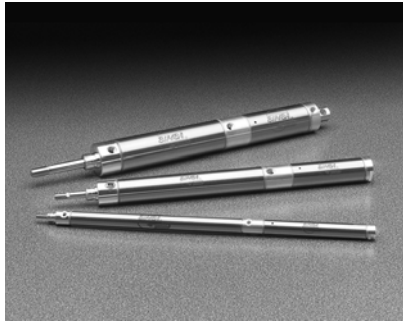


Three-Position Original Line Cylinders



Bimba's three-position Original Line stainless steel body cylinder provides three positions with a single cylinder. Bimba offers the performance and quality of the unitized Original Line cylinder design along with its product breadth now in three positive stroke positions.

How to Order

The model number for all Three-Position Original Line cylinders consists of three alphanumeric clusters. These designate product type, bore size and stroke length, and options. Please refer to the

charts below for an example of model number M-043/4.5-DW. This is a 3/4" bore, with a 3" stroke for position A, plus an additional 4-1/2" stroke for position B, double acting cylinder with a rod wiper.

Product Type	Bore Sizes	Stroke A	Stroke B	Standard Stroke Lengths and Stroke Maximums
Blank – Three-position Original Line M – Magnet option for cylinders* NR – Non-rotating rod option	02 – 9/16" 04 – 3/4" 09 – 1-1/16" 17 – 1-1/2" 31 – 2"	0.5 = 1/2" 1 = 1" 1.5 = 2-1/2" 3.75 = 3-3/4" etc.	0.5 = 1/2" 1 = 1" 2.5 = 2-1/2" 3.75 = 3-3/4" etc.	Nose Mount 1" increments to 12" 2 x Stroke A + Stroke B Maximum = 12" Universal Mount 1" increments to 24" 2 x Stroke A + Stroke B Maximum = 32"

*Magnet located on stroke B piston only.

M - 043 / 4.5 - D W

Mounting Options	Options
D – Double acting, nose mount DXP – Double acting, universal mount	(Enter in alphabetical order, except EE which is last) B – Bumpers E – Non-lube seals and lubrication F – Molycoated body G – Magnalube® G K – Ports rotated 90 degrees N – Low temperature seals & lubrication NT – Non-threaded rod Q – Side ported rear head (see standard Original Line information for applicable length adders by bore size) T – Switch Track (T2, T3 or T4) see page 142 V – High temperature seals & lubrication W – Rod wiper (not available on 9/16" and 2")

Note: Consult OL catalog page 5 for option combination compatibility.

Specifications

Expected life:	1400 miles when lubricated
Total stroke tolerance:	
9/16" – 1-1/2"	+.075/-.040
2"	+.095/-.060
Operating Medium:	Air only
Maximum Operating Pressure:	250 psi
Temperature Range:	-20°F to 200°F
Standard Lubrication:	HT-99
Endcaps, center section, and piston material:	Aluminum
Cylinder body:	304 stainless steel
Piston and rod seals:	Buna N "U" cups
Rod and pivot bushings:	Sintered bronze
Piston rod:	303 stainless steel

ORDER ONLINE

Three-Position Original Line Cylinders

List Prices

Bore	Mounting		Total combined stroke adder, per inch**
	Mounting- D List Price	-DXP List Price	
02 - 9/16"	\$28.85	\$31.90	\$1.35
04 - 3/4"	\$31.45	\$36.15	\$1.35
09 - 1-1/16"	\$36.30	\$41.35	\$1.35
17 - 1-1/2"	\$49.25	\$55.10	\$2.10
31 - 2"	\$68.20	\$76.85	\$2.40

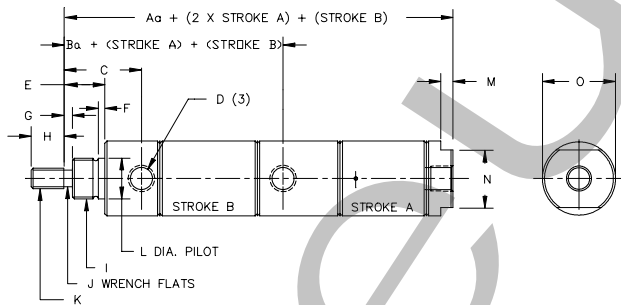
**Total combined stroke = (2 X stroke A) + Stroke B

Bore	Options								
	M (Prefix) Magnetic Position Sensing	B Bumpers	E Non-lube Seals and Lubrication	F Molycoated Body per inch	N Low Temperature Seals	V High Temperature Seals and lubrication	W Rod Wiper	EE Extra Rod Extension per inch	NR Prefix Non- rotating rod
9/16" (02)	\$8.40	\$7.25	\$14.65	\$2.30	\$2.10	\$18.95	N/A	\$0.70	\$15.00
3/4" (04)	\$8.40	\$7.25	\$15.20	\$2.30	\$2.10	\$18.95	\$2.50	\$0.70	\$15.00
1-1/16" (09)	\$10.45	\$7.25	\$16.75	\$2.30	\$3.15	\$22.80	\$2.50	\$0.70	\$20.00
1-1/2" (17)	\$12.55	\$8.80	\$17.80	\$2.30	\$4.20	\$25.10	\$2.50	\$1.05	\$20.00
2" (31)	\$14.65	\$11.30	\$26.35	\$2.30	\$5.25	\$32.20	N/A	\$1.15	\$25.00

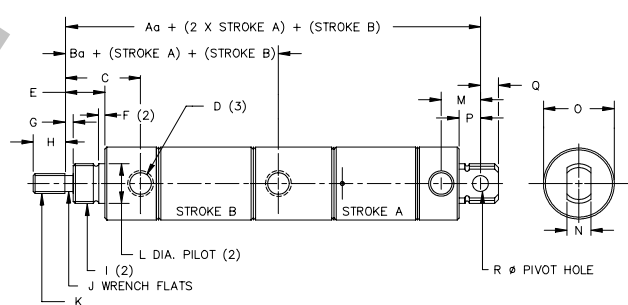
No Charge Options: G, K, NT

Dimensions

D Mounting Style (in.)



DXP Mounting Style (in.)



D Model																Bumper Option	
Bore	Aa	Ba	C	D	E	F	G	H	I	J	K	L	M	N	O	Aa	Ba
9/16" (02)	4.12	2.25	0.75	#10-32	0.38	0.06	N/A	0.50	7/16-20	N/A	#10-32	.434/.437	0.19	0.50	0.62	4.31	2.31
3/4" (04)	5.47	3.12	0.97	1/8 NPT	0.50	0.09	N/A	0.50	5/8-18	N/A	1/4-28	.621/.624	0.19	0.62	0.81	5.47	3.12
1-1/16" (09)	5.97	3.25	1.19	1/8 NPT	0.62	0.09	0.12	0.50	5/8-18	0.25	5/16-24	.621/.624	0.49	0.88	1.12	6.09	3.25
1-1/2" (17)	6.5	3.69	1.50	1/8 NPT	0.88	0.09	0.25	0.75	3/4-16	0.38	7/16-20	.746/.749	0.25	0.88	1.56	6.62	3.69
2" (31)	8.25	4.78	1.92	1/4 NPT	1.19	0.12	0.38	0.88	1-1/4-12	0.50	1/2-20	1.375/1.372	0.31	1.25	2.09	8.62	4.91

DXP Model																	Bumper Option			
Bore	Aa	Ba	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Aa	Ba
9/16" (02)	4.41	2.25	0.75	#10-32	0.38	0.06	N/A	0.50	7/16-20	N/A	#10-32	.434/.437	0.38	0.31	0.62	0.25	0.19	0.157	4.66	2.31
3/4" (04)	6.25	3.12	0.97	1/8 NPT	0.50	0.09	N/A	0.50	5/8-18	N/A	1/4-28	.621/.624	0.62	0.38	0.86	0.34	0.28	0.250	6.25	3.12
1-1/16" (09)	6.56	3.25	1.19	1/8 NPT	0.62	0.09	0.12	0.50	5/8-18	0.25	5/16-24	.621/.624	0.62	0.38	1.12	0.34	0.28	0.250	6.68	3.25
1-1/2" (17)	7.18	3.69	1.50	1/8 NPT	0.63	0.09	0.25	0.75	3/4-16	0.38	7/16-20	.746/.749	0.81	0.62	1.56	0.50	0.38	0.375	7.31	3.69
2" (31)	9.19	4.78	1.92	1/4 NPT	1.19	0.12	0.38	0.88	1-1/4-12	0.50	1/2-20	1.375/1.372	1.03	0.75	2.08	0.56	0.44	0.375	9.56	4.91

Air Cylinders with Adjustable Cushions*

- Readily Accessible Cushion Needle For Easy Adjustment
- Double Acting Models
- Rated 250 PSI
- 304 Stainless Steel Body – Mirror Finish I.D.
- High Strength Aluminum Alloy Porting Ends
- Ground and Roller Burnished 303 Stainless Steel Piston Rod Standard
- Buna N “U” Cup Seals
- Low Breakaway Friction – Less Than 5 PSI
- Special Stroke Lengths Available on Request

OPTIONS FOR EACH BORE SIZE:

NO CHARGE:

- **MAGNALUBE G (G)**
- **NO THREAD (NT)**
(Available on 3/4", 1 1/8" and 1 1/2" bores)

EXTRA EXTENSION (EE)

- Double acting, per inch of extension:
3/4" Bore, add \$0.70
1 1/8" Bore, add \$0.70
1 1/2" Bore, add \$0.90
2" Bore, add \$1.15
2 1/2" Bore, add \$1.25
3" Bore, add \$1.50

HIGH TEMPERATURE SEALS (V)

	Double Acting	DXDE
04 Bore	\$15.55	\$18.55
09 Bore	\$17.90	\$20.90
17 Bore	\$19.00	\$24.40
31 Bore	\$27.90	\$32.85

- **Cylinders** are supplied with adjustable cushions on both ends. To order cushion on one end only, specify CF (front head cushion only), or CR (rear head cushion only), or CS (one end only) and deduct from base price as shown.
(ex: 3/4" bore, cushion on front head only – CF-04□-D;
3/4" bore, cushion on rear head only – CR-04□-D;
3/4" DXDE model, cushion on one side only – CS-04-D).

Enter Stroke Length as 3rd Digit

OPTIONS FOR EACH BORE SIZE: continued...

50 Bore	\$30.35	\$35.35
70 Bore	\$33.00	\$38.80

EXTRA EXTENSION (EE)

- DXDE, per inch of extension:
(added to each end)
3/4" Bore, add \$0.90
1 1/8" Bore, add \$0.90
1 1/2" Bore, add \$1.70
2" Bore, add \$1.75
2 1/2" Bore, add \$2.05
3" Bore, add \$2.15

PORTS ROTATED (K)*

(Rotates ports and cushion screw location 90° clockwise)

MAGNETIC PISTON (prefix M)

- 3/4" Bore, add \$8.40
1 1/8" Bore, add \$10.45
1 1/2" Bore, add \$12.55
2" Bore, add \$14.65
2 1/2" Bore, add \$14.65
3" Bore, add \$26.15

MINI SWITCH TRACKS on all bore sizes

Must specify track(s) for use with Bimba's miniature position sensing (T2, T3, T4 – Add \$2.50 per track. See page 140 for details.

ROD WIPER (W) (Available on 3/4", 1 1/8" and 1 1/2" bores)

- Double acting, add \$2.50
- DXDE, add \$5.00

PIVOT BUSHING (Y)*

MOLYCOATED BODY (F)

- Add \$2.30 per inch of stroke

NON-LUBE SERVICE (E)

See corresponding standard Original Line bore size catalog page for pricing.

*Consult local distributor for pricing.

3/4" Bore Air Cylinders with Adjustable Cushions

MODEL/PRICE

DESCRIPTION/WEIGHT (lbs.)

DIMENSIONS

C-04□-D

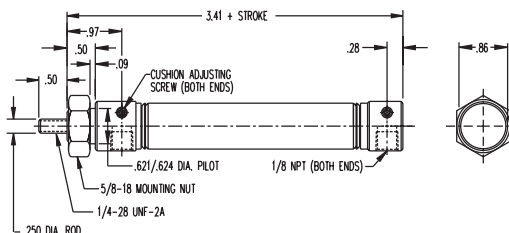


\$28.30

BASE PRICE

Add \$1.35 per inch of stroke
Cushion one end only,
deduct \$5.75 from base price.
CF-04□-D (Front only)
CR-04□-D (Rear only)

Double Acting – Air Return – Front Nose Mounting
Standard Stroke Lengths:
1", 1 1/2", 2", 2 1/2", 3", 4", 5", 6"
Maximum Stroke – 12"
Stainless Steel Rod Standard
Optional Rod Wiper
Optional Accessory:
D-129 Mounting Bracket
Base Weight: .24
Adder Per Inch of Stroke: .03



*U.S. Patent nos. 4,794,681 and 4,862,786