



Premair™ Series Compact Interchangeable Cylinders

Round Compact Cylinders

Square Metric Compact Cylinders



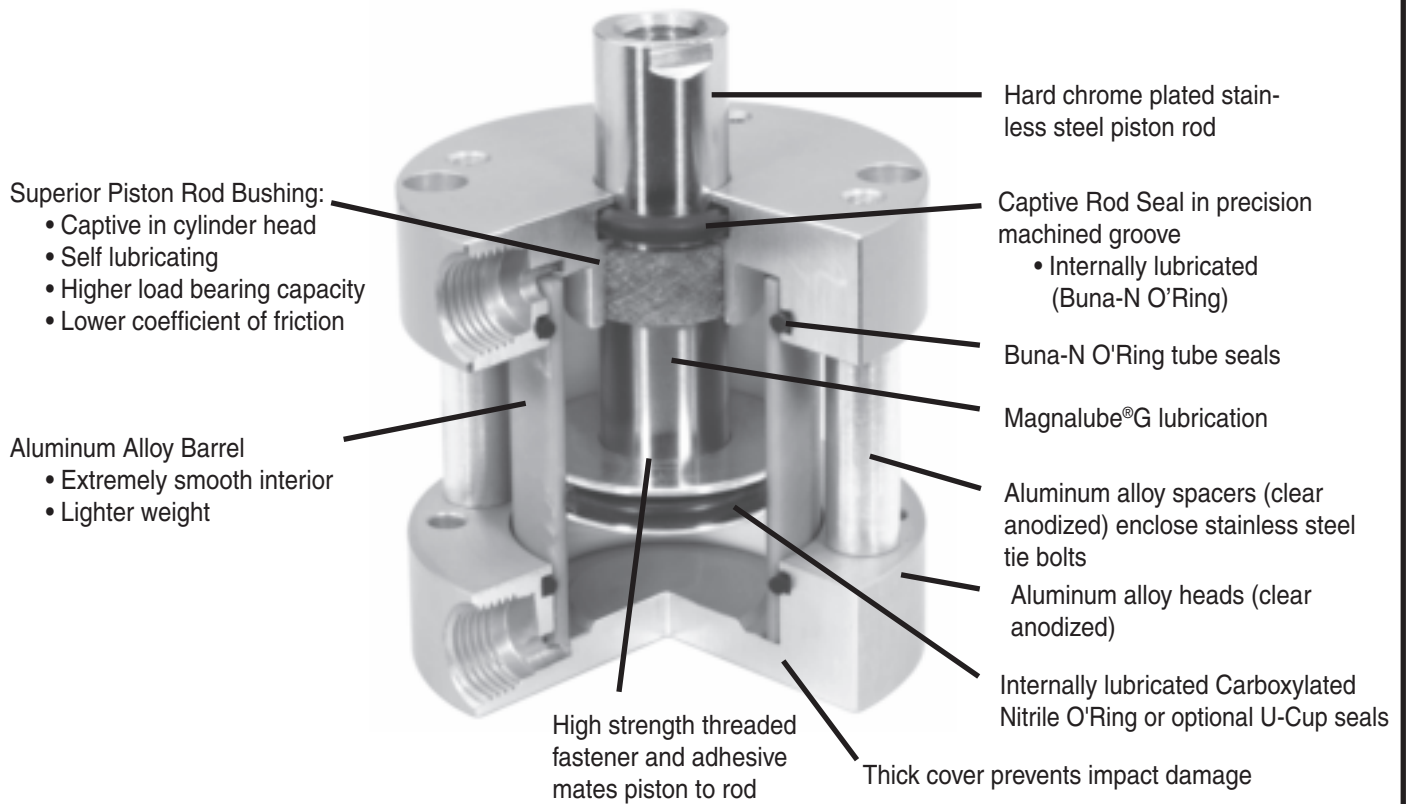
airpumping.co.uk

of 1979

Unit 16, Upminster Trading Park, Witley St, Upminster, Essex, RM14 3PL, ENGLAND

***Ideal for OEM installations and
General Industrial applications
where peak performance, endurance
and reliability are a must.***

Premair™ Series Compact, Composite, Interchangeable Cylinders



Superior Interchangeable Industrial Air Cylinders

Big Value in a Compact Package— Stainless steel tie bolts and aluminum spacers lock precision machined heads tightly around a heavy walled, aluminum alloy cylinder barrel. The barrel's extremely smooth, self-lubricating interior surface insures highly reliable performance and extended seal life.



Available in 4 styles

- Double acting, single end rod (Model SCC)
- Double acting, double end rod (Model SCD)
- Single acting, spring retract rod (Model SCS)
- Reverse acting, spring extend rod (Model SCR)

8 Bore sizes 1/2" thru 4" Strokes to 4" standard

Ratings

- Body Aluminum Alloy
- Heads Clear anodized aluminum alloy
- Tie Bolts Stainless steel
- Rod Chrome plated stainless steel
- Piston Aluminum alloy
- Rod end Female thread with wrench flats
- Ports Position #1
- Seals Internally lubricated Nitrile
- Lubrication Magnalube®-G
- Rod bushing High density iron
- Stroke tolerance $\pm 1/64"$
- Media Air
- Pressure rating, maximum 250 psi
- Minimum recommended operating pressure 15 psi
- Temperature rating
 - Cylinder -25° to $+225^{\circ}\text{F}$
(-32° to $+121^{\circ}\text{C}$)
 - Electronic sensors -5° to $+175^{\circ}\text{F}$
(-20° to $+80^{\circ}\text{C}$)

Spring Forces

Bore (in.)	Maximum Force	Spring Rate (lbs/inch) for Stroke Range			
		0.12 to 1" Stroke	1.001 to 2" Stroke	2.001 to 3" Stroke	3.001 to 4" Stroke
1/2 (05)	5.25	4.25	1.75	1.24	0.88
3/4 (07)	10.00	6.00	2.50	1.76	1.25
1-1/8 (11)	11.50	6.00	2.50	1.76	1.25
1-1/2 (15)	13.00	5.50	2.25	1.60	1.13
2 (20)	13.00	5.50	2.25	1.60	1.13
2-1/2 (25)	25.00	6.50	2.75	1.93	1.38
3 (30)	25.00	6.50	2.75	1.93	1.38
4 (40)	25.00	6.50	2.75	1.93	1.38

Cylinder Sizing Guide

Bore Diameter (in.)	1/2	3/4	1-1/8	1-1/2	2	2 1/2	3	4
Rod Diameter (in.)	0.25	0.31	0.50	0.63	0.75	0.75	0.88	1.00
Rod Area	0.05	0.08	0.19	0.31	0.44	0.44	0.60	0.79
Push Area (Single Rod)	0.20	0.44	0.88	1.76	3.14	4.91	7.07	12.57
Push Area (Double Rod)	0.15	0.36	0.69	1.45	2.66	4.47	6.47	11.78
Pull Area	0.15	0.36	0.69	1.45	2.66	4.47	6.47	11.78

Select, Compact Type _____		Stroke (Inches) _____
Bore Size _____		Head/Port Options
Mounting Options _____		Magnet/Sensor Options
Thread/Rod Options _____		Bumper/Seal Options _____

C Double Acting, Single Rod End
D Double Acting, Double Rod End
S Single Acting
R Reverse Acting

05 1/2"
07 3/4"
11 1 1/8"
15 1 1/2"
20 2"
25 2 1/2"
30 3"
40 4"

C Pivot Mount
D Pivot Mount 90 From Standard
E Trunnion Mount, Both Ends (See Note #5)
M Trunnion Mount, Front (See Note #5)
P Trunnion Mount, Rear (See Note #5)
G Threaded Mounting Holes, Both Ends
F Threaded Mounting Holes, Front
H Threaded Mounting Holes, Rear
J Screw Clearance Holes, Both Ends
K Screw Clearance Holes, Front
L Screw Clearance Holes, Rear
N Nose Mount For SCC, SCR & SCS Only (See Note #6)
X Standard Counterbored Mounting holes

Tens **Ones** **Fractions**
0 0-9 0 = 0 in.
0 1 = 1/8 in.
2 = 1/4 in.
3 = 3/8 in.
4 = 1/2 in.
5 = 5/8 in.
6 = 3/4 in.
7 = 7/8 in.

H Heavy Duty Rear Head
J FailSafe Operation (SCS Models Only)
(See Note #5)
P Front Port Position #2
R Front Port Position #3
S Front Port Position #4
X No Additional Options Required

E Magnetic Piston Only (See Note #7)
X No Additional Options Required

D Coarse Female Thread, Dimension "E"
E Male Rod End With Coarse Threads
H Hollow Rod, (SCD) Models Only
M Male Rod End, Fine, Thread
N Non-Threaded Rod
W 1/4" Extra Rod Extension
Y 1/2" Extra Rod Extension
Z 1" Extra Rod Extension
X No Additional Options Required

B Bumpers, Both Ends (SCC & SCD Models Only)
F Bumpers, Front Only (SCR Models Only)
R Bumpers, Rear Only (SCR Models Only)
L Low Friction Seals
M Low Friction & Low Temperature Seals
N Low Friction & Viton Seals
Q Low Temperature Operation (-40 F to 200 F)
V Viton Seals For Media Compatibility
W Rod Wiper, Buna-N Only
X No Additional Options Required

NOTES:

5) Not Available On 1/2" Bore Size Models.

6) Includes Heavy duty Rear Head (H) and Rod wiper (W)

7) 3/8" stroke minimum. Not available with Viton Seals or Low Temperature Seals.

Accessories

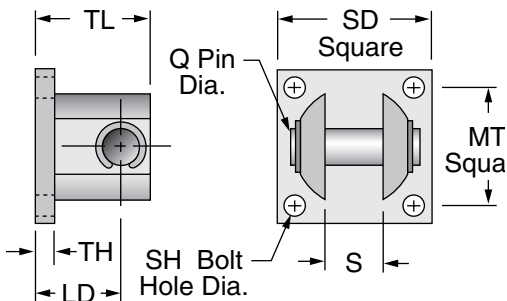
Selection Guide

Accessory	Standard Series
Clevis Bracket	✓
Trunnion Bracket	✓
Rod Pivot	✓

Clevis Bracket

Anodized aluminum alloy

Chrome plated steel pin included



The bracket is intended for mounting with either a rod pivot or pivot mount; it is not intended to mount directly with the rear cylinder head.

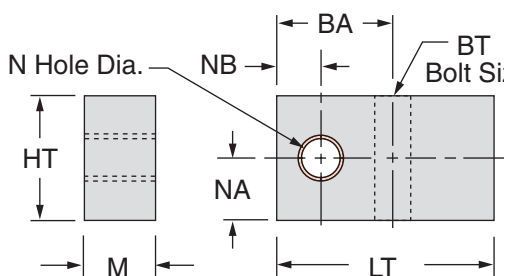
Dimensions (inches)

Kit No.	Bore	LD	MT	Q	S	SH	SD	TH	TL
SCABC-1	1/2 (05)	0.56	0.75	0.187	0.39	#6	1.00	0.16	0.78
	3/4 (07)								
	1-1/8 (11)								
SCABC-2	1-1/2 (15)	0.94	1.38	0.375	0.75	#10	1.75	0.22	1.34
	2 (20)								
	2-1/2 (25)								
SCABC-3	3 (30)	1.25	2.00	0.625	1.00	0.25	2.50	0.25	1.81
	4 (40)								

Trunnion Bracket (pair)

Anodized aluminum alloy

complete with bronze pivot bushings

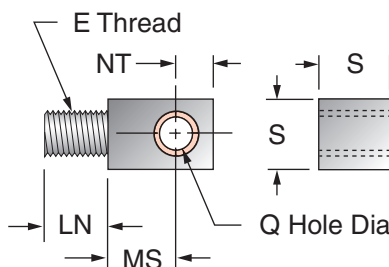


Dimensions (inches)

Kit No.	Bore	BA	BT	HT	LT	M	N	NA	NB
SCABT-1	3/4 (07)	0.56	#10	0.63	1.12	0.31	0.126	0.30	0.22
	1-1/8 (11)								
SCABT-2	1-1/2 (15)	0.81	1/4	0.88	1.50	0.50	0.251	0.38	0.31
	2 (20)								
SCABT-3	2-1/2 (25)	0.94	5/16	1.00	1.63	0.63	0.313	0.45	0.38
	3 (30)								
SCABT-4	4 (40)	1.06	3/8	1.25	1.88	0.75	0.376	0.55	0.44

Rod Pivot

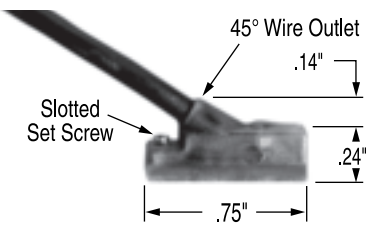
Steel with bronze pivot bushing and nut



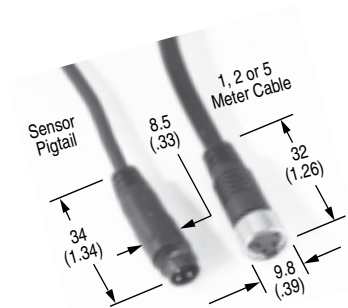
Dimensions (inches)

Kit No.	Bore	E	LN	MS	NT	Q	S
SCARP-0	1/2 (05)	#8-32 UNC	0.38	0.47	0.25	0.187	0.38
SCARP-1	3/4 (07)	#10-32 UNF	0.38	0.47	0.25	0.187	0.38
SCARP-2	1-1/8 (11)	5/16-24 UNF	0.63	0.47	0.25	0.187	0.38
SCARP-3	1-1/2 (15)	3/8-24 UNF	0.63	0.72	0.44	0.375	0.75
SCARP-4	2 (20)	1/2-20 UNF	0.75	0.72	0.44	0.375	0.75
	2-1/2 (25)						
SCARP-5	3 (30)	5/8-18 UNF	0.88	1.00	0.63	0.625	1.00
SCARP-6	4 (40)	3/4-16 UNF	0.88	1.00	0.63	0.625	1.00

Sensor Specifications & Ordering Information

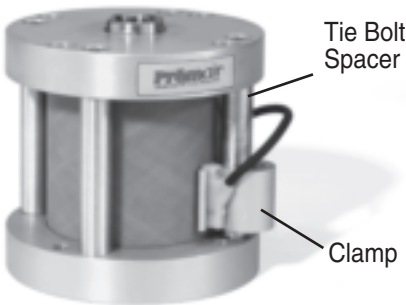


- Encased in a plastic housing, dovetail style electronic sensors are corrosion resistant. 45° wire outlet allows close mounting.
- Two methods of mounting are available:
 1. Tie bolt spacer mounted clamps
 2. Adhesive mounted dovetail extrusions
- **Order sensors separately from the table below**



Ordering Guide – Dovetail Style Magnetic Sensor with LED					Sensor Temperature Range -20° to +80° C (-4° to +176° F)	Female Cordsets for Quick Disconnect	
Sensor Type	Prewired 9 ft. Part No.	Quick Disconnect Part No.*	Wire Leads	Electrical Characteristics			
Electronic	SCAMS-1	SCAMS-3	3	Sourcing PNP 6-24 VDC, 0.20 Amp Max current, 0.5 Voltage Drop			
Electronic	SCAMS-2	SCAMS-4	3	Sinking NPN 6-24 VDC, 0.20 Amp Max current, 0.5 Voltage Drop			
Note*: Quick disconnect styles are supplied with 6 inch pigtail with male connector. Order female cordsets separately.							
						Length	Part No.
						1 Meter	SCAFC-1
						2 Meters	SCAFC-2
						5 Meters	SCAFC-5

Position sensors with spacer mounted clamps

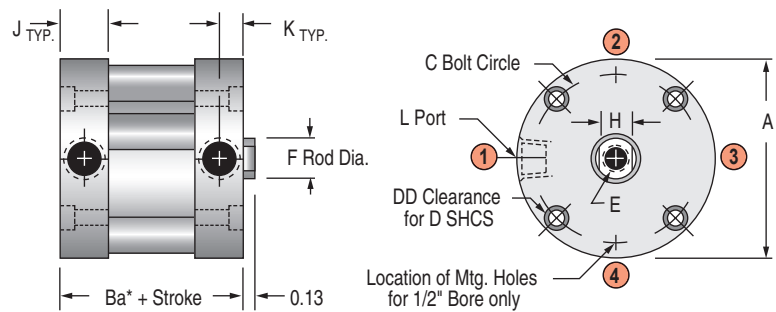


Clamp Selection Guide						
Part No.	SCAMC-1	SCAMC-2	SCAMC-3	SCAMC-4	SCAMC-5	SCAMC-6
To Fit Bore	1/2"	3/4"	1-1/8"	1-1/2" & 2"	2-1/2" & 3"	4"

Order clamps and sensors separately

Model SCC

Double Acting, Single Rod

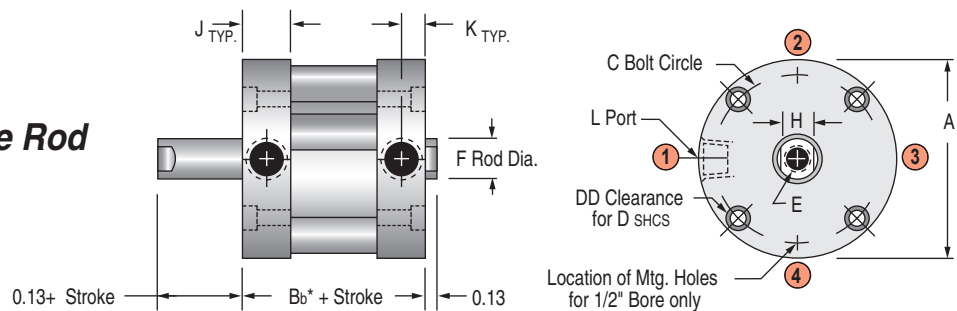


***Note: Some options effect cylinder length**

Standard Strokes – All Models: • 1/8 • 1/4 • 3/8 • 1/2 • 5/8 • 3/4 • 7/8 • 1 • 1-1/4 • 1-1/2 • 1-3/4 • 2 • 2-1/2 • 3 • 3-1/2 • 4

Model SCD

Double Acting, Double Rod



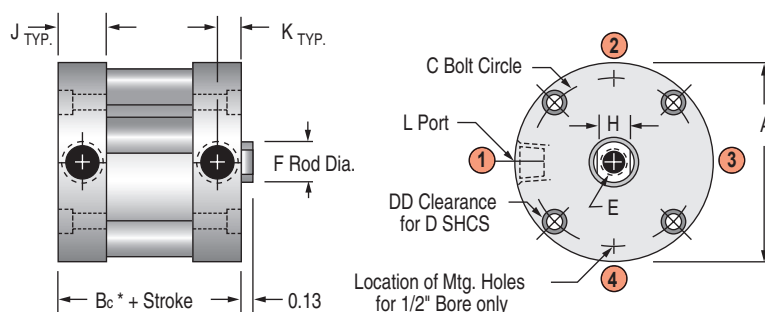
***Note: Some options effect cylinder length**

Dimensions (inches)

Bore	A	Ba*	Bb*	Bc* for Stroke Range				Bd* for Stroke Range				C	DD
				0-1	1.001-2	2.001-3	3.001-4	0-1	1.001-2	2.001-3	3.001-4		
1/2 (05)	1.12	0.56	0.69	0.81	1.38	1.96	2.52	1.06	1.62	2.14	3.21	0.88	2
3/4 (07)	1.50	0.56	0.69	0.81	1.38	1.94	2.50	1.06	1.62	2.19	2.75	1.22	4
1-1/8 (11)	2.00	0.88	0.94	0.88	1.50	2.13	2.75	1.38	2.00	2.63	3.25	1.69	4
1-1/2 (15)	2.62	0.88	1.00	0.88	1.50	2.13	2.75	1.38	2.00	2.63	3.25	2.19	4
2 (20)	3.12	0.94	1.06	0.94	1.56	2.19	2.81	1.44	2.06	2.69	NA	2.69	4
2-1/2 (25)	3.75	1.19	1.31	1.19	2.06	2.94	3.81	1.94	2.81	2.81	NA	3.25	4
3 (30)	4.25	1.25	1.38	1.25	2.12	3.00	3.88	2.00	2.88	2.88	NA	3.78	4
4 (40)	5.50	1.56	1.69	1.56	2.44	3.31	4.19	2.31	3.19	3.19	NA	4.94	4

Model SCS

Single Acting, Spring Retract

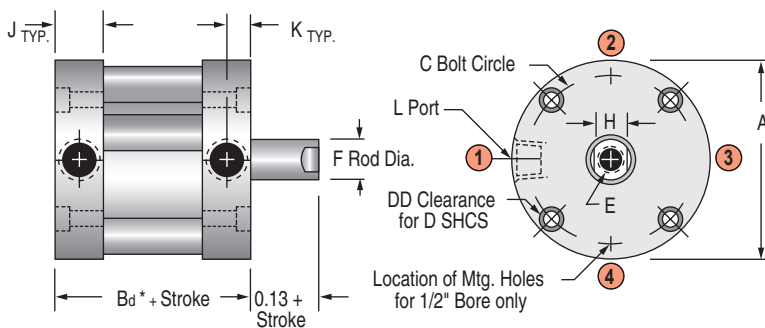


**Note: Some options effect cylinder length*

Standard Strokes – All Models: • 1/8 • 1/4 • 3/8 • 1/2 • 5/8 • 3/4 • 7/8 • 1 • 1-1/4 • 1-1/2 • 1-3/4 • 2

Model SCR

Reverse Acting, Spring Extend



Approximate Cylinder Weights (ounces) SCC, SCS, SCD, SCR

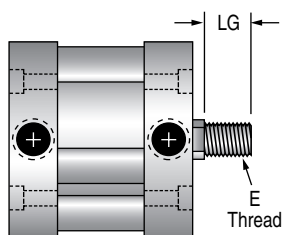
Bore	SCC, SCS		SCD			SCR		Nose Mount Option
	Base	Adder per 1/8 of Stroke	Base	Adder per 1/8 of Stroke	Adder per 1/8 of Stroke for -H Option	Base	Adder per 1/8 of Stroke	Adder to Base Weight
1/2 (05)	1.2	0.08	1.3	0.15	0.1	1.3	0.08	0.1
3/4 (07)	1.9	0.1	2.1	0.2	0.15	2.0	0.1	0.2
1-1/8 (11)	4.9	0.3	5.8	0.4	0.3	5.3	0.3	1.1
1-1/2 (15)	9.6	0.4	11.2	0.6	0.5	10.5	0.4	1.8
2 (20)	13.0	0.5	15.2	0.7	0.6	14.0	0.5	2.7
2-1/2 (25)	22.4	0.6	28.0	0.8	0.7	25.0	0.6	3.1
3 (30)	28.9	0.8	38.0	1.1	0.9	32.5	0.8	3.5
4 (40)	55.7	1.0	71.8	1.3	1.1	61.8	1.0	5.9

Dimensions (inches)

Bore	D	E Standard	E Depth for Stroke Range		F	H	J	K	L
			1/8 – 1/2	5/8 +					
1/2 (05)	#4	#8-32 UNF	0.30-0.46	0.46	0.25	0.22	0.34	0.14	#10-32 UNF
3/4 (07)	#6	#10-32 UNF	0.30-0.46	0.46	0.31	0.25	0.34	0.14	#10-32 UNF
1-1/8 (11)	#6	5/16-24 UNF	0.37-0.63	0.70	0.50	0.44	0.50	0.25	1/8 NPT
1-1/2 (15)	#10	3/8-24 UNF	0.37-0.70	0.70	0.63	0.50	0.50	0.25	1/8 NPT
2 (20)	#10	1/2-20 UNF	0.30-0.63	0.70	0.75	0.63	0.53	0.25	1/8 NPT
2-1/2 (25)	1/4	1/2-20 UNF	0.42-0.70	0.70	0.75	0.63	0.66	0.33	1/4 NPT
3 (30)	1/4	5/8-18 UNF	0.45-0.73	0.73	0.88	0.75	0.69	0.33	1/4 NPT
4 (40)	5/16	3/4-16 UNF	0.40-0.70	0.80	1.00	0.88	0.84	0.42	3/8 NPT

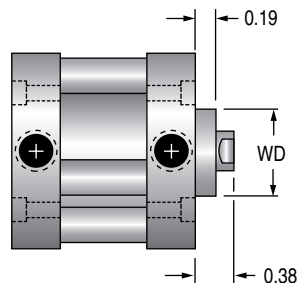
Model Options

Male Rod Ends



Thread Sizes		
Bore	E Thread	LG
	M (Fine)	
1/2 (05)	#8-32 UNC	0.38
3/4 (07)	#10-32 UNF	0.38
1-1/8 (11)	5/16-24 UNF	0.50
1-1/2 (15)	3/8-24 UNF	0.50
2 (20)	1/2-20 UNF	0.63
2-1/2 (25)	1/2-20 UNF	0.63
3 (30)	5/8-18 UNF	0.75
4 (40)	3/4-16 UNF	0.75

Rod Wiper (Buna-N only)

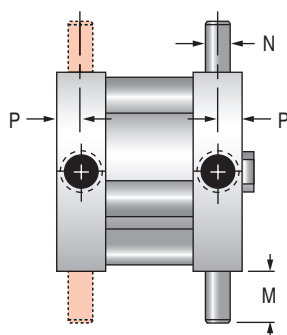


Boss Dia.	
Bore	WD
1/2 (05)	0.56
3/4 (07)	0.69
1-1/8 (11)	0.88
1-1/2 (15)	1.00
2 (20)	1.13
2-1/2 (25)	1.13
3 (30)	1.25
4 (40)	1.38

Mounting Options

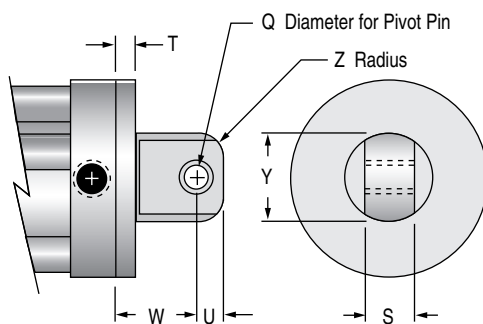
Trunnion Mount

Available rear, front or both.
Not available on 1/2" bore.



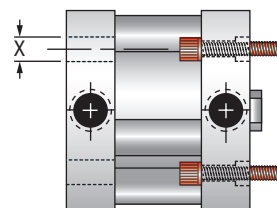
Pivot Mount

Complete with bronze pivot bushing.
Not available as an accessory.



Screw Clearance Holes

Available either or both ends.



Dimensions (inches)											
Bore	M	N	P	Q	S	T	U	W	X	Y	Z
1/2 (05)	NA	NA	NA	0.19	0.38	0.19	0.25	0.75	0.17	0.63	0.19
3/4 (07)	0.31	0.125	0.17	0.19	0.38	0.19	0.25	0.75	0.23	0.75	0.19
1-1/8 (11)	0.50	0.250	0.25	0.19	0.38	0.25	0.25	0.81	0.25	0.75	0.19
1-1/2 (15)	0.50	0.250	0.25	0.38	0.75	0.25	0.44	1.19	0.34	1.38	0.38
2 (20)	0.50	0.250	0.25	0.38	0.75	0.31	0.44	1.25	0.34	1.38	0.38
2-1/2 (25)	0.63	0.312	0.33	0.38	0.75	0.38	0.44	1.31	0.41	1.38	0.38
3 (30)	0.63	0.312	0.33	0.63	1.00	0.38	0.56	1.69	0.41	1.88	0.38
4 (40)	0.75	0.375	0.42	0.63	1.00	0.44	0.56	1.75	0.50	1.88	0.38

Deviations from Standard Dimensions

Length Adder (inches)					
Bore	Low Friction Seals	Heavy Duty Rear Head†	Magnetic Position Sensing† (E or M)		
			SCC, SCD	SCS	SCR
1/2 (05)	0.25	0.13	0.88	0.63	0.38
3/4 (07)	0.25	0.13	0.88	0.88	0.88
1-1/8 (11)	0.38	0.19	0.88	0.88	0.88
1-1/2 (15)	0.38	0.19	0.88	0.88	0.88
2 (20)	0.38	0.19	0.88	0.88	0.88
2-1/2 (25)	0.38	0.25	0.88	0.88	0.88
3 (30)	0.50	0.25	0.88	0.88	0.88
4 (40)	0.50	0.38	0.88	0.88	0.88

† Heavy duty rear head is recommended for applications where the cylinder is mounted on the front face or trunnion-mounted, and impact loading (20 or more cycles/minute) occurs between the piston and rear head. It increases the overall length of the cylinder as shown.

† A minimum stroke of 3/8" is required to sense end-of-stroke positions. For low friction seals used in conjunction with magnetic position sensing, use "E" or "M" sensor options only.

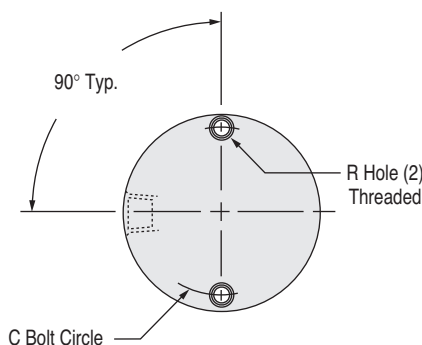
Hollow Rod Option

Hole Diameter		
Bore	Female Rod Thread	Male Rod Thread
1/2 (05)	0.14	N/A
3/4 (07)	0.14	0.09
1-1/8 (11)	0.22	0.16
1-1/2 (15)	0.28	0.19
2 (20)	0.38	0.25
2-1/2 (25)	0.38	0.25
3 (30)	0.44	0.31
4 (40)	0.50	0.38

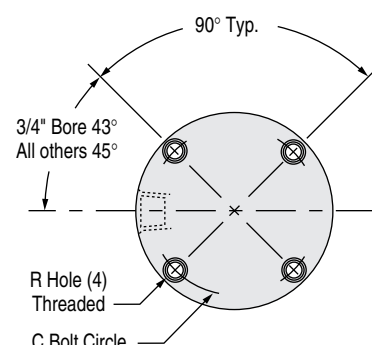
Threaded Mounting Holes

1/2" Bore

Available either or both ends.



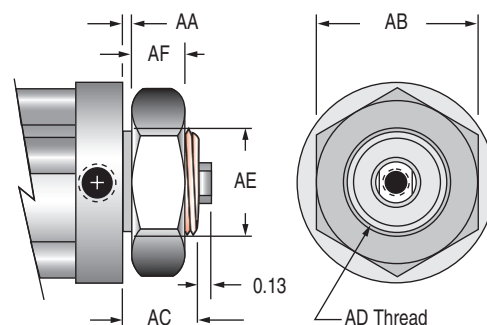
3/4" Bore & Up



Nose Mount

Available on SCC, SCS, SCR.

Included heavy duty rear head. See length adder above.



Dimensions (inches)								
Bore	AA	AB	AC	AD	AE	AF	C	R
1/2 (05)	.06	0.75 Hex	.38	1/2 – 20 UNF-2A	.50	.31	0.88	#4 – 40 UNC
3/4 (07)	.06	0.75 Hex	.38	5/8 – 18 UNF-2A	.62	.25	1.22	#6 – 32 UNC
1-1/8 (11)	.13	1.50 Hex	.75	1 – 14 UNF-2A	1.00	.55	1.69	#6 – 32 UNC
1-1/2 (15)	.13	1.88 Hex	.75	1-1/4 – 12 UNF-2A	1.25	.52	2.19	#10 – 24 UNC
2 (20)	.19	1.88 Hex	.88	1-3/8 – 12 UNF-2A	1.38	.52	2.69	#10 – 24 UNC
2-1/2 (25)	.25	1.88 Hex	1.00	1-3/8 – 12 UNF-2A	1.38	.52	3.25	1/4 – 20 UNC
3 (30)	.25	1.88 Hex	1.00	1-3/8 – 12 UNF-2A	1.38	.52	3.78	1/4 – 20 UNC
4 (40)	.19	2.62 Hex	1.12	1-3/4 – 12 UN-2A	1.75	.88	4.94	5/16 – 18 UNC

Maximum Torque for Nose Mount Option

Bore	Foot-Pounds
1/2 (05)	12
3/4 (07)	28
1-1/8 (11)	100
1-1/2 (15)	120
2 (20)	130
2-1/2 (25)	130
3 (30)	130
4 (40)	150



10 Bore Sizes 12mm thru 100mm

- NPT Ports
- Stainless Steel Rod
- Space Saving Design
- Buna Seals Standard
- Light Weight Aluminum Body
- Metric Female Rod Threads Standard

Low-profile, aluminum cylinders are designed for compact, space-saving applications. All models have magnetic pistons and are switch-ready for accurate position sensing. Low-profile, solid state switches slide into machined grooves located on the cylinder body. Viton seals for higher temperature rating than nitrile. Stainless steel piston rods are hard chrome plated for superior wear and corrosion resistance. Piston is attached to rod with a flat head screw to minimize pounding and vibration. Mounting through holes are threaded for easy mounting hardware installation.

Ratings

- | | |
|--|---|
| • FluidAIR | • Rod End ThreadFemale (standard) |
| • Max. Operating Pressure140 PSI | • Stroke Tolerance0.039 in (+10/-0mm) |
| • Min. Operating Pressure7 PSI | • MountingThrough Hole (Standard) |
| • Ambient and Fluid Temperature . . .15-140 F (-10 - 60 C) | • Piston Speed2-20inch/sec (50-500mm/sec) |
| • LubricationNot Required | |
| • CushionNone | |

Cylinder Force

Cylinder force

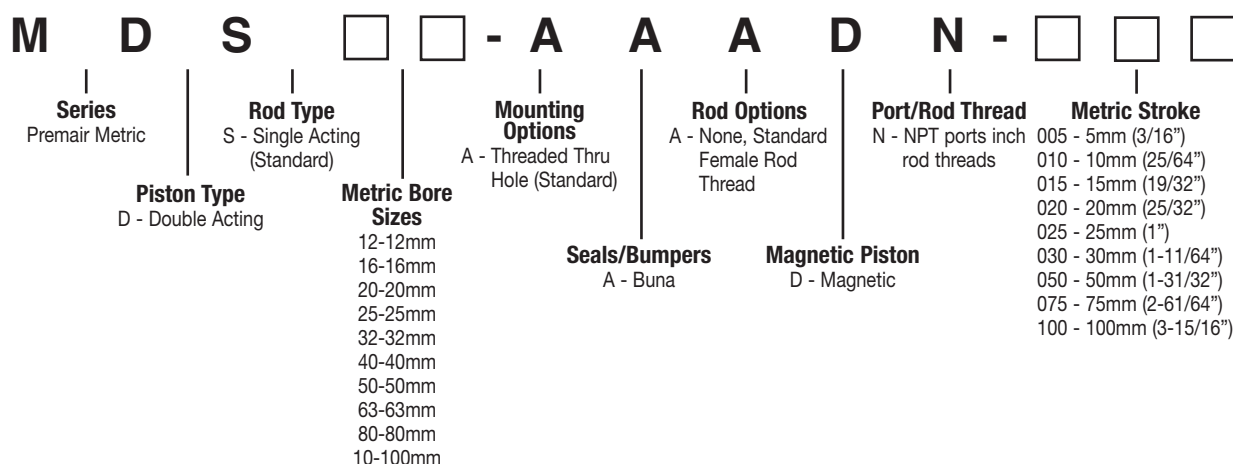
Bore Size	Operating Pressure PSI		
	50	75	100
012(1/2 nom)	8.7	13.1	17.5
	6.6	9.8	13.1
016(5/8 nom)	15.6	23.4	31.2
	11.7	17.5	23.4
020(3/4 nom)	24.3	36.5	48.6
	18.2	27.3	36.5
025(1 nom)	38	57	76
	29.3	43.9	58.5
032(1 1/4 nom)	62.3	93.5	12.5
	46.8	70.1	93.5

Bore Size	Operating Pressure PSI		
	50	75	100
040(1 1/2 nom.)	97.4	146	195
	81.8	123	164
050(2 nom)	152	228	304
	128	192	256
063(2 1/2 nom)	242	362	483
	217	326	434
080(3 1/4 nom)	390	584	779
	352	527	703
100(4 nom)	609	913	1217
	554	831	1108

Basic Cylinder Weights

Basic Cylinder Weights (lbs)

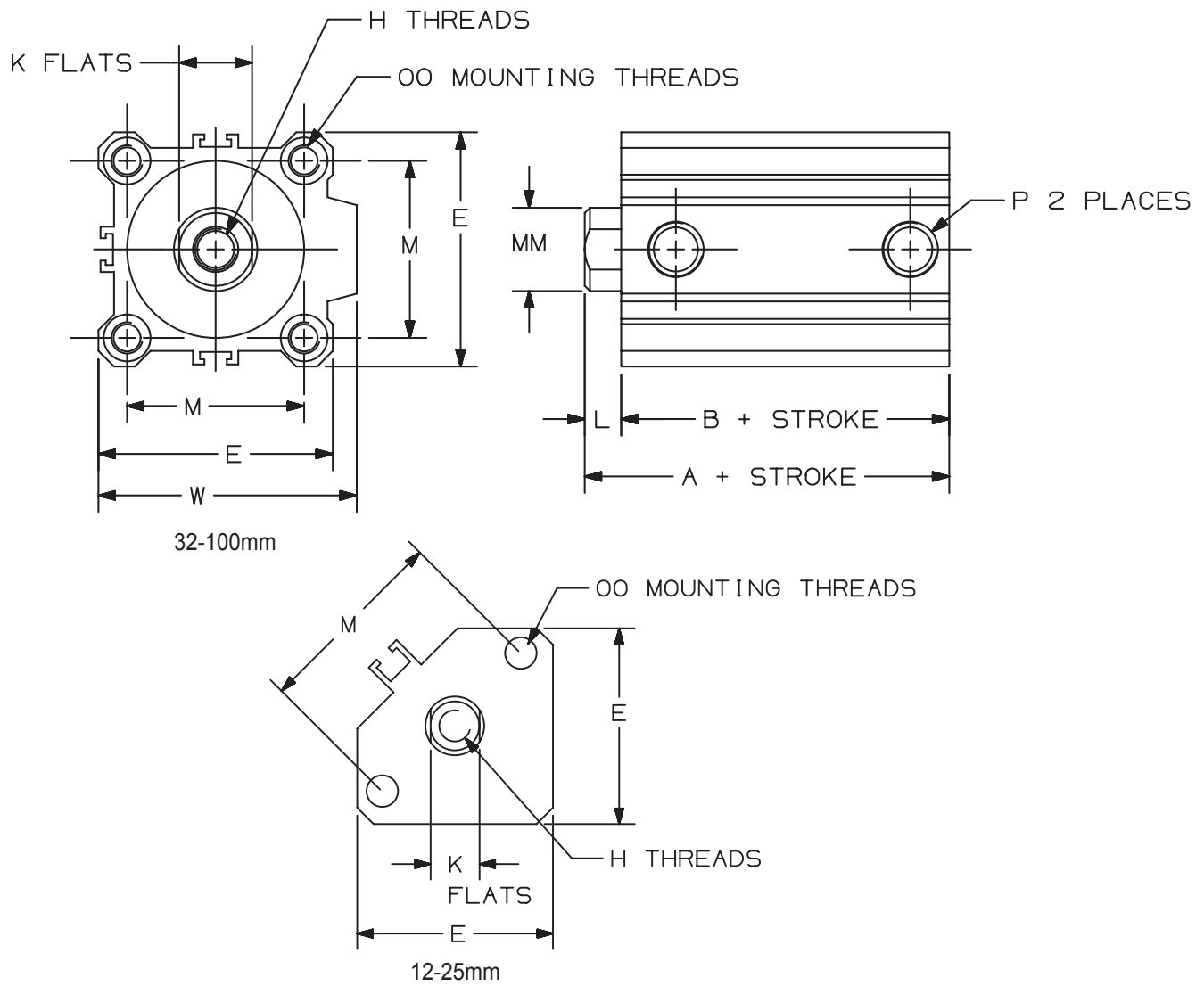
Bore (in)	Stroke (inch)											
	5 (.20)	10 (.39)	15 (.59)	20 (.79)	25 (.98)	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	50 (1.97)	75 (2.95)	100 (3.94)
1/2	0.110	0.126	0.141	0.157	0.172	0.187	-	-	-	-	-	-
5/8	0.157	0.181	0.207	0.232	0.256	0.280	-	-	-	-	-	-
3/4	0.229	0.271	0.315	0.359	0.406	0.450	0.494	0.540	0.584	0.631	-	-
1	0.284	0.331	0.395	0.423	0.472	0.518	0.564	0.613	0.657	0.706	-	-
1-1/4	0.571	0.598	0.624	0.650	0.701	0.750	0.800	0.851	0.902	0.961	1.22	1.47
1-1/2	0.752	0.805	0.858	0.908	0.953	0.997	1.05	1.09	1.14	1.2	1.44	1.68
2	-	1.10	1.17	1.25	1.34	1.43	1.5	1.58	1.66	1.78	2.18	2.5
2-1/2	-	1.60	1.69	1.78	1.87	1.97	2.06	2.15	2.23	2.38	2.84	3.29
3-1/4	-	3.53	3.74	4.0	4.16	4.36	4.57	4.78	4.99	5.28	6.31	7.33
4	-	5.55	5.68	5.81	6.05	6.29	6.52	6.75	6.97	7.31	8.45	9.59



Available Models

Bore(mm)	Stroke (mm)	Model number	Bore(mm)	Stroke (mm)	Model number
12	.5	MDS12-AAADN-005	40	.35	MDS40-AAADN-035
12	.10	MDS12-AAADN-010	40	.40	MDS40-AAADN-040
12	.15	MDS12-AAADN-015	40	.45	MDS40-AAADN-045
12	.20	MDS12-AAADN-020	40	.50	MDS40-AAADN-050
12	.25	MDS12-AAADN-025	40	.75	MDS40-AAADN-075
12	.30	MDS12-AAADN-030	40	100	MDS40-AAADN-100
16	.5	MDS16-AAADN-005	50	.10	MDS50-AAADN-010
16	.10	MDS16-AAADN-010	50	.15	MDS50-AAADN-015
16	.15	MDS16-AAADN-015	50	.20	MDS50-AAADN-020
16	.20	MDS16-AAADN-020	50	.25	MDS50-AAADN-025
16	.25	MDS16-AAADN-025	50	.30	MDS50-AAADN-030
16	.30	MDS16-AAADN-030	50	.35	MDS50-AAADN-035
20	.5	MDS20-AAADN-005	50	.40	MDS50-AAADN-040
20	.10	MDS20-AAADN-010	50	.45	MDS50-AAADN-045
20	.15	MDS20-AAADN-015	50	.50	MDS50-AAADN-050
20	.20	MDS20-AAADN-020	50	.75	MDS50-AAADN-075
20	.25	MDS20-AAADN-025	50	100	MDS50-AAADN-100
20	.30	MDS20-AAADN-030	63	.10	MDS63-AAADN-010
20	.35	MDS20-AAADN-035	63	.15	MDS63-AAADN-015
20	.40	MDS20-AAADN-040	63	.20	MDS63-AAADN-020
20	.45	MDS20-AAADN-045	63	.25	MDS63-AAADN-025
20	.50	MDS20-AAADN-050	63	.30	MDS63-AAADN-030
25	.5	MDS25-AAADN-005	63	.35	MDS63-AAADN-035
25	.10	MDS25-AAADN-010	63	.40	MDS63-AAADN-040
25	.15	MDS25-AAADN-015	63	.45	MDS63-AAADN-045
25	.20	MDS25-AAADN-020	63	.50	MDS63-AAADN-050
25	.25	MDS25-AAADN-025	63	.75	MDS63-AAADN-075
25	.30	MDS25-AAADN-030	63	100	MDS63-AAADN-100
25	.35	MDS25-AAADN-035	80	.10	MDS80-AAADN-010
25	.40	MDS25-AAADN-040	80	.15	MDS80-AAADN-015
25	.45	MDS25-AAADN-045	80	.20	MDS80-AAADN-020
25	.50	MDS25-AAADN-050	80	.25	MDS80-AAADN-025
32	.5	MDS32-AAADN-005	80	.30	MDS80-AAADN-030
32	.10	MDS32-AAADN-010	80	.35	MDS80-AAADN-035
32	.15	MDS32-AAADN-015	80	.40	MDS80-AAADN-040
32	.20	MDS32-AAADN-020	80	.45	MDS80-AAADN-045
32	.25	MDS32-AAADN-025	80	.50	MDS80-AAADN-050
32	.30	MDS32-AAADN-030	80	.75	MDS80-AAADN-075
32	.35	MDS32-AAADN-035	80	100	MDS80-AAADN-100
32	.40	MDS32-AAADN-040	10	.10	MDS10-AAADN-010
32	.45	MDS32-AAADN-045	10	.15	MDS10-AAADN-015
32	.50	MDS32-AAADN-050	10	.20	MDS10-AAADN-020
32	.75	MDS32-AAADN-075	10	.25	MDS10-AAADN-025
32	100	MDS32-AAADN-100	10	.30	MDS10-AAADN-030
40	.5	MDS40-AAADN-005	10	.35	MDS10-AAADN-035
40	.10	MDS40-AAADN-010	10	.40	MDS10-AAADN-040
40	.15	MDS40-AAADN-015	10	.45	MDS10-AAADN-045
40	.20	MDS40-AAADN-020	10	.50	MDS10-AAADN-050
40	.25	MDS40-AAADN-025	10	.75	MDS10-AAADN-075
40	.30	MDS40-AAADN-030	10	100	MDS10-AAADN-100

13 | General Dimensions with Chart



Dimensions mm (inch)

BORE mm (Nom. In.)	A	B	E	H (Inch)	K	L	M	MM	OO	P (NPT)	W
12 (1/2)	31.5 (1.24)	28.0 (1.10)	25 (0.98)	8-32	5 (0.20)	3.5 (0.14)	22 (0.87)	6 (0.236)	6.5 (0.26)	10-32	23 (0.90)
16 (5/8)	34.0 (1.34)	30.5 (1.20)	29 (1.14)	8-32	6 (0.24)	3.5 (0.14)	28 (1.10)	8 (0.315)	6.5 (0.26)	10-32	27.2 (1.07)
20 (3/4)	36.0 (1.42)	31.5 (1.24)	36 (1.42)	10-32	8 (0.31)	4.5 (0.18)	36 (1.42)	10 (0.394)	9 (0.35)	10-32	31.2 (1.23)
25 (1)	37.5 (1.48)	32.5 (1.28)	40 (1.57)	1/4-28	10 (0.39)	5 (0.20)	40 (1.57)	12 (0.472)	9 (0.35)	10-32	36.9 (1.45)
32 (1-1/4)	40.0 (1.57)	33.0 (1.30)	44.5 (1.75)	5/16-24	14 (0.55)	7 (0.28)	34 (1.34)	16 (0.630)	9 (0.35)	1/8	49.3 (1.94)
40 (1-1/2)	46.5 (1.83)	39.5 (1.56)	52 (2.05)	3/8-24	14 (0.55)	7 (0.28)	40 (1.57)	16 (0.630)	9 (0.35)	1/8	57 (2.24)
50 (2)	48.5 (1.91)	40.5 (1.59)	63.7 (2.51)	1/2-20	17 (0.67)	8 (0.31)	50 (1.97)	20 (0.787)	11 (0.43)	1/4	70.6 (2.78)
63 (2-1/2)	54.0 (2.13)	46.0 (1.81)	76.7 (3.02)	1/2-20	17 (0.67)	8 (0.31)	60 (2.36)	20 (0.787)	14 (0.55)	1/4	83.6 (3.29)
80 (3-1/4)	63.5 (2.50)	53.5 (2.11)	97.8 (3.85)	5/8-18	22 (0.87)	10 (0.39)	77 (3.03)	25 (0.984)	17.5 (0.69)	3/8	104 (4.09)
100 (4)	75.0 (2.95)	63.0 (2.48)	115.3 (4.54)	3/4-16	27 (1.06)	12 (0.47)	94 (3.70)	30 (1.181)	17.5 (0.69)	3/8	121.9 (4.80)

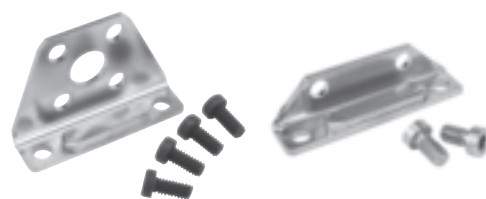
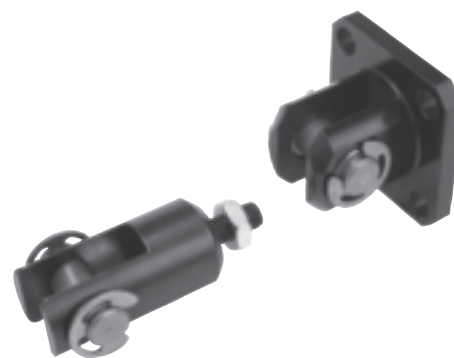
Rod cleviss

Bore mm (in)	Inch Part Number	Metric Part Number
12 (1/2)	114818-12	114819-12
16 (5/8)	114818-16	114819-16
20 (3/4)	114818-20	114819-20
25 (1)	114818-25	114819-25
32 (1-1/4)	114818-32	114819-32
40 (1-1/2)	114818-40	114819-32
50 (2)	114818-50	114819-50
63 (2-1/2)	114818-50	114819-50
80 (3-1/4)	114818-80	114819-80
100 (4)	114818-100	114819-100



Double Cleviss rod clevis & rear clevis

Bore mm (in)	Part Number	Overall Length
12 (1/2)	114817-12	3/4
16 (5/8)	114817-16	53/64
20 (3/4)	114817-20	1 1/16
25 (1)	114817-25	1 1/12
32 (1-1/4)	114817-32	1 1/12
40 (1-1/2)	114817-40	1 17/64
50 (2)	114817-50	1 21/32
63 (2-1/2)	114817-63	1 47/64
80 (3-1/4)	114817-80	2 7/32
100 (4)	114817-100	4 27/32



Flange Mount

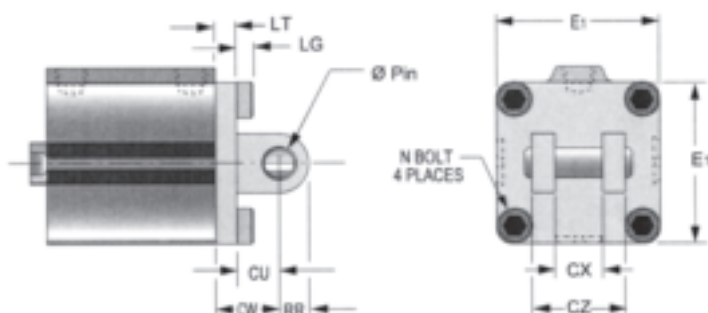
Bore mm (in)	Part Number
12 (1/2)	114815-12
16 (5/8)	114815-16
20 (3/4)	114815-20
25 (1)	114815-25
32 (1-1/4)	114815-32
40 (1-1/2)	114815-40
50 (2)	114815-50
63 (2-1/2)	114815-63
80 (3-1/4)	114815-80
100 (4)	114815-100

Foot Mount

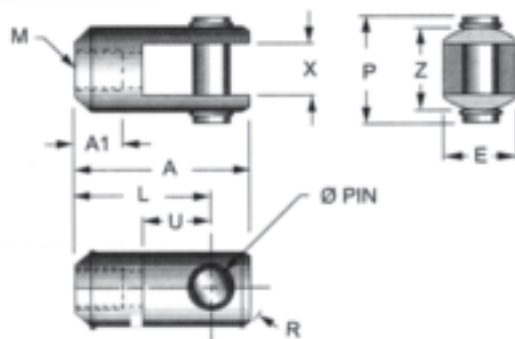
Bore mm (in)	Part Number
12 (1/2)	114816-12
16 (5/8)	114816-16
20 (3/4)	114816-20
25 (1)	114816-25
32 (1-1/4)	114816-32
40 (1-1/2)	114816-40
50 (2)	114816-50
63 (2-1/2)	114816-63
80 (3-1/4)	114816-80
100 (4)	114816-100

Double Clevis

Dimensions-inch



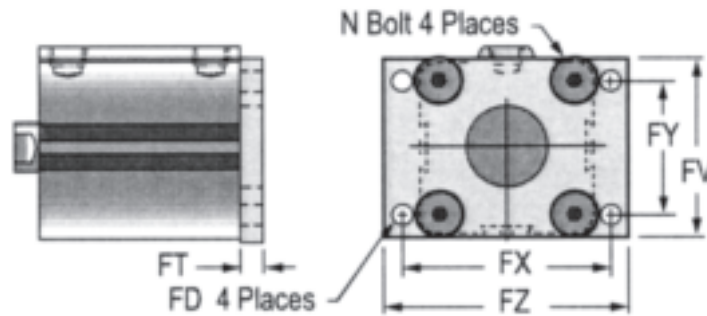
Bore (in)	Pin (in)	CW	CU	CX	CZ	LT	LG	RR	E1	N (bolt)
12 (1/2)	0.187	0.55	0.28	0.02	0.39	0.20	0.11	0.24	0.98	M4x.07
16 (5/8)	0.187	0.59	0.39	0.03	0.47	0.20	0.11	0.24	1.14	M4x.07
20 (3/4)	0.312	0.71	0.47	0.33	0.63	0.20	0.16	0.35	1.42	M6x1.0
25 (1)	0.375	0.79	0.55	0.41	0.79	0.20	0.16	0.39	1.57	M6x1.0
32 (1-1/4)	0.375	0.79	0.55	0.72	1.42	0.24	0.16	0.39	1.75	M6x1.0
40 (1-1/2)	0.375	0.87	0.55	0.72	1.42	0.31	0.16	0.39	2.05	M6x1.0
50 (2)	0.500	1.10	0.79	0.88	1.73	0.31	0.20	0.55	2.51	M8x1.25
63 (2-1/2)	0.500	1.18	0.79	0.88	1.73	0.39	0.24	0.55	3.02	M10x1.5
80 (3-1/4)	0.750	1.50	1.07	1.11	2.20	0.43	0.28	0.71	3.85	M12x1.75
100 (4)	0.875	1.77	1.22	1.27	2.52	0.55	0.28	0.87	4.54	M12x1.75



Rod Clevis

Dimensions-inch

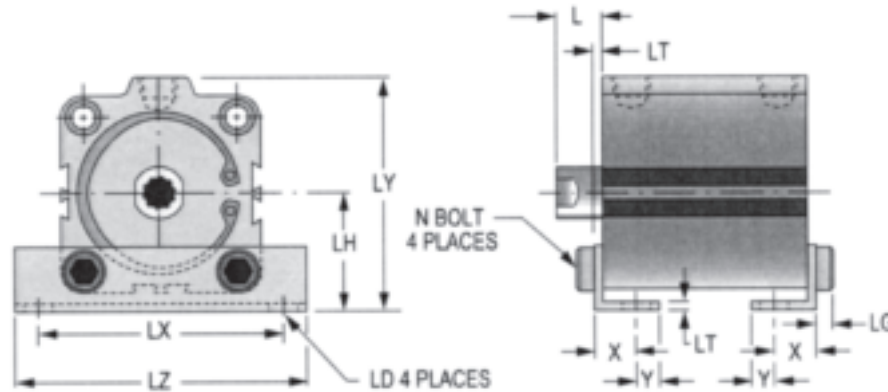
Bore mm (in)	L	U	X	Z	P	E	A1	A	R	M (thds) inch / metric
12 (1/2)	0.63	0.27	0.21	0.39	0.55	0.39	0.24	0.85	0.25	#8-32 M3 x 0.5
16 (5/8)	0.83	0.39	0.26	0.47	0.63	0.47	0.24	1.10	0.47	#8-32 M4 x 0.7
20 (3/4)	0.98	0.45	0.33	0.63	0.83	0.63	0.24	1.34	0.41	#10-32 M5 x 0.8
25 (1)	1.18	0.55	0.41	0.78	0.98	0.78	0.31	1.61	0.50	1/4-28 M6 x 1.0
32 (1-1/4)	1.18	0.55	0.72	1.44	1.61	0.87	0.63	1.65	0.47	5/16-24 M8 x 1.25
40 (1-1/2)	1.18	0.55	0.72	1.44	1.61	0.87	0.63	1.65	0.47	3/8-24 M8 x 1.25
50 (2)	1.57	0.79	0.88	1.75	1.97	1.10	0.79	2.20	0.63	1/2-20 M10 x 1.5
63 (2-1/2)	1.57	0.79	0.88	1.75	1.97	1.10	0.79	2.20	0.63	1/2-20 M10 x 1.5
80 (3-1/4)	1.97	1.06	1.12	2.19	2.46	1.50	0.91	2.80	0.83	5/8-18 M16 x 2.0
100 (4)	2.17	1.22	1.28	2.50	2.78	1.73	0.95	3.11	0.95	3/4-16 M20 x 2.5



Flange Mount

Dimensions-inch

Bore mm (in)	FT	L	N Bolt	FD	FY	FX	FV	FZ
12 (1/2)	0.22	0.31	M4 x 0.7	1.80	-	1.77	0.98	2.17
16 (5/8)	0.22	0.31	M4 x 0.7	1.80	-	1.77	1.18	2.17
20 (3/4)	0.31	0.26	M6 x 1.0	0.26	-	1.89	1.54	2.36
25 (1)	0.31	0.28	M6 x 1.0	0.26	-	2.05	1.65	2.52
32 (1-1/4)	0.31	0.35	M6 x 1.0	0.22	1.34	2.20	1.89	2.56
40 (1-1/2)	0.31	0.35	M6 x 1.0	0.22	1.57	2.44	2.13	2.83
50 (2)	0.35	0.35	M8 x 1.25	0.26	1.97	2.99	2.64	3.50
63 (2-1/2)	0.35	0.35	M10 x1.50	0.35	2.36	3.62	3.15	4.25
80 (3-1/4)	0.43	0.35	M12 x1.75	0.43	3.03	4.57	3.90	5.28
100 (4)	0.43	0.43	M12 x1.75	0.43	3.70	5.35	4.61	6.06

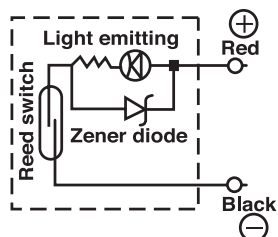


Foot Mount

Dimensions-inch

Bore mm (in)	LD	LH	LX	LY	LZ	L	LT	X	Y	LG
12 (1/2)	0.18	0.67	1.34	1.16	1.73	0.53	0.08	0.31	0.18	0.11
16 (5/8)	0.18	0.75	1.50	1.32	1.89	0.53	0.08	0.31	0.20	0.11
20 (3/4)	0.26	0.94	1.89	1.65	2.44	0.57	0.13	0.36	0.23	0.16
25 (1)	0.26	1.02	2.05	1.81	2.60	0.59	0.13	0.42	0.23	0.16
32 (1-1/4)	0.26	1.18	2.24	2.24	2.80	0.67	0.13	0.44	0.23	0.16
40 (1-1/2)	0.26	1.30	2.52	2.52	3.07	0.67	0.13	0.44	0.28	0.60
50 (2)	0.35	1.54	3.11	3.07	3.74	0.71	0.13	0.58	0.31	0.20
63 (2-1/2)	0.43	1.81	3.74	3.60	4.45	0.71	0.13	0.64	0.35	0.24
80 (3-1/4)	0.51	2.32	4.65	4.49	5.51	0.79	0.18	0.77	0.43	0.28
100 (4)	0.51	2.80	5.39	5.35	6.38	0.87	0.24	0.91	0.49	0.28

Sensors



SENSORS			
Part Number	Type	Switching Current	Switching Voltage
114811	Reed Sensor	0.5 Amp. Max	0-120VDC/VAC
114812	Reed Sensor	0.03 Amp Max.	5-120VDC/VAC
114813	Sourcing Sensor	0.20 Amp Max.	Sourcing PNP 6-24VDC
114814	Sinking Sensor	0.20 Amp Max.	Sinking NPN 6-24VDC

MODEL	114811	114812	114813	114814
TYPE	REED	REED	PNP(SOURCING)	NPN(SINKING)
	2 WIRE	2 WIRE	3 WIRE	3 WIRE
LEAD	PREWIRED 9'	PREWIRED 9'	PREWIRED 9'	PREWIRED 9'
INPUT VOLTAGE	0-120VDC/VAC	5-120 VDC/VAC	6-24 VDC	6-24 VDC
MAX WATTAGE	10	4	0.2	0.2
VOLTAGE DROP		2	0.5	0.5
LED	N/A	YES	YES	YES

Repair Kits (Round and Square Cylinders)

Round

BORE	BUNA	VITON	LOW TEMP	LOW FRICTION	LOW FRICTION + VITON	LOW FRICTION + LOW TEMP
1/2"	RKSC05-B	RKSC05-V	RKSC05-Q	RKSC05-L	RKSC05-N	RKSC05-M
3/4"	RKSC07-B	RKSC07-V	RKSC07-Q	RKSC07-L	RKSC07-N	RKSC07-M
1-1/8"	RKSC11-B	RKSC11-V	RKSC11-Q	RKSC11-L	RKSC11-N	RKSC11-M
1-1/2"	RKSC15-B	RKSC15-V	RKSC15-Q	RKSC15-L	RKSC15-N	RKSC15-M
2"	RKSC20-B	RKSC20-V	RKSC20-Q	RKSC20-L	RKSC20-N	RKSC20-M
2-1/2"	RKSC25-B	RKSC25-V	RKSC25-Q	RKSC25-L	RKSC25-N	RKSC25-M
3"	RKSC30-B	RKSC30-V	RKSC30-Q	RKSC30-L	RKSC30-N	RKSC30-M
4"	RKSC40-B	RKSC40-V	RKSC40-Q	RKSC40-L	RKSC40-N	RKSC40-M

Square

mm (in)

12 (1/2)	RKM012-V
16 (5/8)	RKM016-V
20 (3/4)	RKM020-V
25 (1)	RKM025-V
32 (1-1/4)	RKM032-V
40 (1-1/2)	RKM040-V
50 (2)	RKM050-V
63 (2-1/2)	RKM063-V
80 (3-1/4)	RKM080-V
100 (4)	RKM100-V



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