

PG		505										
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
	Pump
A	Single unit
B	Multiple unit
C	—

Displacement	
Code	ccm
0030	3.0
0040	4.0
0050	5.0
0060	6.0
0070	7.0
0080	8.0
0100	10.0
0120	12.0

Code	Rotation
C	Clockwise
A	Counter clockwise

Code	Shaft
A1	9T, 16/32DP, 32L, SAE "A" spline
J1	Ø12.7, 3.2Key, no thread, 38L, parallel
K1	Ø15.88, 4.0Key, no thread, 32L, SAE "A", parallel
Q2	Ø14.25, 5.5L, 3.0Key, M10x1, taper 1:8

Code	Flange
D2	56.0x73.0 - Ø30.0 rectangular
H1	82.5 - Ø50.8 SAE "A-A" 2 bolt flange
H2	106.4 - Ø82.55 SAE "A" 2 bolt flange

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 Connection

Code	Section Connection
S	Separate inlets
C	Common inlets

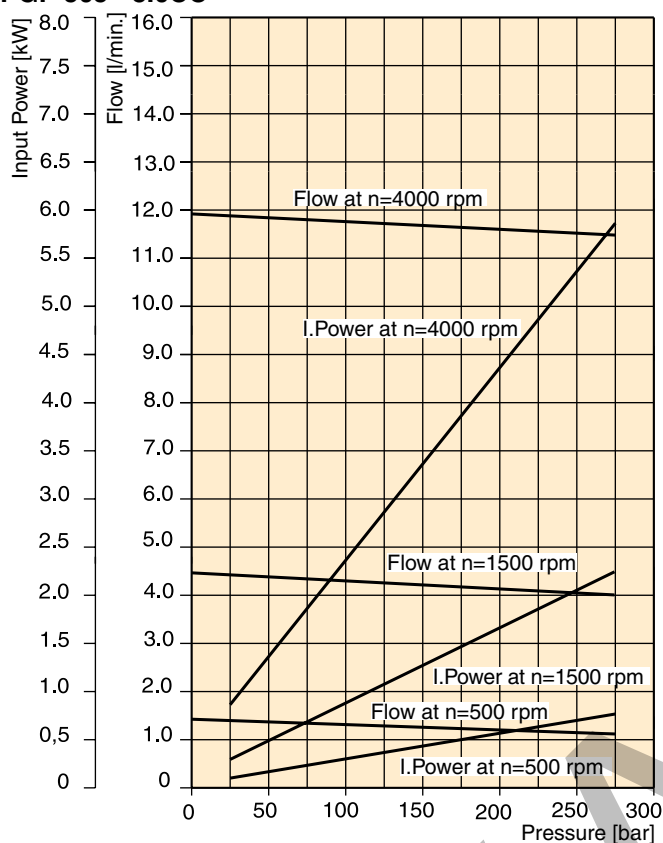
Code	Port Options
B1	No ports
D2 ²⁾	9/16 - 18 UNF thread
D3 ²⁾	3/4 - 16 UNF thread
D4*	7/8 - 14 UNF thread
D5*	1 1/16 - 12UN
E2	3/8 - 19 BSP thread
E3*	1/2 - 14 BSP thread
E5*	3/4 - 16 BSP thread
G1	M14x1.5 thread
G3*	M18x1.5 thread
G4*	M22x1.5 thread
J3*	8 mm - Ø30 mm - M6 square flange
J4*	12 mm - Ø30 mm - M6 square flange
J5*	15 mm - Ø35 mm - M6 square flange
J7*	20 mm - Ø40 mm - M6 square flange

*) Not usable for rear ports

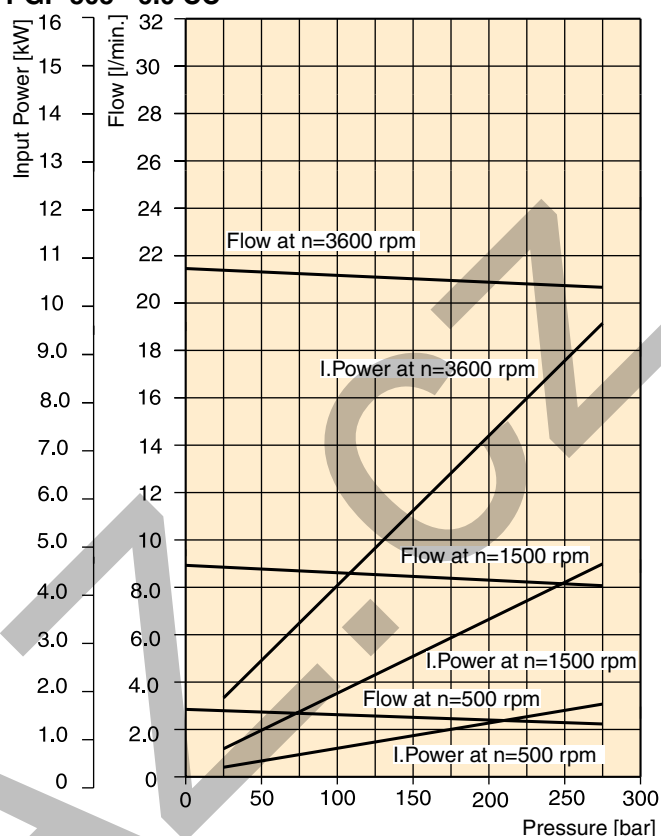
Code	Shaft Seal
X	No seal
N	NBR
M	Double NBR
W	Double FPM

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

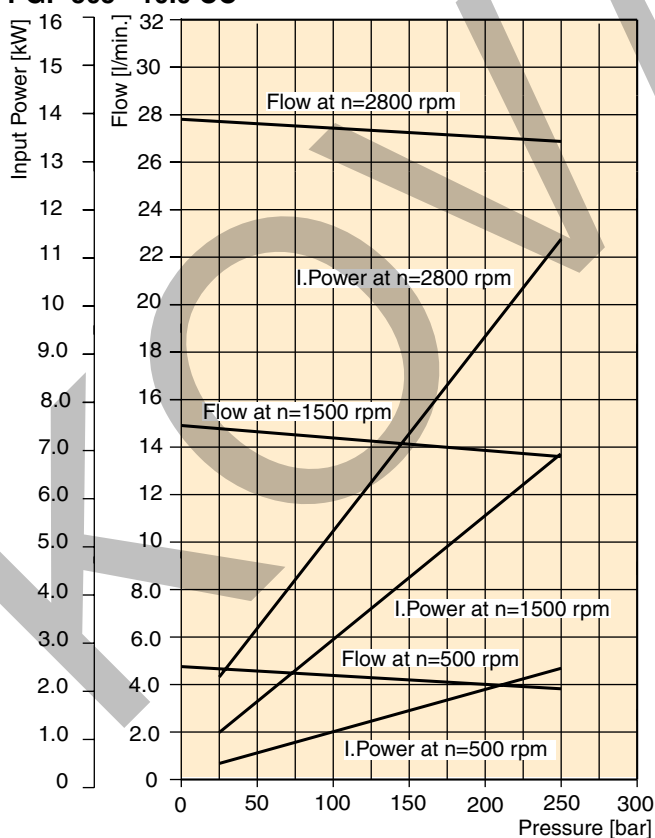
PGP 505 - 3.0CC



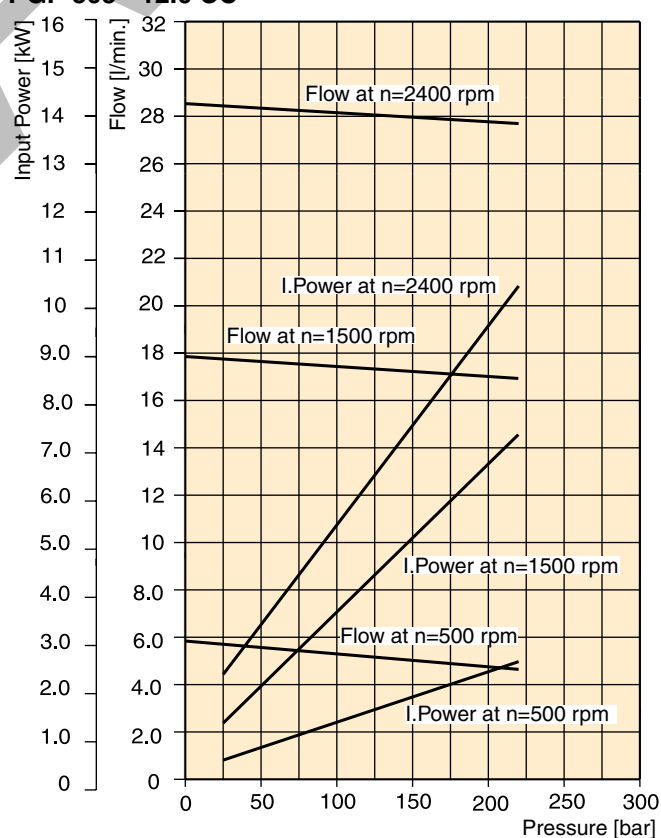
PGP 505 - 6.0 CC



PGP 505 - 10.0 CC



PGP 505 - 12.0 CC



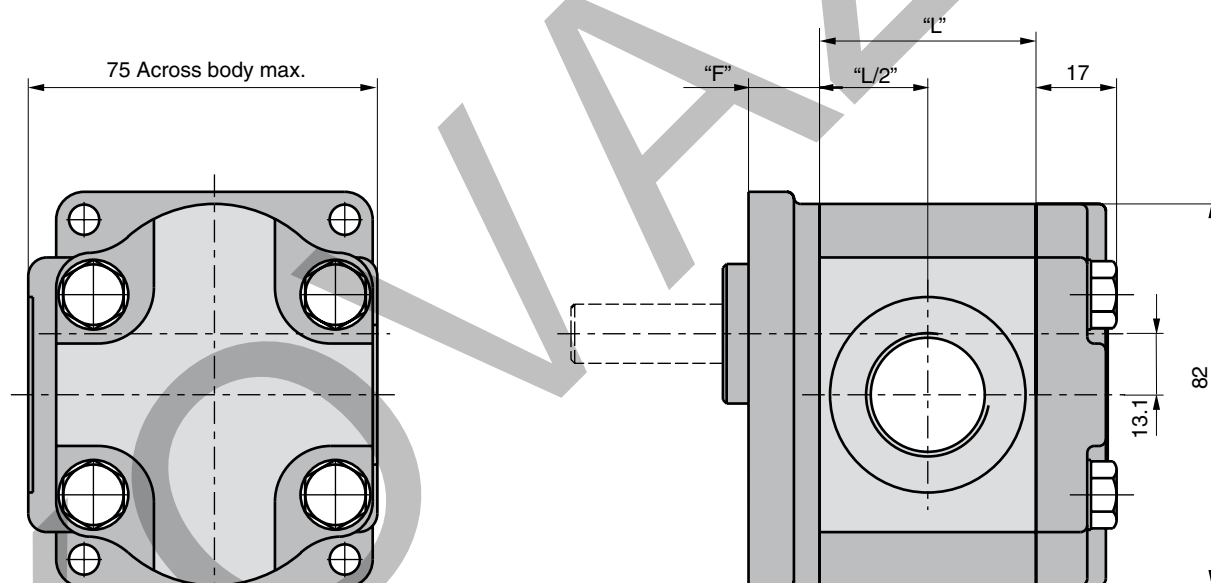
Fluid Temperature = $45 \pm 2^\circ\text{C}$
Viscosity = $36 \text{ mm}^2/\text{s}$
Inlet Pressure = $0.9 + 0.1 \text{ bar absolute}$

PGP 505 Specification - Standard Displacements

Pump Displacement	Code	0030	0040	0050	0060	0070	0080	0100	0110	0120
	cm³/rev	3.0	4.0	5.0	6.0	7.0	8.0	10.0	11.0	12.0
Max. Continuous Pressure	bar	275	275	275	275	275	275	250	250	220
Minimum Speed @ Max. outlet pressure	rpm	500	500	500	500	500	500	500	500	500
Maximum Speed @ 0 Inlet & Max. outlet pressure	rpm	4000	4000	4000	3600	3300	3000	2800	2400	2400
Pump Input Power @ Max. Pressure and 1500 rpm	kW	2.3	3.0	3.8	4.5	5.3	6.0	6.9	7.6	7.5
Dimension "L"	mm	41.1	43.8	46.5	49.1	51.8	54.5	59.8	62.5	65.2
Approximate Weight1)	kg	2.22	2.27	2.32	2.38	2.43	2.48	2.58	2.63	2.68

1) Single pump with Flange D3 and Port end cover B1

Single Unit PGP 505

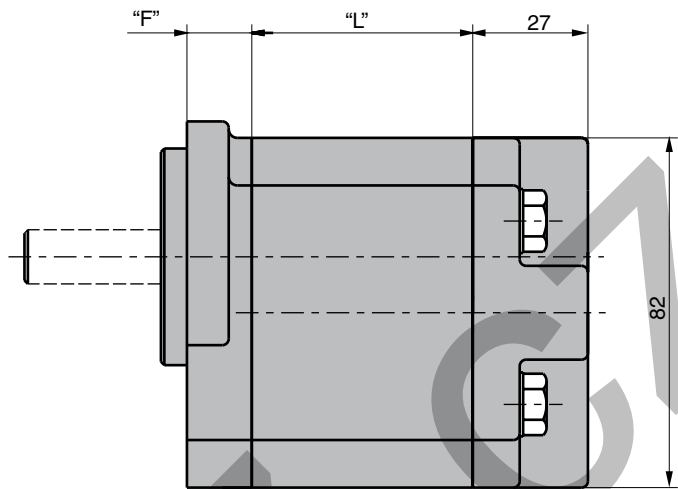
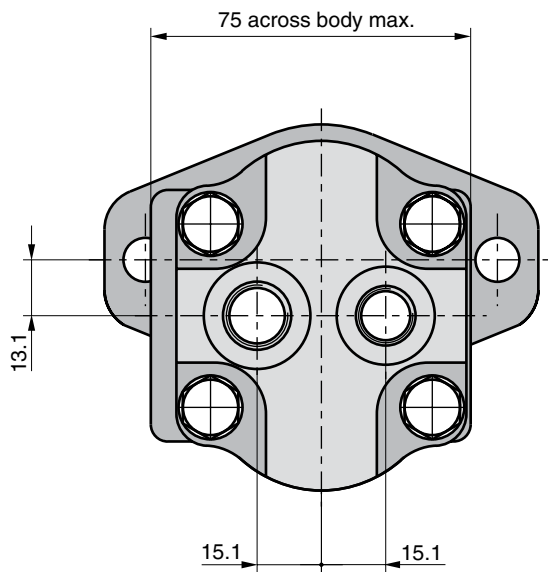


Dimension "L" see table above

Dimension "F" see flanges on pages 25

Dimension Shafts see pages 27 and 28

Single Unit PGP 505 with rear ports

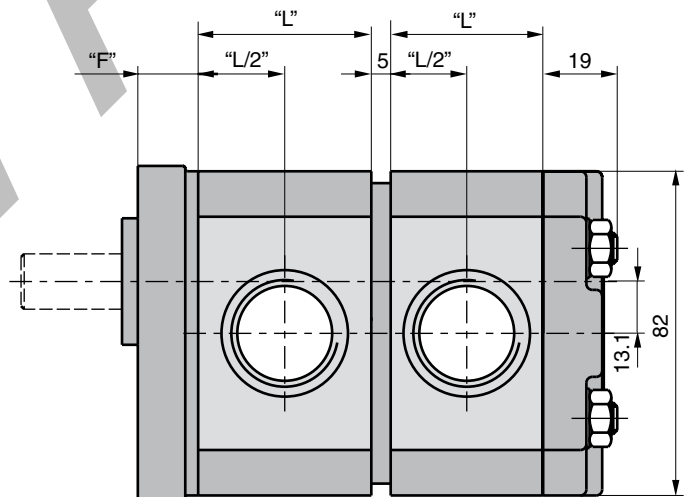
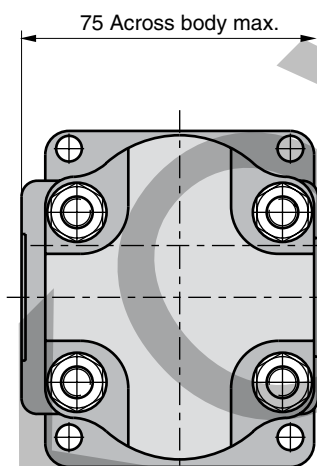


Dimension "L" see table on page 23

Dimension "F" see flanges on pages 25

Dimension Shafts see pages 27 and 28

Tandem Unit PGP 505



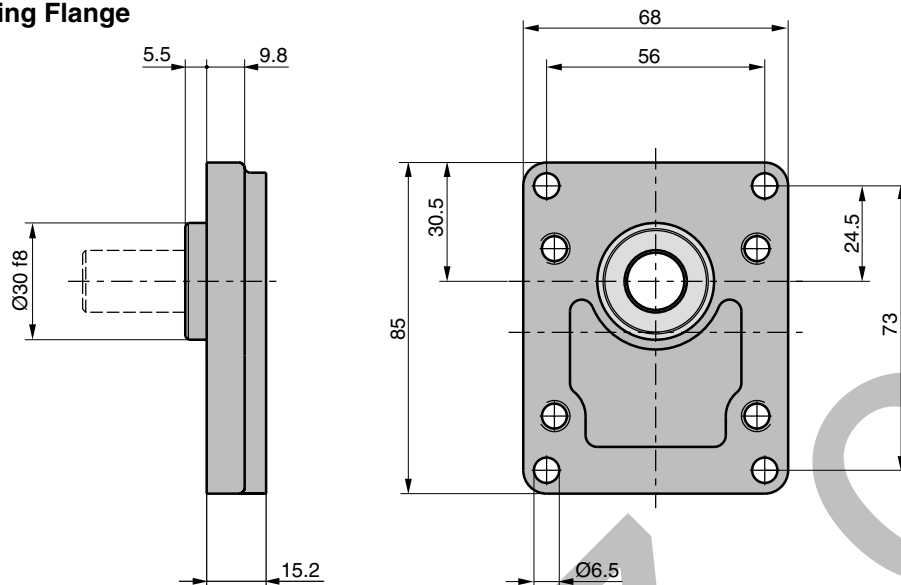
Dimension "L" see table on page 23

Dimension "F" see flanges on pages 25

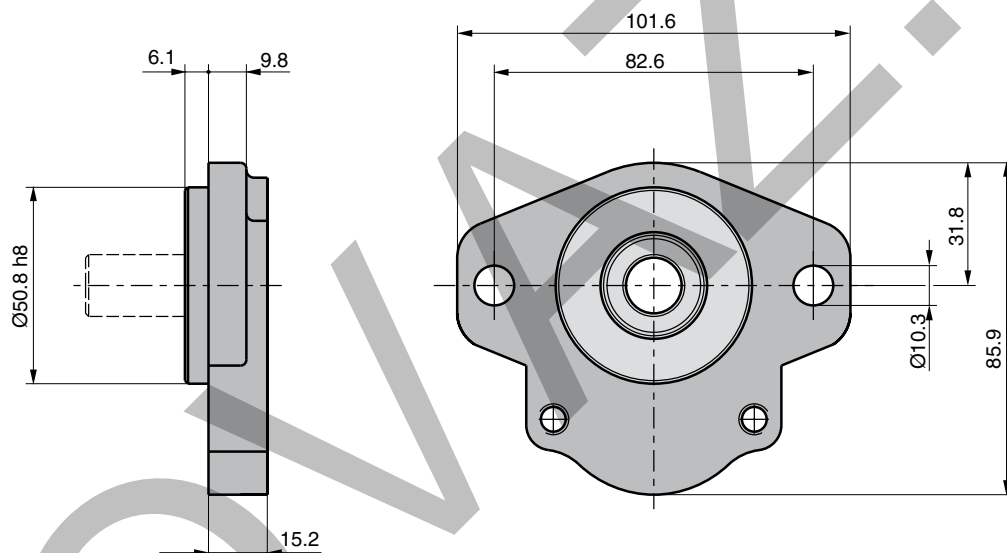
Dimension Shafts see pages 27 and 28

PGP 505 Mounting Flange

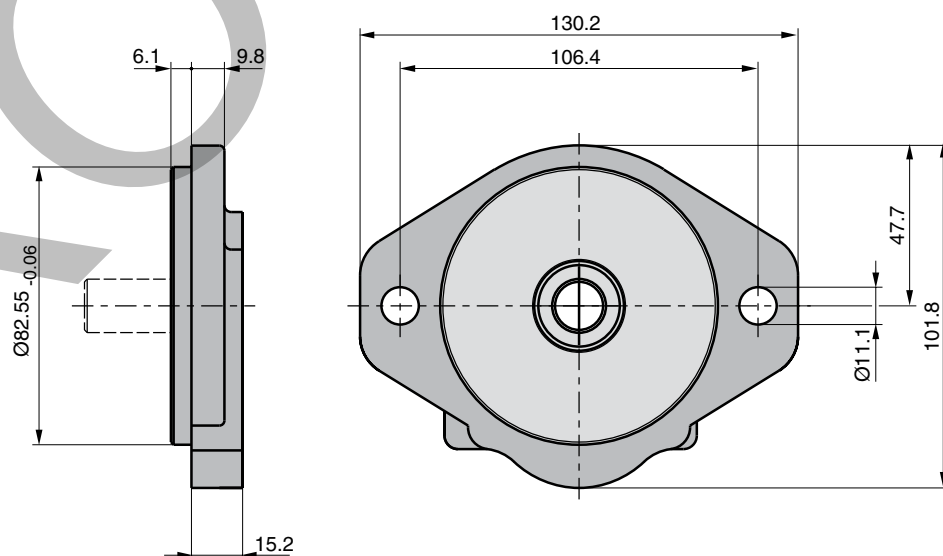
Code D2



Code H1



Code H2



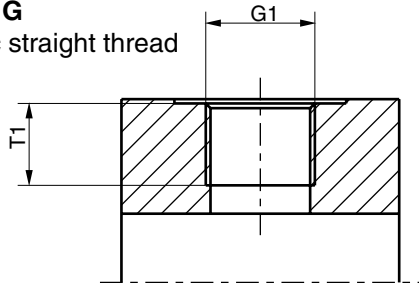
PGP 505 Porting

Code E

British Standard Pipe

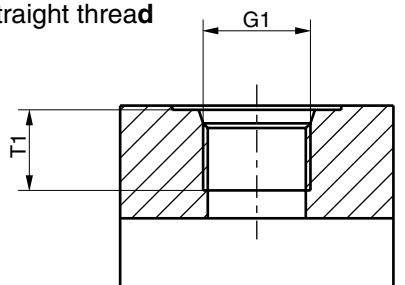
Code G

Metric straight thread



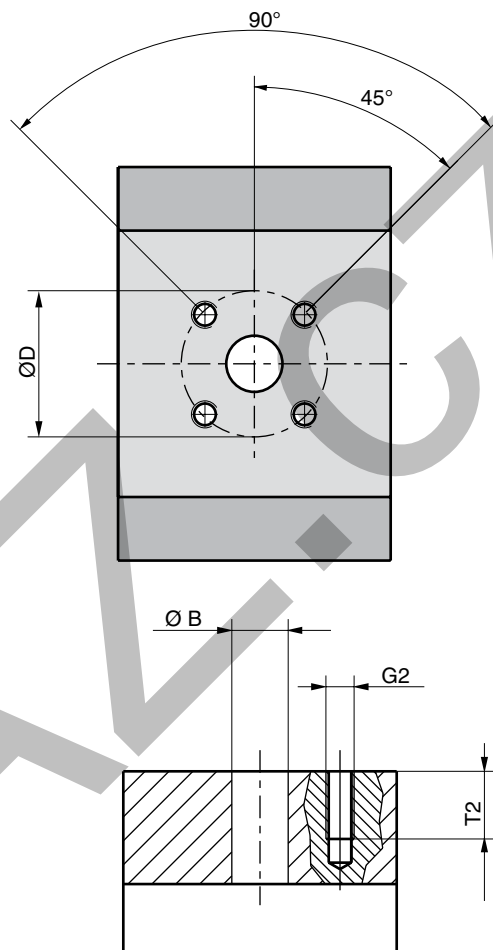
Code D

SAE straight thread



Code J

European flange

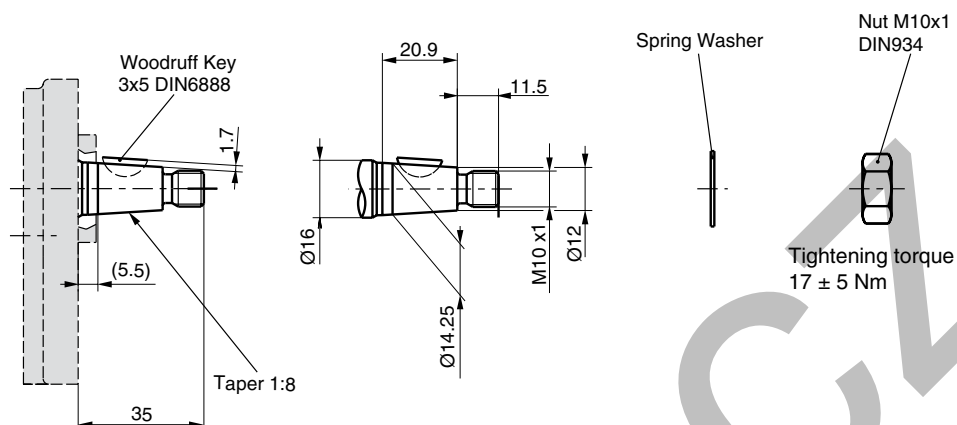


PGP 505

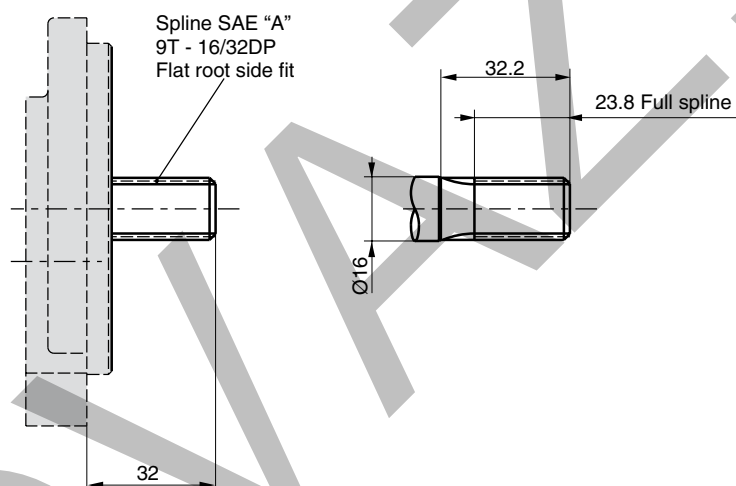
Code	G1	G2	T1	Ø B	Ø D	S	T2
Thread	Thread	Dimensions					
D2	9/16-18 UNF		12.7				
D3	3/4-16 UNF		14.3				
D4	7/8-14 UNF		16.7				
D5	1 1/16-12 UN		19.0				
E2	3/8-19 BSP		12.0				
E3	1/2-14 BSP		14.0				
E5	3/4-14 BSP		16.0				
G1	M 14x1.5		12.0				
G3	M 18x1.5		12.0				
G4	M 22x1.5		14.0				
J3		M6		8.0	30.0		12.0
J4		M6		12.0	30.0		12.0
J5		M6		15.0	35.0		12.5
J7		M6		20.0	40.0		13.0
K5		1/4UNC	14.2			25.15	13.0

PGP 505 Drive Shaft

Code Q2

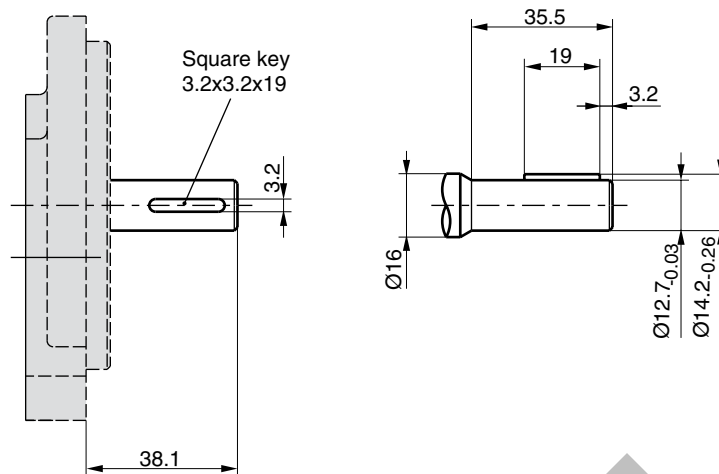


Code A1

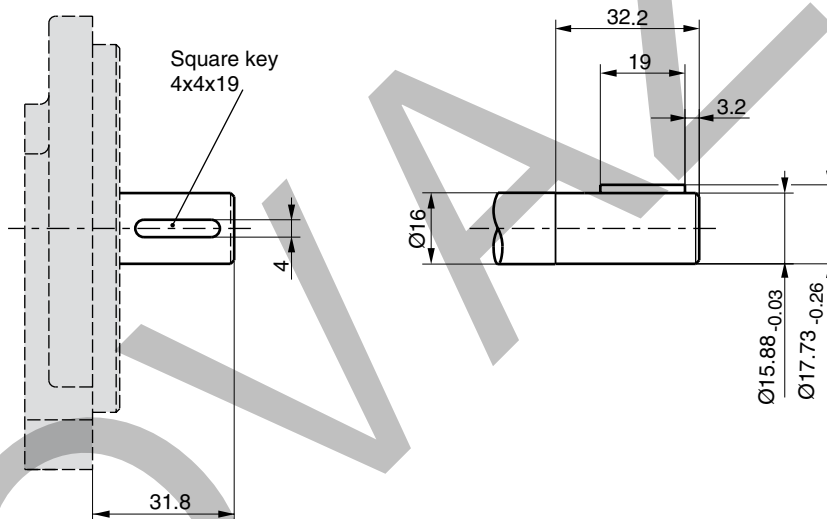


PGP 505 Drive Shaft

Code J1



Code K1



PGP 505 - Shaft Load Capacity

Code	Description		Torque Rating [Nm]
A1	9T,16/32DP, 32L, SAE"A"	spline	108
J1	Ø12.7, 3.2 KEY, no thread, 38L	parallel	43
K1	Ø15.88, 4.0 KEY, no thread, 32L, SAE"A"	parallel	85
Q2	Ø14.25, 5.5L, 3.0 KEY, M10x1	taper 1:8	68
	Multiple pump connection shaft		36

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