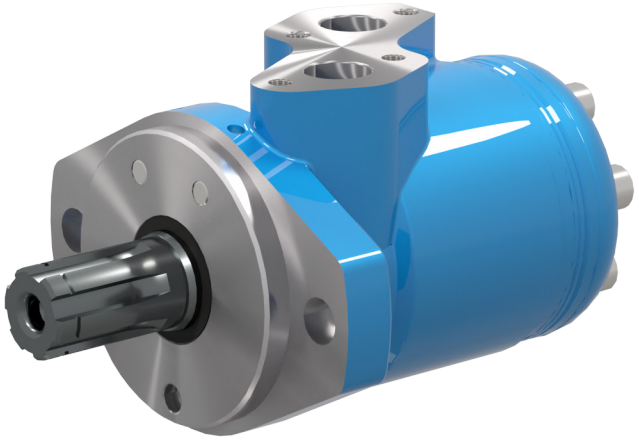
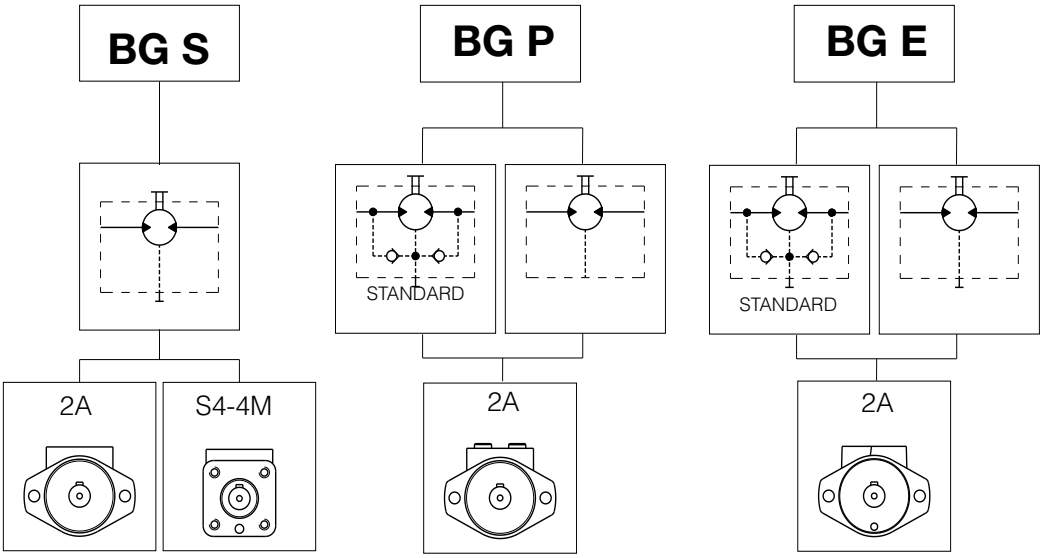
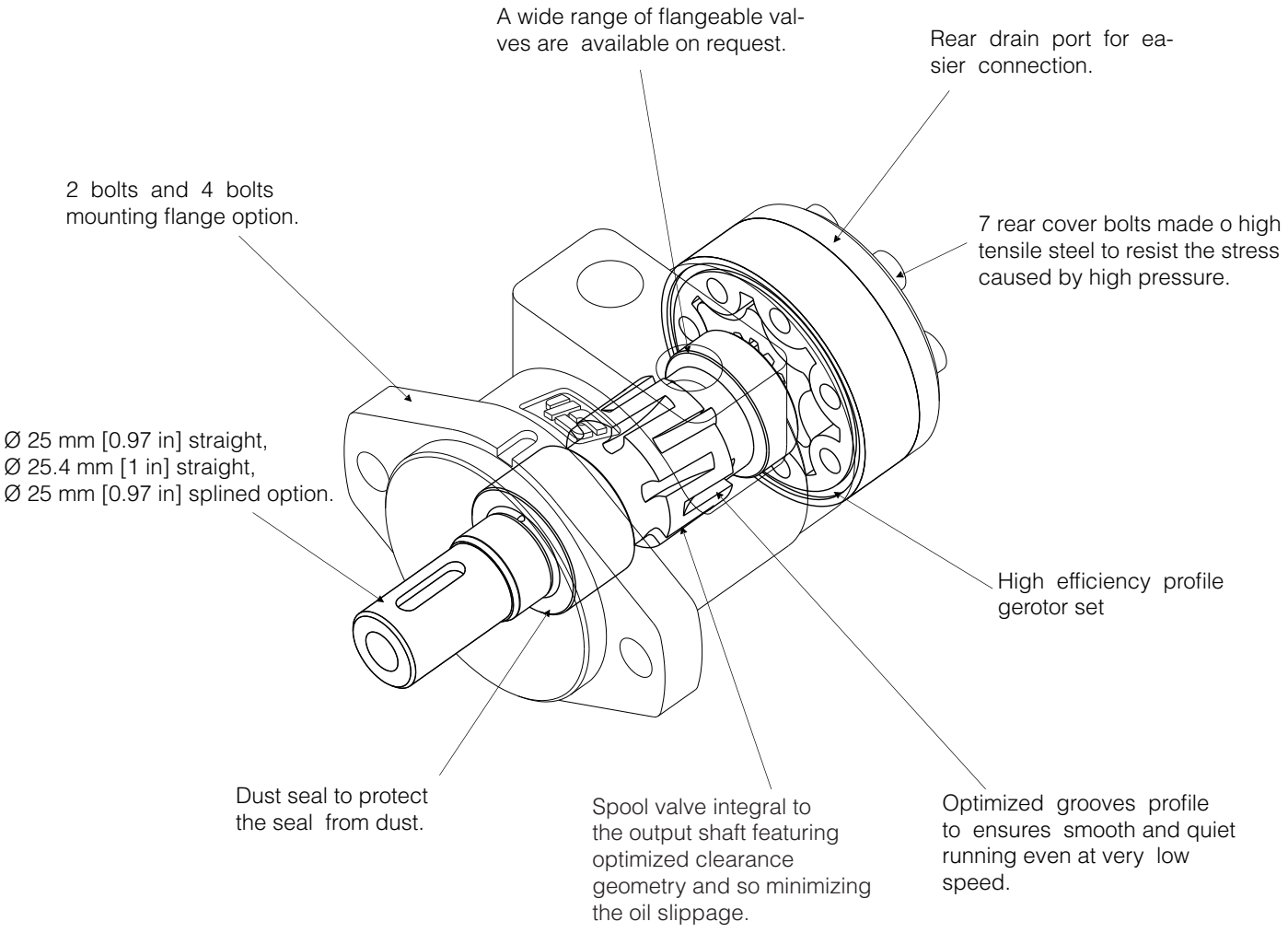
DANA SAMHYDRAULIK™



BG
Orbital Motors

	Page
Motor Features	C2
Motor Technical Specifications	C3
Performance Curves	C4
Pressure Data	C9
Max. Permissible Shaft Seal Pressure Without Drain	C9
Pressure Loss	C10
Other Informations	C11
BG - Ordering Code	C12
BG - Dimensions and Weight	C15
BG - Shaft End	C19
BG - Valve Feature	C20


BG S
BG P
BG E
STANDARD
STANDARD
2A
S4-4M
2A
2A


A wide range of flangeable valves are available on request.
Rear drain port for easier connection.
2 bolts and 4 bolts mounting flange option.
7 rear cover bolts made o high tensile steel to resist the stress caused by high pressure.
Ø 25 mm [0.97 in] straight,
Ø 25.4 mm [1 in] straight,
Ø 25 mm [0.97 in] splined option.
High efficiency profile gerotor set
Dust seal to protect the seal from dust.
Spool valve integral to the output shaft featuring optimized clearance geometry and so minimizing the oil slippage.
Optimized grooves profile to ensures smooth and quiet running even at very low speed.

BG MOTOR TECHNICAL DATA WITH CL250-CL254 PARALLEL KEYED SHAFT

Motor	Displacement cm³/rev [in³/rev]	Max. input pressure bar [psi]		Max. differential pressure bar [psi]		Max. torque Nm [lbf·ft]		Max. flow l/min [U.S. gpm]		Max. speed rpm		Max. power kW [hp]	
BG 050	47.8 [2.91]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	91 [67.1] 115 [84.7]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	1220 1530	Cont Int[1]	10 [13.4] 12 [16.1]
BG 080	71.9 [4.38]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int* Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int*	135 [99.5] 175 [128.9]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	820 1025	Cont Int[1]	9.5 [12.7] 12 [16.1]
BG 100	100.1 [6.10]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	190 [140] 230 [169.5]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	590 740	Cont Int[1]	10.5 [14] 13 [17.4]
BG 130	127.2 [7.76]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	240 [176.8] 290 [213.7]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	465 585	Cont Int[1]	10 [13.4] 12 [16.1]
BG 160	165.3 [10.08]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	300 [221.1] 370 [272.6]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	355 445	Cont Int[1]	10 [13.4] 12 [16.1]
BG 200	192.4 [11.73]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	115 [1670] 160 [2320] 200 [2900]	Cont Int[1]	300 [221.1] 390 [287.4]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	305 380	Cont Int[1]	8 [10.7] 15 [20.1]
BG 250	239.1 [14.58]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	95 [1377] 125 [1810] 180 [2610]	Cont Int[1]	300 [221.1] 400 [294.8]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	245 305	Cont Int[1]	6 [8.1] 8 [10.7]
BG 315	286.9 [17.50]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	80 [1160] 105 [1522] 160 [2320]	Cont Int[1]	300 [221.1] 400 [294.8]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	205 255	Cont Int[1]	5 [6.7] 7 [9.4]
BG 400	382.5 [23.33]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	60 [870] 80 [1160] 130 [1890]	Cont Int[1]	300 [221.1] 400 [294.8]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	150 190	Cont Int[1]	4 [5.4] 6 [8.1]

BG MOTOR TECHNICAL DATA WITH SD250 SPLINED SHAFT

Motor	Displacement cm³/rev [in³/rev]	Max. input pressure bar [psi]		Max. differential pressure bar [psi]		Max. torque Nm [lbf·ft]		Max. flow l/min [U.S. gpm]		Max. speed rpm		Max. power kW [hp]	
BG 050	47.8 [2.91]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	91 [67.1] 115 [84.7]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	1220 1530	Cont Int[1]	10 [13.4] 12 [16.1]
BG 080	71.9 [4.38]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int* Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int*	135 [99.5] 175 [128.9]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	820 1025	Cont Int[1]	9.5 [12.7] 12 [16.1]
BG 100	100.1 [6.10]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	190 [140] 230 [169.5]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	590 740	Cont Int[1]	10.5 [14] 13 [17.4]
BG 130	127.2 [7.76]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	240 [176.8] 290 [213.7]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	465 585	Cont Int[1]	10 [13.4] 12 [16.1]
BG 160	165.3 [10.08]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	300 [221.1] 370 [272.7]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	355 445	Cont Int[1]	10 [13.4] 12 [16.1]
BG 200	192.4 [11.73]	Cont Int[1] Peak[2]	165 [2392] 200 [2900] 225 [3262]	Cont Int[1] Peak[2]	140 [2030] 175 [2540] 225 [3262]	Cont Int[1]	360 [265.3] 420 [309.5]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	305 380	Cont Int[1]	10 [13.4] 12 [16.1]
BG 250	239.1 [14.58]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	110 [1595] 140 [2030] 180 [2610]	Cont Int[1]	360 [265.3] 440 [324.2]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	245 305	Cont Int[1]	8 [10.7] 10 [13.4]
BG 315	286.9 [17.50]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	90 [1310] 120 [1740] 160 [2320]	Cont Int[1]	340 [250.6] 440 [324.2]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	205 255	Cont Int[1]	5.6 [7.8] 7.5 [10.1]
BG 400	382.5 [23.33]	Cont Int[1] Peak[2]	165 [2392] 195 [2827] 225 [3262]	Cont Int[1] Peak[2]	70 [1020] 95 [1377] 130 [1890]	Cont Int[1]	360 [265.3] 460 [339]	Cont Int[1]	60 [15.9] 75 [19.8]	Cont Int[1]	150 190	Cont Int[1]	4.7 [6.3] 6 [8.1]

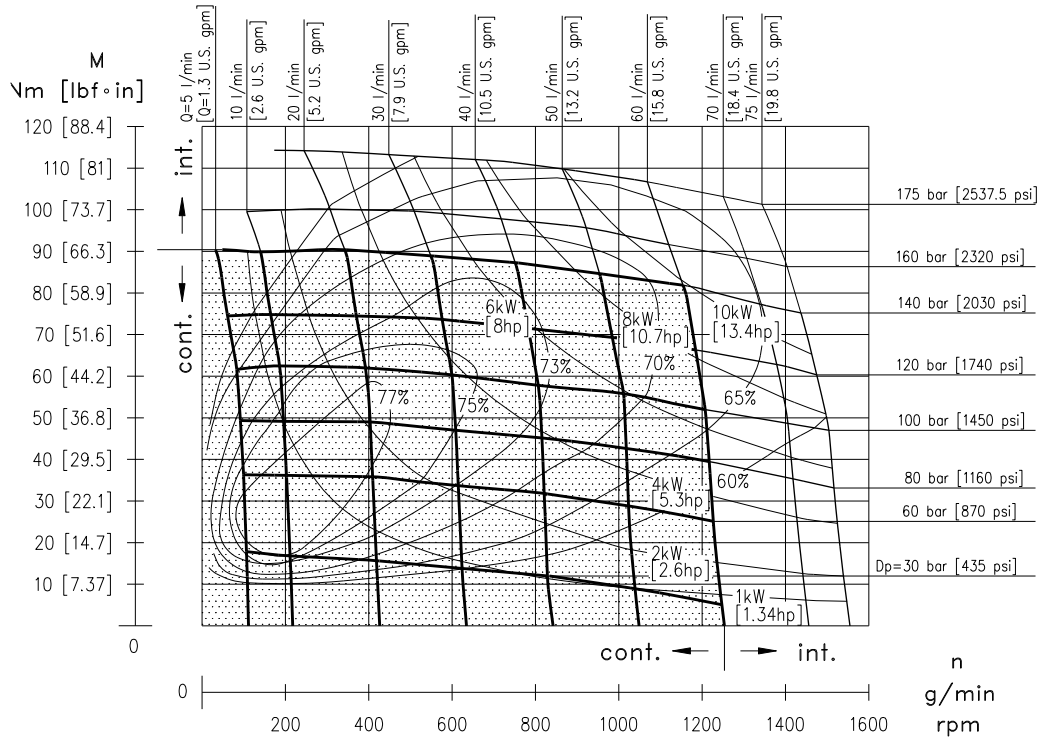
[1] Intermittent duty must not exceed 10% each minute.
[2] Peak duty must not exceed 1% each minute.

Click *i* button to return to main index

Click **DANA** button to return to section index

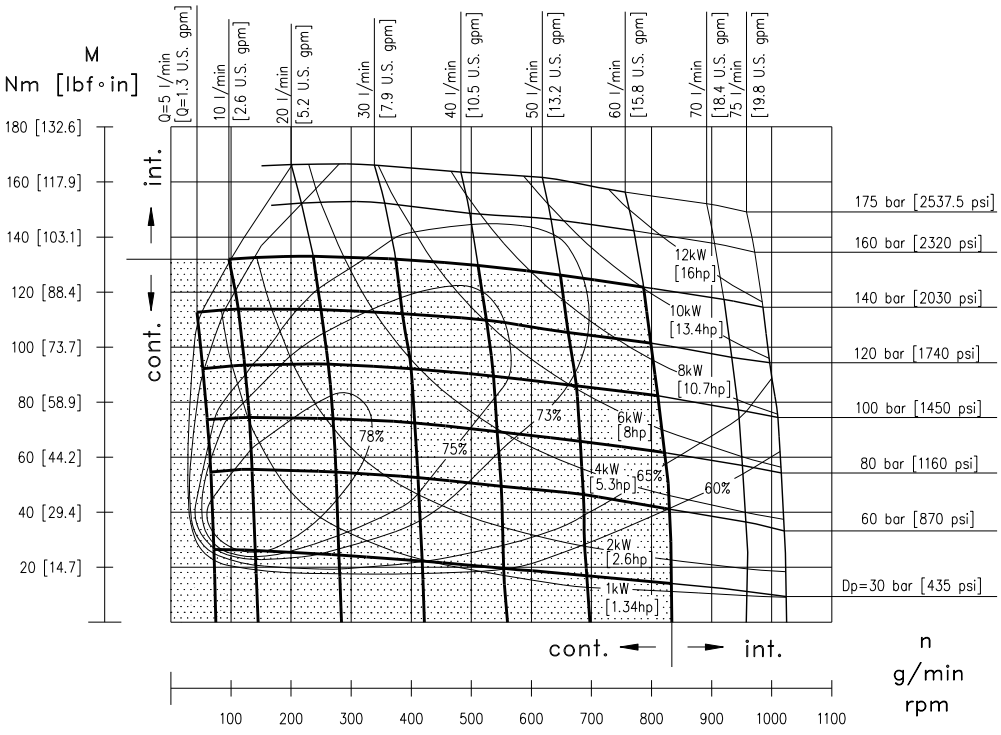
Performance Curves

BG 050



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

BG 080

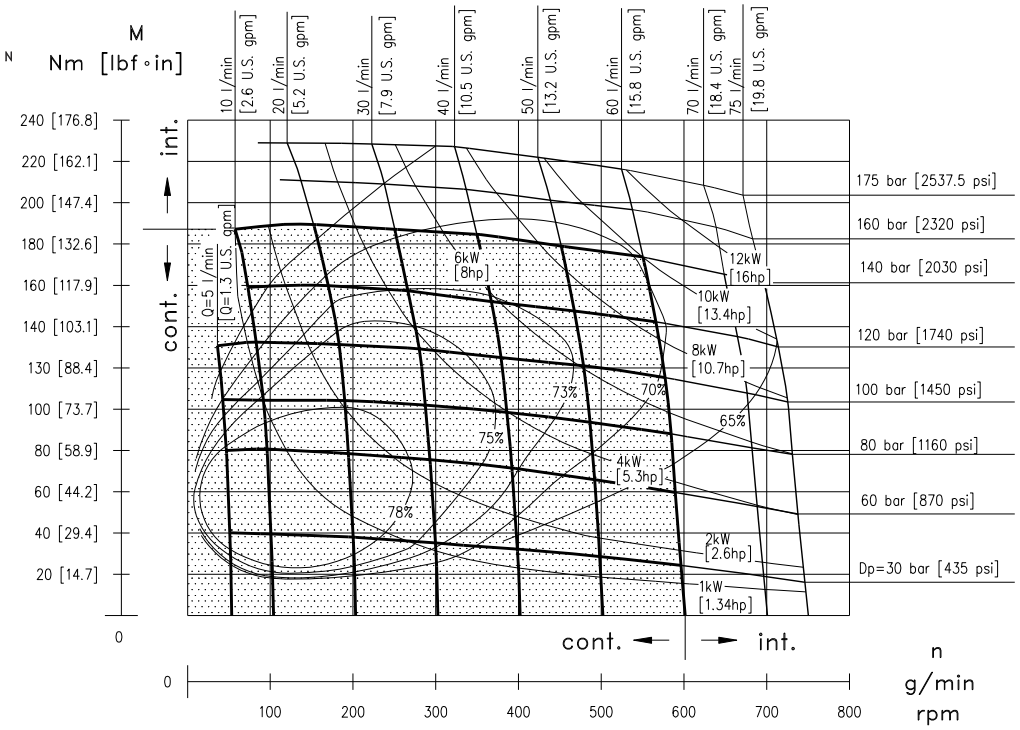


Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

Click **DANA** button to return to section index

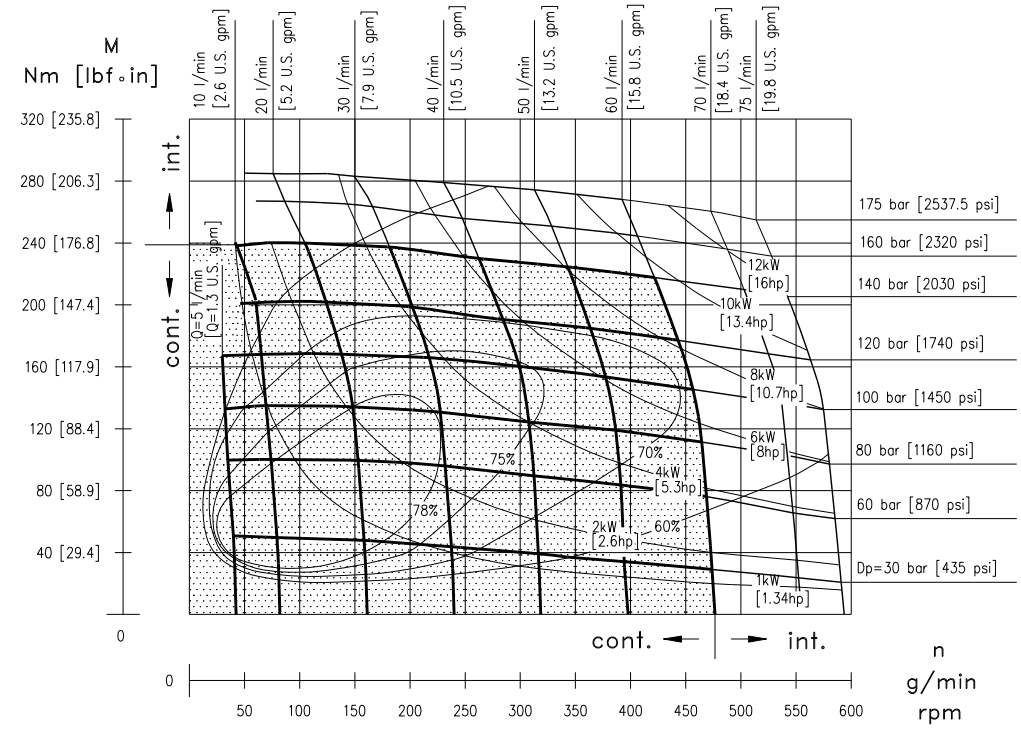
Click *i* button to return to main index

BG 100



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

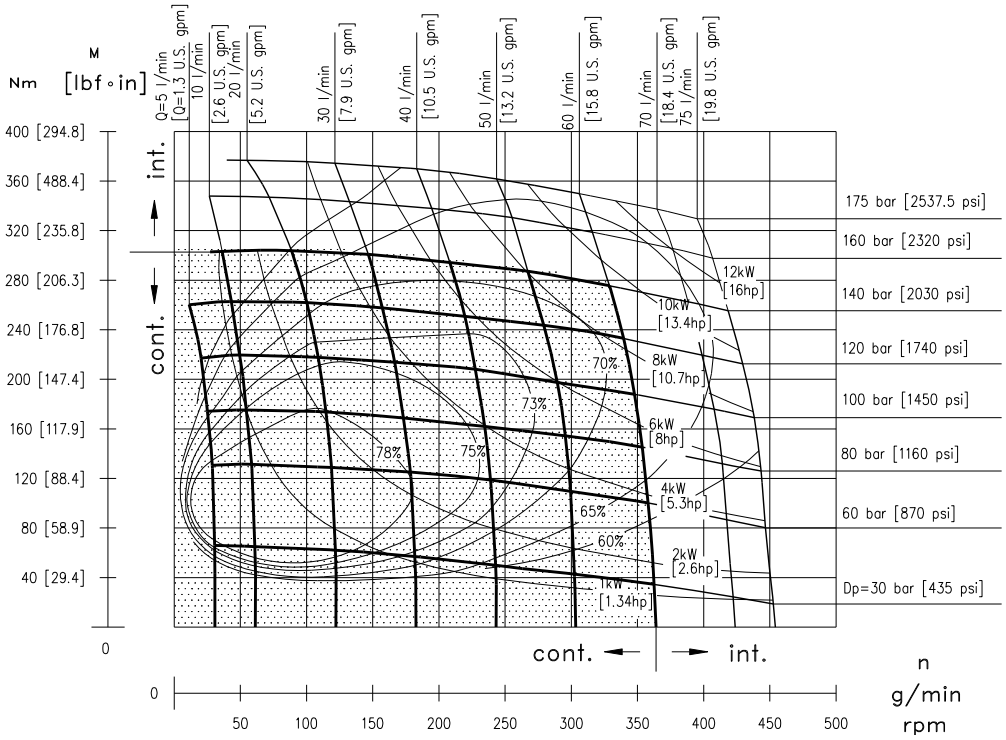
BG 130



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

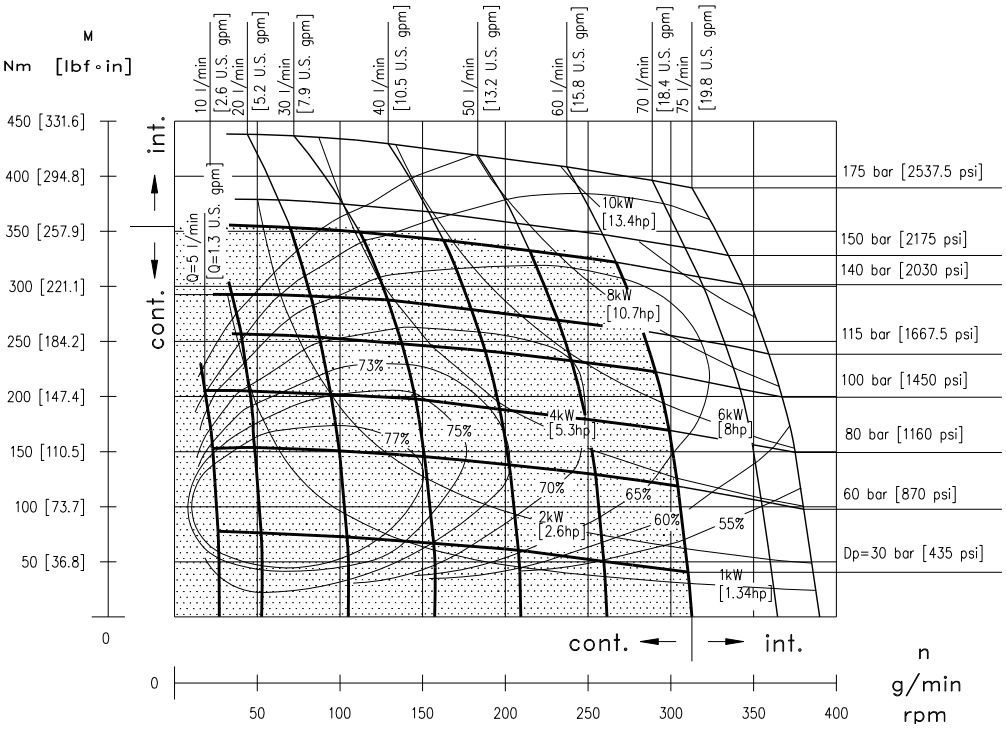
Performance Curves

BG 160



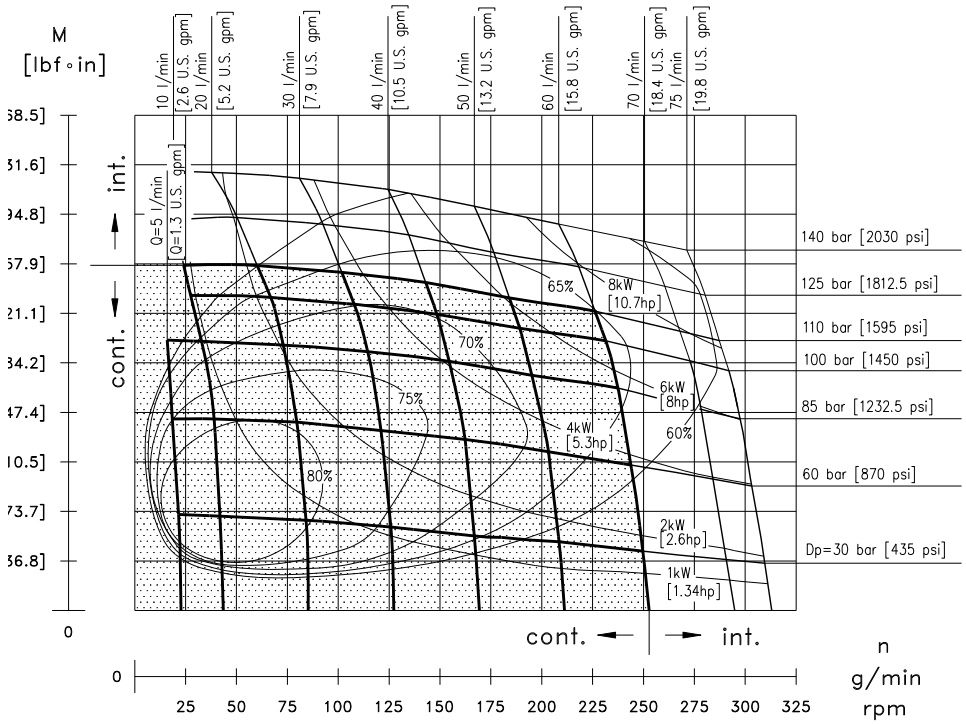
Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

BG 200



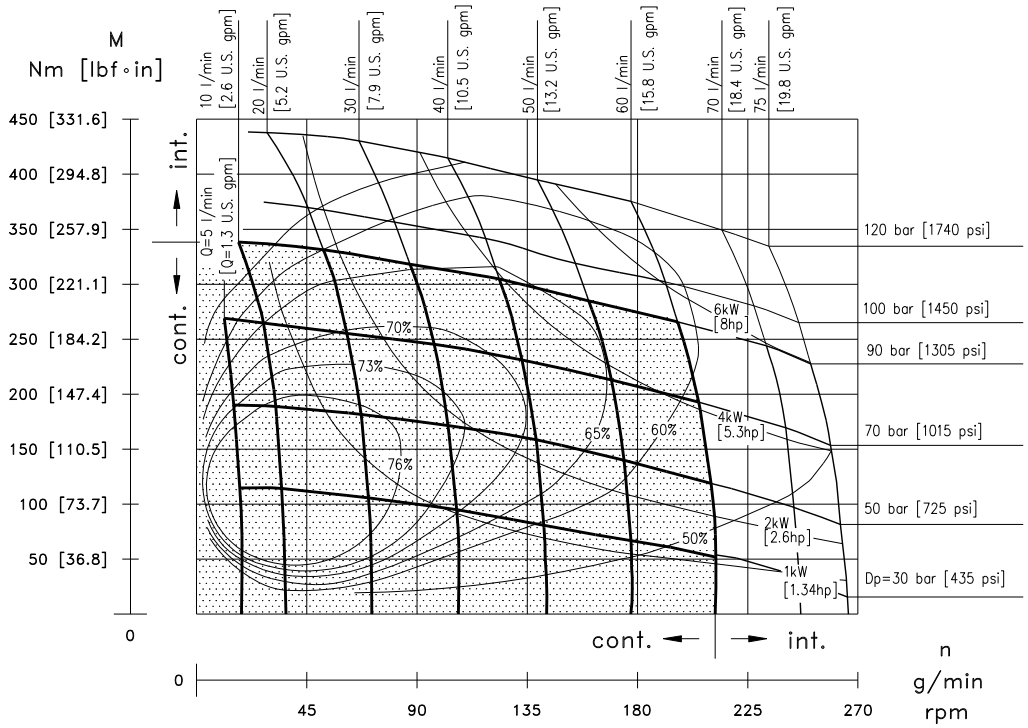
Exceeding continuous pressure values or exceeding flow values indicated, must not occur simultaneously.

BG 250



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

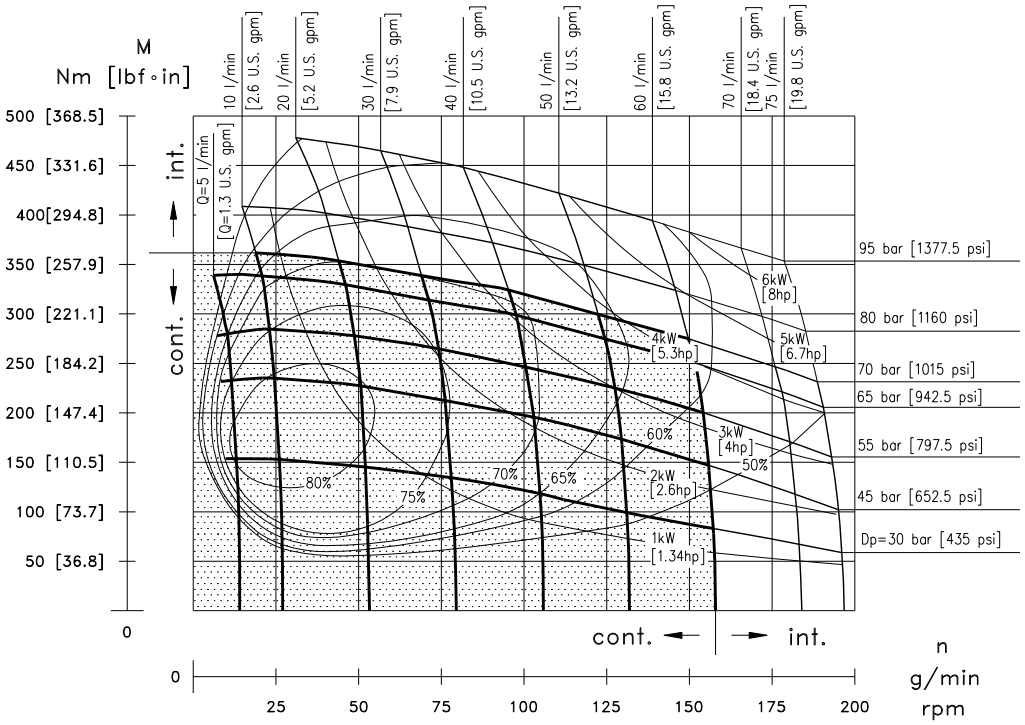
BG 315



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

Performance Curves

BG 400



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

Note:
Diagrams according to tests done with a relevant number of motors and using hydraulic oil with kinematic viscosity of 37 cSt at 45 C° temperature.

Max. Pressure

Motor		Max return pressure with drain line bar [psi]	Max starting pressure with no load bar [psi]	Min starting torque Nm [lbf ft]		
BG	**050**	140 [2030]	10 [145]	At max Δp	Cont. Int.	70 [51.6] 90 [66.3]
BG	**080**	140 [2030]	10 [145]	At max Δp	Cont. Int.	105 [77.4] 135 [99.5]
BG	**100**	140 [2030]	10 [145]	At max Δp	Cont. Int.	150 [111] 190 [140]
BG	**130**	140 [2030]	9 [131]	At max Δp	Cont. Int.	190 [140] 240 [177]
BG	**160**	140 [2030]	8 [116]	At max Δp	Cont. Int.	250 [184] 315 [232]
BG	**200**	140 [2030]	7 [102]	At max Δp	Cont. Int.	255 [188] 320 [236]
BG	**250**	140 [2030]	6 [87]	At max Δp	Cont. Int.	265 [195] 345 [254]
BG	**315**	140 [2030]	6 [87]	At max Δp	Cont. Int.	250 [184] 330 [243]
BG	**400**	140 [2030]	6 [87]	At max Δp	Cont. Int.	265 [195] 355 [262]

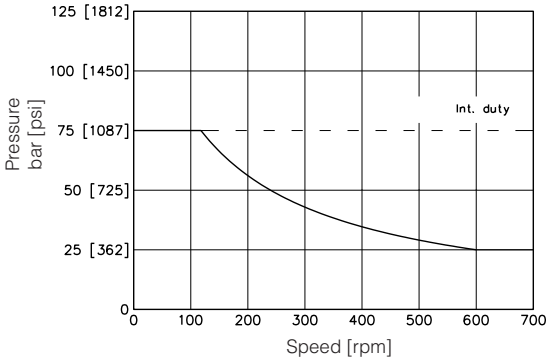
1) Intermittent duty must not exceed 10% every minute.
2) Peak duty must not exceed 1% of every minute.
3) Oil viscosity 35 cSt.

Max. Permissible Shaft Seal Pressure Without Drain

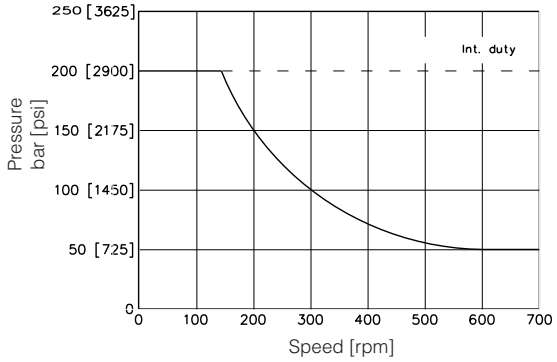
Max. return pressure without drain line or max. pressure in the drain line. Motor are supplied in standard seal version (Standard chart) or in HPS seal version (HPS chart).
For pressure and speeds not showed in the curve below, please contact Dana SamHydraulik.

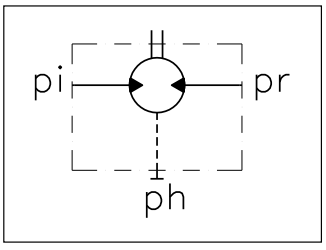
N.B.: TAC/U version is not available with HPS seals.

STANDARD

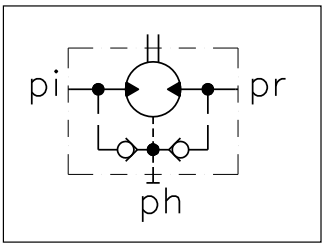


HPS





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



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

The case pressure without drain line is the average between inlet and return pressure.
Max. permissible return (back) pressure with drain line 138 bar [2000 psi] Cont.
In the motors without built-in check valves, the (ph) pressure on the seal is the average between inlet and return pressure.
If (ph) exceeds the allowed values (see the curves in this page), the drain line must be connected.

Click *i* button to return to main index

Click **DANA** button to return to section index

BG - Pressure Loss

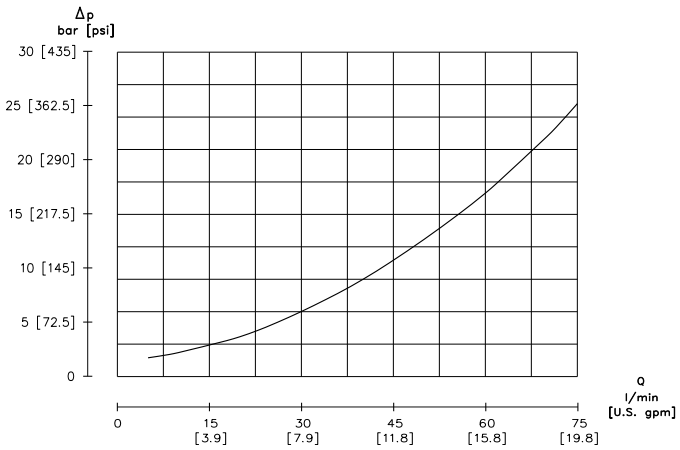


Diagram according tests done with a relevant number of motors and using hydraulic oil with kinematic viscosity of 37 cSt at 45° C temperature.

Shaft Load

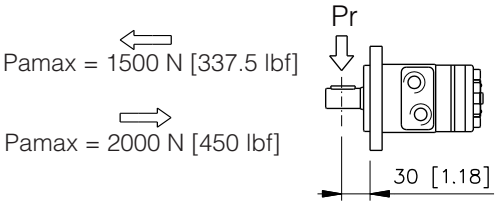
The permissible radial shaft load depends on:

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

BG MOTOR

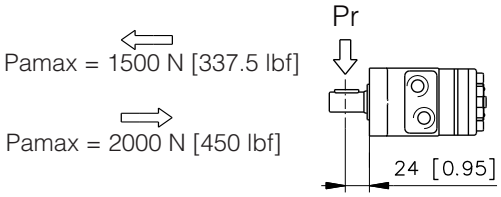
Radial load capacity (Pr) curve according to speed (n) and distance (L) from flange, valid for the 2-bolt flange type “2A”

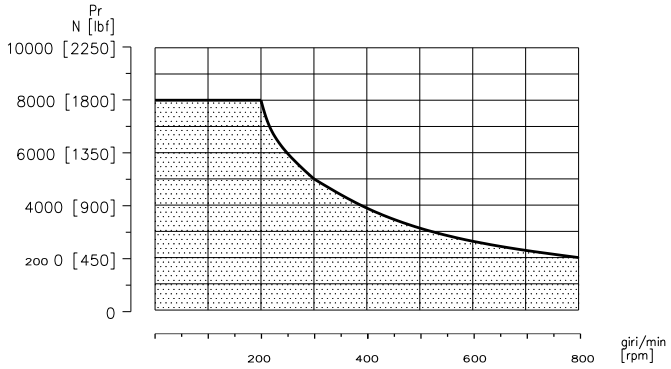
$$Pr = \frac{800}{n} \cdot \frac{242000}{91 + L} \quad [N]$$



Radial load capacity (Pr) curve according to speed (n) and distance (L) from flange, valid for the 4-bolt flange type “S4-4M”

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





The curve show the relation between (Pr) and (n):
- L = 30 mm [1.18 in] for motors with 2A flange
- L = 24 mm [0.95 in] for motors with S4-4M flange

BG - Ordering Code

The following alphanumeric digits system has been developed to identify all of the configuration options for the BG 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.

1	2	3	4	5	6	7	8	9	10	11	12
Series	Displacement	Version	Mount flange	Shaft end	Maint port	Seal	Valve	Valve feature	Option	Version feature	Painting
BG	160	S	2A	CL250	M08	N	M081	028	XX	HPS	XX

1

Series	
BG	Orbital motor

2

Displacement	
050	50 cm³/giro [3.05 in³/rev]
080	80 cm³/giro [4.88 in³/rev]
100	100 cm³/giro [6.10 in³/rev]
130	130 cm³/giro [7.93 in³/rev]
160	160 cm³/giro [9.76 in³/rev]
200	200 cm³/giro [12.20 in³/rev]
250	250 cm³/giro [15.25 in³/rev]
315	315 cm³/giro [19.21 in³/rev]
400	400 cm³/giro [24.40 in³/rev]

3

Version	
S	S (standard)
E	E Version
P	P Version

4

Mounting Flange		Version		
		S	E	P
2A	Oval 2 bolts (standard)	●	●	●
S4	4 bolts 3/8 16 UNC - Ø44.45 mm [Ø1.75 in]	●	-	-
4M	4 bolts M10 - Ø44.45 mm [Ø1.75 in]	●	-	-

5

Shaft end	
CL250	Ø25 mm [0.97 in] Parallel keyed (standard)
CL254	Ø25.4 mm [1 in] Parallel keyed
SD250	Splined Shaft (SAE 6B 1" 6T spline)

● Available
- Not Available

Click **DANA** button to return to section index

Click *i* button to return to main index

6

Main Port		Version S	Version E	Version P
M08	1/2 G BSPP (40x8) Main Ports (standard)	●	-	-
F08	1/2 G BSPP Main Ports	-	-	●
R08	1/2 G BSPP (36x36) Main Ports	-	●	-

7

Seal	
N	NBR (standard)
V	FKM (Not available in HPS version)

8

Valve		Main port M08	Main port F08	Main port R08
XXXX	Not required (standard)	●	●	●
M081	VAF 08 - D pressure relief valve	●	-	-
M082	VAF 08 - D/AF pressure relief valve	●	-	-
M083	VAAF 31 anticavitation and Anti-Shock Valve	●	-	-
M084	AF shuttle-valve	●	-	-
M085	VCD 08 - S/AF overcentre Valve	●	-	-
M086	VCR1 08 - D/AF double-acting overcentre valve with shuttle valve	●	-	-
M087	VCR1 08 D/AF LDP double-acting overcentre valve with shuttle valve	●	-	-
R081[1]	VAF E8 - D pressure relief valve	-	-	●
R082[1]	VCD E8 - S/AF overcentre Valve	-	-	●
R083[1]	VCR1 E8 - D/AF double-acting overcentre valve with shuttle valve	-	-	●
R084[1]	VCR1 E8 D/AF LDP double-acting overcentre valve with shuttle valve	-	-	●

9

Valve feature		Valve XXXX	M081	M082	M083	M084	M085	M086	M087	R081	R082	R083	R084
000	Feature not necessary	●	-	-	-	●	-	-	-	-	-	-	-
028	Not Set 30÷70 bar [435 to 1015 psi]	-	●	●	-	-	-	-	-	-	-	-	-
017	Not Set 70÷200 bar [1015 to 2900 psi]	-	●	●	-	-	-	-	-	-	-	-	-
031	Not Set 50÷130 bar [725 to 1885 psi]	-	-	-	●	-	-	-	-	●	-	-	-
021	Not Set 100÷250 bar [1450 to 3625 psi]	-	-	-	●	-	-	-	-	-	-	-	-
020	Not Set 100÷200 bar [1450 to 2900 psi]	-	-	-	-	-	-	-	-	●	-	-	-
425	Pilot Ratio 4.25:1	-	-	-	-	-	-	●	●	-	-	●	●
800	Pilot Ratio 8:1	-	-	-	-	-	-	●	●	-	-	-	-
700	Pilot Ratio 7:1 - Direction of rotation CW	-	-	-	-	-	●	-	-	-	-	-	-
35D	Pilot Ratio 3.5:1 - Direction of rotation CW	-	-	-	-	-	●	-	-	-	●	-	-
70S	Pilot Ratio 7:1 - Direction of rotation CCW	-	-	-	-	-	●	-	-	-	-	-	-
35S	Pilot Ratio 3.5:1 - Direction of rotation CCW	-	-	-	-	-	●	-	-	-	●	-	-

10

Option	
XX	None

[1] Minimum quantity for order 20 pieces

● Available
- Not Available

Click *i* button to return to main index

Click **DANA** button to return to section index

BG - Ordering Code

11

Version Feature		Version S	Version E	Version P
QDR	QUAD-RING version with Rear drain 1/4" G (BSPP) (standard)	●	●	●
HPS	High Pressure Seal (without Rear Drain)	●	●	●
TC1	TAC/U tachometer (with sensor arrangement)	●	-	-
SV0	Version without built-in check valves + Rear Drain - 1/4" G (BSPP)	-	●	●
SVH	Version without built-in check valves + High Pressure Seal (without Rear Drain)	-	●	●
SVA	Version without built-in check valves + High Pressure Seal + Rear Drain - 1/4"G (BSPP)	-	●	-
DPM	High Pressure Seal + Rear Drain - 1/4" G (BSPP)	●	●	-

12

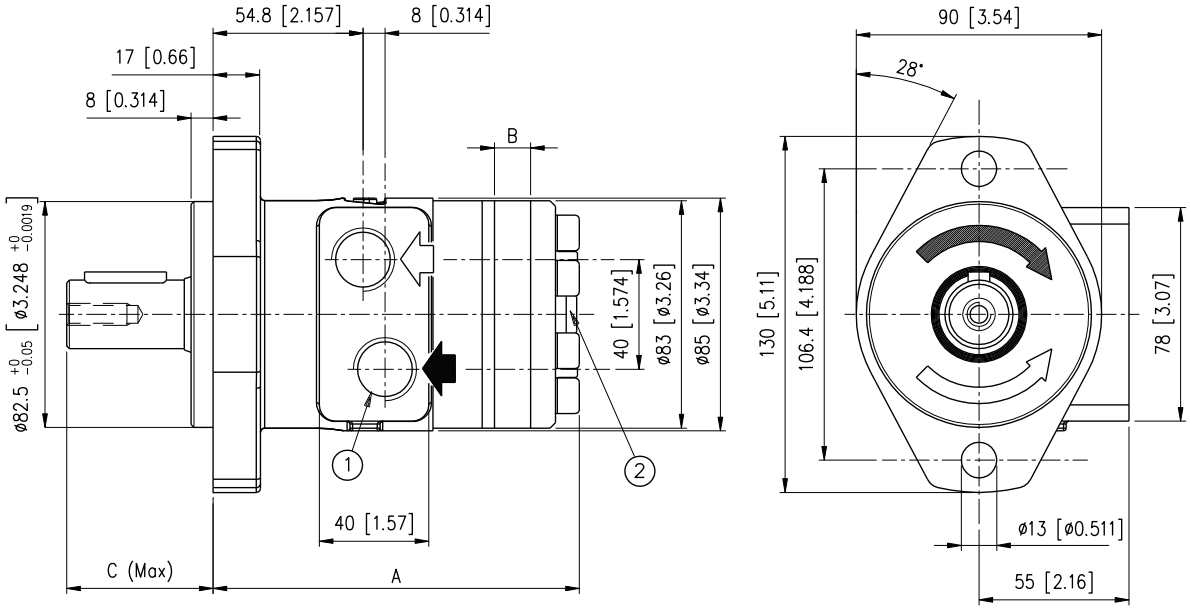
Painting	
XX	Not Painted (standard)
01	Black Painted RAL 9005
02	Blue Painted RAL 5015
06	Grey Painted RAL 7015
07	Grey Painted RAL 7021
22	Grey Painted RAL 7035

● Available
- Not Available

Click **DANA** button to return to section index

Click *i* button to return to main index

BG S 2A M08



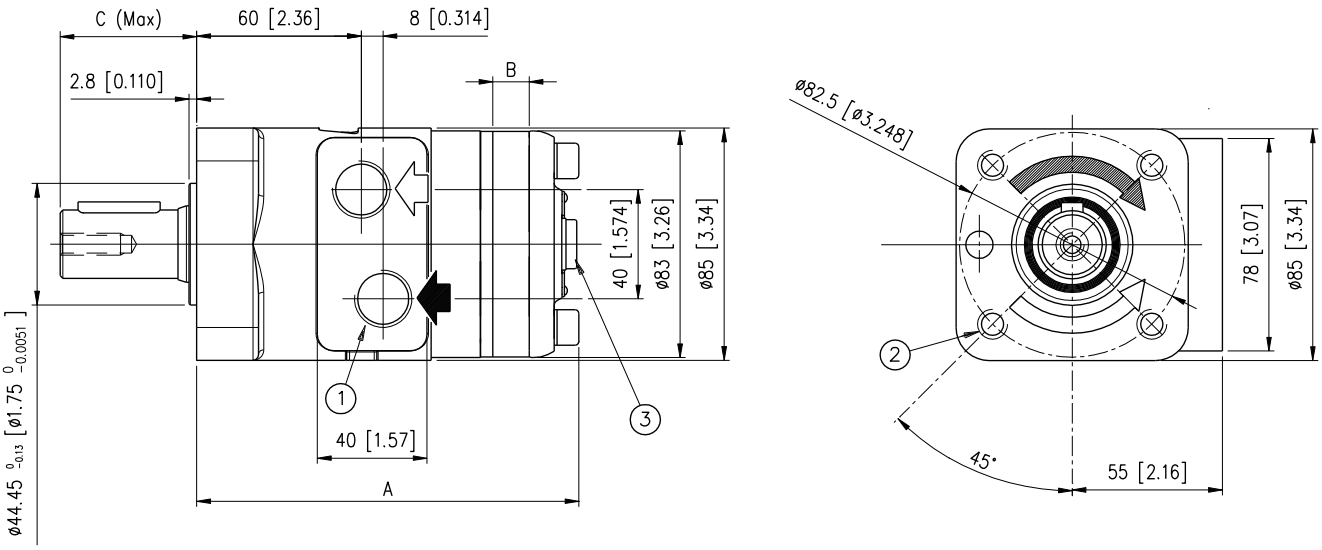
(1) No. 2 1/2 G (BSPP) main ports thread depth 18 mm [0.70 in]
(2) 1/4 G (BSPP) drain motor thread depth 12 mm [0.472 in]

For shafts dimensions see page C19

SHAFT		CL250	CL254	SD250
C	mm [in]	53.5 [2.10]	53.5 [2.10]	53.5 [2.10]

		BG S 050	BG S 080	BG S 100	BG S 130	BG S 160	BG S 200	BG S 250	BG S 315	BG S 400
A	mm [in]	127.5 [5.01]	130.5 [5.13]	134.5 [5.29]	138.5 [5.45]	143.5 [5.64]	146.5 [5.76]	153.5 [6.04]	162.5 [6.39]	172.5 [6.79]
B	mm [in]	6.3 [0.248]	9.5 [0.374]	13.3 [0.523]	16.2 [0.63]	21.9 [0.86]	25.5 [1.003]	31.7 [1.24]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lb]	5.5 [12.1]	5.6 [12.3]	5.8 [12.8]	5.9 [13.0]	6.1 [13.4]	6.3 [13.9]	6.5 [14.3]	6.8 [15.0]	7.3 [16.1]

BG S S4 / 4M M08



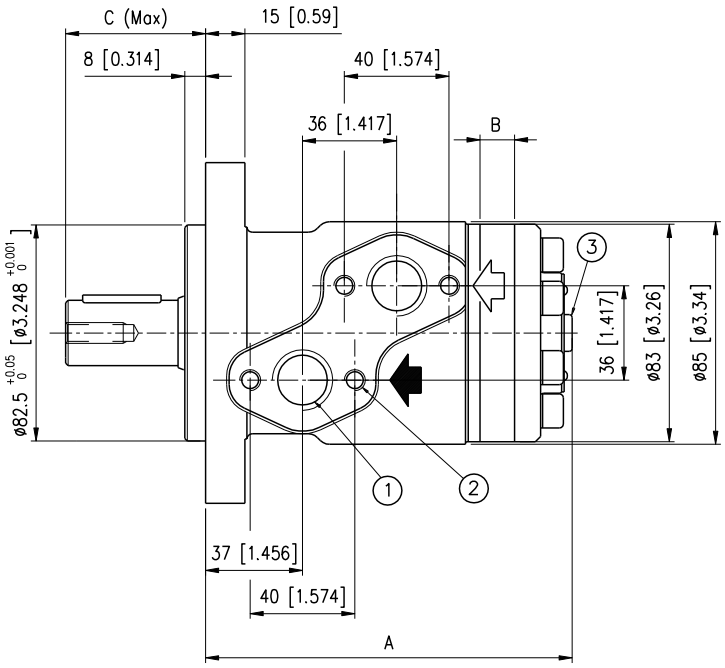
① No. 2 1/2 G (BSPP) main ports thread depth 18 mm [0.70 in]
② No. 4 3/8 16UNC thread depth 17 mm [0.66 in] (S4 flange)
No. 4 M10 thread depth 17 mm [0.66 in] (4M flange)
③ 1/4 G (BSPP) drain motor thread depth 12 mm [0.472 in]

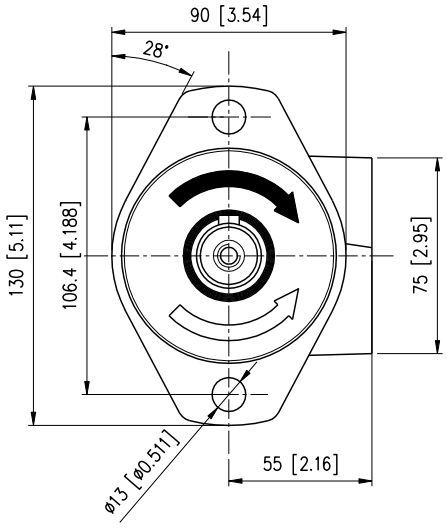
For shafts dimensions see page C19

SHAFT		CL250	CL254	SD250
C	mm [in]	50 [1.96]	45 [1.77]	50 [1.96]

		BG S 050	BG S 080	BG S 100	BG S 130	BG S 160	BG S 200	BG S 250	BG S 315	BG S 400
A	mm [in]	133.1[5.24]	136.3 [5.36]	140 [5.51]	143.7 [5.65]	148.7 [5.85]	152.2 [5.99]	158.5 [6.24]	165 [6.49]	177.5 [6.98]
B	mm [in]	6.3 [0.248]	9.5 [0.374]	13.3 [0.523]	16.2 [0.63]	21.9 [0.86]	25.5 [1.003]	31.7 [1.24]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lb]	5.5 [12.1]	5.6 [12.3]	5.8 [12.8]	5.9 [13.0]	6.1 [13.4]	6.3 [13.9]	6.5 [14.3]	6.8 [15.0]	7.3 [16.1]

BG E 2A R08





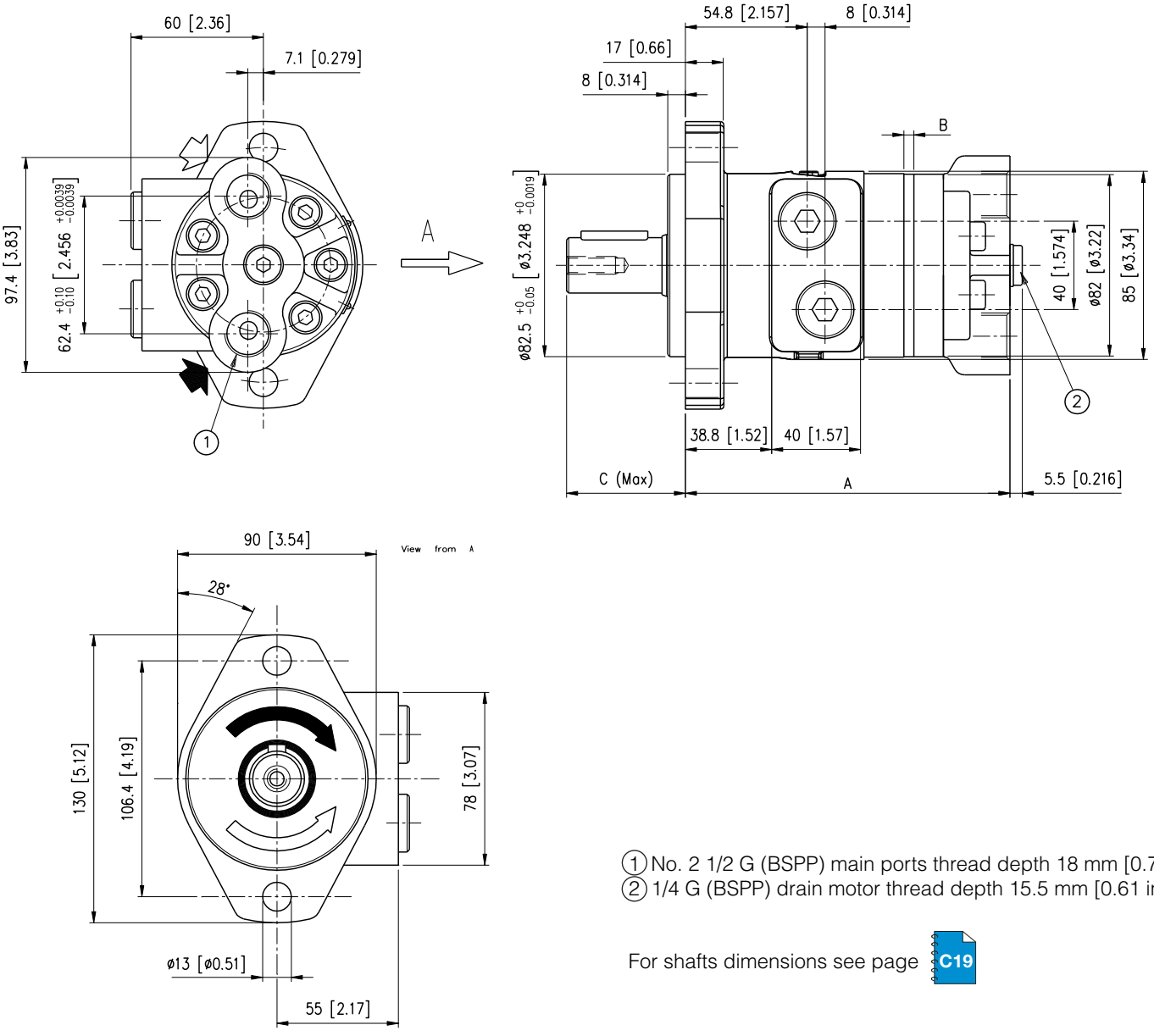
1 No. 2 1/2 G (BSPP) main ports thread depth 18 mm [0.70 in]
2 No. 4 M8 thread depth 16 mm [0.62 in]
3 1/4 G (BSPP) drain motor thread depth 12 mm [0.472 in]

For shafts dimensions see page C19

SHAFT		CL250	CL254	SD250
C	mm [in]	55 [2.16]	50 [1.96]	55 [2.16]

		BG E 050	BG E 080	BG E 100	BG E 130	BG E 160	BG E 200	BG E 250	BG E 315	BG E 400
A	mm [in]	127.7 [5.03]	130.9 [5.15]	134.7 [5.30]	138.2 [5.44]	143.3 [5.64]	146.9 [5.78]	153.1 [6.02]	159.5 [6.27]	172.2 [6.78]
B	mm [in]	6.3 [0.248]	9.5 [0.374]	13.3 [0.523]	16.2 [0.63]	21.9 [0.86]	25.5 [1.003]	31.7 [1.24]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lb]	5.5 [12.1]	5.6 [12.3]	5.8 [12.8]	5.9 [13.0]	6.1 [13.4]	6.3 [13.9]	6.5 [14.3]	6.8 [15.0]	7.3 [16.1]

BG P 2A F08



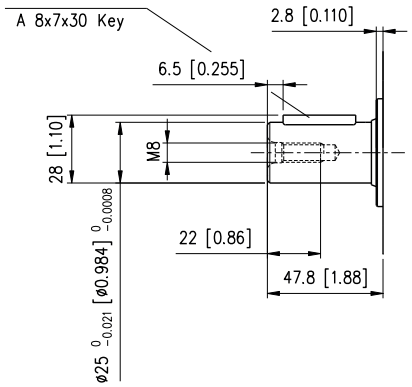
① No. 2 1/2 G (BSPP) main ports thread depth 18 mm [0.70 in]
② 1/4 G (BSPP) drain motor thread depth 15.5 mm [0.61 in]

For shafts dimensions see page C19

SHAFT		CL250	CL254	SD250
C	mm [in]	53.5 [2.10]	53.5 [2.10]	53.5 [2.10]

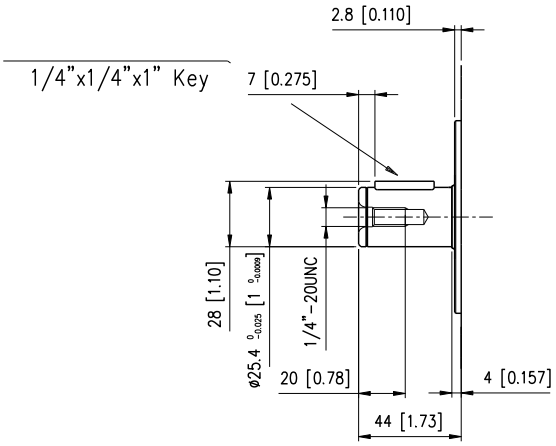
		BG P 050	BG P 080	BG P 100	BG P 130	BG P 160	BG P 200	BG P 250	BG P 315	BG P 400
A	mm [in]	140 [5.51]	143 [5.62]	147 [5.78]	150.2 [5.91]	155.5 [6.12]	159 [6.25]	165 [6.49]	171.5 [6.75]	187.5 [7.38]
B	mm [in]	6.3 [0.248]	9.5 [0.374]	13.3 [0.523]	16.2 [0.63]	21.9 [0.86]	25.5 [1.003]	31.7 [1.24]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lb]	6.5 [14.3]	6.6 [14.5]	6.8 [15.0]	6.9 [15.2]	7.1 [15.6]	7.3 [16.1]	7.5 [16.5]	7.8 [17.2]	8.3 [18.3]

CL250 Cylindrical Shaft



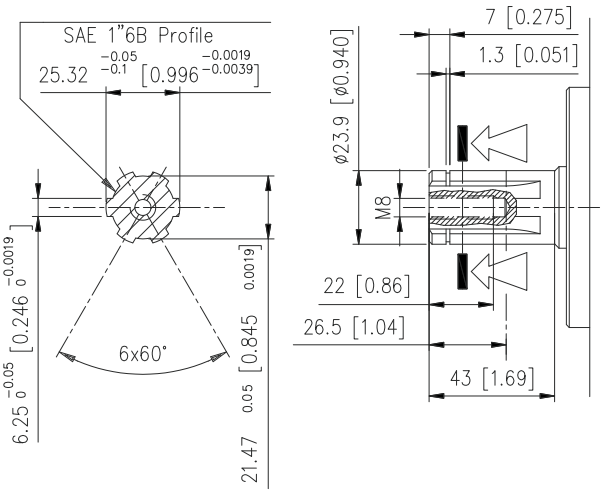
Max Torque Continuous 300 Nm [221.1 lbf·ft]

CL254 Cylindrical Shaft



Max Torque Continuous 300 Nm [221.1 lbf·ft]

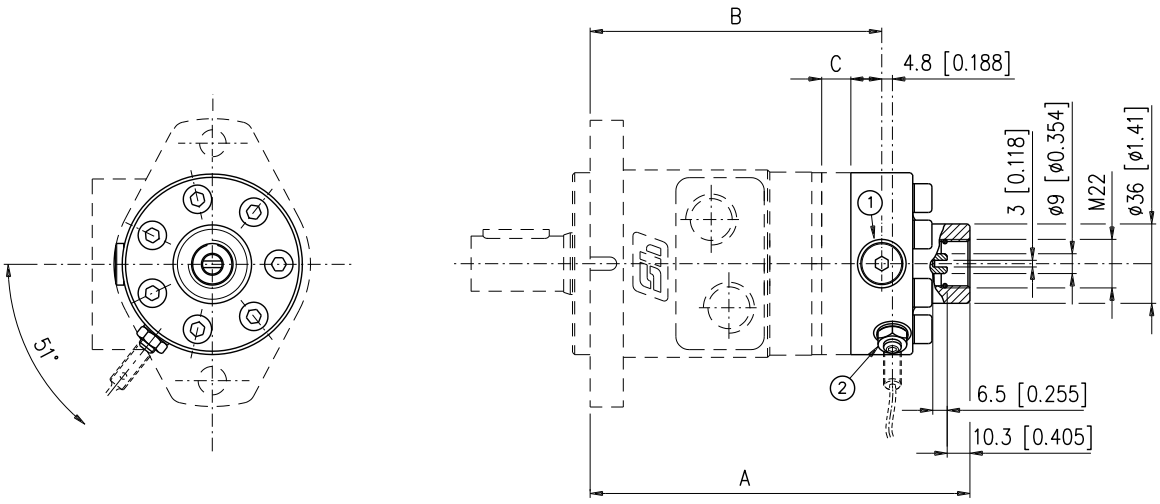
SD250 Splined Shaft



Max Torque Continuous 360 Nm [265.32 lbf·ft]

TC1 TAC/U tachometer

1) 1/4 G (BSPP) drain motor thread depth 12 mm [0.472 in]
2) Sensor connection M8x1

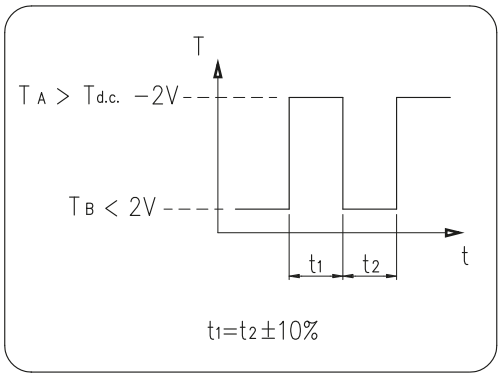


WARNING:
Tacho shaft has a 6 times higher revolution speed than the motor shaft and opposite direction of rotation.

NOTE:
Axial or radial load on tacho shaft must be avoided. Max torque on tacho 1 Nm [0.73 lbf·ft].
The electronic sensor is not supplied: if required, please state it clearly on order form.
Max pressure admissible on the shaft seal with closed drain port 25 bar [363 psi].

		BG S 050	BG S 080	BG S 100	BG S 130	BG S 160	BG S 200	BG S 250	BG S 315	BG S 400
A	mm [in]	163 [6.41]	166 [6.53]	170 [6.69]	174 [6.85]	179 [7.04]	182 [7.16]	189 [7.44]	195 [7.67]	208 [8.18]
B	mm [in]	123 [4.84]	126 [4.96]	130 [5.11]	134 [5.27]	139 [5.47]	142 [5.59]	149 [5.86]	155 [6.10]	168 [6.61]
C	mm [in]	6.3 [0.248]	9.5 [0.374]	13.3 [0.523]	16.2 [0.63]	21.9 [0.86]	25.5 [1.003]	31.7 [1.24]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lb]	6 [13.2]	6.1 [13.4]	6.3 [13.9]	6.4 [14.1]	6.6 [14.5]	6.8 [15.0]	7.0 [15.4]	7.3 [16.1]	7.8 [17.2]

Output signal electronic tacho



- Number of pulses per revolution = 90 Inductive principle
- Output current PNP
- Voltage 10-65 V d.c.
- Max load 300 mA
- Max frequency 10000 Hz
- Temperature range -25C +85C
- Enclosure IP 67

Available versions:
- Sensor with 2 metres three wires cable (cod.424.0050.0000)
- Sensor with binder plug connection (cod.424.0060.0000) + binder connecting
- Plug with 5 metres three wires cable (cod.424.0080.0000)


DANA
SAMHYDRAULIK™