

PG		502										
Gear Design	Type		Unit	Displacement	Rotation	Shaft	Flange	Shaft Seal	Side Suction Port	Side Pressure Port	Rear Suction Port ¹⁾	Rear Pressure Port ¹⁾

Code	Type
P	Pump

Code	Unit
A	Single unit
B	Multiple unit

Displacement	
Code	ccm
0008	0.8
0012	1.2
0016	1.6
0021	2.1
0025	2.5
0033	3.3
0036	3.6
0043	4.3
0048	4.8
0058	5.8
0062	6.2
0079	7.9

Code	Rotation
C	Clockwise
A	Counter clockwise

Code	Shaft
H1	Ø10, 3.0 Key, no thread, 36L, parallel
P2	Ø9.35, 8.8L, 2.4 Key, M6, taper 1:8
V1	5x6.5 long shaft w/o coupling tang drive

Not all variances of ordering codes can be offered. Please check available part numbers first. For not yet implemented part numbers or special requests please contact Parker Hannifin.

¹⁾ Only coded for the last section.

Section Con-
nection

Code	Section Connection
S	Separate inlets
C	Common inlets

Code	Port Options
B1	No ports
D2 ²⁾	9/16 - 18 UNF thread
D3 ²⁾ *	3/4 - 16 UNF thread
E1	1/4 - 19 BSP thread
E2	3/8 - 19 BSP thread
E3*	1/2 - 14 BSP thread
G1 ²⁾	M14x1.5 thread
G3 ²⁾ *	M18x1.5 thread
J1*	8 mm - Ø26 mm - M5 square flange
J2*	10 mm - Ø26 mm - M5 square flange
J3*	8 mm - Ø30 mm - M6 square flange
J4*	12 mm - Ø30 mm - M6 square flange

2) Non standard, on request only

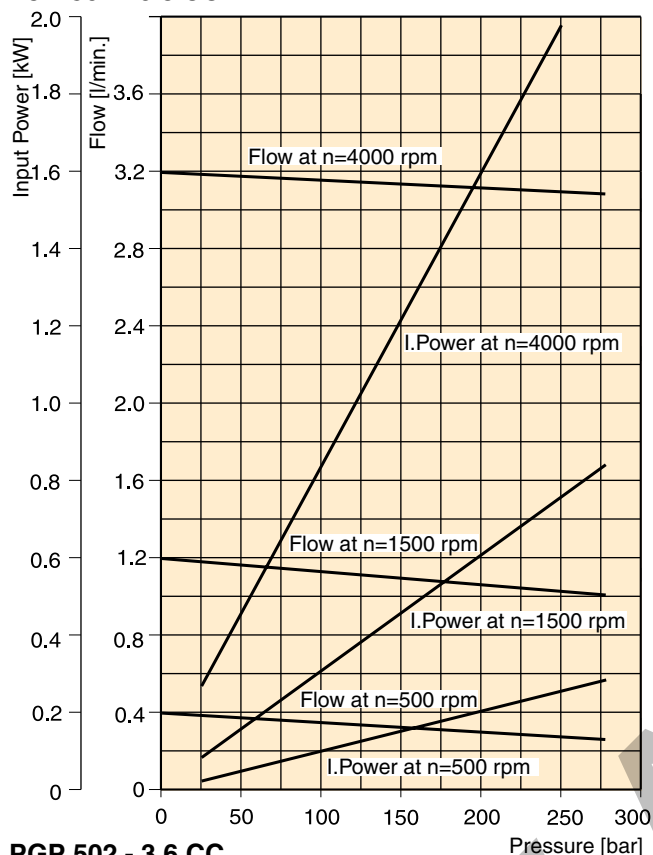
*) Not usable for rear ports

Code	Shaft Seal
X	No seal
N	NBR
V	FPM, FKM

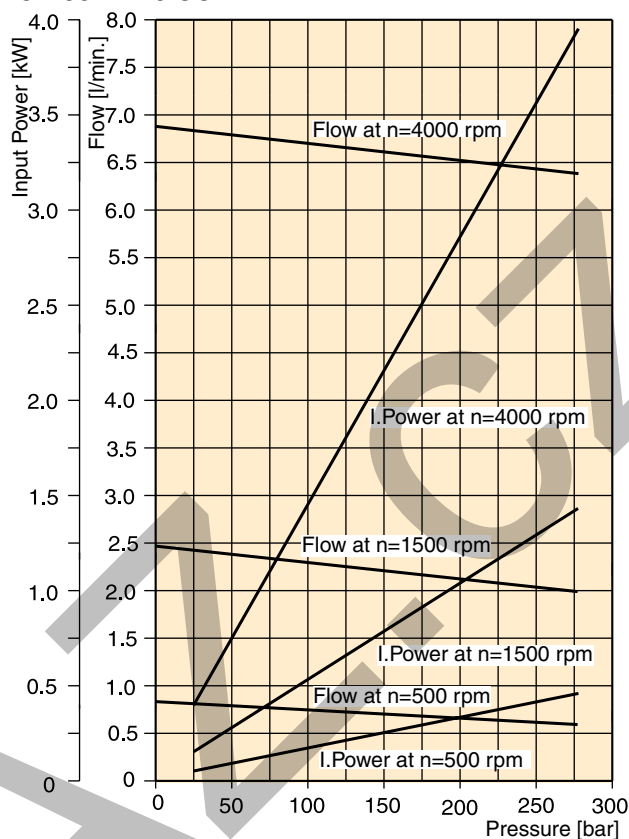
Code	Flange
D1	52.2x72.0 - Ø25.4 rectangular
H1	82.5 - Ø50.8 SAE "A-A" 2 bolt flange
P1	40.0x40.0 - Ø32.0 w/ seal ported, thru bolt flange

3) For further "B" triple unit repeat displacement,
shaft seal between sections,
side suction port,
side pressure port,
rear suction port,
rear pressure port.

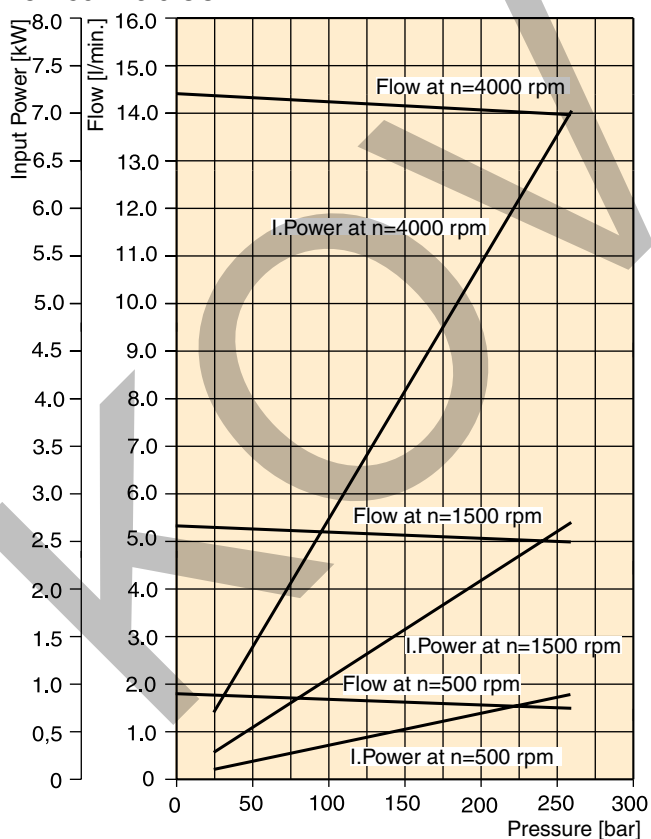
PGP 502 - 0.8 CC



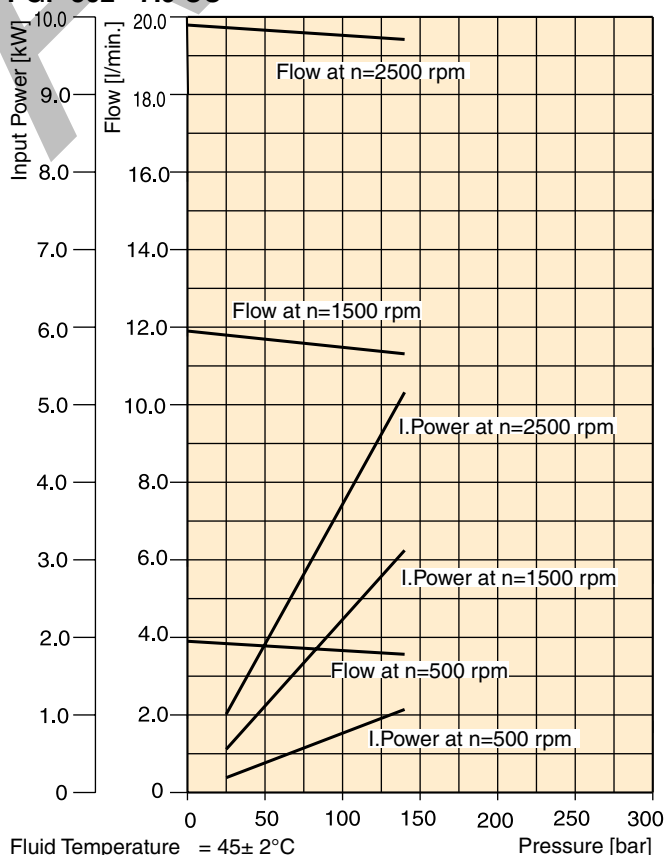
PGP 502 - 1.6 CC



PGP 502 - 3.6 CC



PGP 502 - 7.9 CC



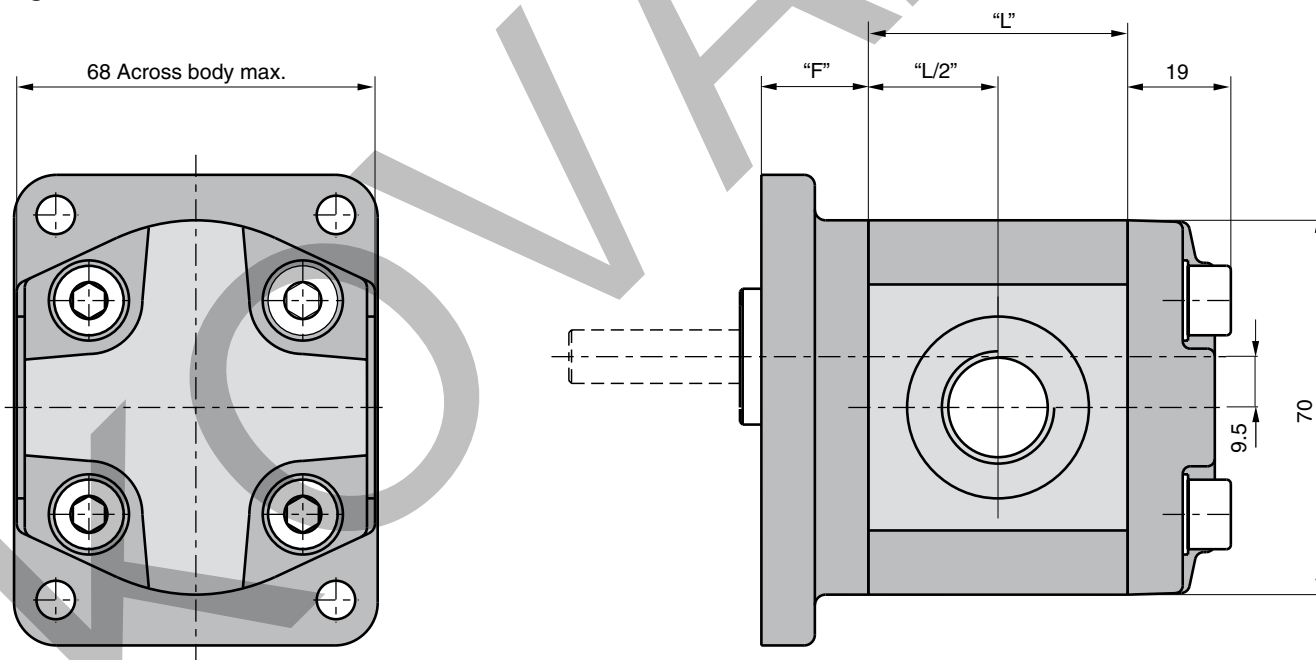
Fluid Temperature = $45 \pm 2^\circ\text{C}$
Viscosity = $36 \text{ mm}^2/\text{s}$
Inlet Pressure = $0.9 + 0.1 \text{ bar absolute}$

PGP 502 Pump Specification - Standard Displacements

Pump Displacement	Code	0008	0012	0016	0021	0025	0033	0036	0043	0048	0058	0062	0079
	cm³/rev	0.8	1.2	1.6	2.1	2.5	3.3	3.6	4.3	4.8	5.8	6.2	7.9
Max. Continuous Pressure	bar	280	280	280	280	280	280	260	250	230	200	180	160
Minimum Speed @ Max. outlet press.	rpm	500	500	500	500	500	500	500	500	500	500	500	500
Maximum Speed @ 0 Inlet & Max. outlet press.	rpm	5000	5000	4500	4500	4000	4000	4000	3500	3000	3000	3000	3000
Pump Input Power @ Max. Press. and 1500 rpm	kW	0.82	1.1	1.4	1.7	2.0	2.5	2.6	2.6	2.4	2.8	2.9	3.0
Dimension "L"	mm	35.3	36.8	38.3	39.9	41.5	44.5	45.6	48.5	50.0	53.8	55.3	61.6
Approximate Weight ¹⁾	kg	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.4	1.4	1.5	1.6

¹⁾ Single pump with Flange D1 and Port end cover B1

Single Unit PGP 502

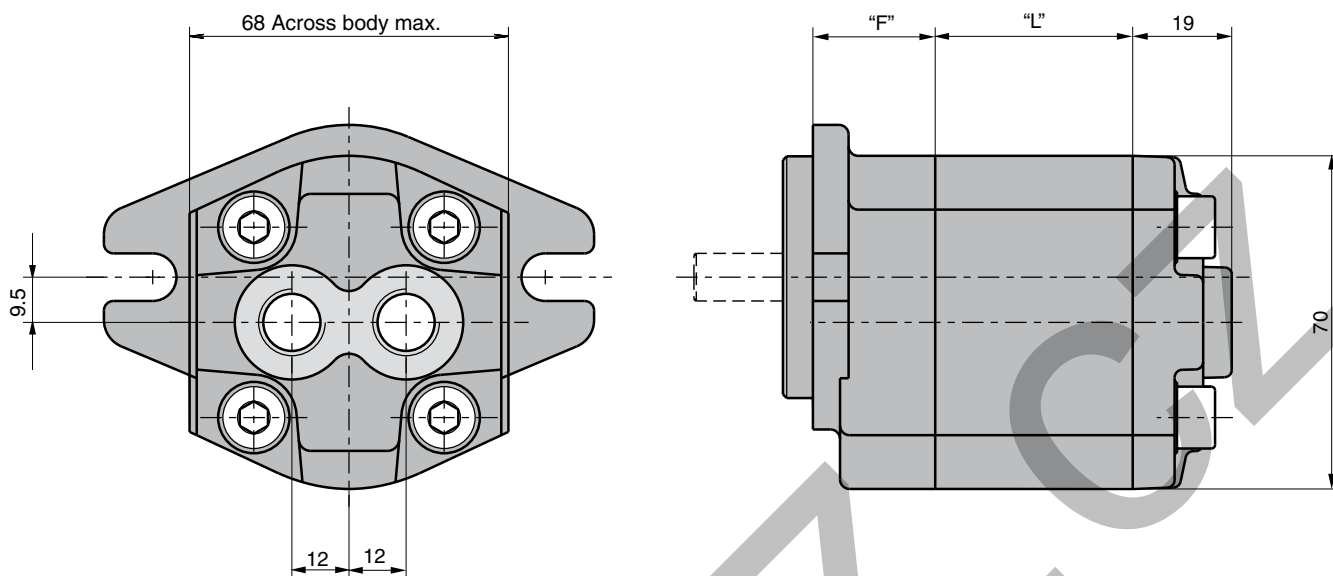


Dimension "L" see table above

Dimension "F" see flanges on page 20

Dimension Shafts see page 22

Single Unit PGP 502 with rear ports

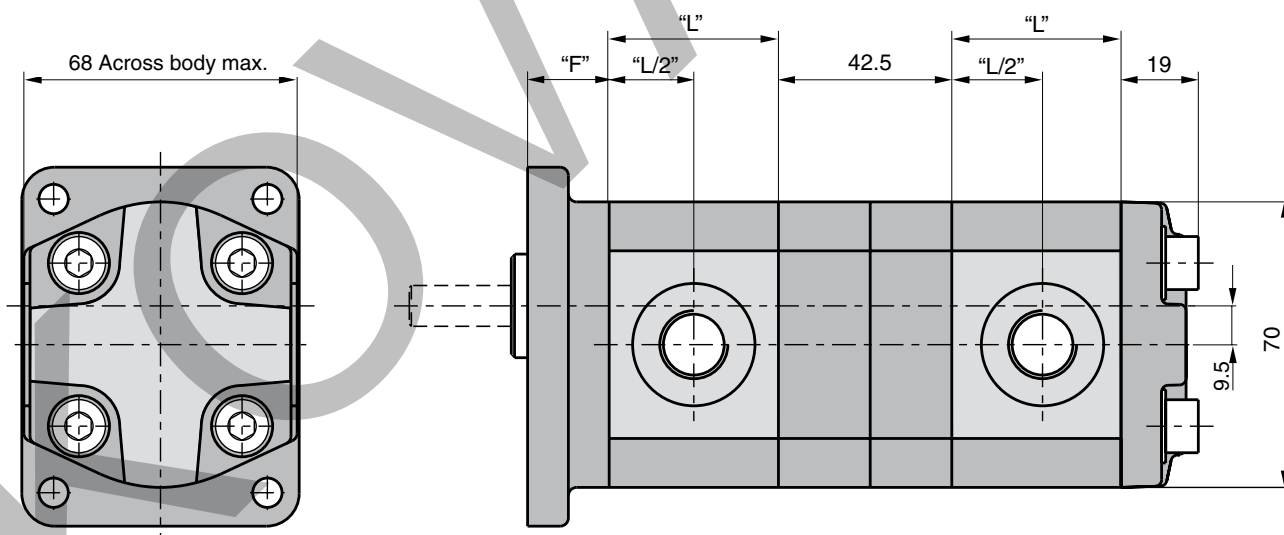


Dimension "L" see table on page 18

Dimension "F" see flanges on page 20

Dimension Shafts see page 22

Tandem Unit PGP 502



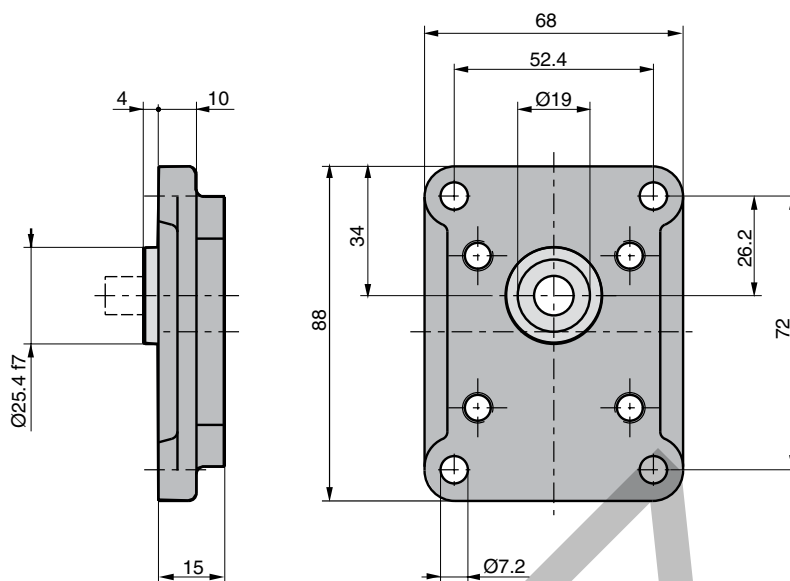
Dimension "L" see table on page 18

Dimension "F" see flanges on page 20

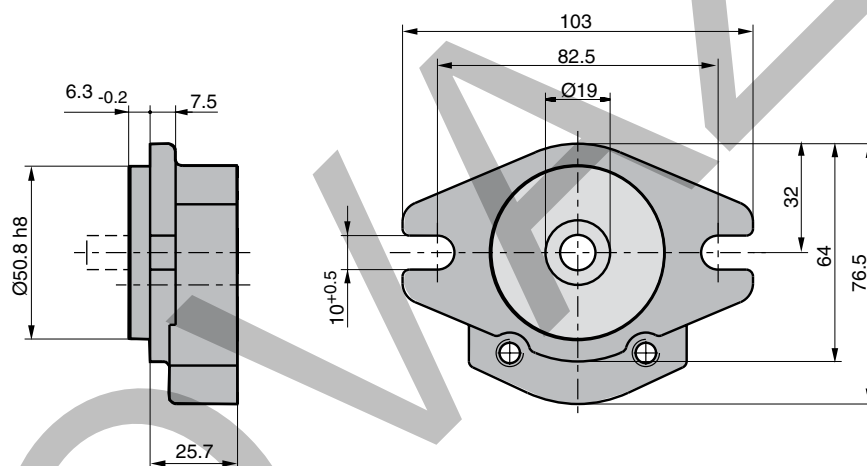
Dimension Shafts see page 22

PGP 502 Mounting Flange

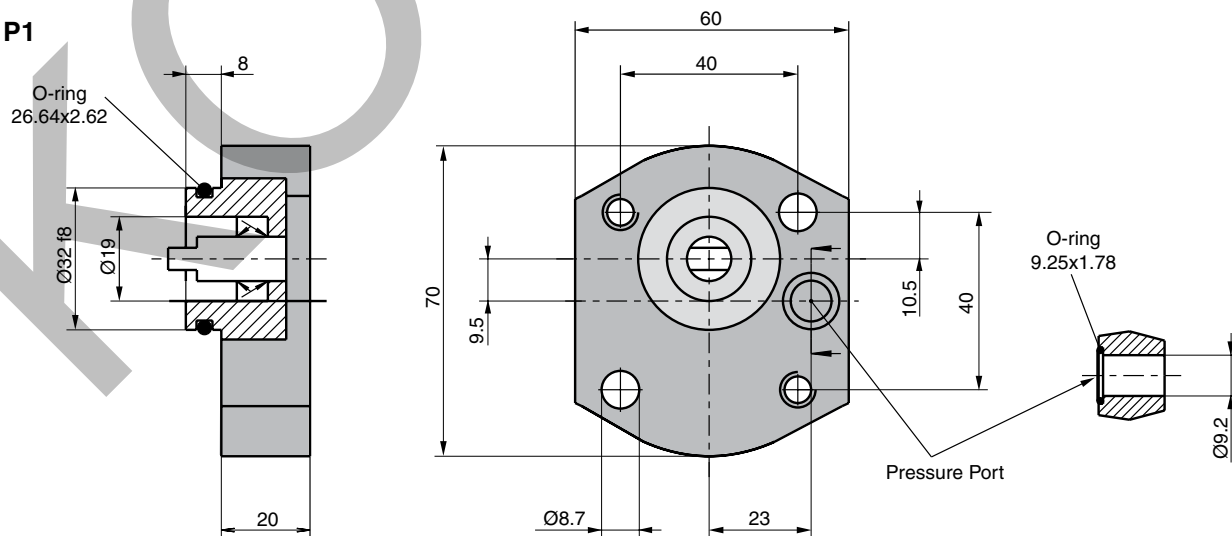
Code D1



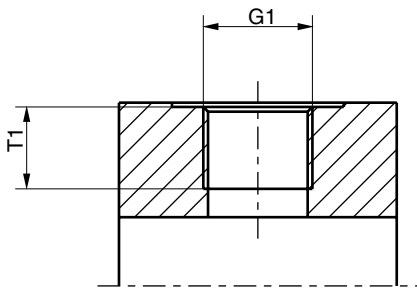
Code H1



Code P1

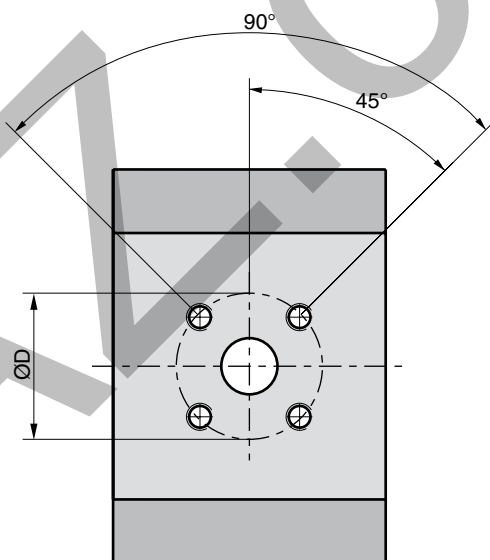
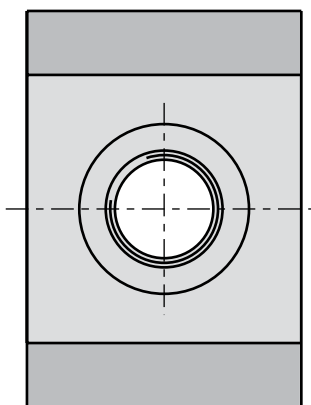
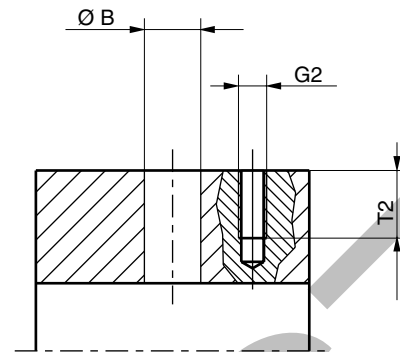


PGP 502 Porting

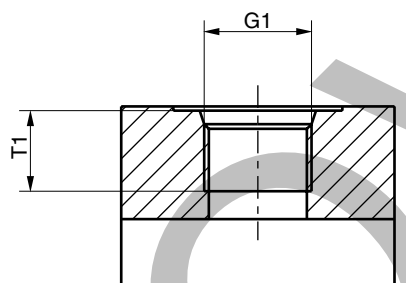


Code E British Standard Pipe Parallel (BSPP)

Code G Metric straight thread



Code J European flange



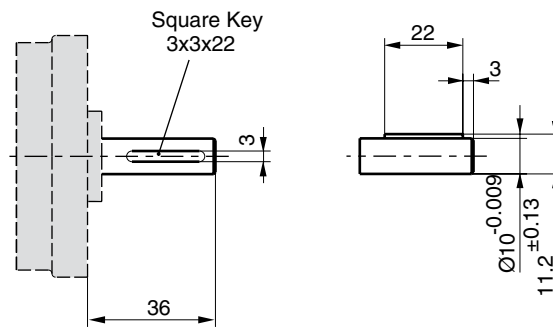
Code D SAE straight thread

PGP 502

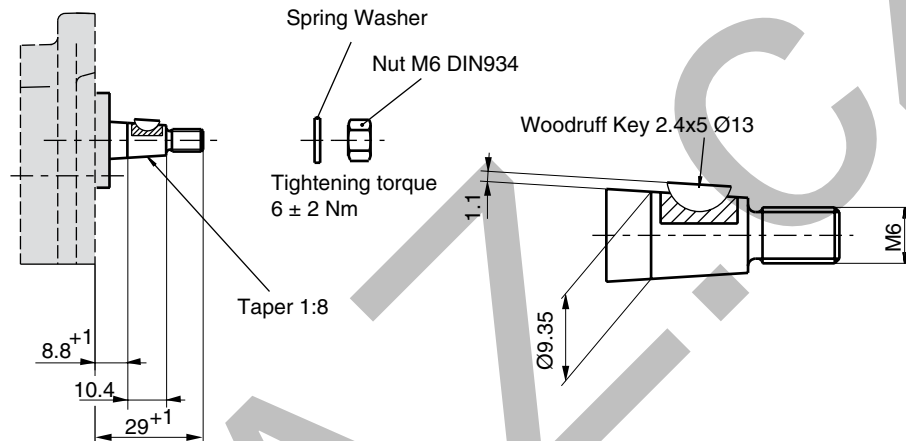
Code	G1	G2	T1	Ø B	Ø D	T2
D2	9/16-18 UNF		12.7			
D3	3/4-16 UNF		14.3			
E1	1/4-19 BSP		12.0			
E2	3/8-19 BSP		12.0			
E3	1/2-14 BSP		14.0			
G1	M14x1.5		12.0			
G3	M18x1.5		12.0			
J1		M5		8.0	26.0	12.0
J2		M5		10.0	26.0	12.0
J3		M6		8.0	30.0	12.0
J4		M6		12.0	30.0	12.0

PGP 502 Drive Shaft

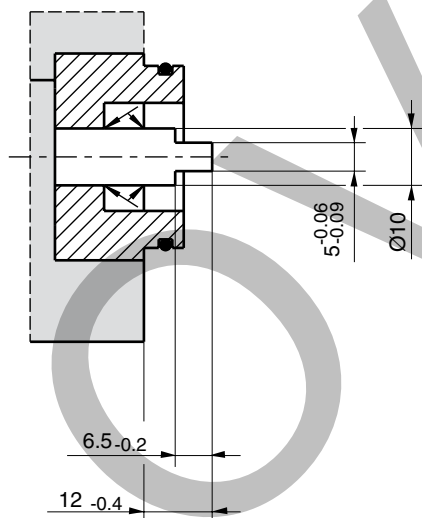
Code H1



Code P2



Code V1



PGP/PGM 502 - Shaft Load Capacity

Code	Description	Torque Rating [Nm]
H1	Ø10, 3.0 KEY, no thread, 36L parallel	30
P2	Ø9.95, 8.8L, 2.4 KEY, M6 taper 1:8	30
V1	5x6.5 long shaft w/o coupling tang drive	20

$$\text{Torque [Nm]} = \frac{\text{Displacement [cm}^3\text{/rev]} \times \text{Pressure [bar]}}{57.2}$$