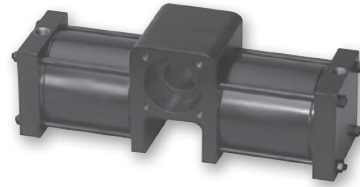


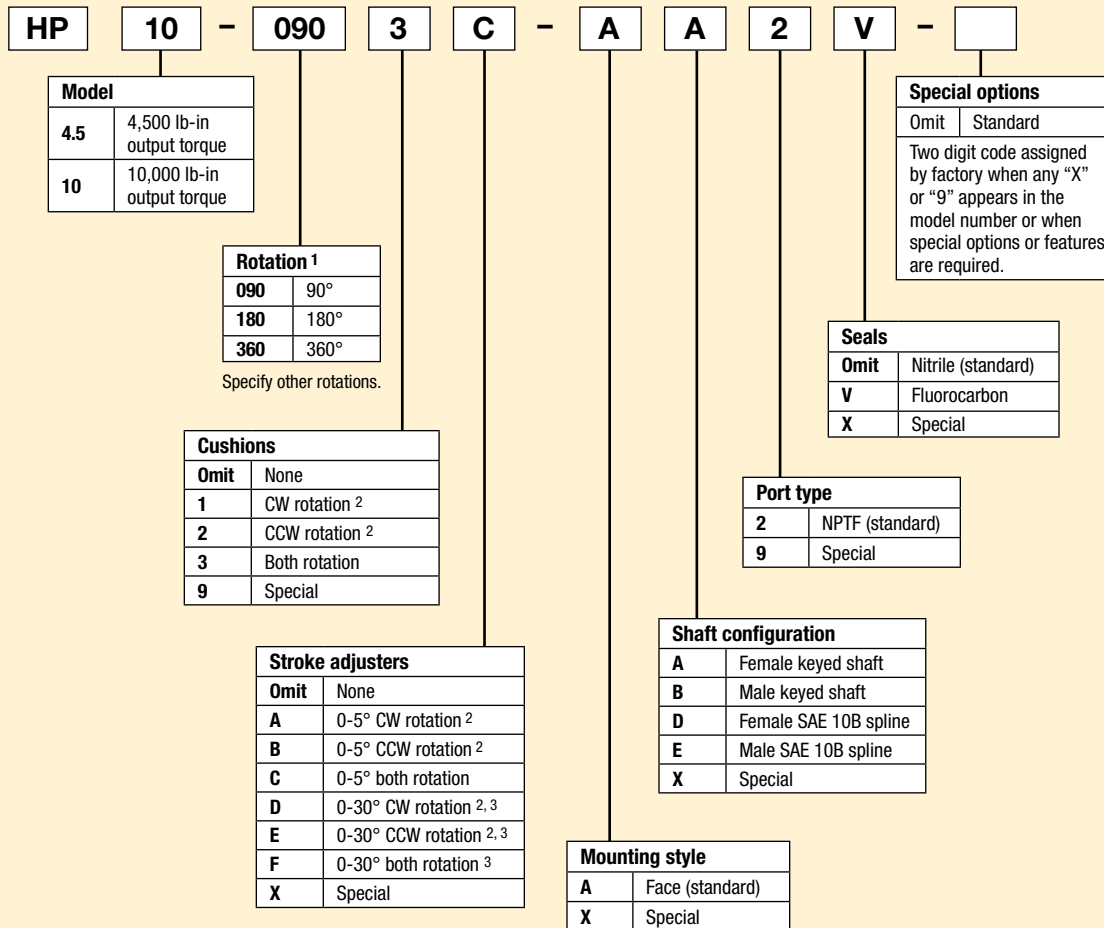
- Rack & pinion rotary actuator
- 2 large bore models
- 3 standard rotations: 90°, 180°, 360°
- Standard output torque at 100 PSIG: 4,500 and 10,000 lb-in
- Large female pinion
- Available with adjustable cushions and stroke adjusters



Operating information

Operating pressure: 100 PSIG
 Temperature range:
 Nitrile seals 0°F to 180°F
 Fluorocarbon seals 0°F to 250°F
 Filtration requirements: 40 micron, dry filtered air
 For technical information see CD

Ordering information



Notes:

- ¹ To obtain equal rotation both sides of midstroke (theoretical 12:00), order 5° longer rotation than standard with stroke adjusters.
- ² Viewed from shaft end.
- ³ Cannot combine with cushions.

Sensors

For sensors see page B294.



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 PTR Series
 HP Series
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Quick reference data

Model	Rotation* (Degrees)	Displacement (Cubic inches)	Weight (lb)	Bore size	Actual torque output at 100 psi (lb-in)	Maximum rotational tolerance (degrees)	Maximum angular backlash (minutes)
4.5	90°	79.93	63	6"	4,500	-0, +2	15
	180°	159.86	75				
	360°	319.72	95				
10	90°	177.64	125	8"	10,000	-0, +2	15
	180°	355.28	147				
	360°	710.56	190				

* To obtain equal rotation both sides of midstroke (theoretical 12:00), order 5° longer rotation than standard with stroke adjusters.

Bearing load capacities and kinetic energy ratings

Model	Radial load (lb) per bearing		Thrust load (lb)		Distance between bearings (in.)	Maximum kinetic energy rating for models based on configuration (in-lb)		
	Dynamic	Static	Dynamic	Static		Standard	Stroke adjusters	Cushion
4.5	2,000	3,000	300	450	2.77	45	45	650
10	2,000	3,000	500	750	3.63	100	100	1450

Seal kit ordering information

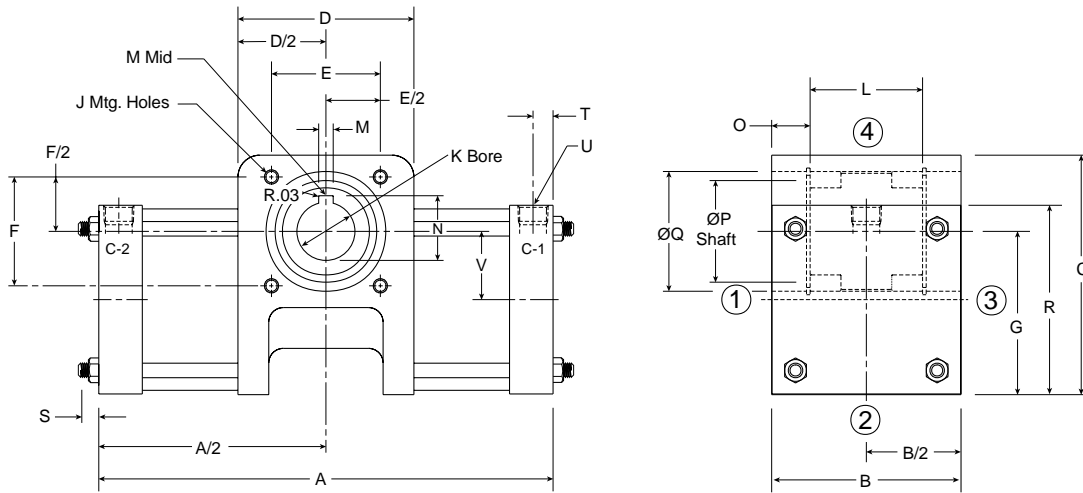
- Standard units are equipped with Nitrile seals.
- Optional seal compounds are available.
- Seal kit part numbers as shown:

<table border="1" style="width: 100%; text-align: left;"> <tr><td style="padding: 2px;">PSK</td></tr> <tr><td style="padding: 2px;">Parker seal kit</td></tr> </table>	PSK	Parker seal kit	—	<table border="1" style="width: 100%; text-align: left;"> <tr><td style="padding: 2px;">HP4.5</td></tr> <tr><td style="padding: 2px;">Base model</td></tr> </table>	HP4.5	Base model	—	<table border="1" style="width: 100%; text-align: left;"> <tr><td style="padding: 2px;">V</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">Omit</td><td style="padding: 2px;">Standard</td></tr> <tr><td style="padding: 2px;">V</td><td style="padding: 2px;">Fluorocarbon</td></tr> <tr><td style="padding: 2px;">N</td><td style="padding: 2px;">Non-Lube</td></tr> </table>	V		Omit	Standard	V	Fluorocarbon	N	Non-Lube
PSK																
Parker seal kit																
HP4.5																
Base model																
V																
Omit	Standard															
V	Fluorocarbon															
N	Non-Lube															

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HP Series
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Standard face mount (A) and female keyed shaft (A) shown



Notes: Pressure on C-1 port gives clockwise rotation.
 Pressure on C-2 port gives counterclockwise rotation.

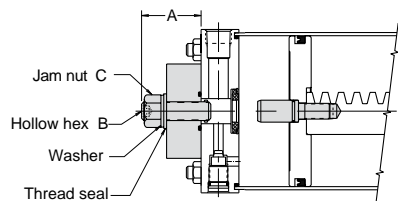
Numbers above represent possible mounting and port positions.

Model number	Rotation (Degrees)	A	B	C	D	E	F	G	J	K
4.5	90°	15-5/8								
	180°	22-1/4	6.525	8-1/4	6.063	3.750	3.750	5.615	7/16-14 x 21/32 DP	2.000 2.003
	360°	33								
10	90°	18								
	180°	26-3/4	8.525	10-1/2	7.813	5.000	5.000	7.265	5/8-11 x 15/16 DP	2.250 2.253
	360°	39-5/8								

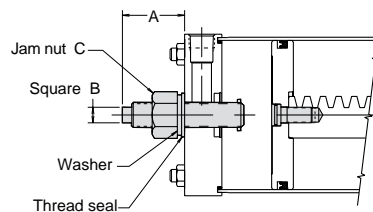
Model number	L	M	N	O	P	Q	R	S	T	U	V
4.5	3-7/8	0.500	2.223	1-5/16	3-1/2	4-1/8	6-1/2	5/8	0.69	3/4 NPTF	2.35
		0.502	2.233								
10	5	0.625	2.525	1-3/4	4-1/2	5-1/4	8-1/2	3/4	0.69	3/4 NPTF	3.00
		0.628	2.535								

Stroke Adjusters (A - F)

5° stroke adjust option with cushion option

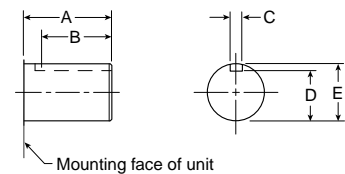


5° or 30° stroke adjust option without cushion option



Cushioned end cap				Non-cushioned end cap				
Model number	(1) Turn Adjust	A		(1) Turn Adjust	A		B	C
		A	B		5°	30°		
4.5	2.5°	2.50	5/8	2.0°	2.00	2.81	3/8	3/4-16
		1.00-14			3.50	15/16		
10	2.0°	2.50	15/16	1.5°	2.56	3.50	15/16	1-1/2-12
		1.50-12						

Male Shaft (B)



Model number	A	B
4.5	2.61	2.38
10	4.38	3.38

Model number	C	D	E
4.5	0.561	1.928	2.249
	0.562	1.933	2.250
10	0.625	1.888	2.249
	0.627	1.893	2.250



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