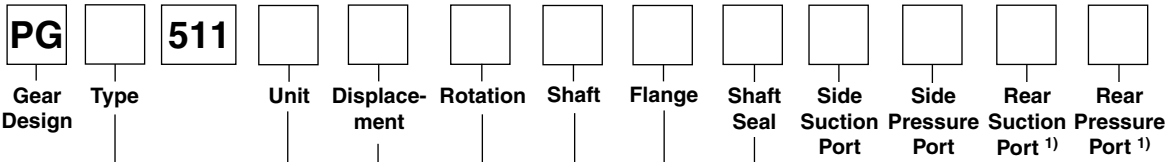


Code	Type
P	Pump

Code	Unit
	Pump
A	Single unit
B	Multiple unit
M	Single distributor unit

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

Code	Shaft
A1	9T, 16/32DP, 32L, SAE "A" spline
C1	11T, 16/32DP, 38.2L, SAE 19-4 spline
K1	Ø15.88, 4.0Key, no thread, 32L, SAE "A", parallel
L6	Ø19.05, 4.8Key, no thread, 32L, SAE 19-1, parallel
S1	Ø17.0, 7.7L, 3.0Key, M12x1.5, taper 1:5
S2	Ø16.65, 12.0L, 3.2 Key, M12x1.5, taper 1:8
V5	8x6.5 short shaft, tang drive
S8*	Ø20, 9.4L, 4.0 Key, M14x1.5, taper 1:5

*) To be used with outboard bearing only

Displacement*	
Code	ccm
0040	4.0
0060	6.0
0080	8.0
0100	10.0
0110	11.0
0140	14.0
0160	16.0
0190	19.0
0230	23.0
0270	27.0
0330	33.0

*) Others on request

Code	Rotation
C	Clockwise
A	Counter clock-wise
B	bi-directional

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.

	511								4)
Section Connection		Unit	Displacement	Shaft Seal	Side Suction Port	Side Pressure Port	Rear Suction Port 2)	Rear Pressure Port 2)	

Code	Section Connection
S	Separate inlets
C	Common inlets

4

Code	Flange
D3	71.4x96.0 - Ø36.47 rectangular
D4	72.0x100.0 - Ø80 rectangular
H2	106.4 - Ø82.55 SAE "A" 2 bolt flange
H3	146.1 - Ø101.6 SAE "B" 2 bolt flange
Q1 2)	60.0x60.0 - Ø52.0 w/o seal ,O' thrubolt flange
Q2	60.0x60.0 - Ø50.0 w. seal ,O' 'thrubolt flange
Q3 2)	60.0x60.0 - Ø52.0 w/o seal ,O' thrubolt flange
Q4	60.0x60.0 - Ø50.0 w. seal ,O',thrubolt flange
F4	72.0x100.0 - Ø80.0 rect., w. OBB and cont. drive shaft

2) Non standard, on request only

Code	Port Options
B1	No ports
D2 2)	9/16 - 18 UNF thread
D3 2)	3/4 - 16 UNF thread
D4 2)	7/8 - 14 UNF thread
D5 2)	1 1/16 - 12 UN thread
D6 2)*	1 5/16 - 12 UN thread
D7 2)*	1 5/8 - 12 UN thread
E2	3/8 - 19 BSP thread
E3	1/2 - 12 BSP thread
E4*	5/8 - 14 BSP thread
E5*	3/4 - 14 BSP thread
E6*	1 - 11 BSP thread
E7*	1 1/4 - 11 BSP thread
G1 2)	M14x1.5 thread
G3 2)	M18x1.5 thread
G4 2)	M22x1.5 thread
G5 2)*	M26x1.5 thread
G7 2)*	M30x1.5 thread
J3 2)*	8mm - Ø30mm - M6 square
J4 2)*	12mm - Ø30mm - M6 square
J5*	15mm - Ø40mm - M6 square
J6 2)*	15mm - Ø40mm - M8 square
J7*	20mm - Ø40mm - M6 square
J8*	18mm - Ø55mm - M8 square
J9*	26mm - Ø55mm - M8 square

Code	Port Options
L1*	13 mm-Ø30 mm-M6 diamond
L2*	19 mm-Ø40 mm-M8 diamond
N1 2)*	1/2"-5/16-18UNC SAE Split Flange
N2 2)*	3/4"-3/8-16UNC SAE Split Flange
N3 2)*	1"-3/8-16UNC SAE Split Flange
N4 2)*	1 1/4"-7/16-14UNC SAE Split Flange
P1*	12.7 mm - M8 Metric Split Flange
P2*	19.0 mm - M10 Metric Split Flange
P3*	25.4 mm - M10 Metric Split Flange
P4*	31.8 mm - M10 Metric Split Flange

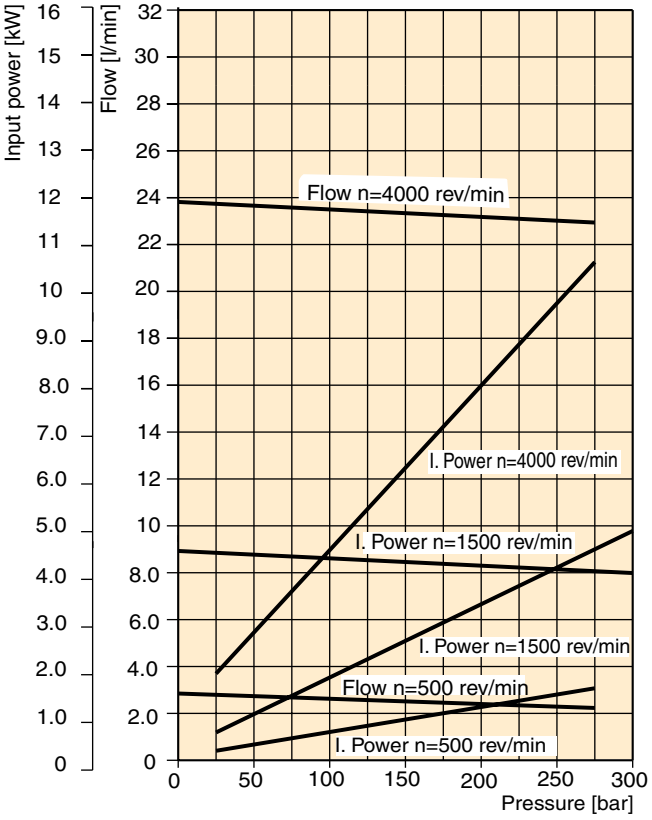
2) Non standard, on request only

*) Not usable for rear ports

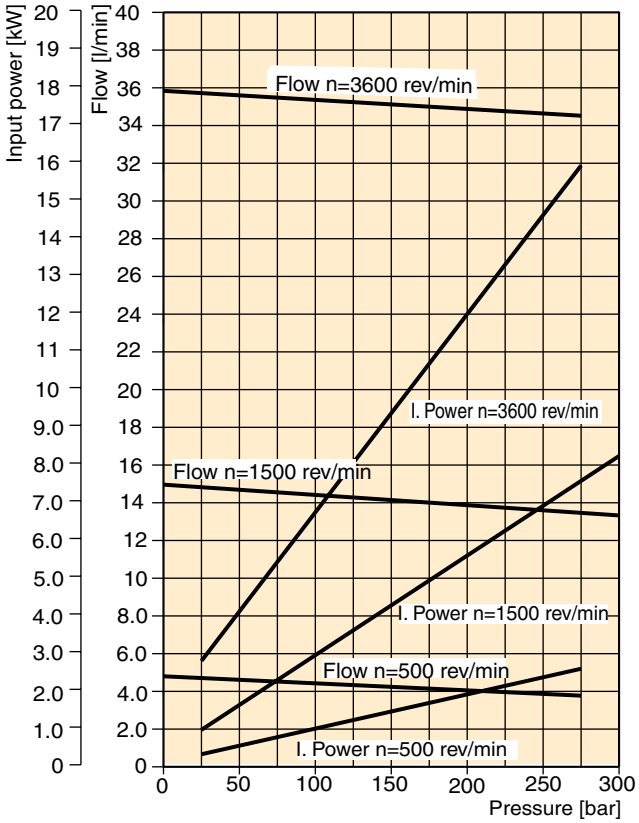
4) For further "B" triple unit repeat
displacement,
shaft seal between sections,
side suction port,
side pressure port,
rear suction port,
rear pressure port.

PI PGP-PGM UK.PMD RH

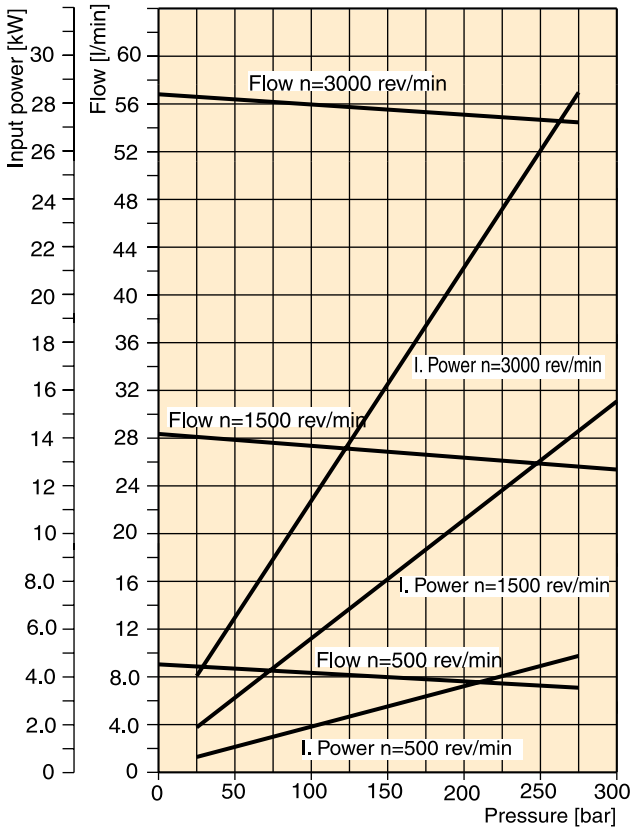
PGP 511 - 6.0 CC



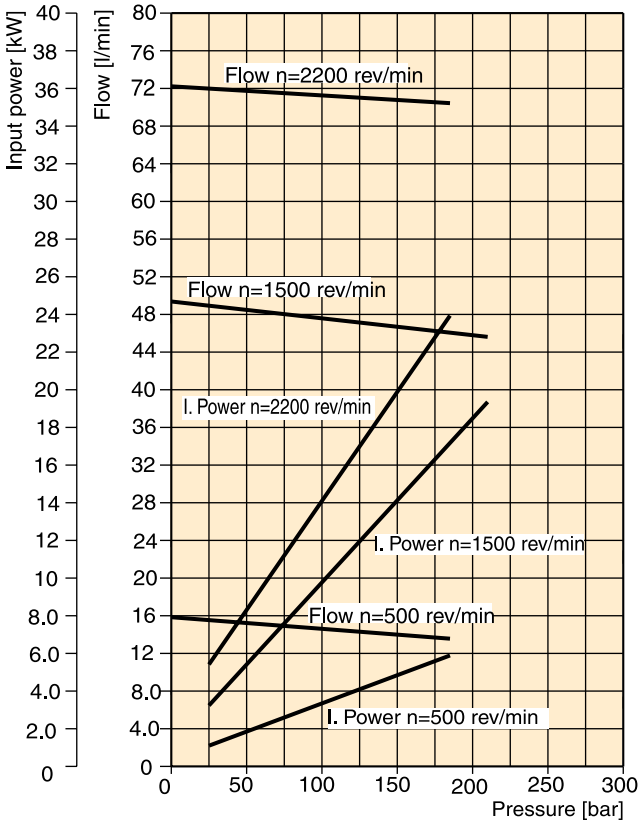
PGP 511 - 10.0 CC



PGP 511 - 19.0 CC



PGP 511 - 33.0 CC



Fluid Temperature = 45± 2°C
Viscosity = 36 mm^2/s
Inlet Pressure = 0.9 + 0.1 bar absolute

PI PGP-PGM UK.PMD RH

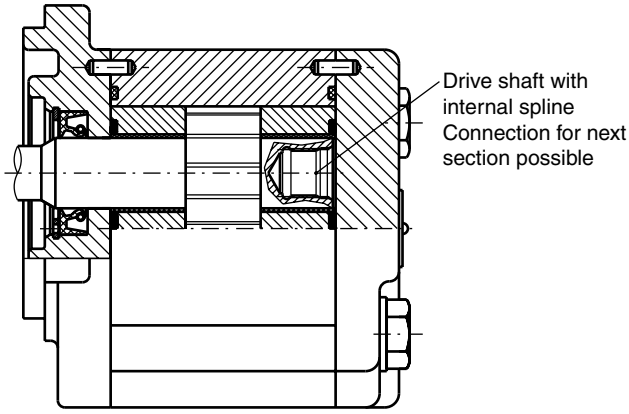
PGP 511 Specification - Standard Displacements

Pump Displacement	Code	0060	0080	0100	0110	0140	0160	0190	0230	0270	033
	cm³/rev	6.0	8.0	10.0	11.0	14.0	16.0	19.0	23.0	27.0	33.0
Max. Continuous Pressure	bar	250	250	250	250	250	250	250	225	190	155
Minimum Speed @ 0 Inlet & Max. outlet pressure	rpm	500	500	500	500	500	500	500	500	500	500
Maximum Speed @ 0 Inlet & Max. outlet pressure	rpm	3500	3500	3500	3500	3500	3500	3250	2750	2350	2000
Pump Input Power @ Max. Pressure and 1500 rpm	kW	4.5	6.0	7.5	8.3	10.5	12.0	14.3	14.7	14.9	17.3
Dimension "L"	mm	50.1	53.3	56.5	58.0	62.8	65.9	70.6	76.9	83.2	92.6
Approximate Weight [1]	kg	3.40	3.47	3.55	3.57	3.71	3.79	3.91	4.06	4.21	4.45

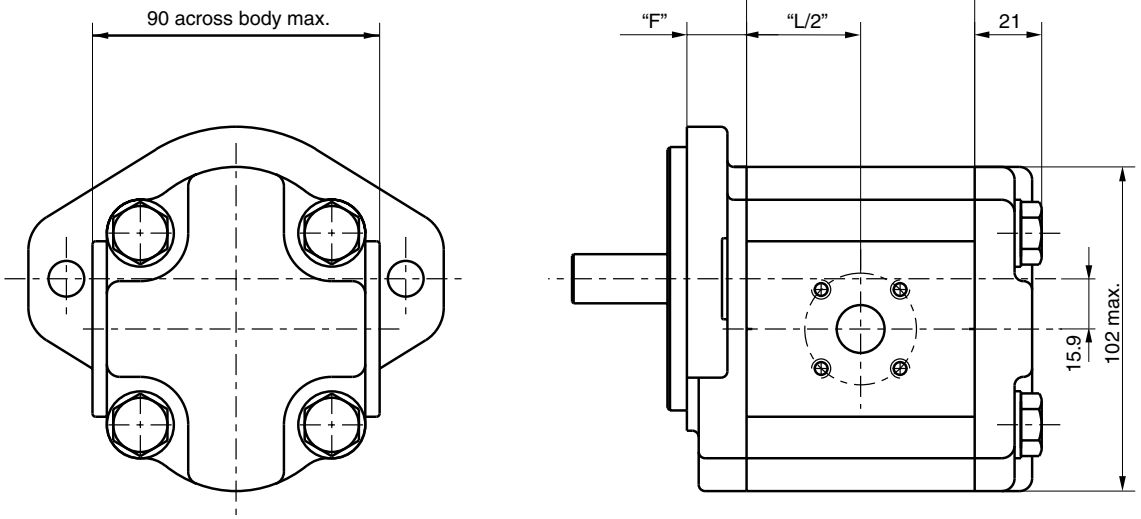
[1] Single pump with Flange Q1 and Port end cover B1

4

Distributor Unit PGP 511



Single Unit PGP 511



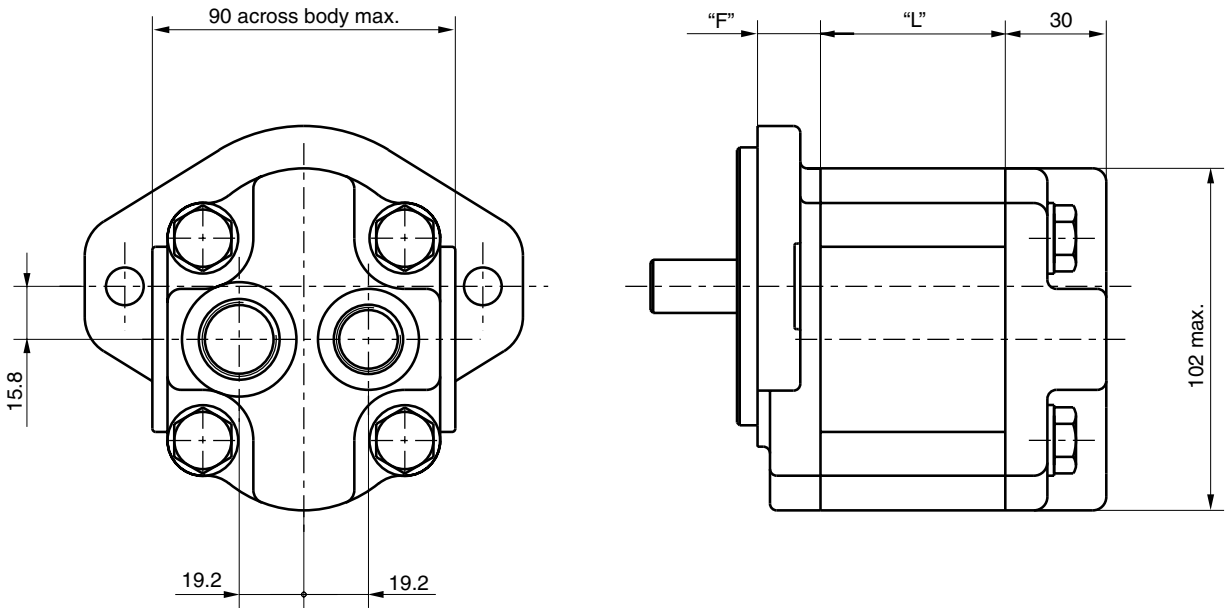
Dimension "L" see table above

Dimension "F" see flanges on pages 31 to 34

Dimension Shafts see pages 38 to 40

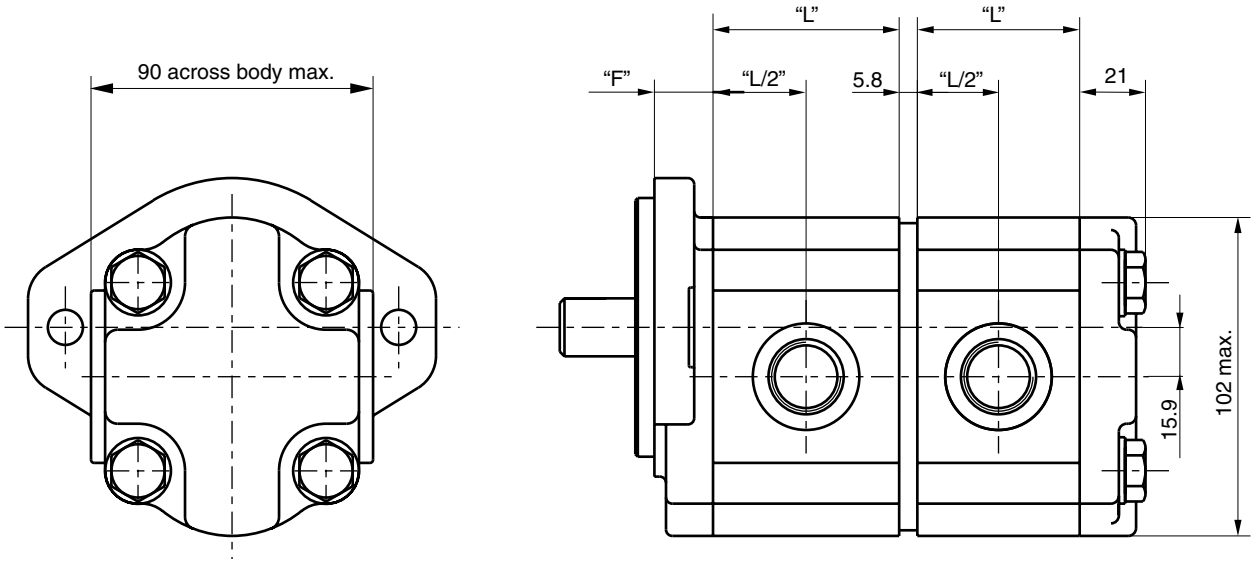
PI PGP-PGM UK.PMD RH

Single Unit PGP 511 with rear ports



Dimension "L" see table on page 29
Dimension "F" see flanges on pages 31 to 34
Dimension Shafts see pages 38 to 40

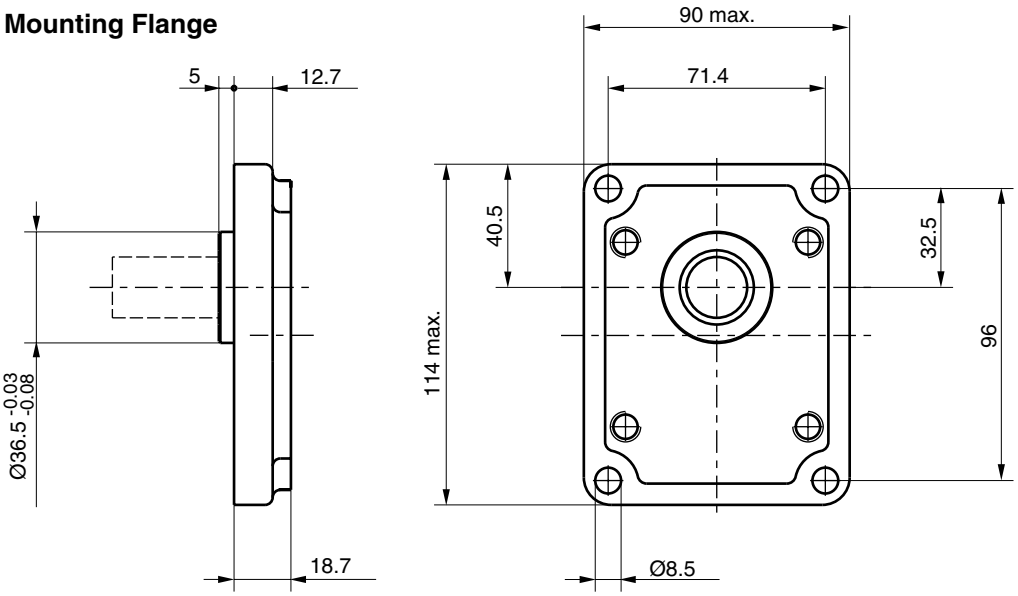
Tandem Unit PGP 511



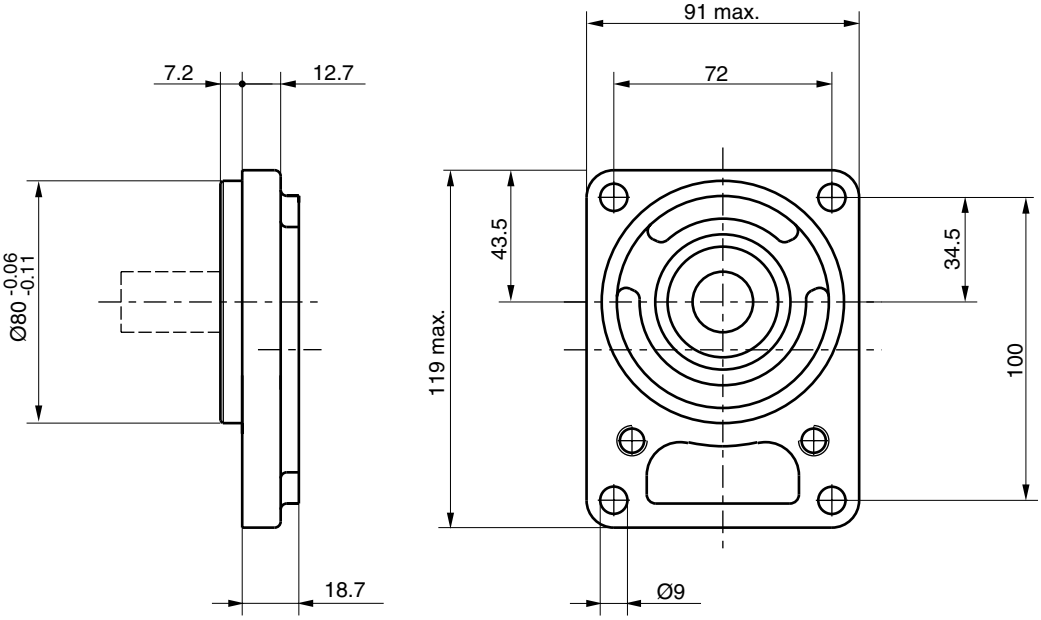
Dimension "L" see table on page 29
Dimension "F" see flanges on pages 31 to 34
Dimension Shafts see pages 38 to 40

PGP 511 Mounting Flange

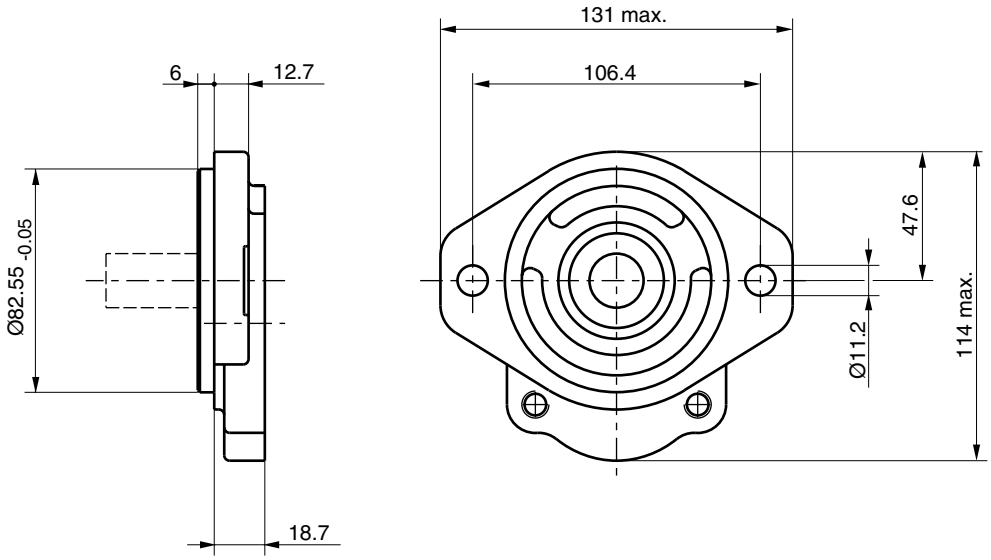
Code D3



Code D4



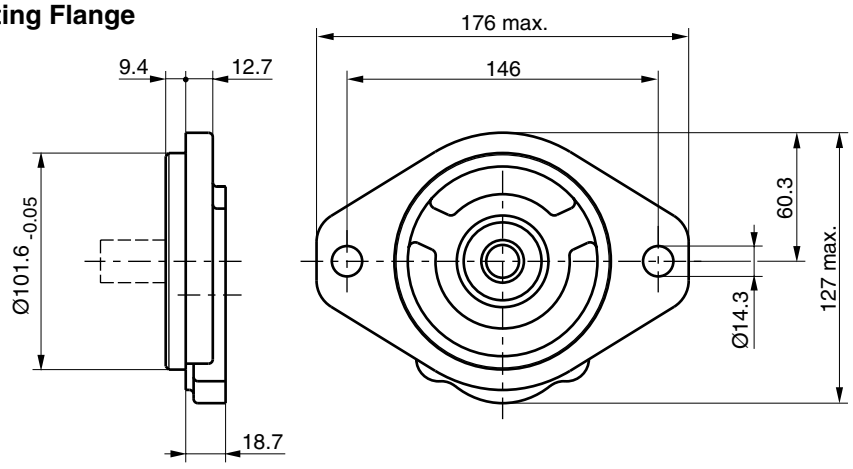
Code H2



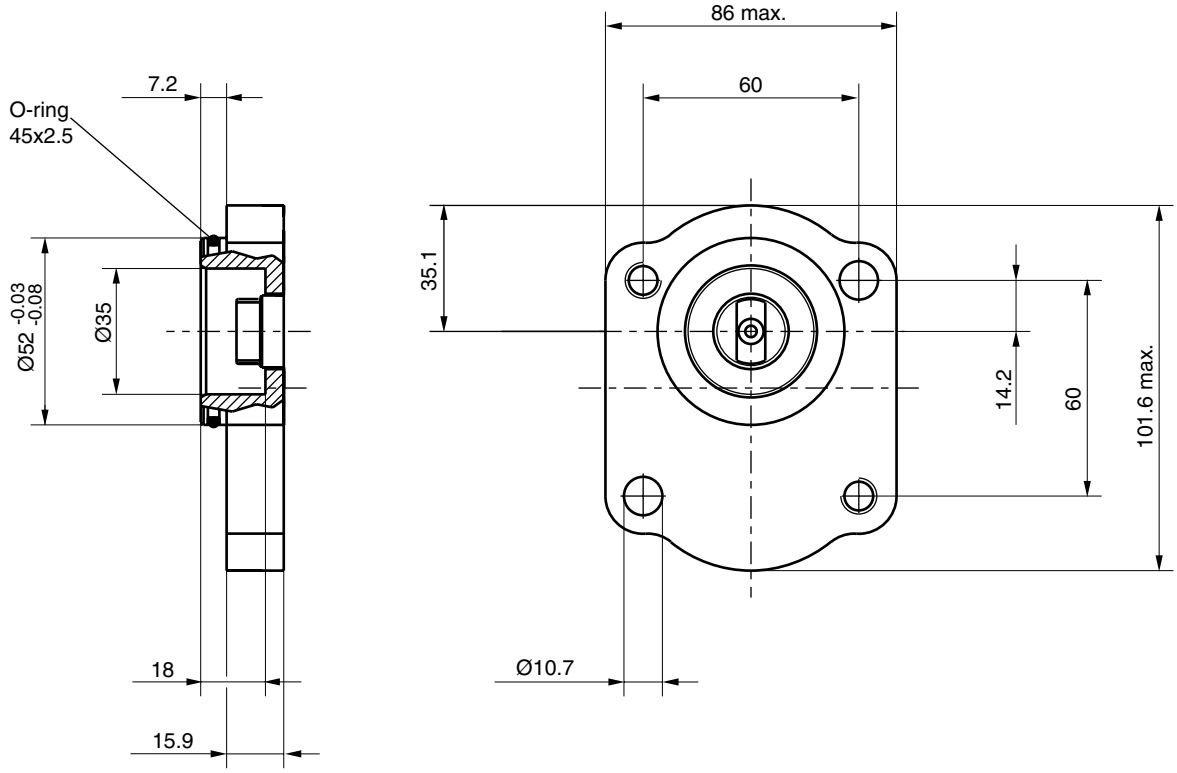
PI PGP-PGM UK.PMD RH

PGP 511 Mounting Flange

Code H3

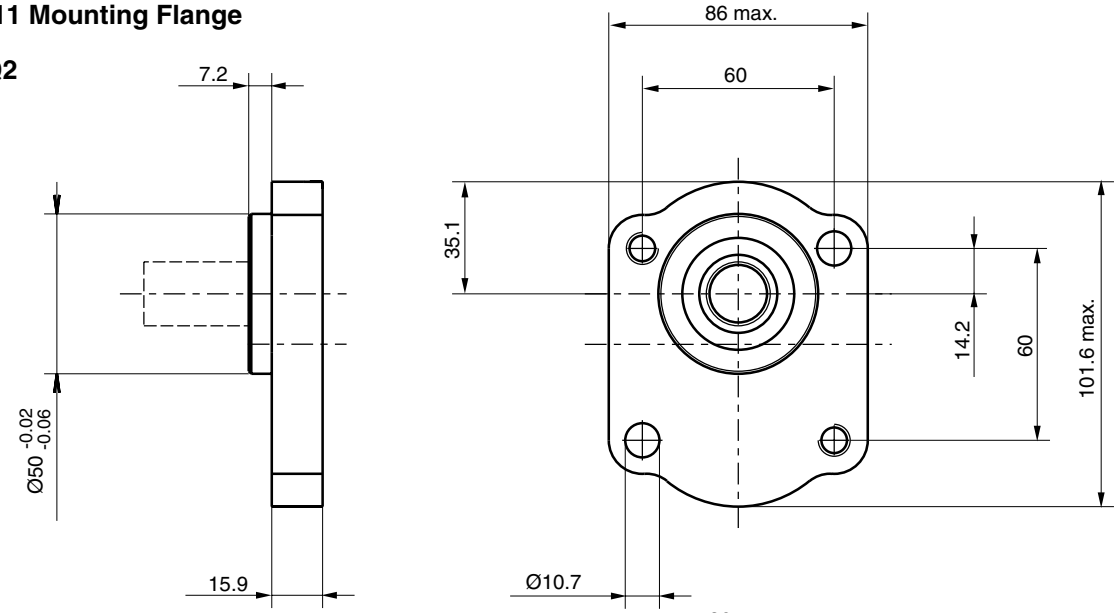


Code Q1

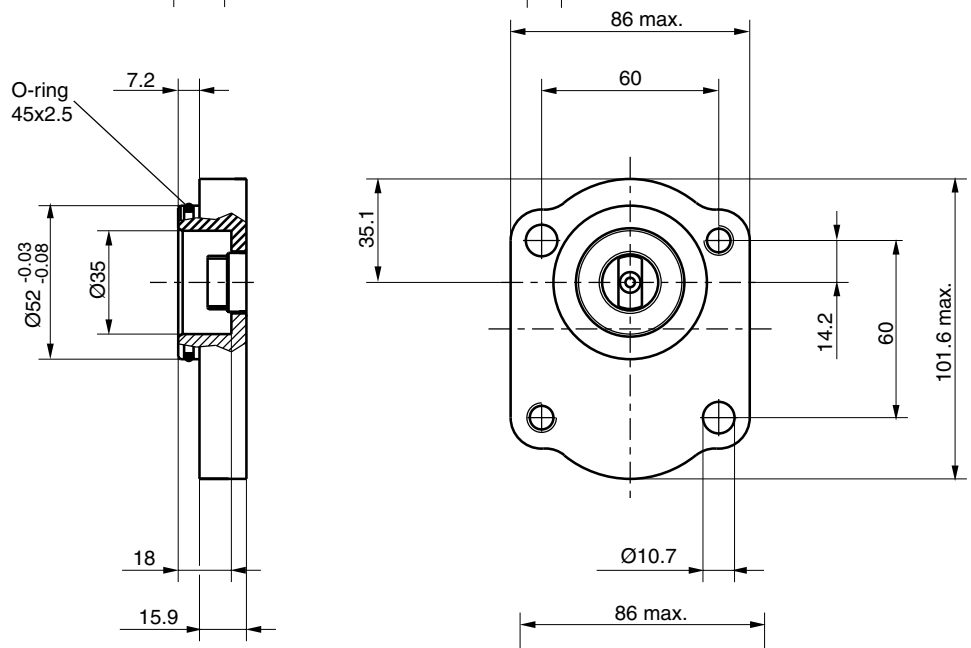


PGP 511 Mounting Flange

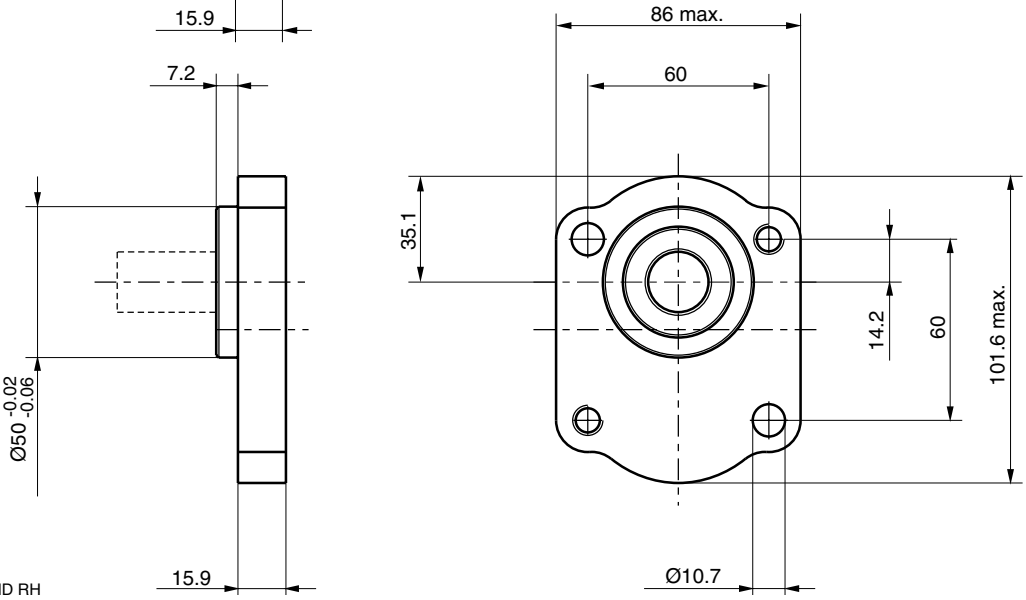
Code Q2



Code Q3



Code Q4



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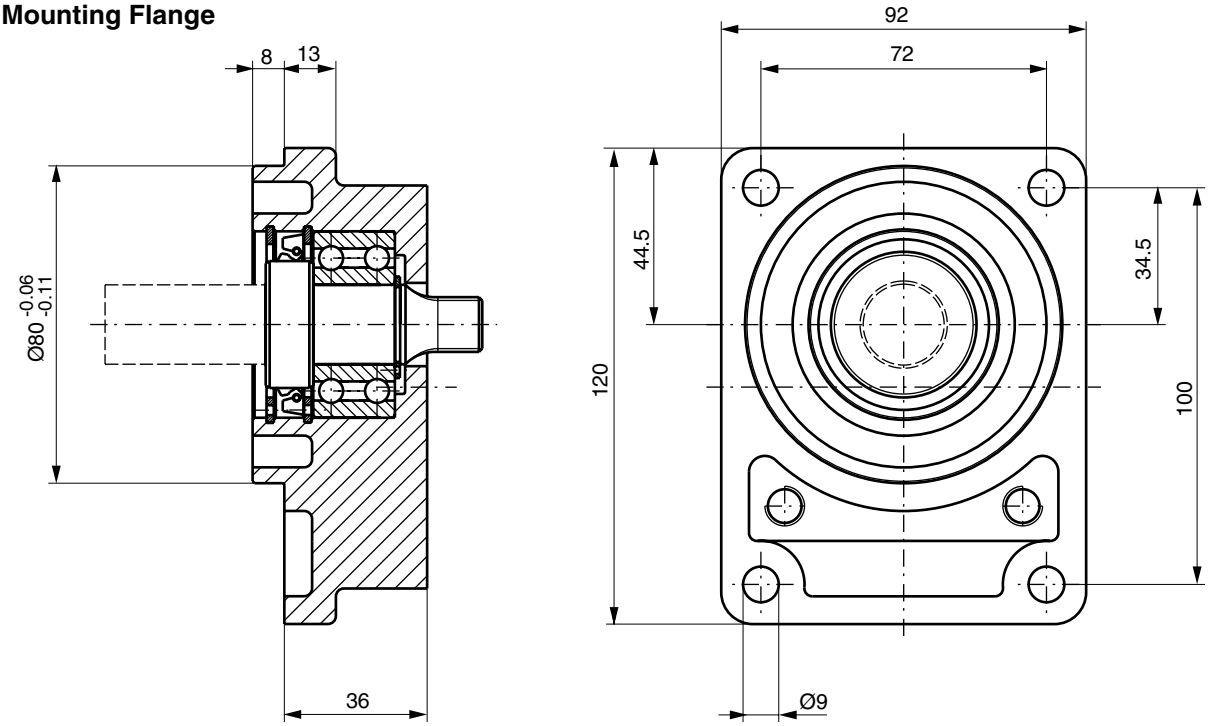
PGP 511 Mounting Flange

Code F4



Outboard Bearing PGP 511

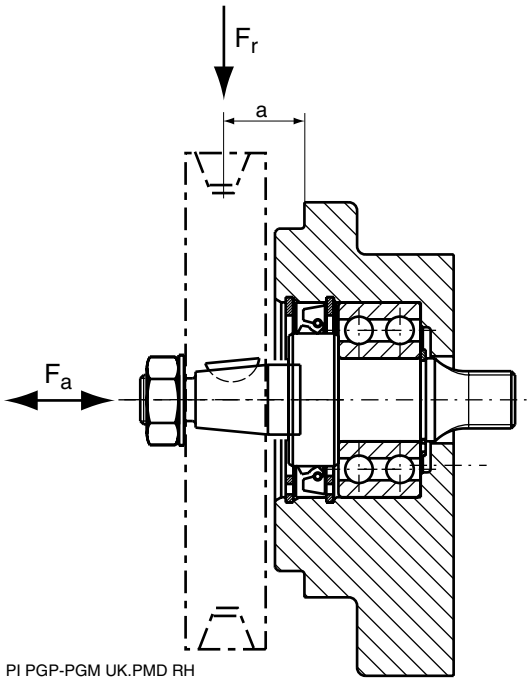
Bearing loads for code F4

Units subject to axial or radial loads, for instance drive with V-belts or gear wheels, must be specified with an outboard bearing.

The diagrams below show the maximum axial or radial loads that can be tolerated referred to a bearing life of L_H = 1000 h.

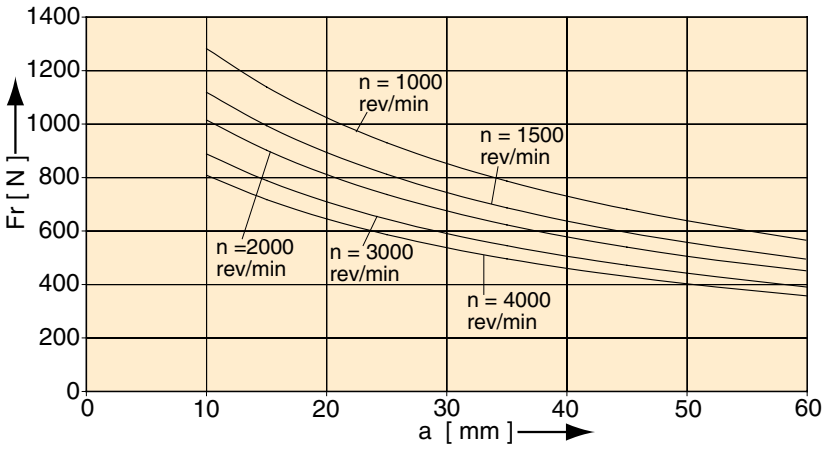
F_r is reduced by 0,7 F_a when axial loading is applied.

Outboard Bearing Code F4

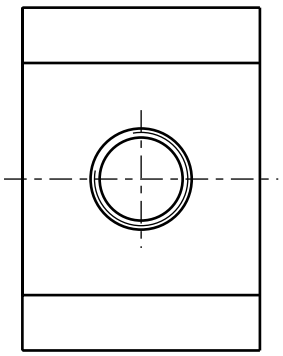


PI PGP-PGM UK.PMD RH

Shaft load for outboard bearings PGP 511

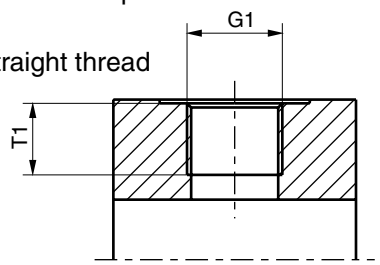


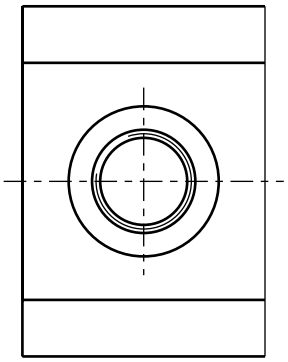
PGP 511 Porting



Code E
British Standard Pipe

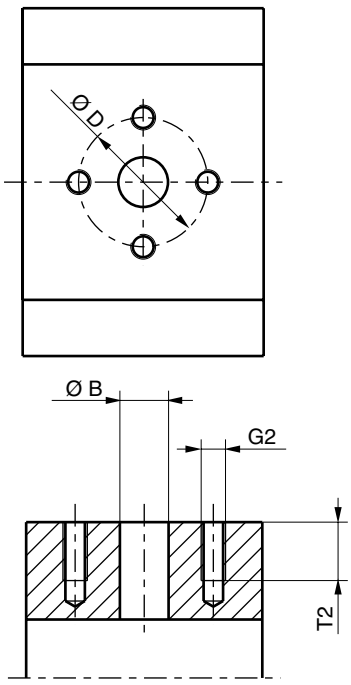
Code G
Metric straight thread





Code D
SAE straight thread

Code L
4-Bolt flange



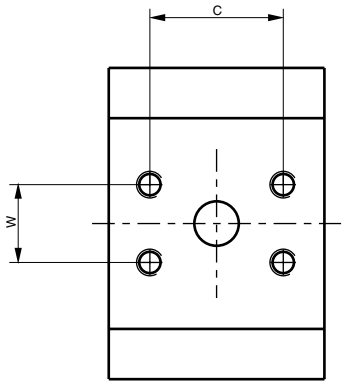
PGP 511

Code	G1	T1
	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
D6	1 5/16-12 UN	19.0
D7	1 5/8-12 UN	19.0
E2	3/8-19 BSP	12.0
E3	1/2-14 BSP	14.0
E4	5/8-14 BSP	16.3
E5	3/4-16 BSP	16.0
E6	1-11 BSP	18.0
E7	1 1/4-11 BSP	20.0
G1	M 14x1.5	12.0
G3	M 18x1.5	12.0
G4	M 22x1.5	14.0
G5	M 26x1.5	16.0
G7	M 30x1.5	12.0

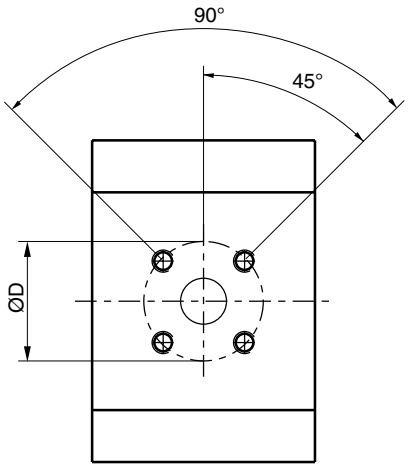
PGP 511 Porting

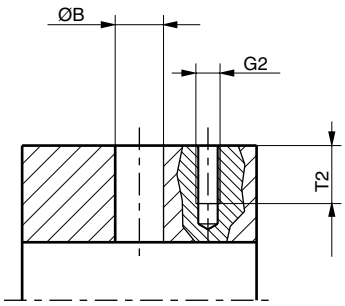
Code N
SAE Split flange

Code P
SAE Split flange
metric thread



Code J
European flange



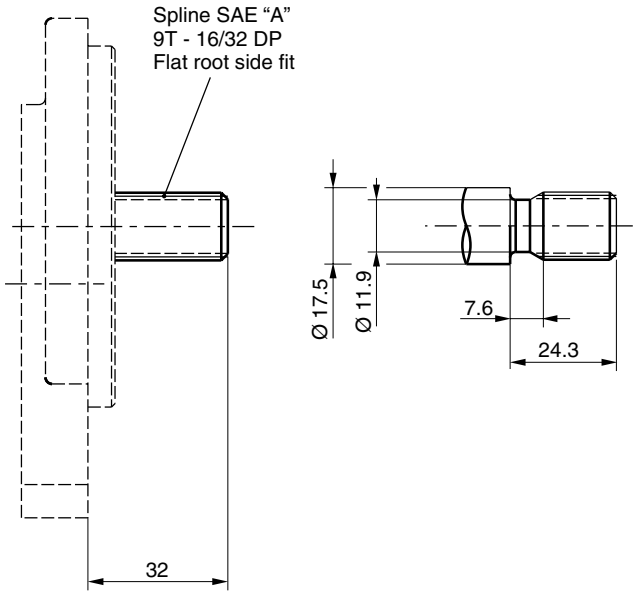


PGP 511

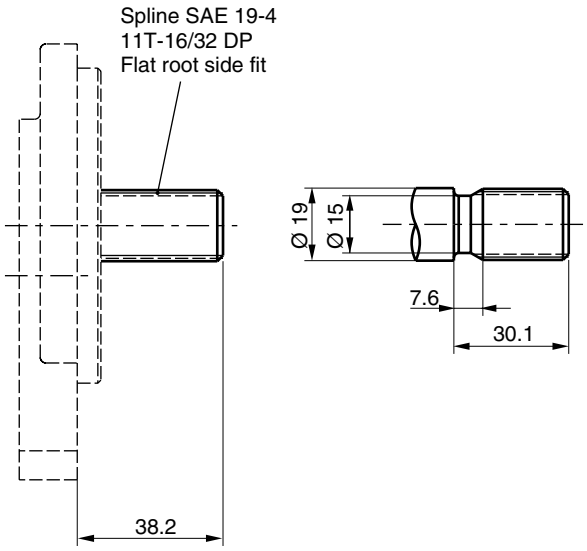
Code	G2	∅ B	∅ D	S	C	W	T2
	Thread	Dimensions					
J3	M6	8.0	30.0				12.0
J4	M6	12.0	30.0				12.0
J5	M6	15.0	35.0				12.5
J6	M8	15.0	40.0				15.0
J7	M6	20.0	40.0				13.0
J8	M8	18.0	55.0				15.0
J9	M8	26.0	55.0				15.0
K1	5/16-18 UNF	19.0		30.48			15.0
K2	M8	19.0		30.48			15.0
K3	M6	19.0		32.00			13.0
K4	M6	16.0		25.15			13.0
L1	M6	13.0	30.0				13.0
L2	M8	19.0	40.0				15.0
N1	5/16-18 UNC	12.7			38.10	17.48	15.0
N2	3/8-16 UNC	19.0			47.63	22.23	14.0
N3	3/8-16 UNC	25.4			52.37	26.19	20.6
N4	7/16-14 UNC	31.8			58.72	30.17	20.6
P1	M8	12.7			38.10	17.48	15.0
P2	M10	19.0			47.63	22.23	20.6
P3	M10	25.4			52.37	26.19	21.4
P4	M10	31.8			58.72	30.17	20.6

PGP 511 Drive Shaft

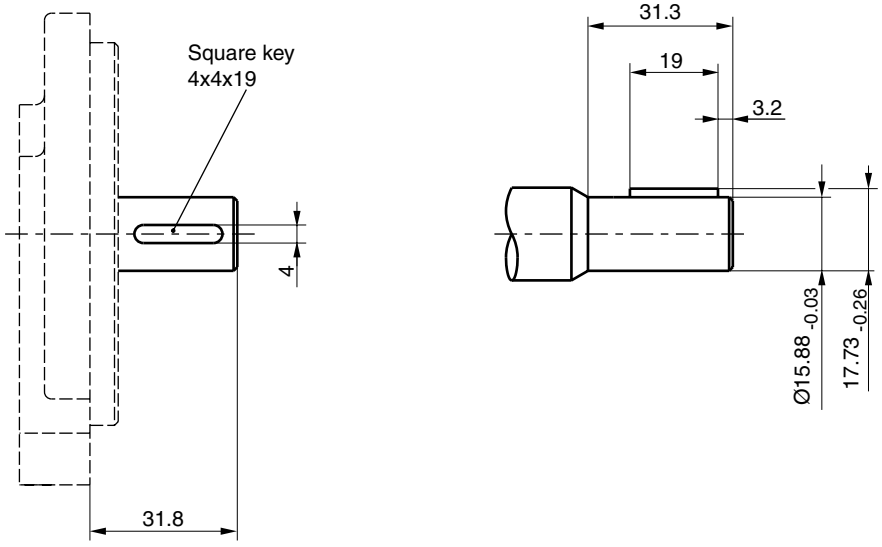
Code A1



Code C1



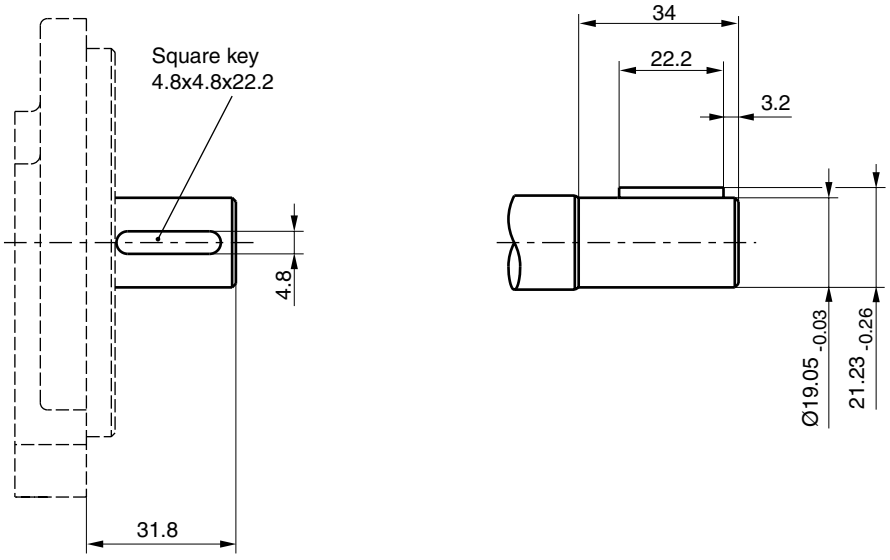
Code K1



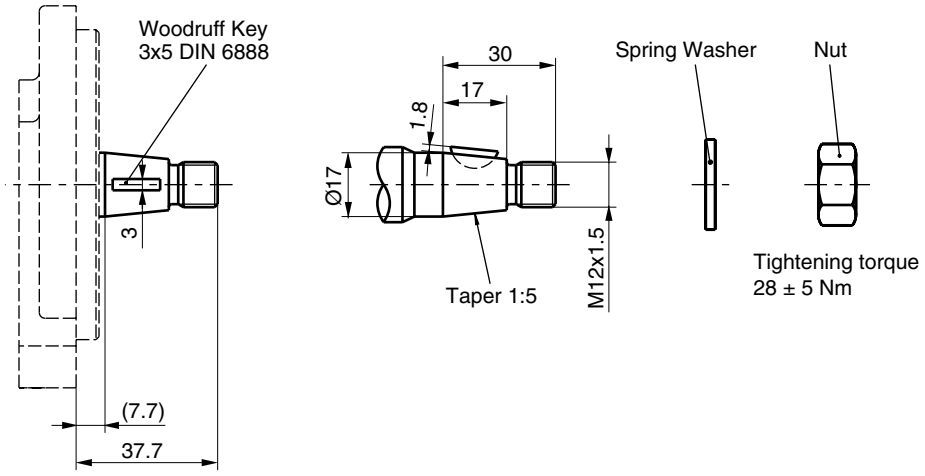
PI PGP-PGM UK.PMD RH

PGP 511 Drive Shaft

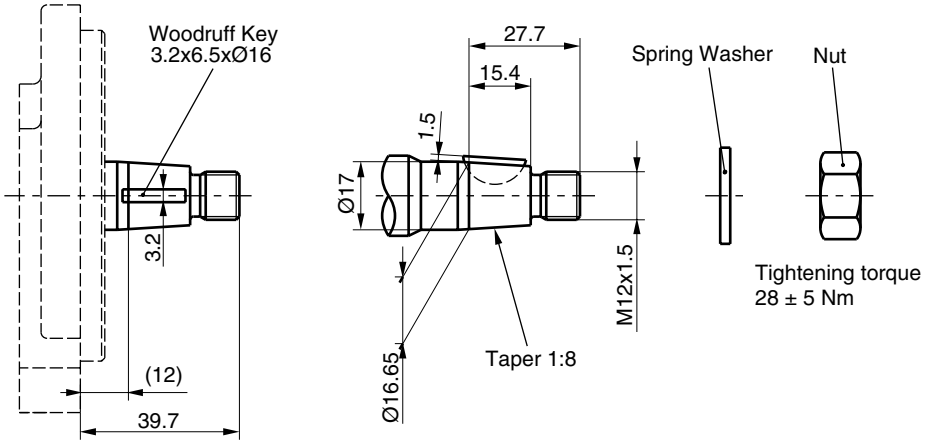
Code L6



Code S1



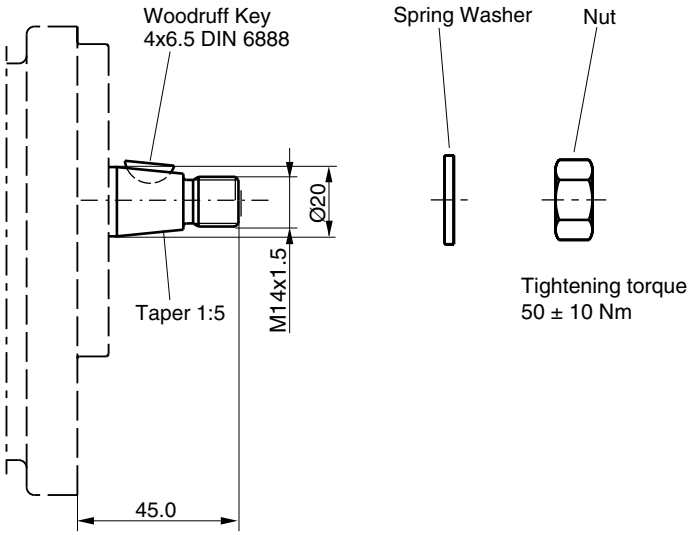
Code S2



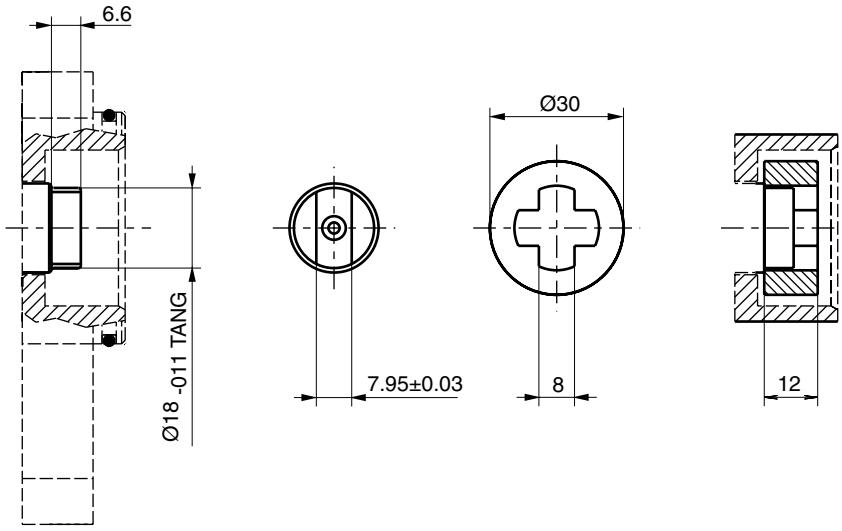
PI PGP-PGM UK.PMD RH

PGP 511 Drive Shaft

Code S8



Code V5



PGP 511 - Shaft Load Capacity

Code	Description		Torque Rating [Nm]
A1	9T, 16/32DP, 32L, SAE“A“	spline	86
C1	11T, 16/32DP, 38.2L, SAE 19-4	spline	184
K1	Ø15.88, 4.0 KEY, no thread, 32L, SAE“A“	parallel	75
L6	Ø19.05, 4.8 KEY, no thread, 32L, SAE 19-1	parallel	145
S1	Ø17.0, 7.7L, 3.0 KEY, M12x1.5	taper 1:5	193
S2	Ø16.65, 12.0L, 3.2 KEY, M12x1.5	taper 1:8	198
S8	Ø20, 9.4L, 4.0 KEY, M14x1.5	taper 1:5	110
V5	8x6.5 short shaft	tang drive	60
	Multiple pump connection shaft		110

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