

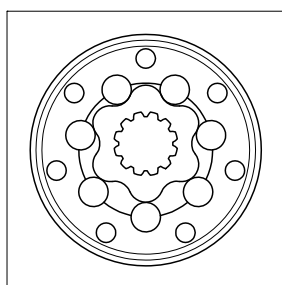
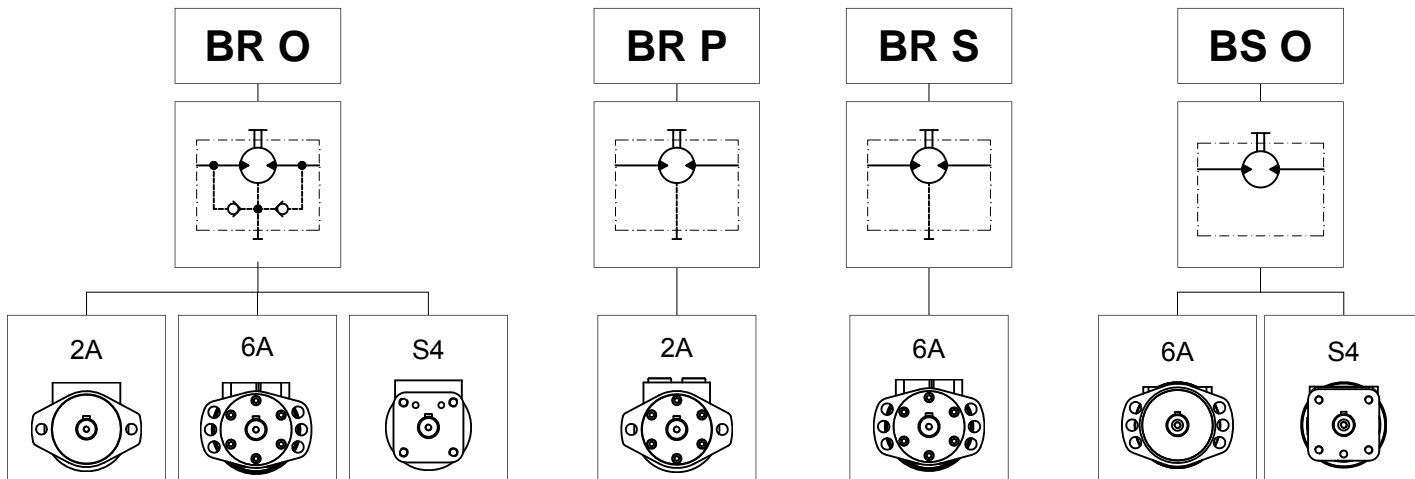
**BR - BS**



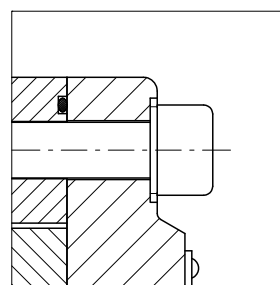
***MOTORI ORBITALI***

**HYDRAULIC MOTOR SERIES**

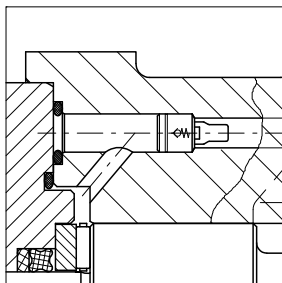
# CARATTERISTICHE DEL MOTORE MOTOR FEATURES



*Roller ad alto rendimento per elevate prestazioni e durata.  
High-performance roller for improved efficiency and life.*

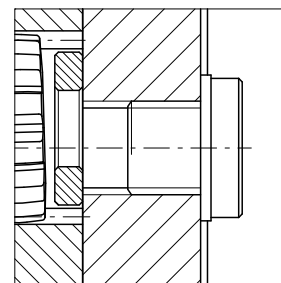


*Viti del coperchio posteriore in acciaio ad alta resistenza per sopportare gli sforzi indotti dall'alta pressione.  
High resistance stainless steel screws capable of withstanding the stress induced by high pressure.*



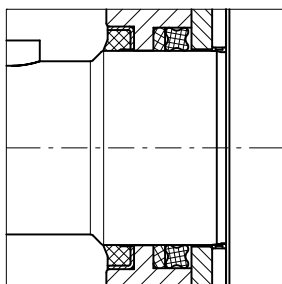
*Valvole di drenaggio incorporate: ricircolano allo scarico il fluido drenato internamente.*

Built in check valves: to relieve case pressure to the low pressure side of the motor.



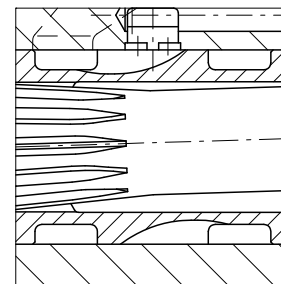
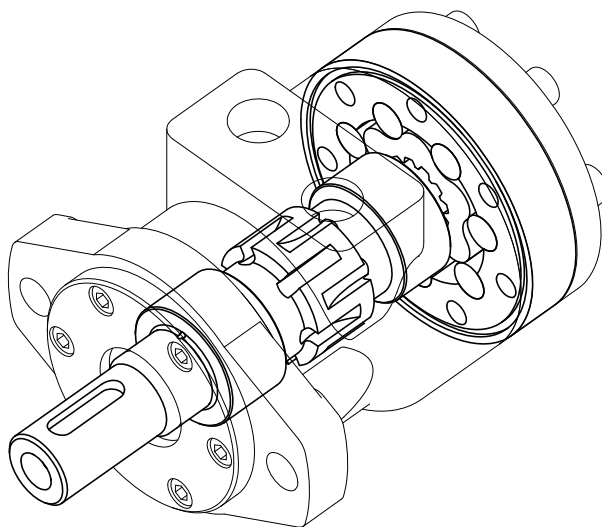
*Foro drenaggio posteriore per un facile collegamento.*

Case drain at rear (shown with plug).



*Parapolvere per proteggere la guarnizione di tenuta dell'albero dalle impurità e guarnizione di tenuta ad alte prestazioni.*

Seal to protect the high pressure shaft seal from dust and debris.



*Valvola distributrice radiale ed albero in un solo pezzo con tolleranze ridotte al minimo per assicurare un drenaggio ridotto.*

Spool valve integral to the output shaft of new design features optimizing clearance geometry and so minimizing the oil slippage.

# CODICI DI ORDINAZIONE ORDERING CODES

Le seguenti lettere o numeri del codice, sono state sviluppate per identificare tutte le configurazioni possibili dei motori BR. Usare il seguente modulo per identificare le caratteristiche desiderate. **Tutte le lettere o numeri del codice devono comparire in fase d'ordine.** Si consiglia di leggere attentamente il catalogo prima di iniziare la compilazione del codice di ordinazione.

The following alphanumeric digits system has been developed to identify all of the configuration options for the BR motors. Use the model code below to specify the desired features. **All alphanumeric digits system of the code must be present when ordering.** We recommend to carefully read the catalogue before filling the ordering code.

## CODICE PRODOTTO / MODEL CODE

1	2	3	4	5	6	7	8	8A	9	10

### 1 - SERIE / SERIES

BR	Motore orbitale Orbital motor
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### 2 - VERSIONI / VERSIONS

O	Versione O O Version	STANDARD
P	Versione P P Version	Speciale a richiesta Special on request
S	Versione S S Version	

### 3 - CILINDRATA / DISPLACEMENT

050	51.6 cm <sup>3</sup> /giro [3.14 in <sup>3</sup> /rev]
065	64.9 cm <sup>3</sup> /giro [3.95 in <sup>3</sup> /rev]
080	80.4 cm <sup>3</sup> /giro [4.9 in <sup>3</sup> /rev]
100	100 cm <sup>3</sup> /giro [6.1 in <sup>3</sup> /rev]
130	125.7 cm <sup>3</sup> /giro [7.66 in <sup>3</sup> /rev]
160	160 cm <sup>3</sup> /giro [9.76 in <sup>3</sup> /rev]
200	200 cm <sup>3</sup> /giro [12.2 in <sup>3</sup> /rev]
250	250 cm <sup>3</sup> /giro [15.2 in <sup>3</sup> /rev]
315	314.5 cm <sup>3</sup> /giro [19.1 in <sup>3</sup> /rev]
400	393 cm <sup>3</sup> /giro [23.9 in <sup>3</sup> /rev]

### 4 - FLANGIA / MOUNTING FLANGE

			VERSIONI / VERSIONS		
			O	S	P
2A	Ovale 2 Fori Oval 2 Bolts	STANDARD	•	/	•
6A	Ovale 6 Fori Oval 6 Bolts		•	•	/
S4	4 fori 3/8 16 UNC - Ø44,45mm 4 Bolt 3/8 16 UNC - Ø1.75 in	Speciale a richiesta Special on request	•	/	/

• Disponibile - Available / Non Disponibile - Not Available

1	2	3	4	5	6	7	8	8A	9	10

## 5 - ATTACCHI / MAIN PORTS

			VERSIONI / VERSIONS		
			O	S	P
<b>M08</b>	Attacchi 1/2 G BSPP (40x8) 1/2 G BSPP (40x8) Main Ports	STANDARD	•	•	/
<b>F08</b>	Attacchi Frontali 1/2 G BSPP 1/2 G BSPP (End Main Ports)	Speciale a richiesta Special on request	/	/	•

• Disponibile - Available / Non Disponibile - Not Available

## 6 - ESTREMITÀ ALBERO / OUTPUT SHAFT

			VERSIONI / VERSIONS				
			O			S	P
			FLANGIA / FLANGE			FLANGIA / FLANGE	FLANGIA / FLANGE
			2A	6A	S4	6A	2A
<b>CL250</b>	Albero Cilindrico Ø25 mm 0.984 in Parallel keyed	STANDARD	•	•	•	•	•
<b>LC254</b>	Albero Cilindrico Ø25.4 mm 1 in Parallel keyed		•	•	•	•	•
<b>C3175</b>	Albero Cilindrico Ø31.75 mm 1.25 in Parallel keyed		/	•	/	/	•
<b>CL320</b>	Albero Cilindrico Ø32 mm 1.259 in Parallel keyed		/	•	/	•	•
<b>CN320</b>	Albero Conico Tapered Shaft	Speciale a richiesta Special on request	/	•	/	/	•
<b>SD250</b>	Albero Scanalato (profilo SAE 6B 1" Z6) Splined Shaft (SAE 6B 1" 6T spline)		•	•	•	•	•

• Disponibile - Available / Non Disponibile - Not Available

## 7 - TENUTE / SEALS

<b>N</b>	NBR	STANDARD
<b>V</b>	FKM	

## 8 - VALVOLE / VALVES

			ATTACCHI / MAIN PORTS	
			M08	F08
<b>XXXX</b>	Non Richieste Not Required	STANDARD	•	•
<b>M081</b>	Valvola di massima pressione VAF 08 - D VAF 08 - D pressure relief valve		•	/
<b>M082</b>	Valvola di massima pressione VAF 08 - D/AF VAF 08 - D/AF pressure relief valve		•	/
<b>M083</b>	Valvola Antiurto e Anticavitazione VAAF 31 VAAF 31 anticavitation and Anti-Shock Valve		•	/
<b>M084</b>	Valvola con prelievo del fluido in pressione AF AF shuttle-valve		•	/
<b>M085</b>	Valvola bilanciata di blocco e controllo discesa VCD 08 - S/AF VCD 08 - S/AF overcentre Valve		•	/
<b>M086</b>	Valvola di controllo bilanciata a doppio effetto VCR1 08 - D/AF VCR1 08 - D/AF double-acting overcentre valve with shuttle valve		•	/
<b>M087</b>	Valvola di controllo bilanciata a doppio effetto con valvola limitatrice di pressione VCR1 08 D/AF LDP VCR1 08 D/AF LDP double-acting overcentre valve with shuttle valve		•	/
<b>M088</b>	Rotodeviatore DR 08/R DR 08/R rotary switch		•	/

• Disponibile - Available / Non Disponibile - Not Available

1	2	3	4	5	6	7	8	8A	9	10

### 8A - CARATTERISTICA VALVOLA / VALVES FEATURE

			VALVOLE / VALVES								
			XXXX	M081	M082	M083	M084	M085	M086	M087	M088
000	Caratteristica non necessaria Feature not necessary	STANDARD	●	/	/	/	●	/	/	/	/
001	Non Tarata (Campo Taratura 30÷70 bar) Not Set [435 to 1015 psi]		/	●	●	/	/	/	/	/	/
002	Non Tarata (Campo Taratura 70÷200 bar) Not Set [1015 to 2900 psi]		/	●	●	/	/	/	/	/	/
003	Non Tarata (Campo Taratura 50÷130 bar) Not Set [725 to 1885 psi]		/	/	/	●	/	/	/	/	/
004	Non Tarata (Campo Taratura 100÷250 bar) Not Set [1450 to 3625 psi]		/	/	/	●	/	/	/	/	/
005	Non Tarata (Campo Taratura 50÷150 bar) Not Set [725 to 2175 psi]		/	/	/	/	/	/	/	/	●
425	Rapporto di Pilotaggio 4.25:1 Pilot Ratio 4.25:1		/	/	/	/	/	/	●	●	/
800	Rapporto di Pilotaggio 8:1 Pilot Ratio 8:1		/	/	/	/	/	/	●	●	/
70D	Rapporto di Pilotaggio 7:1 - Senso di rotazione DX Pilot Ratio 7:1 - Direction of rotation CW		/	/	/	/	/	●	/	/	/
35D	Rapporto di Pilotaggio 3.5:1 - Senso di rotazione DX Pilot Ratio 3.5:1 - Direction of rotation CW		/	/	/	/	/	●	/	/	/
70S	Rapporto di Pilotaggio 7:1 - Senso di rotazione SX Pilot Ratio 7:1 - Direction of rotation CCW		/	/	/	/	/	●	/	/	/
35S	Rapporto di Pilotaggio 3.5:1 - Senso di rotazione SX Pilot Ratio 3.5:1 - Direction of rotation CCW		/	/	/	/	/	●	/	/	/

● Disponibile - Available / Non Disponibile - Not Available

Per la fornitura di valvole tarate contattare Uff. Tecnico.  
Please contact Technical department for valve which require specific setting

### 9 - CARATTERISTICA VERSIONE / VERSION FEATURE

			VERSIONI / VERSIONS		
			O	S	P
XXX	Non Richiesta Not Required	STANDARD	●	●	●
HPS	Guarnizione alta pressione High Pressure Seal		●	●	●
TC1	Tachimetro TAC/U (Senza sensore) TAC/U tachometer (Without sensor)		●	/	/
FP0	Freno FP FP Brake		●	●	/
DPH	Guarnizione alta pressione + Drenaggio posteriore - 1/4 G (BSPP) High Pressure Seal + Rear Drain - 1/4 G (BSPP)		●	●	/

● Disponibile - Available / Non Disponibile - Not Available

### 10 - OPZIONI / OPTIONS

XX	Non Richieste Not Required	STANDARD
01	Verniciato Nero RAL 9005 Black Painted RAL 9005	
02	Verniciato Blu RAL 5015 Blue Painted RAL 5015	
06	Verniciato Grigio RAL 7015 Grey Painted RAL 7015	

**DATI TECNICI PER MOTORE BR CON ALBERI CILINDRICI CL250 E LC254**  
**BR MOTOR TECHNICAL DATA WITH CL250 AND LC254 PARALLEL KEYED SHAFT**

Motore Motor	Cilindrata Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	Pressione max ingresso Max. input pressure bar [psi]		Pressione diff. max. Max. differential pressure bar [psi]		Coppia max. Max. torque Nm [lbf-ft]		Portata max. Max. flow l/min [U.S. gpm]		Velocità max. Max. speed giri/min [rpm]		Potenza max. Max. horsepower kW [hp]	
		Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>(1)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>(1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>(1)</sup>	775 969	Cont Int <sup>(1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 050	51.6 [3.14]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>(1)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>(1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>(1)</sup>	775 969	Cont Int <sup>(1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 065	64.9 [3.95]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	150 [2175] 185 [2682] 225 [3262]	Cont Int <sup>(1)</sup>	140 [103.1] 166 [122.3]	Cont Int <sup>(1)</sup>	50 [13.2] 60 [15.9]	Cont Int <sup>(1)</sup>	770 924	Cont Int <sup>(1)</sup>	9.2 [12.3] 10.6 [14.2]
BR 080	80.4 [4.9]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int* Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int*	197 [145.1] 218 [160.6]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	746 933	Cont Int <sup>(1)</sup>	13 [17.4] 15 [20.1]
BR 100	100 [6.1]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup>	237 [174.6] 277 [204.1]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	600 750	Cont Int <sup>(1)</sup>	13 [17.4] 15 [20.1]
BR 130	125.7 [7.66]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup>	300 [221.1] 340 [250.5]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	477 597	Cont Int <sup>(1)</sup>	12.5 [16.8] 14.5 [19.4]
BR 160	160 [9.76]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>(1)</sup>	296 [218.1] 375 [276.3]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	375 469	Cont Int <sup>(1)</sup>	10 [13.4] 12.5 [16.8]
BR 200	200 [12.2]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	115 [1667] 140 [2030] 225 [3262]	Cont Int <sup>(1)</sup>	297 [218.8] 380 [280]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	300 375	Cont Int <sup>(1)</sup>	8.5 [11] 10 [13.4]
BR 250	250 [15.2]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	90 [1305] 120 [1740] 225 [3262]	Cont Int <sup>(1)</sup>	297 [218.8] 377 [277.8]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	240 300	Cont Int <sup>(1)</sup>	7.1 [9.5] 8.5 [11]
BR 315	314.5 [19.1]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	70 [1020] 100 [1450] 210 [3045]	Cont Int <sup>(1)</sup>	300 [221.1] 420 [309.5]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	191 238	Cont Int <sup>(1)</sup>	5 [6.7] 6.6 [8.8]
BR 400	393 [23.9]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	55 [800] 85 [1230] 175 [2537]	Cont Int <sup>(1)</sup>	292 [215.2] 425 [313.2]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	153 191	Cont Int <sup>(1)</sup>	4.1 [5.4] 6.1 [8.1]

**DATI TECNICI PER MOTORE BR CON ALBERO SCANALATO SD250**  
**BR MOTOR TECHNICAL DATA WITH SD250 SPLINED SHAFT**

Motore Motor	Cilindrata Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	Pressione max ingresso Max. input pressure bar [psi]		Pressione diff. max. Max. differential pressure bar [psi]		Coppia max. Max. torque Nm [lbf-ft]		Portata max. Max. flow l/min [U.S. gpm]		Velocità max. Max. speed giri/min [rpm]		Potenza max. Max. horsepower kW [hp]	
		Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>(1)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>(1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>(1)</sup>	775 969	Cont Int <sup>(1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 050	51.6 [3.14]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>(1)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>(1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>(1)</sup>	775 969	Cont Int <sup>(1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 065	64.9 [3.95]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	150 [2175] 185 [2682] 225 [3262]	Cont Int <sup>(1)</sup>	140 [103.1] 166 [122.3]	Cont Int <sup>(1)</sup>	50 [13.2] 60 [15.9]	Cont Int <sup>(1)</sup>	770 924	Cont Int <sup>(1)</sup>	9.2 [12.3] 10.6 [14.2]
BR 080	80.4 [4.9]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int* Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int*	197 [145.1] 218 [160.6]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	746 933	Cont Int <sup>(1)</sup>	13 [17.4] 15 [20.1]
BR 100	100 [6.1]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup>	237 [174.6] 277 [204.1]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	600 750	Cont Int <sup>(1)</sup>	13 [17.4] 15 [20.1]
BR 130	125.7 [7.66]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup>	300 [221.1] 340 [250.5]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	477 597	Cont Int <sup>(1)</sup>	12.5 [16.8] 14.5 [19.4]
BR 160	160 [9.76]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	165 [2390] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup>	350 [257.9] 428 [315.4]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	375 469	Cont Int <sup>(1)</sup>	11.8 [15.8] 14.3 [19.1]
BR 200	200 [12.2]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	130 [1890] 165 [2390] 225 [3262]	Cont Int <sup>(1)</sup>	335 [246.8] 446 [328.7]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	300 375	Cont Int <sup>(1)</sup>	9.7 [12.9] 12 [16]
BR 250	250 [15.2]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	105 [1522] 135 [1957] 225 [3262]	Cont Int <sup>(1)</sup>	347 [255.7] 424 [312.4]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	240 300	Cont Int <sup>(1)</sup>	8.3 [11.1] 9.6 [12.8]
BR 315	314.5 [19.1]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	85 [1232] 115 [1670] 210 [3045]	Cont Int <sup>(1)</sup>	362 [266.7] 484 [356.7]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	191 238	Cont Int <sup>(1)</sup>	6 [8] 7.6 [10.1]
BR 400	393 [23.9]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>(1)</sup> Peak <sup>(2)</sup>	65 [942] 90 [1310] 175 [2537]	Cont Int <sup>(1)</sup>	345 [254.2] 450 [331.6]	Cont Int <sup>(1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>(1)</sup>	153 191	Cont Int <sup>(1)</sup>	4.9 [6.5] 6.5 [8.7]

**DATI TECNICI PER MOTORE BR CON ALBERI CILINDRICI CL320, C3175 E CONICO CN320**  
**BR MOTOR TECHNICAL DATA WITH CL320, C3175 PARALLEL KEYED SHAFT AND CN320 TAPERED SHAFT**

Motore Motor	Cilindrata Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	Pressione max ingresso Max. input pressure bar [psi]		Pressione diff. max. Max. differential pressure bar [psi]		Coppia max. Max. torque Nm [lbf-ft]		Portata max. Max. flow l/min [U.S. gpm]		Velocità max. Max. speed giri/min [rpm]		Potenza max. Max. horsepower kW [hp]	
		Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>1)</sup>	775 969	Cont Int <sup>1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 050	51.6 [3.14]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	140 [2030] 175 [2540] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	103 [75.9] 126 [92.8]	Cont Int <sup>1)</sup>	40 [10.6] 50 [13.2]	Cont Int <sup>1)</sup>	775 969	Cont Int <sup>1)</sup>	6.8 [9.1] 8.4 [11.2]
BR 065	64.9 [3.95]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	150 [2175] 185 [2682] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	140 [103.1] 166 [122.3]	Cont Int <sup>1)</sup>	50 [13.2] 60 [15.9]	Cont Int <sup>1)</sup>	770 924	Cont Int <sup>1)</sup>	9.2 [12.3] 10.6 [14.2]
BR 080	80.4 [4.9]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	197 [145.1] 218 [160.6]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	746 933	Cont Int <sup>1)</sup>	13 [17.4] 15 [20.1]
BR 100	100 [6.1]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	237 [174.6] 277 [204.1]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	600 750	Cont Int <sup>1)</sup>	13 [17.4] 15 [20.1]
BR 130	125.7 [7.66]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	300 [221.1] 340 [250.5]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	477 597	Cont Int <sup>1)</sup>	12.5 [16.8] 14.5 [19.4]
BR 160	160 [9.76]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	370 [272.6] 428 [315.4]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	375 469	Cont Int <sup>1)</sup>	12.5 [16.8] 14.3 [19.1]
BR 200	200 [12.2]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	450 [331.6] 540 [397.9]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	300 375	Cont Int <sup>1)</sup>	13.4 [17.9] 14.4 [19.2]
BR 250	250 [15.2]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	578 [425.9] 630 [464.3]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	240 300	Cont Int <sup>1)</sup>	13.8 [18.4] 14.2 [19]
BR 315	314.5 [19.1]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	135 [1960] 175 [2537] 210 [3045]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	575 [423.7] 736 [542.4]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	191 238	Cont Int <sup>1)</sup>	9.6 [12.8] 11.5 [15.4]
BR 400	393 [23.9]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2537] 200 [2900] 225 [3262]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	115 [1670] 150 [2180] 175 [2537]	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	612 [451] 750 [552.7]	Cont Int <sup>1)</sup>	60 [15.9] 75 [19.8]	Cont Int <sup>1)</sup>	153 191	Cont Int <sup>1)</sup>	8.6 [11.5] 10.8 [14.4]

Motore Motor	Max press. di scarico con drenaggio aperto Max back pressure with drain line bar[psi]		Pressione max avviamento a vuoto Max starting pressure in unloaded conditions bar[psi]		Coppia min di spunto Min starting torque Nm[lbf-ft]		Portata di drenaggio <sup>4)</sup> Oil flow in the drain line <sup>4)</sup> l/min [U.S. gpm]		Velocità minima <sup>5)</sup> Min speed rpm	
	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	10 [145]	at Δp max at Δp max	Cont Int <sup>1)</sup>	75[55.3] 95[70.0]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 050	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	10 [145]	at Δp max at Δp max	Cont Int <sup>1)</sup>	75[55.3] 95[70.0]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 065	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	10 [145]	at Δp max at Δp max	Cont Int <sup>1)</sup>	120[88.4] 140[103.1]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 080	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	10 [145]	at Δp max at Δp max	Cont Int <sup>1)</sup>	160[118] 180[133]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 100	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	10 [145]	at Δp max at Δp max	Cont Int <sup>1)</sup>	200[147] 225[166]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 130	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	9 [131]	at Δp max at Δp max	Cont Int <sup>1)</sup>	255[188] 290[214]	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 160	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	7 [102]	at Δp max at Δp max	Cont Int <sup>1)</sup>	310(250)[228(184)] <sup>3)</sup> 360(300)[265(221)] <sup>3)</sup>	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	0.7[0.2] 1.6[0.4]	10	
BR 200	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	5 [72.5]	at Δp max at Δp max	Cont Int <sup>1)</sup>	390(250)[287(184)] <sup>3)</sup> 450(320)[332(236)] <sup>3)</sup>	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	1.5[0.4] 3.0[0.8]	10	
BR 250	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	5 [72.5]	at Δp max at Δp max	Cont Int <sup>1)</sup>	490(250)[361(184)] <sup>3)</sup> 560(310)[413(228)] <sup>3)</sup>	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	1.5[0.4] 3.0[0.8]	10	
BR 315	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	5 [72.5]	at Δp max at Δp max	Cont Int <sup>1)</sup>	470(250)[346(184)] <sup>3)</sup> 610(300)[450(221)] <sup>3)</sup>	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	1.5[0.4] 3.0[0.8]	10	
BR 400	Cont Int <sup>1)</sup> Peak <sup>2)</sup>	175 [2538] 200 [2900] 225 [3263]	5 [72.5]	at Δp max at Δp max	Cont Int <sup>1)</sup>	510(250)[376(184)] <sup>3)</sup> 670(320)[494(236)] <sup>3)</sup>	at Δp=100bar[1450psi] at Δp=140bar[2030psi]	1.5[0.4] 3.0[0.8]	10	

1) Le condizioni intermittenti non devono durare più del 10% ogni minuto. - Intermittent duty must not exceed 10% each minute. 2) Le condizioni di picco non devono durare più del 1% di ogni minuto. - Peak duty must not exceed 1% each minute. 3) I valori tra parentesi si riferiscono alla versione con albero CL250/LC254/SD250. - The values in brackets are referred to CL250/LC254/SD250 shaft. 4) Viscosità dell'olio 37 cSt. - Oil Viscosity 37 cSt. 5) Per impieghi a velocità inferiori o con carichi radiali consultare la S.A.M. Hydraulic for applications at lower rpm or at high radial loads pls. consult S.A.M. Hydraulic.



# MASSIMA PRESSIONE AMMESSA SULLA GUARNIZIONE ALBERO MAX PERMISSIBLE SHAFT SEAL PRESSURE

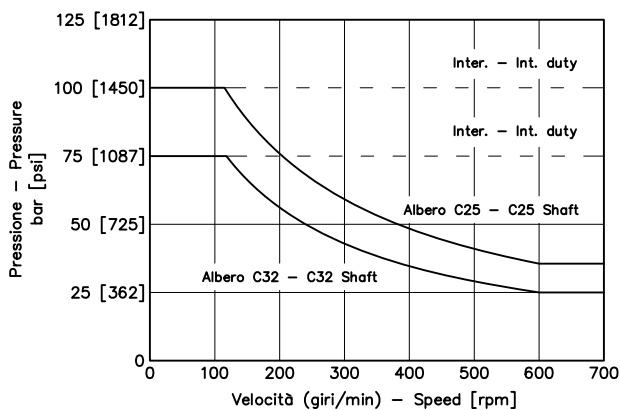
Pressione massima di scarico senza drenaggio o massima pressione nella linea di drenaggio. I motori sono forniti nella versione con guarnizioni standard (diagramma Standard) o nella versione con guarnizioni ad alta pressione (diagramma HPS). Per condizioni di pressione e velocità non contemplate dal presente grafico si consiglia di contattare la S.A.M. Hydraulik.

N.B.: Sulle versioni con Tachimetro o Freno non è possibile installare guarnizioni HPS.

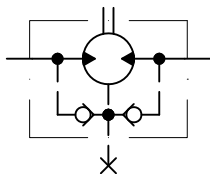
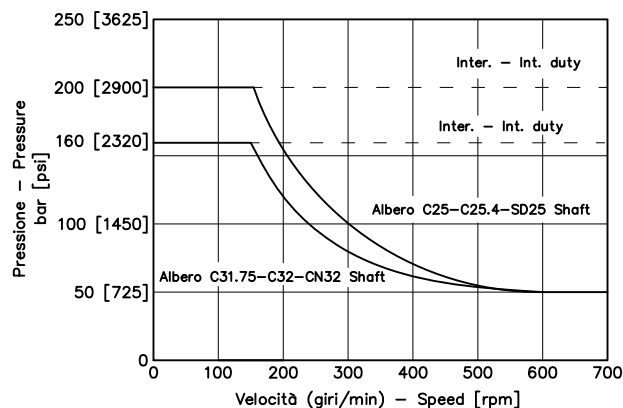
Max. return pressure without drain line or max. pressure in the drain line. Motor are supplied in standard seal version (Standard chart) or in HPS seal version (HPS chart). For pressure and speeds not showed in the curve below, please contact S.A.M. Hydraulik.

N.B.: Tachometer or Brake versions is not available with HPS seals.

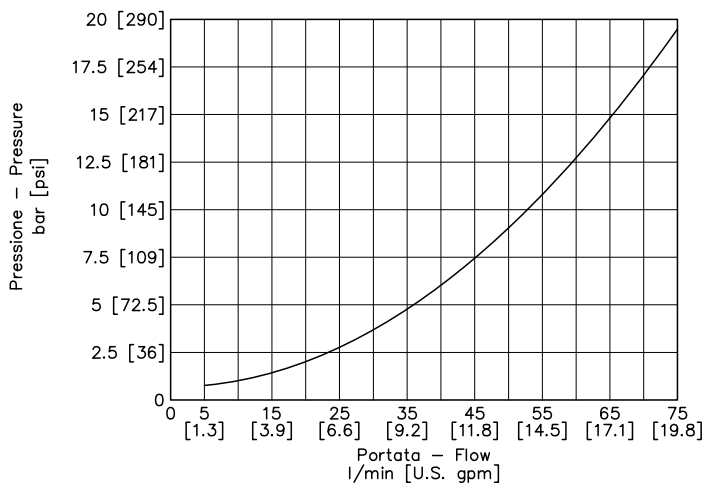
STANDARD



HPS



# PERDITE DI CARICO PER ATTRAVERSAMENTO PRESSURE LOSS

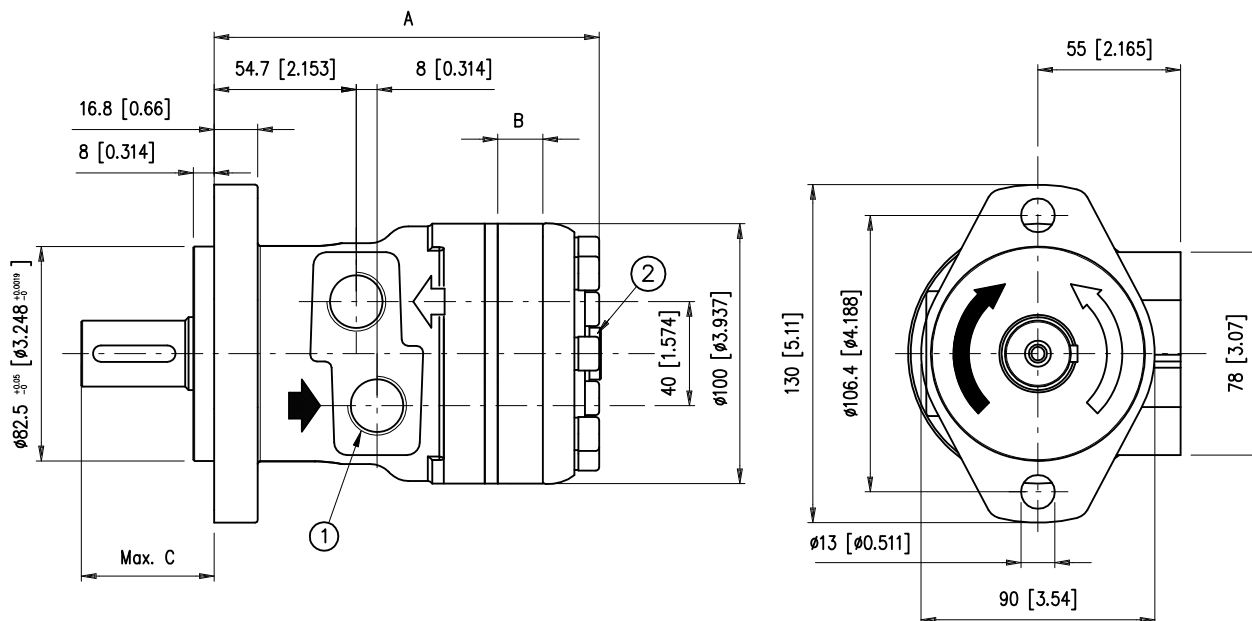


Il diagramma è stato ottenuto con prove eseguite su un numero significativo di motori, utilizzando un olio avente una viscosità cinematica di 37 cSt alla temperatura di 45° C.

Curve according tests carried out with a relevant number of motors and using hydraulic oil with cinematic viscosity of 37 cSt at 45° C temperature.



**Flangia 2A Flange**  
**Attacchi M08 Main ports**



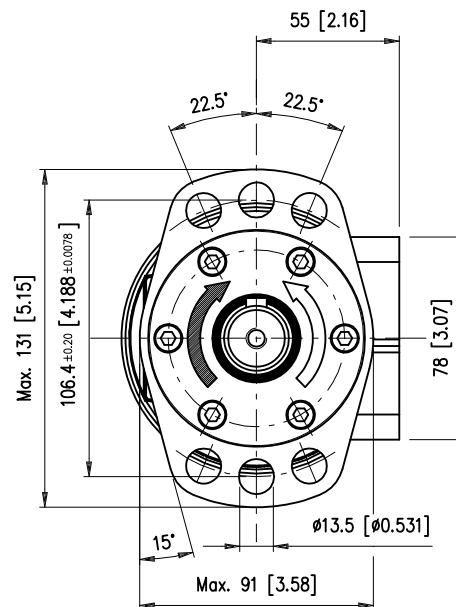
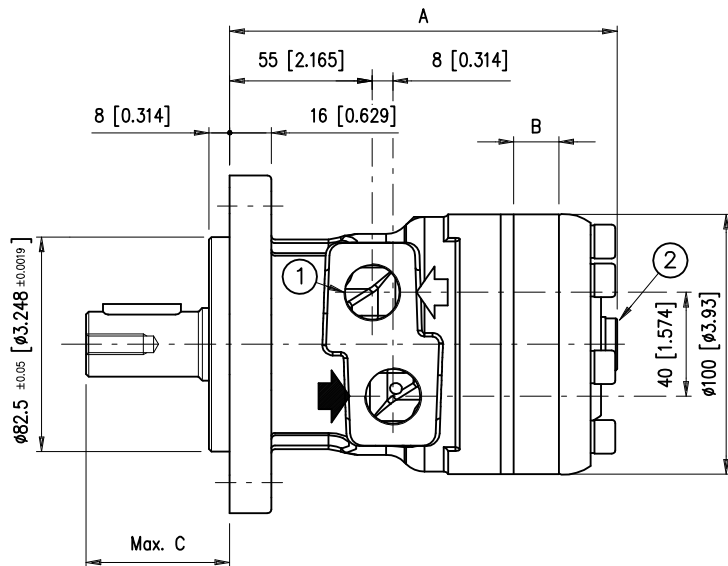
- 1) N° 2 fori di alimentazione 1/2 G (BSPP) profondità filetto 18 mm  
No. 2 1/2 G (BSPP) main ports thread depth 0.70 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm Max. Non presente nella versione HPS  
1/4 G (BSPP) drain motor thread depth 0.59 in Max. Not in HPS version.

Per le dimensioni degli alberi vedere pagina E/16  
For shafts dimensions see page E/16

ALBERO SHAFT		CL250	LC254	SD250						
<b>C</b>	<b>mm [in]</b>	54 [2.12]	54 [2.12]	54 [2.12]						

		BR O 050	BR O 065	BR O 080	BR O 100	BR O 130	BR O 160	BR O 200	BR O 250	BR O 315	BR O 400
<b>A</b>	<b>mm [in]</b>	139.5 [5.49]	141.8 [5.58]	144.5 [5.68]	147.7 [5.81]	152.1 [5.98]	158.2 [6.22]	165.3 [6.50]	173.9 [6.84]	185.1 [7.28]	198.4 [7.81]
<b>B</b>	<b>mm [in]</b>	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>Pesi Weight</b>	<b>kg [lb]</b>	7.2 [15.8]	7.4 [16.3]	7.5 [16.5]	7.7 [16.9]	8 [17.6]	8.3 [18.2]	8.6 [18.9]	9.1 [20]	9.8 [21.5]	10.1 [22.2]

**Flangia 6A Flange**  
**Attacchi M08 Main ports**



- 1) N° 2 fori di alimentazione 1/2 G (BSPP) profondità filetto 18 mm  
No. 2 1/2 G (BSPP) main ports thread depth 0.70 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm.  
1/4 G (BSPP) drain motor thread depth 0.59 in.

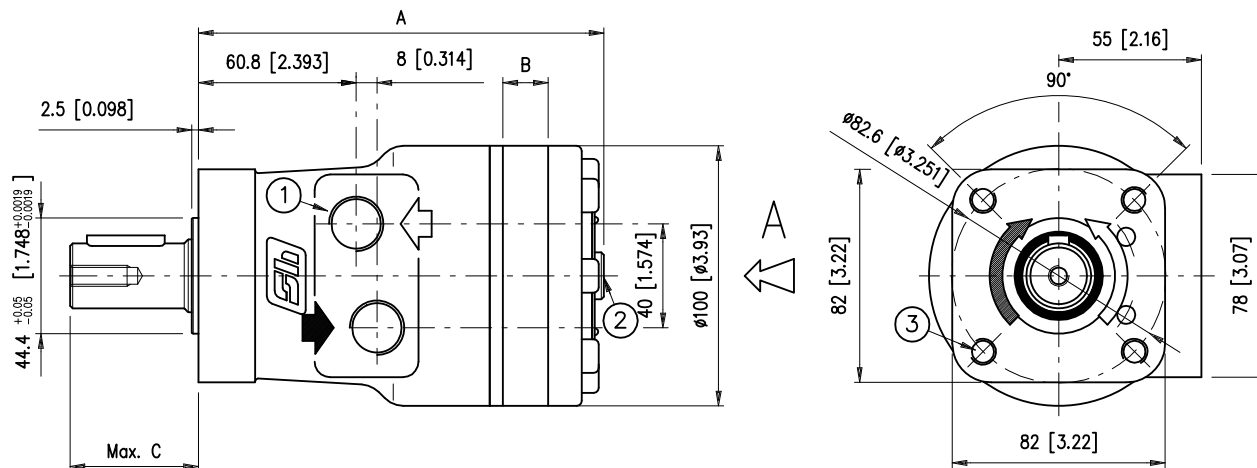
Per le dimensioni degli alberi vedere pagina E/16  
For shafts dimensions see page E/16

ALBERO SHAFT		CL250	LC254	SD250	CL320	C3175	CN320				
C	mm [in]	55.3 [2.17]	55.3 [2.17]	55.3 [2.17]	68.3 [2.68]	59.1 [2.32]	68.5 [2.69]				
		BR O 050	BR O 065	BR O 080	BR O 100	BR O 130	BR O 160	BR O 200	BR O 250	BR O 315	BR O 400
A	mm [in]	139.5 [5.49]	141.8 [5.58]	144.5 [5.68]	147.7 [5.81]	152.1 [5.98]	158.2 [6.22]	165.3 [6.50]	173.9 [6.84]	185.1 [7.28]	198.4 [7.81]
B	mm [in]	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
Pesi Weight	kg [lb]	7.3 [16] <sup>1)</sup> 7.4 [16.3]	7.5 [16.5] <sup>1)</sup> 7.6 [16.7]	7.6 [16.7] <sup>1)</sup> 7.7 [16.9]	7.8 [17.1] <sup>1)</sup> 9 [19.8]	8.1 [17.8] <sup>1)</sup> 8.3 [18.2]	8.4 [18.5] <sup>1)</sup> 8.6 [18.9]	8.7 [19.1] <sup>1)</sup> 9 [19.8]	9.2 [20.2] <sup>1)</sup> 9.5 [20.9]	9.9 [21.8] <sup>1)</sup> 10.2 [22.4]	10.2 [22.4] <sup>1)</sup> 10.5 [23.1]

1) I valori si riferiscono alla versione con albero CL250/LC254/SD250 - The values are referred to CL250/LC254/SD250 shaft

**SPECIALE A RICHIESTA - SPECIAL ON REQUEST**

**Flangia S4 Flange**  
**Attacchi M08 Main ports**



- 1) N° 2 fori di alimentazione 1/2 G (BSPP) profondità filetto 18 mm  
No. 2 1/2 G (BSPP) main ports thread depth 0.70 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm.  
1/4 G (BSPP) drain motor thread depth 0.59 in.
- 3) N° 4 3/8" 16 UNC profondità filetto 17 mm  
No. 4 3/8" 16 UNC thread depth 0.66 in

Per le dimensioni degli alberi vedere pagina E/16  
For shafts dimensions see page E/16

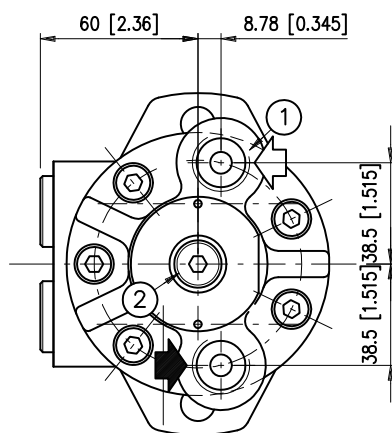
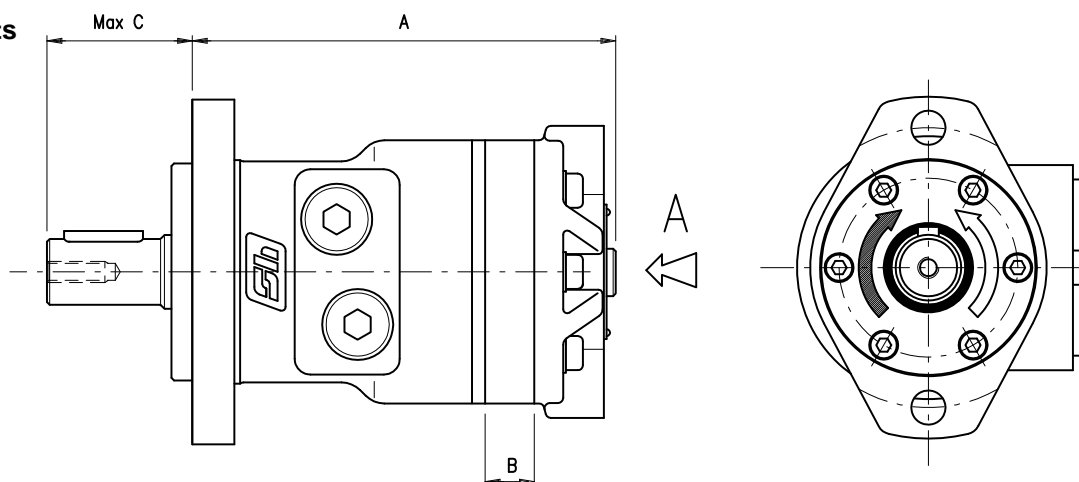
ALBERO SHAFT		CL250	LC254	SD250							
<b>C</b>	mm [in]	49.4 [1.94]	49.4 [1.94]	49.4 [1.94]							

		BR O 050	BR O 065	BR O 080	BR O 100	BR O 130	BR O 160	BR O 200	BR O 250	BR O 315	BR O 400
<b>A</b>	mm [in]	147.8 [5.81]	150.1 [5.90]	152.8 [6.01]	156.2 [6.14]	160.6 [6.32]	166.6 [6.55]	173.6 [6.83]	182.3 [7.17]	193.6 [7.62]	207.1 [8.15]
<b>B</b>	mm [in]	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>Pesi Weight</b>	kg [lb]	7.1 [15.6]	7.3 [16]	7.4 [16.3]	7.6 [16.7]	7.9 [17.4]	8.2 [18]	8.5 [18.7]	9 [19.8]	9.7 [21.3]	10 [22]

**SPECIALE A RICHIESTA - SPECIAL ON REQUEST**

**Flangia 2A Flange**  
**Attacchi F08 Main ports**



Vista da A  
View from A

- 1) N° 2 fori di alimentazione 1/2 G (BSPP) profondità filetto 16mm  
No. 2 1/2 G (BSPP) main ports thread depth 0.62 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 15mm  
1/4 G (BSPP) drain motor thread depth 0.59 in

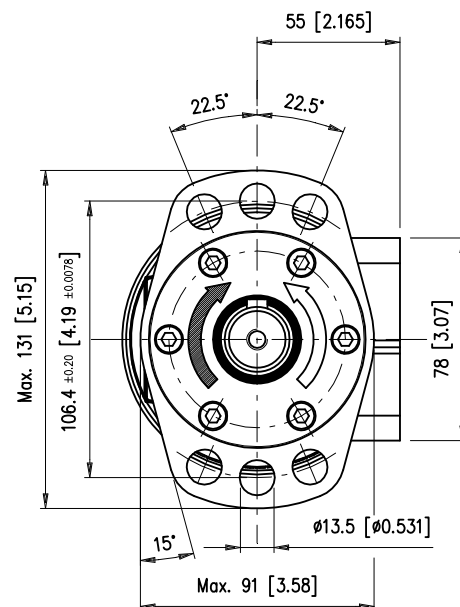
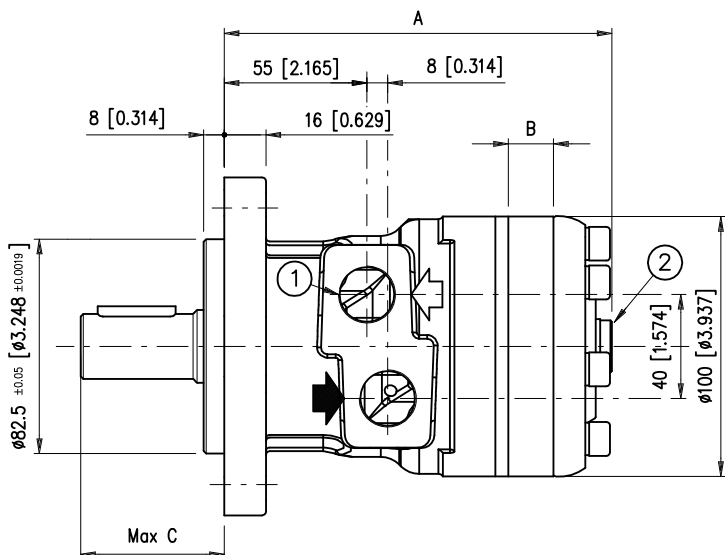
Per le dimensioni degli alberi vedere pagina E/16  
For shafts dimensions see page E/16

Per le dimensioni non indicate fare riferimento al disegno del motore BR flangia 2A.  
Refer to BR 2A flange motor drawings for any dimension here not indicated.

ALBERO SHAFT		CL250	LC254	SD250	CL320	C3175	CN320				
C	mm [in]	55.3 [2.17]	55.3 [2.17]	55.3 [2.17]	68.3 [2.68]	59.1 [2.32]	68.5 [2.69]				
		BR P 050	BR P 065	BR P 080	BR P 100	BR P 130	BR P 160	BR P 200	BR P 250	BR P 315	BR P 400
A	mm [in]	146.9 [5.78]	149.2 [5.87]	151.9 [5.98]	155.3 [6.11]	159.7 [6.28]	165.7 [6.52]	172.7 [6.79]	181.4 [7.14]	192.7 [7.58]	206.2 [8.11]
B	mm [in]	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
Pesi Weight	kg [lb]	7.2 [15.8] <sup>1)</sup> 7.3 [16]	7.4 [16.3] <sup>1)</sup> 7.5 [16.5]	7.5 [16.5] <sup>1)</sup> 7.6 [16.7]	7.7 [16.9] <sup>1)</sup> 7.9 [17.4]	8 [17.6] <sup>1)</sup> 8.2 [18]	8.3 [18.2] <sup>1)</sup> 8.5 [18.7]	8.6 [18.9] <sup>1)</sup> 8.9 [19.6]	9.1 [20] <sup>1)</sup> 9.4 [20.7]	9.8 [21.5] <sup>1)</sup> 10.1 [22.2]	10.1 [22.2] <sup>1)</sup> 10.4 [22.9]

1) I valori si riferiscono alla versione con albero CL250/LC254/SD250 - The values are referred to CL250/LC254/SD250 shaft

**Flangia 6A Flange**  
**Attacchi M08 Main ports**



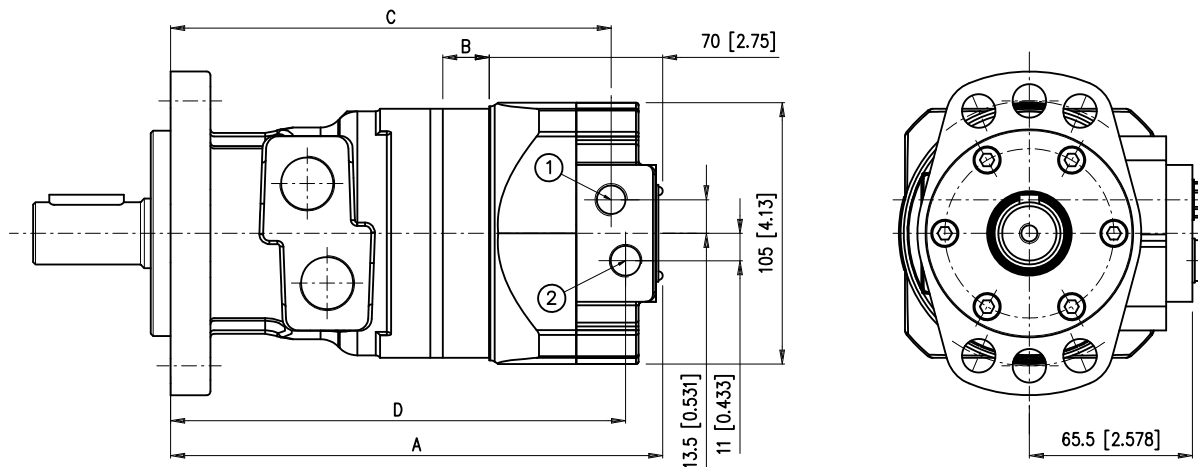
- 1) N° 2 fori di alimentazione 1/2 G (BSPP) profondità filetto 18mm  
No. 2 1/2 G (BSPP) main ports thread depth 0.70 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm.  
1/4 G (BSPP) drain motor thread depth 0.59 in.

Per le dimensioni degli alberi vedere pagina E/16  
For shafts dimensions see page E/16

ALBERO SHAFT		CL250	SD250	CL320	LC254						
<b>C</b>	<b>mm [in]</b>	55.3 [2.17]	55.3 [2.17]	68.3 [2.68]	55.3 [2.17]						
		<b>BR S 050</b>	<b>BR S 065</b>	<b>BR S 080</b>	<b>BR S 100</b>	<b>BR S 130</b>	<b>BR S 160</b>	<b>BR S 200</b>	<b>BR S 250</b>	<b>BR S 315</b>	<b>BR S 400</b>
<b>A</b>	<b>mm [in]</b>	139.5 [5.49]	141.8 [5.58]	144.5 [5.68]	147.9 [5.82]	152.3 [5.99]	158.3 [6.23]	165.3 [6.50]	174 [6.85]	185.3 [7.29]	198.8 [7.82]
<b>B</b>	<b>mm [in]</b>	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>Pesi Weight</b>	<b>kg [lb]</b>	7.3 [16]	7.5 [16.5]	7.6 [16.7]	7.8 [17.1]	8.1 [17.8]	8.4 [18.5]	8.7 [19.1]	9.2 [20.2]	9.9 [21.8]	10.2 [22.4]



- 1) Comando apertura freno 1/4 G (BSPP) profondità filetto 13mm  
1/4 G (BSPP) brake releasing thread depth 0.511 in
- 2) Drenaggio motore 1/4 G (BSPP) profondità filetto 13mm  
1/4 G (BSPP) drain motor thread depth 0.511 in



		BR O 050 BR S 050	BR O 065 BR S 065	BR O 080 BR S 080	BR O 100 BR S 100	BR O 130 BR S 130	BR O 160 BR S 160	BR O 200 BR S 200	BR O 250 BR S 250	BR O 315 BR S 315	BR O 400 BR S 400
<b>A</b>	<b>mm [in]</b>	187.9 [7.39]	190.2 [7.48]	192.9 [7.59]	196.3 [7.72]	200.7 [7.90]	206.7 [8.13]	213.7 [8.41]	222.4 [8.75]	233.7 [9.20]	247.2 [9.73]
<b>B</b>	<b>mm [in]</b>	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>C</b>	<b>mm [in]</b>	169.9 [6.68]	172.2 [6.77]	174.9 [6.88]	178.3 [7.01]	182.7 [7.19]	188.7 [7.42]	195.7 [7.70]	204.4 [8.04]	215.7 [8.49]	229.2 [9.02]
<b>D</b>	<b>mm [in]</b>	173 [6.81]	175.3 [6.90]	178 [7.00]	181.4 [7.14]	185.8 [7.31]	191.8 [7.55]	198.8 [7.82]	207.5 [8.16]	218.8 [8.61]	232.2 [9.14]
<b>Pesi Weight</b>	<b>kg [lb]</b>	8.2 [18]	8.4 [18.5]	8.5 [18.7]	8.7 [19.1]	9 [19.8]	9.3 [20.4]	9.6 [21.1]	10.1 [22.2]	10.8 [23.8]	11.1 [24.4]

## CARATTERISTICHE FRENO BRAKE FEATURES

I freni integrati nei motori FP sono freni di stazionamento a sbloccaggio idraulico (freni negativi) e non possono essere impiegati per frenare dinamicamente il carico.

The brakes integrated in FP motors are holding brakes type (negative brake) and cannot be used for dynamic braking action.

### Accorgimenti per l'installazione

- Il motore idraulico con freno posteriore FP richiede obbligatoriamente il collegamento del drenaggio motore, posto sul corpo freno, in serbatoio a scarico libero.
- Nel caso di funzionamento in circuito aperto è consigliato l'utilizzo di una valvola di ritardo chiusura freno ( per evitare il funzionamento dinamico dello stesso) di una valvola overcentre e di un distributore a centro aperto.

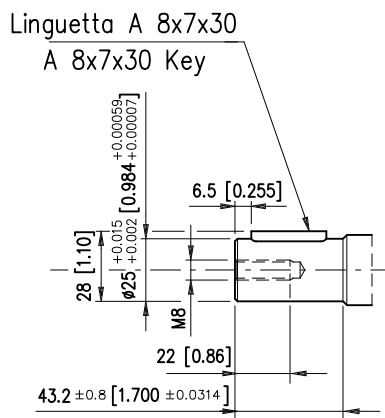
### Installation layout

- The FP hydraulic motors must always have the drain port (on casing) directly connected with tank
- If open circuit layout is needed, it is advisable to use a flow control valve on brake piston ports (in order to avoid dynamic braking), on overcentre valve and a open-centre directional valve.

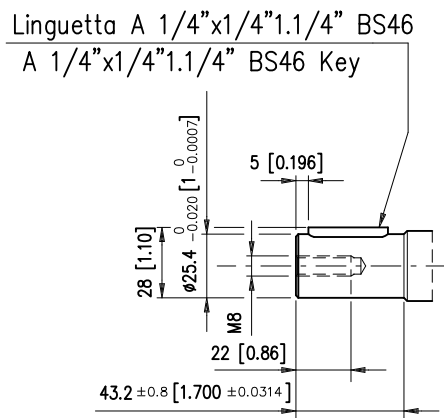
Caratteristiche del motore-freno		Motor-brake features
Pressione di apertura minima	22 bar [319 psi]	Minim release pressure
Pressione di freno libero	25 bar [362.5 psi]	Complete brake release pressure
Pressione massima sul freno	160 bar [2320 psi]	Max. brake pressure
Coppia massimastica	370 Nm [272.7 lbf-ft]	Max. static torque
Velocità massima motore	350 rpm	Max. motor speed



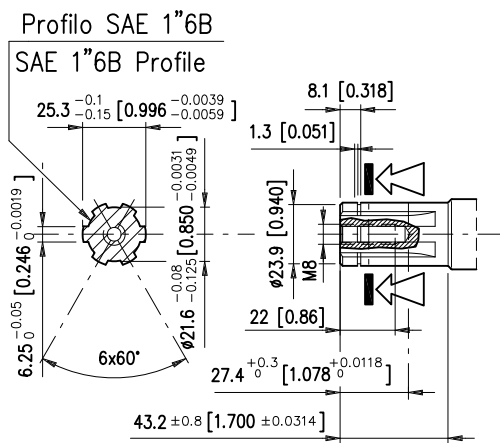
**ALBERO CILINDRICO CL250**  
CL250 CYLINDRICAL SHAFT



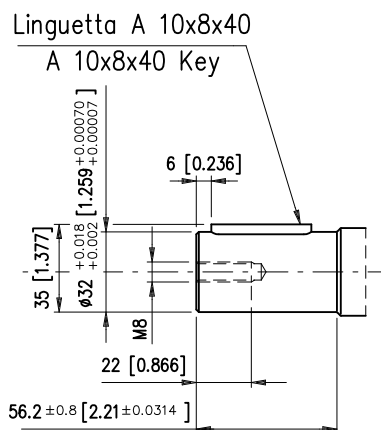
**ALBERO CILINDRICO LC254**  
LC254 CYLINDRICAL SHAFT



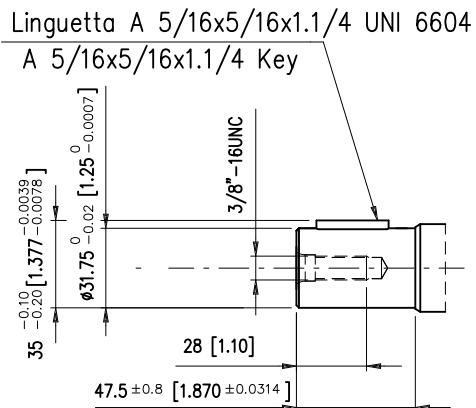
**ALBERO SCANALATO SD250**  
SD250 SPLINED SHAFT



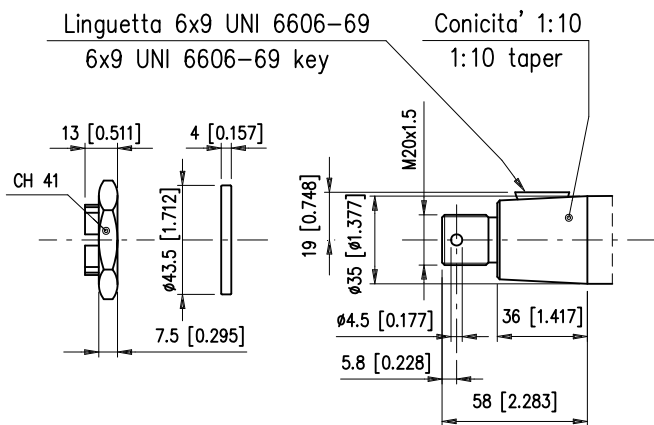
**ALBERO CILINDRICO CL320**  
CL320 CYLINDRICAL SHAFT



**ALBERO CILINDRICO C3175**  
C3175 CYLINDRICAL SHAFT



**ALBERO CONICO CN320**  
CN320 TAPERED SHAFT



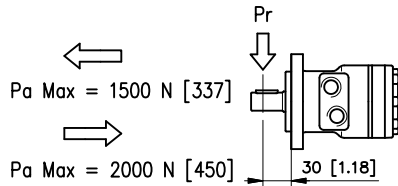
# CARICHI AMMESSI SULL'ALBERO SHAFT LOAD CAPACITY

I carichi ammessi sull'albero variano in funzione di:

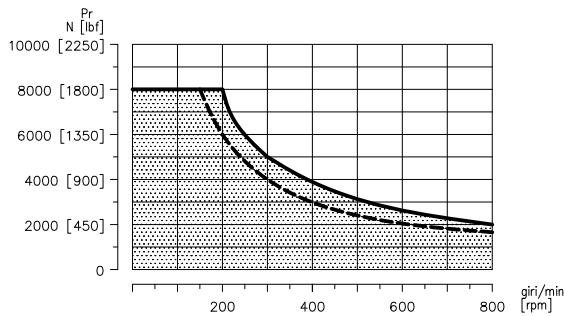
- Velocità (n)
- Distanza (L) dal punto di applicazione del carico alla flangia di montaggio
- Versione della flangia di montaggio
- Versione dell'albero

Formula utilizzabile per il calcolo del carico radiale (Pr) ai vari numeri di giri (n), e alle varie distanze (L) dalla flangia tipo "2A" ovale 2 fori e "6A" ovale 6 fori.

Radial load capacity (Pr) cur ve according to speed (n) and distance (L) from flange, valid for the 2-bolt flange type "2A" and 6-bolt flange type "6A"



	Flangia / Flange 2A	Flangia / Flange 6A
alberi / shafts CL250 LC254 SD250	$Pr = \frac{800}{n} \cdot \frac{250000}{95 + L}$ [N]	$Pr = \frac{800}{n} \cdot \frac{250000}{95 + L}$ [N]
alberi / shafts C3175 CL320 CN320		$Pr = \frac{800}{n} \cdot \frac{187500}{95 + L}$ [N]

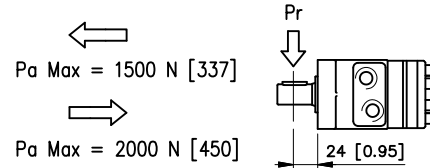


The permissible radial shaft load depends on

- Speed (n)
- Distance (L) from the point of load to the mounting flange
- Mounting flange version
- Shaft version

Formula utilizzabile per il calcolo del carico radiale (Pr) ai vari numeri di giri (n), e alle varie distanze (L) dalla flangia tipo "S4" 4 fori.

Radial load capacity (Pr) cur ve according to speed (n) and distance (L) from flange, valid for the 4-bolt flange type "S4".



	Flangia / Flange S4
alberi / shafts CL250 LC254 SD250	$Pr = \frac{800}{n} \cdot \frac{242000}{97 + L}$ [N]

La curva mostra la relazione tra (Pr) e (n) quando:

- L = 30 mm [1.18 in] per motori flangia 2A e 6A
- L = 24 mm [0.95 in] per motori flangia S4

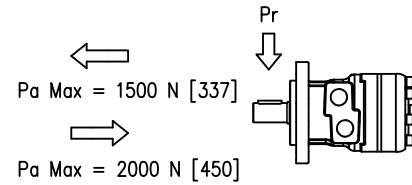
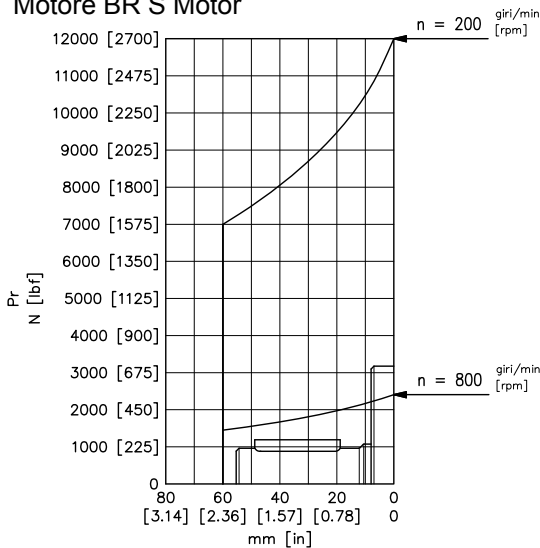
The curve show the relation between (Pr) and (n)

- L = 30 mm [1.18 in] for motors with 2A and 6A flange
- L = 24 mm [0.95 in] for motors with S4 flange

--- Per alberi C3175-CL320-CN320  
For shafts C3175-CL320-CN320  
— Per alberi CL250-LC254-SD250  
For shafts CL250-LC254-SD250

Per applicazioni dove sono richieste prestazioni speciali è consigliato il motore BR S  
For applications with special performance requirements we recommend BR S motor

## Motore BR S Motor



Formula utilizzabile per il calcolo del carico radiale massimo ammissibile (Pr) ai vari numeri di giri, e alle varie distanze dalla flangia.

Calculating formula of max permissible radial load (Pr) according to rpm and distance from flange.

$$Pr = \frac{800}{n} \cdot \frac{219000}{91 + L} [N]$$

$$n \geq 200 [\text{giri / min}] [rpm]$$

$$L \leq 68.5 \text{ mm} [2.69 \text{ in}]$$

Le seguenti lettere o numeri del codice, sono state sviluppate per identificare tutte le configurazioni possibili dei motori BS. Usare il seguente modulo per identificare le caratteristiche desiderate. **Tutte le lettere o numeri del codice devono comparire in fase d'ordine.** Si consiglia di leggere attentamente il catalogo prima di iniziare la compilazione del codice di ordinazione.

The following alphanumeric digits system has been developed to identify all of the configuration options for the BS motors. Use the model code below to specify the desired features. **All alphanumeric digits system of the code must be present when ordering.** We recommend to carefully read the catalogue before filling the ordering code.

**CODICE PRODOTTO / MODEL CODE**

1	2	3	4	5	6	7	8	8A	9	10

**1 - SERIE / SERIES**

BS	Motore orbitale Orbital motor
----	----------------------------------

**2 - VERSIONI / VERSIONS**

O	Versione O O Version
---	-------------------------

**3 - CILINDRATA / DISPLACEMENT**

050	51.6 cm <sup>3</sup> /giro [3.14 in <sup>3</sup> /rev]
065	64.9 cm <sup>3</sup> /giro [3.95 in <sup>3</sup> /rev]
080	80.4 cm <sup>3</sup> /giro [4.9 in <sup>3</sup> /rev]
100	100 cm <sup>3</sup> /giro [6.1 in <sup>3</sup> /rev]
130	125.7 cm <sup>3</sup> /giro [7.66 in <sup>3</sup> /rev]
160	160 cm <sup>3</sup> /giro [9.76 in <sup>3</sup> /rev]
200	200 cm <sup>3</sup> /giro [12.2 in <sup>3</sup> /rev]
250	250 cm <sup>3</sup> /giro [15.2 in <sup>3</sup> /rev]
315	314.5 cm <sup>3</sup> /giro [19.1 in <sup>3</sup> /rev]
400	393 cm <sup>3</sup> /giro [23.9 in <sup>3</sup> /rev]

**4 - FLANGIA / MOUNTING FLANGE**

6A	Ovale 6 Fori Oval 6 Bolts	STANDARD
S4	4 fori 3/8 16 UNC - Ø44,45mm 4 Bolt 3/8 16 UNC - Ø1.75 in	

**5 - ATTACCHI / MAIN PORTS**

			FLANGIA / MOUNTING FLANGE	
			6A	S4
S08	Attacchi 7/8" - 14 UNF SAE10 7/8" - 14 UNF SAE10 Main Ports	STANDARD	•	•
SS8	Attacchi 1/2" - 14 NPTF 1/2" - 14 NPTF Main Ports		•	•
BFL	Attacchi Manifold Manifold Main Ports		•	•
MS8	Attacchi 1/2 G BSPP 1/2 G BSPP (Main Ports)		/	/

• Disponibile - Available / Non Disponibile - Not Available

1	2	3	4	5	6	7	8	8A	9	10

### 6 - ESTREMITÀ ALBERO / OUTPUT SHAFT

CL254	Albero Cilindrico Ø25.4 mm 1 in Parallel keyed	STANDARD
SE250	Albero Scanalato (profilo SAE 6B 1" Z6) Splined Shaft (SAE 6B 1" 6T spline)	
SE210	Albero Scanalato (profilo ANSI-B92.1a-1976-16/32 Z13) Splined Shaft (ANSI-B92.1a-1976-16/32 13T spline)	Speciale a richiesta Special on request

### 7 - TENUTE / SEALS

N	NBR
---	-----

### 8 - VALVOLE / VALVES

XXXX	Non Richieste Not Required
------	-------------------------------

### 8A - CARATTERISTICA VALVOLA / VALVES FEATURE

000	Caratteristica non necessaria Feature not necessary
-----	--

### 9 - CARATTERISTICA VERSIONE / VERSION FEATURE

XXX	Guarnizione alta pressione High Pressure Seal
QDR	Versione QUAD-RING QUAD-RING Version
DPS	Guarnizione alta pressione con Drenaggio posteriore 1/4 G (BSPP) + Raccordo M/F 1/4 G (BSPP) - 7/16" 20UNF2B High Pressure Seal with Rear drain 1/4 G (BSPP) + Pipe Fitting M/F 1/4 G (BSPP) - 7/16" 20UNF2B
DPM	Guarnizione alta pressione con Drenaggio posteriore 1/4 G (BSPP) High Pressure Seal with Rear drain 1/4 G (BSPP)

### 10 - OPZIONI / OPTIONS

XX	Non Richieste Not Required
01	Verniciato Nero RAL 9005 Black Painted RAL 9005

**DATI TECNICI PER MOTORE BS CON ALBERO CILINDRICO CL254**  
**BS MOTOR TECHNICAL DATA WITH CL254 PARALLEL KEYS SHAFT**

Motore Motor	Cilindrata Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	Pressione Max ingresso Max. input pressure		Pressione diff. max. Max.differential pressure		Coppia max. Max. torque		Portata max. Max. flow		Velocità max. Max. speed		Potenza max. Max. horsepower	
		bar [psi]		bar [psi]		Nm [lbf-ft]		l/min [U.S. gpm]		giri/min [rpm]		kW [hp]	
BS 050	51.6 [3.14]	Cont	175 [2537]	Cont	140 [2030]	Cont	103 [75.9]	Cont	40 [10.6]	Cont	775	Cont	6.8 [9.1]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	175 [2540]	Int <sup>1)</sup>	126 [92.8]	Int <sup>1)</sup>	50 [13.2]	Int <sup>1)</sup>	969	Int <sup>1)</sup>	8.4 [11.2]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 065	64.9 [3.95]	Cont	175 [2537]	Cont	150 [2175]	Cont	140 [103.1]	Cont	50 [13.2]	Cont	770	Cont	9.2 [12.3]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	185 [2682]	Int <sup>1)</sup>	166 [122.3]	Int <sup>1)</sup>	60 [15.9]	Int <sup>1)</sup>	924	Int <sup>1)</sup>	10.6 [14.2]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 080	80.4 [4.9]	Cont	175 [2537]	Cont	175 [2537]	Cont	197 [145.1]	Cont	60 [15.9]	Cont	746	Cont	13 [17.4]
		Int <sup>1)</sup>	200 [2900]	Int*	200 [2900]	Int*	218 [160.6]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	933	Int <sup>1)</sup>	15 [20.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 100	100 [6.1]	Cont	175 [2537]	Cont	175 [2537]	Cont	237 [174.6]	Cont	60 [15.9]	Cont	600	Cont	13 [17.4]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	277 [204.1]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	750	Int <sup>1)</sup>	15 [20.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 130	125.7 [7.66]	Cont	175 [2537]	Cont	175 [2537]	Cont	300 [221.1]	Cont	60 [15.9]	Cont	477	Cont	12.5 [16.8]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	340 [250.5]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	597	Int <sup>1)</sup>	14.5 [19.4]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 160	160 [9.76]	Cont	175 [2537]	Cont	140 [2030]	Cont	296 [218.1]	Cont	60 [15.9]	Cont	375	Cont	10 [13.4]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	175 [2540]	Int <sup>1)</sup>	375 [276.3]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	469	Int <sup>1)</sup>	12.5 [16.8]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 200	200 [12.2]	Cont	175 [2537]	Cont	115 [1667]	Cont	297 [218.8]	Cont	60 [15.9]	Cont	300	Cont	8.5 [11]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	140 [2030]	Int <sup>1)</sup>	380 [280]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	375	Int <sup>1)</sup>	10 [13.4]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 250	250 [15.2]	Cont	175 [2537]	Cont	90 [1305]	Cont	297 [218.8]	Cont	60 [15.9]	Cont	240	Cont	7.1 [9.5]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	120 [1740]	Int <sup>1)</sup>	377 [277.8]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	300	Int <sup>1)</sup>	8.5 [11]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 315	314.5 [19.1]	Cont	175 [2537]	Cont	70 [1020]	Cont	300 [221.1]	Cont	60 [15.9]	Cont	191	Cont	5 [6.7]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	100 [1450]	Int <sup>1)</sup>	420 [309.5]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	238	Int <sup>1)</sup>	6.6 [8.8]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]
BS 400	393 [23.9]	Cont	175 [2537]	Cont	55 [800]	Cont	292 [215.2]	Cont	60 [15.9]	Cont	153	Cont	4.1 [5.4]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	85 [1230]	Int <sup>1)</sup>	425 [313.2]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	191	Int <sup>1)</sup>	6.1 [8.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]

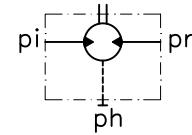
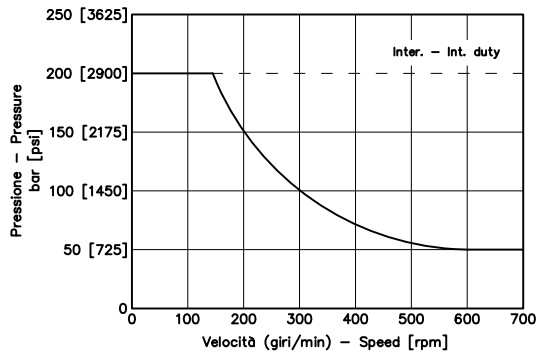
**DATI TECNICI PER MOTORE BS CON ALBERO SCANALATO SE250**  
**BS MOTOR TECHNICAL DATA WITH SE250 SPLINED SHAFT**

Motore Motor	Cilindrata Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	Pressione max ingresso Max. input pressure		Pressione diff. max. Max.differential pressure		Coppia max. Max. torque		Portata max. Max. flow		Velocità max. Max. speed		Potenza max. Max. horsepower	
		bar [psi]		bar [psi]		Nm [lbf-ft]		l/min [U.S. gpm]		giri/min [rpm]		kW [hp]	
BS 050	51.6 [3.14]	Cont	175 [2537]	Cont	140 [2030]	Cont	103 [75.9]	Cont	40 [10.6]	Cont	775	Cont	6.8 [9.1]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	175 [2540]	Int <sup>1)</sup>	126 [92.8]	Int <sup>1)</sup>	50 [13.2]	Int <sup>1)</sup>	969	Int <sup>1)</sup>	8.4 [11.2]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 065	64.9 [3.95]	Cont	175 [2537]	Cont	150 [2175]	Cont	140 [103.1]	Cont	50 [13.2]	Cont	770	Cont	9.2 [12.3]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	185 [2682]	Int <sup>1)</sup>	166 [122.3]	Int <sup>1)</sup>	60 [15.9]	Int <sup>1)</sup>	924	Int <sup>1)</sup>	10.6 [14.2]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 080	80.4 [4.9]	Cont	175 [2537]	Cont	175 [2537]	Cont	197 [145.1]	Cont	60 [15.9]	Cont	746	Cont	13 [17.4]
		Int <sup>1)</sup>	200 [2900]	Int*	200 [2900]	Int*	218 [160.6]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	933	Int <sup>1)</sup>	15 [20.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 100	100 [6.1]	Cont	175 [2537]	Cont	175 [2537]	Cont	237 [174.6]	Cont	60 [15.9]	Cont	600	Cont	13 [17.4]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	277 [204.1]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	750	Int <sup>1)</sup>	15 [20.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 130	125.7 [7.66]	Cont	175 [2537]	Cont	175 [2537]	Cont	300 [221.1]	Cont	60 [15.9]	Cont	477	Cont	12.5 [16.8]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	340 [250.5]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	597	Int <sup>1)</sup>	14.5 [19.4]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 160	160 [9.76]	Cont	175 [2537]	Cont	165 [2390]	Cont	350 [257.9]	Cont	60 [15.9]	Cont	375	Cont	11.8 [15.8]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	428 [315.4]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	469	Int <sup>1)</sup>	14.3 [19.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 200	200 [12.2]	Cont	175 [2537]	Cont	130 [1890]	Cont	335 [246.8]	Cont	60 [15.9]	Cont	300	Cont	9.7 [12.9]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	165 [2390]	Int <sup>1)</sup>	446 [328.7]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	375	Int <sup>1)</sup>	12 [16]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 250	250 [15.2]	Cont	175 [2537]	Cont	105 [1522]	Cont	347 [255.7]	Cont	60 [15.9]	Cont	240	Cont	8.3 [11.1]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	135 [1957]	Int <sup>1)</sup>	424 [312.4]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	300	Int <sup>1)</sup>	9.6 [12.8]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	225 [3262]
BS 315	314.5 [19.1]	Cont	175 [2537]	Cont	85 [1232]	Cont	362 [266.7]	Cont	60 [15.9]	Cont	191	Cont	6 [8]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	115 [1670]	Int <sup>1)</sup>	484 [356.7]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	238	Int <sup>1)</sup>	7.6 [10.1]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]	Peak <sup>2)</sup>	210 [3045]
BS 400	393 [23.9]	Cont	175 [2537]	Cont	65 [942]	Cont	345 [254.2]	Cont	60 [15.9]	Cont	153	Cont	4.9 [6.5]
		Int <sup>1)</sup>	200 [2900]	Int <sup>1)</sup>	90 [1310]	Int <sup>1)</sup>	450 [331.6]	Int <sup>1)</sup>	75 [19.8]	Int <sup>1)</sup>	191	Int <sup>1)</sup>	6.5 [8.7]
		Peak <sup>2)</sup>	225 [3262]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]	Peak <sup>2)</sup>	175 [2537]

1) Le condizioni intermittenti non devono durare più del 10% di ogni minuto. Intermittent duty must not exceed 10% every minute.  
2) Le condizioni di picco non devono durare più del 1% di ogni minuto. Peak duty must not exceed 1% of every minute.

La pressione ammissibile in carcassa per versione HPS (standard) è riportata nel grafico. Elevate pressioni in carcassa comportano basse velocità dell'albero. Se la massima pressione in carcassa è elevata, è necessario utilizzare il drenaggio.

Allowable case pressure for HPS version (standard) is showed in the diagram below - diagram based on case pressure and shaft speed. Allowable case pressure is highest at low shaft speed. If max. allowable case pressure is exceeded, case drain line is needed.



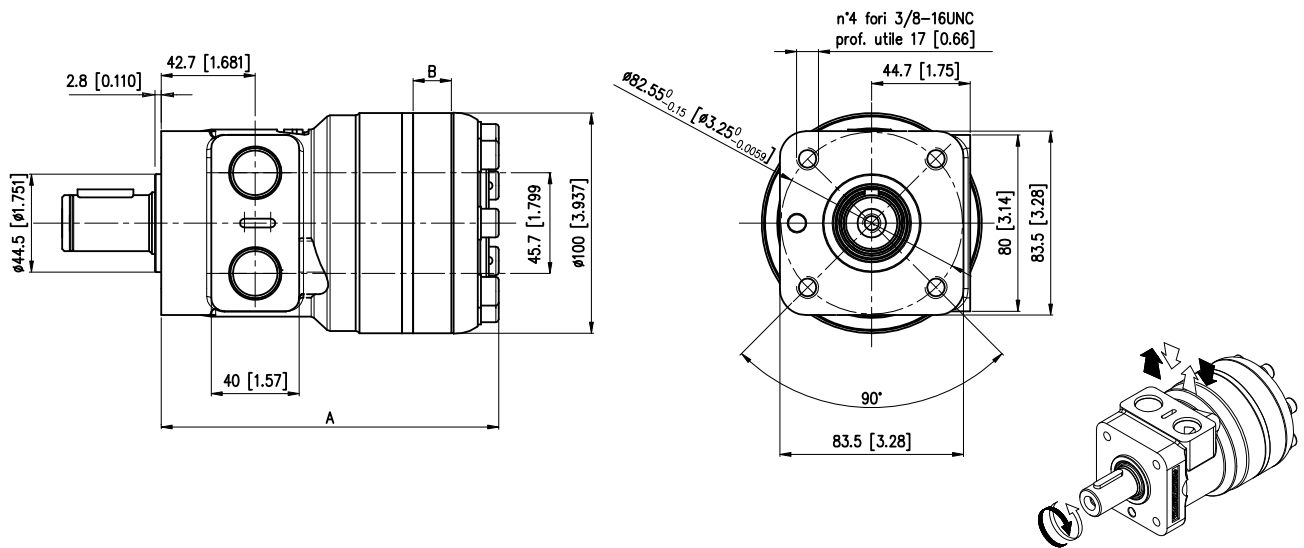
$$Ph = \frac{pi + pr}{2} [\text{bar}]$$

*ph* = pressione in carcassa  
*pi* = pressione di alimentazione  
*pr* = pressione di scarico

ph = housing pressure  
pi = inlet pressure  
pr = outlet pressure

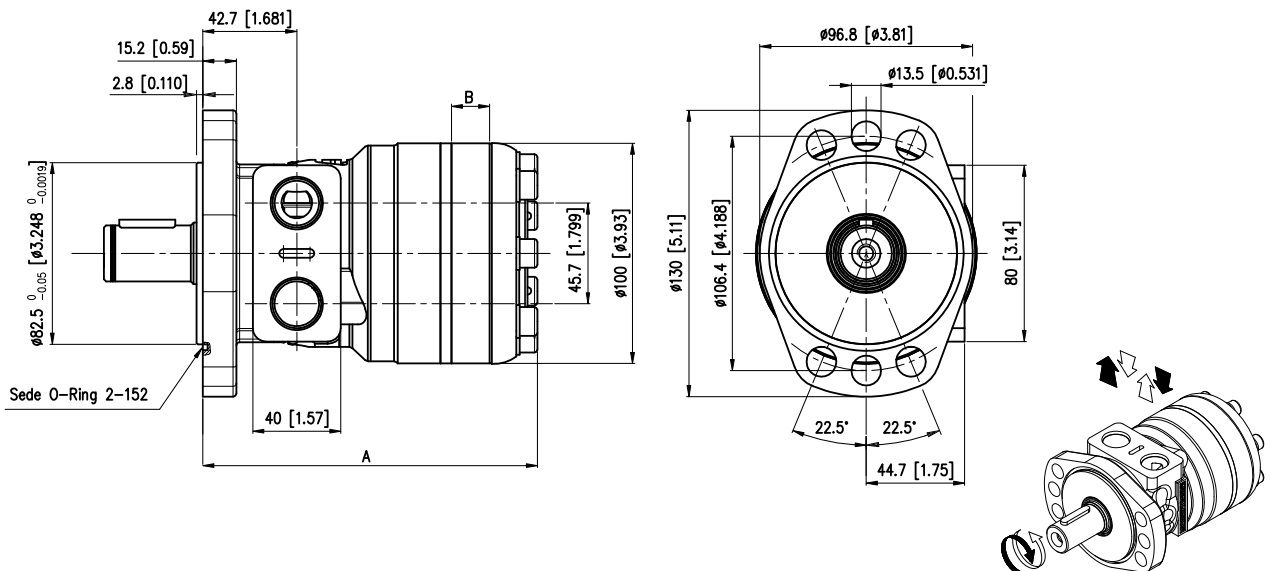
- La pressione in carcassa senza drenaggio è data dalla media tra *pi* e *pr*.
- Il motore BS è fornito senza drenaggio
- La massima pressione di scarico con drenaggio è di 175 bar Cont. - 200 bar Int. - 225 Peak
- The case pressure without drain line is the average between inlet and return pressure.
- As standard, BS motors are supplied without drain port.
- Max. permissible return (back) pressure with drain line 175 bar [2540 psi] Cont. - 200 bar [2900 psi] Int. - 225 bar [3260 psi] Peak.

**Flangia S4 Flange**



		BS 050	BS 065	BS 080	BS 100	BS 130	BS 160	BS 200	BS 250	BS 315	BS 400
<b>A</b>	<b>mm [in]</b>	145 [5.70]	147.3 [5.79]	150 [5.90]	153.5 [6.04]	158 [6.22]	164 [6.45]	171 [6.73]	179.5 [7.06]	191 [7.51]	204.5 [8.05]
<b>B</b>	<b>mm [in]</b>	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>Pesi Weight</b>	<b>kg [lb]</b>	6.8 [14.96]	7 [15.42]	7.1 [15.62]	7.4 [16.28]	7.7 [16.94]	8 [17.6]	8.4 [18.48]	8.9 [19.58]	9.6 [21.12]	9.9 [21.78]

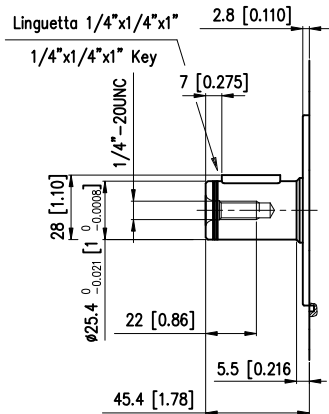
**Flangia 6A Flange**



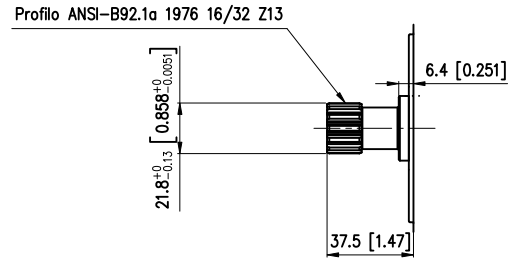
		BS 050	BS 065	BS 080	BS 100	BS 130	BS 160	BS 200	BS 250	BS 315	BS 400
<b>A</b>	<b>mm [in]</b>	143.7 [5.65]	146 [5.74]	148.7 [5.85]	152.1 [5.98]	156.5 [6.16]	162.5 [6.39]	169.5 [6.67]	178.2 [7.01]	189.5 [7.46]	203 [7.99]
<b>B</b>	<b>mm [in]</b>	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
<b>Pesi Weight</b>	<b>kg [lb]</b>	6.8 [14.96]	7 [15.42]	7.1 [15.62]	7.4 [16.28]	7.7 [16.94]	8 [17.6]	8.4 [18.48]	8.9 [19.58]	9.6 [21.12]	9.9 [21.78]



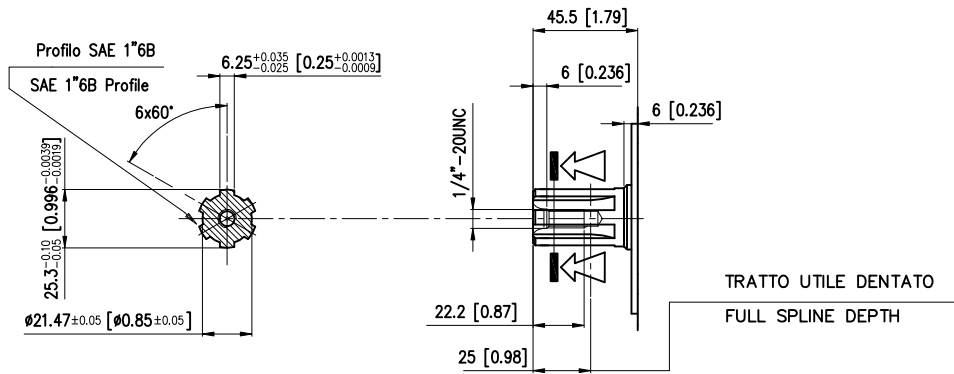
**Cilindrico CL254**  
**Parallel CL254**



**Scanalato SE210**  
**Splined SE210**

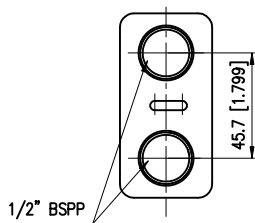


**Scanalato SE250**  
**Splined SE250**

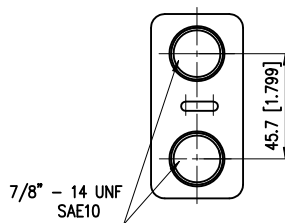


**ATTACCHI**  
**OPTIONS**

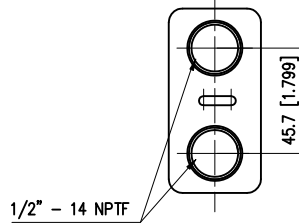
**MS8**



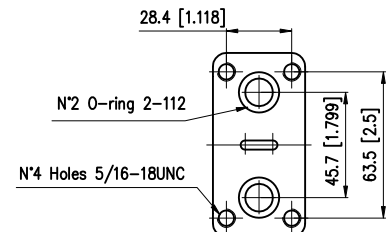
**S08**



**SS8**



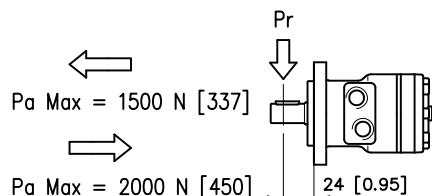
**Manifold (BFL)**



I carichi ammessi sull'albero variano in funzione di:

- Velocità (n)
- Distanza (L) dal punto di applicazione del carico alla flangia di montaggio
- Versione della flangia di montaggio

Formula utilizzabile per il calcolo del carico radiale (Pr) ai vari numeri di giri (n), e alle varie distanze (L) dalla flangia tipo "6A" ovale 6 fori.  
Radial load capacity (Pr) cur ve according to speed (n) and distance (L) from flange, valid for the 6-bolt flange type "6A".

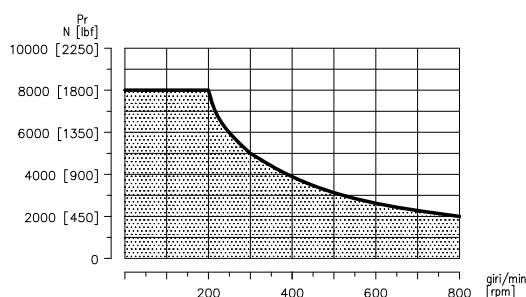
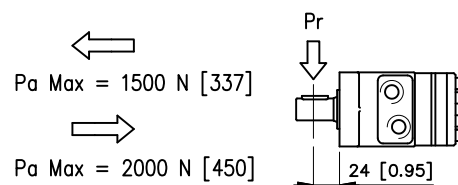


$$Pr = \frac{800}{n} \cdot \frac{242000}{97 + L} \text{ [N]}$$

The permissible radial shaft load depends on

- Speed (n)
- Distance (L) from the point of load to the mounting flange
- Mounting flange version

Formula utilizzabile per il calcolo del carico radiale (Pr) ai vari numeri di giri (n), e alle varie distanze (L) dalla flangia tipo "S4" 4 fori.  
Radial load capacity (Pr) cur ve according to speed (n) and distance (L) from flange, valid for the 4-bolt flange type "S4".



La curva mostra la relazione tra (Pr) e (n) quando:

- L = 24 mm [0.95 in] per motori flangia S4 e 6A

The curve shows the relation between (Pr) and (n)

- L = 24 mm [0.95 in] for motors with S4 and 6A flange

## VERSIONE SPECIALE SPECIAL VERSION

DRENAGGIO POSTERIORE + RACCORDO M/F 1/4 G (BSPP) - 7/16" 20UNF2B  
REAR DRAIN + PIPE FITTING M/F 1/4 G (BSPP) - 7/16" 20UNF2B

Per i motori BS è possibile richiedere un attacco di drenaggio sul fondello.

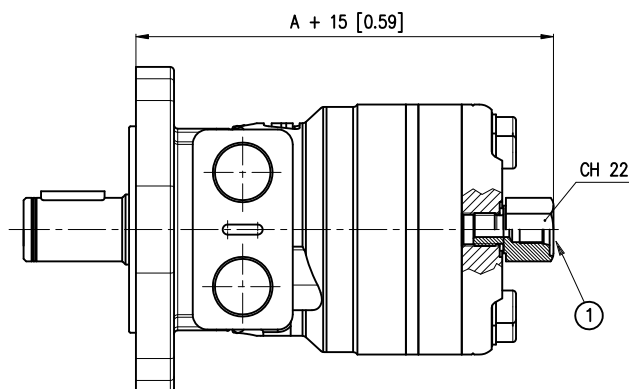
Se si vuole predisporre il motore con l'attacco di drenaggio è necessario specificare in fase d'ordine il valore DPS (vedere punto 9 del codice di ordinazione).

For the BS motors, it is possible to put a drain port on the rear cover.

If it is necessary on the motor a drain port, to specify in the purchase order the value DPS (See position 9 of ordering code)

Versione disponibile per i motori con flangia: 6A - S4

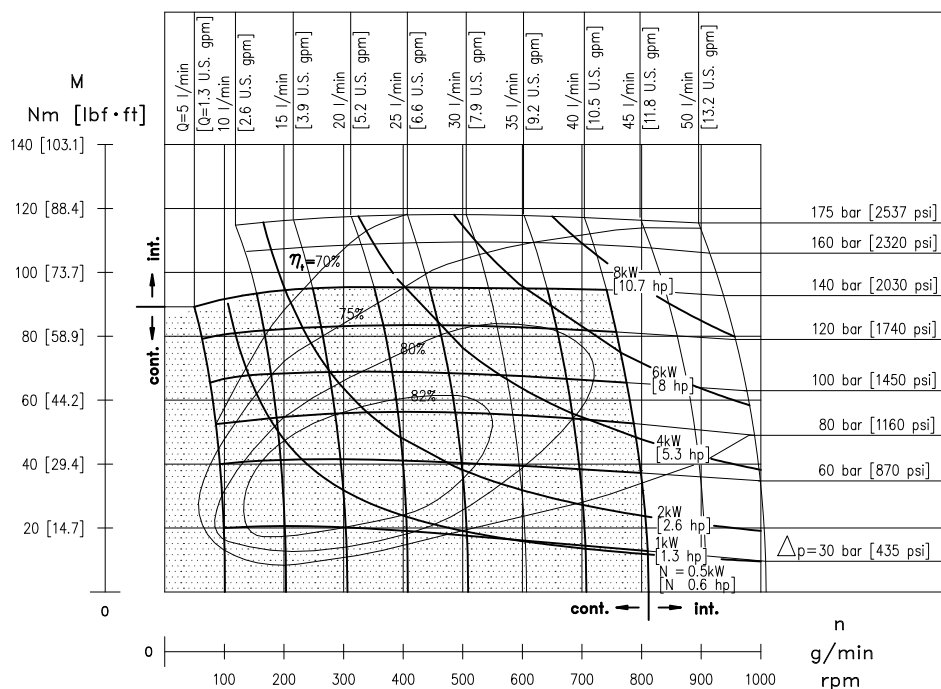
Available on following Mounting flange motors: 6A - S4



La quota "A" è riferita al dimensionale del motore senza raccordo.  
"A" dimension is related to motor length without pipe fitting.

- 1) Drenaggio motore 7/16" 20 UNF 2B profondità filetto 12 mm  
7/16" 20 UNF 2B drain motor thread depth 0.472 in

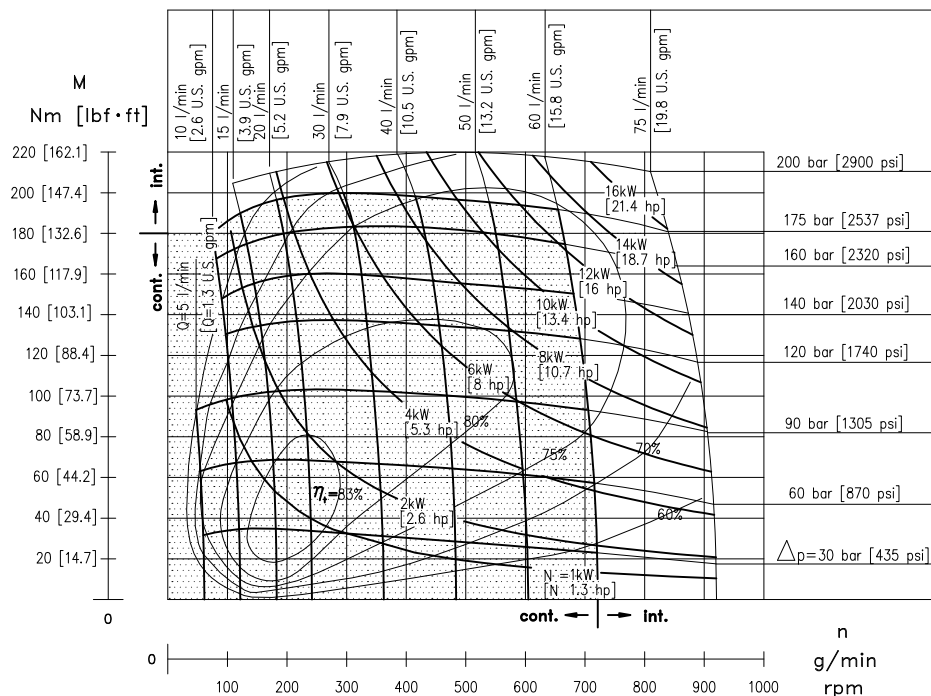
# BR-BS 050



*Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.*

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

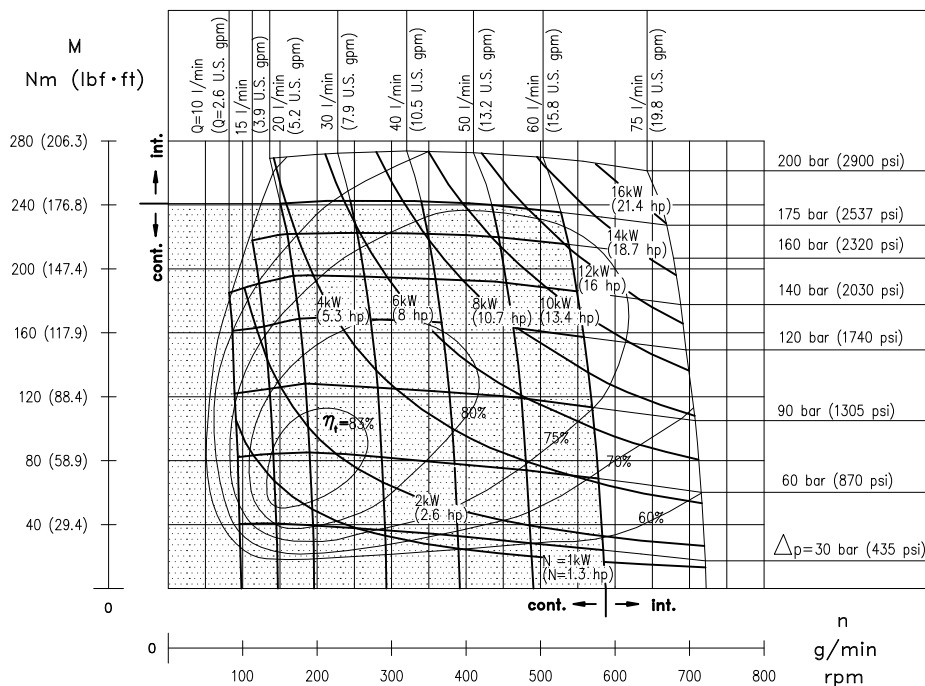
# BR-BS 080



*Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.*

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

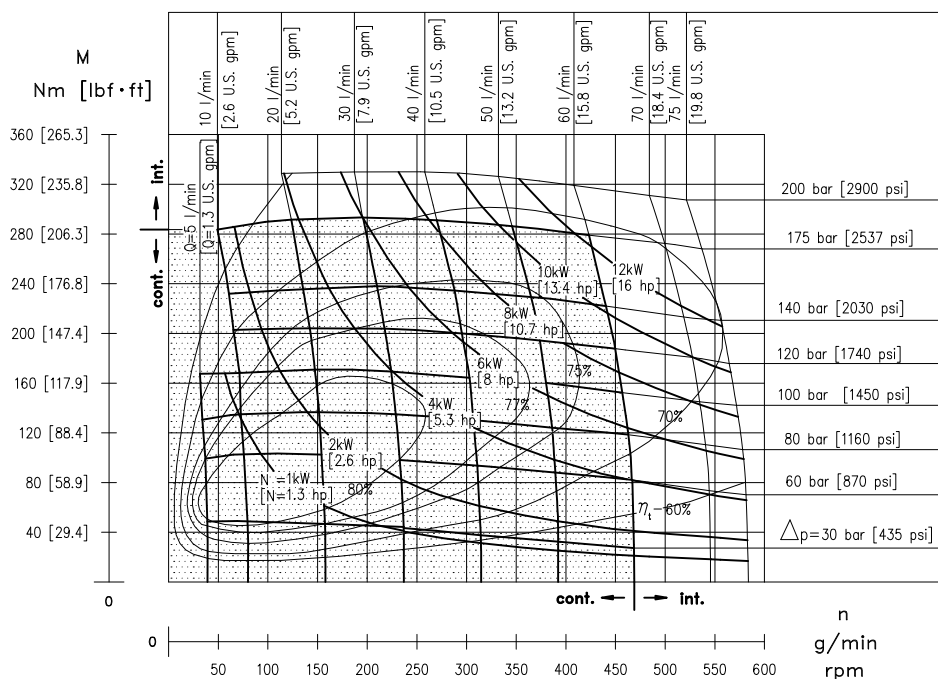
# BR-BS 100



*Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.*

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

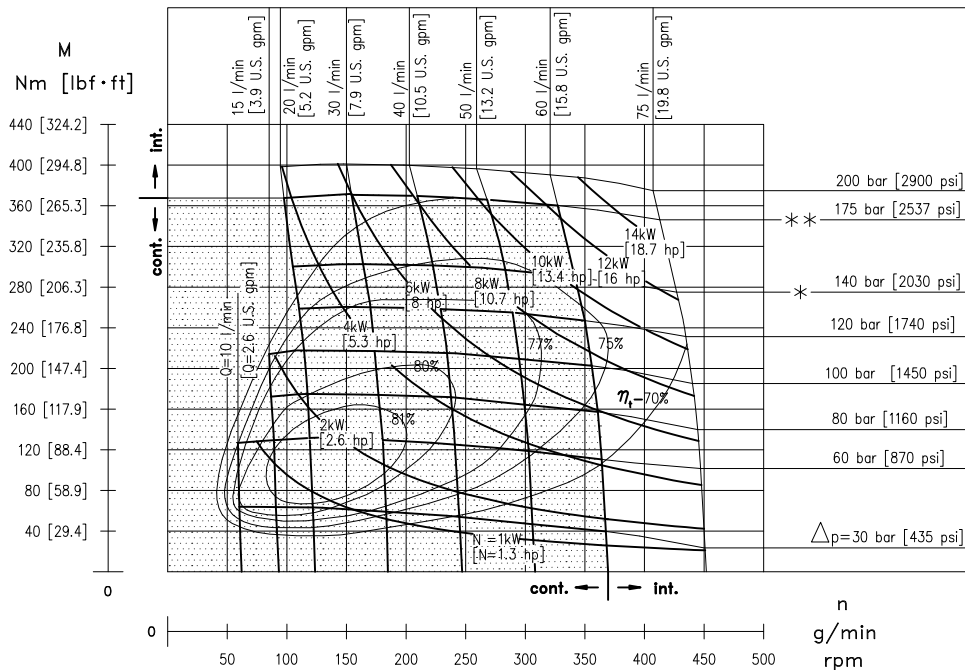
# BR-BS 130



*Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.*

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

# BR-BS 160



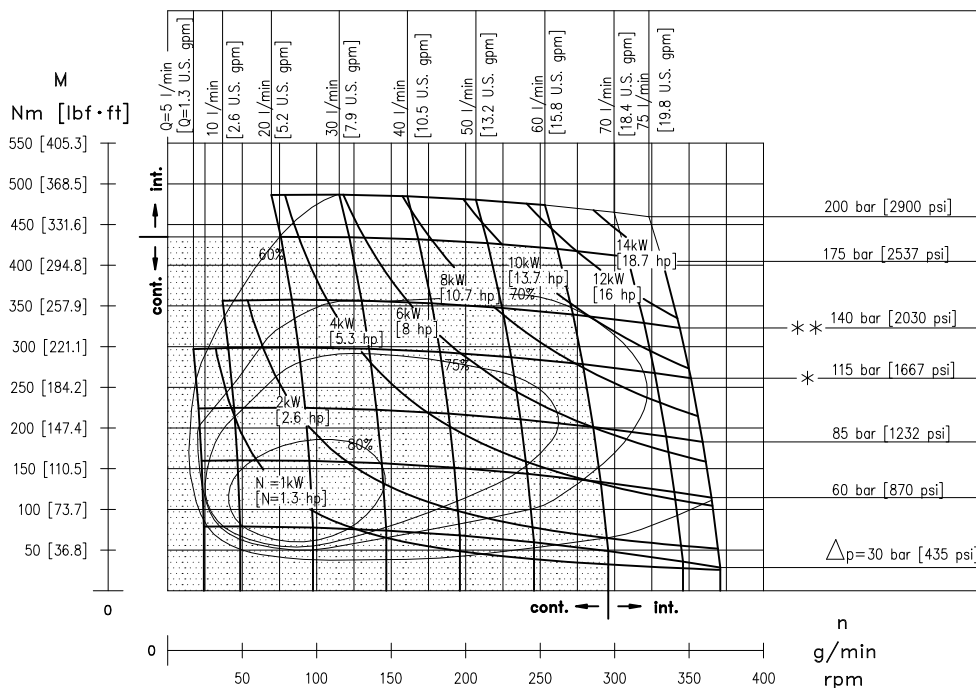
- \* Pressione massima continua per versione con albero Ø25.
- \*\* Pressione massima intermittente per versione con albero Ø25.

Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.

- \* Constant maximum pressure for Ø25 shaft model.
- \*\* Intermittent maximum pressure for Ø25 shaft model.

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

# BR-BS 200



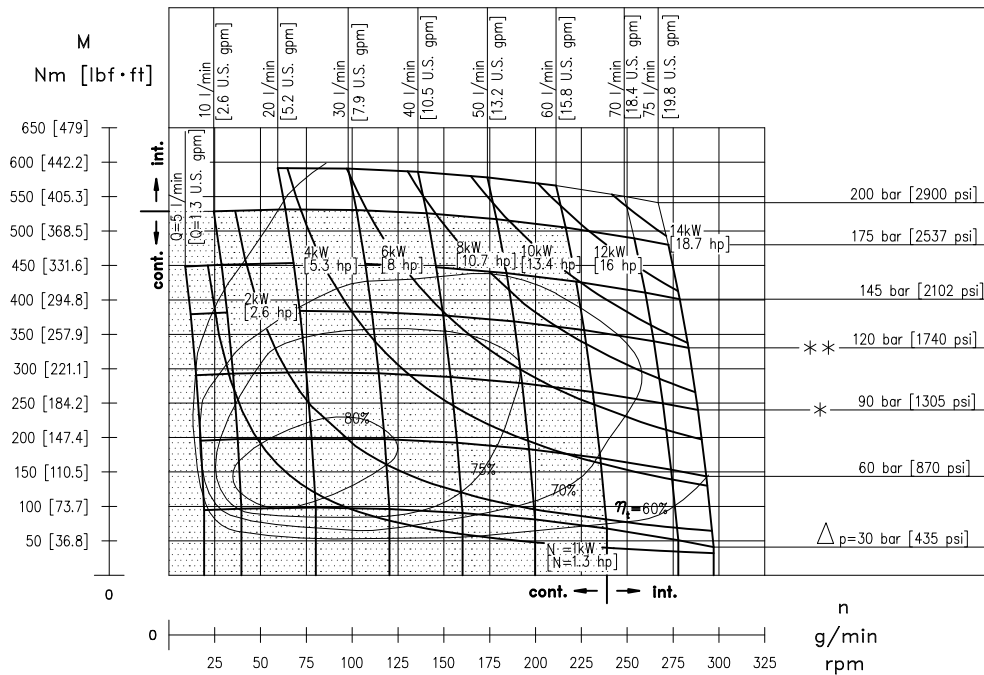
- \* Pressione massima continua per versione con albero Ø25.
- \*\* Pressione massima intermittente per versione con albero Ø25.

Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.

- \* Constant maximum pressure for Ø25 shaft model.
- \*\* Intermittent maximum pressure for Ø25 shaft model.

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

# BR-BS 250



\* Pressione massima continua per versione con albero Ø25.

\*\* Pressione massima intermittente per versione con albero Ø25.

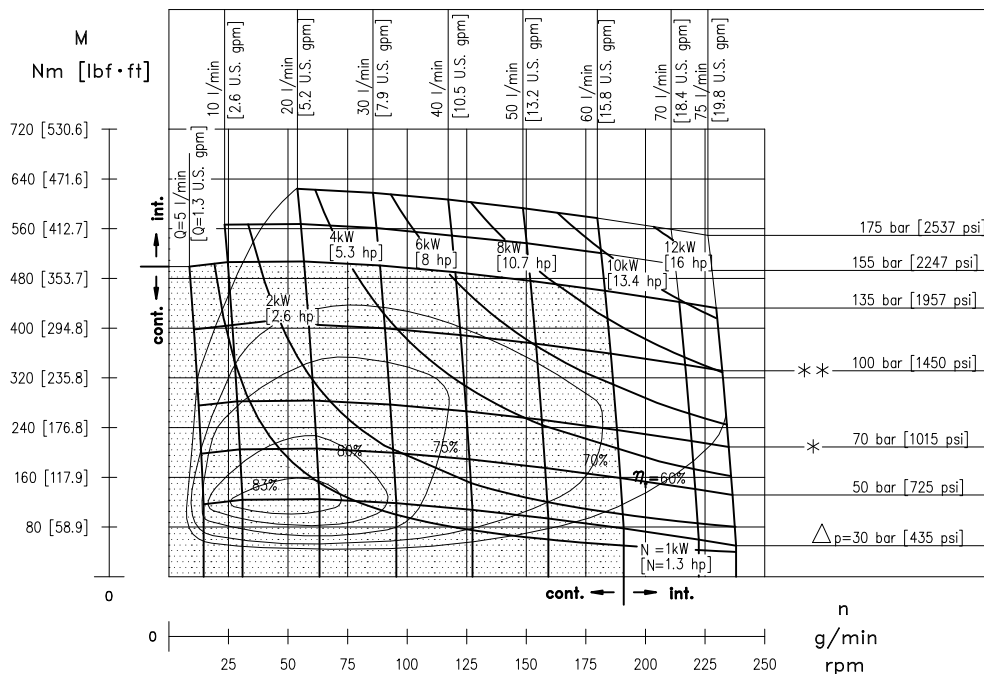
Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.

\* Constant maximum pressure for Ø25 shaft model.

\*\* Intermittent maximum pressure for Ø25 shaft model.

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

# BR-BS 315



\* Pressione massima continua per versione con albero Ø25.

\*\* Pressione massima intermittente per versione con albero Ø25.

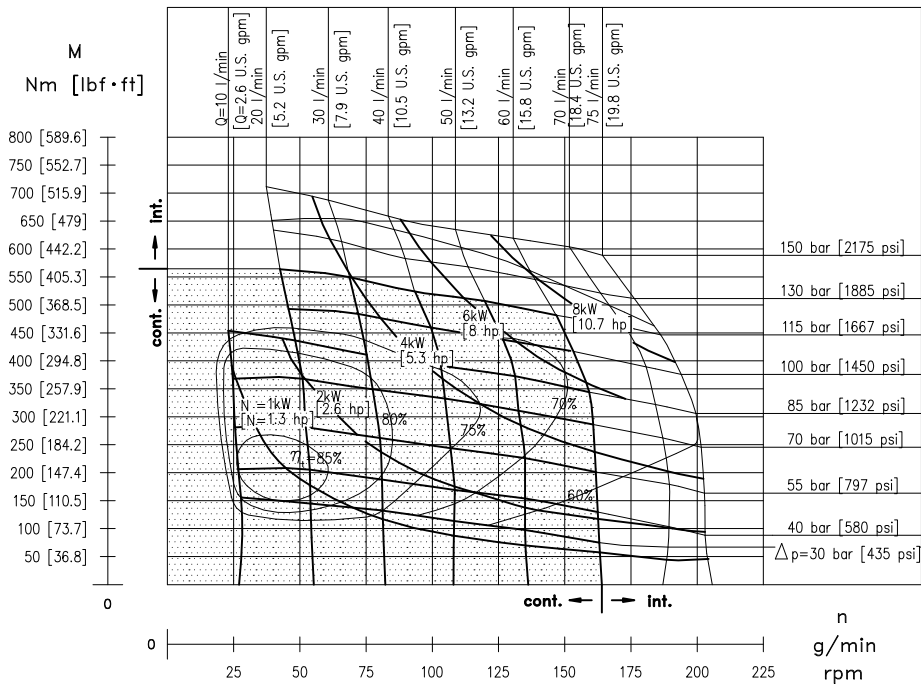
Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.

\* Constant maximum pressure for Ø25 shaft model.

\*\* Intermittent maximum pressure for Ø25 shaft model.

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

# BR-BS 400



\* Pressione massima continua per versione con albero Ø25.

\*\* Pressione massima intermittente per versione con albero Ø25.

Pressioni e portate superiori a quelle ammesse in regime continuo non devono essere applicate contemporaneamente.

\* Constant maximum pressure for Ø25 shaft model.

\*\* Intermittent maximum pressure for Ø25 shaft model.

Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.



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