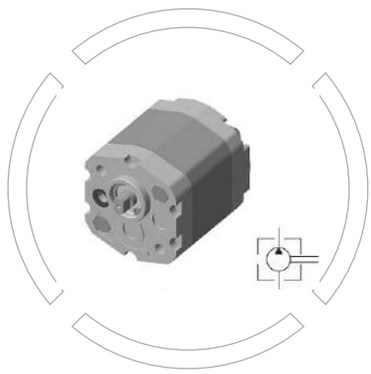
THM HYDRAULICS

CG Series

Gear Pump
Group 1
Displacement: 0.8~8.0 cc/rev
Maximum Pressure up to 270 Bar



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Ordering Code

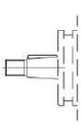
CG									*

Group
Group 1 = 1
Group 1 helical tooth = 1E

Front Cover
Square front cover with oil port (centering Ø32mm)  = Q0
Square front cover without oil port (centering Ø32mm)  = Q1
Square front cover without oil port (centering Ø25.4mm)  = B0

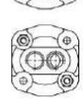
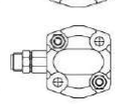
Rotation
Clockwise = D
Counter-Clockwise = S

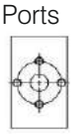
Displacement (cc/rev)
0.8, 1.1, 1.3, 1.6, 1.8, 2.1, 2.7, 3.2, 3.7, 4.2, 4.8, 5.8, 7.0, 8.0

Shaft Options
Taper Shaft 1:8  = T0
Tang Shaft  = G0
Tang Shaft  = G1

*Any other Special Requirements

Options:
No code = Range between -10°C and +80°C, inlet pressure up to max. 3 bar absolute.
V = Version suitable for fluid at high temperatures, range between -10°C and +120°C.
H = Version suitable for fluid at low temperatures, range between -40°C and +80°C.
N = Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

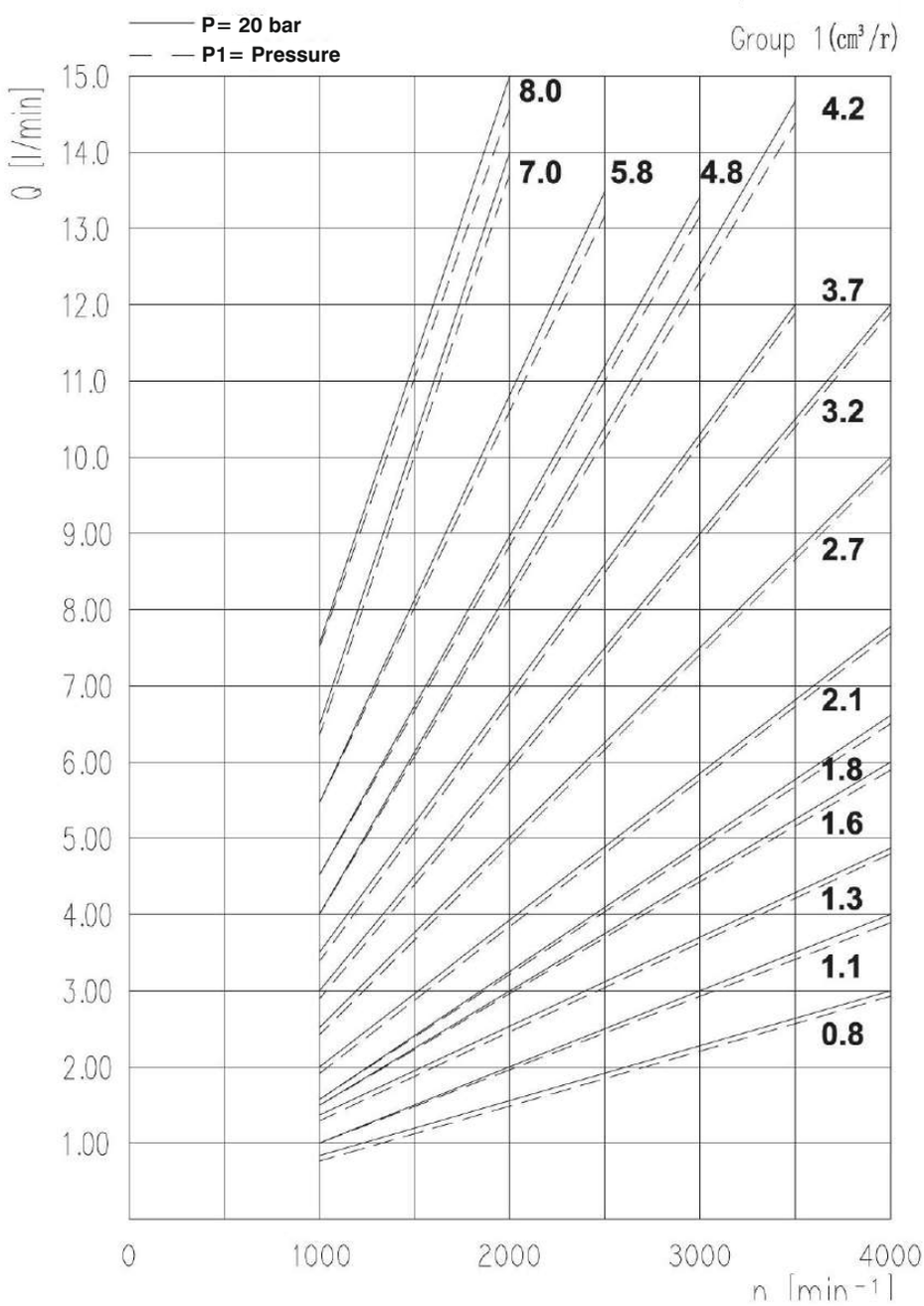
Special Structure
No code = Regular 
_J_ = Back cover with inlet 
_C_ = Back cover with outlet 
L_ = Back cover with inlet and outlet 
YF1 = Back cover with relief valve 

Ports
UNF U_ = thread 
PT R_ = thread 
NPT N_ = thread 
Body X = without ports 
E_ = Rectangular Flange 
F_ = Rectangular Flange 
Z_ = Metric thread 
L_ = Gas thread 

Parameter Table

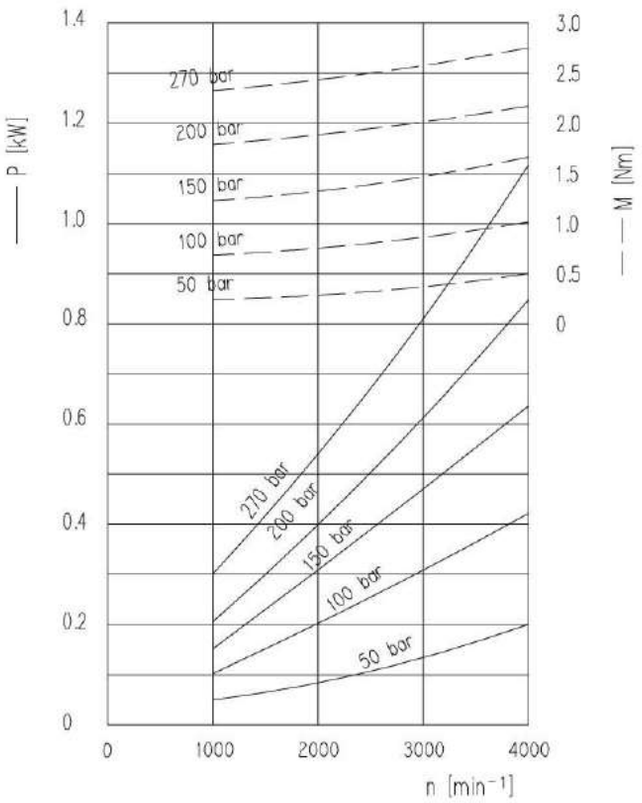
Displacement	V	cc/rev	0.8	1.1	1.3	1.6	1.8	2.1	2.7	3.2	3.7	4.2	4.8	5.8	7.0	8.0
Suction absolute pressure	Pe	bar	0.7...3													
Max. Cont. Pressure	P1		230							210			190		160	
Max. Int. Pressure	P2		250							230			210		180	
Max. Peak Pressure	P3		270							250			230		200	
Min. Speed	n min	r/min	1000						800				600			
Max. Speed	n max		6000							5000		4500	3500	3000	2500	2100
Volumetric Efficiency	nv	%	≥90		≥91			≥92					≥93			

Flow Performance Curve Table

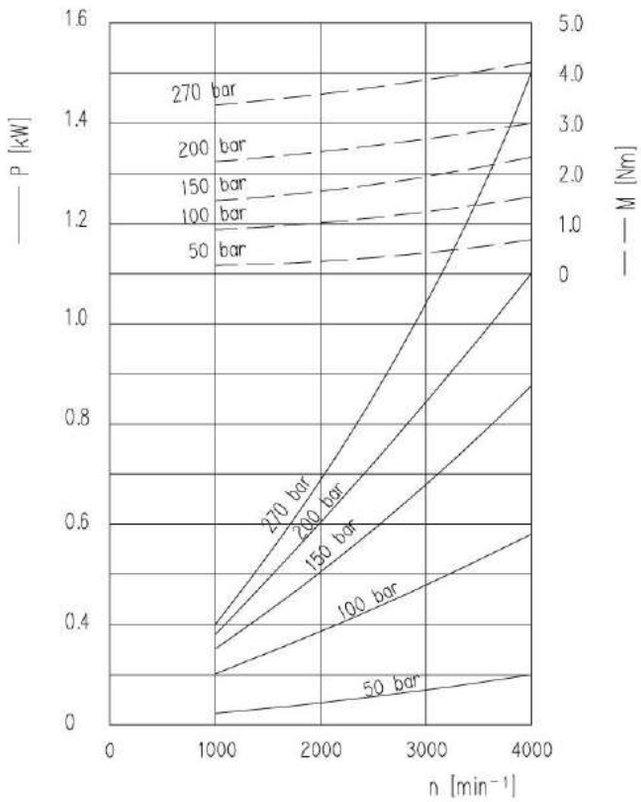


Power Performance Curve

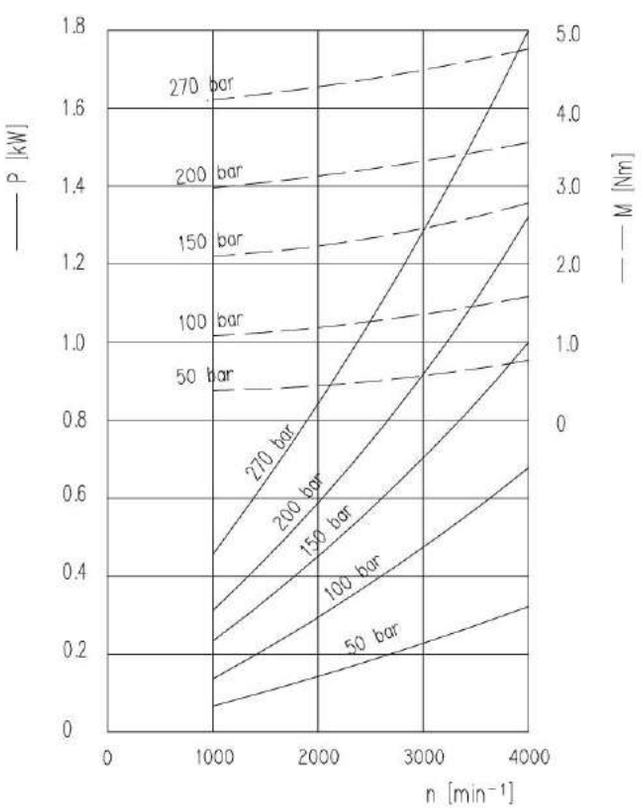
V=0.80cm³/r



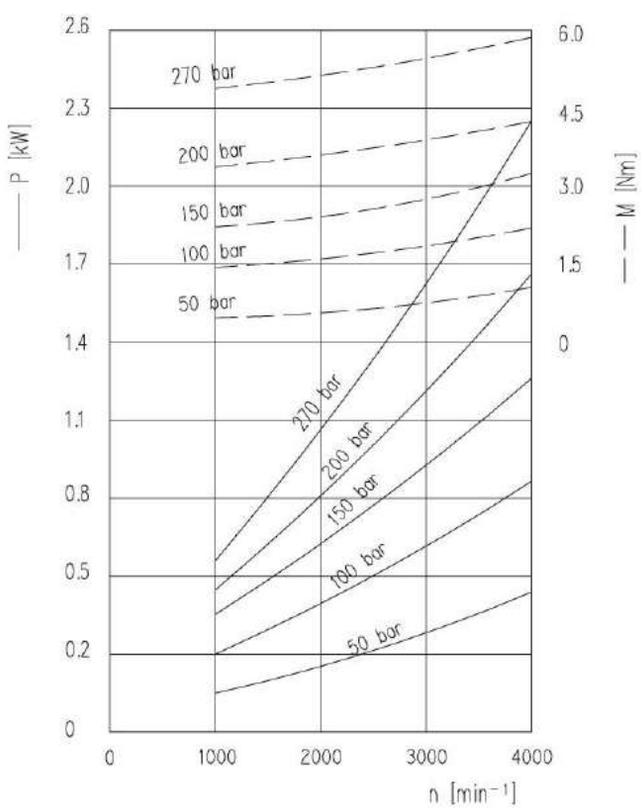
V=1.10cm³/r



V=1.30cm³/r

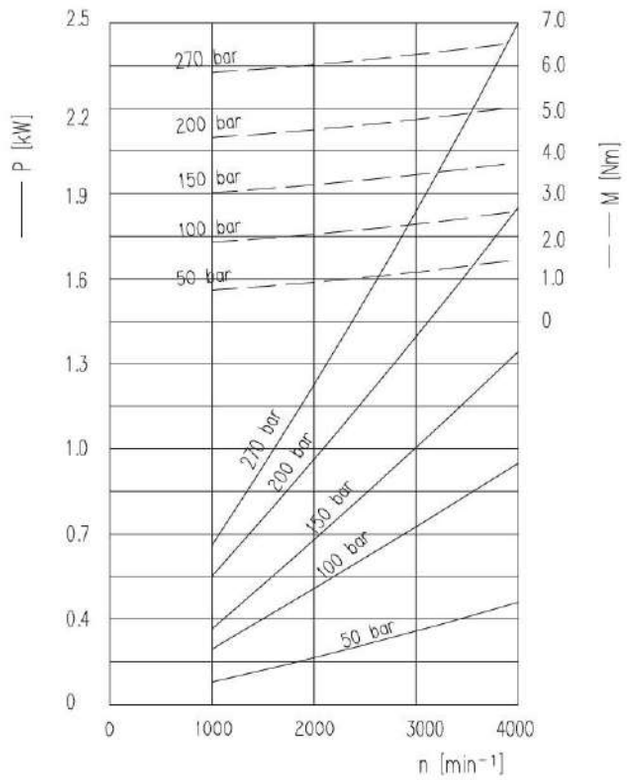


V=1.60cm³/r

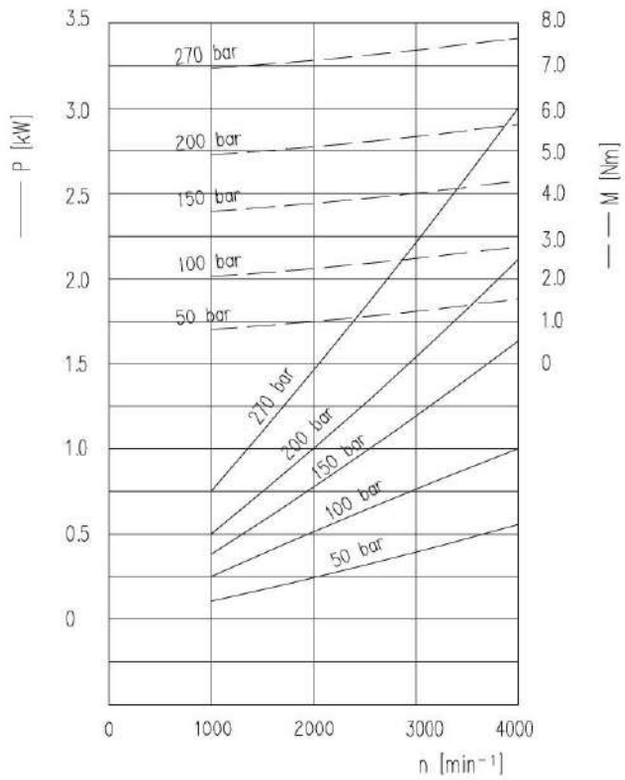


Power Performance Curve

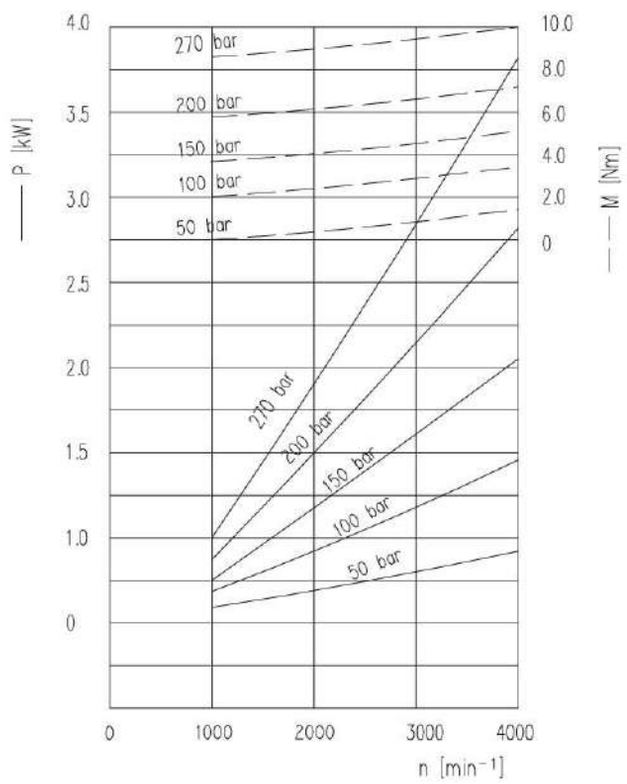
V=1.80cm³/r



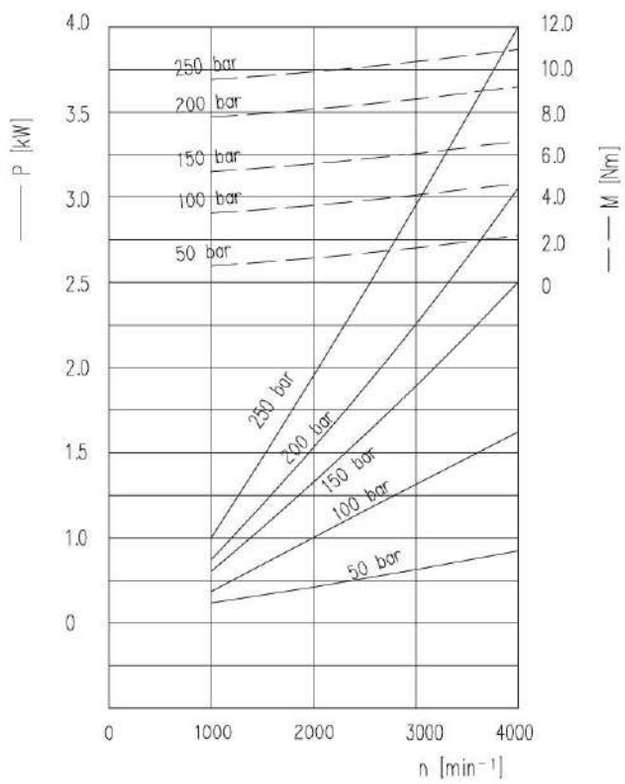
V=2.1cm³/r



V=2.70cm³/r

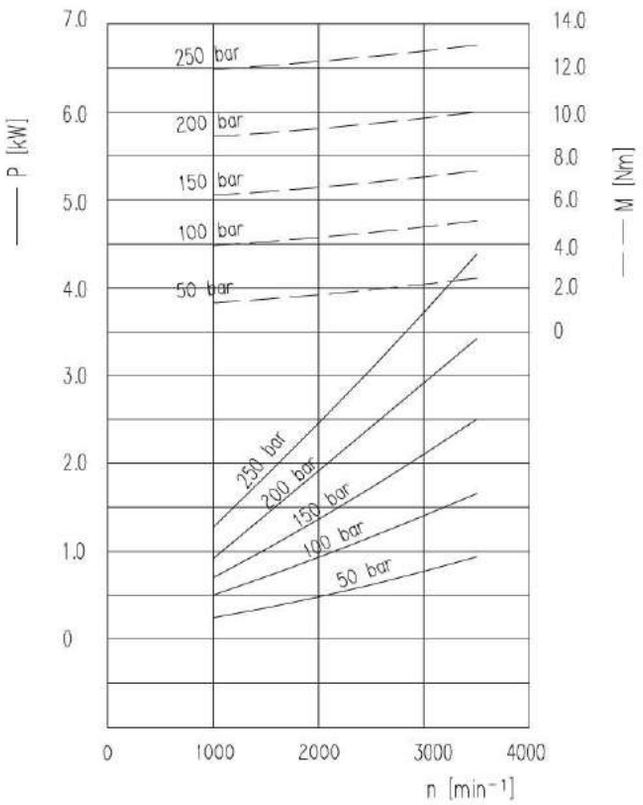


V=3.20cm³/r

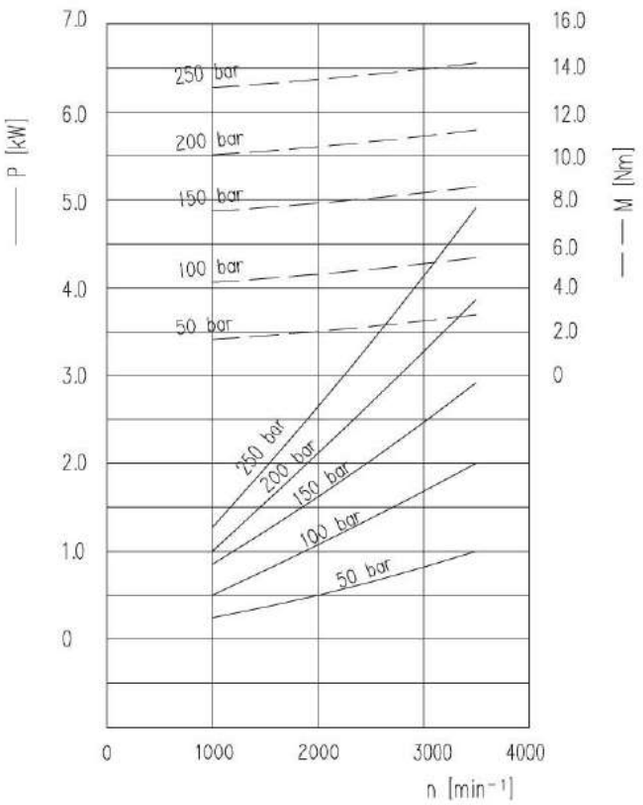


Power Performance Curve

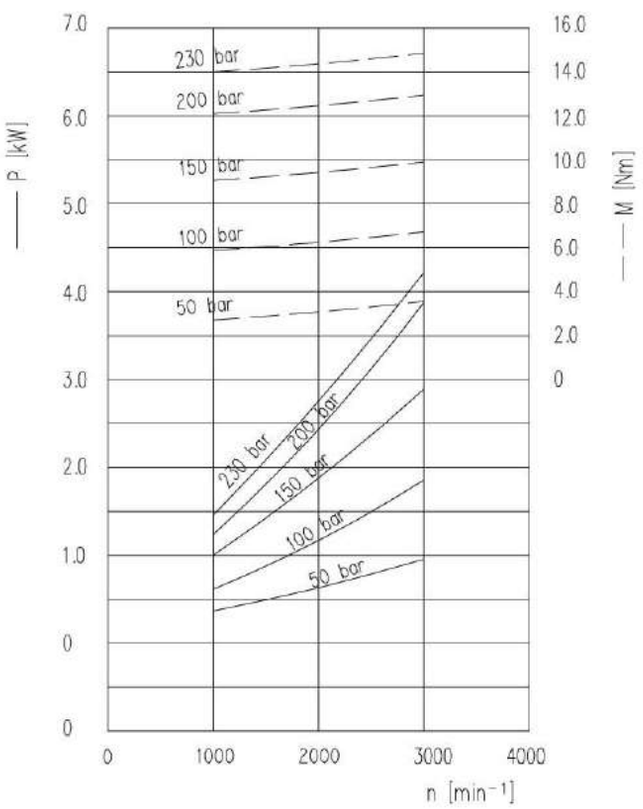
V=3.70cm³/r



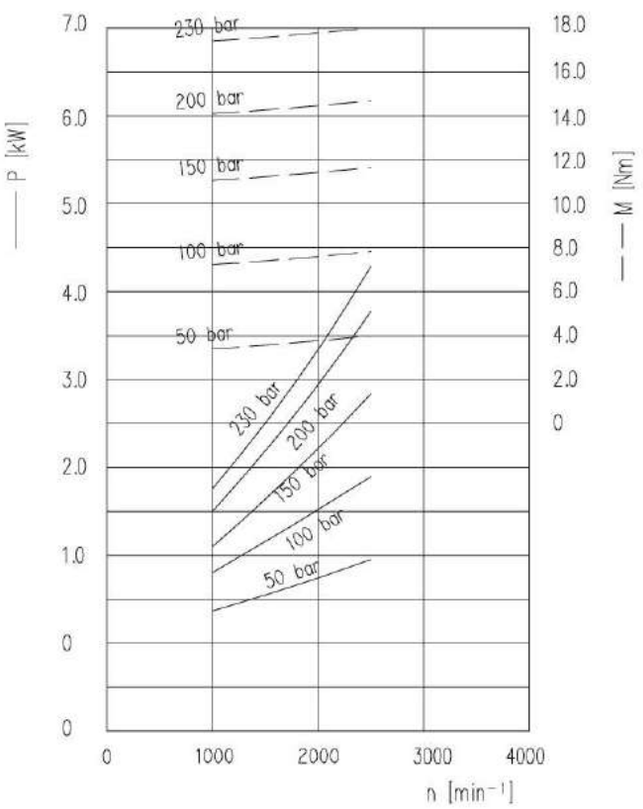
V=4.20cm³/r



V=4.8cm³/r

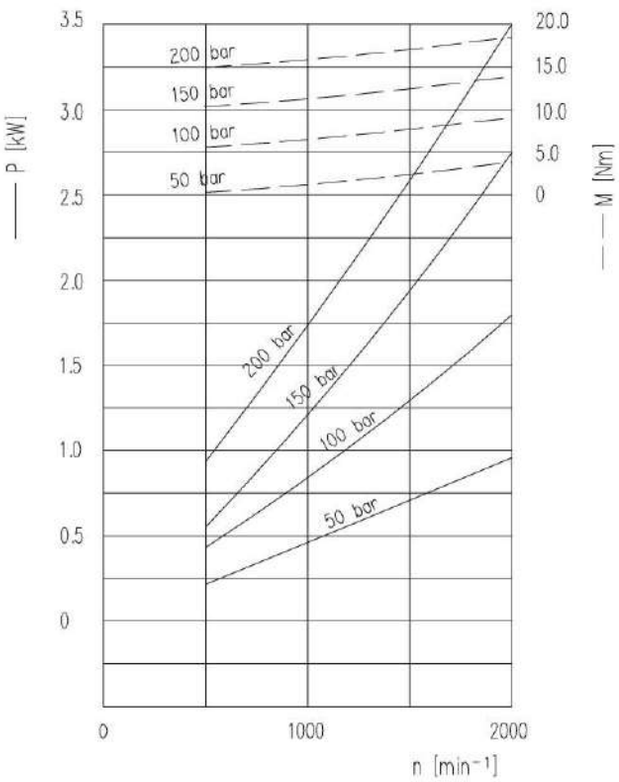


V=5.8cm³/r

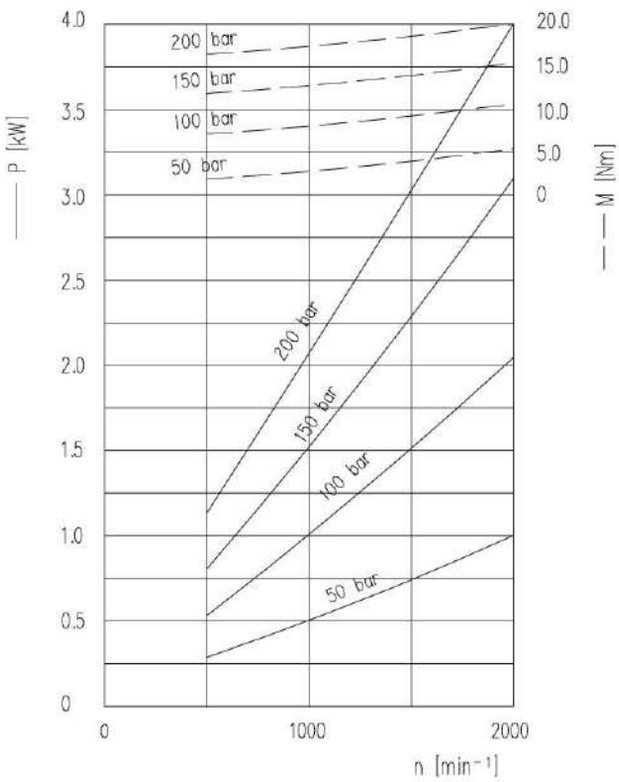


Power Performance Curve

V=7.0cm³/r



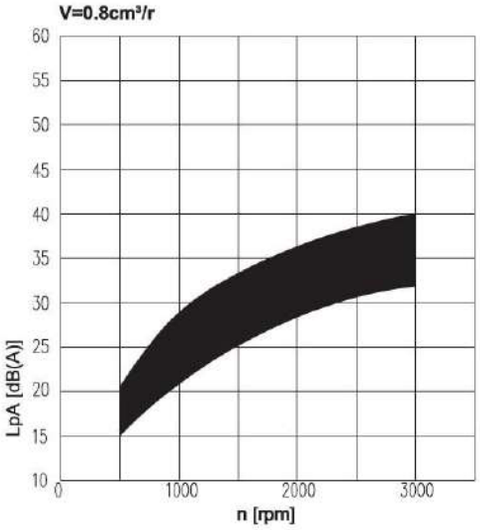
V=8.0cm³/r



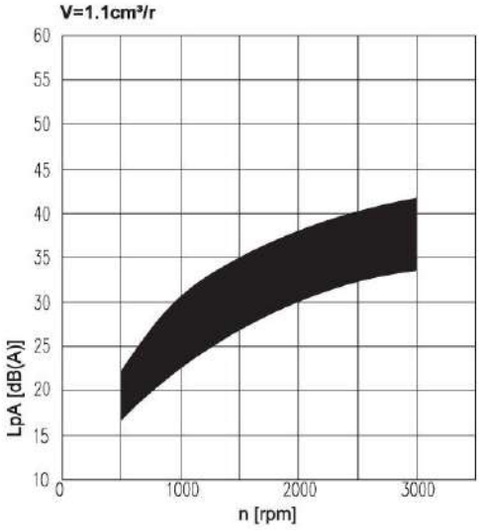
Noise Curve Table

The Noise level depends on the speed and pressure range is between 10 bar and pressure value P1.
Oil data: V= 32mm²/s, θ = 50°C
The sound pressure level obtained by calculating the noise value measured from the sound absorption measuring room meets the requirements of chapter 26 of DIN 45635.
Distance between measuring sensor and hydraulic pump: 1m.

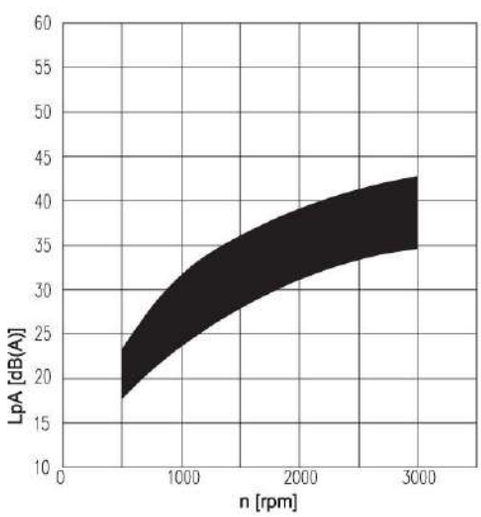
V=0.8cm³/r



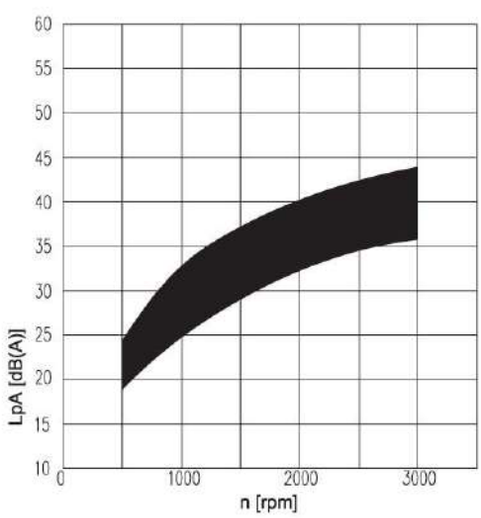
V=1.1cm³/r



V=1.3cm³/r

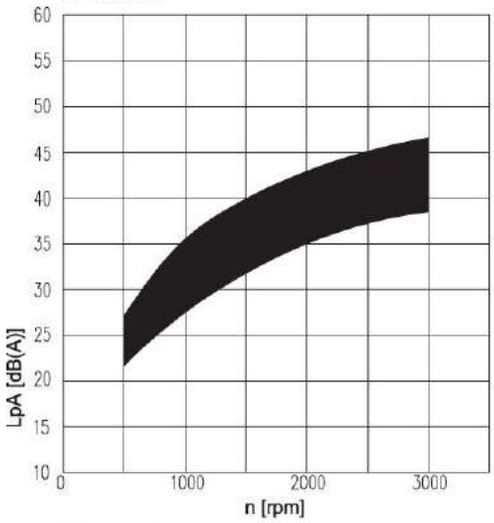


V=1.6cm³/r

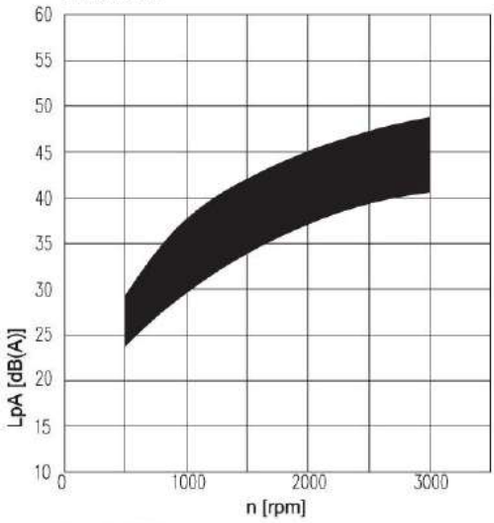


Noise Curve Table

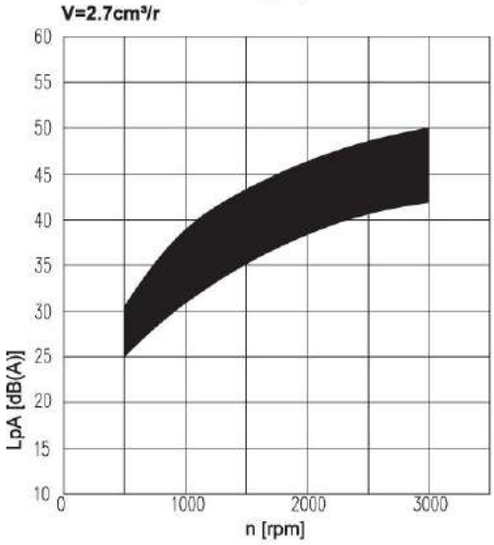
V=1.8cm³/r



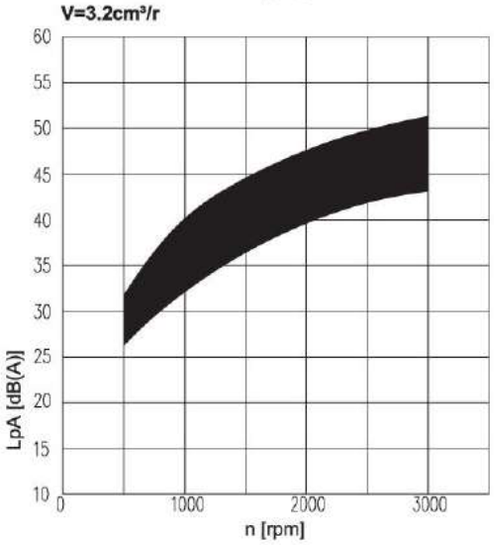
V=2.1cm³/r



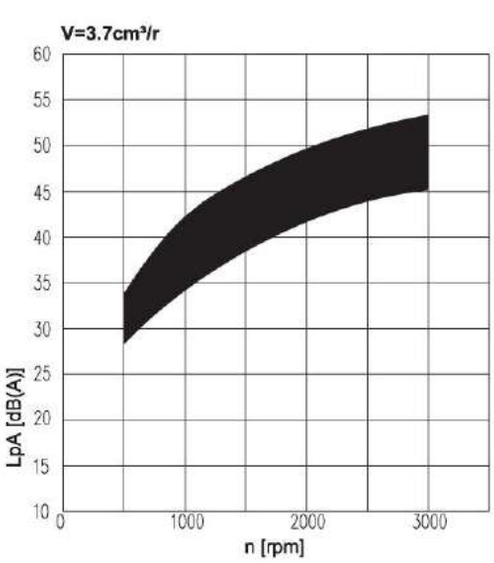
V=2.7cm³/r



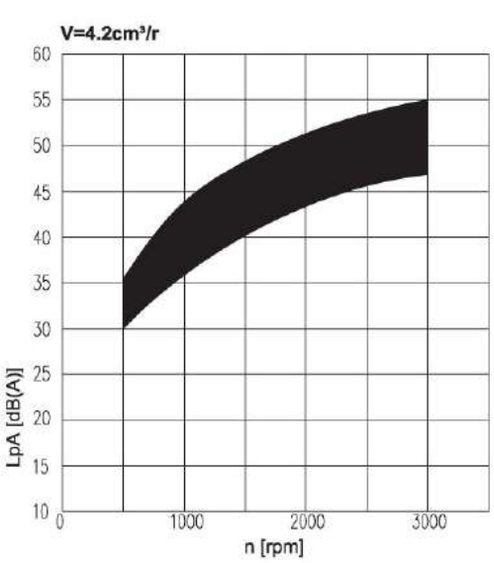
V=3.2cm³/r



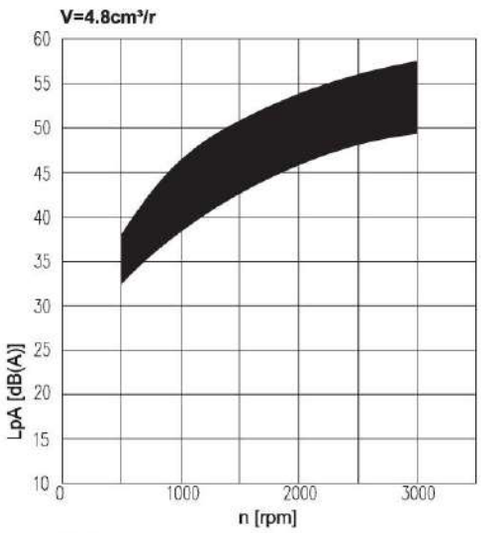
V=3.7cm³/r

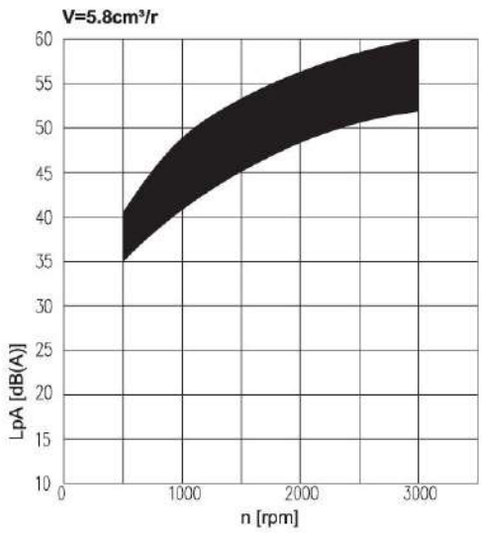


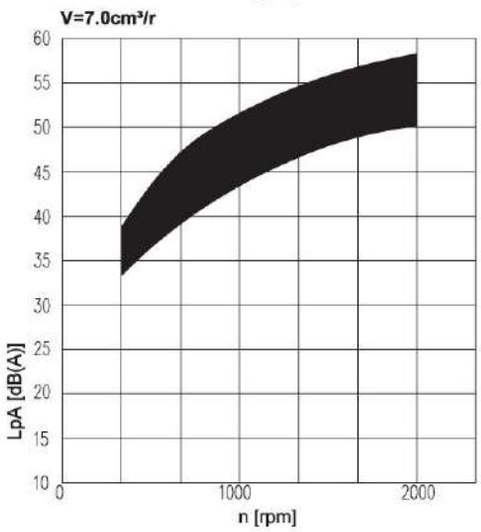
V=4.2cm³/r

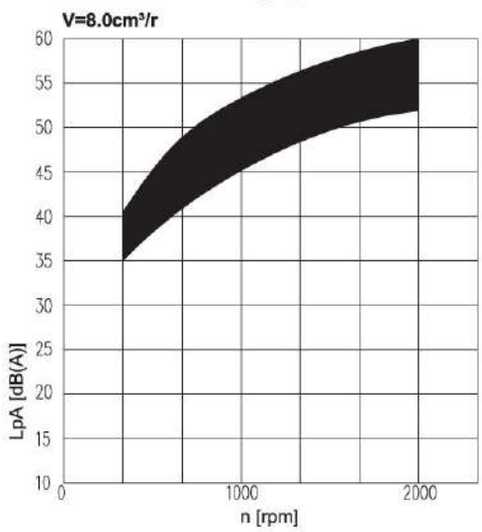


Noise Curve Table

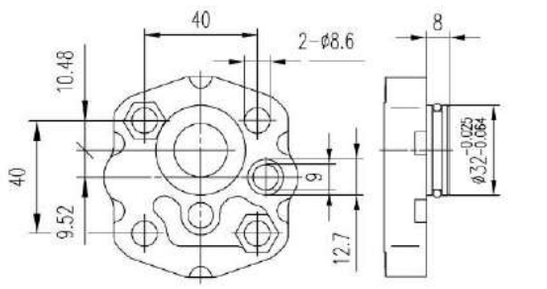




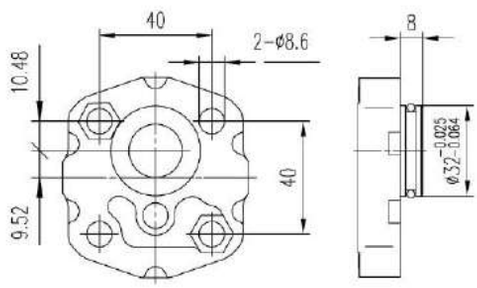




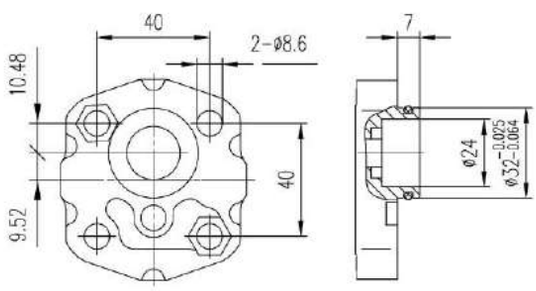
Front Cover



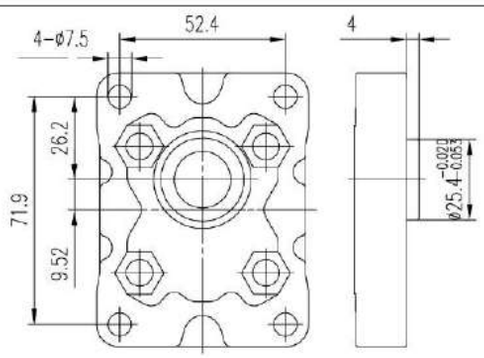
Q0



Q1

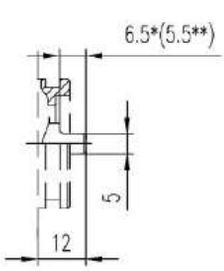


Q2



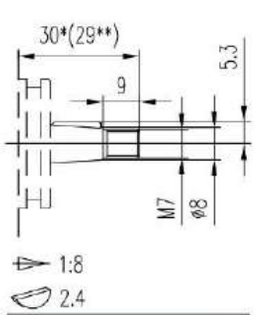
B0

Shaft Options



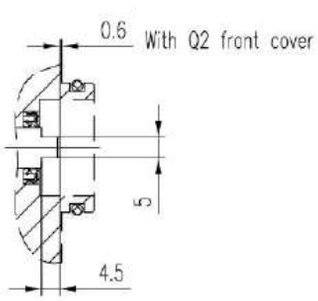
G0

Max. Torque: 20 Nm



T0

Max. Torque: 25 Nm

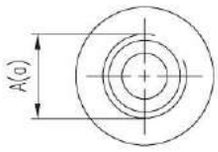


G1

Max. Torque: 20 Nm

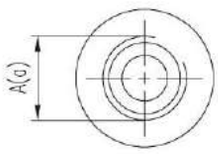
* Dimension with front cover Q_
** Dimension with front cover B_

Ports



L2/L3

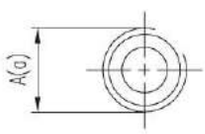
Ports Code	Displacement (cm^3/rev)	Inlet (A)	Outlet (a)
L2	0.8 ~ 8.0	G3/8	G1/4
L3	0.8 ~ 8.0	G3/8	G3/8



O-ring

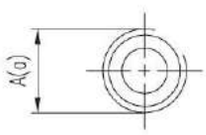
U0

Ports Code	Displacement (cm^3/rev)	Inlet (A)	Outlet (a)
U0	0.8 ~ 8.0	3/4-16UNF	9/16-18UNF



Z0

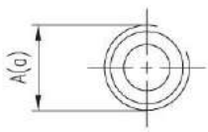
Ports Code	Displacement (cm^3/rev)	Inlet (A)	Outlet (a)
Z0	0.8 ~ 8.0	M18x1.5	M14x1.5



N1

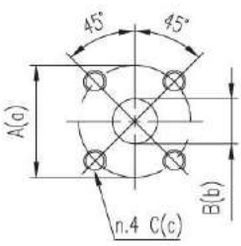
Ports Code	Displacement (cm^3/rev)	Inlet (A)	Outlet (a)
N1	0.8 ~ 8.0	3/8 NPT	3/8 NPT

Ports



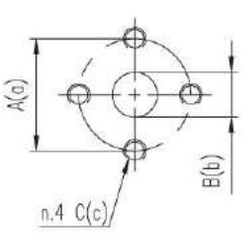
R0/R1

Ports Code	Displacement (cm^3/rev)	Inlet (A)	Outlet (a)
R0	0.8 ~ 8.0	PT1/2	PT1/2
R1	0.8 ~ 8.0	PT3/8	PT3/8



F0

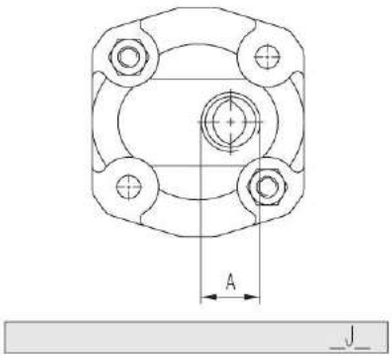
Ports Code	Displacement (cm^3/rev)	Inlet			Outlet		
		A	B	C	a	b	c
F0	0.8 ~ 8.0	30	12	M6	30	12	M6



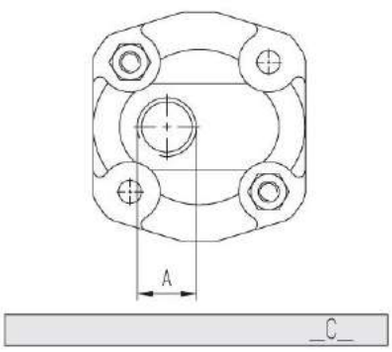
E0

Ports Code	Displacement (cm^3/rev)	Inlet			Outlet		
		A	B	C	a	b	c
E0	0.8 ~ 8.0	30	12	M6	30	12	M6

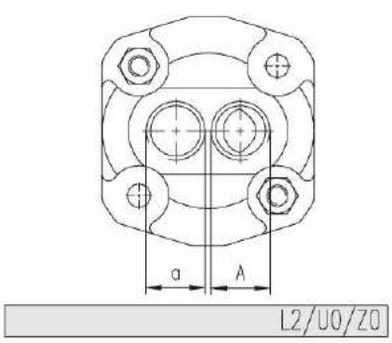
Special Structure



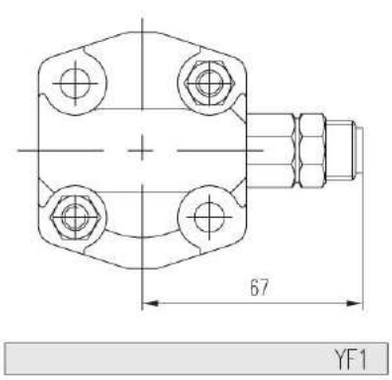
Code	Inlet A
LJ1	G3/8
MJ1	M18x1.5
UJ1	9/16-18UNF



Code	Outlet A
LC0	G1/4
MC0	M14x1.5
UC1	9/16-18UNF



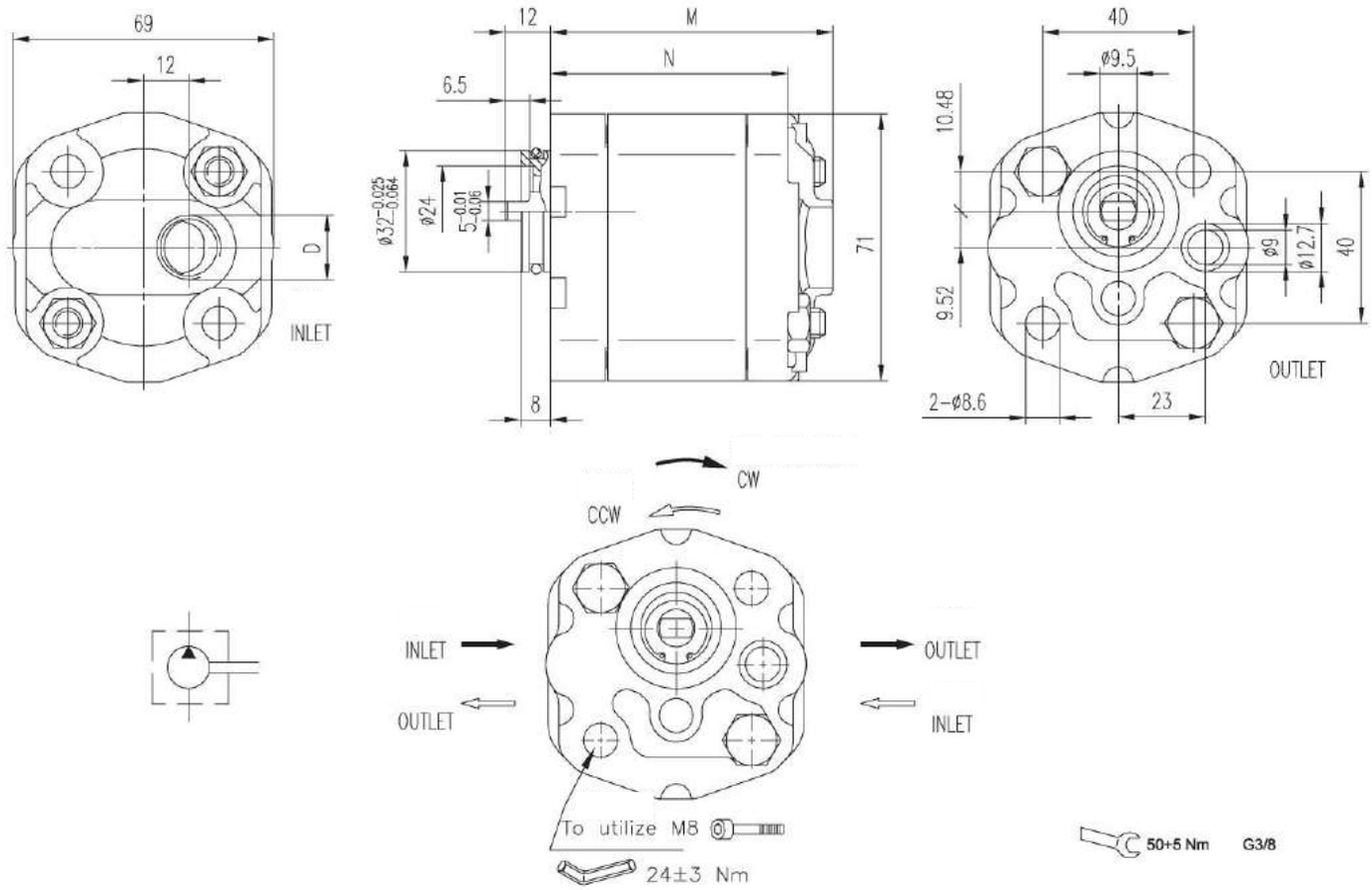
Code	Inlet A	Outlet a
L2	G3/8	G1/4
U0	3/4-16UNF	9/16-18UNF
Z0	M18x1.5	M14x1.5



Code	Pressure Bar
YF1	25...180

Unit Dimensions

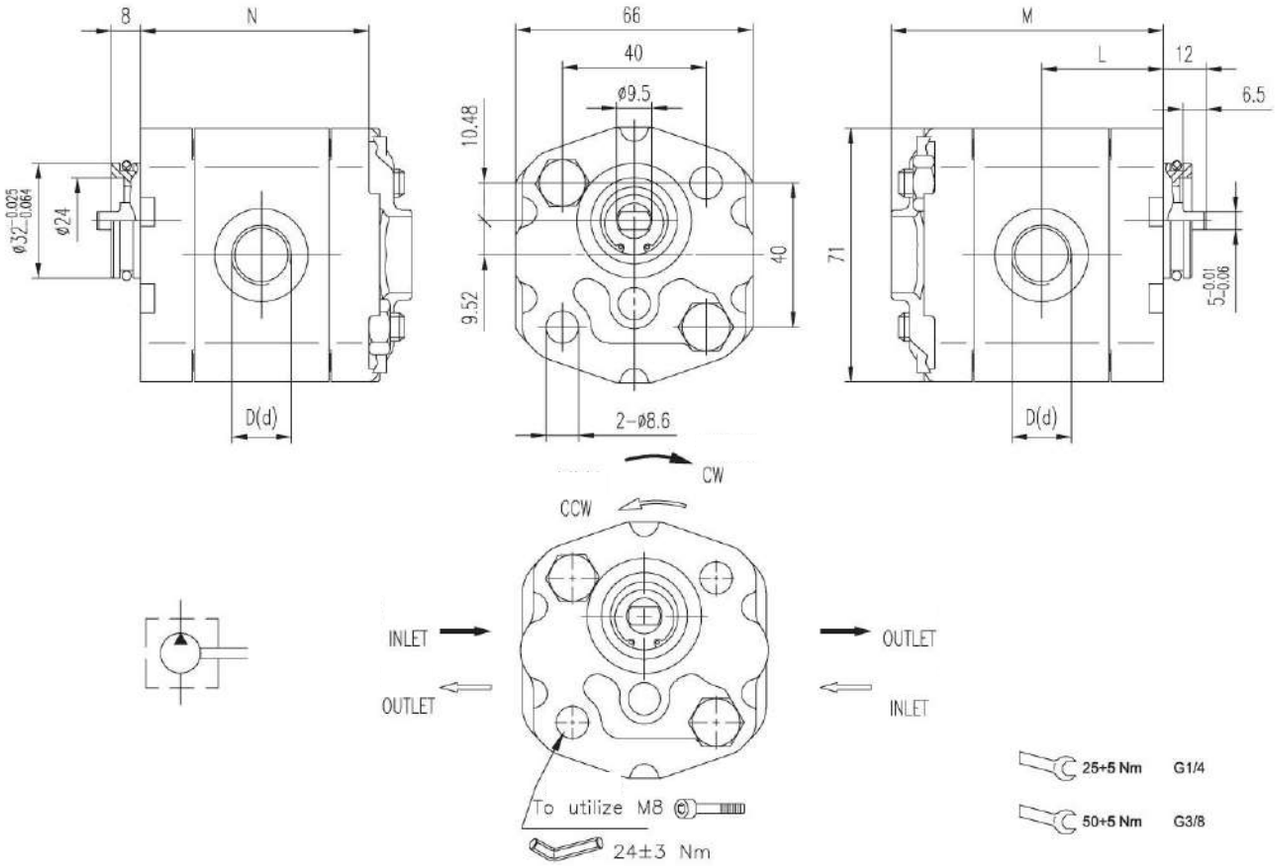
CG1-Q0-D-0.8-G0-X-LJ1



Displace-ment (cm^3/rev)	Max. Pressure			Max. Speed r/min	Min. Speed (r/min)	Weight (Kg)	Dimensions		Oil port code	Inlet (D)
	P1 (Bar)	P2 (Bar)	P3 (Bar)				M (mm)	N (mm)		
0.8	230	250	270	6000	1000	0.76	73.5	61.5	LJ1	G3/8
1.1	230	250	270	6000	1000	0.77	74	62	LJ1	G3/8
1.3	230	250	270	6000	1000	0.78	75	63	LJ1	G3/8
1.6	230	250	270	6000	1000	0.79	76	64	LJ1	G3/8
1.8	230	250	270	6000	1000	0.81	77	65	LJ1	G3/8
2.1	230	250	270	6000	1000	0.82	78	66	LJ1	G3/8
2.7	230	250	270	6000	800	0.85	80	68	LJ1	G3/8
3.2	210	230	250	5000	800	0.87	82	70	LJ1	G3/8
3.7	210	230	250	4500	800	0.90	84	72	LJ1	G3/8
4.2	210	230	250	4000	800	0.93	86	74	LJ1	G3/8
4.8	190	210	230	3500	600	0.95	88	76	LJ1	G3/8
5.8	190	210	230	3000	600	1.02	92	80	LJ1	G3/8
7.0	160	180	200	2500	600	1.07	96	84	LJ1	G3/8
8.0	160	180	200	2100	600	1.13	100	88	LJ1	G3/8

Unit Dimensions

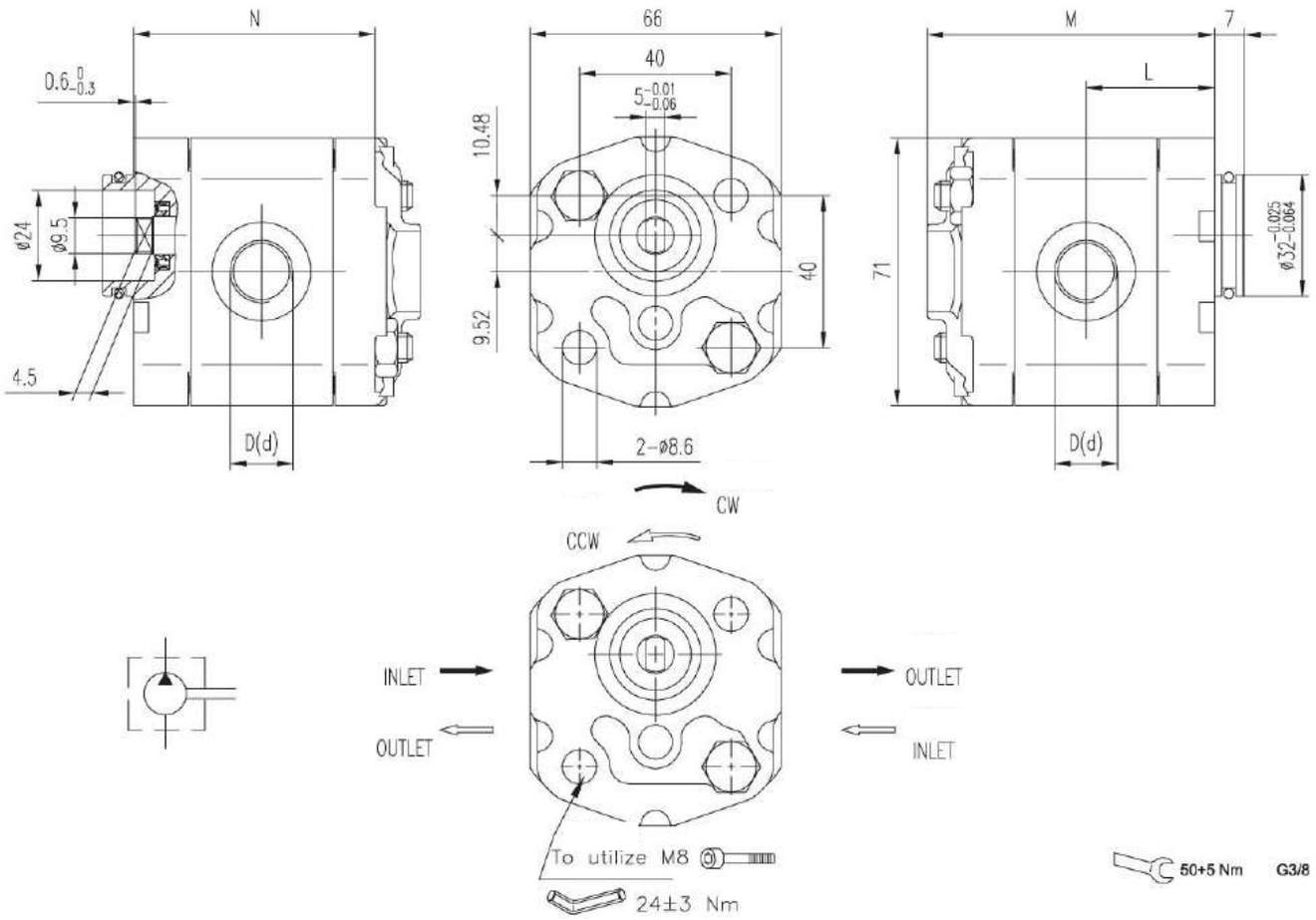
CG1-Q1-D-0.8-G0-L2



Displacement (cm³/rev)	Max. Pressure			Max. Speed r/min	Min. Speed (r/min)	Weight (Kg)	Dimensions			Oil port code	Inlet (D)	Outlet (d)
	P1 (Bar)	P2 (Bar)	P3 (Bar)				M (mm)	N (mm)	L (mm)			
0.8	230	250	270	6000	1000	0.76	73.5	61.5	32.8	L2	G3/8	G1/4
1.1	230	250	270	6000	1000	0.77	74	62	33	L2	G3/8	G1/4
1.3	230	250	270	6000	1000	0.78	75	63	33.5	L2	G3/8	G1/4
1.6	230	250	270	6000	1000	0.79	76	64	34	L2	G3/8	G1/4
1.8	230	250	270	6000	1000	0.81	77	65	34.5	L2	G3/8	G1/4
2.1	230	250	270	6000	1000	0.82	78	66	35	L2	G3/8	G1/4
2.7	230	250	270	6000	800	0.85	80	68	36	L2	G3/8	G1/4
3.2	210	230	250	5000	800	0.87	82	70	37	L2	G3/8	G1/4
3.7	210	230	250	4500	800	0.90	84	72	38	L2	G3/8	G1/4
4.2	210	230	250	4000	800	0.93	86	74	39	L2	G3/8	G1/4
4.8	190	210	230	3500	600	0.95	88	76	40	L2	G3/8	G1/4
5.8	190	210	230	3000	600	1.02	92	80	42	L2	G3/8	G1/4
7.0	160	180	200	2500	600	1.07	96	84	44	L2	G3/8	G1/4
8.0	160	180	200	2100	600	1.13	100	88	46	L2	G3/8	G1/4

Unit Dimensions

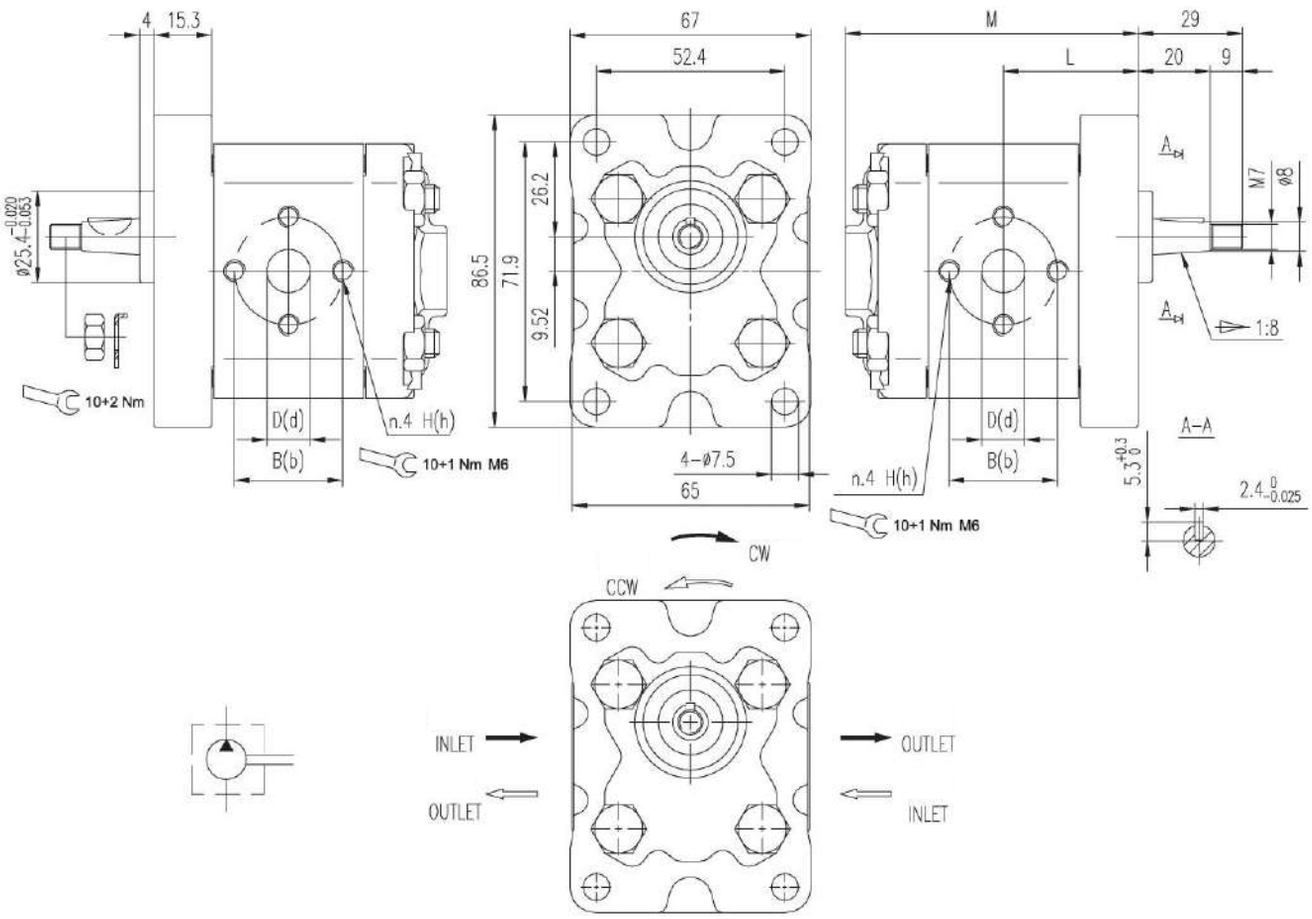
CG1-Q2-D-0.8-G1-L3



Displace-ment (cm³/rev)	Max. Pressure			Max. Speed r/min	Min. Speed (r/min)	Weight (Kg)	Dimensions			Oil port code	Inlet (D)	Outlet (d)
	P1 (Bar)	P2 (Bar)	P3 (Bar)				M (mm)	N (mm)	L (mm)			
0.8	230	250	270	6000	1000	0.76	73.5	61.5	32.8	L3	G3/8	G3/8
1.1	230	250	270	6000	1000	0.77	74	62	33	L3	G3/8	G3/8
1.3	230	250	270	6000	1000	0.78	75	63	33.5	L3	G3/8	G3/8
1.6	230	250	270	6000	1000	0.79	76	64	34	L3	G3/8	G3/8
1.8	230	250	270	6000	1000	0.81	77	65	34.5	L3	G3/8	G3/8
2.1	230	250	270	6000	1000	0.82	78	66	35	L3	G3/8	G3/8
2.7	230	250	270	6000	800	0.85	80	68	36	L3	G3/8	G3/8
3.2	210	230	250	5000	800	0.87	82	70	37	L3	G3/8	G3/8
3.7	210	230	250	4500	800	0.90	84	72	38	L3	G3/8	G3/8
4.2	210	230	250	4000	800	0.93	86	74	39	L3	G3/8	G3/8
4.8	190	210	230	3500	600	0.95	88	76	40	L3	G3/8	G3/8
5.8	190	210	230	3000	600	1.02	92	80	42	L3	G3/8	G3/8
7.0	160	180	200	2500	600	1.07	96	84	44	L3	G3/8	G3/8
8.0	160	180	200	2100	600	1.13	100	88	46	L3	G3/8	G3/8

Unit Dimensions

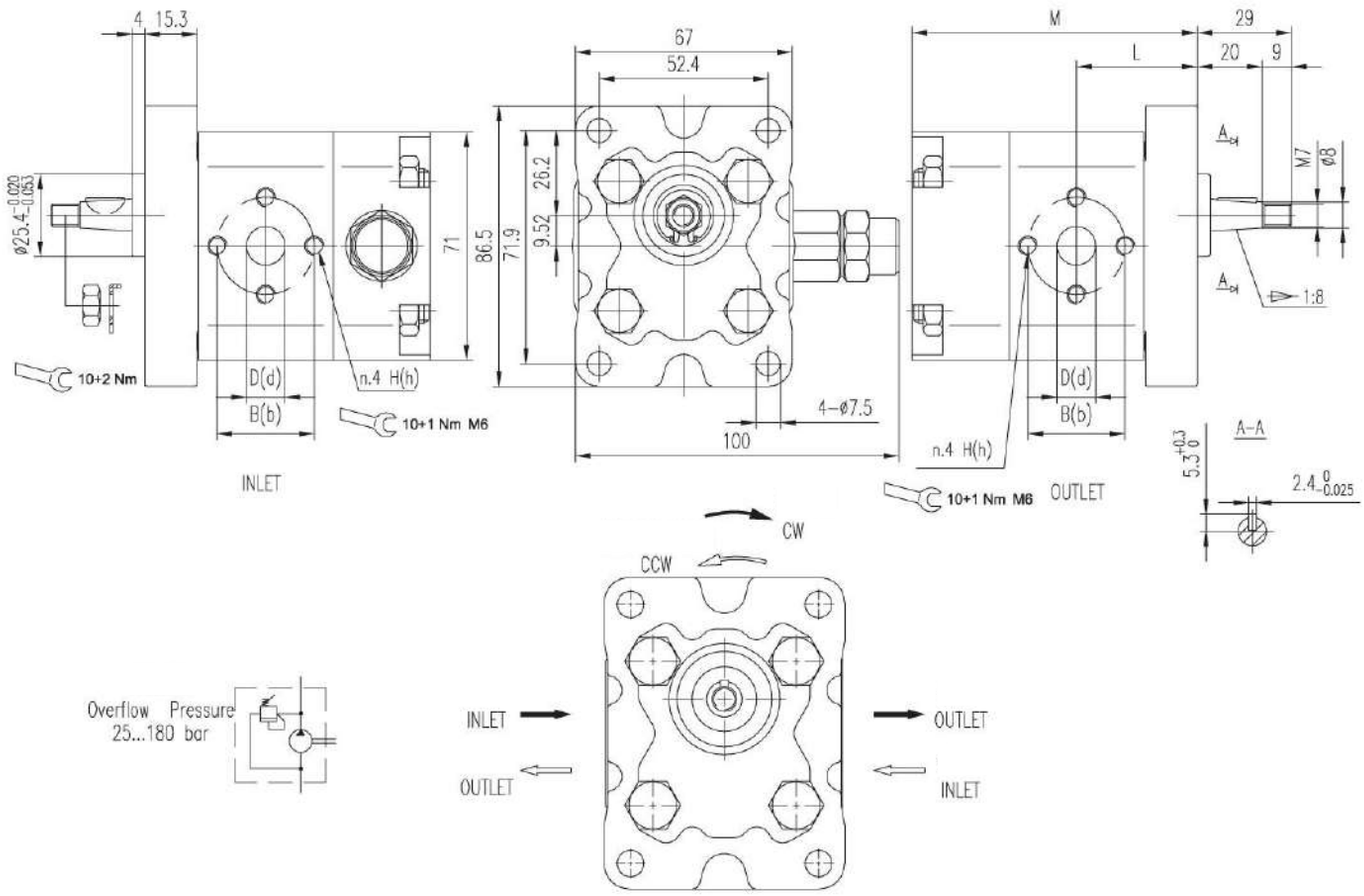
CG1-B1-D-0.8-T0-E0



Displacement (cm³/rev)	Max. Pressure			Max. Speed r/min	Min. Speed (r/min)	Weight (Kg)	Dimensions		Oil port code	Inlet			Outlet		
	P1 (Bar)	P2 (Bar)	P3 (Bar)				M (mm)	L (mm)		B mm	D mm	H mm	b mm	d mm	h mm
0.8	230	250	270	6000	1000	0.86	74.5	33.8	E0	30	12	M6	30	12	M6
1.1	230	250	270	6000	1000	0.88	75	34	E0	30	12	M6	30	12	M6
1.3	230	250	270	6000	1000	0.90	76	34.5	E0	30	12	M6	30	12	M6
1.6	230	250	270	6000	1000	0.92	77	35	E0	30	12	M6	30	12	M6
1.8	230	250	270	6000	1000	0.94	78	35.5	E0	30	12	M6	30	12	M6
2.1	230	250	270	6000	1000	0.96	79	36	E0	30	12	M6	30	12	M6
2.7	230	250	270	6000	800	0.988	81	37	E0	30	12	M6	30	12	M6
3.2	210	230	250	5000	800	1.016	83	38	E0	30	12	M6	30	12	M6
3.7	210	230	250	4500	800	1.044	85	39	E0	30	12	M6	30	12	M6
4.2	210	230	250	4000	800	1.072	87	40	E0	30	12	M6	30	12	M6
4.8	190	210	230	3500	600	1.1	89	41	E0	30	12	M6	30	12	M6
5.8	190	210	230	3000	600	1.156	93	43	E0	30	12	M6	30	12	M6
7.0	160	180	200	2500	600	1.212	97	45	E0	30	12	M6	30	12	M6
8.0	160	180	200	2100	600	1.268	101	47	E0	30	12	M6	30	12	M6

Unit Dimensions

CG1-B1-S-0.8-T0-E0-YF1-P180



Displacement (cm³/rev)	Max. Pressure			Max. Speed r/min	Min. Speed (r/min)	Weight (Kg)	Dimensions		Oil port code	Inlet			Outlet		
	P1 (Bar)	P2 (Bar)	P3 (Bar)				M (mm)	L (mm)		B mm	D mm	H mm	b mm	d mm	h mm
0.8	230	250	270	6000	1000	0.86	83.5	33.8	E0	30	12	M6	30	12	M6
1.1	230	250	270	6000	1000	0.88	84	34	E0	30	12	M6	30	12	M6
1.3	230	250	270	6000	1000	0.90	85	34.5	E0	30	12	M6	30	12	M6
1.6	230	250	270	6000	1000	0.92	86	35	E0	30	12	M6	30	12	M6
1.8	230	250	270	6000	1000	0.94	87	35.5	E0	30	12	M6	30	12	M6
2.1	230	250	270	6000	1000	0.96	88	36	E0	30	12	M6	30	12	M6
2.7	230	250	270	6000	800	0.988	90	37	E0	30	12	M6	30	12	M6
3.2	210	230	250	5000	800	1.016	92	38	E0	30	12	M6	30	12	M6
3.7	210	230	250	4500	800	1.044	94	39	E0	30	12	M6	30	12	M6
4.2	210	230	250	4000	800	1.072	96	40	E0	30	12	M6	30	12	M6
4.8	190	210	230	3500	600	1.1	98	41	E0	30	12	M6	30	12	M6
5.8	190	210	230	3000	600	1.156	102	43	E0	30	12	M6	30	12	M6
7.0	160	180	200	2500	600	1.212	106	45	E0	30	12	M6	30	12	M6
8.0	160	180	200	2100	600	1.268	110	47	E0	30	12	M6	30	12	M6

The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.

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