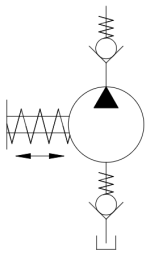
PUMPING ELEMENT

Fixed Delivery | up to 1.07cc/ stroke | 700 bar

Specification/ Technical Data

Max. Operating Pressure	700 bar
Flow Range	0.39…1.54 LPM
Type	Fixed Displacement
Operating Principle	Reciprocating Piston
Min - Max Stroke	300 - 2000 stk/ min
Suction & Delivery Valve	In-built
Body Material	Carbon Steel
Media	Mineral Oil
Oil Temperature Range	+10 to 60°C
Oil Viscosity	ISO VG 46-100
Oil Cleanliness (ISO 4406)	20/18 /15
Assembly	Oil Immersed
Weight (approx.)	0.28 Kg



Pumping elements PA are modules used for delivering fluid flow in radial piston pumps. The modules can be used as individual assemblies to build custom pumps or for replacement in FLUIDIK make pumps. The elements are available with various diameters and strokes, capable of delivering flows up to 1.07 cc/stroke and pressures up to 700 bar.

The elements are most commonly driven by electric motors through a rotating shaft, which is converted into reciprocating motion using an eccentrically mounted bearing. The radial piston pumps are not direction specific and may be used either in CW or CCW directions. These pumps are most popular for high-pressure applications, and their salient features include the ability to design custom flow requirements and multiple port configuration options.

Model	Displacement	Flow	Max Op. Pressure	Weight
PA07	0.27 cc/stroke	0.39 LPM	700 bar	0.28 Kg
PA08	0.35 cc/stroke	0.50 LPM	700 bar	
PA09	0.44 cc/stroke	0.63 LPM	700 bar	
PA10	0.55 cc/stroke	0.79 LPM	550 bar	
PA11	0.66 cc/stroke	0.95 LPM	450 bar	
PA12	0.79 cc/stroke	1.14 LPM	250 bar	
PA13	0.93 cc/stroke	1.34 LPM	200 bar	
PA14	1.07 cc/stroke	1.54 LPM	100 bar	

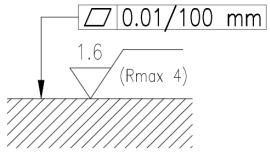
Geometric Displacement @ 7mm stroke
Flow in LPM @ 1440RPM

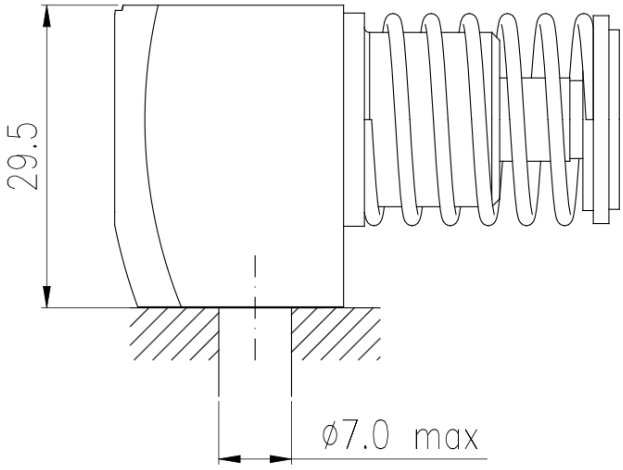
Refer radial piston pump catalogs for HP, RP, RPO and RPX for details on complete pump requirement.

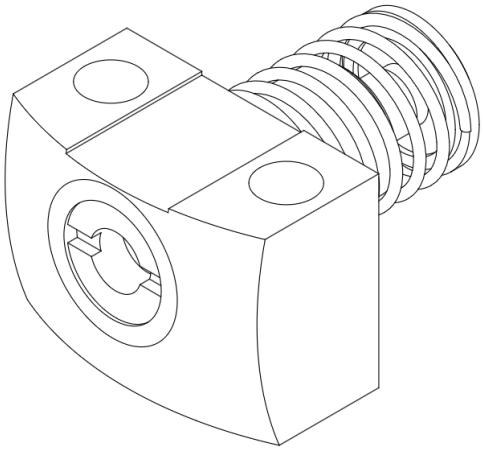
Ordering Information

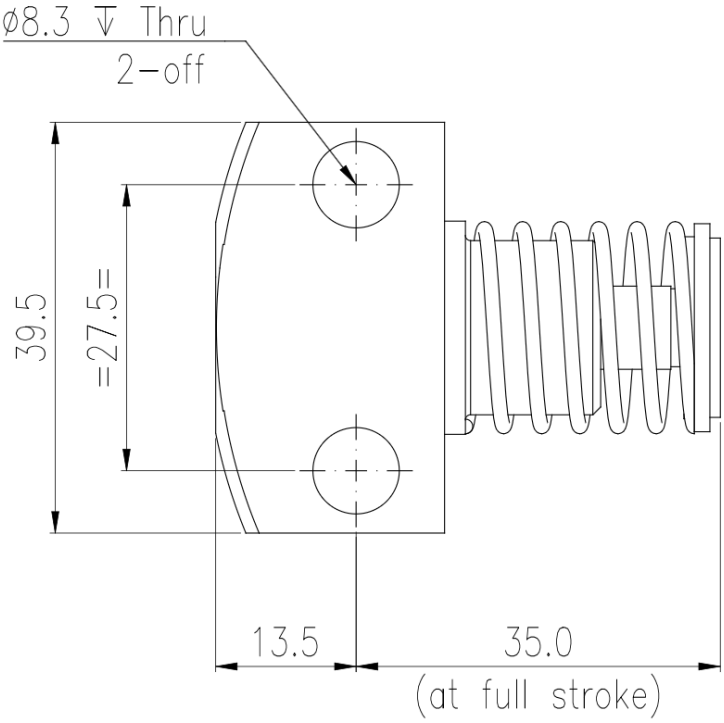
Basic Code	Pumping Element	PA
Size	07…14	07…14
Version		1x

Dimensions





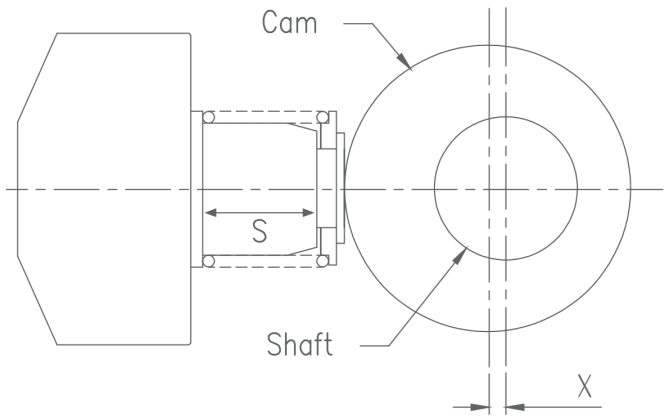




Note:

- Inlet port should be always below oil level to prevent air entrapment and ensure sufficient lubrication to piston and bearing components during operation
- Oil cleanliness will have a impact on the performance, life and efficiency of the pumping element.

Installation



Stroke (S) = 2X
Minimum Stroke = 5mm
Optimal Stroke = 7mm
V_g = cc/ stroke = 0.785 x D^2 x S where,
D is diameter of PA in cm (0.7 to 1.4cm)
S is Stroke in cm

All dimensions in mm

Spare List

SealKit	SSVPA1x

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