510 RE 610	5	21	0	115	105	60	76	25	ø 60 H7	40100883
	5	22	0	120	110	50	76	25	ø 60 H7	02571051
	6	14	0.5	101.5	90	65	78	25	ø 60 H7	40100923
	6	16	0	108	96	70	80	25	ø 60 H7	40100867
	6	18	0	120	108	70	80	25	ø 60 H7	40100831
	6	20	0	132	120	75	80	25	ø 60 H7	40100873
	6	24	0	156	144	68	77.5	25	ø 60 H7	40100808
	7	14	0	112	98	78.5	78.5	25	ø 60 H7	40100874
	8	12	0.5	120	96	80	100	25	ø 60 H7	40100818
	8	13	0	120	104	68	78	25	ø 60 H7	02571111
	8	14	0	128	112	65	68	25	ø 60 H7	40100844
	8	14	0	128	112	75	85	25	ø 60 H7	40100845
	8	15	0	136	120	75	85	25	ø 60 H7	40100848
	8	16	0	144	128	75	85	25	ø 60 H7	40100849
	8	16	0.5	152	128	75	85	25	ø 60 H7	40100893
	8	17	0	149	136	78	110	25	ø 60 H7	40100937
	8	18	0	160	144	76	78	25	ø 60 H7	40100850
	8	18	0	160	144	96	98	25	ø 60 H7	40100898
	8	19	0	174	152	85	102	25	ø 60 H7	02571055
	10	11	0.5	136	110	80	96.5	25	ø 60 H7	40100807
	10	11	0.5	136	110	100	120.5	25	ø 60 H7	40100938
	10	12	0.5	149	120	80	96.5	25	ø 60 H7	40100820
	10	12	0.35	143	120	80	100	25	ø 60 H7	40100838
	10	13	0	150	130	80	80	25	ø 60 H7	40100929
	10	13	0	150	130	90	105	25	ø 60 H7	40100942
	10	14	0	160	140	80	80	25	ø 60 H7	40100866
	10	14	0	160	140	90	105	25	ø 60 H7	40100868
	10	15	0	170	150	80	80	25	ø 60 H7	40100839

	M	z	x	ø de	ø dp	bu	H	S5	ø S6	Code
RE 810	8	15	0.3	140.8	120	67	96	29	ø 72 H7	02571235
	8	17	0	152	136	80	99	29	ø 72 H7	02571121
	8	20	0	176	160	115	124	29	ø 72 H7	025710101
	8	23	0.5	208	184	86	131	29	ø 72 H7	40100853
	10	11	0.5	136	110	80	90	29	ø 72 H7	40100857
	10	12	0.5	150	120	90	90	29	ø 72 H7	02571110
	10	13	0.5	160	130	90	90	29	ø 72 H7	40100852
	10	13	0.5	160	130	99	99	29	ø 72 H7	02571000
	10	14	0	160	140	99	99	29	ø 72 H7	02571024
	10	14	0.5	170	140	67	96	29	ø 72 H7	02571236
	10	15	0	170	150	98	112	29	ø 72 H7	02571037
	10	15	0.5	180	150	98	112	29	ø 72 H7	02571183
	10	17	0.48	198	170	80	90	29	ø 72 H7	02571013
	12	11	0.5	167	132	90	120	29	ø 72 H7	40100821
	12	13	0.5	192	156	118	126	29	ø 72 H7	40100840
	12	13	0.3	187	156	75	90	29	ø 72 H7	02571019
	12	14	0.5	199	168	90	100	29	ø 72 H7	02571101
	14	12	0.3	205	168	80	110	29	ø 72 H7	02571102

On demand for different size

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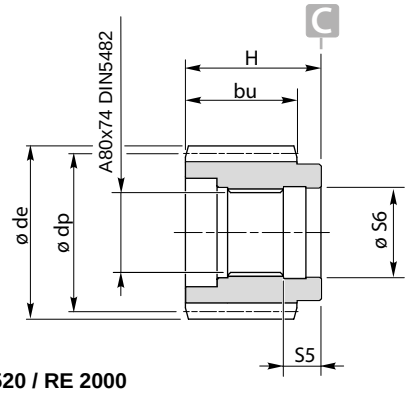
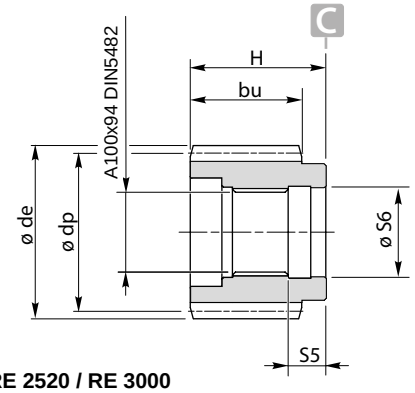


RE 1020 / RE 1520 / RE 2000

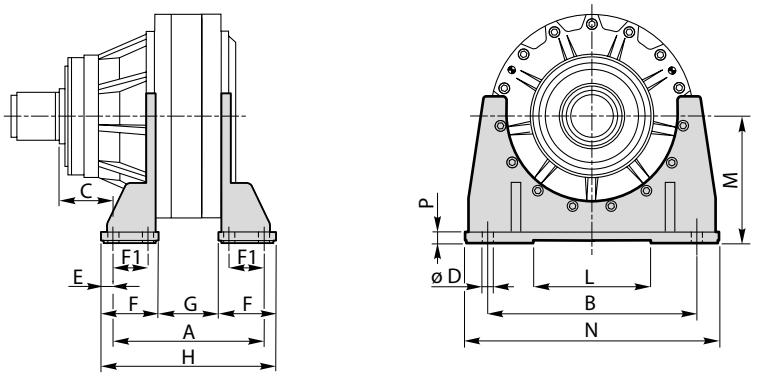


RE 2520 / RE 3000

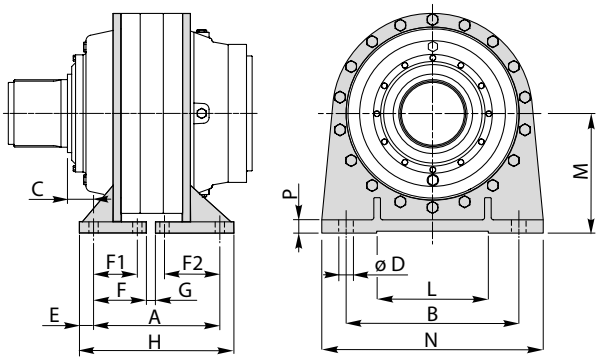
	M	z	x	ø de	ø dp	bu	H	S5	ø S6	Code
RE 1020 RE 1520 RE 2000	10	14	0.32	162.4	140	103	116	30.5	ø 85 H7	02571001
	10	15	0	170	150	90	115	30.5	ø 85 H7	40100940
	10	18	0	198	180	87	116	30.5	ø 85 H7	40100822
	12	11	0.5	167	132	100	120	30.5	ø 85 H7	02571136
	12	13	0.5	192	156	120	120	30.5	ø 85 H7	02571173
	12	14	0.5	199	168	90.5	90.5	30.5	ø 85 H7	40100856
	12	16	0	214	192	90	95	30.5	ø 85 H7	40100850
	14	11	0.5	192.36	154	97	97	30.5	ø 85 H7	025710113
	14	12	0.5	210	168	135	135	30.5	ø 85 H7	02571182
	14	14	0.5	233.8	196	105	105	30.5	ø 85 H7	02571103
	16	10	0.5	208	160	115	115	30.5	ø 85 H7	025710126
	16	19	0	336	304	120	120	30.5	ø 85 H7	02571006
	18	10	0.5	234	180	157	157	30.5	ø 85 H7	02571152
	18	13	0.5	288	234	100	100	30.5	ø 85 H7	02571208
	20	14	0.5	340	280	125	140	30.5	ø 85 H7	025710102

	M	z	x	ø de	ø dp	bu	H	S5	ø S6	Code
RE 2520 RE 3000	12	16	0.5	228.4	192	120	130	34	ø 105 H7	02571044
	14	14	0	224	196	110	110	34	ø 105 H7	02571030
	14	15	0.5	250.6	210	110	120	34	ø 105 H7	02571221
	16	13	0.5	256	208	145	145	34	ø 105 H7	02571201
	16	17	0.5	320	272	140	150	34	ø 105 H7	02571159
	16	19	0.5	352	304	140	150	34	ø 105 H7	02571167
	20	12	0.5	299	240	150	150	34	ø 105 H7	02571176

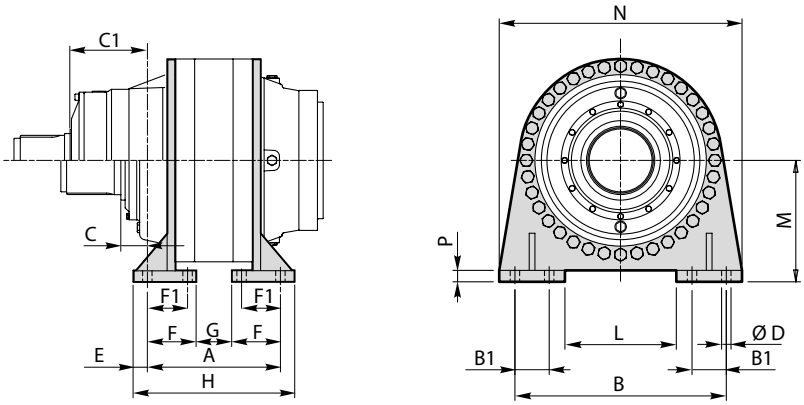
On demand for different size



	A	B	C	ø D	E	F	F1	G	H	L	M	N	P	Code
RE 1520-2000	310	356	80.5	25(8)	29.5	150.5	120.5	9	369	220	230	420	40	99448300
RE 2520-3000	334	457	78.5	33(8)	36	163.5	135	7	405	350	280	550	32.5	99448400

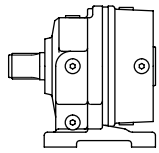
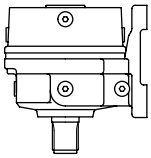
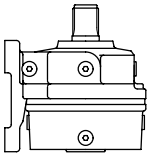
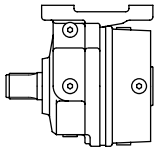
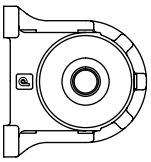
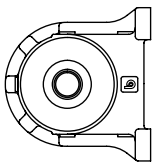
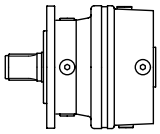
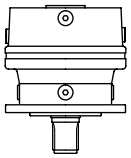
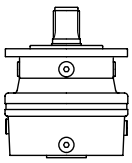


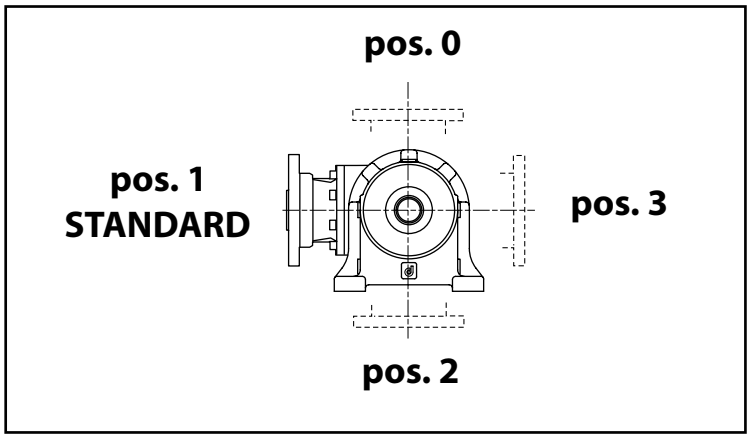
	A	B	C	ø D	E	F	F1	F2	G	H	L	M	N	P	Code
RE 3510-4800	300	390	50	33(8)	35	116.5	92	154	5	370	235	270	500	29	99382000



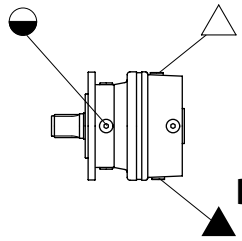
	A	B	B1	C	C1	ø D	E	F	F1	G	H	L	M	N	P	Code
RE 6000	410	508	-	-	114.5	33(8)	43.5	194	160	22	497	340	315	610	35	99452100
RE 6000 H6	401.5	508		14.5	-	33(8)	43.5	194	160	13.5	488.5	340	315	610	35	99450600
RE 8000	404.5	508	--	14.5	-	33(8)	43.5	194	160	16.5	491.5	340	315	610	35	99450600
GB 12010-16000	416	630	100	52	-	32(12)	40	185	145	46	496	340	360	720	38	99335300
GB 21000	432	740	120	62	-	33(12)	50	150	170	37	532	390	425	850	42	99451200
GB 26000	452	740	120	62	-	33(12)	50	150	170	57	552	390	425	850	42	99451300
GB 31000	550	900	150	75	-	45(12)	75	262.5	214.5	25	700	480	530	1020	50	99352800
GB 40000-45000	590	900	150	75		45(12)	75	262.5	214.5	65	740	480	530	1020	50	99446400
GB 53000-61000	645	1100	200	81	—	52(8)	80	200	—	245	805	550	640	1250	60	99180000
GB 85000	693	1100	200	81	—	52(8)	80	200	—	293	853	550	640	1250	60	99180100
GB110000-130000 150000	865	1520	380	68	—	60(8)	72.5	245.5	—	354	1110	610	950	1750	80	—
GB 205000-235000	1090	1770	380	176	—	85(8)	99	326	—	438	1288	780	1050	2000	102	—

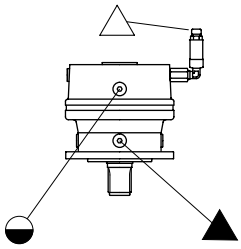
On demand for different size

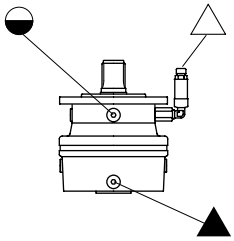
			
B3	**V5**	**V6**	**B8**
			
B6	**B7**	**B5**	**V1**
			
V3			



N


B5


V1


V3

110÷810

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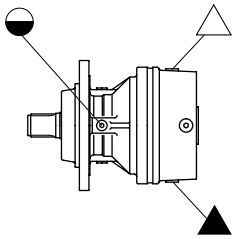
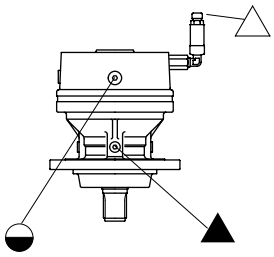
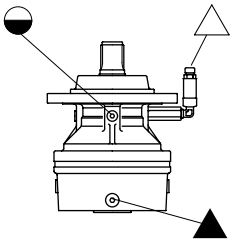
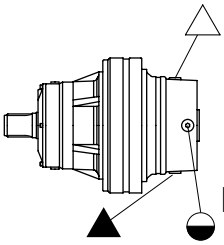

B5


V1


V3

110÷2000

H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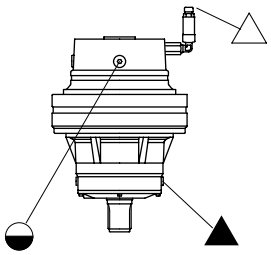
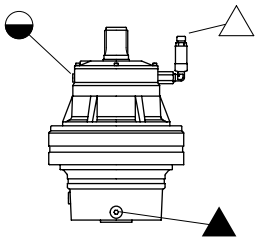
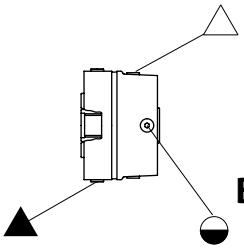

V1


V3

1520÷235000

F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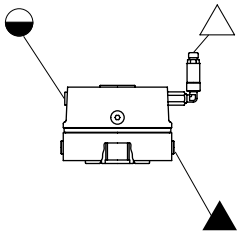
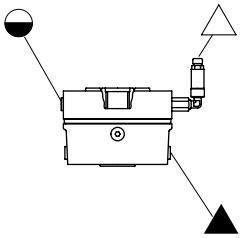
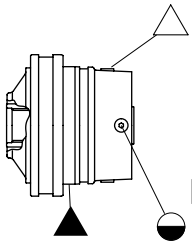

V1


V3

110÷240

F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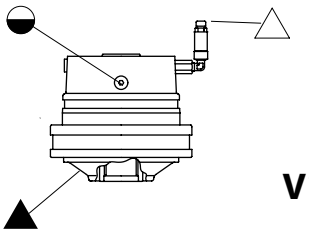
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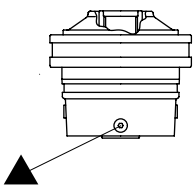
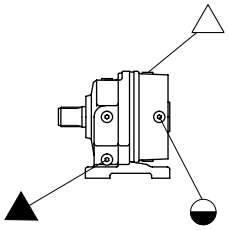
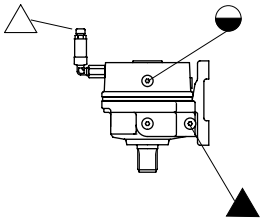

V3

310÷2000

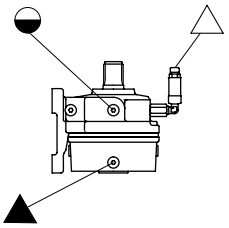
P



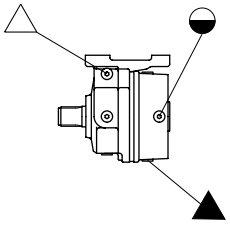
B3



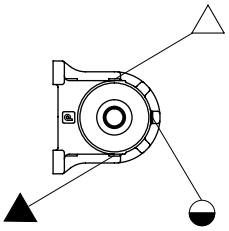
V5



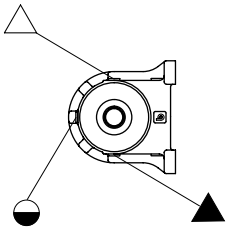
V6



B8



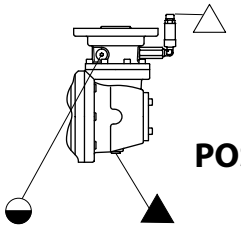
B6



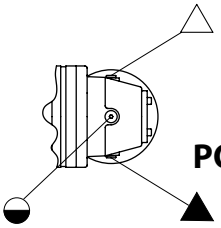
B7

110÷1020

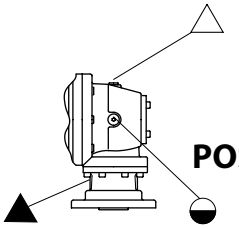
RA



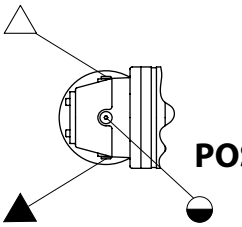
POS. 0



POS. 1

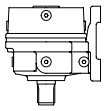
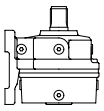
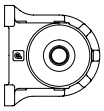
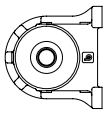
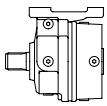
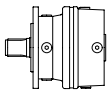
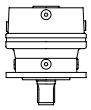
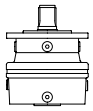


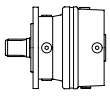
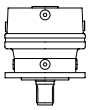
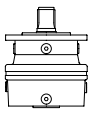
POS. 2

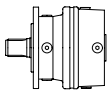
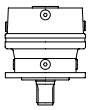
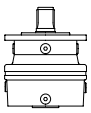


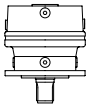
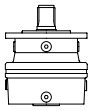
POS. 3

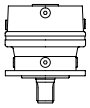
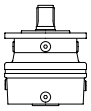
110÷510

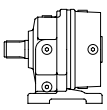
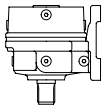
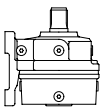
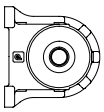
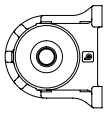
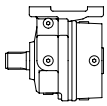
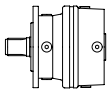
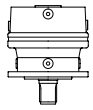
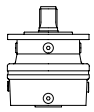
[Liters]	B3	V5	V6	B6	B7	B8	B5	V1	V3
									
RE 111	0.7	1.4	1.4	0.7	0.7	0.7	0.4	0.8	0.8
RE 112	0.9	1.8	1.8	0.9	0.9	0.9	0.5	1	1
RE 113	1.1	2.2	2.2	1.1	1.1	1.1	0.7	1.4	1.4
RE 114	1.3	2.6	2.6	1.3	1.3	1.3	0.8	1.6	1.6
RE 211	0.8	1.6	1.6	0.8	0.8	0.8	0.5	1	1
RE 212	1	2	2	1	1	1	0.6	1.2	1.2
RE 213	1.2	2.4	2.4	1.2	1.2	1.2	0.7	1.4	1.4
RE 214	1.4	2.8	2.8	1.4	1.4	1.4	0.9	1.8	1.8
RE 241	0.8	1.6	1.6	0.8	0.8	0.8	0.5	1	1
RE 242	1	2	2	1	1	1	0.6	1.2	1.2
RE 243	1.2	2.4	2.4	1.2	1.2	1.2	0.7	1.4	1.4
RE 244	1.4	2.8	2.8	1.4	1.4	1.4	0.9	1.8	1.8
RE 311	1.4	2.8	2.8	1.4	1.4	1.4	1	2	2
RE 312	1.6	3.2	3.2	1.6	1.6	1.6	1.2	2.4	2.4
RE 313	1.7	3.4	3.4	1.7	1.7	1.7	1.3	2.6	2.6
RE 314	1.8	3.6	3.6	1.8	1.8	1.8	1.4	2.8	2.8
RE 511	1.5	3	3	1.5	1.5	1.5	1.1	2.2	2.2
RE 512	1.7	3.4	3.4	1.7	1.7	1.7	1.3	2.6	2.6
RE 513	1.8	3.6	3.6	1.8	1.8	1.8	1.5	3	3
RE 514	1.9	3.8	3.8	1.9	1.9	1.9	1.6	3.2	3.2
RE 611	1.6	3.2	3.2	1.6	1.6	1.6	1.2	2.4	2.4
RE 612	1.8	3.6	3.6	1.8	1.8	1.8	1.4	2.8	2.8
RE 613	1.9	3.8	3.8	1.9	1.9	1.9	1.6	3.2	3.2
RE 614	20	40	40	20	20	20	1.7	3.4	3.4
RE 811	1.8	3.6	3.6	1.8	1.8	1.8	1.5	3	3
RE 812	2	4	4	2	2	2	1.7	3.4	3.4
RE 813	2.2	4.4	4.4	2.2	2.2	2.2	1.9	3.8	3.8
RE 814	2.3	4.6	4.6	2.3	2.3	2.3	2	4	4
RE 1021	2.4	4.8	4.8	2.4	2.4	2.4	2.1	4.2	4.2
RE 1022	2.6	5.2	5.2	2.6	2.6	2.6	2.3	4.6	4.6
RE 1023	2.7	5.4	5.4	2.7	2.7	2.7	2.4	4.8	4.8
RE 1024	2.9	5.8	5.8	2.9	2.9	2.9	2.6	5.2	5.2

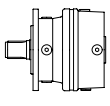
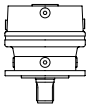
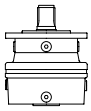
[Liters]	B5	V1	V3
			
RE 1521	2.7	5.4	5.4
RE 1522	3	6	6
RE 1523	3.2	6.4	6.4
RE 1524	3.4	6.8	6.8
RE 2001	2.7	5.4	5.4
RE 2002	3	6	6
RE 2003	3.3	6.6	6.6
RE 2004	3.4	6.8	6.8
RE 2002L	3	6	6
RE 2003L	3.1	6.2	6.2
RE 2004L	3.2	6.4	6.4
RE 2521	3.9	7.7	7.7
RE 2522	4.5	9	9
RE 2523	4.7	9.4	9.4
RE 2524	5	9.9	9.9
RE 3001	3.8	7.6	7.6
RE 3002	4.6	9.1	9.1
RE 3003	4.8	9.5	9.5
RE 3004	5	10	10
RE 3511	4.9	9.8	9.8
RE 3512	5.7	11.4	11.4
RE 3513	6	12	12
RE 3514	6.2	12.4	12.4
RE 4801	4.7	9.4	9.4
RE 4802	6.8	13.6	13.6
RE 4803	7.2	14.4	14.4
RE 4804	7.4	14.8	14.8
RE 6001	7.5	15	15
RE 6002	8.5	17	17
RE 6003	9	18	18
RE 6004	9.3	18.6	18.6
RE 6002L	8.5	17	17
RE 6003L	9	18	18

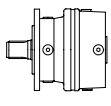
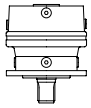
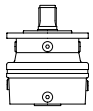
[Liters]	B5	V1	V3
			
RE 6004L	9.2	18.4	18.4
RE 8001	8.3	16.6	16.6
RE 8002	10.2	20.4	20.4
RE 8003	11	22	22
RE 8004	11.5	23	23
RE 8005	11.7	23.4	23.4
RE 8002L	10.2	20.4	20.4
RE 8003L	10.8	21.6	21.6
RE 8004L	11.4	22.8	22.8
RE 8005L	11.6	23.2	23.2
GB 12011	13.5	27	27
GB 12012	15.5	31	31
GB 12013	16.5	33	33
GB 12014	16.8	33.6	33.6
GB 12015	17	34	34
GB 12012L	15.5	31	31
GB 12013L	16.3	32.6	32.6
GB 12014L	16.7	33.4	33.4
GB 12015L	17	34	34
GB 16001	14.5	29	29
GB 16002	18	36	36
GB 16003	19.2	38.4	38.4
GB 16004	19.6	39.2	39.2
GB 16005	19.8	39.6	39.6
GB 16002L	17	34	34
GB 16003L	18	36	36
GB 16004L	18.5	37	37
GB 16005L	18.7	37.4	37.4
GB 21001	20	40	40
GB 21002	23.5	47	47
GB 21003	24.5	49	49
GB 21004	25	50	50
GB 21005	25.5	51	51

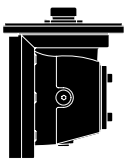
[Liters]	B5	V1	V3
			
GB 26001	20	40	40
GB 26002	25.5	51	51
GB 26003	27.5	55	55
GB 26004	28.5	57	57
GB 26005	29	58	58
GB 31001	38	76	76
GB 31002	46.5	93	93
GB 31003	48.5	97	97
GB 31004	49.5	99	99
GB 31005	50	100	100
GB 40001	41	82	82
GB 40002	49	98	98
GB 40003	51	102	102
GB 40004	52	104	104
GB 40005	52	104	104
GB 45001	41	82	82
GB 45002	50	100	100
GB 45003	53.5	107	107
GB 45004	55	110	110
GB 45005	55.5	111	111
GB 53001	70	140	140
GB 53002	80	160	160
GB 53003	85	170	170
GB 53004	86.5	173	173
GB 53005	87	174	174
GB 61001	70	140	140
GB 61002	80	160	160
GB 61003	85	170	170
GB 61004	86.5	173	173
GB 61005	87	174	174
GB 85001	75	150	150
GB 85002	87.5	175	175
GB 85003	93	186	186

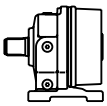
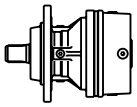
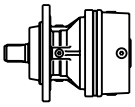
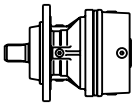
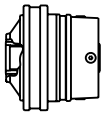
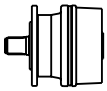
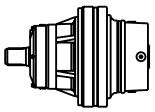
[Liters]	B5	V1	V3
			
GB 85004	95	190	190
GB 85005	95.5	191	191
GB 110001	145	290	290
GB 110002	170	340	340
GB 110003	180	360	360
GB 110004	183	366	366
GB 110005	185	370	370
GB 130001	144	288	288
GB 130002	172	344	344
GB 130003	181	362	362
GB 130004	185	370	370
GB 130005	186	372	372
GB 150001	143	286	286
GB 150002	172	344	344
GB 150003	185	370	370
GB 150004	187	374	374
GB 150005	188	376	376
GB 205001	255	510	510
GB 205002	300	600	600
GB 205003	318	636	636
GB 205004	326	652	652
GB 205005	329	658	658
GB 235001	255	510	510
GB 235002	300	600	600
GB 235003	335	670	670
GB 235004	345	690	690
GB 235005	247	494	494

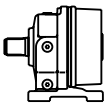
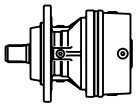
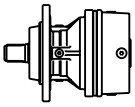
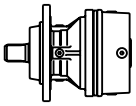
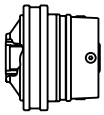
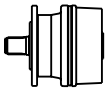
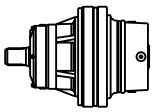
[Liters]	B3-1	V5	V6	B6-1	B7	B8	B5-1	V1	V3
									
RA 112	1.5	3	3	1.5	3	3	1.2	2.4	2.4
RA 113	1.7	3.4	3.4	1.7	3.4	3.4	1.3	2.6	2.6
RA 114	1.9	3.8	3.8	1.9	3.8	3.8	1.5	3	3
RA 212	1.6	3.2	3.2	1.6	3.2	3.2	1.3	2.6	2.6
RA 213	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RA 214	2	4	4	2	4	4	1.5	3	3
RA 242	1.6	3.2	3.2	1.6	3.2	3.2	1.3	2.6	2.6
RA 243	1.8	3.6	3.6	1.8	3.6	3.6	1.4	2.8	2.8
RA 244	2	4	4	2	4	4	1.5	3	3
RA 312	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 313	2.4	4.8	4.8	2.4	4.8	4.8	2	4	4
RA 314	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 512	2.6	5.2	5.2	2.6	5.2	5.2	2.2	4.4	4.4
RA 513	2.5	5	5	2.5	5	5	2.1	4.2	4.2
RA 514	2.6	5.2	5.2	2.6	5.2	5.2	2.3	4.6	4.6
RA 612	2.7	5.4	5.4	2.7	5.4	5.4	2.3	4.6	4.6
RA 613	2.9	5.8	5.8	2.9	5.8	5.8	2.5	5	5
RA 614	2.7	5.4	5.4	2.7	5.4	5.4	2.4	4.8	4.8
RA 812	3.8	7.6	7.6	3.8	7.6	7.6	3.5	7	7
RA 813	3.1	6.2	6.2	3.1	6.2	6.2	2.8	5.6	5.6
RA 814	3	6	6	3	6	6	2.7	5.4	5.4
RA 1022	4.4	8.8	8.8	4.4	8.8	8.8	4.1	8.2	8.2
RA 1023	3.7	7.4	7.4	3.7	7.4	7.4	3.4	6.8	6.8
RA 1024	3.5	7	7	3.5	7	7	3.2	6.4	6.4

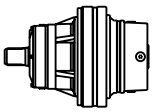
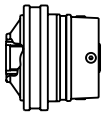
[Liters]	B5-1	V1	V3
			
RA 1522	5.7	11.4	11.4
RA 1523	4.1	8.2	8.2
RA 1524	4	8	8
RA 2002	5.7	11.4	11.4
RA 2003	4.1	8.2	8.2
RA 2004	4.1	8.2	8.2
RA 2003L	4.1	8.2	8.2
RA 2004L	3.9	7.8	7.8
RA 2522	10.7	21.4	21.4
RA 2523	11	22	22
RA 2524	10.5	21	21
RA 3002	10.6	21.2	21.2
RA 3003	11.1	22.2	22.2
RA 3004	10.6	21.2	21.2
RA 3512	14.9	29.8	29.8
RA 3513	7.7	15.4	15.4
RA 3514	7.1	14.2	14.2
RA 4802	14.7	29.4	29.4
RA 4803	9.8	19.6	19.6
RA 4804	8.3	16.6	16.6
RA 6002	17.5	35	35
RA 6003	11.5	23	23
RA 6004	10.1	20.2	20.2
RA 6003L	11.5	23	23
RA 6004L	10.1	20.2	20.2
RA 8002	18.3	36.6	36.6
RA 8003	13.2	26.4	26.4
RA 8004	13	26	26
RA 8003L	13.2	26.4	26.4
RA 8004L	12.8	25.6	25.6
GBA 12013	18.5	37	37
GBA 12014	18.5	37	37
GBA 12015	17.9	35.8	35.8
GBA 12013L	18.5	37	37
GBA 12014L	18.3	36.6	36.6
GBA 12015L	18	36	36
GBA 16003	28	56	56
GBA 16004	22.2	44.4	44.4
GBA 16005	20.7	41.4	41.4

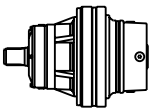
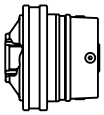
[Liters]	B5-1	V1	V3
			
GBA 16003L	27	54	54
GBA 16004L	21	42	42
GBA 16005L	19.6	39.2	39.2
GBA 21003	33.5	67	67
GBA 21004	27.5	55	55
GBA 21005	26.1	52.2	52.2
GBA 26003	35.5	71	71
GBA 26004	30.5	61	61
GBA 26005	30.5	61	61
GBA 31004	51.5	103	103
GBA 31005	51.5	103	103
GBA 40004	54	108	108
GBA 40005	54	108	108
GBA 45004	63.5	127	127
GBA 45005	58.5	117	117
GBA 53004	96.5	193	193
GBA 53005	90	180	180
GBA 61004	95	190	190
GBA 61005	89.5	179	179
GBA 61006	88	176	176
GBA 85004	103	206	206
GBA 85005	98	196	196
GBA 85006	97	194	194
GBA 110005	186	372	372
GBA 110006	187	374	374
GBA 130005	380	760	388
GBA 130006	189	378	378

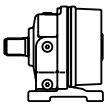
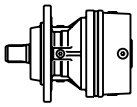
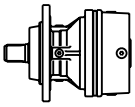
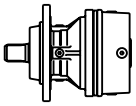
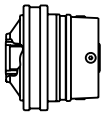
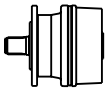
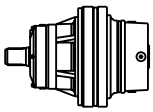
CC		
[Liters]		
CC30	1.6	**Complete filling**
CC120	2.2	
CC350	4	
CC600	6	
CC1000	16	

	P	T	TL	TR	F	N	H
kg							
RE 111	23	20	—	20	14	17	—
RE 112	29.5	26.5	—	26.5	21	24	—
RE 113	36.5	33.5	—	33.5	27.5	30.5	—
RE 114	43	40	—	40	34	37	—
RE 211	25	22	—	22	16	19	—
RE 212	32	29	—	29	23	26	—
RE 213	38	35	—	35	30	32	—
RE 214	45	42	—	42	37	39	—
RE 241	25	22	—	22	16	—	—
RE 242	32	29	—	29	23	—	—
RE 243	38	35	—	35	30	—	—
RE 244	45	42	—	42	37	—	—
RE 311	52	47	47	—	24	35	—
RE 312	59	54	54	—	31	42	—
RE 313	66	61	61	—	38	49	—
RE 314	72	67	66	—	45	56	—
RE 511	57	52	52	—	29	40	—
RE 512	66	61	61	—	38	49	—
RE 513	73	68	68	—	45	56	—
RE 514	80	75	75	—	52	63	—
RE 611	58	53	53	—	30	41	—
RE 612	72	67	67	—	44	55	—
RE 613	79	74	74	—	51	62	—
RE 614	86	81	81	—	58	69	—
RE 811	80	70	—	—	—	67	—
RE 812	94	84	—	—	—	80	—
RE 813	100	90	—	—	—	87	—
RE 814	107	97	—	—	—	94	—
RE 1021	100	90	—	—	60	—	—
RE 1022	117	107	—	—	77	—	—

kg	P	T	TL	TR	F	N	H
							
RE 1023	126	116	—	—	86	—	—
RE 1024	133	123	—	—	93	—	—
RE 1521	—	123	—	—	84	—	130
RE 1522	—	141	—	—	102	—	148
RE 1523	—	149	—	—	110	—	156
RE 1524	—	156	—	—	117	—	163
RE 2001	—	124	—	—	85	—	131
RE 2002	—	142	—	—	104	—	150
RE 2003	—	156	—	—	118	—	163
RE 2004	—	163	—	—	125	—	170
RE 2002L	—	137	—	—	99	—	145
RE 2003L	—	149	—	—	111	—	156
RE 2004L	—	153	—	—	115	—	160
RE 2521	—	—	—	—	151	—	185
RE 2522	—	—	—	—	180	—	214
RE 2523	—	—	—	—	194	—	228
RE 2524	—	—	—	—	201	—	235
RE 3001	—	—	—	—	152	—	186
RE 3002	—	—	—	—	199	—	233
RE 3003	—	—	—	—	207	—	241
RE 3004	—	—	—	—	216	—	250
RE 3511	—	—	—	—	225	—	239
RE 3512	—	—	—	—	260	—	274
RE 3513	—	—	—	—	278	—	292
RE 3514	—	—	—	—	287	—	301
RE 4801	—	—	—	—	226	—	240
RE 4802	—	—	—	—	311	—	325
RE 4803	—	—	—	—	330	—	344
RE 4804	—	—	—	—	339	—	353

kg	H 	F 
RE 6002L	365	340
RE 6003L	375	350
RE 6004L	382	357
RE 6001	315	290
RE 6002	370	345
RE 6003	390	365
RE 6004	395	370
RE 8001	410	380
RE 8002	500	470
RE 8003	540	510
RE 8004	555	525
RE 8005	560	530
RE 8002L	485	455
RE 8003L	520	490
RE 8004L	530	500
RE 8005L	535	505
GB 12011	650	615
GB 12012	750	715
GB 12013	785	750
GB 12014	800	765
GB 12015	810	775
GB 12012L	700	665
GB 12013L	745	710
GB 12014L	750	715
GB 12015L	757	722
GB 16001	690	655
GB 16002	860	825
GB 16003	915	880
GB 16004	935	900
GB 16005	940	905
GB 16002L	860	825
GB 16003L	865	830
GB 16004L	885	850
GB 16005L	890	855
GB 21001	930	880
GB 21002	1115	1065
GB 21003	1165	1115
GB 21004	1190	1140
GB 21005	1205	1155
GB 26001	980	920
GB 26002	1230	1170
GB 26003	1330	1270
GB 26004	1360	1300
GB 26005	1380	1320
GB 31001	1900	1750
GB 31002	2280	2130
GB 31003	2375	2225
GB 31004	2410	2260
GB 31005	2425	2275
GB 40001	2030	1880

kg	H 	F 
GB 40002	2400	2250
GB 40003	2500	2350
GB 40004	2530	2380
GB 40005	2540	2390
GB 45001	2030	1880
GB 45002	2435	2285
GB 45003	2610	2460
GB 45004	2665	2515
GB 45005	2682	2532
GB 53001	3550	3200
GB 53002	4060	3710
GB 53003	4250	3900
GB 53004	4350	4000
GB 53005	4370	4020
GB 61001	3550	3200
GB 61002	4060	3710
GB 61003	4250	3900
GB 61004	4350	4000
GB 61005	4370	4020
GB 85001	3850	3450
GB 85002	4410	4010
GB 85003	4650	4250
GB 85004	4750	4350
GB 85005	4785	4385
GB 110001	7520	6620
GB 110002	8780	7880
GB 110003	9155	8255
GB 110004	9250	8350
GB 110005	9285	8385
GB 130001	7535	6635
GB 130002	8800	7900
GB 130003	9210	8310
GB 130004	9380	8480
GB 130005	9430	8530
GB 150001	7550	6650
GB 150002	8795	7895
GB 150003	9280	8380
GB 150004	9460	8560
GB 150005	9500	8600
GB 205001	12240	11790
GB 205002	14330	13880
GB 205003	15040	14590
GB 205004	15410	14960
GB 205005	15500	15050
GB 235001	12250	11800
GB 235002	14580	14130
GB 235003	15830	15380
GB 235004	16200	15750
GB 235005	16300	15850

kg	P	T	TL	TR	F	N	H
							
RA 112	43	40	—	40	34	37	—
RA 113	49.5	46.5	—	46.5	41	44	—
RA 114	56.5	53.5	—	53.5	47.5	50.5	—
RA 212	45	42	—	42	36	39	—
RA 213	52	49	—	49	43	46	—
RA 214	58	55	—	55	50	52	—
RA 242	45	—	—	42	—	—	—
RA 243	52	—	—	49	—	—	—
RA 244	58	—	—	55	—	—	—
RA 312	102	97	97	—	74	85	—
RA 313		74	74	—	51	62	—
RA 314	86	81	81	—	58	69	—
RA 512	107	102	102	—	79	90	—
RA 513	86	81	81	—	58	69	—
RA 514	93	88	88	—	65	76	—
RA 612	108	103	103	—	80	91	—
RA 613	122	117	117	—	94	105	—
RA 614	99	94	94	—	71	82	—
RA 812	170	160	—	—	—	157	—
RA 813	144	134	—	—	—	130	—
RA 814	120	110	—	—	—	107	—
RA 1022	190	180	—	—	150	—	—
RA 1023	167	157	—	—	127	—	—
RA 1024	146	136	—	—	106	—	—
RA 1522	—	258	—	—	219	—	265
RA 1523	—	191	—	—	152	—	198
RA 1524	—	169	—	—	130	—	176
RA 2002	—	259	—	—	220	—	266
RA 2003	—	192	—	—	154	—	200
RA 2004	—	176	—	—	138	—	183
RA 2003L	—	187	—	—	149	—	195
RA 2004L	—	169	—	—	131	—	176
RA 2522	—	—	—	—	286	—	320
RA 2523	—	—	—	—	270	—	304
RA 2524	—	—	—	—	214	—	248
RA 3002	—	—	—	—	287	—	321
RA 3003	—	—	—	—	289	—	323
RA 3004	—	—	—	—	257	—	291
RA 3512	—	—	—	—	575	—	589
RA 3513	—	—	—	—	350	—	364
RA 3514	—	—	—	—	398	—	412
RA 4802	—	—	—	—	576	—	590
RA 4803	—	—	—	—	446	—	460
RA 4804	—	—	—	—	380	—	394

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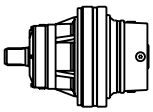
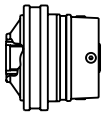
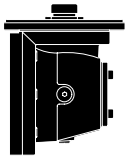
kg		
RA 6002	665	640
RA 6003	505	480
RA 6004	440	415
RA 6003L	500	475
RA 6004L	425	400
RA 8002	760	730
RA 8003	635	605
RA 8004	630	600
RA 8003L	620	590
RA 8004L	610	580
GBA 12013	885	850
GBA 12014	875	840
GBA 12015	850	815
GBA 12013L	835	800
GBA 12014L	835	800
GBA 12015L	800	765
GBA 16003	1210	1175
GBA 16004	1050	1015
GBA 16005	985	950
GBA 16003L	1210	1175
GBA 16004L	1000	965
GBA 16005L	935	900
GBA 21003	1465	1415
GBA 21004	1300	1250
GBA 21005	1240	1190
GBA 26003	1580	1520
GBA 26004	1465	1405
GBA 26005	1450	1390
GBA 31004	2510	2360
GBA 31005	2500	2350
GBA 40004	2635	2485
GBA 40005	2620	2470
GBA 45004	2960	2810
GBA 45005	2800	2650
GBA 53004	4600	4250
GBA 53005	4485	4135
GBA 61004	4600	4250
GBA 61005	4485	4135
GBA 61006	4420	4070
GBA 85004	5000	4600
GBA 85005	4885	4485
GBA 85006	4875	4475
GBA 110005	9385	8485
GBA 110006	9375	8475
GBA 130005	9730	8830
GBA 130006	9365	8665

	CC
kg	
CC30	35
CC120	50
CC350	90
CC600	135
CC1000	350