

**B**  
Actuator Products

# Actuator Products

## Tie Rod Cylinders

### 3MA Series - Economy NFPA Cylinder



- Bore sizes 1-1/2 through 5 inch
- 18 standard mounting styles
- Pressures up to 250 PSIG
- Temperatures -10°F to 165°F
- Aluminum body construction

B6

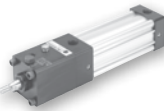
### 4MA / 4ML Series - Flexible NFPA Cylinder



- Bore sizes 1-1/2 through 8 inch
- 20 standard mounting styles
- Pressures up to 250 PSIG
- Temperatures -50°F to 250°F
- Aluminum body construction

B16

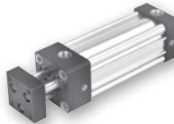
### 3MAJ / 4MAJ - Rodlock Cylinder



- Bore sizes 1-1/2 through 8 inch
- 17 standard mounting styles
- Pressures up to 100 PSIG
- Temperatures -10°F to 165°F
- Aluminum body construction

B40

### 4MNR Series - Non-Rotating Cylinder



- Bore sizes 1-1/8 through 4 inch
- 14 standard mounting styles
- Pressures up to 250 PSIG
- Temperatures -10°F to 165°F
- Aluminum body construction

B58

### P1D Series - ISO 15552 / ISO 6431



- 6 available for maximum flexibility
- Bore sizes 32mm through 200mm
- 10 standard mounting styles
- Pressures up to 145 PSIG
- Temperatures -10°F to 250°F
- Aluminum body construction

B65

## Round Body Cylinders

### SR / SRM / SRD / SRDM Series - Non-Repairable



- Bore sizes 5/16 through 3 inch
- 28 mounting styles
- Pressures up to 250 PSIG
- Temperatures -10°F to 165°F
- Stainless steel body construction

B83

### SRX Series - Position Feedback



- Bore sizes 1-1/16 through 3 inch
- Continuous position feedback
- Pressures up to 150 PSIG
- Temperatures 40°F to 165°F
- Stainless steel body construction

B109

### P1L Series - Repairable



- Bore sizes 20mm through 100mm
- 9 mounting styles
- Pressures up to 145 PSIG
- Temperatures -10°F to 250°F
- Aluminum body construction

B117

### P1A Series - ISO Non-Repairable



- Bore sizes 10mm through 25mm
- 5 mounting styles
- Pressures up to 145 PSIG
- Temperatures -40°F to 302°F
- Stainless steel body construction

B132

### P Series - Repairable



- Bore sizes 1-1/8 through 4 inch
- 4 mounting styles
- Pressures up to 150 PSIG
- Temperatures -10°F to 250°F
- Aluminum body construction

B136

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## Compact Cylinders


### P1Q Series - Economy Compact Cylinder



- Bore sizes 12mm through 100mm
- 4 flexible mounting options
- Pressures up to 10 PSIG
- Temperatures 23°F to 158°F
- Aluminum body construction

**B143**

### P1M Series - Compact Cylinder



- Bore sizes 12mm through 100mm
- 6 mounting options
- Pressures up to 145 PSIG
- Temperatures -4°F to 250°F
- Aluminum body construction

**B151**

### LP / LPM Series - Compact Cylinder




- Bore sizes 9/16 through 4 inch
- 6 mounting styles
- Pressures up to 150 PSIG
- Temperatures -10°F to 200°F
- Aluminum body construction

**B163**

## Guided Cylinders


### P5T Series - Compact Guided



- Bore sizes 16mm through 100mm
- Pressures up to 145 PSIG
- Temperatures 0°F to 250°F
- Aluminum body construction
- Flexible porting: top, rear, side

**B169**

### P5L Series - Guided



- Bore sizes 20mm through 100mm
- Direct mounting
- Pressures up to 145 PSIG
- Temperatures 0°F to 250°F
- Extruded aluminum body construction

**B176**


### HB Series - Heavy Duty Guided



- Bore sizes 1-1/2 through 2-1/2 inch
- Thrust, reach and compact versions available
- Air service pressure up to 250 PSIG, hydraulic service up to 750 PSIG
- Temperatures 0°F to 250°F
- Aluminum body construction
- Rod lock version available

**B202**

### P5E Series - P1D ISO Guided



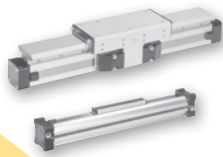
- Bore sizes 32mm through 100mm
- Pressures up to 145 PSIG
- Temperatures 14°F to 165°F
- Aluminum body construction
- Rod lock version available

**B210**

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## Rodless Cylinders

### OSP-P Series - Band Type Rodless



- Bore sizes 10mm through 80mm
- Pressures to max. 8 bar
- Temperatures -10°F to 80°F
- Aluminum body construction

B216

### P1X Series - Band Type Rodless



- 7 bore sizes 16mm through 63mm
- Integral sensor mounting rail
- Pressures 7 to 100 PSIG
- Temperatures 40°F to 140°F
- Aluminum body construction

B234

### P1Z Series - Magnetically Coupled Rodless



- 3 bore sizes 16mm, 20mm & 32mm
- Pressures 29 to 100 PSIG
- Temperatures 15°F to 140°F
- Stainless steel body construction

B246

### GDL Series - Rails & Cassettes



- 6 sizes available
- Speed up to 10m/s (33 ft/s)
- Temperatures -10°C to 80°C
- Aluminum alloy rail
- Aluminum body construction

B258

## Rotary Actuators

### PV Series - Vane Rotary



- 8 model sizes
- Single or double vane models
- Pressures to 150 PSIG
- Temperatures 30°F to 250°F
- 7 to 1800 lb-in output torque

B263

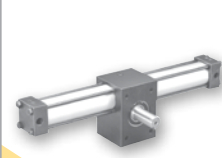
### PRN(A) Series - Vane Rotary



- 5 miniature and 4 standard models
- Temperatures -23°F to 176°F
- 1.33 to 2355 in-lb torque at 100 PSIG

B267

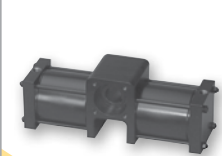
### PTR Series - Rack & Pinion Rotary



- Bore sizes 1 through 3-1/4 inch
- Pressures to 250 PSIG
- Temperatures 0°F to 250°F
- 39 to 2281 lb-in output torque

B272

### HP Series - Large Rack & Pinion Rotary



- 2 large bore models
- 3 standard rotations
- Pressures to 100 PSIG
- Temperatures 0°F to 250°F
- 4500 and 10,000 lb-in output at 100 PSIG

B275

### P1V-S Series - Air Motors



- Power from 20 through 1200 watts
- Speeds 5 to 24,000 RPM
- Pressures to max. 7 bar
- Temperatures -30°C to 100°C

B278

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## Automation Products

### Grippers



- Grip forces to 44,000N
- Parallel or Angular
- 2 or 3 jaw
- Pneumatic or electric
- Temperature to 300°F
- Magnetic piston standard
- Clean room

B281

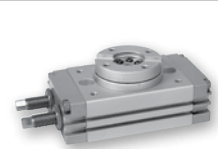
### Slide Tables



- 6 bore sizes: 6mm to 25mm
- Strokes to 150mm
- Integration of linear rail and dual bore cylinder
- Available with adjustable stroke and shock absorbers
- Magnetic piston standard

B314

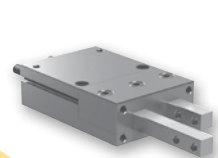
### Rotary Tables



- 4 bore sizes: 16mm to 32mm
- Dual rack and pinion with integrated bearing
- Adjustable rotation standard 0 to 190 degrees
- Available with optional shock absorbers

B326

### Escapements

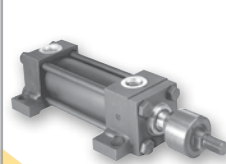


- 3 bore sizes: 14mm to 27mm
- Locking key ensures part separation and eliminates jams
- Adjustable retract stops
- Sealed design repels contaminants
- Dowel holes in body for precision applications

B328

## Actuator Accessories

### Linear Alignment Couplers



- 12 standard thread sizes
- Maximum reliability for trouble-free operation, long life and lower operating costs
- Increased cylinder life by reducing wear on piston and rod bearings
- Stainless steel versions available

B335

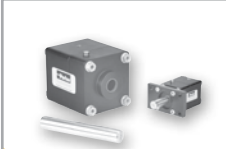
### 4TK Series - Air Oil Tanks



- 6 standard bore sizes
- Lightweight aluminum / fiberglass design
- 2 fluid flow baffles reduce agitation and aeration
- 8 standard mounting styles

B336

### PRL Series - Stand Alone Rodlock



- 5 different sizes
- Large holding forces
- 2 different mounting styles
- Case-hardened rod material available

B337

## Electronic Sensors

### Sensors



- Solid state
- Reed
- NAMUR
- Proximity

B339

## Shock Absorbers

### Shock Absorbers



- Miniature - self-compensating
- Heavyweight - soft contact and self-compensating
- Miniature - soft contact and self-compensating
- Magnum series - adjustable
- Heavy - self-compensating
- Heavy - adjustable

B361

## SR Series

- 304 stainless steel cylinder body, non repairable construction
- Aluminum heads and caps, Delrin heads and caps are optional
- 12 bore sizes — 5/16" through 3"  
(see dimensional tables for SRM and SRD/SRDM exclusions).
- Stainless steel piston rods are standard up to 1.50" bore
- 28 standard mounting styles (not all available on SRM and SRD/SRDM – see table on following page)
- Single and double acting
- Adjustable cushions optional on both ends



### Operating information

Operating pressure: 250 PSIG (17 bar) for SR and SRM  
 100 PSIG (7 bar) for SRD/SRDM

Temperature range: -10°F to 165°F (-23°C to 74°C) for SR  
 14°F to 140°F (-10°C to 60°C) for SRM  
 32°F to 160°F (0°C to 71°C) for SRD/SRDM

Filtration requirements: 40 micron, dry filtered air

### Ordering information

<b>1.06</b>	<b>C</b>	□	<b>D</b>	<b>SR</b>	<b>B</b>	<b>V</b>	□	□	□	<b>C</b>	<b>2.00</b>																																																																										
<table border="1"> <tr><th colspan="2">Bore Size <sup>1</sup></th></tr> <tr><td>.31</td><td>5/16"</td></tr> <tr><td>.44</td><td>7/16"</td></tr> <tr><td>.56</td><td>9/16"</td></tr> <tr><td>.75</td><td>3/4"</td></tr> <tr><td>.88</td><td>7/8"</td></tr> <tr><td>1.06</td><td>1-1/16"</td></tr> <tr><td>1.25</td><td>1-1/4"</td></tr> <tr><td>1.50</td><td>1-1/2"</td></tr> <tr><td>1.75</td><td>1-3/4"</td></tr> <tr><td>2.00</td><td>2"</td></tr> <tr><td>2.50</td><td>2-1/2"</td></tr> <tr><td>3.00</td><td>3"</td></tr> </table>	Bore Size <sup>1</sup>		.31	5/16"	.44	7/16"	.56	9/16"	.75	3/4"	.88	7/8"	1.06	1-1/16"	1.25	1-1/4"	1.50	1-1/2"	1.75	1-3/4"	2.00	2"	2.50	2-1/2"	3.00	3"	<table border="1"> <tr><th colspan="2">Series</th></tr> <tr><td><b>SR</b></td><td>Standard cylinder</td></tr> <tr><td><b>SRM</b></td><td>With magnetic piston</td></tr> <tr><td><b>SRD</b></td><td>With delrin caps</td></tr> <tr><td><b>SRDM</b></td><td>With delrin caps and magnetic piston</td></tr> </table>	Series		<b>SR</b>	Standard cylinder	<b>SRM</b>	With magnetic piston	<b>SRD</b>	With delrin caps	<b>SRDM</b>	With delrin caps and magnetic piston	<table border="1"> <tr><th colspan="2">Stroke</th></tr> <tr><td>Specify in inches.</td></tr> </table>	Stroke		Specify in inches.	<table border="1"> <tr><th colspan="2">Cushion Cap <sup>2</sup></th></tr> <tr><td>Use "C" only when cushion cap is required.</td></tr> </table>	Cushion Cap <sup>2</sup>		Use "C" only when cushion cap is required.	<table border="1"> <tr><th colspan="2">Non-Standard Piston Rod</th></tr> <tr><td>Use "3" only when special piston rod end is required. Specify CC, LE and A Dimensions (See next page.)</td></tr> </table>	Non-Standard Piston Rod		Use "3" only when special piston rod end is required. Specify CC, LE and A Dimensions (See next page.)	<table border="1"> <tr><th colspan="2">Non-Standard Rod</th></tr> <tr><td>Specify Y for stainless steel piston rod. Stainless steel is standard on all bore sizes up to and including 1.50" Bore.</td></tr> </table>	Non-Standard Rod		Specify Y for stainless steel piston rod. Stainless steel is standard on all bore sizes up to and including 1.50" Bore.	<table border="1"> <tr><th colspan="2">Special</th></tr> <tr><td>Use "S" only if special modifications are required, except piston rod end.</td></tr> </table>	Special		Use "S" only if special modifications are required, except piston rod end.	<table border="1"> <tr><th colspan="2">Piston</th></tr> <tr><td><b>Blank</b></td><td>No bumpers</td></tr> <tr><td><b>B</b></td><td>With bumpers <sup>3</sup></td></tr> </table>	Piston		<b>Blank</b>	No bumpers	<b>B</b>	With bumpers <sup>3</sup>	<table border="1"> <tr><th colspan="2">Seals</th></tr> <tr><td><b>Blank</b></td><td>Standard seals</td></tr> <tr><td><b>V</b></td><td>Fluorocarbon seals <sup>4</sup></td></tr> <tr><td><b>W</b></td><td>Rod wiper</td></tr> </table>	Seals		<b>Blank</b>	Standard seals	<b>V</b>	Fluorocarbon seals <sup>4</sup>	<b>W</b>	Rod wiper	<table border="1"> <tr><th colspan="2">Cushion Head <sup>2</sup></th></tr> <tr><td>Use "C" only when cushion head is required.</td></tr> </table>	Cushion Head <sup>2</sup>		Use "C" only when cushion head is required.	<table border="1"> <tr><th colspan="2">Double Rod</th></tr> <tr><td>Use "K" only when double rod is required. Available on DX and DXH mounting only.</td></tr> </table>	Double Rod		Use "K" only when double rod is required. Available on DX and DXH mounting only.	<table border="1"> <tr><th colspan="2">Mounting <sup>1,5</sup></th></tr> <tr><td>N, NR, NRP, P, R, RP, D, DP, DXP, DX, DXH, A, RA, AP, AR, BRN, BRR, BFD, BRD, BFN, BFR, TRN, TRR, TFD, TRD, TFN or TFR.</td></tr> </table>	Mounting <sup>1,5</sup>		N, NR, NRP, P, R, RP, D, DP, DXP, DX, DXH, A, RA, AP, AR, BRN, BRR, BFD, BRD, BFN, BFR, TRN, TRR, TFD, TRD, TFN or TFR.
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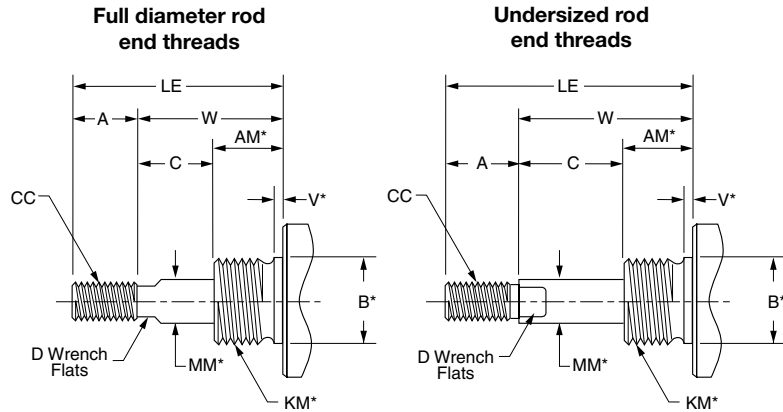
<sup>1</sup> Bore sizes and mounting styles are limited by series. See table on next page for availability.  
<sup>2</sup> Cushions not available on SRD/SRDM series or KDX mounts.  
<sup>3</sup> Bumpers may increase cylinder length. Please reference catalog 0900P-E, page D37 for adders.  
<sup>4</sup> Fluorocarbon seals not available on SRM or SRDM series.  
<sup>5</sup> TRD mount not available with cushions.

**Sensors**  
 For sensors see page B339.

For ordering purposes, when special options or common modifications are requested, the factory will assign a sequential part number in place of the model number.

### Non-Standard Rods

For non-standard rod dimensions, or undersized rod end threads, put a "3" in model number and describe the rod using the letters shown in the drawing. Specify CC, LE and A dimensions. LE is measured in retracted position.

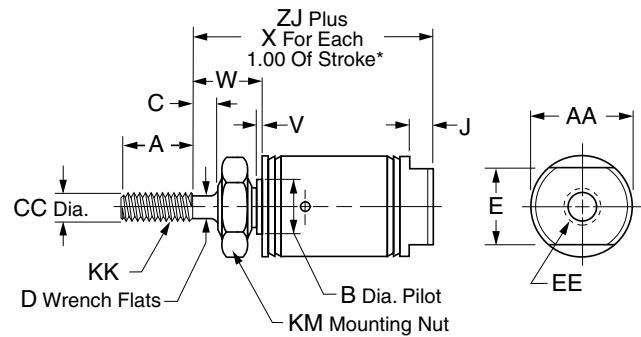


\* Requires an S designation in model number.

### Mounting Style N

Nose mount, spring return

Bore size	SR	SRM	Std. strokes (in)	Max. stroke (in)	SS rod std
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓
7/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	✓
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
7/8"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/4"	•	•	1/2, 1, 2, 3, 4	6	✓
1-1/2"	•	•	1/2, 1, 2, 3, 4	6	✓
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	
2"	•	•	-	4	



Bore size	ZJ															
	A	AA	B	C	CC	D	E	EE	J	KK	KM	V	W	X	SR	SRM
5/16"	0.38	0.36	-	-	0.125	-	0.36	#10-32	-	#5-40 UNC	1/4-28	0	0.25	0.75**	1.12	-
7/16"	0.50	0.50	0.374	-	0.188	-	0.38	#10-32	0.19	#10-32 UNF	3/8-24	0.05	0.31	0.94**	1.31	-
9/16"	0.50	0.62	0.437	-	0.188	-	0.50	#10-32	0.19	#10-32 UNF	7/16-20	0.06	0.38	1.62	1.53	1.76
3/4"	0.50	0.81	0.499	-	0.250	-	0.62	1/8 NPTF	0.19	1/4-28 UNF	1/2-20	0.09	0.44	1.69	1.50	1.75
7/8"	0.50	0.93	0.624	-	0.250	-	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.09	0.50	1.56	1.84	-
1-1/16"	0.50	1.12	0.624	0.12	0.312	0.25	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	0.09	0.69	1.56	2.06	2.31
1-1/4"	0.75	1.34	0.749	0.25	0.437	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.81	2.66	2.78
1-1/2"	0.75	1.56	0.749	0.25	0.437	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.69	2.44	2.69
1-3/4"	0.88	1.84	1.031	0.38	0.500	7/16	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	0.09	0.75	2.0	2.97	3.09
2"	0.88	2.08	1.374	0.38	0.625	0.50	1.25	1/4 NPTF	0.31	1/2-20 UNF	1-1/4-120.12	1.19	-	▲	▲	

▲ SR: 5.41" for 1" stroke, 7.41" for 2" stroke, 8.66" for 3" stroke, 11.59" for 4" stroke.  
 SRM: 5.66" for 1" stroke, 7.66" for 2" stroke, 8.91" for 3" stroke, 11.84" for 4" stroke.

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract a half inch.

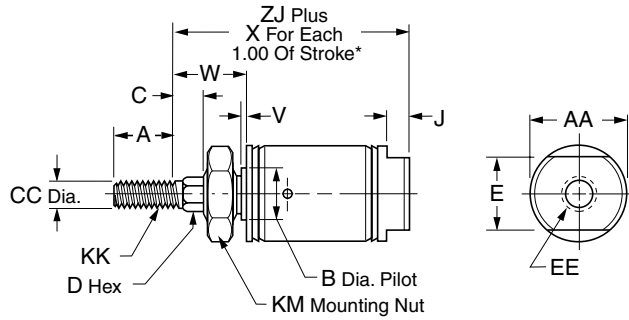
\*\* For each 0.50" of stroke



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

**Mounting Style NR**

Nose mount, spring return, hex rod



Bore size	SR	SRM	Std. stroke (in)	Max.. stroke (in)	SS rod std
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
7/8"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/4"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1/2, 1, 2, 3, 4	6	✓
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	

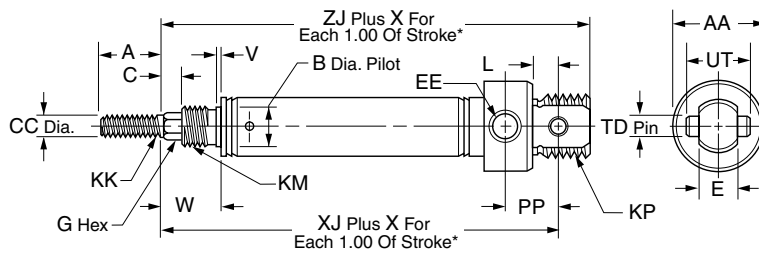
Bore size	A	AA	B	C	CC	D	E	EE	J	KK	KM	V	W	X	ZJ	
															SR	SRM
7/16"	0.50	-	0.374	0.25	0.188	3/16	-	#10-32	0.19	#10-32 UNF	3/8-24	0.05	0.56	0.94	1.56	-
9/16"	0.50	-	0.437	0.25	0.188	3/16	-	#10-32	0.19	#10-32 UNF	7/16-20	0.06	0.62	1.62	1.78	2.03
3/4"	0.50	-	0.499	0.25	0.250	1/4	-	1/8 NPTF	0.19	1/4-28 UNF	1/2-20	0.09	0.69	1.69	1.75	2.00
7/8"	0.50	-	0.624	0.25	0.250	1/4	-	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.09	0.75	1.56	2.09	-
1-1/16"	0.50	1.12	0.624	0.25	0.312	3/8	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	0.09	0.75	1.56	2.19	2.44
1-1/4"	0.88	1.34	0.749	0.25	0.437	7/16	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.81	2.66	2.78
1-1/2"	0.88	1.56	0.749	0.38	0.437	7/16	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	1.00	1.69	2.56	2.81
1-3/4"	0.88	1.84	1.031	0.38	0.500	1/2	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	0.09	1.12	2.0	3.03	3.15

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



**Mounting Style NRP**

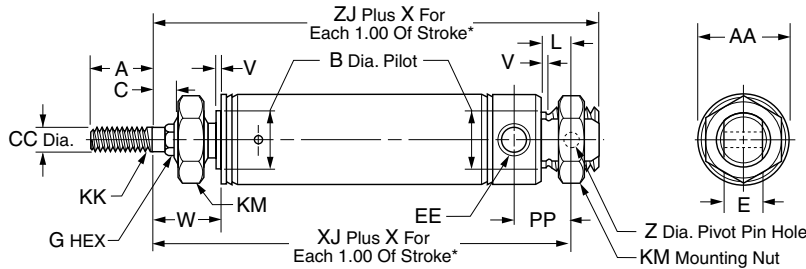
Pivot & nose mount, spring return, hex rod



**Bore sizes**

7/16" *
3/4"

\* No mounting nuts



**Bore sizes**

9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"

\* No mounting nuts

**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SW/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.374	0.25	0.188	0.31	#10-32
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.25	0.188	0.31	#10-32
3/4"	•	•	1, 2, 3, 4	6	✓	0.50	0.86	0.499	0.25	0.250	0.38	1/8 NPTF
7/8"	•		1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.25	0.250	0.38	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.50	1.12	0.624	0.25	0.312	0.38	1/8 NPTF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.88	1.34	0.749	0.25	0.437	0.50	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	0.88	1.56	0.749	0.38	0.437	0.62	1/8 NPTF
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6		0.88	1.84	1.031	0.38	0.500	0.62	1/4 NPTF

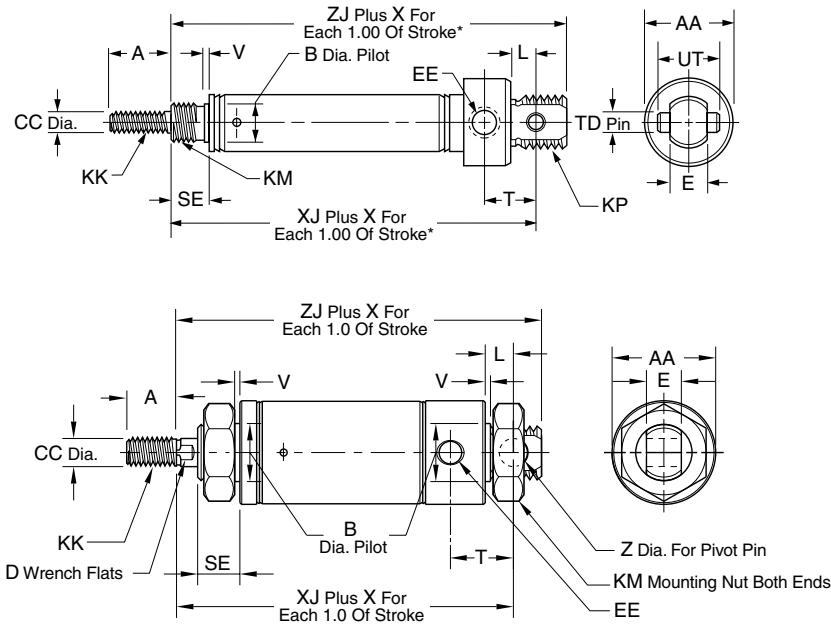
Bore size												XJ		ZJ		
	G HEX	KK	KM	KP	L	PP	TD	UT	V	W	X	SR	SRM	Z	SR	SRM
7/16"	3/16	#10-32 UNF	3/8-24	7/16-20 UNF	0.25	0.44	0.156	0.50	0.05	0.56	0.94	2.00	-	-	2.25	-
9/16"	3/16	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.38	-	-	0.06	0.62	1.62	2.06	2.31	0.157	2.25	2.50
3/4"	1/4	1/4-28 UNF	1/2-20	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.69	1.69	2.53	2.78	-	2.81	3.06
7/8"	1/4	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.75	1.56	2.72	-	-	3.00	-
1-1/16"	3/8	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.75	1.56	2.78	3.03	-	3.06	3.31
1-1/4"	7/16	7/16-20 UNF	3/4-16	-	0.41	0.78	0.251	-	0.09	0.88	1.81	3.38	3.50	0.251	3.78	3.91
1-1/2"	7/16	7/16-20 UNF	3/4-16	-	0.50	0.81	0.375	1.00	0.09	1.00	1.69	3.25	3.50	-	3.62	3.87
1-3/4"	1/2	1/2-20 UNF	1-14	-	0.50	1.12	0.376	0.62	0.09	1.12	2.0	4.09	4.21	0.376	4.59	4.71

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



### Mounting Style P

Pivot mount, spring return



Bore sizes
5/16" *
7/16"
3/4"

\* No mounting nuts

Bore sizes
9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"
2" *

\* No mounting nuts

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
5/16"	•		1/2, 1, 1-1/2, 2, 3, 4	4	✓	0.38	0.39	-	0.125	-	0.25	#10-32
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.374	0.188	-	0.31	#10-32
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.188	-	0.31	#10-32
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.86	0.499	0.250	-	0.38	1/8 NPTF
7/8"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	-	0.38	1/8 NPTF
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	0.38	1/8 NPTF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	0.50	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	0.75	1.56	0.749	0.437	0.38	0.62	1/8 NPTF
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	✓	0.88	1.84	1.031	0.500	7/16	0.62	1/4 NPTF
2"	•	•	-	4	✓	0.88	2.08	1.374	0.625	0.50	0.75	1/4 NPTF

Bore size	KK	KM	KP	L	SE	T	TD	UT	V	X	XJ			ZJ	
											SR	SRM	Z	SR	SRM
5/16"	#5-40 UNC	3/8-24	-	0.34	0.25	0.34	-	-	-	0.75	1.52	-	0.125	1.68	-
7/16"	#10-32 UNF	3/8-24	7/16-20 UNF	0.25	0.31	0.44	0.156	0.50	0.05	0.94	1.75	-	-	2.00	-
9/16"	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.38	0.38	-	-	0.06	1.62	1.81	2.06	0.157	2.00	2.25
3/4"	1/4-28 UNF	1/2-20	5/8-18 UNF	0.34	0.44	0.62	0.250	0.75	0.09	1.69	2.28	2.53	-	2.56	2.81
7/8"	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.50	0.62	0.250	0.75	0.09	1.56	2.47	-	-	2.75	-
1-1/16"	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.50	0.62	0.250	0.75	0.09	1.56	2.66	2.91	-	2.94	3.19
1-1/4"	7/16-20 UNF	3/4-16	-	0.41	0.63	0.78	-	-	0.09	1.81	3.38	3.91	0.251	3.78	3.50
1-1/2"	7/16-20 UNF	3/4-16	-	0.50	0.63	0.81	0.375	1.00	0.09	1.81	3.12	3.37	-	3.50	3.75
1-3/4"	1/2-20 UNF	1-14	-	0.50	0.75	1.12	-	-	0.09	2.0	4.03	4.15	0.376	4.53	4.65
2"	1/2-20 UNF	1-1/4-12	-	0.56	0.81	1.03	-	-	0.12	-	■	*	-	▲	◆

■ 6.34" for 1" stroke, 8.34" for 2" stroke, 9.59" for 3" stroke, 12.53" for 4" stroke\*

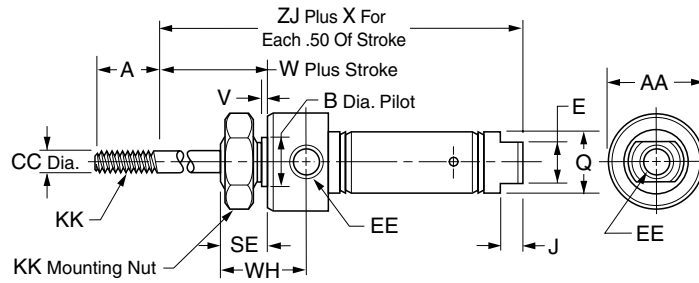
▲ 6.78" for 1" stroke, 8.78" for 2" stroke, 10.03" for 3" stroke, 12.97" for 4" stroke\*

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract a half inch.

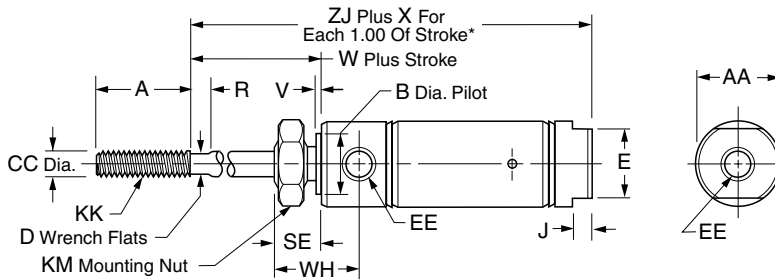


### Mounting Style R

Nose mount, spring extended



Bore sizes
5/16"
7/16"
3/4"



Bore sizes
9/16"
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *

\* No mounting nuts

Bore size	Series		Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E
	SR	SRM									
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3	4	✓	0.38	0.50 SQ.	-	0.125	-	-
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.74	0.437	0.188	-	0.38
9/16"	•	•	1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.62	0.437	0.188	-	0.50
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.50	0.86	0.624	0.250	-	-
7/8"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	-	-
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	-
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	-
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.437	0.38	0.88
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6		0.88	1.84	1.031	0.500	7/16	-
2"	•	•	-	4		0.88	2.08	1.374	0.625	0.50	-

Bore size	Series											ZJ	
	EE	J	KK	KM	Q	R	SE	V	W	WH	X	SR	SM
5/16"	#10-32	-	#5-40 UNC	3/8-24	0.36	-	0.31	-	0.31	0.47	1.25	1.49	-
7/16"	#10-32	0.19	#10-32 UNF	7/16-20	0.50	-	0.38	0.05	0.38	0.72	1.44	1.94	-
9/16"	#10-32	0.19	#10-32 UNF	7/16-20	0.62	-	0.38	0.05	0.38	0.78	2.62	2.00	2.25
3/4"	1/8 NPTF	-	1/4-28 UNF	5/8-18	0.81	-	0.50	0.09	0.50	0.97	2.69**	2.31	2.56
7/8"	1/8 NPTF	-	1/4-28 UNF	5/8-18	-	-	0.50	0.09	0.50	0.97	2.56	2.31	-
1-1/16"	1/8 NPTF	-	5/16-24 UNF	5/8-18	-	0.12	0.50	0.09	0.62	1.06	2.81	2.62	2.87
1-1/4"	1/8 NPTF	-	7/16-20 UNF	3/4-16	-	0.25	0.62	0.09	0.88	1.38	2.81	3.47	3.60
1-1/2"	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	-	0.25	0.62	0.09	0.88	1.25	3.00	3.19	3.44
1-3/4"	1/4 NPTF	-	1/2-20 UNF	1-14	-	-	0.75	0.09	1.06	1.63	3.0	4.03	4.15
2"	1/4 NPTF	-	1/2-20 UNF	1-1/4-12	-	0.38	0.81	0.12	1.19	1.47	-	▲	◆

▲ 7.11" for 1" stroke, 10.11" for 2" stroke, 12.34" for 3" stroke, 16.34" for 4" stroke.\*

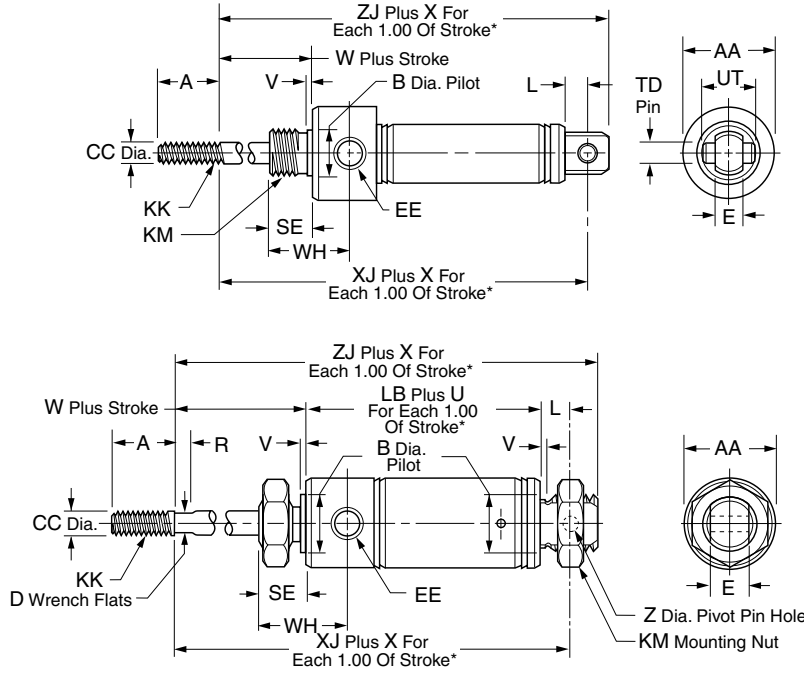
\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

\*\* For each 1.00" of stroke.



**Mounting Style RP**

Pivot and nose mount, spring extended



Bore sizes
5/16" *
7/16"
3/4"

\* No mounting nuts

Bore sizes
9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"
2" *

\* No mounting nuts

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE	KK
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3	4	✓	0.38	0.50 SQ.	–	0.125	–	0.25	#10-32	#5-40 UNC
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.74	0.437	0.188	–	0.31	#10-32	#10-32 UNF
9/16"	•	•	1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.62	0.437	0.188	–	0.31	#10-32	#10-32 UNF
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.50	0.86	0.624	0.250	–	0.38	1/8 NPTF	1/4-28 UNF
7/8"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	–	0.38	1/8 NPTF	1/4-28 UNF
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	0.38	1/8 NPTF	5/16-24 UNF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	0.50	1/8 NPTF	7/16-20 UNF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.437	0.38	0.62	1/8 NPTF	7/16-20 UNF
2"	•	•	–	4		.88	2.08	1.374	0.625	0.50	0.75	1/4 NPTF	1/2-20 UNF

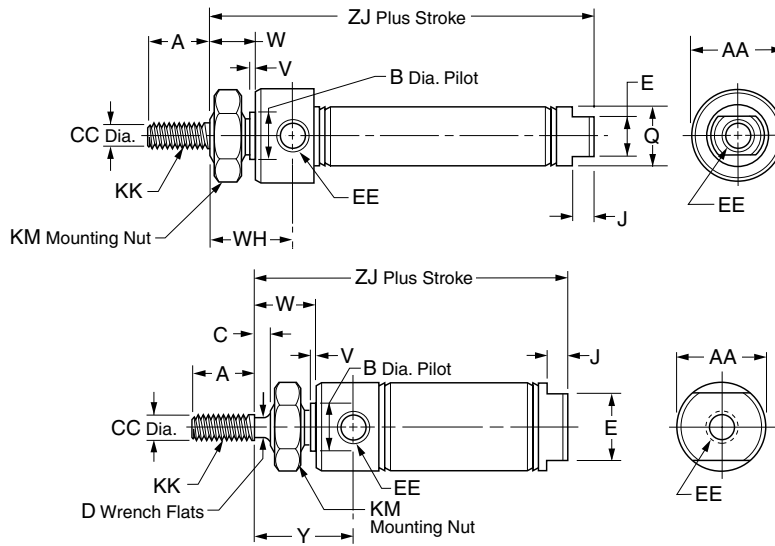
Bore size	KM	L	LB	R	SE	TD	U	UT	V	W	WH	X	XJ			ZJ	
													SR	SRM	Z	SR	SRM
5/16"	3/8-24	0.19	–	–	0.31	–	–	–	–	0.31	0.47	1.25	1.88	–	–	2.04	–
7/16"	7/16-20	0.25	–	–	0.38	0.156	–	0.50	0.05	0.38	0.72	1.44	2.38	–	–	2.62	–
9/16"	7/16-20	0.25	–	–	0.38	–	–	–	0.06	0.38	0.78	2.62	2.28	2.53	0.157	2.47	2.72
3/4"	5/8-18	0.34	–	–	0.50	0.250	–	0.75	0.09	0.50	0.97	2.69	2.44	2.69	–	2.72	2.97
7/8"	5/8-18	0.34	–	–	0.50	0.250	–	0.75	0.09	0.50	0.97	2.56	2.63	–	–	2.91	–
1-1/16"	5/8-18	0.34	–	0.12	0.50	0.250	–	0.75	0.09	0.62	1.06	2.81	2.78	3.03	–	3.06	3.31
1-1/4"	3/4-16	0.41	2.47	0.25	0.62	–	1.81	–	0.09	0.88	1.38	2.81	3.78	3.91	0.251	4.16	4.28
1-1/2"	3/4-16	0.50	–	0.25	0.62	0.375	–	1.00	0.09	0.88	1.25	3.00	3.88	4.13	–	4.25	4.50
2"	1-1/4 -12	0.56	–	0.38	0.81	–	–	–	0.12	1.19	1.47	–	■	★	0.376	▲	◆

■ 8.05" for 1" stroke, 11.05" for 2" stroke, 13.28" for 3" stroke, 17.28" for 4" stroke\*  
 ▲ 8.50" for 1" stroke, 11.50" for 2" stroke, 13.72" for 3" stroke, 17.72" for 4" stroke\*  
 \* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



**Mounting Style D**

Nose mount, double acting



**Bore sizes**

- 5/16"
- 7/16"
- 3/4"

**Bore sizes**

- 9/16"
- 7/8"
- 1-1/16"
- 1-1/4"
- 1-1/2"
- 1-3/4"
- 2" \*
- 2-1/2" \*
- 3" \*

\* No mounting nuts

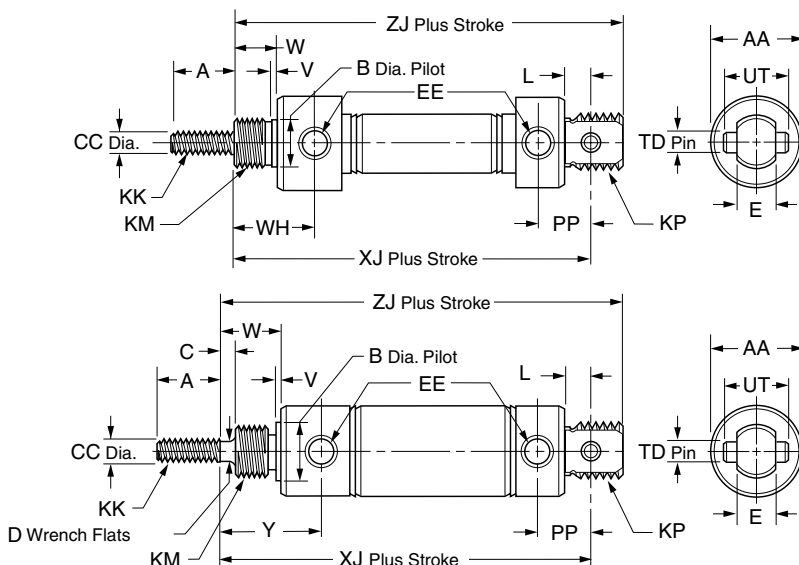
Bore size	Series				Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC
	SR	SRM	SRD	SRDM								
5/16"	•				1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	0.50 SQ.	–	–	0.125
7/16"	•				1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	–	0.188
9/16"	•	•	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.62	0.437	–	0.188
3/4"	•	•	•		1/2, 1, 2, 2-1/2, 3, 4, 5, 6, 8, 10	12	✓	0.50	0.86	0.624	–	0.250
7/8"	•				1/2, 1, 2, 3, 4, 5, 6	12	✓	0.50	0.93	0.624	–	0.250
1-1/16"	•	•	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.50	1.12	0.624	0.12	0.312
1-1/4"	•	•			1, 2, 3, 4, 5, 6	12	✓	0.75	1.34	0.749	0.25	0.437
1-1/2"	•	•	•		1/2, 1, 2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.75	1.56	0.749	0.25	0.437
1-3/4"	•	•			1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6	12		0.88	1.84	1.031	0.31	0.500
2"	•	•	•		–	12		0.88	2.08	1.374	0.38	0.625
2-1/2"	•	•			–	12		0.88	2.62	1.500	0.38	0.625
3"	•				–	12		1.25	3.16	1.630	0.38	0.750

Bore size	Series											ZJ	
	D	E	EE	J	KK	KM	Q	V	W	WH	Y	SR	SRM
5/16"	–	–	#10-32	–	#5-40 UNC	3/8-24	0.36	–	0.31	0.47	–	1.64	–
7/16"	–	0.38	#10-32	0.19	#10-32 UNF	7/16-20	0.50	0.05	0.38	0.72	–	2.12	–
9/16"	–	0.50	#10-32	0.19	#10-32 UNF	7/16-20	–	0.06	0.38	0.78	–	2.28	2.53
3/4"	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.81	0.09	0.50	0.97	–	2.97	2.97
7/8"	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	–	0.09	0.50	0.97	–	2.94	–
1-1/16"	0.25	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	–	0.09	0.62	–	1.19	3.25	3.41
1-1/4"	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	–	0.09	0.88	–	1.62	4.00	4.03
1-1/2"	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	–	0.09	0.88	–	1.50	3.69	3.94
1-3/4"	7/16	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	–	0.09	1.06	1.63	–	4.69	4.69
2"	0.50	1.25	1/4 NPTF	0.31	1/2-20 UNF	1-1/4-12	–	0.12	1.19	–	1.84	4.69	4.97
2-1/2"	1/2	1.75	1/4 NPTF	0.31	1/2-20 UNF	1-3/8-12	–	0.13	1.19	–	1.84	4.69	4.69
3"	5/8	2.00	3/8 NPTF	0.31	5/8-18 UNF	1-1/2-12	–	0.19	1.38	–	2.09	5.25	–



**Mounting Style DP**

Pivot and nose mount, double acting, pivot pin



Bore sizes
5/16"
7/16"
3/4"

Bore sizes
1-1/16"
1-1/2"

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	B	CC	D	E
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	0.188	-	0.31
3/4"	•	•	1/2, 1, 2, 2-1/2, 3, 4, 5, 6, 8, 10	12	✓	0.50	0.86	0.624	0.250	-	0.38
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.50	1.12	0.624	0.312	0.25	0.38
1-1/2"	•	•	1, 2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.75	1.56	0.749	0.437	0.38	0.62

Bore size	EE	KK	KM	KP	L	PP	TD	UT	V	W	WH	XJ		ZJ		
												SR	SRM	Y	SR	SRM
7/16"	#10-32	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.44	0.156	0.50	0.05	0.38	0.72	2.56	-	-	2.81	-
3/4"	1/8 NPTF	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.50	0.97	3.75	3.75	-	4.03	4.03
1-1/16"	1/8 NPTF	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.62	-	3.84	4.00	1.19	4.12	4.28
1-1/2"	1/8 NPTF	7/16-20 UNF	3/4-16	-	0.50	0.81	0.375	1.00	0.09	0.87	-	4.38	4.63	1.50	4.75	5.00

**B**

Round Body Cylinders  
Actuator Products

SR/SM/SRD/SRDM  
Series

SRX  
Series

P1L  
Series

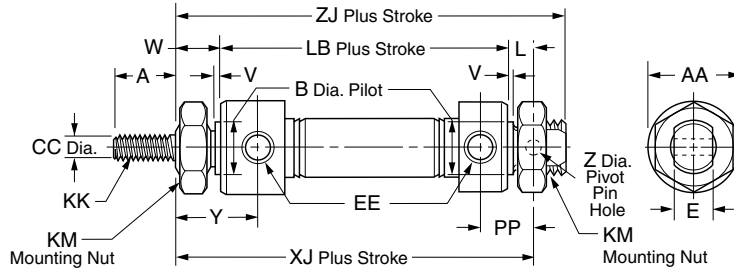
P1A  
Series

P  
Series

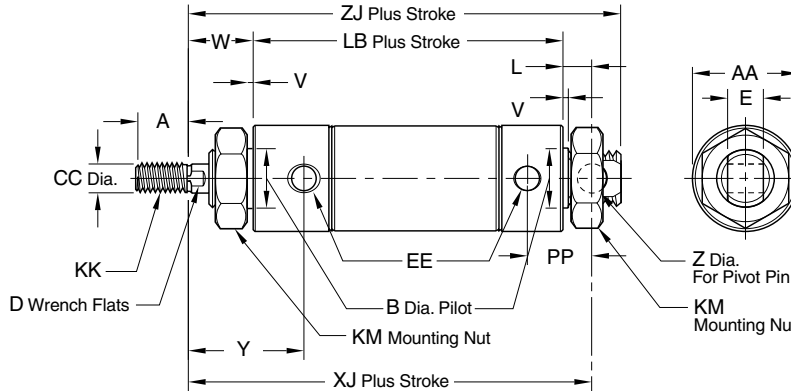


**Mounting Style DXP**

Pivot & nose mount, double acting, no pivot pin



Bore sizes
5/16"
7/16"
3/4"



Bore sizes
9/16" *
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *
2-1/2" *
3" *

\* No mounting nuts

**B**  
Round Body Cylinders  
Actuator Products

SR/SW/SRD/SRDM  
Series

SRX  
Series

P1L  
Series

P1A  
Series

P  
Series

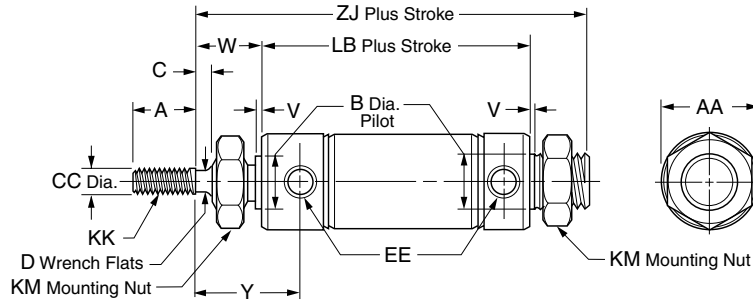
Bore size	SR	SRM	SRD SRDM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E
5/16"	•			1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	0.50 SQ.	-	0.125	-	0.25
7/16"	•			1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	0.188	-	0.31
9/16"	•	•	•	1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.62	0.437	0.188	-	0.31
3/4"	•	•	•	1, 2, 3, 4, 5, 6, 8, 10	32	✓	0.50	0.86	0.624	0.250	-	0.38
7/8"	•			1, 2, 3, 4, 5, 6, 8, 10	32	✓	0.50	0.93	0.624	0.250	-	0.38
1-1/16"	•	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	32	✓	0.50	1.12	0.624	0.312	0.25	0.38
1-1/4"	•	•		1, 2, 3, 4, 5, 6, 7, 8, 10, 12	32	✓	0.75	1.34	0.749	0.437	0.38	0.50
1-1/2"	•	•	•	-	32	✓	0.75	1.56	0.749	0.437	0.38	0.62
1-3/4"	•	•		1, 2, 3, 4, 5, 6, 8, 10, 12	32		0.88	1.84	1.031	0.500	7/16	0.62
2"	•	•	•	-	32		0.88	2.08	1.374	0.625	0.50	0.75
2-1/2"	•	•		-	32		0.88	2.62	1.500	0.625	1/2	0.75
3"	•			-	32		1.25	3.16	1.630	0.750	5/8	0.88

Bore size	XJ								ZJ					
	EE	KK	KM	L	LB	PP	V	W	SR	SRM	Y	Z	SR	SRM
5/16"	#10-32	#5-40 UNC	3/8-24	0.19	-	0.34	-	0.31	2.03	-	-	0.125	2.19	-
7/16"	#10-32	#10-32 UNF	7/16-20	0.25	1.94	0.44	0.05	0.38	2.56	-	0.72	0.157	2.81	-
9/16"	#10-32	#10-32 UNF	7/16-20	0.25	-	0.38	0.06	0.38	2.56	2.81	0.78	0.157	2.75	3.00
3/4"	1/8 NPTF	1/4-28 UNF	5/8-18	0.34	2.91	0.62	0.09	0.50	3.75	3.75	0.97	0.251	4.03	4.03
7/8"	1/8 NPTF	1/4-28 UNF	5/8-18	0.34	-	0.62	0.09	0.50	3.56	-	0.97	0.251	3.84	-
1-1/16"	1/8 NPTF	5/16-24 UNF	5/8-18	0.34	-	0.62	0.09	0.62	3.84	-	1.19	0.251	4.12	4.28
1-1/4"	1/8 NPTF	7/16-20 UNF	3/4-16	0.41	-	0.78	0.09	0.88	4.72	4.75	1.62	0.251	5.12	5.16
1-1/2"	1/8 NPTF	7/16-20 UNF	3/4-16	0.50	-	0.81	0.09	0.88	4.38	4.63	1.50	0.376	4.75	5.00
1-3/4"	1/4 NPTF	1/2-20 UNF	1-14	0.50	4.19	1.12	0.09	1.06	5.75	5.75	1.94	0.376	6.25	6.25
2"	1/4 NPTF	1/2-20 UNF	1-1/4-12	0.56	-	1.03	0.12	1.19	5.62	5.91	-	0.376	6.06	6.34
2-1/2"	1/4 NPTF	1/2-20 UNF	1-3/8-12	0.56	-	1.03	0.13	1.19	5.62	5.62	1.84	0.376	6.06	6.06
3"	3/8 NPTF	5/8-18 UNF	1-1/2-12	0.81	-	1.34	0.19	1.38	6.50	-	2.09	0.500	7.12	-



**Mounting Style DX**

Threaded both ends, double acting



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std
7/16" *	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓
9/16" *	•	•	1/2, 1, 1-1/2, 2, 3, 4	12	✓
3/4" *	•	•	1, 2, 3, 4, 5, 6, 8, 10	32	✓
7/8" *	•	•	1, 2, 3, 4, 5, 6, 8, 10	32	✓
1-1/16" *	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	32	✓
1-1/4" *	•	•	1, 2, 3, 4, 5, 6, 7, 8, 10, 12	32	✓
1-1/2"	•	•	1, 2, 3, 4, 5, 6, 8, 10, 12	32	✓
2" *	•	•	–	32	

Bore size	A	AA	B	C	CC	D	EE	KK	KM	LB			ZJ		
										SR	SRM	V	W	Y	SR
7/16" *	0.50	0.74	0.437	–	0.188	–	#10-32	#10-32 UNF	7/16-20	1.94		0.05	0.38	0.72	2.81
9/16" *	0.50	0.62	0.437	–	0.188	–	#10-32	#10-32 UNF	7/16-20	–		0.06	0.38	0.78	2.75
3/4" *	0.50	0.86	0.624	–	0.250	–	1/8 NPTF	1/4-28 UNF	5/8-18	2.91		0.09	0.50	0.97	4.03
7/8" *	0.50	0.93	0.624	–	0.250	–	1/8 NPTF	1/4-28 UNF	5/8-18	–		0.09	0.50	0.97	3.84
1-1/16" *	0.50	1.12	0.624	0.12	0.312	0.25	1/8 NPTF	5/16-24 UNF	5/8-18	–		0.09	0.62	1.19	4.12
1-1/4" *	0.75	0.34	0.749	0.25	0.437	0.38	1/8 NPTF	7/16-20 UNF	3/4-16	–		0.09	0.88	1.62	5.12
1-1/2"	0.75	1.56	0.749	0.25	0.437	0.38	1/8 NPTF	7/16-20 UNF	3/4-16	3.00		0.09	0.88	1.50	4.50
2" *	0.88	2.08	1.374	0.38	0.625	0.50	1/4 NPTF	1/2-20 UNF	1-1/4-12	–		0.12	1.19	–	6.06

\* Available upon request. Please consult factory.

**B**  
 Round Body Cylinders  
 Actuator Products

SR/SM/SRD/SRDM  
 Series

SRX  
 Series

P1L  
 Series

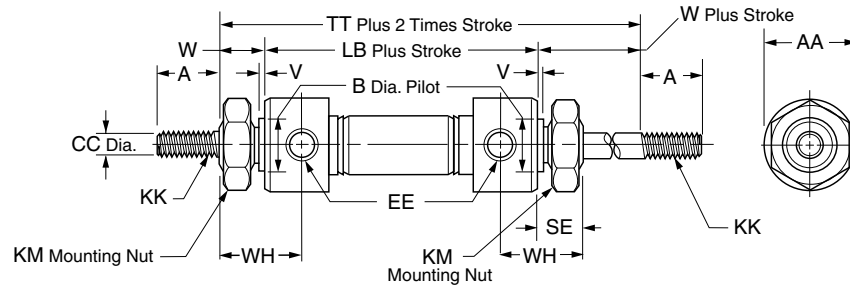
P1A  
 Series

P  
 Series

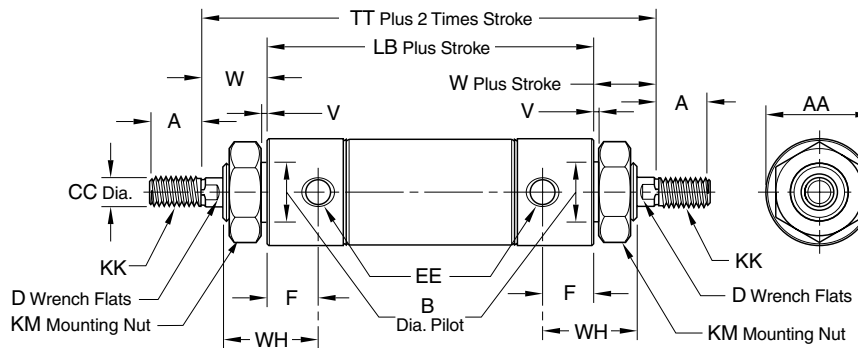


**Mounting Style KDX**

Threaded both ends, double acting, double rod



Bore sizes
7/16"
3/4"



Bore sizes
9/16" *
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *
2-1/2" *
3" *

\* No mounting nuts

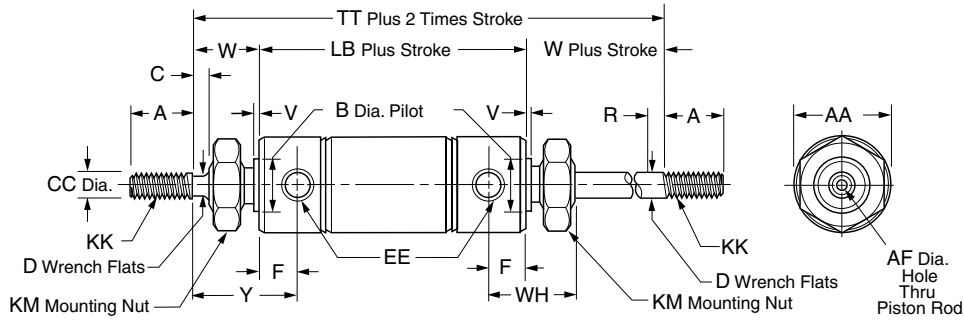
Bore size	SR	SRM	SRD SRDM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	B	CC
7/16"	•			1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.437	0.188
9/16"	•	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.188
3/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.50	0.86	0.624	0.250
7/8"	•			1, 2, 3, 4, 6	12	✓	0.50	0.93	0.624	0.250
1-1/16"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.50	1.12	0.624	0.312
1-1/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.34	0.749	0.437
1-1/2"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.56	0.749	0.437
1-3/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.88	1.84	1.031	0.500
2"	•	•	•	–	12	✓	0.88	2.08	1.374	0.625
2-1/2"	•	•	•	–	18	✓	0.88	2.62	1.500	0.625
3"	•	•	•	–	12	✓	1.25	3.16	1.630	0.750

Bore size	D	EE	F	KK	KM	LB			TT			V	W	WH
						SR	SRM	SE	SR	SRM	SE			
7/16"	–	#10-32	0.34	#10-32 UNF	7/16-20	2.06	–	0.38	2.81	–	0.05	0.38	0.72	
9/16"	–	#10-32	0.40	#10-32 UNF	7/16-20	2.19	2.44	0.38	2.94	3.19	0.06	0.38	0.78	
3/4"	–	1/8 NPTF	0.47	1/4-28 UNF	5/8-18	3.00	3.00	0.50	4.00	4.00	0.09	0.50	0.97	
7/8"	–	1/8 NPTF	0.47	1/4-28 UNF	5/8-18	2.91	–	0.50	3.91	–	0.09	0.50	0.97	
1-1/16"	0.25	1/8 NPTF	0.56	5/16-24 UNF	5/8-18	2.75	3.28	0.50	4.00	4.53	0.09	0.62	1.19	
1-1/4"	0.38	1/8 NPTF	0.75	7/16-20 UNF	3/4-16	3.81	3.84	0.63	5.56	5.59	0.09	0.88	1.62	
1-1/2"	0.38	1/8 NPTF	0.62	7/16-20 UNF	3/4-16	3.38	3.63	0.63	5.12	5.38	0.09	0.88	1.50	
1-3/4"	7/16	1/4 NPTF	0.88	1/2-20 UNF	1-14	4.44	4.44	0.75	6.56	6.56	0.09	1.06	1.63	
2"	0.50	1/4 NPTF	0.65	1/2-20 UNF	1-1/4-12	4.19	4.47	–	6.56	6.84	0.12	1.19	1.84	
2-1/2"	1/2	1/4 NPTF	0.65	1/2-20 UNF	1-3/8-12	4.19	4.19	–	6.56	6.56	0.13	1.19	1.84	
3"	5/8	3/8 NPTF	0.71	5/8-18 UNF	1-1/2-12	4.56	–	–	7.31	–	0.19	1.38	1.72	



### Mounting Style KDXH

Threaded both ends, double rod, hollow rod

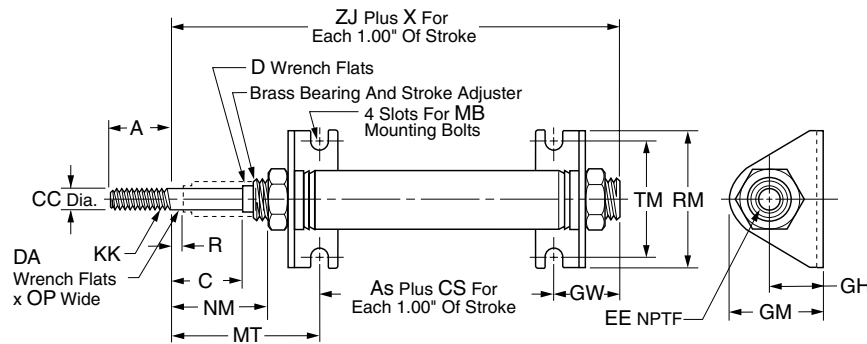


Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	AF	B	C	CC
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.50	1.12	0.187	0.624	0.12	0.312
1-1/4"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.75	1.34	0.250	0.749	0.25	0.437
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.75	1.56	0.250	0.749	0.25	0.437
1-3/4"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.88	1.84	0.328	1.031	0.38	0.500

Bore size	D	EE	F	KK	KM	LB		R	TT		V	W	WH	Y
						SR	SRM		SR	SRM				
1-1/16"	0.25	1/8 NPTF	0.56	5/16-24 UNF	5/8-18	2.75	3.28	0.12	4.00	4.53	0.09	0.62	1.06	1.19
1-1/4"	0.38	1/8 NPTF	0.75	7/16-20 UNF	3/4-16	3.81	3.84	0.25	5.56	5.59	0.09	0.88	1.38	1.62
1-1/2"	0.38	1/8 NPTF	0.62	7/16-20 UNF	3/4-16	3.38	3.63	0.25	5.12	5.38	0.09	0.88	1.25	1.50
1-3/4"	7/16	1/4 NPTF	0.88	1/2-20 UNF	1-14	4.44	4.44	-	6.56	6.56	0.09	1.06	1.63	1.63

### Mounting Style A

Nose mount, spring return, head adjustable stroke



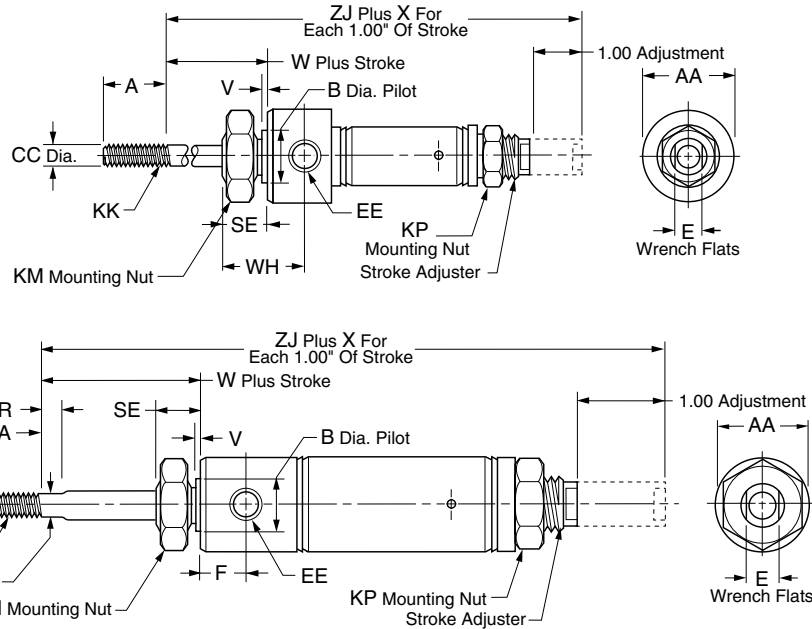
Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std	A	AS	C	CC	CS	D
3/4"	•		Stroke adjustment in 1" increments to 3": 1" stroke adjusts 0-1" 2" stroke adjusts 1-2" 3" stroke adjusts 2-3"	6	✓	0.50	-	1.19	0.250	1.69	-
1-1/16"	•			6	✓	0.50	0.32	1.25	0.312	1.56	0.25
1-1/2"	•			6	✓	0.75	0.19	1.25	0.437	2.00	0.62

Bore size	EE	GH	GM	GW	KK	MB	MT	NM	OP	R	RM	TM	X	ZJ
3/4"	1/8 NPTF	0.81	1.38	0.88	1/4-28 UNF	0.250	2.38	1.44	-	0.19	1.88	1.50	1.69	3.12
1-1/16"	1/8 NPTF	0.81	1.38	0.93	5/16-24 UNF	0.250	2.38	1.44	0.12	0.25	1.88	1.50	1.56	3.63
1-1/2"	1/8 NPTF	1.00	1.78	1.25	7/16-20 UNF	0.250	2.56	1.50	-	0.25	2.50	1.88	2.00	4.00



**Mounting Style RA**

Nose mount, spring return, cap adjustable stroke



<b>Bore sizes</b>
3/4"
<b>Bore sizes</b>
1-1/16"
1-1/2"

**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std
3/4"	•		Stroke adjustment in 1" increments to 3"	6	✓
1-1/16"	•		1" stroke adjusts 0-1"	6	✓
1-1/2"	•		2" stroke adjusts 1-2"	6	✓
			3" stroke adjusts 2-3"		

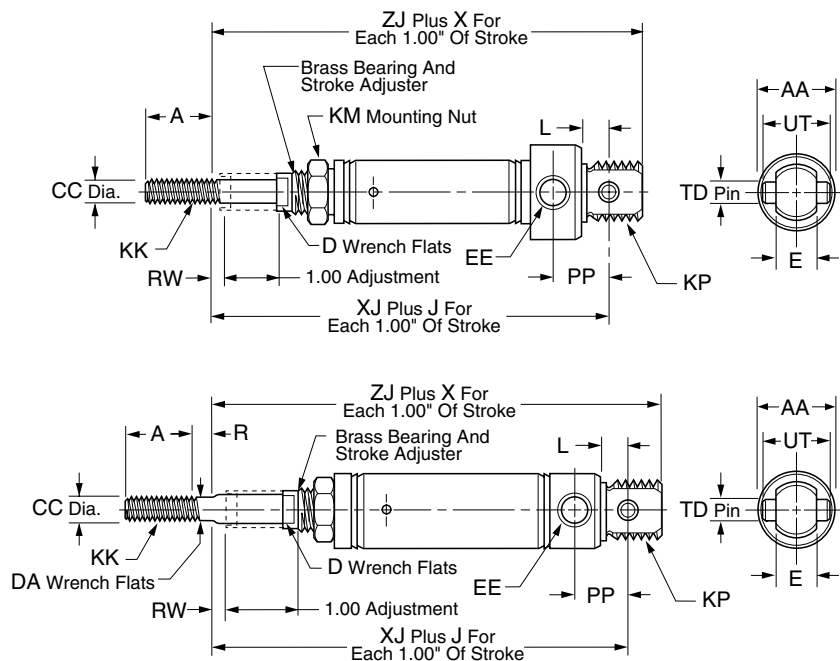
Bore size	A	AS	AA	B	CC	D	E	EE	F
3/4"	0.50	1.69	0.86	0.624	0.250	-	0.34	1/8 NPTF	-
1-1/16"	0.50	0.32	1.12	0.624	0.312	0.25	0.50	1/8 NPTF	0.56
1-1/2"	1.25	0.19	1.56	0.749	0.437	0.38	0.62	1/8 NPTF	0.62

Bore size	KK	KM	SE	R	V	W	WH	X	ZJ
3/4"	1/4-28 UNF	5/8-18	0.50	-	0.09	0.53	0.97	2.69	3.78
1-1/16"	5/16-24 UNF	5/8-18	0.50	0.12	0.09	0.50	-	2.56	4.03
1-1/2"	7/16-20 UNF	3/4-16	0.62	0.25	0.09	0.88	-	2.00	5.81



**Mounting Style AP**

Pivot mount, spring return, head adjustable stroke



Bore sizes

3/4"

Bore sizes

1-1/16"

1-1/2"

Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std
3/4"	•		Stroke adjustment in 1" increments to 3":	6	✓
1-1/16"	•		1" stroke adjusts 0-1" 2" stroke adjusts 1-2"	6	✓
1-1/2"	•		3" stroke adjusts 2-3"	6	✓

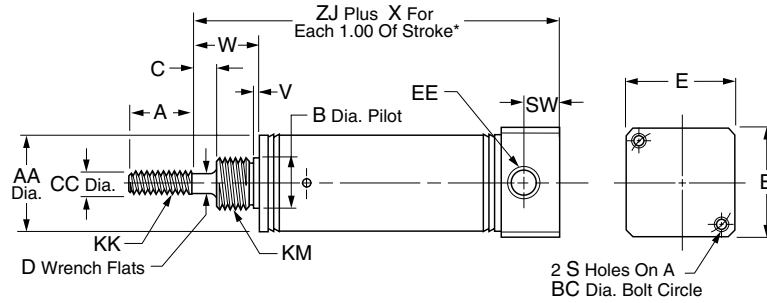
Bore size	A	AA	CC	D	DA	E	EE	J	KK
3/4"	0.50	0.86	0.250	0.34	–	0.38	1/8 NPTF	1.69	1/4-28 UNF
1-1/16"	0.50	1.12	0.312	0.50	0.25	0.38	1/8 NPTF	1.56	5/16-24 UNF
1-1/2"	0.75	1.56	0.437	0.62	0.38	0.62	1/8 NPTF	2.00	7/16-20 UNF

Bore size	KM	KP	L	OP	PP	R	RW	TD	UT	X	XJ	ZJ
3/4"	7/16-20	5/8-18 UNF	0.34	–	0.62	0.19	0.19	0.250	0.75	1.69	3.65	3.93
1-1/16"	–	5/8-18 UNF	0.34	0.25	0.62	0.12	0.25	0.250	0.75	1.56	3.97	4.25
1-1/2"	3/4-16	–	0.50	–	0.81	0.25	0.25	0.375	1.00	2.00	4.31	4.69

**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

### Mounting Style BRN

Rear block mount, single acting, spring return



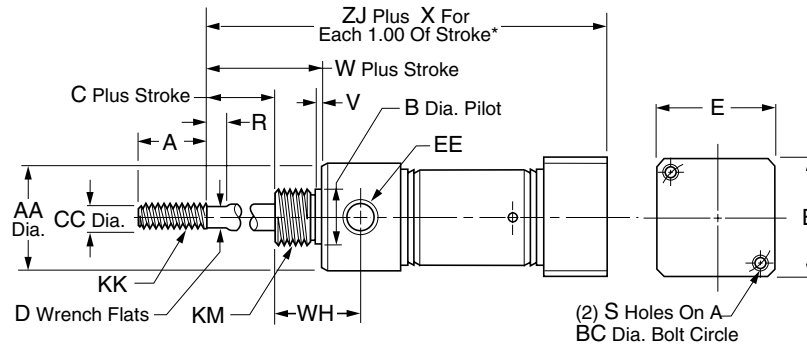
Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D
7/16"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.5	0.374	–	0.188	–
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.499	0.25	0.250	0.22
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	0.38	0.312	0.25
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.25	0.437	0.38

Bore size	E	EE	KK	KM	SW	V	W	X	ZJ	
									SR	SRM
7/16"	0.75	#10-32	#10-32 UNF	3/8-24	0.38	0.05	0.31	0.94	1.62	–
3/4"	1.00	1/8 NPTF	1/4-28 UNF	1/2-20	0.44	0.09	0.62	1.69	2.31	2.56
1-1/16"	1.25	1/8 NPTF	5/16-24 UNF	5/8-18	0.44	0.09	0.88	1.81	2.81	3.06
1-1/2"	1.75	1/4 NPTF	7/16-20 UNF	3/4-16	0.62	0.09	0.88	2.00	3.06	3.31

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

### Mounting Style BRR

Rear block mount, single acting, spring extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	BC	C	CC	D
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.86	0.624	1.00	0.25	0.250	0.22
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	1.25	0.38	0.312	0.25
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	1.75	0.25	0.437	0.38

Bore size	E	EE	KK	KM	R	S	V	W	WH	X	ZJ	
											SR	SRM
3/4"	1.00	1/8 NPTF	1/4-28 UNF	5/8-18	0.25	#10-32 UNF	0.09	0.75	0.97	2.69	3.22	3.47
1-1/16"	1.25	1/8 NPTF	5/16-24 UNF	5/8-18	0.25	#10-32 UNF	0.09	0.88	1.06	2.81	3.53	3.78
1-1/2"	1.75	1/4 NPTF	7/16-20 UNF	3/4-16	0.25	1/4-20 UNC	0.09	0.88	1.25	3.00	3.88	4.13

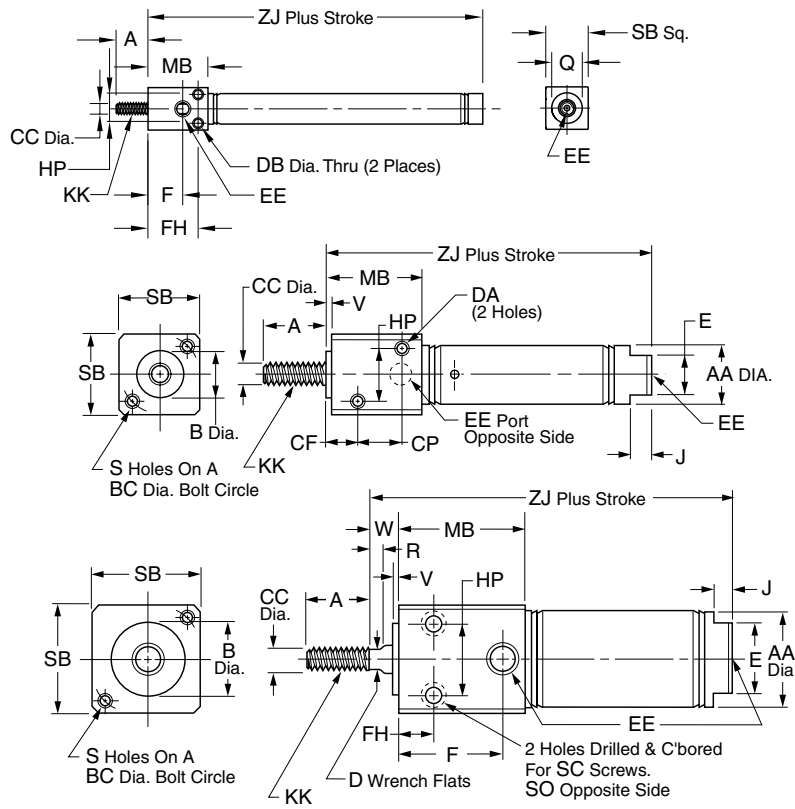
\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

**B**  
 Round Body Cylinders  
 Actuator Products  
**SR/SW/SRD/SRDM**  
 Series  
 SRX  
 Series  
 P1L  
 Series  
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 Series  
 P  
 Series



**Mounting Style BFD**

Front block mount, double acting



Bore sizes
5/16"

Bore sizes
7/16"

Bore sizes
3/4"
1-1/16"
1-1/2"

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	BC	CC
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	-	-	-	0.125
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.50	0.437	0.75	0.188
3/4"	•	•	1/2, 1, 2, 3, 4, 5, 6	12	✓	0.75	0.81	0.624	1.00	0.250
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.12	0.750	1.25	0.312
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	1.00	1.75	0.437

Bore size	CF	CP	D	DA	DB	E	EE	F	FH	HP	J
5/16"	-	-	-	-	0.11	-	#10-32	0.41	0.59	0.34	-
7/16"	0.31	0.44	-	#8-32	-	0.38	#10-32	-	0.31	0.44	0.19
3/4"	-	-	0.22	-	-	0.62	1/8 NPTF	0.88	0.38	0.62	0.19
1-1/16"	-	-	0.25	-	-	0.88	1/8 NPTF	1.16	0.62	0.81	0.19
1-1/2"	-	-	0.38	-	-	0.88	1/4 NPTF	1.53	0.88	1.12	0.25

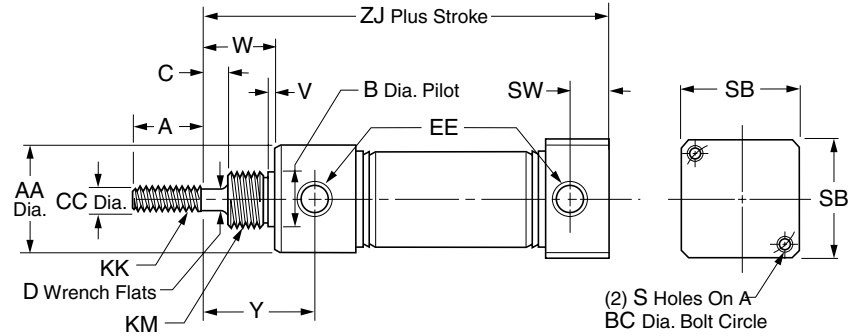
Bore size	KK	MB	Q	R	S	SB	SC	SO	V	W	ZJ	
											SR	SRM
5/16"	#5-40 UNC	0.71	0.36	-	-	0.50 SQ	-	-	-	-	1.72	-
7/16"	#10-32 UNF	0.88	-	-	#8-32 UNC	0.75	-	-	0.062	-	2.12	-
3/4"	1/4-28 UNF	1.12	-	-	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	3.22	3.22
1-1/16"	5/16-24 UNF	1.41	-	0.25	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	3.75	3.91
1-1/2"	7/16-20 UNF	1.88	-	-	1/4-20 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	4.19	4.44



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM Series  
 SRX Series  
 P1L Series  
 P1A Series  
 P Series

**Mounting Style BRD**

Rear block mount, double acting



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std
7/16"	•		1/2, 1, 2, 3, 4	12	✓
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓
1-1/16"	•	•	1, 2, 3, 4	12	✓
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓

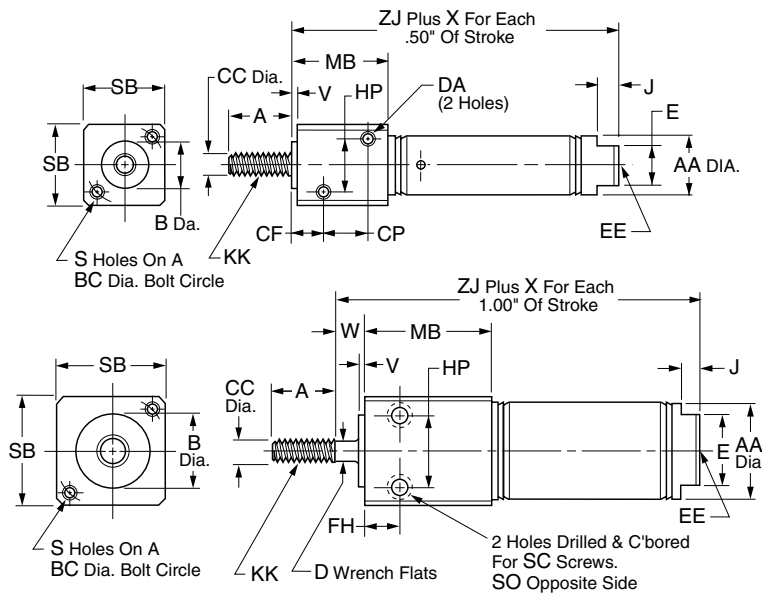
Bore size	A	AA	B	BC	C	CC	D	EE	KK
7/16"	0.50	0.74	0.437	0.75	–	0.188	–	#10-32	#10-32 UNF
3/4"	0.75	0.86	0.624	1.00	0.25	0.250	0.22	1/8 NPTF	1/4-28 UNF
1-1/16"	0.75	1.12	0.624	1.25	0.38	0.312	0.25	1/8 NPTF	5/16-24 UNF
1-1/2"	1.25	1.56	0.749	1.75	0.25	0.437	0.38	1/4 NPTF	7/16-20 UNF

Bore size	KM	S	SB	SW	V	W	Y	ZJ	
								SR	SRM
7/16"	7/16-20 UNF	#8-32 UNC	0.75	0.38	0.05	0.43	0.72	2.44	–
3/4"	5/8-18 UNF	#10-32 UNF	1.00	0.44	0.09	0.75	1.22	3.78	3.78
1-1/16"	5/8-18 UNF	#10-32 UNF	1.25	0.44	0.09	0.88	1.44	4.00	4.16
1-1/2"	3/4-16 UNF	1/4-20 UNC	1.75	0.62	0.09	0.88	1.47	4.38	4.63



**Mounting Style BFN**

Front block mount, single acting, spring return



Bore sizes
7/16"

Bore sizes
3/4"
1-1/16"
1-1/2"

Bore size	SR	SRM	Std. stroke (in)	Max stroke (in)	SS rod std
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓
1-1/16"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1, 2, 3, 4	6	✓

Bore size	A	AA	B	BC	CC	CF	CP	D	DA	E	EE	FH
7/16"	0.50	0.50	0.437	0.75	0.188	0.31	0.44	-	#8-32 UNC	0.38	#10-32	0.31
3/4"	0.75	0.81	0.624	1.00	0.250	-	-	0.22	-	0.62	1/8 NPTF	0.38
1-1/16"	0.75	1.12	0.750	1.25	0.312	-	-	0.25	-	0.88	1/8 NPTF	0.62
1-1/2"	1.25	1.56	1.00	1.75	0.437	-	-	0.38	-	0.88	1/4 NPTF	0.88

Bore size	HP	J	KK	MB	S	SB	SC	SO	V	W	X	ZJ	
												SR	SRM
7/16"	0.44	0.19	#10-32 UNF	0.88	#8-32 UNC	0.75	-	-	0.062	-	0.94	1.94	-
3/4"	0.62	0.19	1/4-28 UNF	1.12	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	1.69	2.66	2.91
1-1/16"	0.81	0.19	5/16-24 UNF	1.41	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	1.81	3.38	3.63
1-1/2"	1.12	0.25	7/16-20 UNF	1.88	1/4 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	2.00	3.69	3.94

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



**B**  
 Round Body Cylinders  
 Actuator Products

SR/SM/SRD/SRDM  
 Series

SRX  
 Series

P1L  
 Series

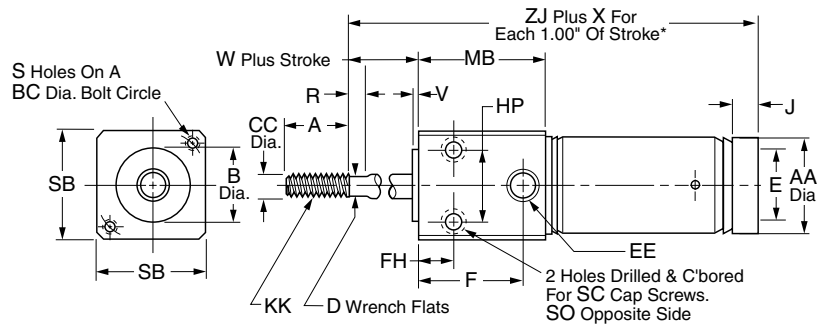
P1A  
 Series

P  
 Series



**Mounting Style BFR**

Front block mount, single acting, spring extend



Bore size	SR	SRM	Std. stroke (in)	Max stroke (in)	SS rod std
3/4"	•	•	1, 2, 3, 4	6	✓
1-1/16"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1, 2, 3, 4	6	✓

Bore size	A	AA	B	BC	CC	D	E	EE	F	FH	HP	J
3/4"	0.75	0.81	0.624	1.00	0.250	0.22	-	1/8 NPTF	0.88	0.38	0.62	0.19
1-1/16"	0.75	1.12	0.750	1.25	0.312	0.25	-	1/8 NPTF	1.16	0.62	0.81	-
1-1/2"	1.25	1.56	1.00	1.75	0.437	0.38	0.88	1/4 NPTF	1.53	0.88	1.12	0.25

Bore size	KK	MB	R	S	SB	SC	SO	V	W	X	ZJ	
											SR	SRM
3/4"	1/4-28 UNF	1.12	0.25	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	2.69	2.56	2.81
1-1/16"	5/16-24 UNF	1.41	0.25	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	2.81	3.12	3.37
1-1/2"	7/16-20 UNF	1.88	0.25	1/4-20 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	3.00	3.69	3.94

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

**B**  
Round Body Cylinders  
Actuator Products

SR/SW/SRD/SRDM  
Series

SRX  
Series

P1L  
Series

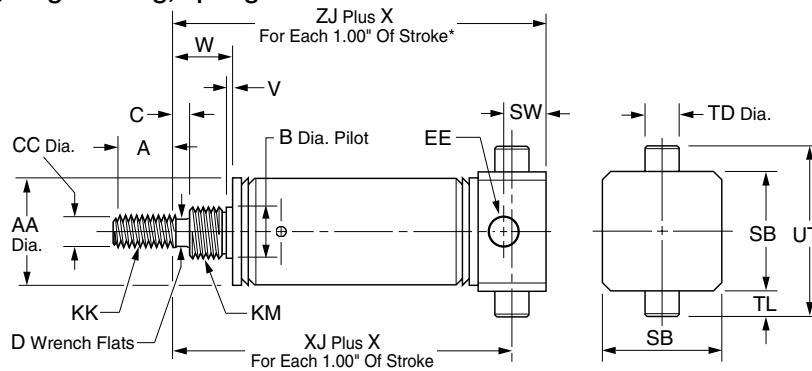
P1A  
Series

P  
Series



### Mounting Style TRN

Rear trunnion mount, single acting, spring return



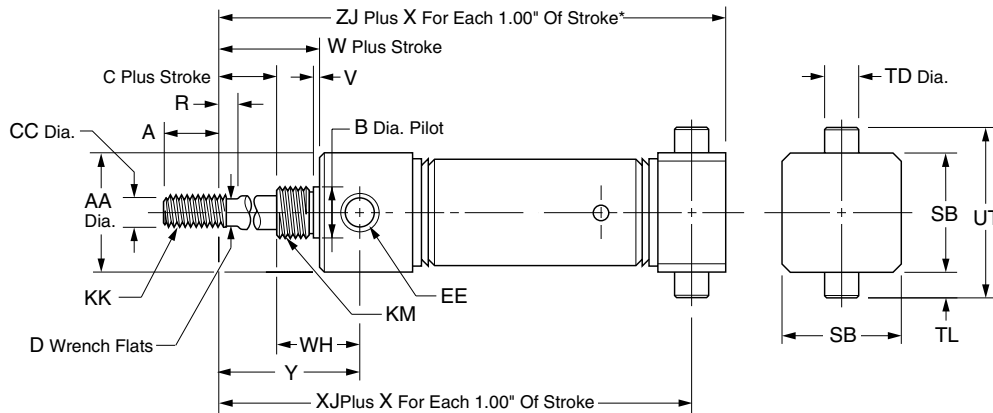
Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
						For Each 1.00\"/>						
7/16"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.50	0.374	–	0.188	–	#10-32
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.499	0.25	0.250	0.22	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

Bore size	KK	KM	SB	SW	TD	TL	UT	V	W	X	XJ		ZJ	
											SR	SRM	SR	SRM
7/16"	#10-32 UNF	3/8-24 UNF	0.75	0.38	0.374	0.50	1.25	0.05	0.32	0.94**	1.38	–	1.62	–
3/4"	1/4-28 UNF	1/2-20 UNF	1.00	0.44	0.500	0.38	1.75	0.09	0.62	1.69	1.94	2.19	2.31	2.56
1-1/16"	5/16-24 UNF	5/8-18 UNF	1.25	0.44	0.500	0.38	2.00	0.09	0.88	1.81	2.44	2.69	2.81	3.06
1-1/2"	7/16-20 UNF	3/4-16 UNF	1.75	0.62	0.500	0.38	2.50	0.09	0.88	2.00	2.56	2.81	3.06	3.31

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.  
 \*\* For each 0.50" of stroke.

### Mounting Style TRR

Rear trunnion mount, single acting, spring extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
						For Each 1.00\"/>						
3/4"			1, 2, 3, 4	6	3	0.75	0.86	0.624	0.25	0.250	0.22	1/8 NPTF
1-1/16"			1, 2, 3, 4	6	3	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"			1, 2, 3, 4	6	3	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

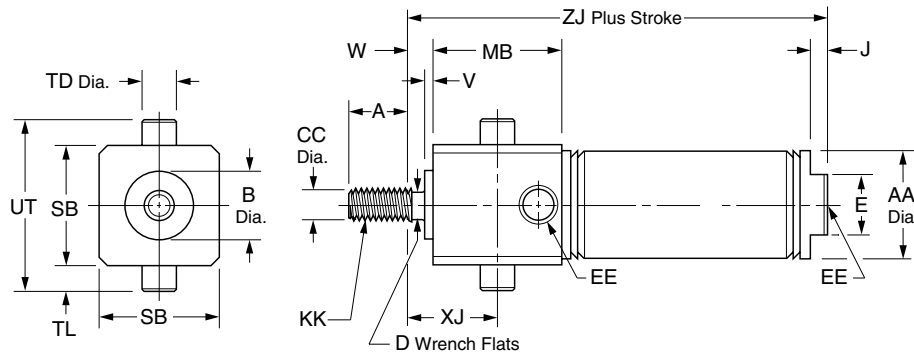
Bore size	KK	KM	R	SB	TD	TL	UT	V	W	WH	X	XJ		ZJ	
												SR	SRM	SR	SRM
3/4"	1/4-28 UNF	1/2-20 UNF	0.25	1.00	0.500	0.38	1.75	0.09	0.75	0.72	2.69	2.85	3.10	3.22	3.47
1-1/16"	5/16-24 UNF	5/8-18 UNF	0.25	1.25	0.500	0.38	2.00	0.09	0.88	0.68	2.81	3.15	3.40	3.53	3.78
1-1/2"	7/16-20 UNF	3/4-16 UNF	0.25	1.75	0.500	0.38	2.50	0.09	0.88	1.25	3.00	3.38	3.63	3.88	4.13

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



### Mounting Style TFD

Front trunnion mount, double acting

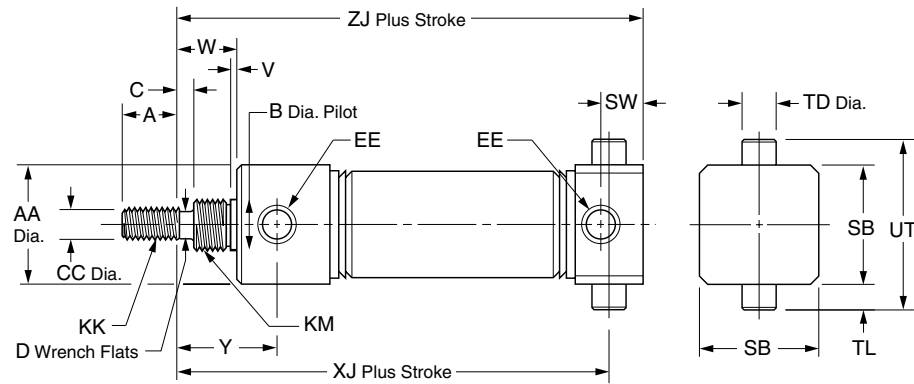


Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.50	0.437	0.188	–	0.38	#10-32
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	0.81	0.624	0.250	0.22	0.62	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.12	0.750	0.312	0.25	0.88	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	1.000	0.437	0.38	0.88	1/4 NPTF

Bore size	J	KK		MB	SB	TD	TL	UT	V	W	XJ	ZJ	
	0.19	#10-32 UNF	SR									SRM	
7/16"	0.19	1/4-28 UNF	0.88	0.75	0.374	0.250	1.25	0.062	–	0.31	2.12	–	
3/4"	0.19	5/16-24 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	0.69	3.22	3.22	
1-1/16"	0.25	7/16-20 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	1.09	3.75	3.91	
1-1/2"			1.88	1.75	0.500	0.38	2.50	0.125	0.38	1.31	4.19	4.44	

### Mounting Style TRD

Rear trunnion mount, double acting



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	–	0.188	–	#10-32
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	0.86	0.624	0.25	0.250	0.22	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	12	✓	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

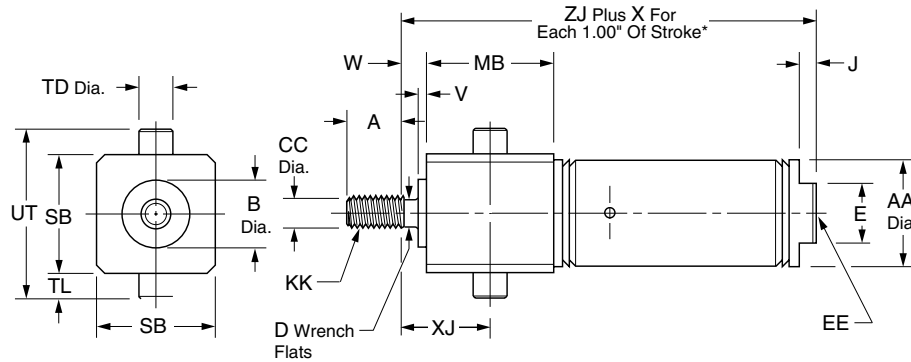
Bore size	KK		KM		SB	SW	TD	TL	UT	V	W	XJ		ZJ	
	#10-32 UNF	7/16-20 UNF	SR	SRM								Y	SR	SRM	
7/16"	1/4-28 UNF	5/8-18 UNF	0.75	0.38	0.374	0.25	1.25	0.05	0.38	2.19	–	0.72	2.44	–	
3/4"	5/16-24 UNF	5/8-18 UNF	1.00	0.44	0.500	0.38	1.75	0.09	0.75	3.41	3.41	1.22	3.78	3.78	
1-1/16"	7/16-20 UNF	3/4-16 UNF	1.25	0.44	0.500	0.38	2.00	0.09	0.88	3.62	3.62	1.44	4.00	4.16	
1-1/2"			1.75	0.62	0.500	0.38	2.50	0.09	0.88	3.88	4.13	1.47	4.38	4.63	



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

### Mounting Style TFN

Front trunnion mount, single acting, spring return



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.50	0.437	0.188	–	0.38	#10-32
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.75	0.81	0.624	0.250	0.22	0.62	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.750	0.312	0.25	0.88	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	1.000	0.437	0.38	0.88	1/4 NPTF

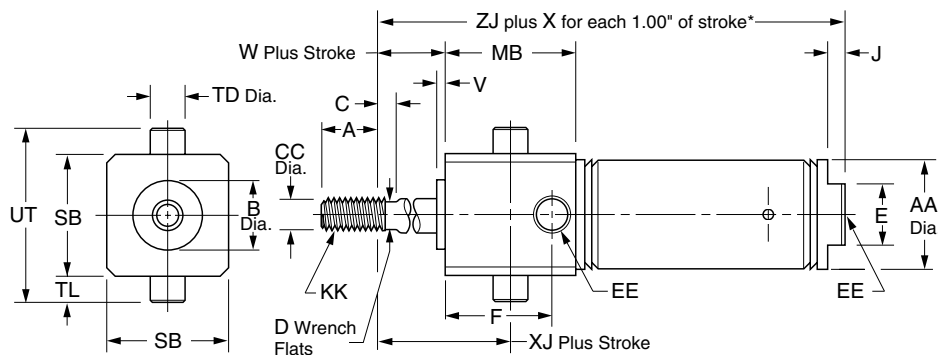
Bore size	J	KK	MB	SB	TD	TL	UT	V	W	X	XJ	ZJ SR	ZJ SRM
7/16"	0.19	#10-32 UNF	0.88	0.75	0.374	0.25	1.25	0.062	0	0.94**	0.31	1.94	–
3/4"	0.19	5/16-24 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	1.69	0.69	2.66	2.91
1-1/16"	0.25	7/16-20 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	1.81	1.09	3.38	3.63
1-1/2"			1.88	1.75	0.500	0.38	2.50	0.125	0.38	2.00	1.31	3.69	3.94

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

\*\* For each 0.50" of stroke

### Mounting Style TFR

Front trunnion mount, single acting, spring extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	E
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.624	0.25	0.250	0.22	0
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.750	0.25	0.312	0.25	0
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	1.000	0.25	0.437	0.38	0.88

Bore size	F	EE	J	KK	MB	SB	TD	TL	UT	V	W	X	XJ	ZJ SR	ZJ SRM
3/4"	0.88	1/8 NPTF	–	1/4-28 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	2.69	0.69	2.56	2.81
1-1/16"	1.16	1/8 NPTF	–	5/16-24 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	2.81	1.09	3.12	3.37
1-1/2"	–	1/4 NPTF	0.25	7/16-20 UNF	1.88	1.75	0.500	0.38	2.50	0.125	0.38	3.00	1.31	3.69	3.94

\* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



## Air Reservoirs

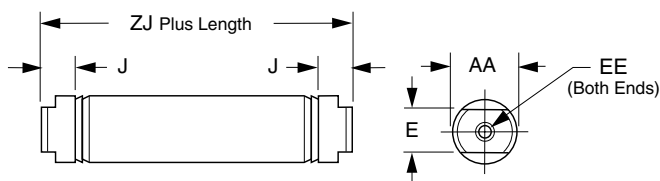
Air Reservoirs installed can significantly reduce the pulsation of a system. In addition air reservoirs can be used as a means to store energy. Caution should always be used when storing energy. Air reservoirs if installed in the correct location and sized correctly can temporarily increase the flow of an actuator or cylinder.

As always never exceed the rated pressure of the cylinder.

## Ordering information

<b>.75</b>	<b>AR</b>	<b>SR</b>	<b>2.00</b>																				
<table border="1"> <tr><th colspan="2">Bore Size*</th></tr> <tr><td>.75</td><td>3/4"</td></tr> <tr><td>1.06</td><td>1-1/16"</td></tr> <tr><td>1.50</td><td>1-1/2"</td></tr> <tr><td>2.00</td><td>2"</td></tr> <tr><td>2.50</td><td>2-1/2"</td></tr> <tr><td>3.00</td><td>3"</td></tr> </table>	Bore Size*		.75	3/4"	1.06	1-1/16"	1.50	1-1/2"	2.00	2"	2.50	2-1/2"	3.00	3"	<table border="1"> <tr><th colspan="2">Mounting</th></tr> <tr><td>AR</td><td>Air Reservoir</td></tr> </table>	Mounting		AR	Air Reservoir		<table border="1"> <tr><th>Length</th></tr> <tr><td>Specify in inches. See table below.</td></tr> </table>	Length	Specify in inches. See table below.
Bore Size*																							
.75	3/4"																						
1.06	1-1/16"																						
1.50	1-1/2"																						
2.00	2"																						
2.50	2-1/2"																						
3.00	3"																						
Mounting																							
AR	Air Reservoir																						
Length																							
Specify in inches. See table below.																							

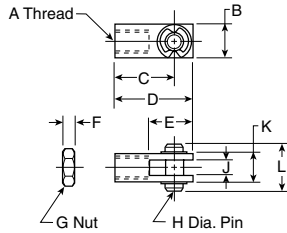
Bore size	Standard lengths	Max. length	Volume (in3)
3/4"	1" increments to 4"	32"	0.39 plus 0.44 per inch length
1-1/16"	1" increments to 8"	32"	0.99 plus 0.89 per inch length
1-1/2"	1" increments to 16"	32"	1.91 plus 1.77 per inch length
2"	1" increments to 16"	32"	4.22 plus 3.14 per inch length
2-1/2"	1" increments to 16"	32"	7.04 plus 4.91 per inch length
3"	1" increments to 16"	32"	9.90 plus 7.07 per inch length



Bore size	AA	E	EE	J	ZJ
3/4"	0.813	0.625	1/8" NPTF	0.19	1.938
1-1/16"	1.125	0.88	1/8" NPTF	0.19	2.375
1-1/2"	1.56	0.88	1/8" NPTF	0.250	2.250
2"	2.08	1.25	1/4" NPTF	0.562	2.875
2-1/2"	2.62	1.75	1/4" NPTF	0.562	2.875
3"	3.16	2.00	3/8" NPTF	0.562	3.190

### Piston Rod Clevis

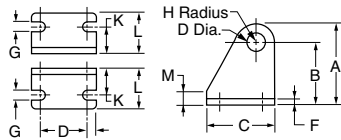
Assembly includes pin and (2) retainer rings and (1) jam nut.



Bore size	A	B	C	D	E	F	G	H	J	K	L	Part number
5/16	#5-40	.31	.44	.56	.38	.11	#5-40	.12	.13	.31	.50	L071300025
7/16, 9/16	#10-32	.38	.75	.94	.56	.12	#10-32	.19	.19	.38	.56	L071300100 L077130100*
3/4, 7/8	1/4-28	.50	.94	1.19	.68	.16	1/4-28	.25	.25	.50	.69	L071300200 L077130200*
1-1/16	5/16-24	.50	.94	1.19	.68	.19	5/16-24	.25	.25	.50	.69	L071300300 L077130300*
1-1/4, 1-1/2	7/16-20	.75	1.31	1.69	.94	.25	7/16-20	.38	.38	.75	1.03	L071300400 L077130400*
1-3/4, 2, 2-1/2	1/2-20	.75	1.31	1.69	.94	.31	1/2-20	.38	.38	.75	1.03	L071300500 L077130500*
3	5/8-18	1.00	2.25	2.75	1.50	.38	5/8-18	.50	.50	1.00	1.38	L071300600

\* Stainless Steel for use with SRD/SRDM cylinders.

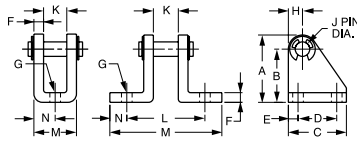
### Pivot Brackets



Bore size	A	B	C	D	E	F	G	H	J	K	L	M	Part number
7/16	.76	.56	.75	.50	.12	.06	.19	.20	.160	.28	.50	.12	L071310100
3/4, 7/8, 1-1/16	1.19	.88	1.12	.75	.19	.12	.27	.31	.255	.44	.81	.25	L071310200
1-1/2	1.75	1.38	1.50	1.00	.25	.12	.27	.38	.380	.62	1.00	.25	L071310300

### Pivot Bracket Assembly

Assembly includes pin and (2) retainer rings.



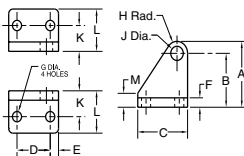
5/16" bore only

Bore size	A	B	C	D	E	F	G	H	J	K	L	M	N	Part number
5/16	.53	.40	.62	.38	.12	.04	.16	.12	.12	.26	-	.36	.18	L071320025
7/16, 9/16	.76	.56	.75	.50	.12	.06	.19	.19	.156	.34	.91	1.34	.22	L071320100 L077150100*
3/4, 7/8, 1-1/16	1.18	.88	1.12	.75	.19	.12	.27	.30	.250	.38	1.25	2.00	.38	L071320200 L077150200*
1-1/4	1.18	.88	1.12	.75	.19	.12	.27	.30	.250	.50	1.38	2.14	.38	L071320300
1-1/2, 1-3/4	1.75	1.38	1.50	1.00	.25	.25	.27	.37	.375	.62	2.00	2.88	.44	L071320400 L077150400*
2, 2-1/2	1.75	1.38	1.50	1.00	.25	.25	.27	.37	.375	.75	2.12	3.00	.44	L071320500 L077150500*
3	2.25	1.75	1.75	1.25	.25	.25	.27	.50	.50	.88	2.62	3.88	.62	L071320600

\* Stainless steel for use with SRD/SRDM cylinders.

### SR Series Trunnion Brackets

Select brackets for SR series trunnion mount cylinders from the table below. (Note: trunnion brackets are ordered as a separate item from the cylinder.)

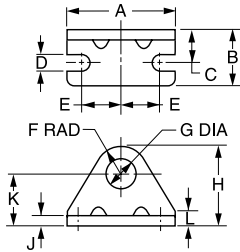


Bore size	A	B	C	D	E	F	G	H	J	K	L	M	Part number
7/16	1.75	1.38	1.50	1	.25	.25	.27	.38	.375	.69	1.12	.37	L076600100
3/4, 1-1/16, 1-1/2	1.75	1.38	1.50	1	.25	.25	.27	.38	.500	.69	1.12	.37	L076600200

Most popular.



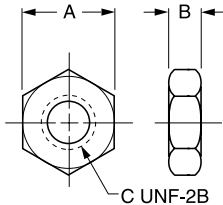
**Foot Brackets**



Bore size	A	B	C	D	E	F	G	H	J	K	L	Part number
5/16	1.00	.37	.25	.13	.37	.31	.25	.75	.06	.44	.12	L073790016
5/16	1.00	.37	.25	.13	.37	.31	.38	.75	.06	.44	.12	L073790023
7/16	1.38	.62	.31	.19	.50	.31	.38	.88	.07	.56	.12	L073790024
7/16, 9/16	1.38	.62	.38	.19	.50	.38	.44	.94	.09	.56	.12	L073790028 L077160028*
3/4	1.62	.75	.44	.19	.62	.41	.50	1.09	.10	.69	.19	L073790032
3/4, 7/8, 1-1/16	1.88	1.00	.56	.27	.75	.56	.63	1.38	.12	.81	.25	L073790040 L077160040*
1-1/4, 1-1/2	2.50	1.50	.75	.27	.94	.75	.75	1.75	.12	1.00	.38	L073790048 L077160048*
1-3/4	3.00	1.50	.87	.35	1.12	.91	1.03	2.16	.19	1.25	.50	L073790102
2	3.12	1.62	1.00	.34	1.12	1.00	1.38	2.50	.25	1.50	.62	L073790124 L077160124*
2-1/2	3.75	1.62	1.00	.35	1.44	1.25	1.51	3.00	.25	1.75	.75	L073790132
3	4.37	1.62	1.00	.35	1.75	1.25	1.64	3.14	.25	1.89	.89	L073790140

\* Stainless Steel for use with SRD/SRDM cylinders.

**Mounting Nut**



Bore size	A	B	C	Part number
5/16	.44	.16	1/4-28	L073800200
5/16, 7/16	.56	.22	3/8-24	L073800400
7/16, 9/16	.69	.25	7/16-20	L073800500 L077170500*
3/4	.75	.31	1/2-20	L073800600
3/4, 7/8, 1-1/16	.94	.38	5/8-18	L073800800 L077170800*
1-1/4, 1-1/2	1.12	.42	3/4-16	L073800900
1-1/4, 1-1/2	1.12	.72	3/4-16	L077170900*
1-3/4	1.50	.55	1-14	L073801100
2	1.88	.50	1-1/4-12	L073801200 L077171200*
2-1/2	2.06	.78	1-3/8-12	L073801400
3	2.25	.84	1-1/2-12	L073801500

\* Stainless Steel for use with SRD/SRDM cylinders.

Most popular.



**B**  
 Round Body Cylinders  
 Actuator Products

SR/SW/SRD/SRDM  
 Series

SRX  
 Series

P1L  
 Series

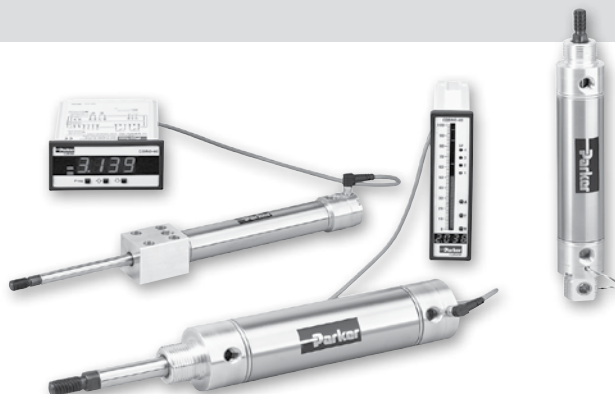
P1A  
 Series

P  
 Series

## SRX Series

- Continuous position feedback
- Bore sizes: 1-1/16" to 3"
- Signal input: 5 to 24 VDC
- Signal output (w/o controls): DC ratiometric voltage\*
- Signal output (w/controls): 0 to 10 VDC or 4 to 20 mA
- Strokes: Available in any practical stroke length up to 24"

\* Mega Ohm impedance interface device suggested for limiting sensor current if controller is not used.



### Operating information

Operating pressure:	150 PSIG (10.3 bar)
Temperature range:	40°F to 160°F (4.4°C to 71°C)
Filtration requirements:	40 micron, dry filtered air

### Ordering information

<b>1.50"</b>	<b>DXP</b>	<b>P</b>	<b>SRX</b>	<b>B</b>	<b>F</b>	<b>S</b>	<b>3</b>	<b>6.00"</b>
<b>Bore size</b>	<b>Connector style</b>		<b>Piston</b>		<b>Special</b>		<b>Stroke</b>	
1.06"	<b>P</b> Plug	<b>F</b> Flying leads	<b>B</b> Bumper*	Leave blank if not required.		<b>S</b> Special	Stroke in inches	
1.50"	<b>Mounting style</b>		Leave blank if not required.		Leave blank if special modification is not required.		Leave blank if special rod end dimension is not required.	
2.00"	<b>D</b> Nose mount	<b>DXP</b> Nose and pivot mount	<b>Seals</b>		<b>Non-standard rod dimension</b>		Leave blank if special rod end dimension is not required.	
2.50"	<b>BFD</b> Front block mount		<b>F</b> Low friction	Leave blank if not required.		<b>3</b> Non-standard dimension	Leave blank if special rod end dimension is not required.	
3.00"			Leave blank if not required.		<b>NOTE:</b> For non-standard / special rod ends, see below.			

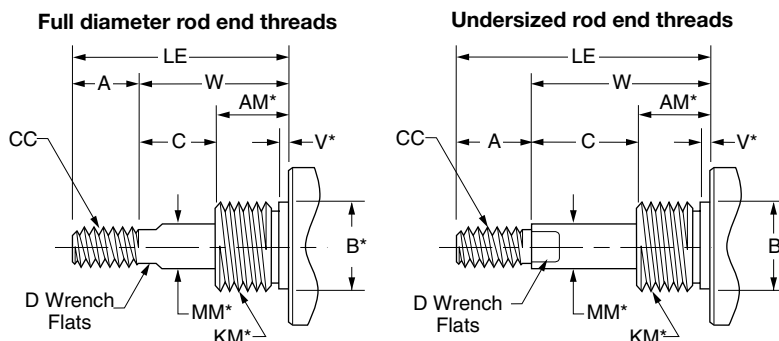
\* Incorporating bumpers adds 1/4" of overall length to the cylinder.

**Sensors**  
For sensors see page B339.

For ordering purposes, when special options or common modifications are requested, the factory will assign a sequential part number in place of the model number.

### Non-standard rods

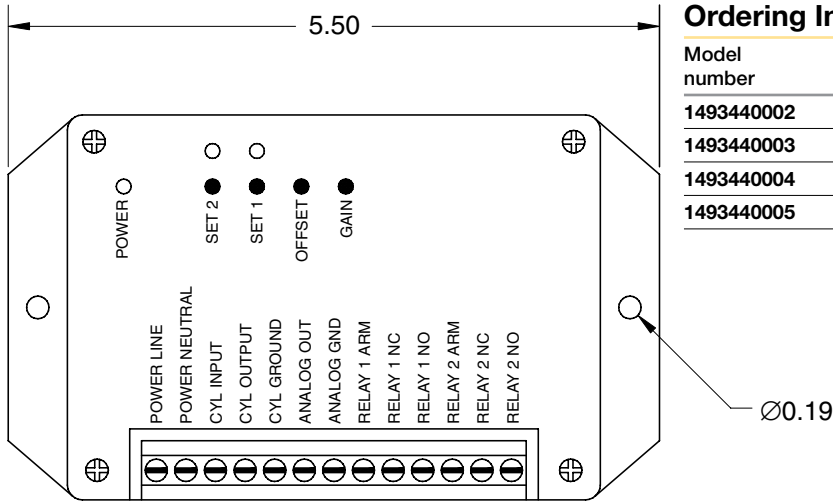
For non-standard rod dimensions, or undersized rod end threads, put a "3" in model number and describe the rod using the letters shown in the drawing. It is necessary to specify only those dimensions that are non-standard. LE is measured in retracted position.



\* Requires an "S" designation in model number.

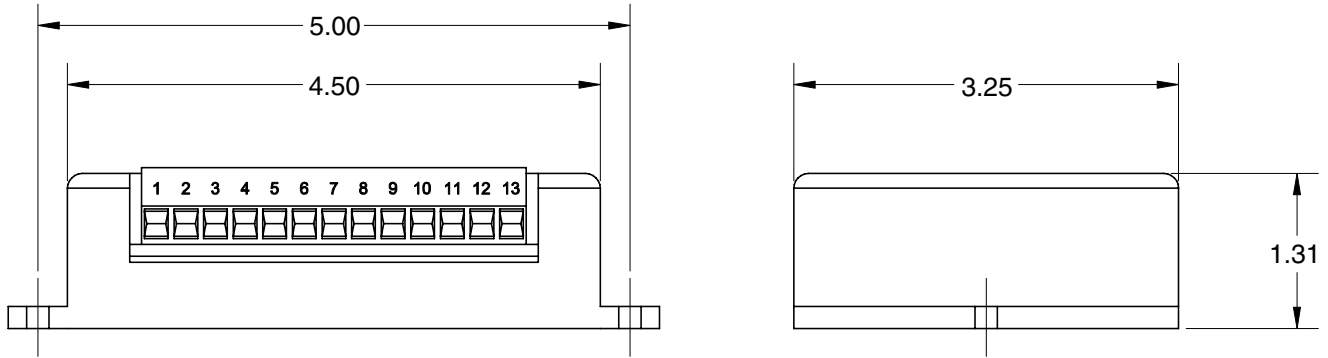


**Dual Set Point Controller, Part #149344000**



**Ordering Information**

Model number	Input specifications	Output specifications
1493440002	120 VAC	0-10 V
1493440003	120 VAC	4-20 mA
1493440004	12-24 VDC	0-10 V
1493440005	12-24 VDC	4-20 mA



**Dual Set Point Controller Specifications, Part #149344000**

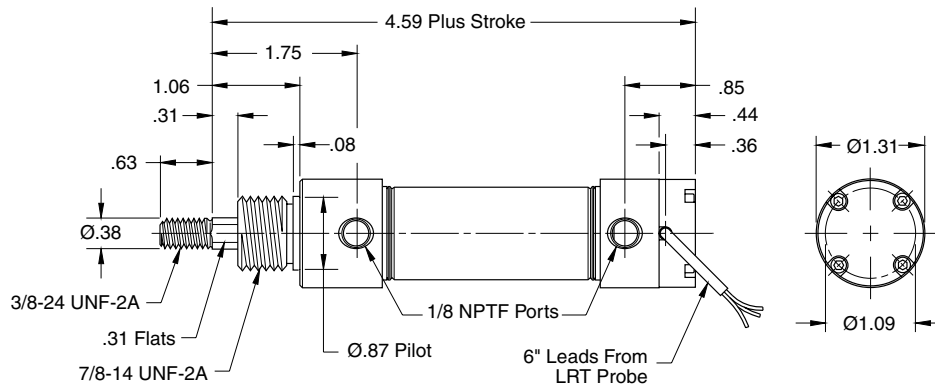
- Power Input Requirements..... 12 to 24 VDC, 0.1 amps, or 120 VAC, 60 Hz, 0.1 amps
- Output specifications – Set Point .....Relay (2) 2 amps @ 24 VDC or 120 VAC
- Output Specifications – Scaleable .....0 to 10 V, 1 mA max. output current (10K ohm impedance min.) 4 to 20mA, into 500-ohm max. impedance
- Maximum Zero Offset.....50% of cylinder stroke
- Minimum Span Range.....50% of cylinder stroke
- Enclosure Dimensions..... 1.31" h x 5.50" w x 3.25" d
- Electronics Temperature Operating Range .... +40°F to +160°F

*Please reference Parker Bulletin #0971-G-B2 for information regarding programming and operation of this controller.*

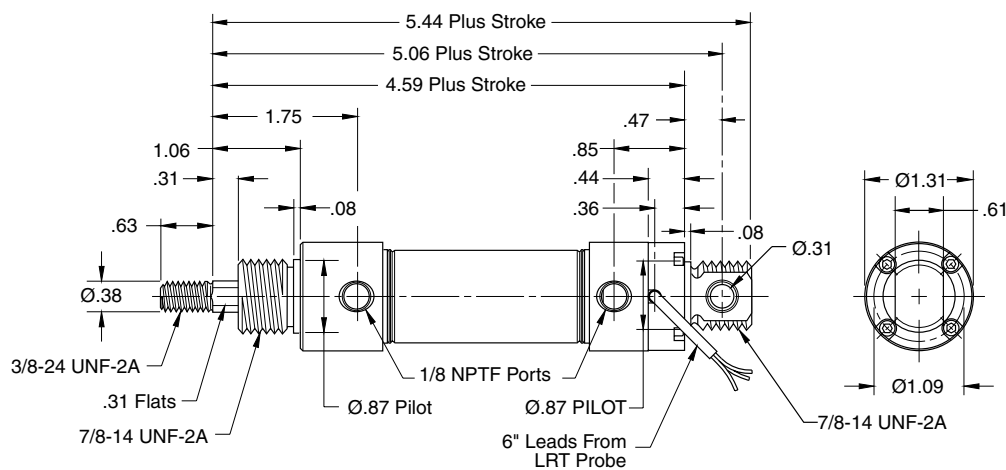
**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

**1-1/16" Bore Cylinders**

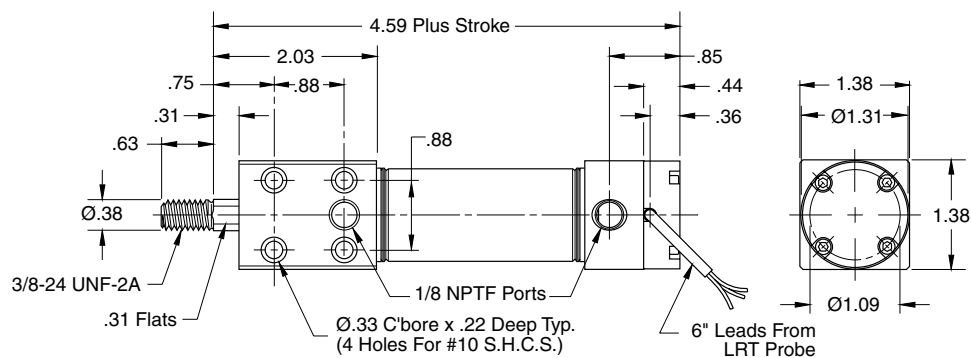
**Style D**



**Style DXP**



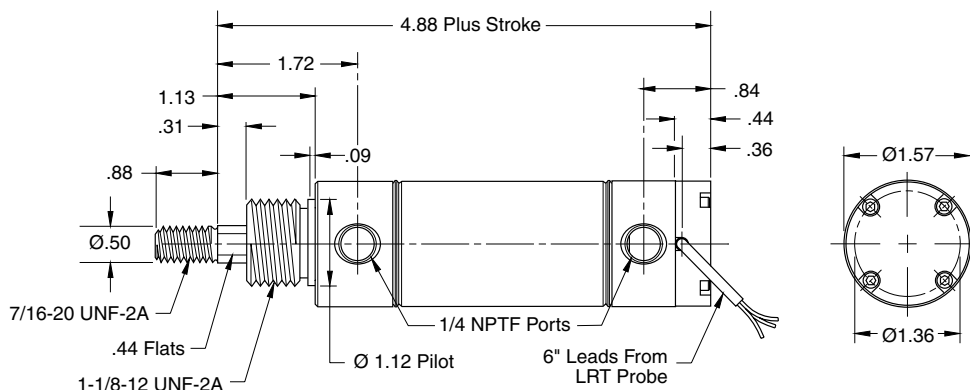
**Style BFD**



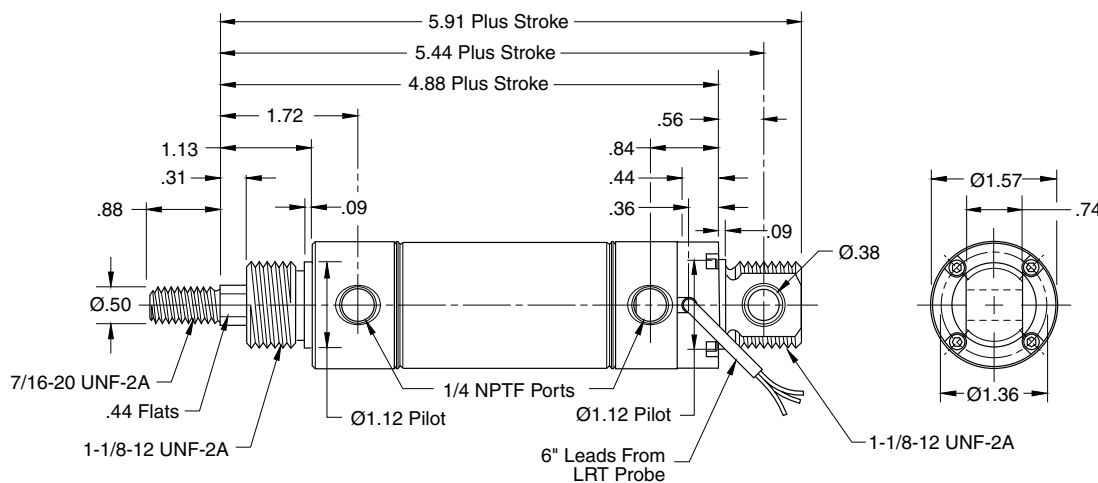
<b>B</b>	Round Body Cylinders Actuator Products
	SR/SM/SRD/SRDM Series
SRX Series	
P1L Series	
P1A Series	
P Series	

**1-1/2" Bore Cylinders**

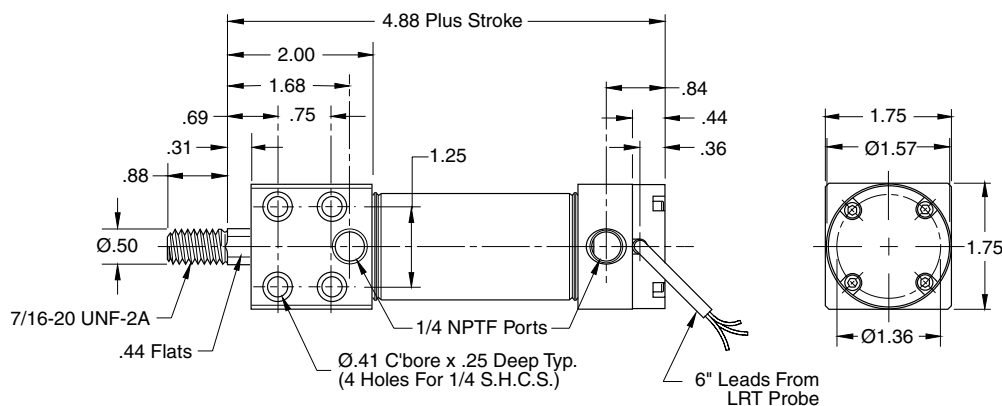
**Style D**



**Style DXP**



**Style BFD**

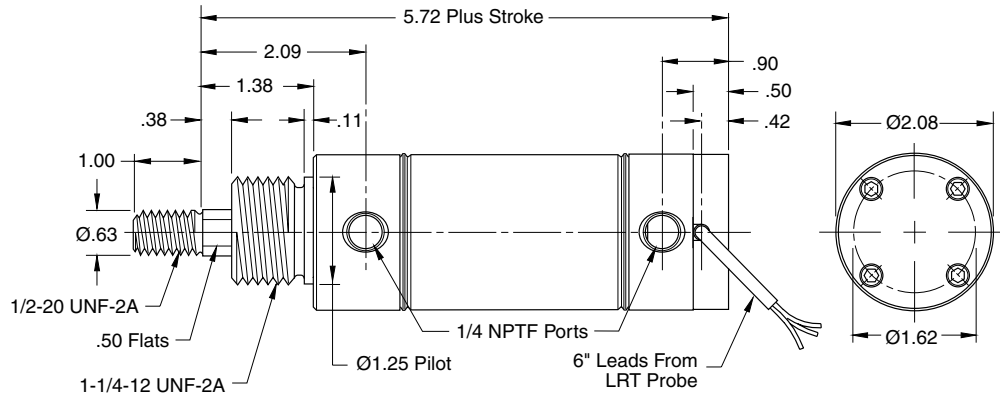


<b>B</b>	Round Body Cylinders
	Actuator Products
<b>SR</b>	SR/SM/SRD/SRD/SRD
	Series
<b>SRX</b>	Series
<b>P1L</b>	Series
<b>P1A</b>	Series
<b>P</b>	Series

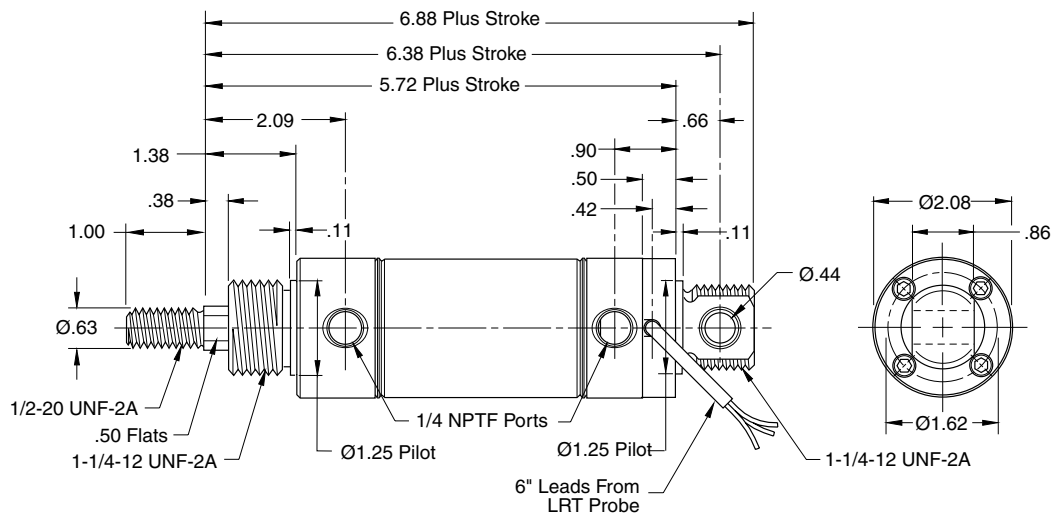


**2" Bore Cylinders**

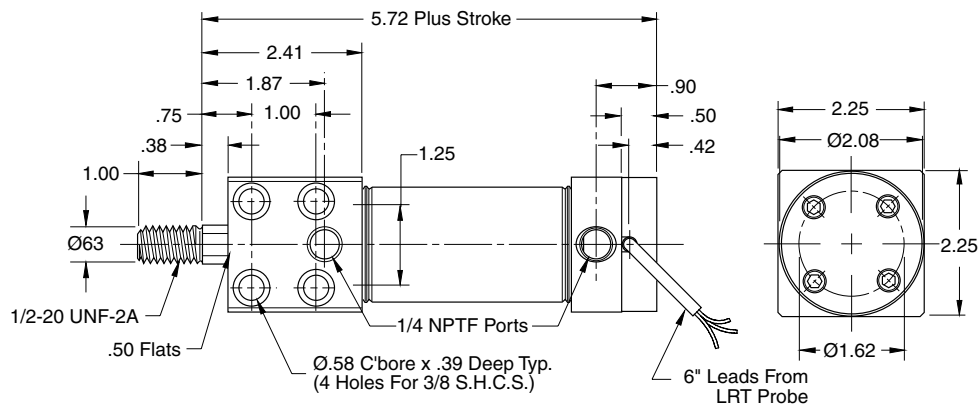
**Style D**



**Style DXP**



**Style BFD**

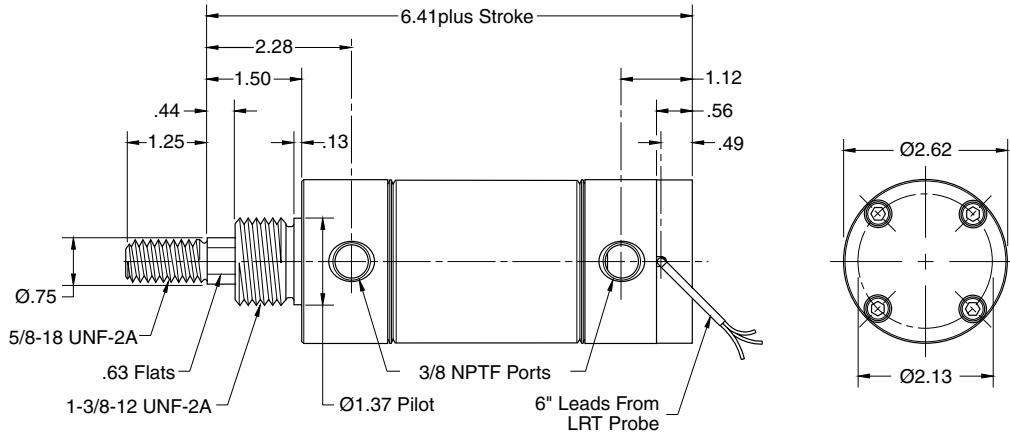


<b>B</b>	Round Body Cylinders
	Actuator Products
	SR/SM/SRD/SRDM Series
	SRX Series
	P1L Series
	P1A Series
	P Series

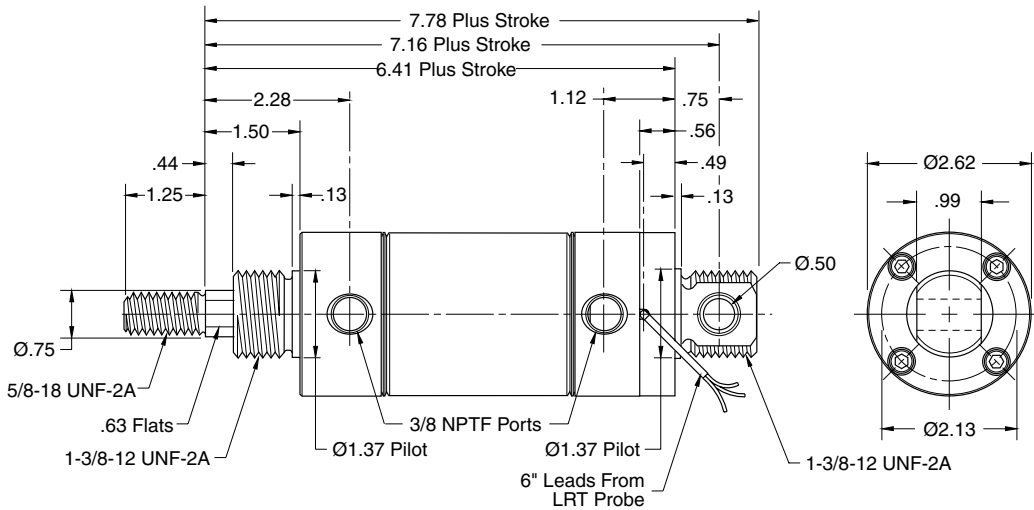


**2-1/2" Bore Cylinders**

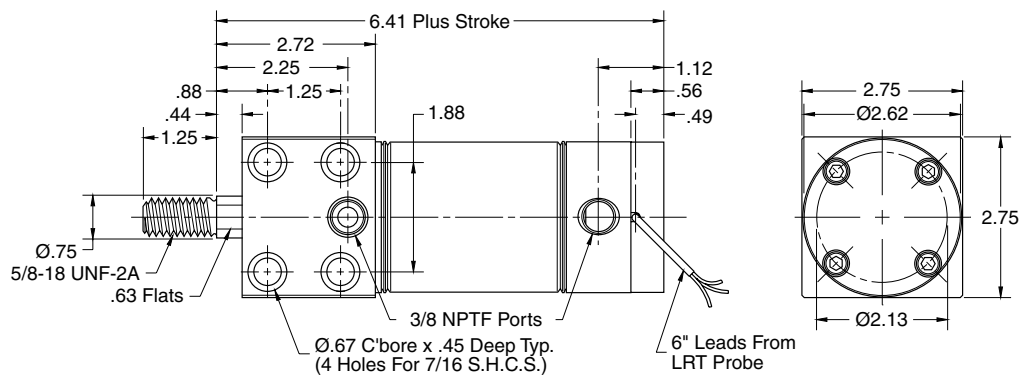
**Style D**



**Style DXP**



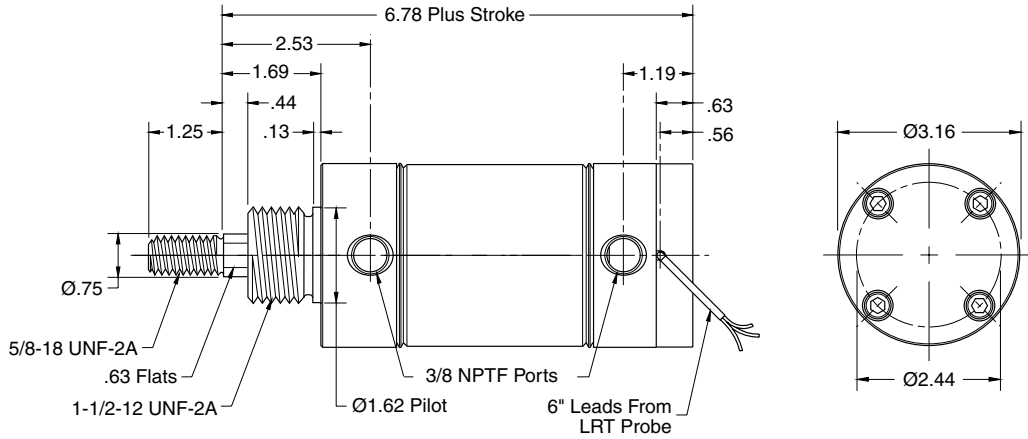
**Style BFD**



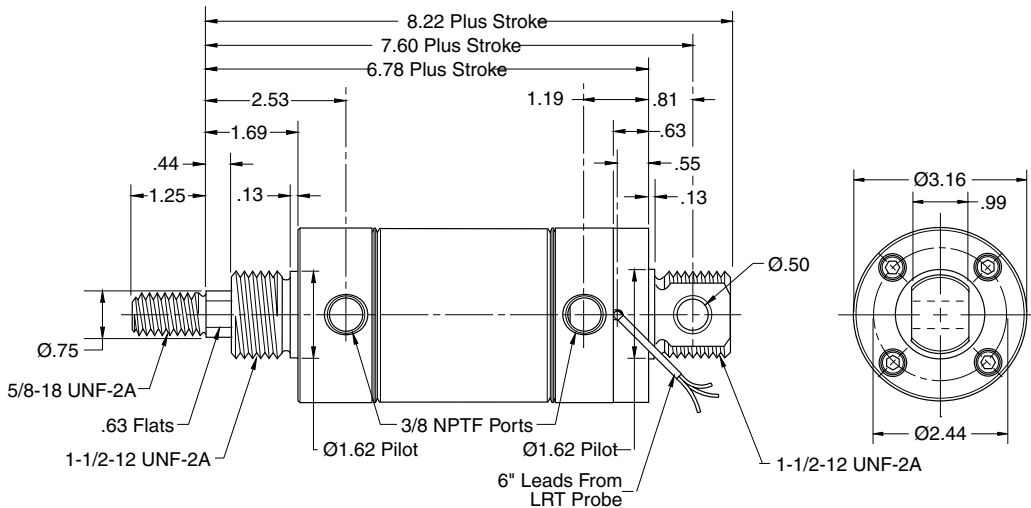
<b>B</b>	Round Body Cylinders
	Actuator Products
<b>SR</b>	SR/SM/SRD/SRDM Series
	SRX Series
<b>P</b>	P1L Series
<b>P</b>	P1A Series
<b>P</b>	P Series

**3" Bore Cylinders**

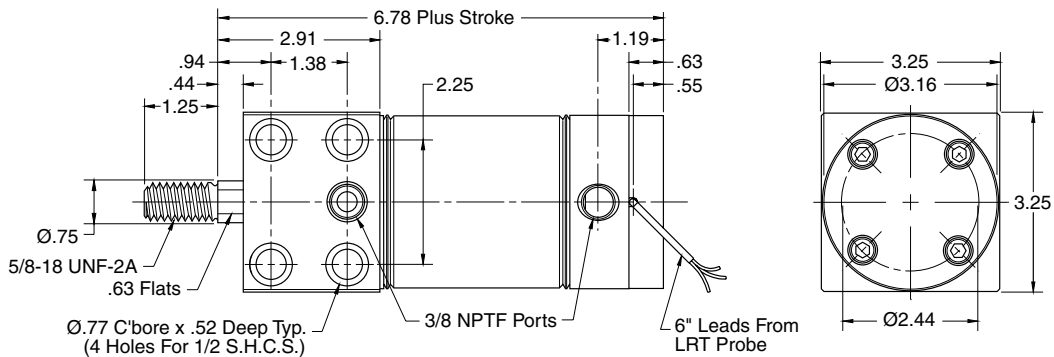
**Style D**



**Style DXP**

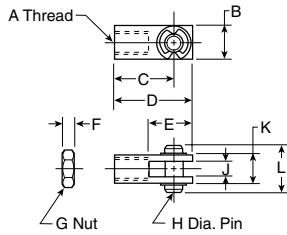


**Style BFD**



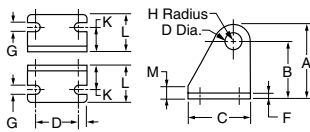
<b>B</b>	Round Body Cylinders Actuator Products
	SR/SM/SRD/SRDM Series
SRX Series	
P1L Series	
P1A Series	
P Series	

### Piston Rod Clevis



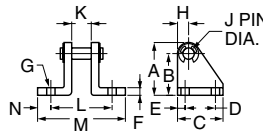
Bore size	A	B	C	D	E	F	G	H	J	K	L	Part number
1-1/16	3/8-24	.63	1.38	1.69	.94	.22	3/8-24	.31	.32	.63	.88	L071300350
1-1/2	7/16-20	.75	1.31	1.69	.94	.25	7/16-20	.38	.38	.75	1.03	L071300400
2	1/2-20	.88	1.88	2.31	1.31	.31	1/2-20	.44	.45	.88	1.14	L071300550
2-1/2, 3	5/8-18	1.00	2.25	2.75	1.50	.38	5/8-18	.50	.51	1.00	1.38	L071300600

### Pivot Brackets



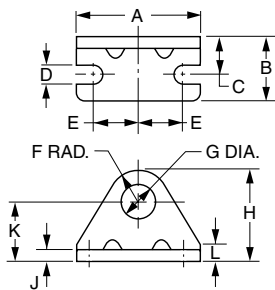
Bore size	A	B	C	D	E	F	G	H	J	K	L	M	Part number
1-1/16	1.31	1.00	1.31	.81	.25	.16	.28	.31	.315	.56	.88	.28	L071310400
1-1/2	1.63	1.25	1.63	1.00	.31	.19	.34	.38	.378	.69	1.13	.31	L071310500
2	1.81	1.38	1.81	1.19	.31	.25	.34	.44	.440	.75	1.19	.38	L071310600
2-1/2, 3	2.13	1.63	2.13	1.38	.38	.25	.41	.50	.503	.88	1.38	.38	L071310700

### Pivot Brackets



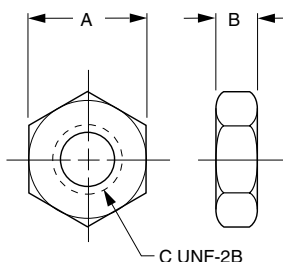
Bore size	A	B	C	D	E	F	G	H	J	K	L	M	N	Part number
1-1/16	1.31	1.00	1.31	.81	.25	.16	.28	.31	.312	.62	1.75	2.38	.31	L071320250
1-1/2	1.63	1.25	1.63	1.00	.31	.19	.34	.38	.375	.75	2.13	3.00	.44	L071320350
2	1.81	1.38	1.81	1.19	.31	.25	.34	.44	.437	.88	2.38	3.25	.44	L071320450
2-1/2, 3	2.13	1.63	2.13	1.38	.38	.25	.41	.50	.500	1.00	2.75	3.75	.50	L071320550

### Foot Brackets



Bore size	A	B	C	D	E	F	G	H	J	K	L	Part number
1-1/16	2.13	1.16	.66	.28	.75	.75	.88	1.75	.16	1.00	.38	L073790056
1-1/2	2.75	1.44	.81	.35	1.00	.94	1.13	2.19	.19	1.25	.38	L073790108
2	3.00	1.59	.91	.35	1.19	1.06	1.26	2.44	.22	1.38	.44	L073790116
2-1/2	3.75	1.88	1.06	.41	1.50	1.19	1.38	2.81	.25	1.63	.50	L073790125
3	4.38	1.62	1.00	.35	1.75	1.25	1.64	3.14	.25	1.89	.89	L073790140

### Mounting Nut



Bore size	A	B	C	Part number
1-1/16	1.31	.48	7/8-14	L073801000
1-1/2	1.69	.61	1-1/8-12	L073801300
2	1.88	.50	1-1/4-12	L073801200
2-1/2	2.06	.78	1-3/8-12	L073801400
3	2.25	.84	1-1/2-12	L073801500

Most popular.



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

## P1L Series

- Repairable aluminum cylinder, anodized body and end caps
- 8 bore sizes: 20mm to 100mm (3/4" to 4")
- 4 Standard rod ends: inch, metric, male, female
- Bumpers standard on both ends
- Adjustable cushions optional at both ends
- Mounting styles: 9 standard
- Strokes available in any practical length
- Available in metric or inch mounting threads



### Operating information

Operating pressure:	10 bar (145 PSIG)
Temperature range:	
Standard	-23°C to 74°C (-10°F to 250°F)
High temperature version*	-23°C to 121°C (-10°F to 250°F)
* Option intended for limited exposure to temperatures over 80°C or 176°F. This option is primarily for applications which subject the cylinder to fluids that have an adverse effect on external seals.	
Filtration requirements:	40 micron, dry filtered air

### Ordering information

**P1L N 032 D M N 0200 W B N N N**

<b>Construction 1</b>	
N	Inch mounting threads
M	Metric mounting threads

<b>Bores (mm)</b>			
020	032	050	080
025	040	063	100

<b>Function</b>	
D	Double acting, single rod
K	Double acting, double rod

<b>Cushions/magnetic piston</b>	
N	No cushion, no magnetic piston
M	No cushion, magnetic piston 2
F	Cushioned both ends, no magnetic piston
Y	Cushioned both ends, magnetic piston 2

<b>Stroke</b>	
Specify in mm	

<b>Version 3</b>	
B	Basic
W	With options
/	Special

<b>Seal material</b>	
N	Standard seals
T	Fluorocarbon

<b>Mounting style</b>	
N	No mountings fitted (std.)
J	Front flange
H	Rear flange
B	Single rear clevis
A	Double rear clevis
F	Foot, front & rear
G	Nose mount
E	Front trunnion
D	Rear trunnion

<b>Rod material</b>	
N	Carbon steel (std on 32-100mm bores)
S	Stainless (std on 20-25mm bores)

<b>Rod end style 1</b>	
N	Inch male 4
6	Metric female
5	Metric male 5
9	Inch female
3	Special

<b>Port type 1</b>	
N	NPT threads 4
B	BSPT threads 5

<b>Stroke length for standard cylinders</b>		
<b>Bore</b>	<b>Min. stroke (mm)</b>	<b>Max. stroke (mm) 6</b>
20	2	1000
25	2	1000
32	2	1000
40	4	1000
50	5	1000
63	7	1000
80	4	1000
100	4	1000

**Sensors**  
For sensors see page B339.

**Notes:**

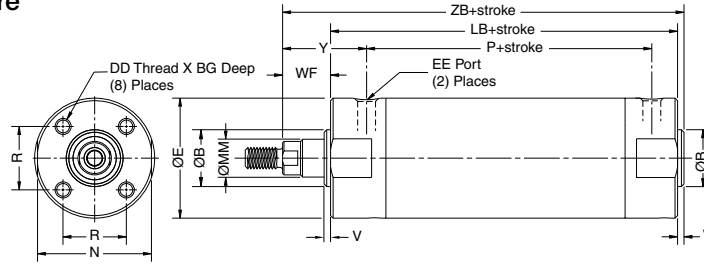
- When selecting inch or metric construction, be advised that the piston rod end and porting thread will coincide with the mounting thread selected as the standard for the basic cylinder. For example, selecting "M" in the construction field will automatically provide a metric male piston rod end and BSPT ports as standard.
- Not available with fluorocarbon seal option.
- If cylinder contains no options, then use "B" as the last digit in the model code. The last 4 boxes are used only when "W" or "/" appears in this field.
- Standard with Inch Construction
- Standard with Metric Construction
- Please consult factory for availability of stroke lengths longer than those listed.

For ordering purposes, when special options or common modifications are requested, the factory will assign a sequential part number in place of the model number.

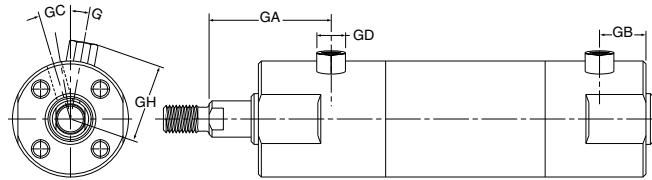


**Style N - Basic No Mount**

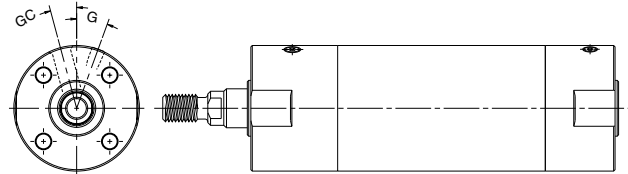
Typical 20 to 100 mm Bore without air cushion



With adjustable air cushion - 20 to 25 mm bores



With adjustable air cushion - 32 to 100 mm bores (feature a flush-fit cushion adjustment screw)



**Style N, envelope and mounting dimensions – mm (inch)**

Bore size	ØB +0 -0.02 (+0 -0.001)	DD (UNF)	BG depth	ØE	EE (NPTF)	Ø MM rod dia.	N	NA	R	V	WF	Y
20	12 (0.472)	M4x0.7 (8-32)	7 (0.28)	27 (1.06)	1/8* (1/8 †)	8 (0.315)	24 (0.94)	-	14 (0.55)	2 (0.08)	13 (0.50)	28 (1.10)
25	14 (0.551)	M5x0.8 (10-32)	7.6 (0.30)	32 (1.26)	1/8* (1/8 †)	10 (0.394)	29 (1.14)	-	16.5 (0.65)	2 (0.08)	16 (0.62)	30 (1.18)
32	18 (0.709)	M5x0.8 (10-32)	7.6 (0.30)	39 (1.53)	1/8 (1/8)	12 (0.472)	36 (1.42)	11 (0.43)	20 (0.79)	2 (0.08)	22 (0.88)	40 (1.57)
40	25 (0.984)	M6x1 (1/4-28)	12 (0.47)	48.5 (1.91)	1/8 (1/8)	16 (0.630)	44 (1.73)	14 (0.55)	26 (1.02)	2 (0.08)	22 (0.88)	42 (1.65)
50	30 (1.181)	M8x1.25 (5/16-24)	16 (0.63)	59 (2.32)	1/4 (1/4)	20 (0.787)	55 (2.17)	18 (0.71)	32 (1.26)	2 (0.08)	30 (1.19)	53 (2.09)
63	32 (1.260)	M10x1.5 (3/8-24)	16 (0.63)	72 (2.83)	1/4 (1/4)	20 (0.787)	69 (2.72)	18 (0.71)	38 (1.50)	2 (0.08)	30 (1.19)	53 (2.09)
80	40 (1.575)	M10x1.5 (3/8-24)	22 (0.88)	90 (3.54)	3/8 (3/8)	25 (0.984)	86 (3.39)	23 (0.91)	50 (1.97)	3 (0.12)	31 (1.22)	59 (2.32)
100	50 (1.968)	M12x1.75 (1/2-20)	22 (0.88)	110 (4.33)	1/2 (1/2)	32 (1.260)	106 (4.17)	30 (1.18)	60 (2.36)	3 (0.12)	31 (1.22)	57 (2.24)

**Add stroke**

Bore size	LB	P	ZB
20	69 (2.70)	45 (1.77)	83 (3.28)
25	69 (2.70)	46 (1.81)	86 (3.40)
32	71 (2.78)	43 (1.69)	95 (3.74)
40	78 (3.06)	49 (1.93)	102 (4.02)
50	90 (3.53)	53 (2.09)	122 (4.80)
63	90 (3.53)	52 (2.05)	122 (4.80)
80	108 (4.25)	64 (2.52)	142 (5.59)
100	108 (4.25)	66 (2.60)	142 (5.59)

**Adjustable air cushion**

Bore size	GA	GB	GD Hex	GC°	G°	GH	EE	Cushion length
20	33 (1.30)	14 (0.55)	8 (0.31)	13-1/2	25-1/2	20.5 (0.81)	M5 x 0.8 (10-32 UNF)	9 (0.35)
25	35 (1.38)	14 (0.55)	8 (0.31)	15-1/2	20-1/2	23 (0.91)	M5 x 0.8 (10-32 UNF)	9 (0.35)
32	-	-	-	10-1/2	30-1/2	-	1/8 (1/8 NPTF)	10 (0.39)
40	-	-	-	10-1/2	22-1/2	-	1/8 (1/8 NPTF)	12 (0.47)
50	-	-	-	10-1/2	23-1/2	-	1/4 (1/4 NPTF)	15 (0.59)
63	-	-	-	15-1/2	20-1/2	-	1/4 (1/4 NPTF)	15 (0.59)
80	-	-	-	15-1/2	25-1/2	-	3/8 (3/8 NPTF)	15 (0.59)
100	-	-	-	15-1/2	25-1/2	-	1/2 (1/2 NPTF)	15 (0.59)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch



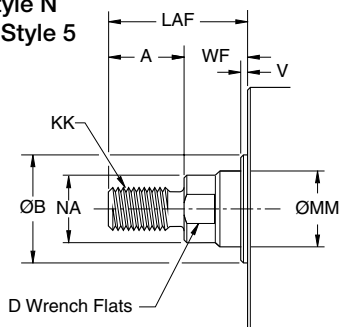
**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRD/SM Series  
 SRX Series  
 P1L Series  
 P1A Series  
 P Series

### Rod End Details

#### Male threads

Inch male - Style N

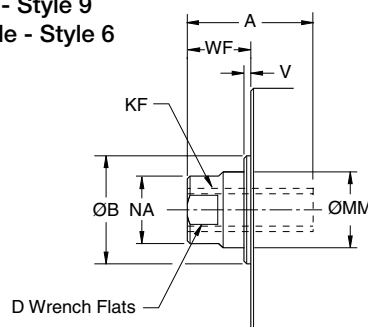
Metric male - Style 5



#### Female threads

Inch female - Style 9

Metric female - Style 6



#### Special rod end threads

##### Thread Style 3

Special Metric or Inch threads, extension, blank, etc., are also available.

To order, specify "Style 3" and give desired dimensions for KK or KF, A and LAF or WF (length dimensions in millimeters).

If otherwise special, supply a dimensioned sketch.

#### Rod ends – mm (inch)

Bore size	Thread									
	A	ØB +0 -0.02 (+0 -0.001)	D	KK Style 5 (Style N)	KF Style 6 (Style 9)	LAF	Ø MM rod dia.	NA	V	WF
20	13 (0.50)	12 (0.472)	6 (0.24)	M8 x 1.25 (1/4-28)	M5 x 0.80 (#10-32)	26 (1.00)	8 (0.315)	-	2 (0.08)	13 (0.50)
25	13 (0.50)	14 (0.551)	8 (0.31)	M10 x 1.25 (5/16-24)	M6 x 1.00 (1/4-28)	29 (1.12)	10 (0.394)	-	2 (0.08)	16 (0.62)
32	19 (0.75)	18 (0.709)	10 (0.39)	M10 x 1.25 (7/16-20)	M8 x 1.25 (5/16-24)	41 (1.63)	12 (0.472)	11 (0.43)	2 (0.08)	22 (0.88)
40	19 (0.75)	25 (0.984)	12 (0.47)	M14 x 1.5 (7/16-20)	M8 x 1.25 (3/8-24)	41 (1.63)	16 (0.630)	14 (0.55)	2 (0.08)	22 (0.88)
50	22 (0.88)	30 (1.181)	16 (0.63)	M18 x 1.5 (1/2-20)	M10 x 1.25 (1/2-20)	52 (2.07)	20 (0.787)	18 (0.71)	2 (0.08)	30 (1.19)
63	22 (0.88)	32 (1.260)	16 (0.63)	M18 x 1.5 (1/2-20)	M10 x 1.25 (1/2-20)	52 (2.07)	20 (0.787)	18 (0.71)	2 (0.08)	30 (1.19)
80	38 (1.50)	40 (1.575)	20 (0.79)	M22 x 1.5 (3/4-16)	M16 x 1.5 (5/8-18)	69 (2.72)	25 (0.984)	23 (0.91)	3 (0.12)	31 (1.22)
100	48 (1.88)	50 (1.968)	26 (1.02)	M26 x 1.5 (1-14)	M20 x 1.5 (3/4-16)	79 (3.11)	32 (1.260)	30 (1.18)	3 (0.12)	31 (1.22)

**B**

Round Body Cylinders  
Actuator Products

SR/SM/SRD/SRDM  
Series

SRX  
Series

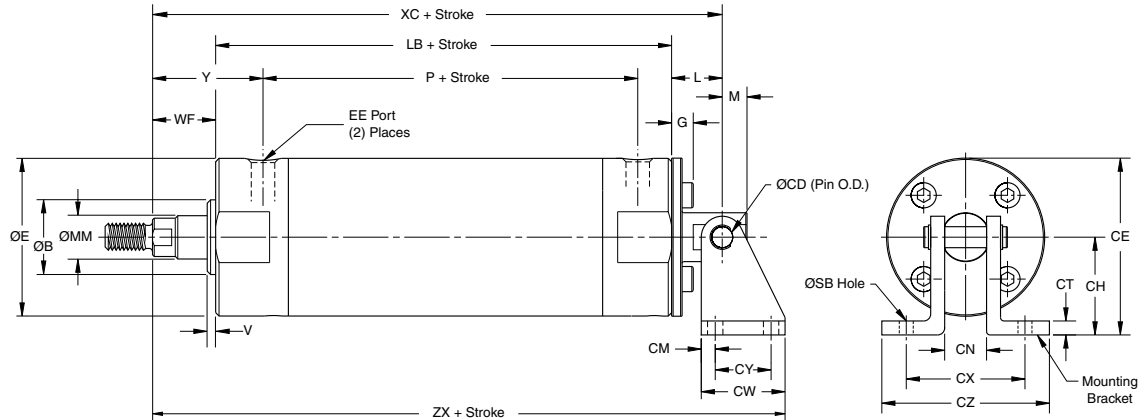
P1L  
Series

P1A  
Series

P  
Series

**Style B - Single Rear Clevis**

Typical 20 to 100 mm Bore



Note: Mating Mounting Bracket and Pin must be ordered as separate items

**Style B, envelope and mounting dimensions – mm (inch)**

Bore size	ØB	ØCD	ØE	EE	G	L	M	ØMM	V	WF	Y
	+0 - 0.02 (+0 - 0.001)	h9 (+0 - 0.002)		BSPT (NTPF)							
20	12 (0.472)	6.35 (0.250)	27 (1.06)	1/8* (1/8 †)	7 (0.26)	18 (0.70)	7 (0.28)	8 (0.315)	2 (0.08)	13 (0.50)	28 (1.10)
25	14 (0.551)	6.35 (0.250)	32 (1.26)	1/8* (1/8 †)	8 (0.27)	17 (0.68)	7 (0.28)	10 (0.394)	2 (0.08)	16 (0.62)	30 (1.18)
32	18 (0.709)	6.35 (0.250)	39 (1.53)	1/8 (1/8)	15.5 (0.57)	27 (1.07)	10 (0.39)	12 (0.472)	2 (0.08)	22 (0.88)	40 (1.57)
40	25 (0.984)	9.52 (0.375)	48.5 (1.91)	1/8 (1/8)	10 (0.36)	22 (0.88)	10 (0.39)	16 (0.630)	2 (0.08)	22 (0.88)	42 (1.65)
50	30 (1.181)	9.52 (0.375)	59 (2.32)	1/4 (1/4)	12 (0.43)	23 (0.91)	11 (0.44)	20 (0.787)	2 (0.08)	30 (1.19)	53 (2.09)
63	32 (1.260)	9.52 (0.375)	72 (2.83)	1/4 (1/4)	13 (0.46)	23 (0.91)	11 (0.44)	20 (0.787)	2 (0.08)	30 (1.19)	53 (2.09)
80	40 (1.575)	19.07 (0.751)	90 (3.54)	3/8 (3/8)	15 (0.54)	35 (1.38)	19 (0.75)	25 (0.984)	3 (0.12)	31 (1.22)	59 (2.32)
100	50 (1.968)	19.07 (0.751)	110 (4.33)	1/2 (1/2)	17 (0.64)	43 (1.69)	19 (0.75)	32 (1.260)	3 (0.12)	31 (1.22)	57 (2.24)

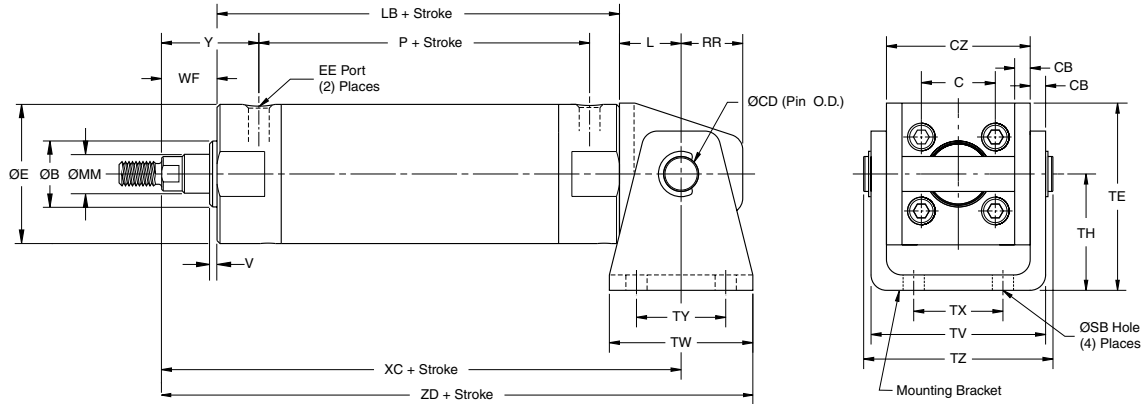
Bore size											Add stroke			
	CE	CH	CM	CN	CT	CW	CX	CY	CZ	ØSB	LB	P	XC	ZX
20	35.5 (1.39)	22 (0.87)	5 (0.19)	10 (0.38)	3 (0.12)	29 (1.13)	32 (1.25)	19 (0.75)	51 (2.00)	7 (0.27)	69 (2.70)	45 (1.77)	99 (3.91)	120 (4.74)
25	38 (1.49)	22 (0.87)	5 (0.19)	10 (0.38)	3 (0.12)	29 (1.13)	32 (1.25)	19 (0.75)	51 (2.00)	7 (0.27)	69 (2.70)	46 (1.81)	102 (4.00)	123 (4.83)
32	41.5 (1.63)	22 (0.87)	5 (0.19)	13 (0.50)	3 (0.12)	29 (1.13)	35 (1.38)	19 (0.75)	54 (2.12)	7 (0.27)	71 (2.78)	43 (1.69)	120 (4.72)	141 (5.55)
40	59 (2.31)	35 (1.38)	6 (0.25)	16 (0.62)	3 (0.12)	38 (1.50)	47 (1.86)	25 (1.00)	67 (2.62)	7 (0.27)	78 (3.06)	49 (1.93)	122 (4.81)	151 (5.94)
50	64.5 (2.52)	35 (1.38)	6 (0.25)	19 (0.75)	6 (0.25)	38 (1.50)	54 (2.12)	25 (1.00)	76 (3.00)	7 (0.27)	90 (3.53)	53 (2.09)	143 (5.63)	172 (6.76)
63	80 (3.17)	44 (1.75)	6 (0.25)	19 (0.75)	6 (0.25)	38 (1.50)	54 (2.12)	25 (1.00)	76 (3.00)	7 (0.27)	90 (3.53)	52 (2.05)	143 (5.63)	172 (6.76)
80	96 (3.77)	51 (2.00)	13 (0.50)	28 (1.09)	6 (0.25)	64 (2.50)	72 (2.84)	38 (1.50)	104 (4.09)	11 (0.42)	108 (4.25)	64 (2.52)	173 (6.82)	218 (8.57)
100	115 (4.54)	60 (2.37)	13 (0.50)	32 (1.25)	6 (0.25)	70 (2.75)	76 (3.00)	44 (1.75)	108 (4.25)	14 (0.55)	108 (4.25)	66 (2.60)	189 (7.44)	240 (9.44)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch

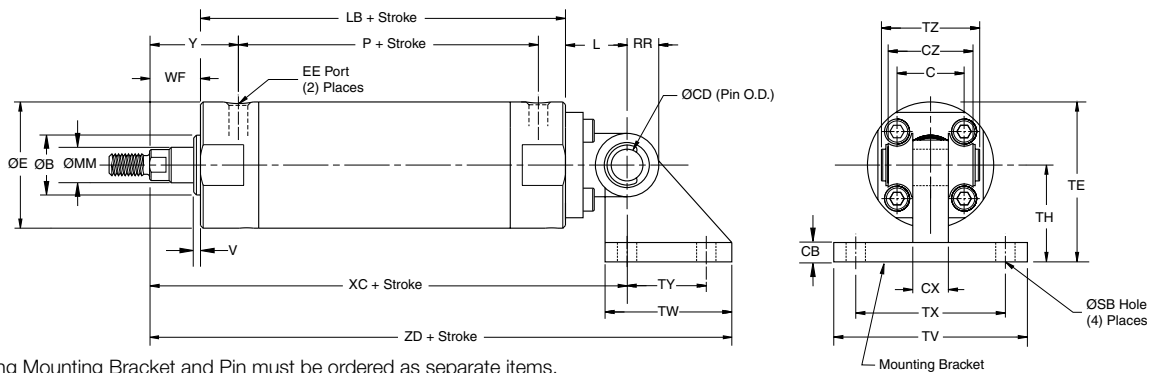


**Style A - Double Rear Clevis**

Typical 20 to 63 mm bore



Typical 80 to 100 mm bore



Note: Mating Mounting Bracket and Pin must be ordered as separate items.

**Style A, envelope and mounting dimensions - mm (inch)**

Bore size	ØB +0 -0.02 (+0 -0.001)	C	CB	ØCD d 9 (-0.001 -0.003)	CZ	CX	ØE	EE BSPT (NPTF)	L	ØMM rod dia.	RR	V	WF
20	12 (0.472)	14 (0.55)	3 (0.12)	8 (0.315)	29 (1.14)	-	27 (1.06)	1/8* (1/8†)	14 (0.55)	8 (0.315)	11 (0.43)	2 (0.08)	13 (0.50)
25	14 (0.551)	16.5 (0.65)	3 (0.12)	10 (0.394)	33 (1.30)	-	32 (1.26)	1/8* (1/8†)	16 (0.63)	10 (0.394)	13 (0.51)	2 (0.08)	16 (0.62)
32	18 (0.709)	20 (0.79)	4.5 (0.18)	12 (0.472)	40 (1.57)	-	39 (1.53)	1/8 (1/8)	20 (0.79)	12 (0.472)	15 (0.59)	2 (0.08)	22 (0.88)
40	25 (0.984)	26 (1.02)	4.5 (0.18)	14 (0.551)	49 (1.93)	-	48.5 (1.91)	1/8 (1/8)	22 (0.87)	16 (0.630)	18 (0.71)	2 (0.08)	22 (0.88)
50	30 (1.181)	32 (1.26)	6 (0.25)	16 (0.630)	60 (2.36)	-	59 (2.32)	1/4 (1/4)	25 (0.98)	20 (0.787)	20 (0.79)	2 (0.08)	30 (1.19)
63	32 (1.260)	38 (1.50)	8 (0.31)	18 (0.709)	74 (2.91)	-	72 (2.83)	1/4 (1/4)	30 (1.18)	20 (0.787)	22 (0.87)	2 (0.08)	30 (1.19)
80	40 (1.575)	50 (1.97)	11 (0.43)	18 (0.709)	56 (2.20)	28 (1.10)	90 (3.54)	3/8 (3/8)	35 (1.38)	25 (0.984)	18 (0.71)	3 (0.12)	31 (1.22)
100	50 (1.968)	60 (2.36)	12 (0.47)	22 (0.866)	64 (2.52)	32 (1.26)	110 (4.33)	1/2 (1/2)	43 (1.69)	32 (1.260)	22 (0.87)	3 (0.12)	31 (1.22)

Bore size	ØSB	TY	TV	TE	TH	TX	TW	TZ	Y	Add Stroke			
										LB	P	XC	ZD
20	5.5 (0.22)	28 (1.10)	35 (1.39)	38 (1.50)	25 (0.98)	16 (0.63)	42 (1.66)	43.4 (1.71)	28 (1.10)	69 (2.70)	45 (1.77)	95 (3.75)	116 (4.58)
25	5.5 (0.22)	28 (1.10)	39 (1.55)	45.5 (1.79)	30 (1.18)	20 (0.79)	42 (1.66)	48 (1.89)	30 (1.18)	69 (2.70)	46 (1.81)	100 (3.95)	121 (4.78)
32	7 (0.28)	28 (1.10)	49 (1.93)	54 (2.13)	35 (1.38)	22 (0.87)	48 (1.88)	59.4 (2.34)	40 (1.57)	71 (2.78)	43 (1.69)	113 (4.45)	137 (5.39)
40	7 (0.28)	30 (1.18)	58 (2.28)	63.5 (2.50)	40 (1.57)	30 (1.18)	56 (2.20)	71.4 (2.81)	42 (1.65)	78 (3.06)	49 (1.93)	122 (4.81)	150 (5.91)
50	9 (0.35)	36 (1.42)	72 (2.83)	79 (3.11)	50 (1.97)	36 (1.42)	64 (2.52)	86 (3.38)	53 (2.09)	90 (3.53)	53 (2.09)	145 (5.70)	177 (6.96)
63	11 (0.43)	46 (1.81)	90 (3.54)	96 (3.78)	60 (2.36)	46 (1.81)	74 (2.91)	105.4 (4.15)	53 (2.09)	90 (3.53)	52 (2.05)	150 (5.90)	187 (7.36)
80	11 (0.43)	45 (1.77)	110 (4.33)	100 (3.94)	55 (2.17)	85 (3.35)	72 (2.83)	64 (2.52)	59 (2.32)	108 (4.25)	64 (2.52)	174 (6.85)	232.5 (9.15)
100	13.5 (0.53)	60 (2.36)	130 (5.12)	120 (4.72)	65 (2.56)	100 (3.94)	93 (3.66)	72 (2.83)	57 (2.24)	108 (4.25)	66 (2.60)	182 (7.17)	258.5 (10.18)

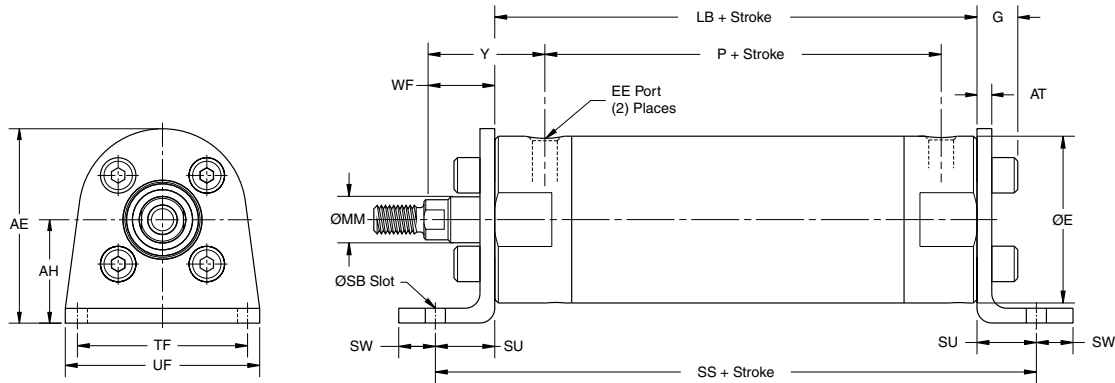
\* Ports are M5 for cushioned versions, metric

† Ports are 10-32 for cushioned versions, inch



**Style F - Foot Mount**

Typical 20 to 100 mm bore



**Style F, envelope and mounting dimensions – mm (inch)**

Bore size	AE	AH	AT	ØE	EE (BSPT)	G	ØMM rod dia.	ØSB
20	36.5 (1.44)	20.6 (0.81)	3 (0.12)	27 (1.06)	1/8* (1/8†)	6 (0.20)	8 (0.315)	7 (0.27)
25	38.5 (1.52)	20.6 (0.81)	3 (0.12)	32 (1.26)	1/8* (1/8†)	6.5 (0.22)	10 (0.394)	7 (0.27)
32	46.5 (1.83)	25.4 (1.00)	3 (0.12)	39 (1.53)	1/8 (1/8)	6.5 (0.22)	12 (0.472)	7 (0.28)
40	51 (2.02)	25.4 (1.00)	3 (0.12)	48.5 (1.91)	1/8 (1/8)	7 (0.25)	16 (0.630)	7 (0.28)
50	72 (2.84)	38.1 (1.50)	6 (0.25)	59 (2.32)	1/4 (1/4)	11 (0.41)	20 (0.787)	9 (0.34)
63	83.5 (3.29)	44.5 (1.75)	6 (0.25)	72 (2.83)	1/4 (1/4)	12 (0.44)	20 (0.787)	9 (0.34)
80	101 (3.98)	55 (2.17)	6 (0.25)	90 (3.54)	3/8 (3/8)	12 (0.44)	25 (0.984)	11 (0.43)
100	121 (4.76)	65 (2.56)	6 (0.25)	110 (4.33)	1/2 (1/2)	13 (0.50)	32 (1.260)	14 (0.55)

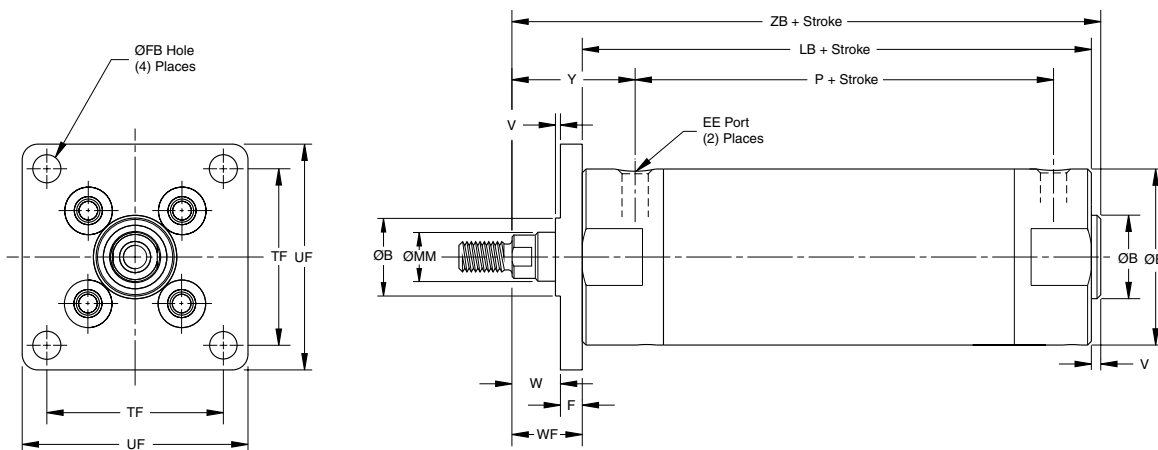
Bore size	SU	SW	TF	UF	WF	Y	Add stroke		
							LB	P	SS
20	14 (0.56)	11 (0.44)	38 (1.50)	48 (1.88)	13 (0.50)	28 (1.10)	69 (2.70)	45 (1.77)	97 (3.82)
25	14 (0.56)	11 (0.44)	38 (1.50)	48 (1.88)	16 (0.62)	30 (1.18)	69 (2.70)	46 (1.81)	97 (3.82)
32	19 (0.75)	19 (0.75)	48 (1.88)	63.5 (2.50)	22 (0.88)	40 (1.57)	71 (2.78)	43 (1.69)	109 (4.28)
40	18 (0.72)	20 (0.78)	48 (1.88)	63.5 (2.50)	22 (0.88)	42 (1.65)	78 (3.06)	49 (1.93)	114 (4.50)
50	25 (1.00)	16 (0.62)	57 (2.24)	79 (3.12)	30 (1.19)	53 (2.09)	90 (3.53)	53 (2.09)	140 (5.53)
63	25 (1.00)	16 (0.62)	73 (2.88)	95 (3.75)	30 (1.19)	53 (2.09)	90 (3.53)	52 (2.05)	140 (5.53)
80	28.5 (1.12)	14 (0.55)	100 (3.94)	125 (4.92)	31 (1.22)	59 (2.32)	108 (4.25)	64 (2.52)	165 (6.49)
100	30 (1.18)	16 (0.63)	120 (4.72)	150 (5.91)	31 (1.22)	57 (2.24)	108 (4.25)	66 (2.60)	168 (6.61)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch



**Style J - Front Flange**

Typical 20 to 100 mm bore



**Style J, envelope and mounting dimensions – mm (inch)**

Bore size	ØB		EE (BSPT)	F	ØFB	ØMM rod dia.	TF	UF	V	WF	W	Y
	+0	-0.02										
20	12 (0.472)	27 (1.06)	1/8* (1/8†)	6 (0.24)	5.5 (0.22)	8 (0.315)	28 (1.10)	40 (1.57)	2 (0.08)	13 (0.50)	7 (0.26)	28 (1.10)
25	14 (0.551)	32 (1.26)	1/8* (1/8†)	7 (0.28)	5.5 (0.22)	10 (0.394)	32 (1.26)	44 (1.73)	2 (0.08)	16 (0.62)	9 (0.34)	30 (1.18)
32	18 (0.709)	39 (1.53)	1/8 (1/8)	7 (0.28)	7 (0.28)	12 (0.472)	38 (1.50)	53 (2.09)	2 (0.08)	22 (0.88)	15 (0.60)	40 (1.57)
40	25 (0.984)	48.5 (1.91)	1/8 (1/8)	8 (0.31)	7 (0.28)	16 (0.630)	46 (1.81)	61 (2.40)	2 (0.08)	22 (0.88)	14 (0.57)	42 (1.65)
50	30 (1.181)	59 (2.32)	1/4 (1/4)	9 (0.35)	9 (0.35)	20 (0.787)	58 (2.28)	76 (3.00)	2 (0.08)	30 (1.19)	21 (0.84)	53 (2.09)
63	32 (1.260)	72 (2.83)	1/4 (1/4)	9 (0.35)	11 (0.43)	20 (0.787)	70 (2.76)	92 (3.62)	2 (0.08)	30 (1.19)	21 (0.84)	53 (2.09)
80	40 (1.575)	90 (3.54)	3/8 (3/8)	11 (0.43)	11 (0.43)	25 (0.984)	82 (3.23)	104 (4.09)	3 (0.12)	31 (1.22)	20 (0.79)	59 (2.32)
100	50 (1.968)	110 (4.33)	1/2 (1/2)	14 (0.55)	14 (0.55)	32 (1.260)	100 (3.94)	128 (5.04)	3 (0.12)	31 (1.22)	17 (0.67)	57 (2.24)

Bore size	Add stroke		
	LB	P	ZB
20	69 (2.70)	45 (1.77)	83 (3.28)
25	69 (2.70)	46 (1.81)	86 (3.40)
32	71 (2.78)	43 (1.69)	95 (3.74)
40	78 (3.06)	49 (1.93)	102 (4.02)
50	90 (3.53)	53 (2.09)	122 (4.80)
63	90 (3.53)	52 (2.05)	122 (4.80)
80	108 (4.25)	64 (2.52)	142 (5.59)
100	108 (4.25)	66 (2.60)	142 (5.59)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch

**B**

Round Body Cylinders  
Actuator Products

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SR/SM/SRD/SRDM  
Series

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SRX  
Series

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P1L  
Series

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P1A  
Series

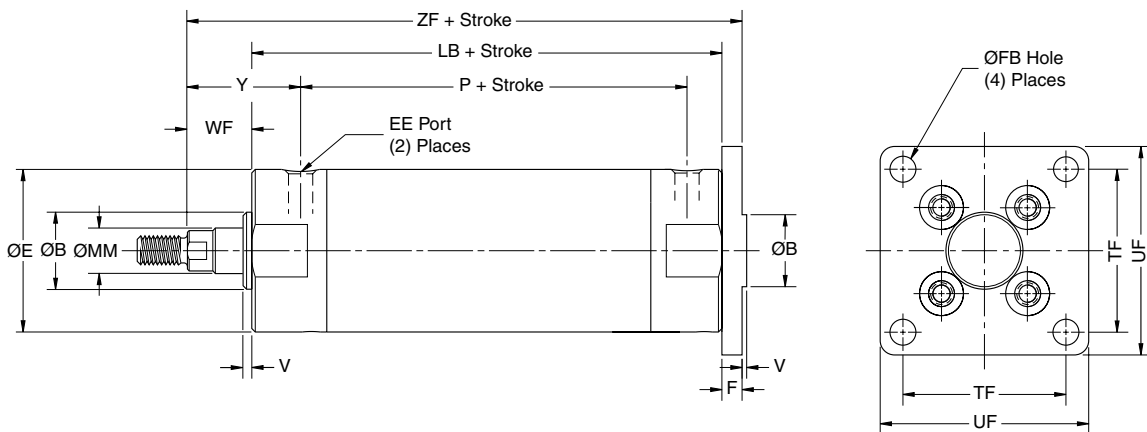
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P  
Series



**Style H - Rear Flange**

Typical 20 to 100 mm bore



**Style H, envelope and mounting dimensions – mm (inch)**

Bore size	ØB +0 -0.02	ØE	EE (BSPT)	F	ØFB	ØMM rod dia.	TF	UF	V	WF	Y
20	12 (0.472)	27 (1.06)	1/8* (1/8†)	6 (0.24)	5.5 (0.22)	8 (0.315)	28 (1.10)	40 (1.57)	2 (0.08)	13 (0.50)	28 (1.10)
25	14 (0.551)	32 (1.26)	1/8* (1/8†)	7 (0.28)	5.5 (0.22)	10 (0.394)	32 (1.26)	44 (1.73)	2 (0.08)	16 (0.62)	30 (1.18)
32	18 (0.709)	39 (1.53)	1/8 (1/8)	7 (0.28)	7 (0.28)	12 (0.472)	38 (1.50)	53 (2.09)	2 (0.08)	22 (0.88)	40 (1.57)
40	25 (0.984)	48.5 (1.91)	1/8 (1/8)	8 (0.31)	7 (0.28)	16 (0.630)	46 (1.81)	61 (2.40)	2 (0.08)	22 (0.88)	42 (1.65)
50	30 (1.181)	59 (2.32)	1/4 (1/4)	9 (0.35)	9 (0.35)	20 (0.787)	58 (2.28)	76 (3.00)	2 (0.08)	30 (1.19)	53 (2.09)
63	32 (1.260)	72 (2.83)	1/4 (1/4)	9 (0.35)	11 (0.43)	20 (0.787)	70 (2.76)	92 (3.62)	2 (0.08)	30 (1.19)	53 (2.09)
80	40 (1.575)	90 (3.54)	3/8 (3/8)	11 (0.43)	11 (0.43)	25 (0.984)	82 (3.23)	104 (4.09)	3 (0.12)	31 (1.22)	59 (2.32)
100	50 (1.968)	110 (4.33)	1/2 (1/2)	14 (0.55)	14 (0.55)	32 (1.260)	100 (3.94)	128 (5.04)	3 (0.12)	31 (1.22)	57 (2.24)

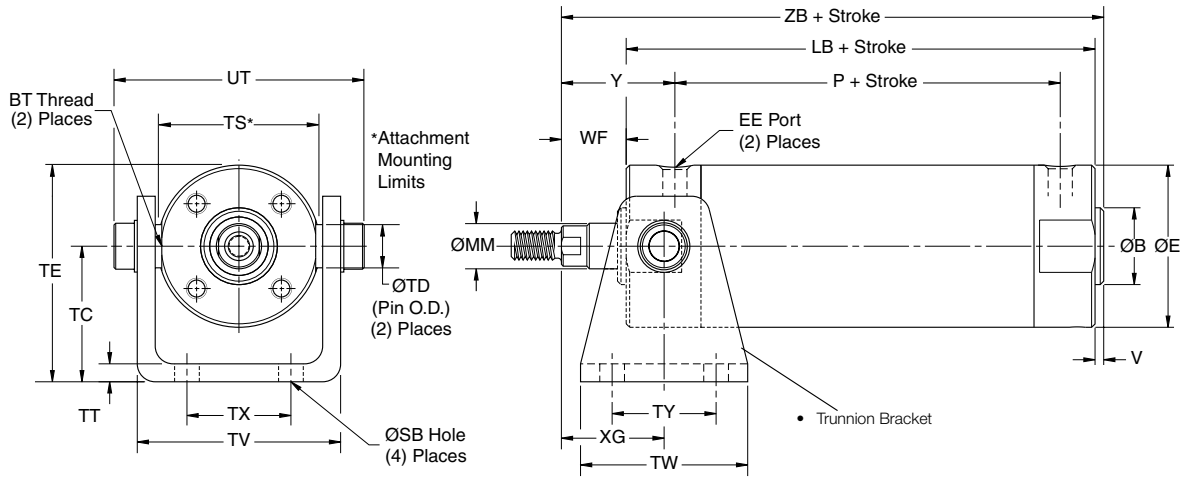
Bore size	Add stroke		
	LB	P	ZF
20	69 (2.70)	45 (1.77)	87 (3.44)
25	69 (2.70)	46 (1.81)	91 (3.60)
32	71 (2.78)	43 (1.69)	100 (3.94)
40	78 (3.06)	49 (1.93)	108 (4.25)
50	90 (3.53)	53 (2.09)	129 (5.07)
63	90 (3.53)	52 (2.05)	129 (5.07)
80	108 (4.25)	64 (2.52)	150 (5.91)
100	108 (4.25)	66 (2.60)	153 (6.02)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch

**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SW/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

**Style E - Front Trunnion**

Typical 20 to 63 mm bore



Note: Trunnion Bracket must be ordered as separate item

**Style E, envelope and mounting dimensions – mm (inch)**

Bore size	ØB		BT	D	ØE	EE (BSPT)	ØMM rod dia.	V	WF	XG	Y	ØSB	TC							
	+0	-0.02																		
20	12	(0.472)	M5x0.80	6	(0.24)	1/8* (1/8†)	8	(0.315)	2	(0.08)	13	(0.50)	24	(0.93)	28	(1.10)	5.5	(0.22)	25	(0.98)
25	14	(0.551)	M6x0.75	8	(0.31)	1/8* (1/8†)	10	(0.394)	2	(0.08)	16	(0.62)	27	(1.05)	30	(1.18)	5.5	(0.22)	30	(1.18)
32	18	(0.709)	M8x1.00	10	(0.39)	1/8 (1/8)	12	(0.472)	2	(0.08)	22	(0.88)	33	(1.31)	40	(1.57)	7	(0.28)	35	(1.38)
40	25	(0.984)	M10x1.25	12	(0.47)	1/8 (1/8)	16	(0.630)	2	(0.08)	22	(0.88)	34	(1.35)	42	(1.65)	7	(0.28)	40	(1.57)
50	30	(1.181)	M12x1.25	16	(0.63)	1/4 (1/4)	20	(0.787)	2	(0.08)	30	(1.19)	43	(1.70)	53	(2.09)	9	(0.35)	50	(1.97)
63	32	(1.260)	M14x1.50	16	(0.63)	1/4 (1/4)	20	(0.787)	2	(0.08)	30	(1.19)	43	(1.70)	53	(2.09)	11	(0.43)	60	(2.36)

Bore size	ØTD e8	TE	TS	TT	TV	TW	TX	TY	UT	Add stroke														
										LB	P	ZB												
20	8	(0.315)	38.5	(1.51)	28	(1.10)	3	(0.12)	35	(1.39)	42	(1.66)	16	(0.63)	28	(1.10)	47.5	(1.87)	69	(2.70)	45	(1.77)	83	(3.28)
25	10	(0.394)	46	(1.81)	33	(1.30)	3	(0.12)	39	(1.55)	42	(1.66)	20	(0.79)	28	(1.10)	53	(2.09)	69	(2.70)	46	(1.81)	86	(3.40)
32	12	(0.472)	54.5	(2.15)	40	(1.58)	4.5	(0.18)	49	(1.93)	48	(1.88)	22	(0.87)	28	(1.10)	68	(2.67)	71	(2.78)	43	(1.69)	95	(3.74)
40	14	(0.551)	64	(2.53)	49	(1.93)	4.5	(0.18)	58	(2.28)	56	(2.20)	30	(1.18)	30	(1.18)	79	(3.10)	78	(3.06)	49	(1.93)	102	(4.02)
50	16	(0.630)	79.5	(3.13)	60	(2.36)	6	(0.25)	72	(2.83)	64	(2.52)	36	(1.42)	36	(1.42)	99	(3.88)	90	(3.53)	53	(2.09)	122	(4.80)
63	18	(0.709)	96	(3.78)	74	(2.91)	8	(0.31)	90	(3.54)	74	(2.91)	46	(1.81)	46	(1.81)	119	(4.69)	90	(3.53)	52	(2.05)	122	(4.80)

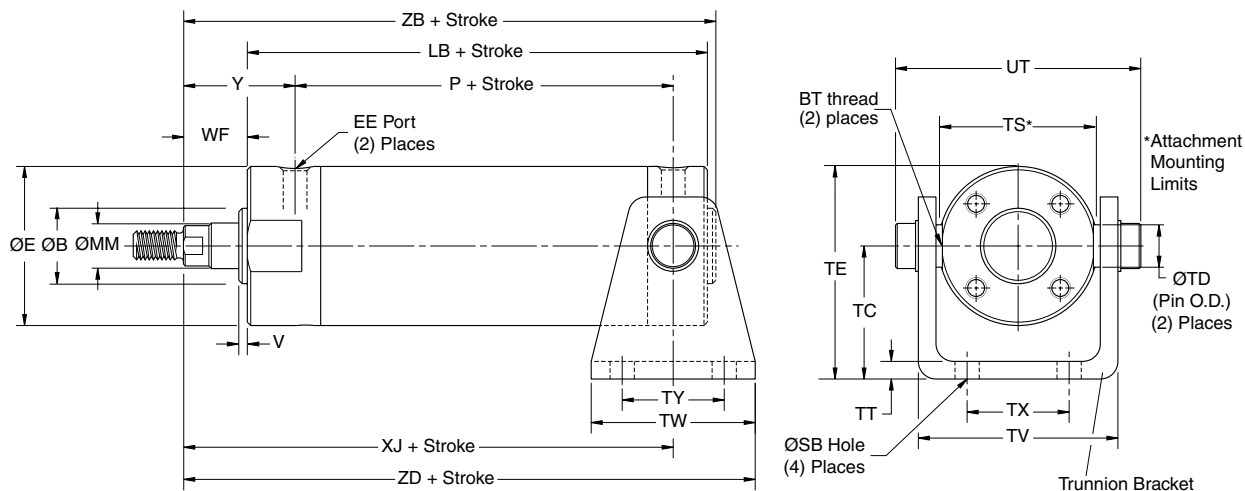
\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch





**Style D - Rear Trunnion**

Typical 20 to 63 mm bore



Note: Trunnion Bracket must be ordered as separate item

**Style D, envelope and mounting dimensions – mm (inch)**

Bore size	ØB +0 -0.02	BT	ØE	EE (BSPT)	ØMM rod dia.	V	WF	Y	ØSB	TC	ØTD e8	TE
20	12 (0.472)	M5x0.80	27 (1.06)	1/8* (1/8†)	8 (0.315)	2 (0.08)	13 (0.50)	28 (1.10)	5.5 (0.22)	25 (0.98)	8 (0.315)	38.5 (1.51)
25	14 (0.551)	M6x0.75	32 (1.26)	1/8* (1/8†)	10 (0.394)	2 (0.08)	16 (0.62)	30 (1.18)	5.5 (0.22)	30 (1.18)	10 (0.394)	46 (1.81)
32	18 (0.709)	M8x1.00	39 (1.53)	1/8 (1/8)	12 (0.472)	2 (0.08)	22 (0.88)	40 (1.57)	7 (0.28)	35 (1.38)	12 (0.472)	54.5 (2.15)
40	25 (0.984)	M10x1.25	48.5 (1.91)	1/8 (1/8)	16 (0.630)	2 (0.08)	22 (0.88)	42 (1.65)	7 (0.28)	40 (1.57)	14 (0.551)	64 (2.53)
50	30 (1.181)	M12x1.25	59 (2.32)	1/4 (1/4)	20 (0.787)	2 (0.08)	30 (1.19)	53 (2.09)	9 (0.35)	50 (1.97)	16 (0.630)	79.5 (3.13)
63	32 (1.260)	M14x1.50	72 (2.83)	1/4 (1/4)	20 (0.787)	2 (0.08)	30 (1.19)	53 (2.09)	11 (0.43)	60 (2.36)	18 (0.709)	96 (3.78)

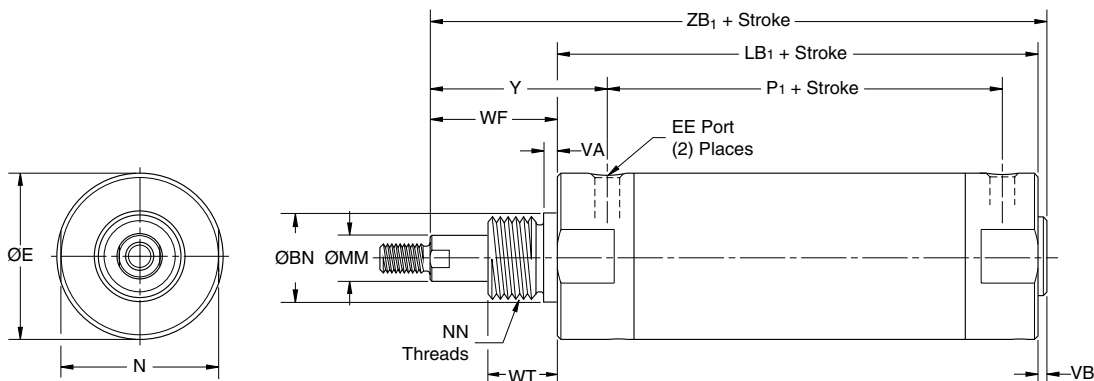
Bore size	Add stroke											
	TS	TT	TV	TW	TX	TY	UT	LB	P	XJ	ZB	ZD
20	28 (1.10)	3 (0.12)	35 (1.39)	42 (1.66)	16 (0.63)	28 (1.10)	47.5 (1.87)	69 (2.70)	45 (1.77)	70 (2.77)	83 (3.28)	91 (3.60)
25	33 (1.30)	3 (0.12)	39 (1.55)	42 (1.66)	20 (0.79)	28 (1.10)	53 (2.09)	69 (2.70)	46 (1.81)	73 (2.89)	86 (3.40)	94 (3.72)
32	40 (1.58)	4.5 (0.18)	49 (1.93)	48 (1.88)	22 (0.87)	28 (1.10)	68 (2.67)	71 (2.78)	43 (1.69)	83 (3.27)	95 (3.74)	107 (4.21)
40	49 (1.93)	4.5 (0.18)	58 (2.28)	56 (2.20)	30 (1.18)	30 (1.18)	79 (3.10)	78 (3.06)	49 (1.93)	90 (3.54)	102 (4.02)	118 (4.64)
50	60 (2.36)	6 (0.25)	72 (2.83)	64 (2.52)	36 (1.42)	36 (1.42)	99 (3.88)	90 (3.53)	53 (2.09)	108 (4.25)	122 (4.80)	140 (5.51)
63	74 (2.91)	8 (0.31)	90 (3.54)	74 (2.91)	46 (1.81)	46 (1.81)	119 (4.69)	90 (3.53)	52 (2.05)	108 (4.25)	122 (4.80)	145 (5.71)

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch



**Style G - Nose Mount**

Typical 20 to 25 mm bore



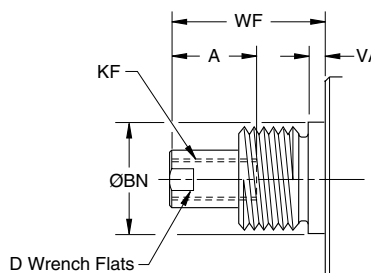
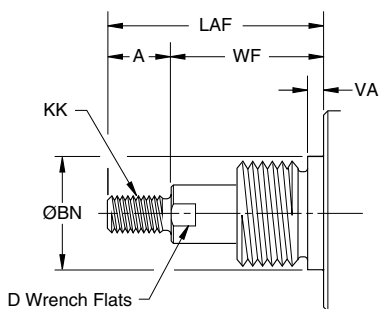
**Rod end details – 20 and 25 mm bore**

**Male threads**

Inch male - Style N  
 Metric male - Style 5

**Female threads**

Inch female - Style 9  
 Metric female - Style 6



**Special rod end threads**

**Thread style 3**

Special metric or inch threads, extension, blank, etc., are also available. To order, specify "Style 3" and give desired dimensions for KK or KF, A and LAF or WF (length dimensions in millimeters). If otherwise special, supply a dimensioned sketch.

**Style G, envelope and mounting dimensions – mm (inch)**

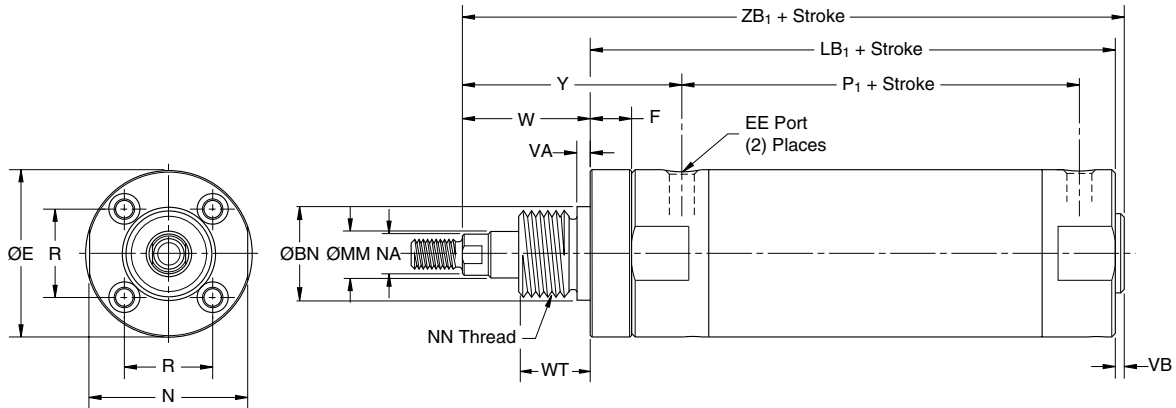
Bore size	A	BN +0 -0.08	D	ØE	EE (BSPT)	Thread KK Style 5	Thread KF Style 6	ØMM rod dia.	LAF	NN	N	VA	VB	WF	WT	Y	Add stroke		
																	LB <sup>1</sup>	P <sup>1</sup>	ZB <sup>1</sup>
20	13 (0.50)	19.02 (0.749)	6 (0.24)	27 (1.06)	1/8* (1/8†)	M8x1.25 (1/4-28)	M5x0.80 (#10-32)	35 (1.38)	8 (0.315)	3/4-16 (3/4-16)	24 (0.94)	3 (0.12)	2 (0.08)	22 (0.88)	16 (0.63)	32 (1.25)	66 (2.60)	47 (1.85)	90 (3.56)
25	13 (0.50)	19.02 (0.749)	8 (0.31)	32 (1.26)	1/8* (1/8†)	M10x1.25 (5/16-24)	M6x1.00 (1/4-28)	35 (1.38)	10 (0.394)	3/4-16 (3/4-16)	29 (1.14)	3 (0.12)	2 (0.08)	22 (0.88)	16 (0.63)	32 (1.25)	66 (2.60)	47 (1.85)	90 (3.56)

\* Ports are M5 for cushioned versions, metric

† Ports are 10-32 for cushioned versions, inch

**Style G - Nose Mount**

Typical 32 to 63mm bore



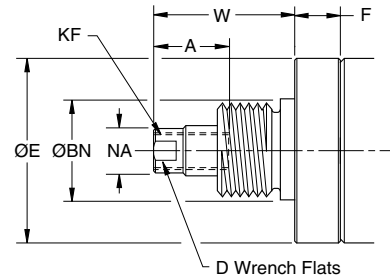
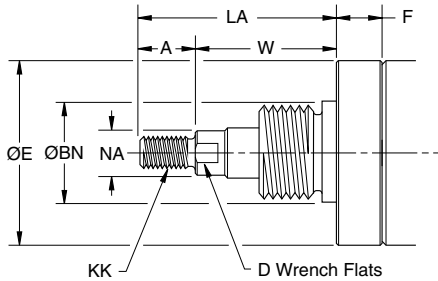
**Rod end details – 32 to 63mm bore**

**Male threads**

Inch male - Style N  
 Metric male - Style 5

**Female threads**

Inch female - Style 9  
 Metric female - Style 6



**Special rod end threads**

**Thread style 3**

Special metric or inch threads, extension, blank, etc., are also available. To order, specify "Style 3" and give desired dimensions for KK or KF, A and LAF or WF (Note: LAF = LA+F and WF = W+F), (length dimensions in millimeters). If otherwise special, supply a dimensioned sketch.

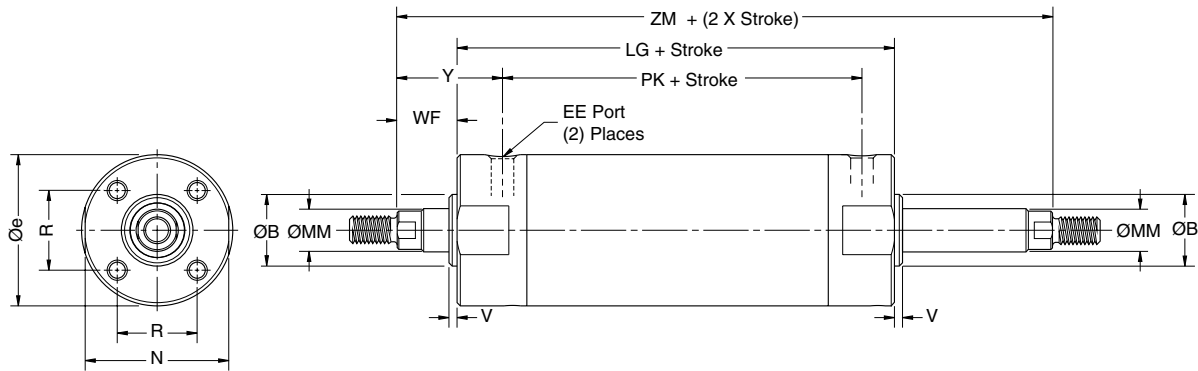
**Style G, envelope and mounting dimensions – mm (inch)**

Bore size	A	BN +0 -0.8	D	ØE	EE* (BSPT)	F	Thread		ØMM rod dia.	NN	N	NA	R	VA	VB	W	WT	Y	Add stroke			
							KK Style 5	KF Style 6											LA	LB <sup>1</sup>	P <sup>1</sup>	ZB <sup>1</sup>
32	19 (0.75)	19.02 (0.749)	10 (0.39)	39 (1.53)	1/8 (1/8)	9 (0.37)	M10x1.25 (7/16-20)	M8x1.25 (5/16-24)	41 (1.63)	12 (0.472)	3/4-16 (3/4-16)	36 (1.42)	11 (0.43)	20 (0.79)	3 (0.12)	2 (0.08)	22 (0.88)	16 (0.63)	49 (1.93)	80 (3.15)	43 (1.69)	104 (4.11)
40	19 (0.75)	26.87 (1.058)	12 (0.47)	48.5 (1.91)	1/8 (1/8)	14 (0.56)	M14x1.5 (7/16-20)	M8x1.25 (3/8-24)	51 (2.00)	16 (0.630)	1-1/4 (1-1/4)	44 (1.73)	14 (0.55)	26 (1.02)	5 (0.19)	2 (0.08)	32 (1.25)	22 (0.88)	66 (2.60)	92 (3.62)	49 (1.93)	126 (4.95)
50	22 (0.88)	34.90 (1.374)	16 (0.63)	59 (2.32)	1/4 (1/4)	15 (0.59)	M18x1.5 (1/2-20)	M10x1.25 (1/2-20)	52 (2.07)	20 (0.787)	1-1/4-12 (1-1/4-12)	55 (2.17)	18 (0.71)	32 (1.26)	3 (0.12)	2 (0.08)	30 (1.19)	20.5 (0.81)	68 (2.68)	105 (4.12)	53 (2.09)	137 (5.39)
63	22 (0.88)	38.10 (1.500)	16 (0.63)	72 (2.83)	1/4 (1/4)	16 (0.63)	M18x1.5 (1/2-20)	M10x1.25 (1/2-20)	52 (2.07)	20 (0.787)	1-3/8-12 (1-3/8-12)	69 (2.72)	18 (0.71)	38 (1.50)	3 (0.12)	2 (0.08)	30 (1.19)	20.5 (0.81)	70 (2.76)	106 (4.19)	52 (2.05)	139 (5.46)

\* See Metric Dimensions for BSPT Port Size.  
 See Inch Dimensions for NPTF Port Size.

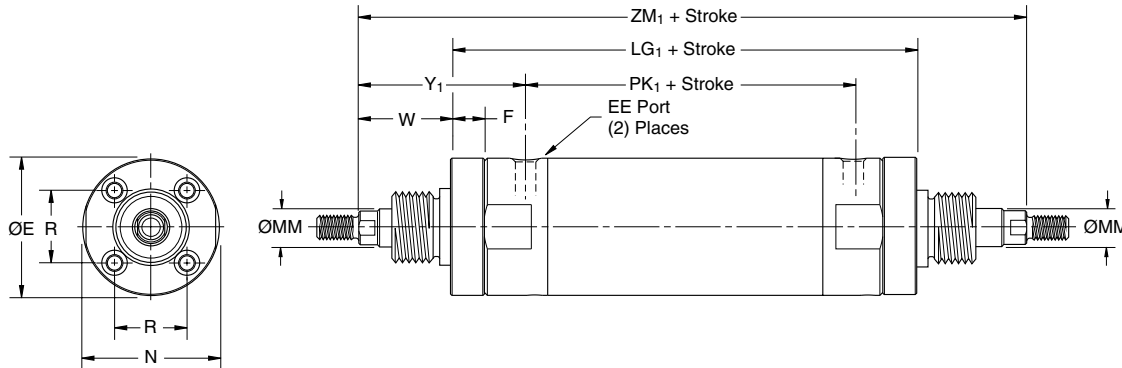
**Double-Rod**

Typical 20 to 100mm bore



**Double-Rod**

Nose Mount (32 to 63mm bore)



For detailed dimensions for the nose mount from 20 to 63 mm bore, please reference previous pages.

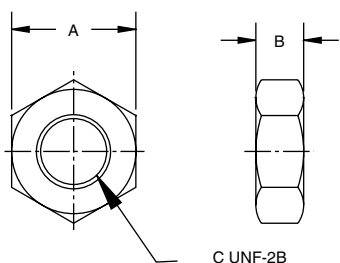
**Double rod, envelope and mounting dimensions – mm (inch)**

Bore size	ØB		F	EE (BSPT)	ØMM rod dia.			Add stroke										
	+0	-0.02			ØE	N	R	V	W	WF	Y	Y1	LG	LG1	PK	PK1	ZM	ZM1
20	12	27	-	1/8* (1/8†)	8	24	14	2	-	13	28	32	75	70	45	50	101	95
	(0.472)	(1.06)			(0.315)	(0.94)	(0.55)	(0.08)		(0.50)	(1.10)	(1.25)	(2.97)	(2.74)	(1.77)	(1.97)	(3.97)	(3.74)
25	14	32	-	1/8* (1/8†)	10	29	16.5	2	-	16	30	32	75	70	47	50	107	101
	(0.551)	(1.26)			(0.394)	(1.14)	(0.65)	(0.08)		(0.62)	(1.18)	(1.25)	(2.97)	(2.74)	(1.85)	(1.97)	(4.21)	(3.98)
32	18	39	9	1/8	12	36	20	2	22	22	40	49	78	97	42	42	122	141
	(0.709)	(1.53)	(0.37)	(1/8)	(0.472)	(1.42)	(0.79)	(0.08)	(0.88)	(0.88)	(1.57)	(1.93)	(3.06)	(3.80)	(1.65)	(1.65)	(4.82)	(5.56)
40	25	48.5	14	1/8	16	44	26	2	32	22	42	66	87	115	47	47	131	179
	(0.984)	(1.91)	(0.56)	(1/8)	(0.630)	(1.73)	(1.02)	(0.08)	(1.25)	(0.88)	(1.65)	(2.60)	(3.41)	(4.53)	(1.85)	(1.85)	(5.17)	(7.03)
50	30	59	15	1/4	20	55	32	2	30	30	53	68	100	130	54	54	160	190
	(1.181)	(2.32)	(0.59)	(1/4)	(0.787)	(2.17)	(1.26)	(0.08)	(1.19)	(1.19)	(2.09)	(2.68)	(3.93)	(5.11)	(2.13)	(2.13)	(6.31)	(7.49)
63	32	72	17	1/4	20	69	38	2	30	30	53	70	100	133	54	54	160	194
	(1.260)	(2.83)	(0.66)	(1/4)	(0.787)	(2.72)	(1.50)	(0.08)	(1.19)	(1.19)	(2.09)	(2.76)	(3.93)	(5.25)	(2.13)	(2.13)	(6.31)	(7.63)
80	40	90	-	3/8	25	86	50	3	-	31	59	-	119	-	61	-	181	-
	(1.575)	(3.54)		(3/8)	(0.984)	(3.39)	(1.97)	(0.12)		(1.22)	(2.32)		(4.70)		(2.40)		(7.14)	
100	50	110	-	1/2	32	106	60	3	-	31	57	-	119	-	65	-	181	-
	(1.968)	(4.33)		(1/2)	(1.260)	(4.17)	(2.36)	(0.12)		(1.22)	(2.24)		(4.70)		(2.56)		(7.14)	

\* Ports are M5 for cushioned versions, metric  
 † Ports are 10-32 for cushioned versions, inch



**Rod Jam Nut**



Rod jam nut should be ordered separately on all mounting styles.

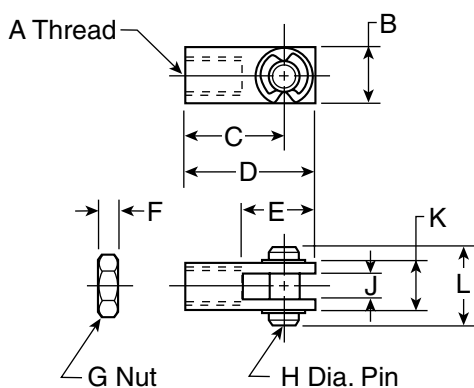
**Rod Jam Nut Dimensions – mm**

Bore size	A	B	C	Part number
20	13	4	M8 x 1.25	<b>L075540008</b>
25-32	17	5	M10 x 1.25	<b>L075540010</b>
40	22	7	M14 x 1.5	<b>L075540014</b>
50-63	27	8	M18 x 1.5	<b>L075540018</b>
80	32	11	M22 x 1.5	<b>L075540022</b>
100	41	16	M26 x 1.5	<b>L075540026</b>

**Rod Jam Nut Dimensions – inch**

Bore size	A	B	C	Part number
20	0.44	0.16	1/4-28	<b>L077970025</b>
25	0.50	0.19	5/16-24	<b>L077970031</b>
32-40	0.69	0.25	7/16-20	<b>L077970044</b>
50-63	0.75	0.31	1/2-20	<b>L077970050</b>
80	1.12	0.42	3/4 -16	<b>L077970075</b>
100	1.50	0.55	1-14	<b>L077970100</b>

**Piston Rod Clevis**



**Piston Rod Clevis Dimensions – mm**

Bore size	A	B	C	D	E	F	H h9	J	K	L	Part number
20	M8x1.25	13	24	30	18	4	6.35	6.5	13	17.5	<b>L077590020</b>
25	M10x1.25	19	24	30	18	5	6.35	6.5	19	24.5	<b>L077590025</b>
32	M10x1.25	19	34	43	24	5	9.52	10	19	26	<b>L077590032</b>
40	M14x1.5	19	34	43	24	7	9.52	10	19	26	<b>L077590040</b>
50	M18x1.5	28	34	43	24	8	9.52	10	28	36	<b>L077590050</b>
63	M18x1.5	28	34	43	24	8	9.52	10	28	36	<b>L077590050</b>
80	M22x1.5	38	50	71	48	11	18	28	56	64	<b>PIM-4PRC</b>
100	M26x1.5	44	55	79	55	16	22	32	63.5	72	<b>L077590100</b>

**Piston Rod Clevis Dimensions – inch**

Bore size	A	B	C	D	E	F	H	J	K +0 -0.02	L	Part number
20	1/4-28	0.50	0.94	1.19	0.69	0.16	0.250	0.26	0.50	0.69	<b>L077960025</b>
25	5/16-24	0.50	0.94	1.19	0.69	0.19	0.250	0.26	0.50	0.69	<b>L077960031</b>
32	7/16-20	0.75	1.32	1.69	0.94	0.25	0.375	0.38	0.75	1.03	<b>L077960044</b>
40	7/16-20	0.75	1.32	1.69	0.94	0.25	0.375	0.38	0.75	1.03	<b>L077960044</b>
50	1/2-20	0.75	1.32	1.69	0.94	0.31	0.375	0.38	0.75	1.03	<b>L077960050</b>
63	1/2-20	0.75	1.32	1.69	0.94	0.31	0.375	0.38	0.75	1.03	<b>L077960050</b>
80	3/4-16	1.25	1.81	2.38	1.31	0.42	0.437	0.52	1.25	1.66	<b>L077960075</b>
100	1-14	1.50	2.63	3.38	1.81	0.55	0.500	0.64	1.50	1.91	<b>L077960100</b>

**B**  
Round Body Cylinders  
Actuator Products  
SRX Series  
SRSM/SRD/SRDM Series  
P1L Series  
P1A Series  
P Series



**Mounting Kits & Accessories**

**How to order P1L mounting kits as a separate item**

Bore size	Foot mounting		Flange		Trunnion / double clevis bracket	Single clevis bracket
	Inch	Metric	Inch	Metric		
20	L077440075	L077550020	L077450075	L077560020	L077510020	L077520075
25	L077440100	L077550025	L077450100	L077560025	L077510025	L077520075
32	L077440125	L077550032	L077450125	L077560032	L077510032	L077520125
40	L077440150	L077550040	L077450150	L077560040	L077510040	L077520150
50	L077440200	L077550050	L077450200	L077560050	L077510050	L077520200
63	L077440250	L077550063	L077450250	L077560063	L077510063	L077520250
80	L077440312	L077550080	L077450312	L077560080	L077510080	L077520312
100	L077440400	L077550100	L077450400	L077560100	L077510100	L077520400

Bore size	Single clevis		Double clevis		Single clevis pin	Double clevis pin
	Inch	Metric	Inch	Metric		
20	L077470075	L077570020	L077480075	L077580020	L077490075	L077500020
25	L077470100	L077570025	L077480100	L077580025	L077490075	L077500025
32	L077470125	L077570032	L077480125	L077580032	L077490125	L077500032
40	L077470150	L077570040	L077480150	L077580040	L077490150	L077500040
50	L077470200	L077570050	L077480200	L077580050	L077490200	L077500050
63	L077470250	L077570063	L077480250	L077580063	L077490200	L077500063
80	L077470312	L077570080	L077480312	L077580080	L077490312	L077500080
100	L077470400	L077570100	L077480400	L077580100	L077490400	L077500100

**Notes:**

- “Inch” mounting kits include inch threaded bolts, while “Metric” mounting kits include metric threaded bolts. Please verify that the kit style matches the cylinder Construction type (code “N” or “M”) for which it is intended.
- Clevis pins may be used for either Inch or Metric mounting kits.

**Service kits**

Bore size	Single rod cylinder repair kits		Double rod cylinder repair kits	
	Consisting of: 1 ea. Symbol #5, 7, 12, & 2 ea. Symbol #1, 8 11, 14		Consisting of: 1 ea. Symbol #5, 7, & 2 ea. Symbol #1, 8 11, 12, 14	
mm	Class 1 seals, std. service	Class 5 seals, high temp.	Class 1 seals, std. service	Class 5 seals, high temp.
	Part number	Part number	Part number	Part number
20	P1L020D001	P1L020D005	P1L020K001	P1L020K005
25	P1L025D001	P1L025D005	P1L025K001	P1L025K005
32	P1L032D001	P1L032D005	P1L032K001	P1L032K005
40	P1L040D001	P1L040D005	P1L040K001	P1L040K005
50	P1L050D001	P1L050D005	P1L050K001	P1L050K005
63	P1L063D001	P1L063D005	P1L063K001	P1L063K005
80	P1L080D001	P1L080D005	P1L080K001	P1L080K005
100	P1L100D001	P1L100D005	P1L100K001	P1L100K005

**B**

Round Body Cylinders  
Actuator Products

SR/SM/SRD/SRDM  
Series

SRX  
Series

P1L  
Series

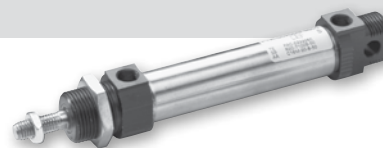
P1A  
Series

P  
Series



## P1A Series

- Conforms to ISO 6432 and CETOP RP52P standards
- 5 bore sizes, 10mm to 25mm
- Stainless steel body with black anodized aluminum end caps
- Stainless steel piston rod
- Magnetic piston and bumpers standard



### Operating information

Operating pressure:	10 bar (145 PSIG)
Temperature range:	
Working	-20°C to 80°C (-4°F to 176°F)
High temperature version	
20mm, 25mm	-10°C to 150°C (14°F to 302°F)
10mm, 12mm, 16mm	-10°C to 120°C (14°F to 248°F)
Low temperature version	-40°C to 60°C (-40°F to 140°F)
Filtration requirements:	40 micron, dry filtered air



### Ordering information

<b>P1A - S</b>	<b>016</b>	<b>M</b>	<b>S</b>	-	<b>0025</b>																																				
<table border="1"> <thead> <tr> <th colspan="2">Bore size</th> </tr> </thead> <tbody> <tr> <td>010</td> <td>10mm</td> </tr> <tr> <td>012</td> <td>12mm</td> </tr> <tr> <td>016</td> <td>16mm</td> </tr> <tr> <td>020</td> <td>20mm</td> </tr> <tr> <td>025</td> <td>25mm</td> </tr> </tbody> </table>		Bore size		010	10mm	012	12mm	016	16mm	020	20mm	025	25mm	<table border="1"> <thead> <tr> <th colspan="2">Cylinder type / function</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>Double-acting, adjustable cushioning, Ø16-25 mm. Not for sealing material type F.</td> </tr> <tr> <td>D</td> <td>Double-acting, bumpers, Ø10 - Ø25</td> </tr> <tr> <td>F</td> <td>Double-acting, adjustable cushioning, double rod, Ø16-25 mm. Not for sealing material type F.</td> </tr> <tr> <td>K</td> <td>Double-acting, bumpers, double rod, Ø10 - Ø25</td> </tr> <tr> <td>S</td> <td>Single-acting, bumpers, spring return for retract stroke, Ø10-25 mm</td> </tr> <tr> <td>T</td> <td>Single-acting, bumpers, spring extend for advance stroke, Ø16-25 mm</td> </tr> </tbody> </table>		Cylinder type / function		M	Double-acting, adjustable cushioning, Ø16-25 mm. Not for sealing material type F.	D	Double-acting, bumpers, Ø10 - Ø25	F	Double-acting, adjustable cushioning, double rod, Ø16-25 mm. Not for sealing material type F.	K	Double-acting, bumpers, double rod, Ø10 - Ø25	S	Single-acting, bumpers, spring return for retract stroke, Ø10-25 mm	T	Single-acting, bumpers, spring extend for advance stroke, Ø16-25 mm	<table border="1"> <thead> <tr> <th colspan="2">Sealing material</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>Standard -20°C to +80°C (-4°F to +176°F) Magnetic piston</td> </tr> <tr> <td>F</td> <td>High temperature: Ø12 mm, 16 mm, 20 mm and 25 mm -10°C to +150°C. (14°F to 302°F) Non magnetic piston</td> </tr> <tr> <td>V</td> <td>External seals of fluorinated rubber -20°C to +80°C (-4°F to +176°F) Magnetic piston</td> </tr> </tbody> </table>		Sealing material		S	Standard -20°C to +80°C (-4°F to +176°F) Magnetic piston	F	High temperature: Ø12 mm, 16 mm, 20 mm and 25 mm -10°C to +150°C. (14°F to 302°F) Non magnetic piston	V	External seals of fluorinated rubber -20°C to +80°C (-4°F to +176°F) Magnetic piston		
Bore size																																									
010	10mm																																								
012	12mm																																								
016	16mm																																								
020	20mm																																								
025	25mm																																								
Cylinder type / function																																									
M	Double-acting, adjustable cushioning, Ø16-25 mm. Not for sealing material type F.																																								
D	Double-acting, bumpers, Ø10 - Ø25																																								
F	Double-acting, adjustable cushioning, double rod, Ø16-25 mm. Not for sealing material type F.																																								
K	Double-acting, bumpers, double rod, Ø10 - Ø25																																								
S	Single-acting, bumpers, spring return for retract stroke, Ø10-25 mm																																								
T	Single-acting, bumpers, spring extend for advance stroke, Ø16-25 mm																																								
Sealing material																																									
S	Standard -20°C to +80°C (-4°F to +176°F) Magnetic piston																																								
F	High temperature: Ø12 mm, 16 mm, 20 mm and 25 mm -10°C to +150°C. (14°F to 302°F) Non magnetic piston																																								
V	External seals of fluorinated rubber -20°C to +80°C (-4°F to +176°F) Magnetic piston																																								
<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="16">Stroke length, mm</th> </tr> <tr> <th colspan="2"></th> <td colspan="16">E.g. 0025 = 25 mm For standard stroke length and max length see table below.</td> </tr> </thead> </table>								Stroke length, mm																		E.g. 0025 = 25 mm For standard stroke length and max length see table below.															
		Stroke length, mm																																							
		E.g. 0025 = 25 mm For standard stroke length and max length see table below.																																							

Stroke Lengths		Stroke Length (* = standard, ° = non-standard, blank = N/A)															
Cylinder model	Bore size	10	15	20	25*	30	40	50*	80*	100*	125*	160*	200*	250*	320*	400*	500*
<b>Double acting with fixed end-cushioning:</b>																	
P1A-S 010 D	10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 012 D	12	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 016 D	16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 020 D	20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 025 D	25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Double acting with adjustable end-cushioning:</b>																	
P1A-S 016 M	16			•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 020 M	20			•	•	•	•	•	•	•	•	•	•	•	•	•	•
P1A-S 025 M	25			•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Single acting:</b>																	
P1A-S 010 SS	10	•	•	•	•	•	•	•	•								
P1A-S 012 SS	12	•	•	•	•	•	•	•	•								
P1A-S 016 SS(TS)	16	•	•	•	•	•	•	•	•**								
P1A-S 020 SS(TS)	20	•	•	•	•	•	•	•	•								
P1A-S 025 SS(TS)	25	•	•	•	•	•	•	•	•								

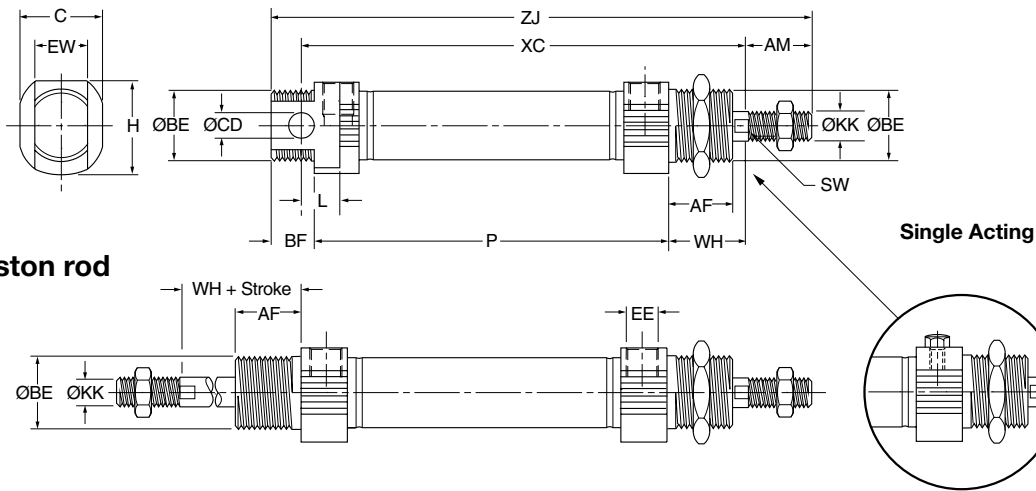
\* Standard stroke lengths in mm according to ISO 4393  
 \*\* Not for the TS version

### Sensors

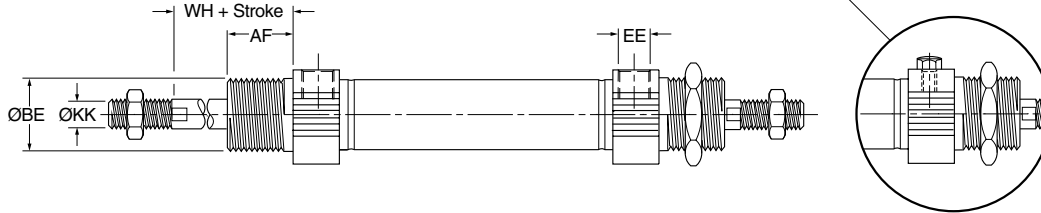
For sensors see page B339.



**Double acting cylinders**



**Double piston rod**



Bore size mm	AM <sup>0/-2</sup> mm	BE	AF mm	BF mm	C mm	CD <sup>h9</sup> mm	EE	EW mm	H mm	KK	L mm	SW mm	WH $\pm$ 1.2 mm
10	12	M12x1.25	12	10	14.0	4	M5	8	16.7	M4	6	–	16
12	16	M16x1.5	18	13	18.0	6	M5	12	19.1	M6	9	5	22
16 <sup>1)</sup>	16	M16x1.5	18	13	18.0	6	M5	12	19.1	M6	9	5	22
16 <sup>2)</sup>	16	M16x1.5	18	13	25.0	6	M5	12	24.0	M6	9	5	22
20	20	M22x1.5	20	14	24.0	8	G1/8	16	27.0	M8	12	7	24
25	22	M22x1.5	22	14	27.5	8	G1/8	16	29.0	M10x1.25	12	9	28

1) P1A-S016DS/SS/TS 2) P1A-S016MS

**Double acting cylinders**

Bore size mm	XC mm	ZJ mm	P mm
10	64 + stroke	84 + stroke	46 + stroke
12	75 + stroke	99 + stroke	48 + stroke
16	82 + stroke	104 + stroke	53 + stroke
20	95 + stroke	125 + stroke	67 + stroke
25	104 + stroke	132 + stroke	68 + stroke

**Single-acting, spring return, type SS**

Bore size mm	XC (mm) at various strokes						ZJ (mm) at various strokes						P (mm) at various strokes					
	10	15	25	40	50	80	10	15	25	40	50	80	10	15	25	40	50	80
10	74	79	89	126	136	174	94	99	109	146	156	194	56	61	71	108	118	156
12	85	90	100	132	142	185	109	114	124	156	166	209	58	63	73	105	115	158
16	92	97	107	122	132	184	114	119	129	144	154	206	63	68	78	93	103	155
20	105	110	120	135	145	191	135	140	150	165	175	221	77	82	92	107	117	163
25	114	119	129	144	154	201	142	147	157	172	182	229	78	83	93	108	118	165

**Single-acting, spring-extended, type TS**

Bore size mm	ZC <sup>3)</sup> (mm) at various strokes					ZJ <sup>3)</sup> (mm) at various strokes					P (mm) at various strokes							
	10	15	25	40	80	10	15	25	40	80	10	15	25	40	80			
16	107	112	122	137	147	–	134	139	149	164	174	–	78	83	93	108	118	–
20	120	125	135	150	160	195	156	161	171	186	196	231	92	97	107	122	132	167
25	129	134	144	159	169	205	165	170	180	195	205	241	93	98	108	123	133	169

3) With piston rod retracted, as shown in the dimension drawing  
 Length tolerances  $\pm$ 1 mm Stroke length tolerance +1.5/0 mm



**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

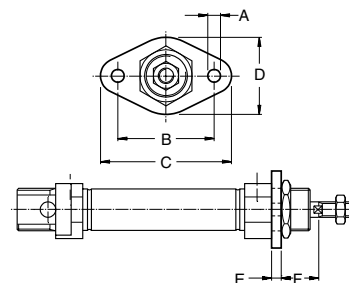
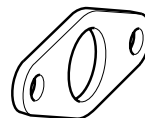


**Parker Pneumatic**

**P1A Series**

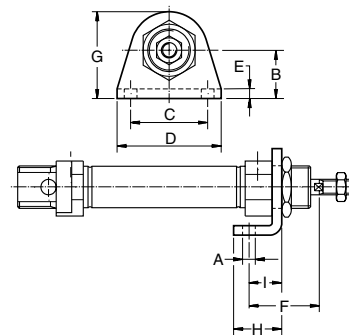
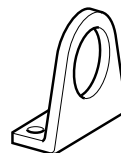
**Flange - MF8**

Cylinder Ø mm	A	B	C	D	E	F	Weight lbs	Part number
10	4.5	30	40	22	3	13	0.025	<b>P1A-4CMB</b>
12-16	5.5	40	52	30	4	18	0.055	<b>P1A-4DMB</b>
20	6.6	50	66	40	5	19	0.100	<b>P1A-4HMB</b>
25	6.6	50	66	40	5	23	0.100	



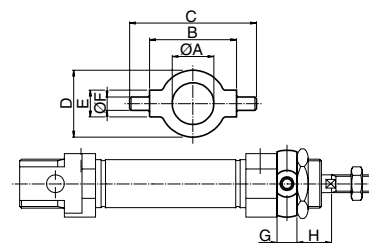
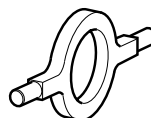
**Foot - MS3**

Cylinder Ø mm	A	B	C	D	E	F	G	H	I	Weight lbs	Part number
10	4.5	16	25	35	3	24	26.0	16	11	0.045	<b>P1A-4CMF</b>
12-16	5.5	20	32	42	4	32	32.5	20	14	0.08	<b>P1A-4DMF</b>
20	6.5	25	40	54	5	36	45.0	25	17	0.18	<b>P1A-4HMF</b>
25	6.5	25	40	54	5	40	45.0	25	17	0.18	



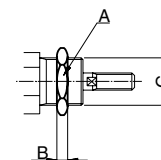
**Cover Trunnion**

Cylinder Ø mm	A	B h14	C	D	E e9	F	G	H	Weight lbs	Part number
10	12.5	26	38	20	8	4	6	10	0.03	<b>P1A-4CMJ</b>
12-16	16.5	38	58	25	10	6	8	14	0.07	<b>P1A-4DMJ</b>
20	22.5	46	66	30	10	6	8	16	0.08	<b>P1A-4HMJ</b>
25	22.5	46	66	30	10	6	8	20	0.08	



**Mounting Nut**

Cylinder Ø mm	A	B	C	Weight lbs	Part number
10	19	6	M12x1.25	0.02	<b>9127385101</b>
12-16	24	8	M16x1.50	0.04	<b>9127385102</b>
20-25	32	11	M22x1.50	0.09	<b>9127385103</b>

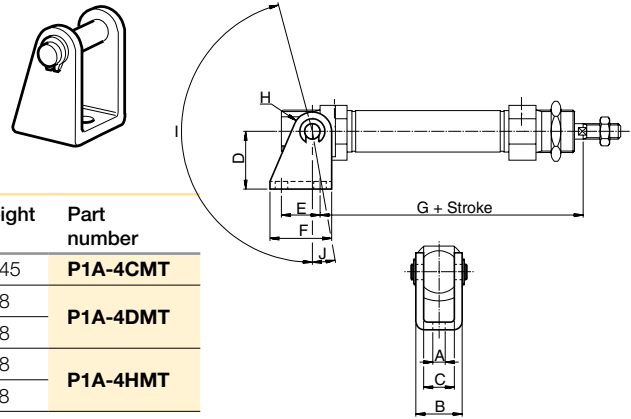


Most popular.



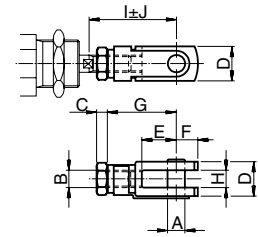
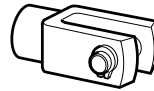
**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

### Clevis Bracket



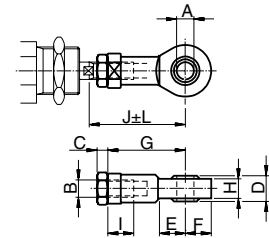
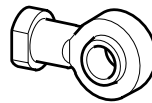
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I °	J °	Weight lbs	Part number
10	4.5	13	8	24	12.5	20	65.3	5	160	17	0.045	<b>P1A-4CMT</b>
12	5.5	18	12	27	15.0	25	73.0	7	170	15	0.08	<b>P1A-4DMT</b>
16	5.5	18	12	27	15.0	25	80.0	7	170	15	0.08	<b>P1A-4HMT</b>
20	6.5	24	16	30	20.0	32	91.0	10	165	10	0.18	<b>P1A-4HMT</b>
25	6.5	24	16	30	20.0	32	100.0	10	165	10	0.18	<b>P1A-4HMT</b>

### Rod clevis



Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Weight lbs	Part number
10	4	M4	2.2	8	8	5	16	4	22.0	2.0	0.015	<b>P1A-4CRC</b>
12-16	6	M6	3.2	12	12	7	24	6	31.0	3.0	0.05	<b>P1A-4DRC</b>
20	8	M8	4.0	16	16	10	32	8	40.5	3.5	0.10	<b>P1A-4HRC</b>
25	10	M10 x 1.25	5.0	20	20	12	40	10	49.0	3.0	0.21	<b>P1A-4JRC</b>

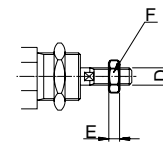
### Swivel Rod Eye



Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	Weight lbs	Part number
10	5	M4	2.2	8	10	9	27	6.0	8	33.0	9	2.0	0.04	<b>P1A-4CRS</b>
12-16	6	M6	3.2	9	10	10	30	6.8	9	38.5	11	1.5	0.06	<b>P1A-4DRS</b>
20	8	M8	4.0	12	12	12	36	9.0	12	46.0	14	2.0	0.10	<b>P1A-4HRS</b>
25	10	M10 x 1.25	5.0	14	14	14	43	10.5	15	52.5	17	2.5	0.19	<b>P1A-4JRS</b>

### Rod Nut

Cylinder Ø mm	D mm	F mm	E mm	Weight lbs	Part number
10	M4	7	2.2	0.002	<b>0261110600</b>
12-16	M6	10	3.2	0.004	<b>0261210800</b>
20	M8	13	4.0	0.010	<b>0261211000</b>
25	M10x1.25	17	5.0	0.015	<b>9128985601</b>



Most popular.



## P Series

- Repairable design, aluminum construction
- 6 bore sizes: 1-1/8" to 4"
- Double-acting, spring-return and spring-extend models
- Cushions optional at either or both ends
- Universal nose and tang mounts
- Standard stroke lengths to 20 inches in one inch increments, plus 1-1/2", 2-1/2" and 3-1/2" strokes. Fraction strokes and strokes over 20 inches are available upon request.



### Operating information

Operating pressure:	150 PSIG (8 bar)
Temperature range:	-10°F to 165°F (-23°C to 74°C)
Standard seals	-10°F to 250°F (-23°C to 121°C)
Fluorocarbon seals	-10°F to 250°F (-23°C to 121°C)
Filtration requirements:	40 micron, dry filtered air

### Ordering information

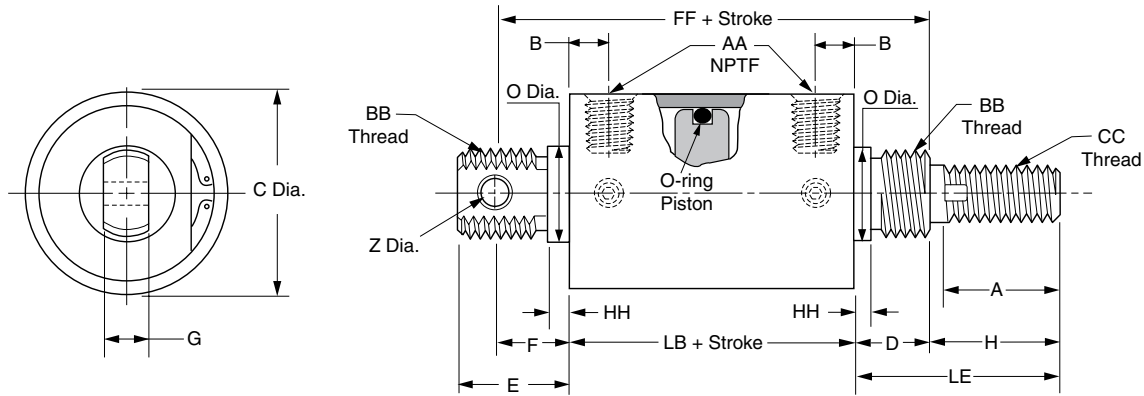
<b>2-1/2"</b>	<b>C</b>	<b>K</b>	<b>P</b>	<b>L</b>	<b>U</b>				<b>1</b>	<b>6</b>		<b>C</b>	<b>X6"</b>
<b>Bore size</b>			<b>Series</b>	<b>Piston</b>	<b>Ports</b>							<b>Cushion cap end</b>	<b>Stroke</b>
1-1/8" 1-1/2" 2" 2-1/2" 3" 4"			<b>Blank</b> O-ring piston <b>L</b> Lipseal piston Sensors available on lipseal pistons only.	<b>U</b> N.P.T.F.								<b>Blank</b> No cushion <b>C</b> Cushion cap end	Specify in inches. Show times symbol "X" just ahead of stroke length.
<b>Cushion head end</b>				<b>Seals / options</b>								<b>Blank</b> No cushion <b>C</b> Cushion cap end	
<b>Blank</b> No cushion <b>C</b> Cushion head end				<b>Blank</b> Buna-N <b>V</b> Fluorocarbon <b>M</b> Magnet with Buna-N seals <sup>1</sup>									
<b>Double rod</b>				<b>Spring</b>								<b>Rod material</b>	
<b>Blank</b> Single rod <b>K</b> Double rod				<b>E</b> Spring extend <b>R</b> Spring return								<b>Blank</b> Standard rod <b>D</b> 416 Stainless steel <sup>2</sup>	
<b>Mounting style</b>				<b>Special number</b>								<b>Rod thread</b>	
<b>Blank</b> Standard <b>N</b> No tang <b>A</b> Dual tang				Use "S" symbol only if special feature is required (specify). NOTE: Do not use symbol "S" for rod end modification.								<b>6</b> Standard <b>3</b> Special (For special rod end specify "CC" thread Dia. A and LE or LE1 or Dim. or submit sketch.)	
<b>Safety Cushion Adjustment Location</b>				<b>Rod diameter style</b>								<b>1</b> Standard For double rod cylinders specify rod code twice.	
				<b>Sensors</b>								For sensors see page B339.	
With port in position 1, cushion location will be position 4.				<b>Notes:</b> <sup>1</sup> Must specify lipseal piston with magnet option. <sup>2</sup> Standard on 1-1/8" bore. {D} not required.									

For ordering purposes, when special options or common modifications are requested, the factory will assign a sequential part number in place of the model number.



### Model P

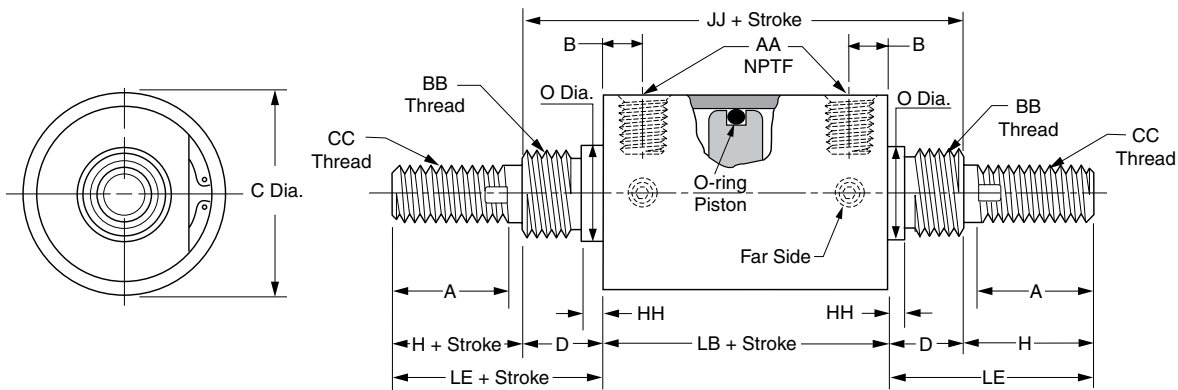
O-ring piston – single rod



Model P cylinders are available without tang covered by dimension E minus HH at no extra charge. To order specify Model NP.

### Model KP

O-ring piston – double rod



Mounting nuts not supplied with cylinder.

### Model P and KP single and double rod cylinders

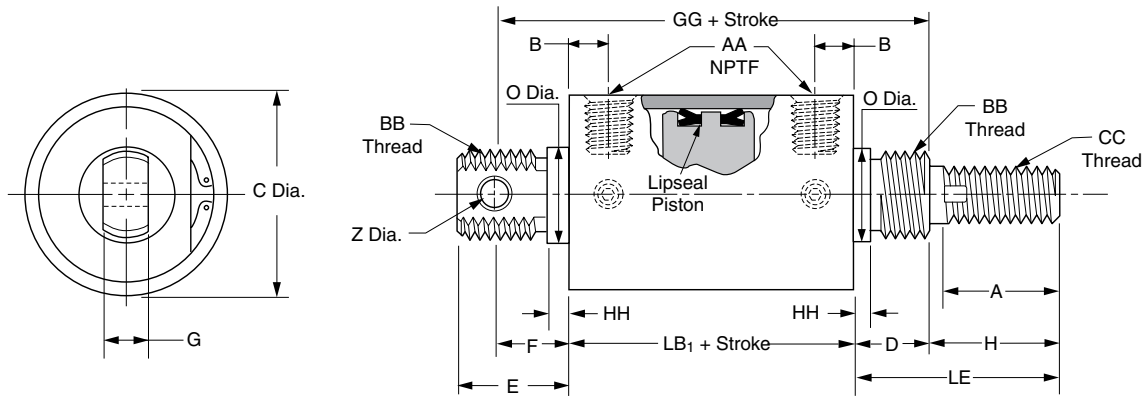
Bore Size	Rod Dia.	LB	B	C	D	E	F	G	H	A	O	Z	AA	BB	CC	FF	HH	JJ	LE
1-1/8	3/8	2-1/16	13/32	1-3/8	5/8	1	11/16	3/8	1	7/8	3/4	1/4	1/8	3/4-16	3/8-16	3-3/8	3/32	3-5/16	1-5/8
1-1/2	1/2	2-5/8	1/2	1-3/4	7/8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	1/2-13	4-3/8	1/8	4-3/8	2-5/16
2	5/8	2-5/8	1/2	2-1/4	7/8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	5/8-11	4-3/8	1/8	4-3/8	2-5/16
2-1/2	3/4	3	5/8	2-3/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	5-3/8	3/16	5	2-11/16
3	3/4	3	5/8	3-1/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	5-3/8	3/16	5	2-11/16

Note: 4" bore size offered only with Lipseal Piston.  
 FLUOROCARBON SEALS for operation to 250°F are available at extra cost. Specify model PV or KP.



**Model PL**

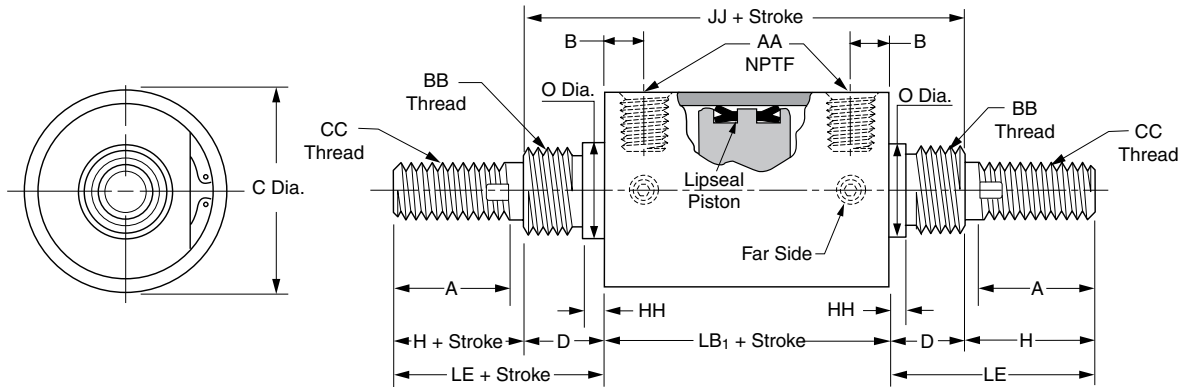
Lipseal piston – single rod



Model PL cylinders are available without tang covered by dimension E minus HH at no extra charge. To order specify Model NPL.

**Model KPL**

Lipseal piston – double rod



Mounting nuts not supplied with cylinder.

**Model PL and KPL single and double rod cylinders**

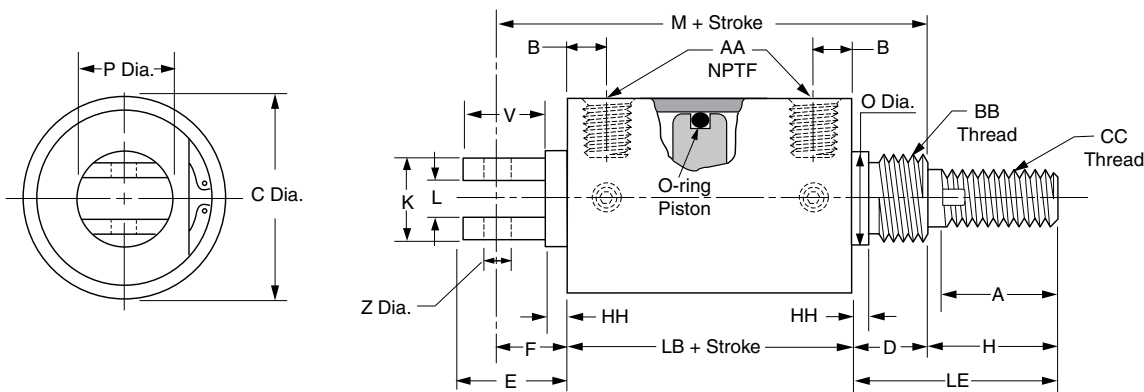
Bore Size	Rod Dia.	LB <sub>1</sub>	B	C	D	E	F	G	H	A	O	Z	AA	BB	CC	GG	HH	KK	LE
1-1/8	3/8	3-1/16	13/32	1-3/8	5/8	1	11/16	3/8	1	7/8	3/4	1/4	1/8	3/4-16	3/8-16	4-3/8	3/32	4-5/16	1-5/8
1-1/2	1/2	3-5/8	1/2	1-3/4	7/8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	1/2-13	5-3/8	1/8	5-3/8	2-5/16
2	5/8	3-5/8	1/2	2-1/4	7/8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	5/8-11	5-3/8	1/8	4-3/8	2-5/16
2-1/2	3/4	4	5/8	2-3/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	6-3/8	3/16	6	2-11/16
3	3/4	4	5/8	3-1/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	6-3/8	3/16	6	2-11/16
4	1	5-1/2	15/16	4-3/8	1-1/8	2-3/16	1-7/16	3/4	2-1/4	1-7/8	1-3/4	1/2	1/2	1-3/4-12	1-14	8-1/16	3/16	7-1/4	3-3/8

FLUOROCARBON SEALS for operation to 250°F are available at extra cost. Specify model PLV or KPLV.



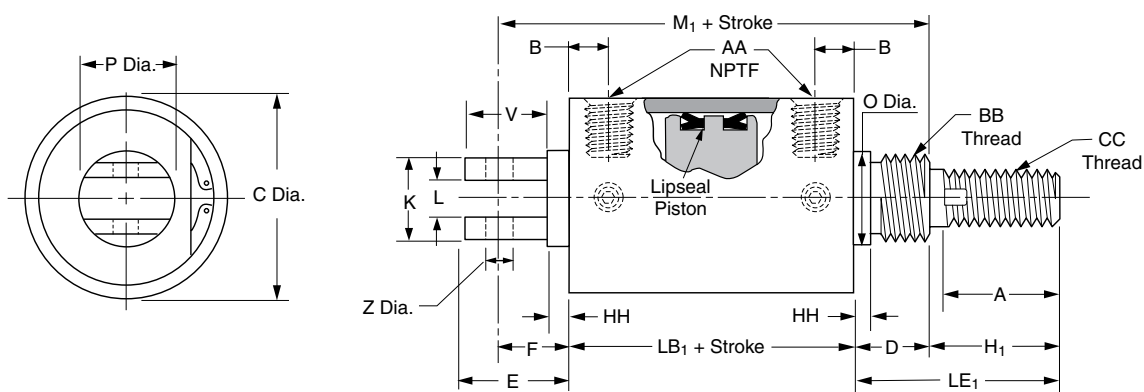
### Model AP

O-ring piston – single rod  
 1-1/8" bore thru 3" bore



### Model APL

Lipseal piston – single rod  
 1-1/8" bore thru 4" bore



Mounting nuts not supplied with cylinder.

### Models AP and APL only

Bore Rod Size	Dia.	LB	LB <sub>1</sub>	B	C	D	E	F	H	H <sub>1</sub>	A	K	L	M	M <sub>1</sub>	O	P	V	Z	AA	BB	CC	HH	LE	LE <sub>1</sub>
1-1/8	3/8	2-1/16	3-1/16	13/32	1-3/8	5/8	1	11/16	1	1	7/8	15/16	3/8	4-3/8	5-3/8	3/4	15/16	7/8	3/8	1/8	3/4-16	3/8-16	3/32	1-5/8	1-5/8
1-1/2	1/2	2-5/8	3-5/8	1/2	1-3/4	7/8	1-5/8	15/16	2-7/16	1-7/16	1-1/4	1-1/4	1/2	6-7/8	6-7/8	1-1/16	1-1/4	1-1/2	3/8	1/4	1-14	1/2-13	1/8	3-5/16	2-5/16
2	5/8	2-5/8	3-5/8	1/2	2-1/4	7/8	2-1/4	1-9/16	2-7/16	1-7/16	1-1/4	1-1/2	1/2	7-1/2	7-1/2	1-1/16	1-11/16	1-3/4	1/2	1/4	1-14	5/8-11	1/8	3-5/16	2-5/16
2-1/2	3/4	3	4	5/8	2-3/4	1	1-13/16	1-1/8	3-11/16	2-11/16	1-1/2	1-1/2	1/2	8-13/16	8-13/16	1-3/8	2-1/4	1-11/16	1/2	3/8	1-3/8-12	3/4-10	3/16	4-11/16	3-11/16
3	3/4	3	4	5/8	3-1/4	1	2-5/16	1-5/8	3-11/16	2-11/16	1-1/2	1-1/2	1/2	9-5/16	9-5/16	1-3/8	2-1/4	1-3/4	1/2	3/8	1-3/8-12	3/4-10	3/16	4-11/16	3-11/16
4	1	-	5-1/2	15/16	4-3/8	1-1/8	2-7/8	1-7/8	-	2-1/4	1-7/8	2-1/4	3/4	-	10-3/4	1-3/4	3	2-1/2	3/4	1/2	1-3/4-12	1-14	3/16	-	3-3/8

FLUOROCARBON Seals for operation to 250°F are available at extra cost. Specify model ASPV or ASPLV.



**B**  
 Round Body Cylinders  
 Actuator Products

SR/SM/SRD/SRDM  
 Series

SRX  
 Series

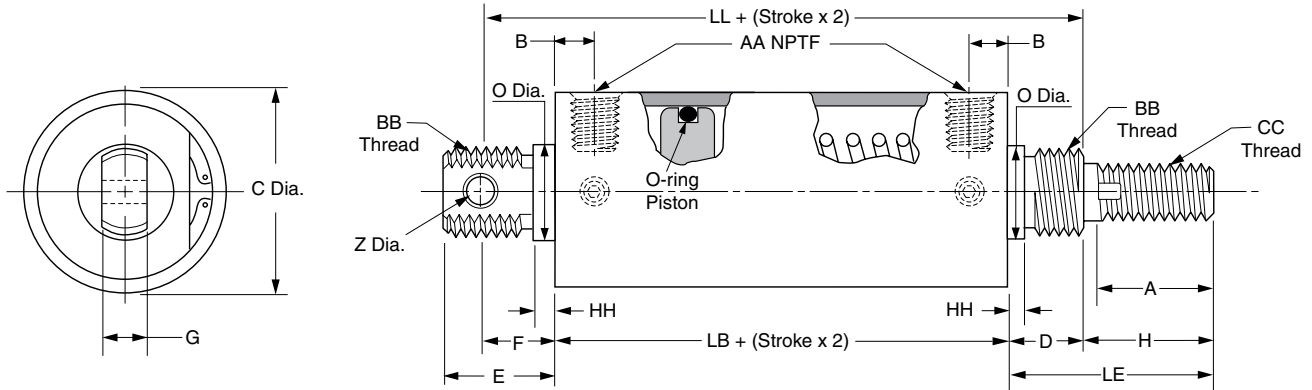
P1L  
 Series

P1A  
 Series

P  
 Series

**Model PR – Spring return**  
**Model PE – Spring extend**

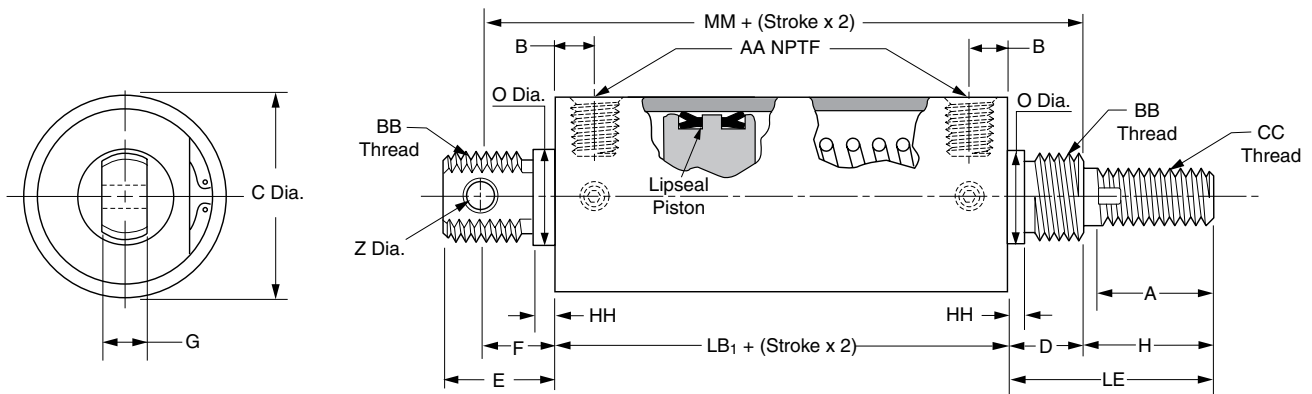
O-ring piston



Spring return cylinders are available without tail section covered by dimension E minus HH at no extra charge. To order, add letter "N" to model number.

**Model PLR – Spring return**  
**Model PLE – Spring extend**

Lipseal piston



Mounting nuts not supplied with cylinder.

**For single rod spring return cylinders up to 6" stroke (no load spring)**

Bore Size	Rod Dia.	LB	LB <sub>1</sub>	B	C	D	E	F	G	H	A	O	Z	AA	BB	CC	HH	LL	MM	LE	Spring force	
																					Pre-load (lbs.)	Max. load (lbs.)
1-1/8	3/8	2-1/16	3-1/16	13/32	1-3/8	5/8	1	11/16	3/8	1	7/8	3/4	1/4	1/8	3/4-16	3/8-16	3/32	3-3/8	4-3/8	1-5/8	12	36
1-1/2	1/2	2-5/8	3-5/8	1/2	1-3/4	7/8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	1/2-13	1/8	4-3/8	5-3/8	2-5/16	14	45
2	5/8	2-5/8	3-5/8	1/2	2-1/4	7-8	1-1/4	7/8	1/2	1-7/16	1-1/4	1-1/16	5/16	1/4	1-14	5/8-11	1/8	4-3/8	5-3/8	2-5/16	18	48
2-1/2	3/4	3	4	5/8	2-3/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	3/16	5-3/8	6-3/8	2-11/16	30	64
3	3/4	3	4	5/8	3-1/4	1	2	1-3/8	5/8	1-11/16	1-1/2	1-3/8	7/16	3/8	1-3/8-12	3/4-10	3/16	5-3/8	6-3/8	2-11/16	30	64
4	1	▲	5-1/2	15/16	4-3/8	1-1/8	2-3/16	1-7/16	3/4	2-1/4	1-7/8	1-3/4	1/2	1/2	1-3/4-12	1-14	3/16	▲	8-1/16	3-3/8	50	148

▲ 4" bore spring return cylinders, available only with lipseal type piston.

\*\* Net stroke plus stop tube = gross stroke.

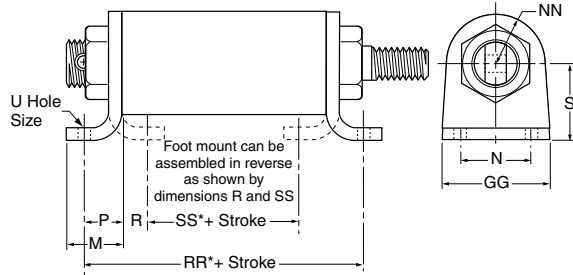
FLUOROCARBON SEALS for operation to 250°F are available at extra cost. Specify model PVR, PVE, PLVR or PLVE.

\* Dimensions shown are for cylinder with no load spring. For heavier springs or double rod spring return cylinders, consult factory.

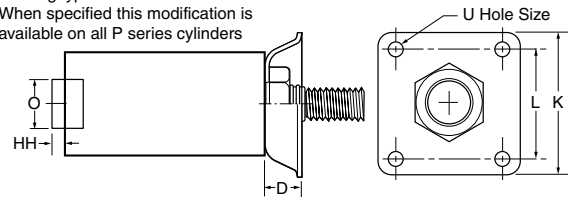


**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SM/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

### Foot and Flange Mounts



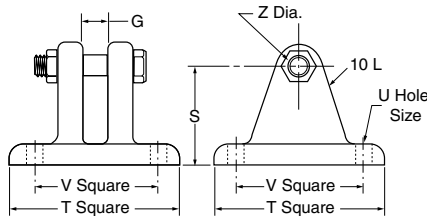
No tang type shown.  
 When specified this modification is available on all P series cylinders



Bore size	D	K	L	M	N	O	P	R	S	U	GG	HH	NN	RR	SS	Foot mount*	Flange mount**
1-1/8	5/8	2-1/2	2	1-3/8	1-11/16	3/4	7/8	5/8	1-9/32	9/32	2-11/16	3/32	11/16	3-13/16	13/16	L069190000	L069230000
1-1/2	7/8	3-1/4	2-1/2	1-9/32	1-5/8	1-1/16	7/8	9/16	1-3/4	9/32	2-7/16	1/8	1-1/8	4-3/8	1-1/2	L069200000	L069240000
2	7/8	3-1/4	2-1/2	1-9/32	1-5/8	1-1/16	7/8	9/16	1-3/4	9/32	2-7/16	1/8	1-1/8	4-3/8	1-1/2	L069200000	L069240000
2-1/2	1	4-1/2	3-3/8	1-29/32	2-1/4	1-3/8	1-1/4	7/8	2-3/8	13/32	3-9/16	3/16	1-5/8	5-1/2	1-1/4	L069210000	L069250000
3	1	4-1/2	3-3/8	1-29/32	2-1/4	1-3/8	1-1/4	7/8	2-3/8	13/32	3-9/16	3/16	1-5/8	5-1/2	1-1/4	L069210000	L069250000
4	1-1/8	5-1/4	4	2-17/32	3-1/4	1-3/4	1-3/4	1-5/16	3-3/16	15/32	4-13/16	3/16	2-3/16	9▲	2-7/8▲	L069220000	L069260000

▲ Dimension shown is for lipseal piston type.  
 \* Part number includes one foot mounting and one mounting nut.  
 \*\* Includes mounting nut.

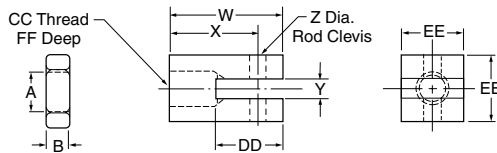
### Clevis Bracket



Bore size	G	S	T	U	V	Z	Part number
1-1/8	3/8	1-9/32	2-1/4	9/32	1-3/4	1/4	L067300000
1-1/2	1/2	1-3/4	3	9/32	2-1/4	5/16	L067310000
2	1/2	1-3/4	3	9/32	2-1/4	5/16	L067310000
2-1/2	5/8	2-3/8	4	13/32	3	7/16	L067320000
3	5/8	2-3/8	4	13/32	3	7/16	L067320000
4	3/4	3-3/16	5	15/32	3-3/4	1/2	L067330000

Connecting pin and locknut furnished with clevis bracket.

### Rod Clevis

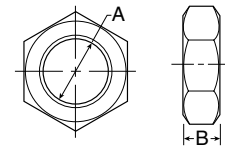


Cyl. bore	Rod dia.	A	B	CC	DD	EE	FF	W	X	Y	Z	Part number
1-1/8	3/8	3/8-16	7/32	3/8-16	1-1/8	3/4	5/8	1-3/4	1-3/8	5/16	1/4	L067340000
1-1/2	1/2	1/2-13	5/16	1/2-13	1-5/16	1	15/16	2-1/4	1-3/4	3/8	5/16	L067350000
2	5/8	5/8-11	3/8	5/8-11	1-5/16	1	15/16	2-1/4	1-3/4	3/8	5/16	L067360000
2-1/2	3/4	3/4-10	27/64	3/4-10	1-5/16	1-1/4	1-1/16	2-3/8	1-13/16	1/2	7/16	L067370000
3	3/4	3/4-10	27/64	3/4-10	1-5/16	1-1/4	1-1/16	2-3/8	1-13/16	1/2	7/16	L067370000
4	1	1-14	35/64	1-14	1-13/16	1-1/2	1-9/16	3-3/8	2-5/8	5/8	1/2	L067380000

Note: Rod end jam nut furnished with rod clevis.

Most popular.

### Mounting Nut for Cylinders\*\*



Bore size	A	B	Part number
1-1/8	3/4-16	27/64	0833010048
1-1/2 & 2	1-14	35/64	0833010100
2-1/2 & 3	1-3/8-12	25/32	0833010124
4	1-3/4-12	15/16	0831830000

### Sensors

For sensors see page B339.





**Table A**

**Seal kit for series “P” cylinders with o-ring piston**

Contains: 2 each symbol #15 & 1 each symbol #16, 24 & 25

Bore size	Standard seal kit part number	Hi-temp seal kit part number
1-1/8"	L067680000	L067730000
1-1/2"	L067690000	L067740000
2"	L067700000	L067750000
2-1/2"	L067710000	L067760000
3"	L067720000	L067770000

**Table B**

**Seal kit for series “P” cylinders with lipseal piston**

Contains: 2 each symbol #15 & 23 & 1 each symbol #24 & 25

Bore size	Standard seal kit part number	Hi-temp seal kit part number
1-1/8"	L067780000	L067840000
1-1/2"	L067790000	L067850000
2"	L067800000	L067860000
2-1/2"	L067810000	L067870000
3"	L067820000	L067880000
4"	L067830000	L067890000

**Table C**

**Cushion seal kit for series “P” cylinders**

Contains: 2 each symbol #19 & 21 (Symbol #21 not required or supplied for 1-1/8" & 1-1/2" bore size cylinders)

Bore size	Standard seal kit part number	Hi-temp seal kit part number
1-1/8"	L067900000	L067950000
1-1/2"	L067910000	L067960000
2"	L067920000	L067970000
2-1/2"	L067930000	L067980000
3"	L067930000	L067980000
4"	L067940000	L067990000

**B**  
 Round Body Cylinders  
 Actuator Products  
 SR/SW/SRD/SRDM  
 Series  
 SRX  
 Series  
 P1L  
 Series  
 P1A  
 Series  
 P  
 Series

