

F-Series Air Cylinders

FABCO-AIR

PARCO-AIR

PABCO-AIR

ORDER







F Series Direct Interchange Air Cylinders All the Models Bore-for-Bore!



F Series Max Operating Pressure Ratings

F Series Basic Cylinders	250 psi
Adjustable Cushion Cylinders	250 psi
Custom Cylinders 1" Diameter Rod, 2" Bore	250 psi
Volume Chambers	250 psi
Delrin [®] Series	100 psi
Magnetic Interchange Cylinders	250 psi
Hole Punch Cylinders	250 psi
3-Position Cylinders	250 psi
Position Feedback Cylinders	150 psi

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Piston

performance.

F Series **Direct Interchange Air Cylinders**

Pre-Lubrication

Factory lube is a special petroleum based oil formulated for long maintenance-free performance.

Rod Bushing

Oil impregnated sintered bronze for excellent wear and long life.

Piston Rod

303 stainless steel, ground, polished, and roller burnished for corrosion-free long life.

Magnet

High strength aluminum in all units.

Double acting units include air passage to the entire piston and seal area for quick response and full force

Piston position indication with reed or electronic sensors. See individual cylinder drawings for length adjustments. See page 62 for sensors.

Ports

Crimp

Full-flow ports and cross-slots on the end caps allow air passage to the entire piston and seal area for quick response and full force performance.

Cylinder body tube and end caps are attached with double rolled-in crimp.

Rod Thread

Roll-formed rod threads at both ends provide strength for customer connections as well as the internal piston connection.

Rod Seal

Low friction Buna N "U"-cup seal is inherently wear compensating for long, trouble-free cycle life. Optional low and high temperature seals are available

End Caps

Anodized high strength aluminum

inherently wear compensating for long, trouble-free cycle life.

Low friction Buna N "U"-cups are

Piston Seals

Thin wall 304 stainless steel, drawn and polished for low friction and long life.

Temperature Ranges

Tube

Standard Seals-10° to +165°F (-23° to + 74°C) Low Temperature Seals ... -40° to +225°F (-40° to + 107°C) Viton° Seals -15° to +350°F (-26° to + 177°C)

Stroke Tolerance = +/- .032

Overall Length Calculations for F Series Cylinders

F

1

Single acting F-Series cylinders have stop tubes added for every 1/2" or 1" depending on the bore size. Strokes with no fractional inch simplify the calculation of having a base length plus adder per inch of stroke. However, strokes with fractional inch require more in-depth calculation. The following equations help to calculate the OAL for fractional inch strokes.

Variables:

OAL = Overall Length of Cylinder

S = Actual Stroke

B = Base Length

STA = Stop Tube Adder per increment of stroke **S1**= Stroke rounded up to the next increment

(5/16" and 7/16" bores have 1/2" increments)

Note: for 2" bores - use lengths shown on page 34 for whole inch strokes and subtract the difference between desired stroke and next longer standard increment. (Subtract twice for spring extend models.)

Documents Provided by Coast Pneumatics

Single Acting Spring Return Cylinders

Calculate the length of next whole standard increment of stroke. Then subtract the difference between desired stroke and next longer standard increment of stroke

$OAL = B + (STA \times S1) - (S1 - S)$

Example: F-1062S01-02M (2-3/4" stroke)

F-1062S01 base length Plus 1.562 per inch of stroke 1.562 x 3.0 (next longer stroke increment)	
F-1062S01-03A length Standard stroke increment minus desired stroke Stroke difference F-1062S01-02M length	= 3.000" = -2.750 = .250 - <u>.250</u>
ouble Acting Cylinders	

Double Acting Cylinders Add desired stroke length to base length of OAL = B + S cvlinder.

5	
Example: F-0750D01-01E	(1-1/4" strol

Single Acting Spring Extend Cylinders

Calculate the length of next whole standard increment of stroke. Then subtract twice the difference between desired stroke and next longer standard increment of stroke.

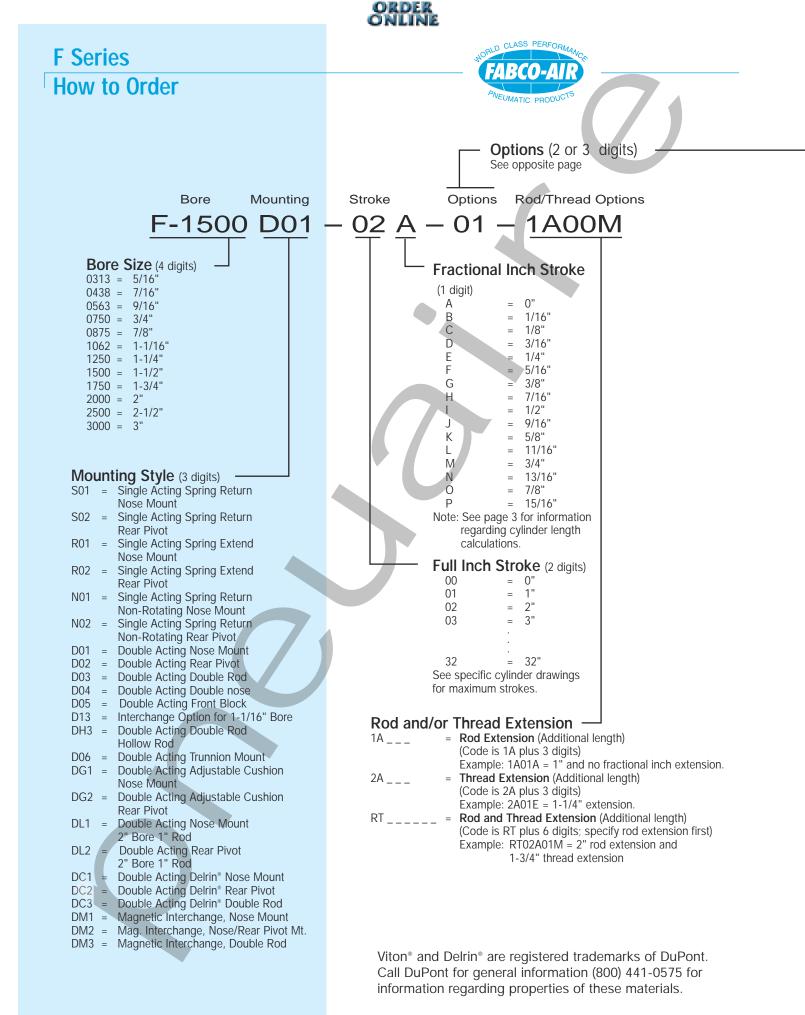
$OAL = B + (STA \times S1) - 2(S1 - S)$

Example: F-0438R02-01K (1-5/8" stroke)

F-0438R02 base length = Plus 1.438 per each 0.5" stroke = .438 x 4.0 (number of standard increments required for the next longer increment)	2.375 + <u>5.752</u>
F-0438R02-02A length = Standard stroke increment = 2.000" minus desired stroke = -1.625 Stroke difference = .375 Twice stroke difference = .750	8.127 - <u>.750</u>

F-0438R02-01K length = 7.377

ke) F-0750D01 base length = 2.969 Plus 1.250 stroke = +<u>1.250</u> 4.219 F-0750D01-01E =



Specifications and prices subject to change without notice or incurring obligation



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Standard F Series Options

- 01 = Bumpers
- 02 = Viton Seals
- 03 = Magnet
- 04 = Bumpers, and Magnet
- 05 = Pivot bushing
- 06 = Bumpers, and Pivot Bushing
- 07 = Viton Seals, and Pivot Bushing
- 08 = Magnet, and Pivot Bushing
- 09 = Bumpers, Magnet, and Pivot Bushing
- 20 = Port Rotated w/ No Options
- 30 = Rod Wiper w/ No Options
- 31 = Rod Wiper w/ Bumpers
- 32 = Rod Wiper w/ Viton Seals
- **33** = Rod Wiper w/ Magnet
- 34 = Rod Wiper w/ Bumpers, and Magnet
- 35 = Rod Wiper w/ Pivot bushing
- 36 = Rod Wiper w/ Bumpers, and Pivot Bushing
- 37 = Rod Wiper w/ Viton Seals, and Pivot Bushing
- 38 = Rod Wiper w/ Magnet, and Pivot Bushing
- 39 = Rod Wiper w/ Bumpers, Magnet, and Pivot Bushing
- **50** = Side Port w/No Options
- 100 = Low Temp Seals
- **101** = Low Temp Seals and Bumpers
- 103 = Low Temp Seals and Magnet
- 104 = Low Temp Seals, Bumpers and Magnet 105 = Low Temp Seals and Pivot Bushing
- 106 = Low Temp Seals, Bumpers and Pivot Bushing **108** = Low Temp Seals, Magnet and Pivot Bushing
- 109 = Low Temp Seals, Bumpers, Magnet and Pivot Bushing
- 200 = Polypak rod seal
- **300** = Polypak piston seal
- 400 = Both Polypak rod and piston seal

How to Order - Examples

F-0438S01-01A

0438 = 7/16" Bore S01 = Single Acting, Spring Return, Nose Mount 01 = 1" Stroke A = .00" Fractional Stroke

F-1062D02-03E-04

1062 = 1-1/16" Bore D02 = Double Acting, Rear Pivot Mount 03 = 3" Stroke E = .25" Fractional Stroke 04 = Bumpers and Magnet

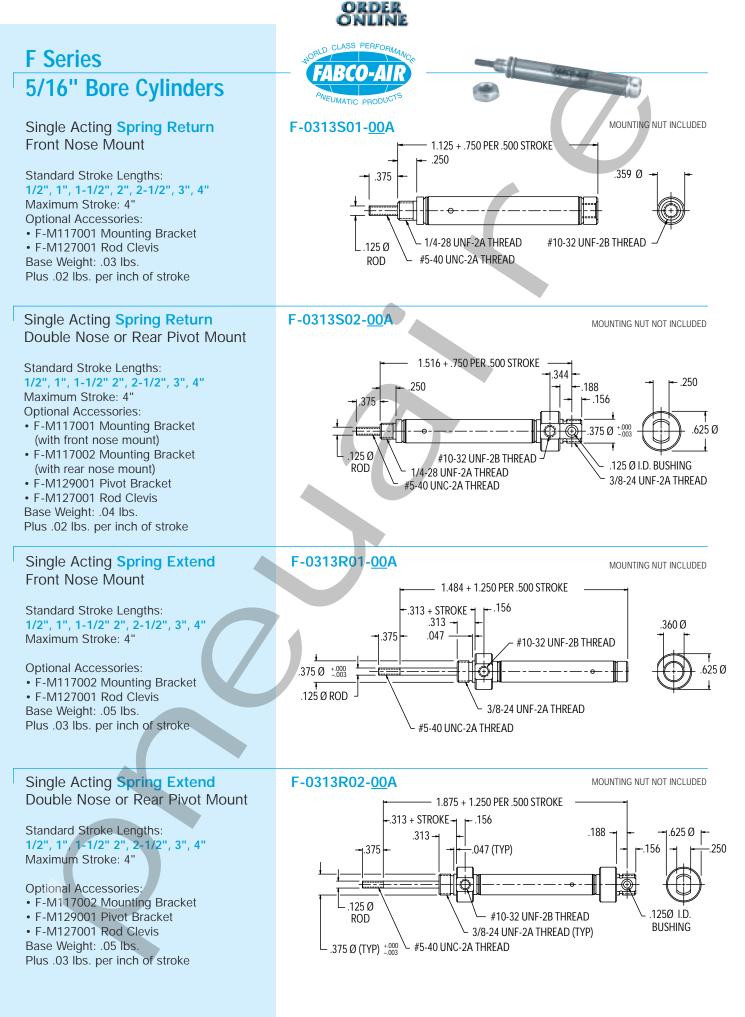
Documents Provided by Coast Pneumatics

F-1500D04-10I-01-1A02A

1500 = 1 - 1/2'' Bore D04 = Double Acting, Double Nose 10 = 10" Stroke I = .50" Fractional Stroke 01 = Bumpers 1A02A = 2" Rod Extension

F-2000DG2-20H-03-RT02A01I

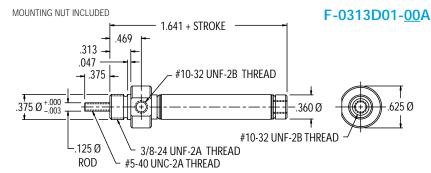
2000 = 2" Bore DG2 = Double Acting, Adjustable Cushion, Rear Pivot Mount 20 = 20" Stroke H = .4375 Fractional Stroke 03 = Magnet RT02A011 = 2" Rod Extension and 1-1/2" Thread Extension

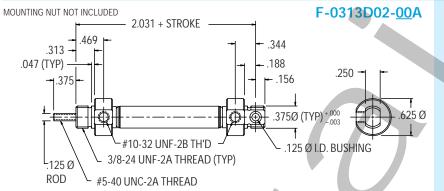


9-15-04









F Series 5/16" Bore Cylinders

Double Acting Front Nose Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" Maximum Stroke: 4" **Optional Accessories:** • F-M117002 Mounting Bracket • F-M127001 Rod Clevis Base Weight: .05 lbs. Plus .01 lbs. per inch of stroke

Double Acting

OPTION

Bumpers

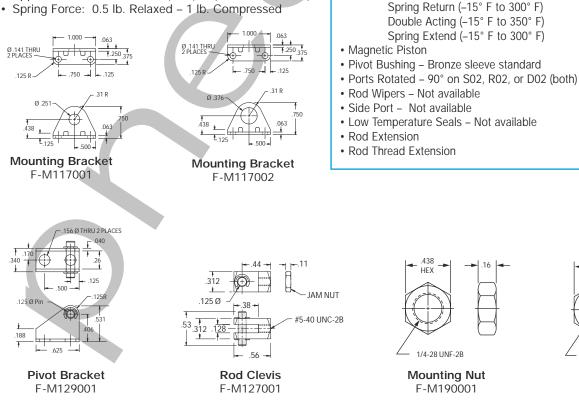
· Viton® Seals -

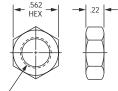
Double Nose or Rear Pivot Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" Maximum Stroke: 4" **Optional Accessories:** • F-M117002 Mounting Bracket • F-M129001 Pivot Bracket • F-M127001 Rod Clevis Base Weight: .06 lbs. Plus .01 lbs. per inch of stroke

5/16" Bore Cylinder Features – Options & Accessories

- -10° to +165°F
- · Piston Rod: Ground and Polished 303 Stainless Steel
- Mounting nuts are standard on all nose mount cylinders
- Approximate Force Exerted: (0.07) x (Air Line Pressure)
- Spring Force: 0.5 lb. Relaxed 1 lb. Compressed



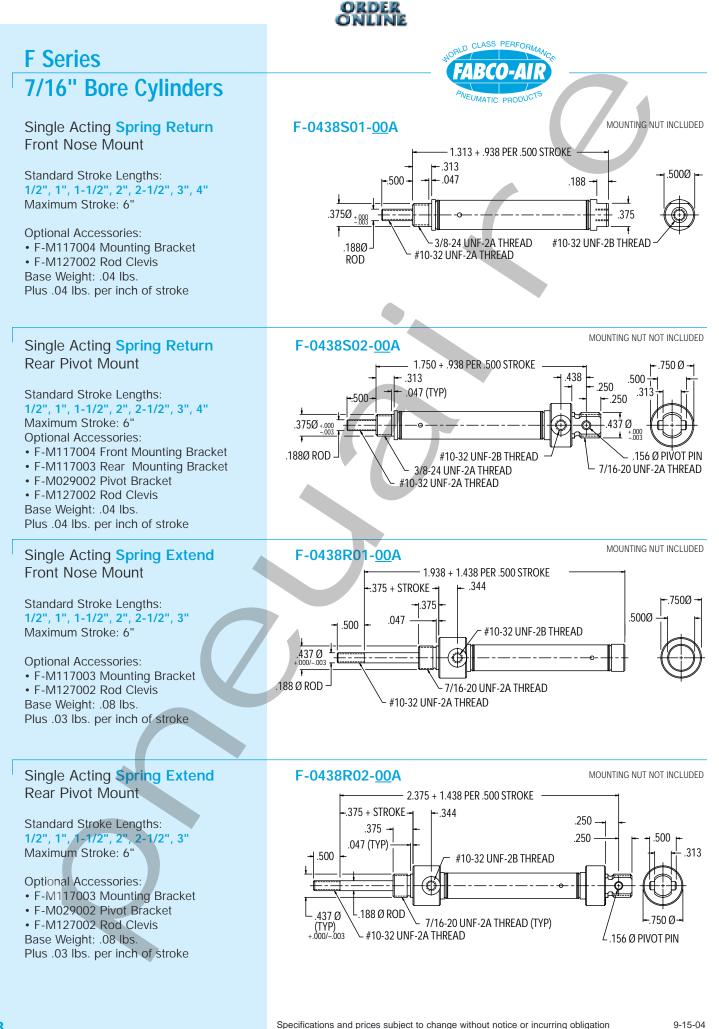


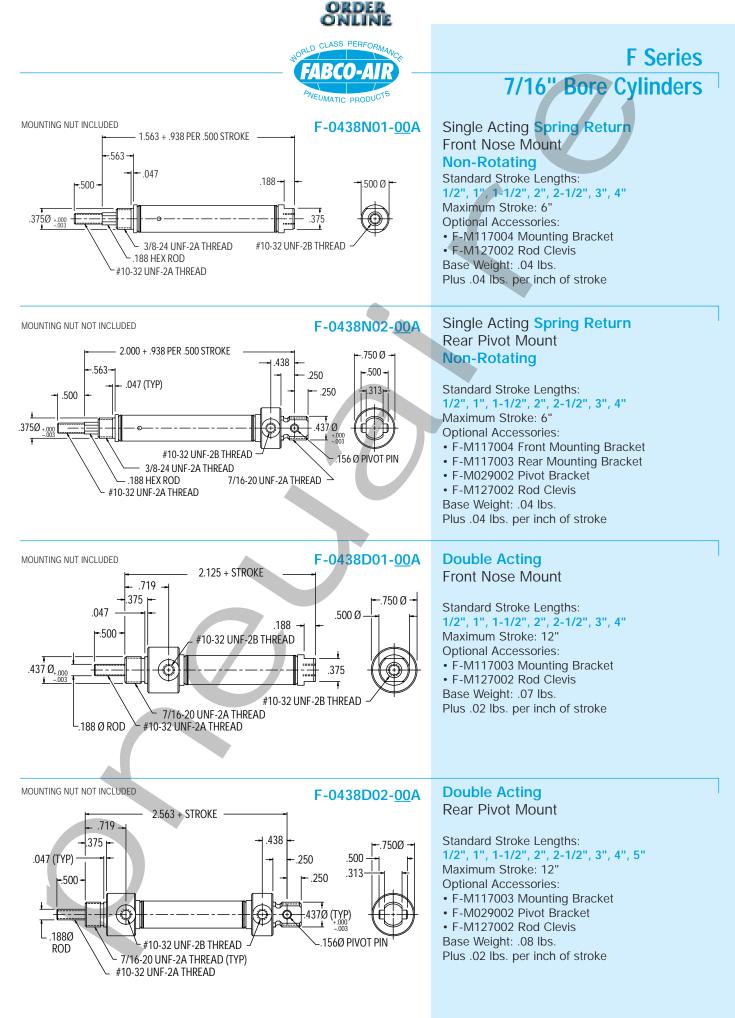
3/8-24 UNF-2B

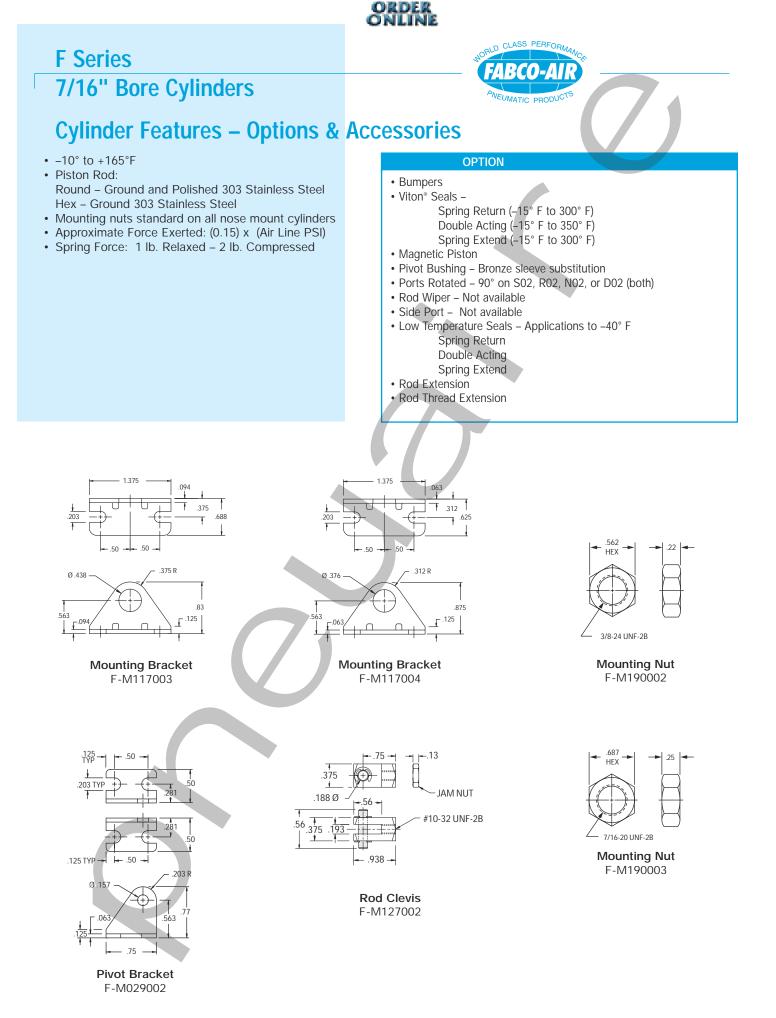
Mounting Nut F-M190002

Documents Provided by Coast Pneumatics

Specifications and prices subject to change without notice or incurring obligation ORDER





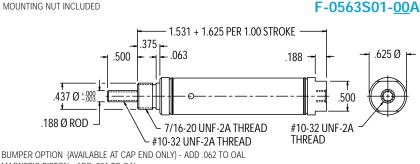


Documents Provided by Coast Pneumatics

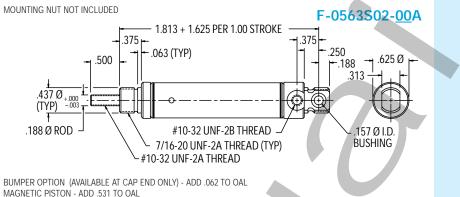




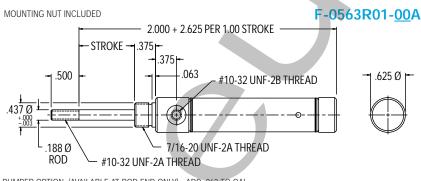
MOUNTING NUT INCLUDED



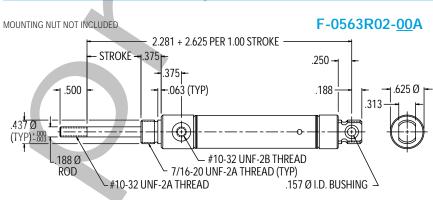
MAGNETIC PISTON - ADD .531 TO OAL BOTH BUMPER & MAGNETIC PISTON - ADD .713 TO OAL



BOTH BUMPER & MAGNETIC PISTON - ADD .713 TO OAL



BUMPER OPTION (AVAILABLE AT ROD END ONLY) - ADD .062 TO OAL MAGNETIC PISTON - ADD .531 TO OAL BOTH BUMPER & MAGNETIC PISTON - ADD .713 TO OAL



BUMPER OPTION (AVAILABLE AT ROD END ONLY) - ADD .062 TO OAL MAGNETIC PISTON - ADD .531 TO OAL BOTH BUMPER & MAGNETIC PISTON - ADD .713 TO OAL

Documents Provided by Coast Pneumatics

9-15-04

F Series 9/16" Bore Cylinders

Single Acting Spring Return Front Nose Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" Maximum Stroke: 6" **Optional Accessories:** • F-M117003 Mounting Bracket • F-M127002 Rod Clevis Base Weight: .06 lbs. Plus .05 lbs. per inch of stroke

Single Acting Spring Return Double Nose or Rear Pivot Mount

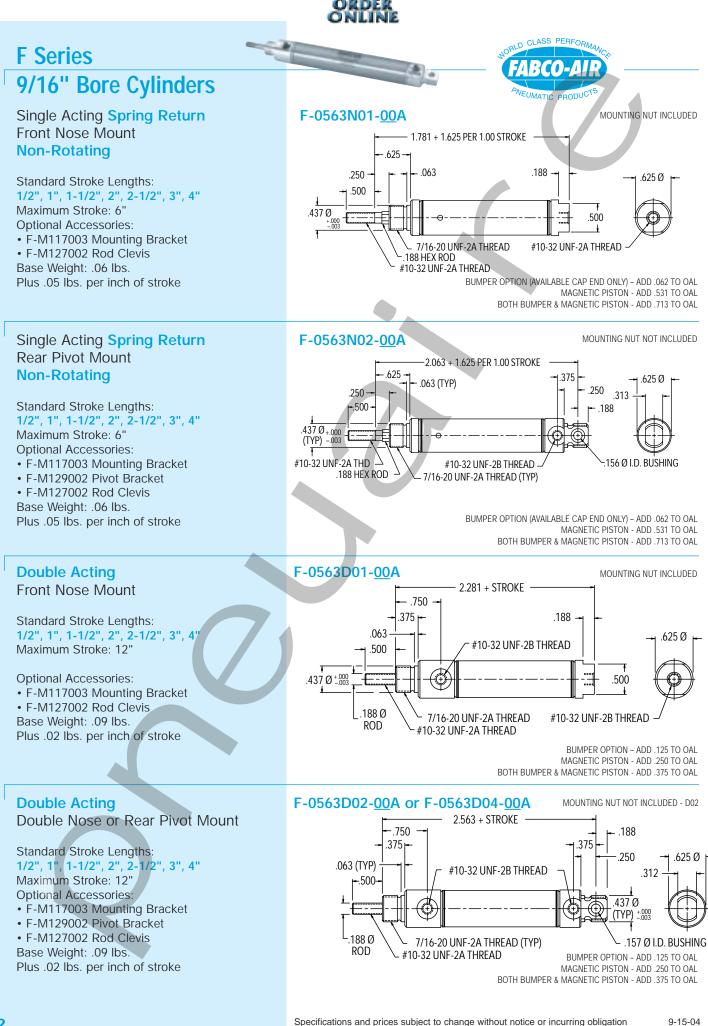
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" Maximum Stroke: 6" **Optional Accessories:** F-M117003 Mounting Bracket F-M129002 Pivot Bracket F-M127002 Rod Clevis Base Weight: .06 lbs. Plus .05 lbs. per inch of stroke

Single Acting Spring Extend Front Nose Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3" Maximum Stroke: 6" **Optional Accessories:** • F-M117003 Mounting Bracket • F-M127002 Rod Clevis Base Weight: .08 lbs. Plus .04 lbs. per inch of stroke

Single Acting Spring Extend Double Nose or Rear Pivot Mount

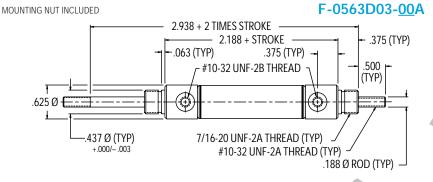
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3" Maximum Stroke: 6" **Optional Accessories:** • F-M117003 Mounting Bracket F-M129002 Pivot Bracket F-M127002 Rod Clevis Base Weight: .08 lbs. Plus .04 lbs. per inch of stroke







F Series 9/16" Bore Cylinders

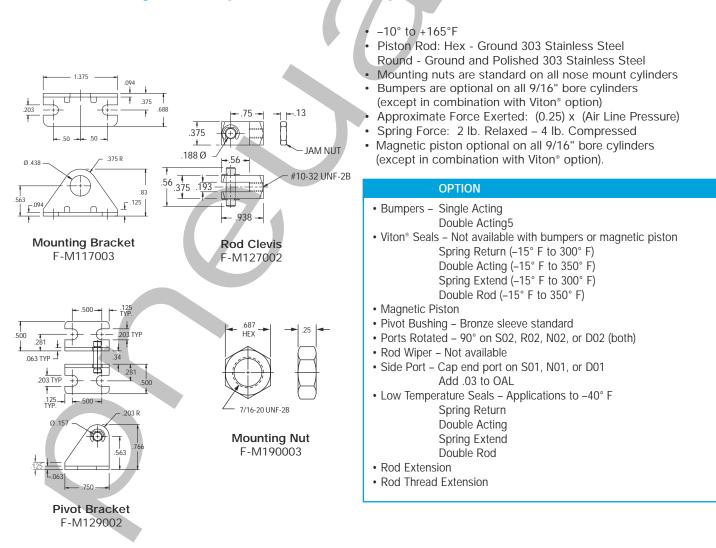


Double Acting Double Rod

Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 12" Optional Accessories: • F-M117003 Mounting Bracket • F-M127002 Rod Clevis Base Weight: .16 lbs. Plus .03 lbs. per inch of stroke

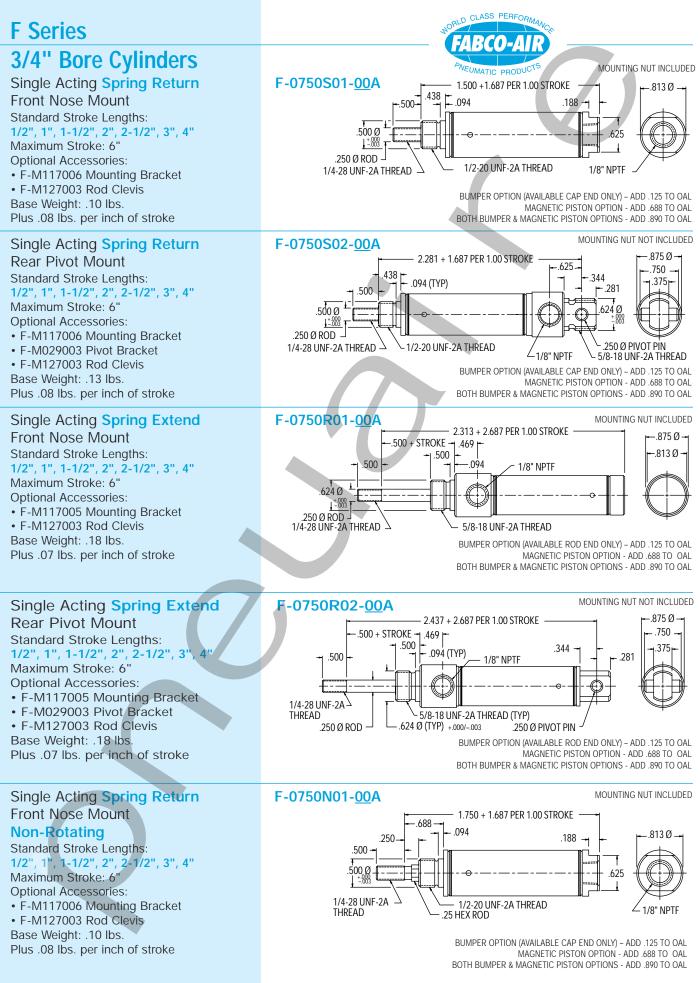
BUMPER OPTION - ADD .125 TO OAL MAGNETIC PISTON - ADD .250 TO OAL BOTH BUMPER & MAGNETIC PISTON - ADD .375 TO OAL

9/16" Bore Cylinder Specifications – Options & Accessories



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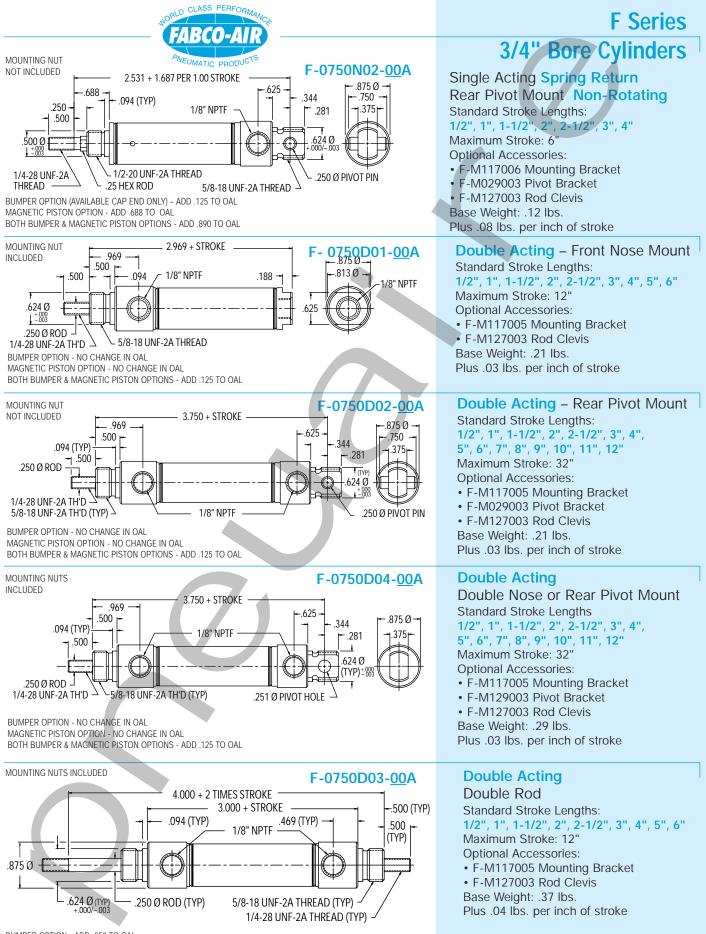




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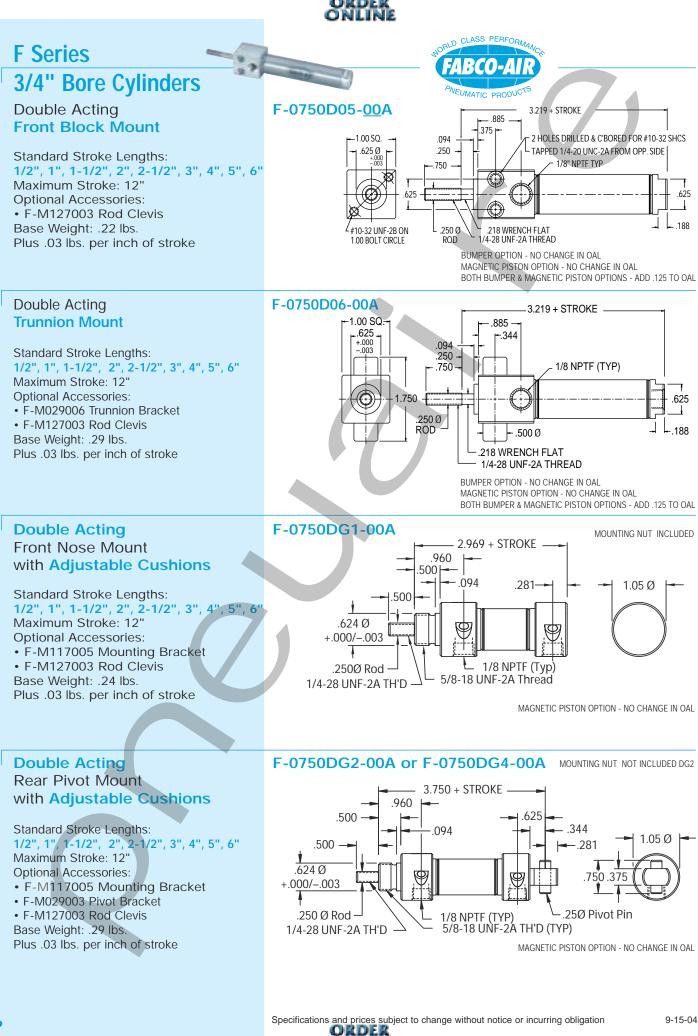
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BUMPER OPTION - ADD .250 TO OAL MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL

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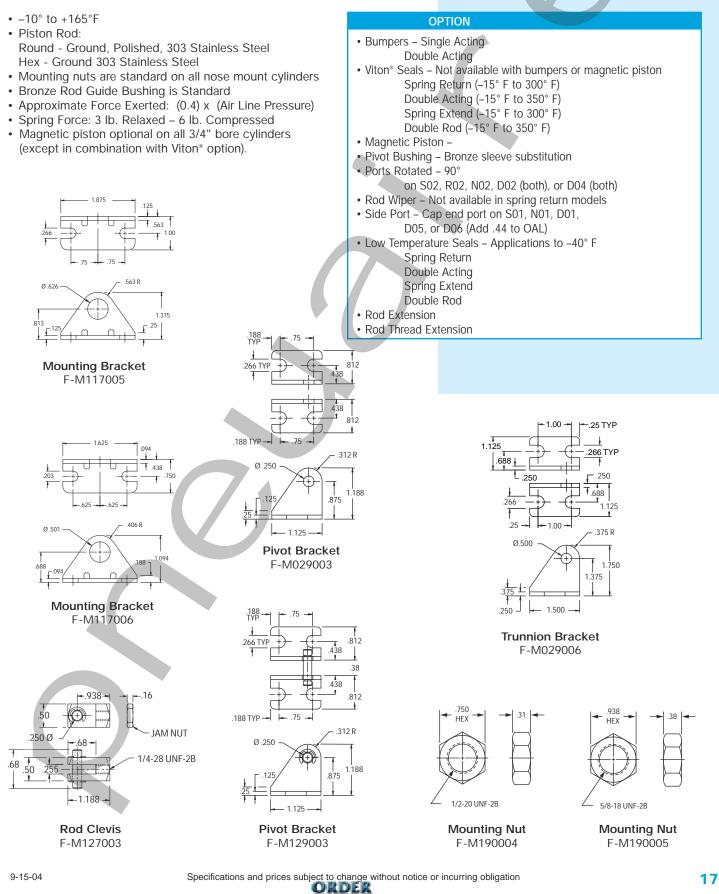


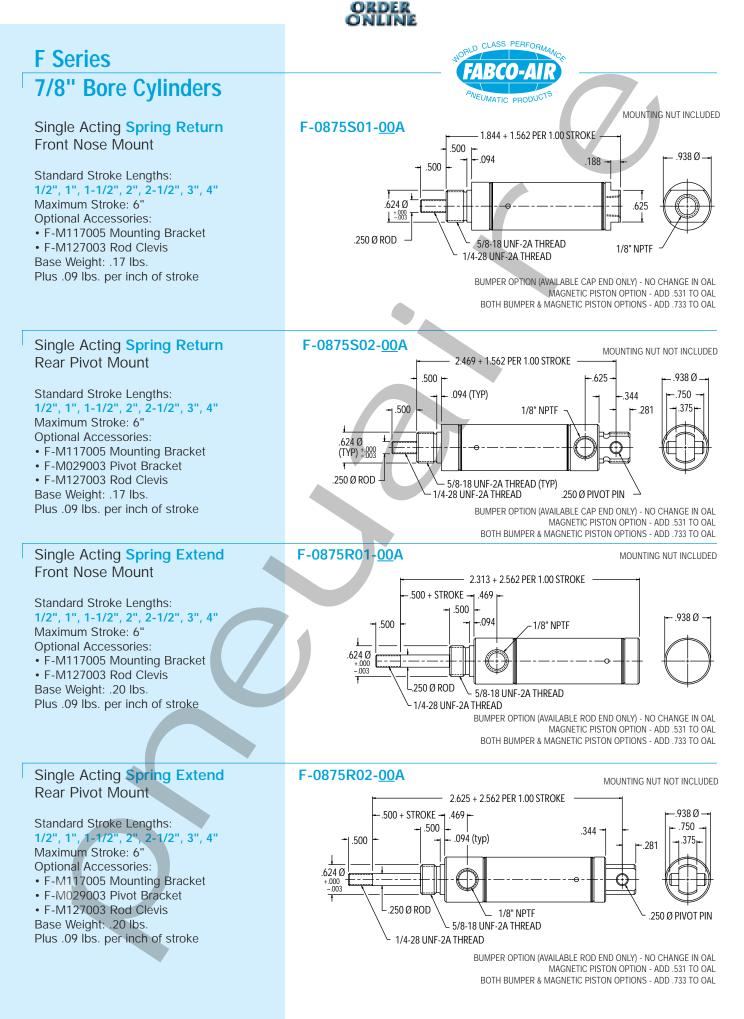
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F Series 3/4" Bore Cylinders

Cylinder Specifications – Options & Accessories





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CLASS PERFORMAN

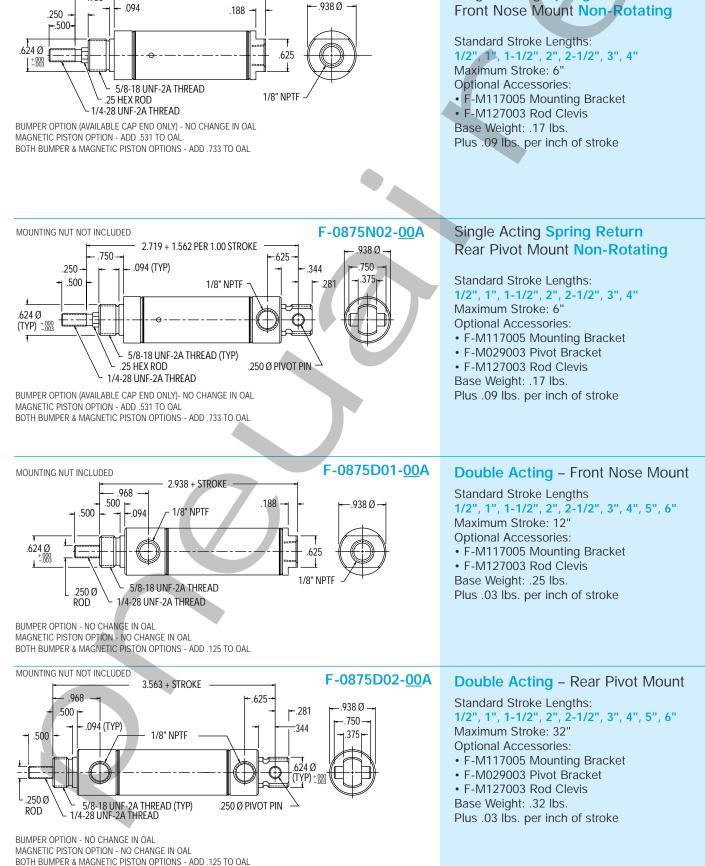
VEUMATIC PROD

2.094 + 1.562 PER 1.00 STROKE

MOUNTING NUT INCLUDED

.750





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Q)



F Series 7/8" Bore Cylinders

Double Acting

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 32"

Optional Accessories:

• F-M117005 Mounting Bracket

- F-M129003 Pivot Bracket
- F-M127003 Rod Clevis
- Base Weight: .32 lbs.

Plus .03 lbs. per inch of stroke

WEUMATIC PROD MOUNTING NUTS INCLUDED F-0875D04-00A 3.563 + STROKE -.625 -.968 .281 .500 -.938 .344 .094 (TYP) 1/8" NPTF .375 .500 .624 Ø (TYP) +.000 .250 Ø 5/8-18 UNF-2A THREAD (TYP) .250 Ø PIVOT HOLE ROD 1/4-28 UNF-2A THREAD BUMPER OPTION - NO CHANGE IN OAL

Viton[®] Seals – Not available with bumpers or magnetic piston

on S02, R02, N02, D02 (both), or D04 (both)

Spring Return (–15° F to 300° F) Double Acting (–15° F to 350° F)

Spring Extend (-15° F to 300° F)

OPTION

Double Acting

· Pivot Bushing - Bronze sleeve substitution

Rod Wiper – Not available in spring return models

Side Port – Cap end port on S01, N01, or D01

Add .28 to OAL • Low Temperature Seals – Applications to –40° F

> Spring Return Double Acting

Spring Extend

• Bumpers – Single Acting

Magnetic Piston

Rod Extension Rod Thread Extension

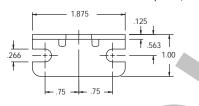
Ports Rotated – 90°

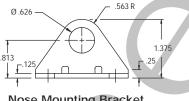
D CLASS PERFORM

MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .125 TO OAL

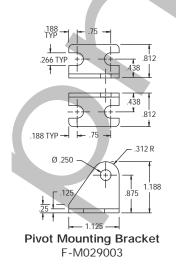
7/8" Bore Cylinder Specifications – Options & Accessories

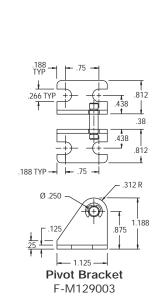
- -10° to +165°F
- Piston Rod: Round - Ground and Polished, 303 Stainless Steel Hex - Ground 303 Stainless Steel
- Mounting nuts are standard on all nose mount cylinders
- Bronze Rod Guide Bushing is Standard
- Approximate Force Exerted: (0.6) x (Air Line Pressure)
- Spring Force: 3 lb. Relaxed 6 lb. Compressed
- Magnetic piston optional on all 7/8" bore cylinders (except in combination with Viton[®] option).

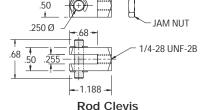




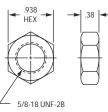
Nose Mounting Bracket F-M117005







F-M127003



Mounting Nut F-M190005

Specifications and prices subject to change without notice or incurring obligation



F-1062S01-00A

+1.125Ø +--

1/8" NPTF



.188

.875

1.938 + 1.562 PER 1.00 STROKE

5/8-18 UNF-2A THREAD

.250 WRENCH FLATS

5/16-24 UNF-2A THREAD

.500

.094

.125

.500

BUMPER OPTION (AVAILABLE CAP END ONLY) - ADD .125 TO OAL

.624Ø

.313 Ø ROD

MAGNETIC PISTON OPTION - ADD .562 TO OAL

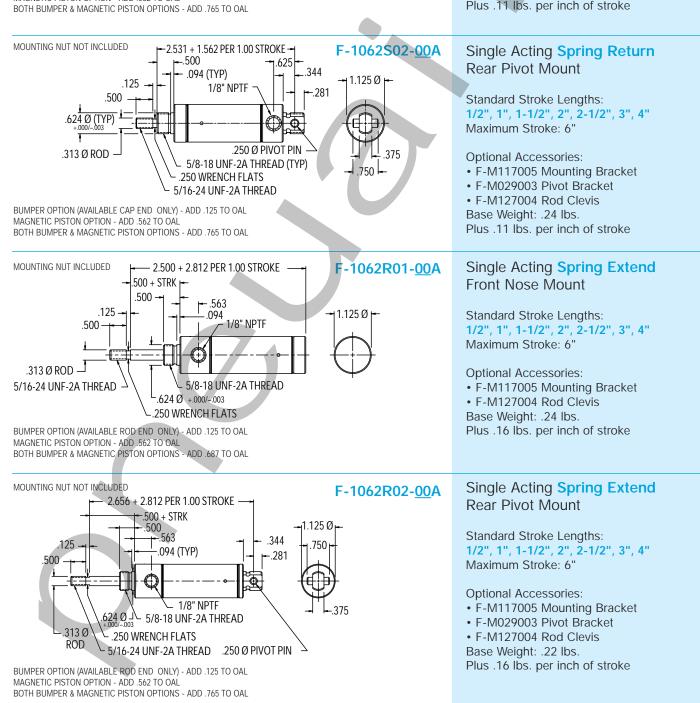
MOUNTING NUT INCLUDED



Single Acting Spring Return Front Nose Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 6"

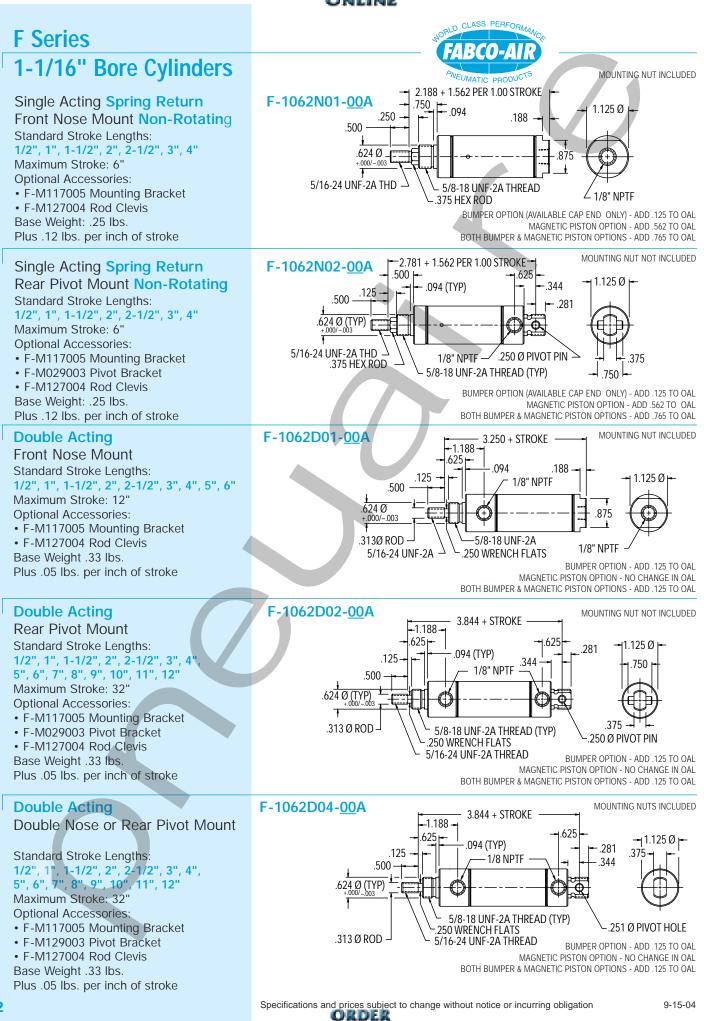
Optional Accessories: F-M117005 Mounting Bracket F-M127004 Rod Clevis Base Weight: .23 lbs. Plus .11 lbs. per inch of stroke



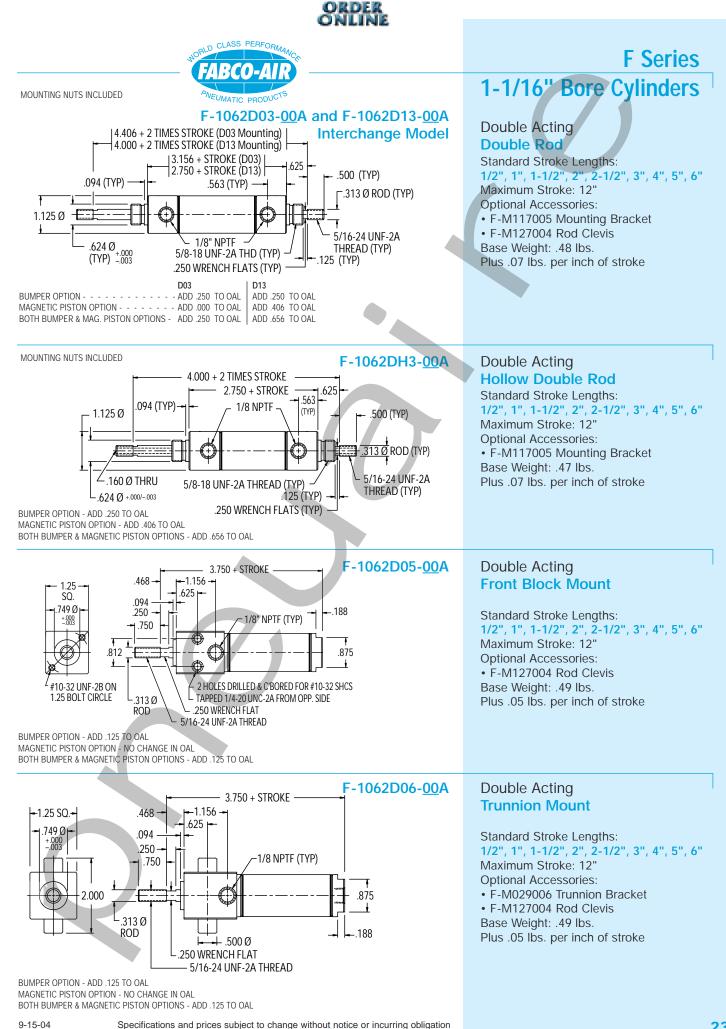
Documents Provided by Coast Pneumatics

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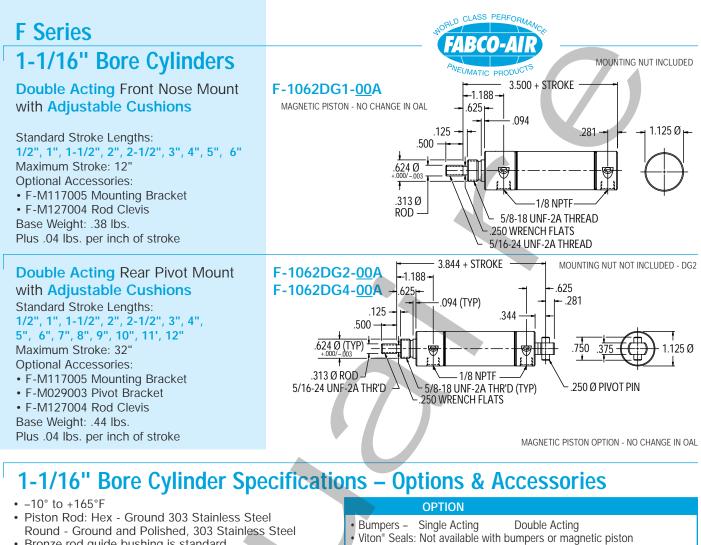




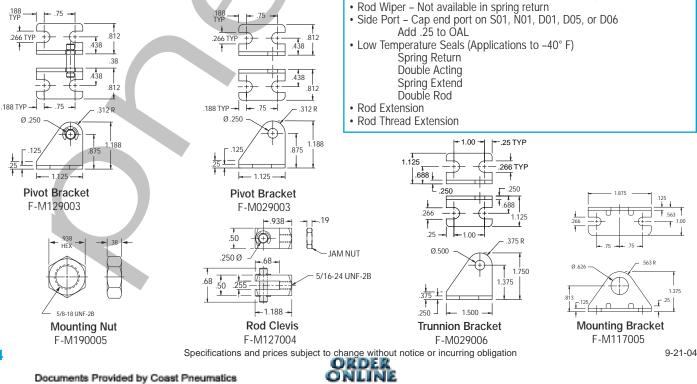
 \mathbf{O}



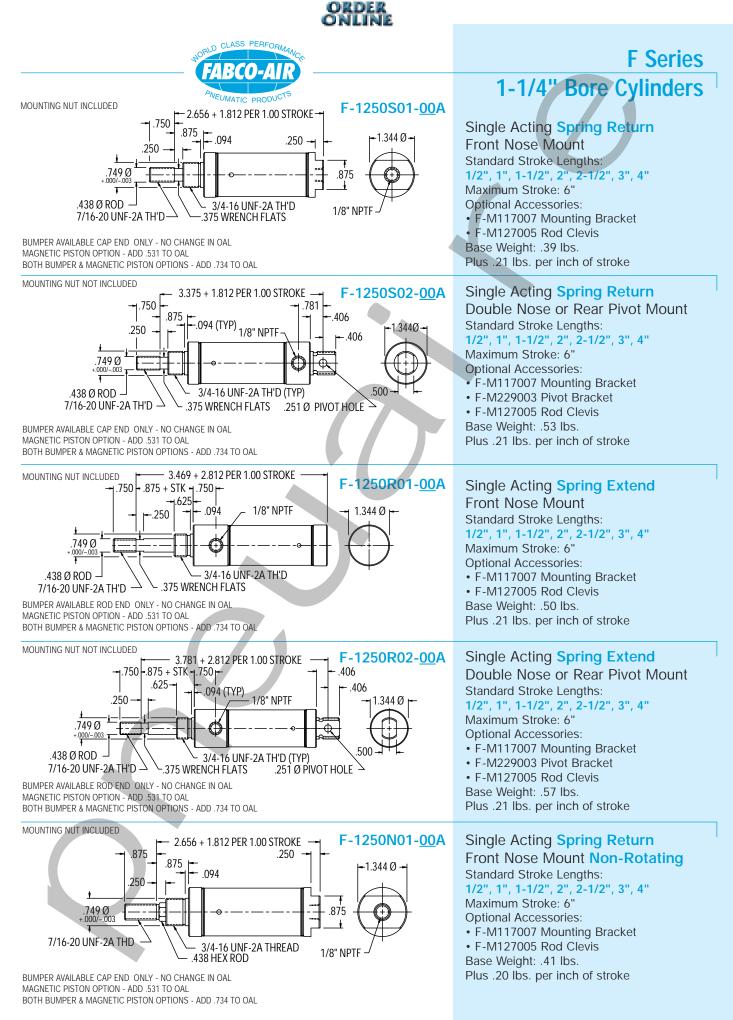




- Bronze rod guide bushing is standard.
- Approximate force exerted = (0.9) x (air line pressure).
- Spring force: 3 lbs. relaxed, 6 lbs. compressed. •
- Mounting nuts are standard on all nose mount cylinders. •
- Bumpers are optional on all 1-1/16" bore cylinders (except in combination with Viton[®] option).
- Magnetic piston optional on all 1-1/16" bore cylinders (except in combination with Viton® option).



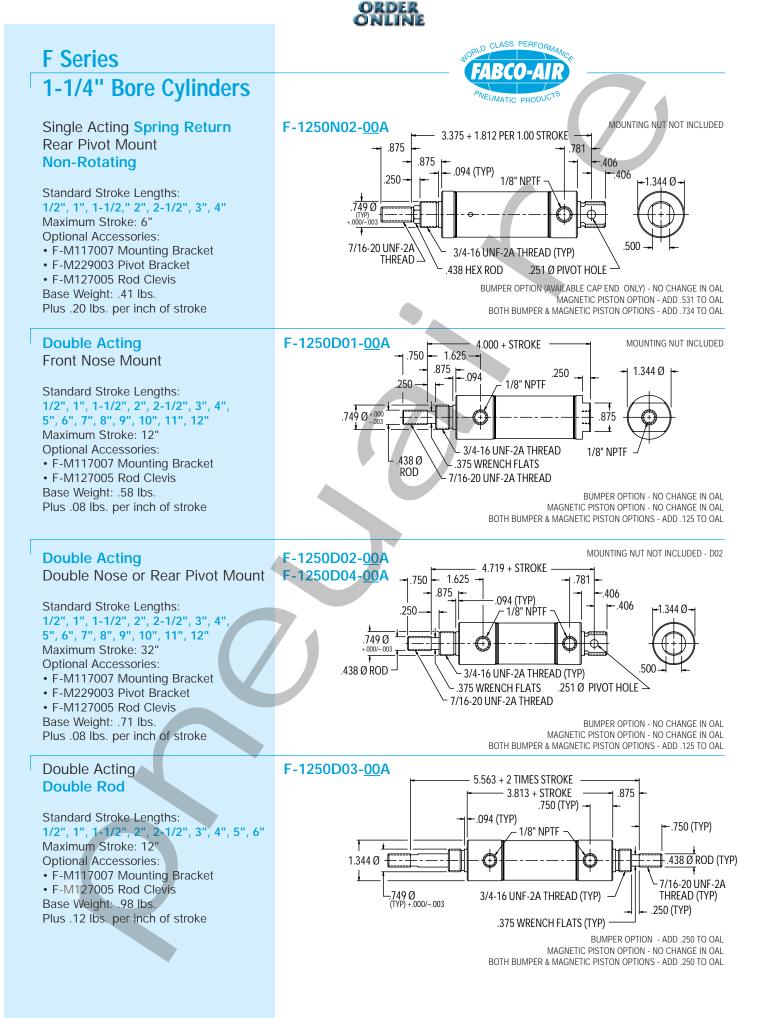
- Spring Return (–15° F to 300° F) Double Acting (-15°F to 350°F) Spring Extend (-15° F to 300° F) Double Rod (-15°F to 350°F)
- Magnetic Piston
- Pivot Bushing Bronze sleeve substitution
 Ports Rotated 90°
- on S02, R02, N02, D02 (both), or D04 (both)



9-15-04

Specifications and prices subject to change without notice or incurring obligation ORDER

25



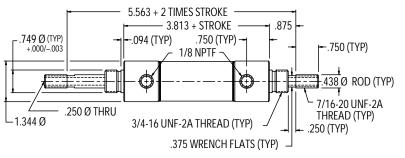
01







F-1250DH3-00A



BUMPER OPTION - ADD .250 TO OAL MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL Double Acting Hollow Double Rod

Standard Stroke Lengths:

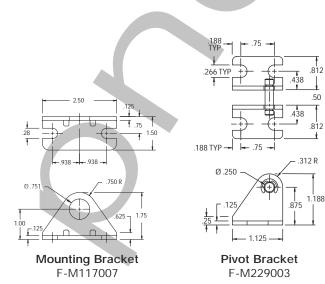
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 12" Optional Accessories:
F-M117007 Mounting Bracket Base Weight: .97 lbs.
Plus .12 lbs. per inch of stroke

1-1/4" Bore Cylinder Specifications – Options & Accessories

• -10° to +165°F

MOUNTING NUT INCLUDED

- Piston Rod: Round – Ground and Polished, 303 Stainless Steel. Hex – Ground 303 Stainless Steel.
- Bronze rod guide bushing is standard.
- Approximate force exerted = $(1.2) \times (air line pressure)$.
- Spring force: 7.5 lbs. relaxed, 15 lbs. compressed.
- Mounting nuts are standard on all nose mount cylinders
- Bumpers are optional on all 1-1/4" bore cylinders (except in combination with Viton® option).
- Magnetic piston optional on all 1-1/4" bore cylinders (except in combination with Viton[®] option).

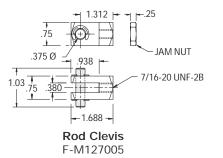


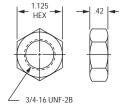
Documents Provided by Coast Pneumatics

OPTION

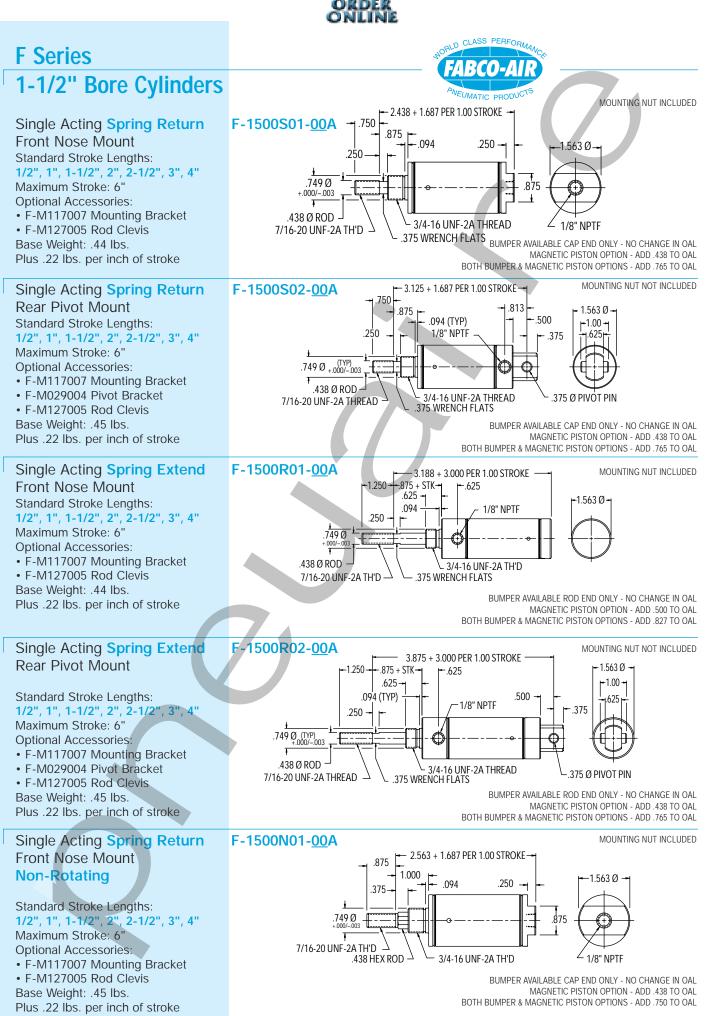
• Bumpers -

- Single Acting
- Double Acting
- Viton[®] Seals Not available with Bumpers or Magnetic Piston Spring Return (–15°F to 300°F)
 - Double Acting (-15°F to 350°F)
 - Spring Extend (-15°F to 300°F)
 - Double Rod (-15°F to 350°F)
- Magnetic Piston –
- Pivot Bushing Bronze sleeve substitution
- Ports Rotated 90°
 - on S02, R02, N02, or D02 (both)
- Rod Wiper Not available in spring return models
- Side Port Cap end port on S01, N01, or D01 Add .31 to OAL
- Low Temperature Seals Applications to –40° F Spring Return Double Acting
 - Spring Extend
 - Double Rod (-15°F to 400°F)
- Rod Extension -
- Rod Thread Extension





Mounting Nut F-M190006

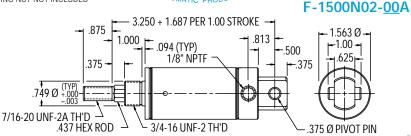


28

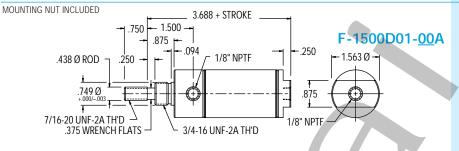




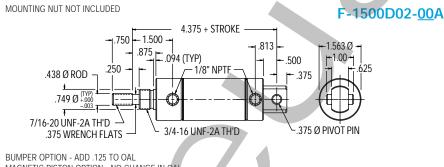




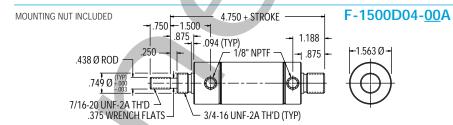
BUMPER AVAILABLE CAP END ONLY - NO CHANGE IN OAL MAGNETIC PISTON OPTION - ADD .438 TO OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .765 TO OAL



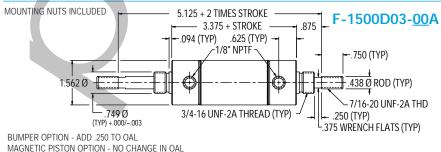
BUMPER OPTION - ADD .125 TO OAL MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL



MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL



BUMPER OPTION - ADD .125 TO OAL MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL



BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .250 TO OAL

Documents Provided by Coast Pneumatics

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ORDER
ONLINE

F Series

1-1/2" Bore Cylinders Single Acting Spring Return Rear Pivot Mount Non-Rotating Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" Maximum Stroke: 6" **Optional Accessories:** F-M117007 Mounting Bracket F-M029004 Pivot Bracket F-M127005 Rod Clevis Base Weight: .46 lbs. Plus .22 lbs. per inch of stroke **Double Acting** Front Nose Mount Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 12' **Optional Accessories:** • F-M117007 Mounting Bracket

- F-M127005 Rod Clevis
- Base Weight: .69 lbs. Plus .08 lbs. per inch of stroke

Double Acting

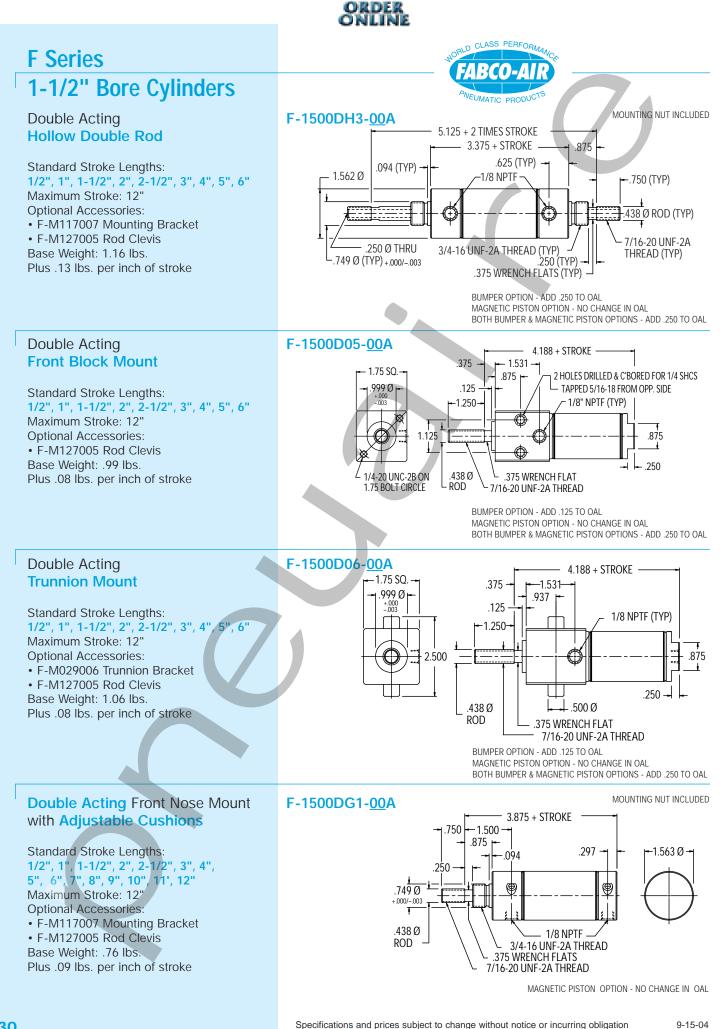
Rear Pivot Mount Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 32" Optional Accessories: • F-M117007 Mounting Bracket • F-M029004 Pivot Bracket • F-M029004 Pivot Bracket • F-M127005 Rod Clevis Base Weight: .73 lbs. Plus .08 lbs. per inch of stroke

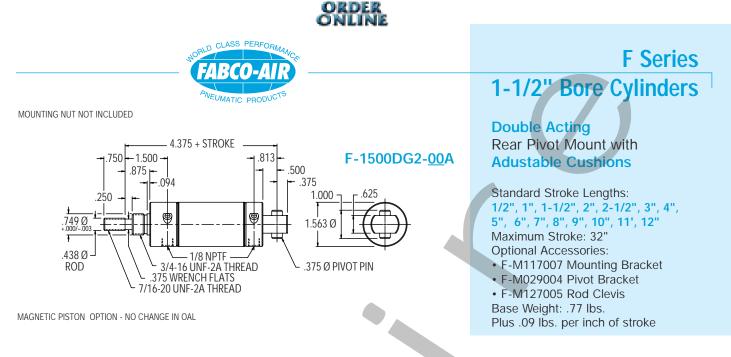
Double Acting

Double Nose Mount Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 32" Optional Accessories: • F-M117007 Mounting Bracket • F-M127005 Rod Clevis Base Weight: .82 lbs. Plus .08 lbs. per inch of stroke

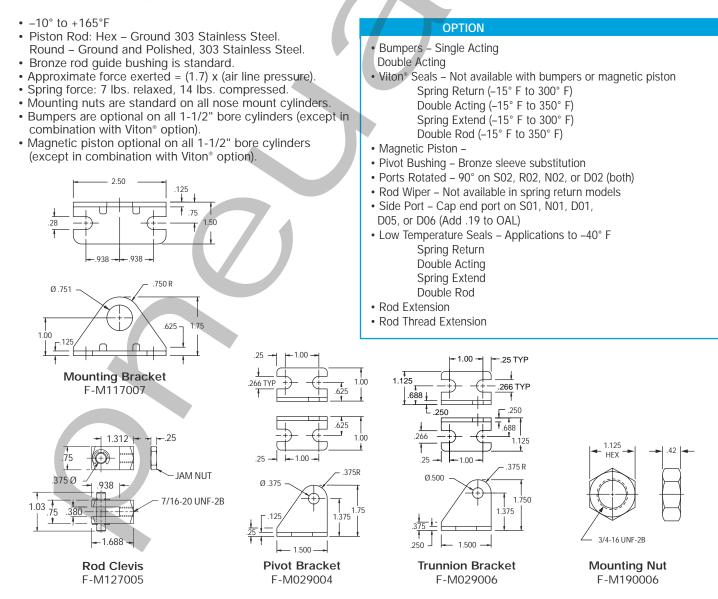
Double Acting

Double Rod Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 12" Optional Accessories: • F-M117007 Mounting Bracket • F-M127005 Rod Clevis Base Weight: 1.17 lbs. Plus .13 lbs. per inch of stroke



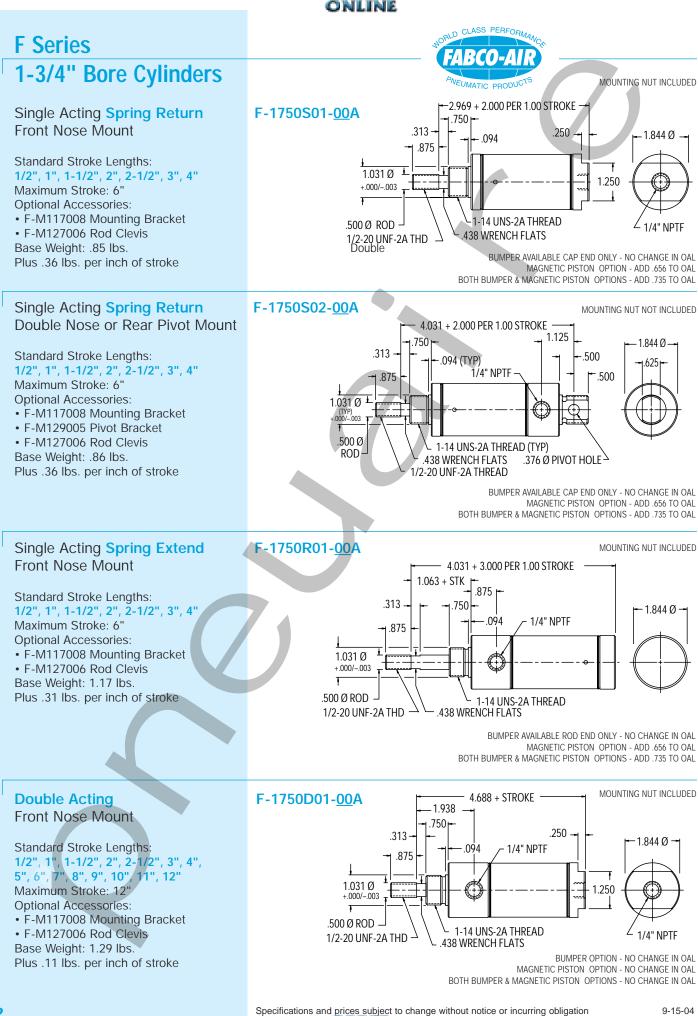


1-1/2" Bore Cylinder Specifications – Options & Accessories



9-15-04

Specifications and prices subject to change without notice or incurring obligation

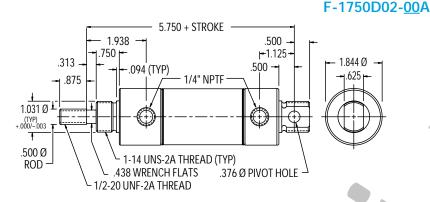


ORDE

Documents Provided by Coast Pneumatics



MOUNTING NUT NOT INCLUDED



CLASS PERFORMAN

VEUMATIC PROD

BUMPER OPTION - NO CHANGE IN OAL MAGNETIC PISTON OPTION - NO CHANGE IN OAL BOTH BUMPER & MAGNETIC PISTON OPTIONS - NO CHANGE IN OAL

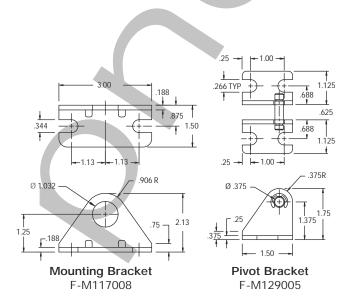
F Series 1-3/4" Bore Cylinders

Double Acting Double Nose or Rear Pivot Mount

Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 32" Optional Accessories: • F-M117008 Mounting Bracket • F-M129005 Pivot Bracket • F-M127006 Rod Clevis Base Weight: 1.64 lbs. Plus .11 lbs. per inch of stroke

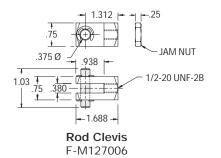
1-3/4" Bore Cylinder Specifications – Options & Accessories

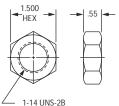
- -10° to +165°F
- Piston Rod: Ground and Polished, 303 Stainless Steel.
- Bronze rod guide bushing is standard.
- Approximate force exerted = (2.4) x (air line pressure).
- Spring force: 11 lbs. relaxed, 24 lbs. compressed.
- Mounting nuts are standard on all nose mount cylinders.
- Bumpers are optional on all 1-3/4" bore cylinders (except in combination with Viton[®] option).
- Magnetic piston optional on all 1-3/4" bore cylinders (except in combination with Viton[®] option).



OPTION

- Bumpers Single Acting
 Double Acting
- Viton[®] Seals Not available with bumpers or magnetic piston Spring Return (–15° F to 300° F) Double Acting (–15° F to 350° F)
 - Spring Extend (-15° F to 300° F)
- Magnetic Piston
- Pivot Bushing Bronze sleeve substitution
- Ports Rotated 90° on S02 or D02 models (both)
- Rod Wiper Not available in spring return models
- Side Port Cap end ports on S01 or D01 models
 Add .56 to OAL
- Low Temperature Seals Applications to –40° F Spring Return Double Acting Spring Extend
- Rod Extension
- Rod Thread Extension



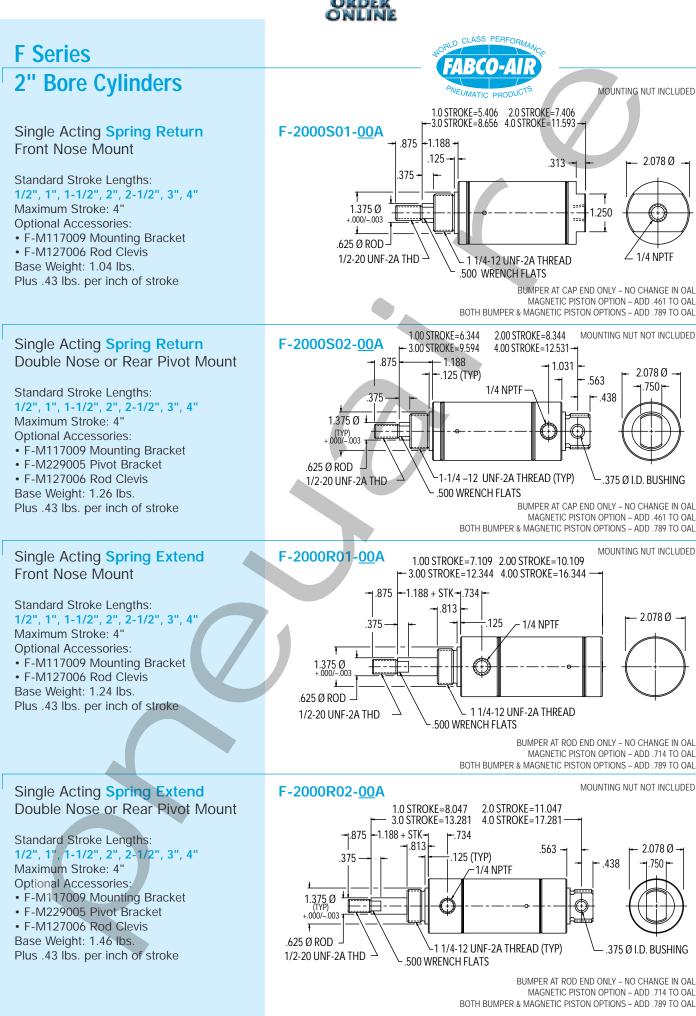


Mounting Nut F-M190008

Documents Provided by Coast Pneumatics

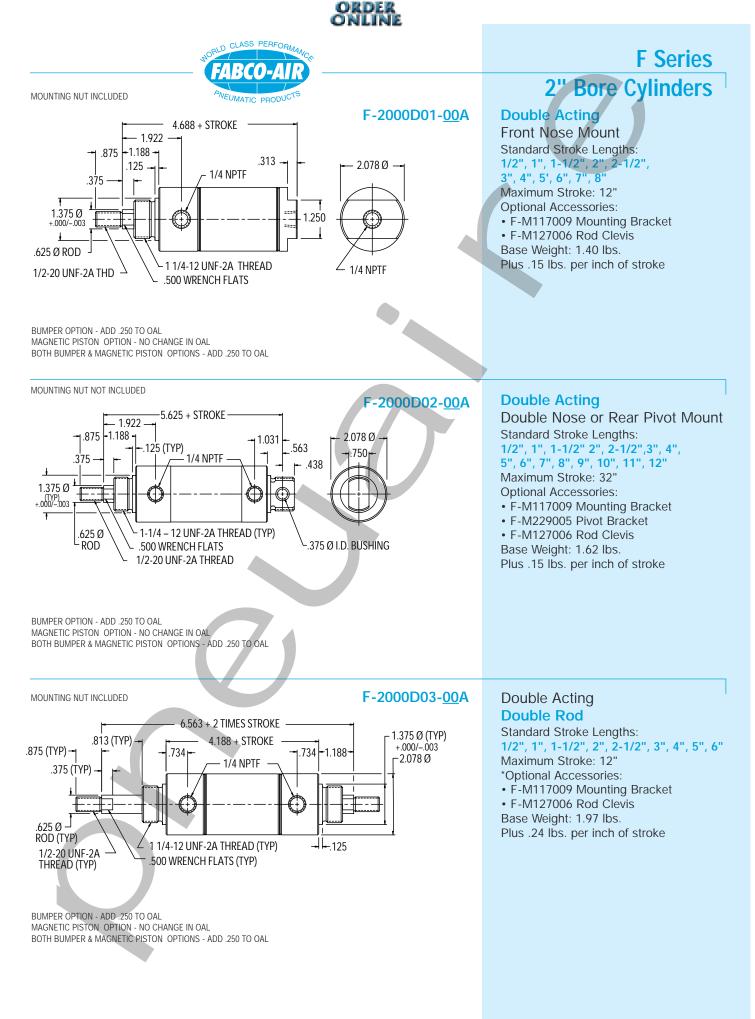
9-15-04





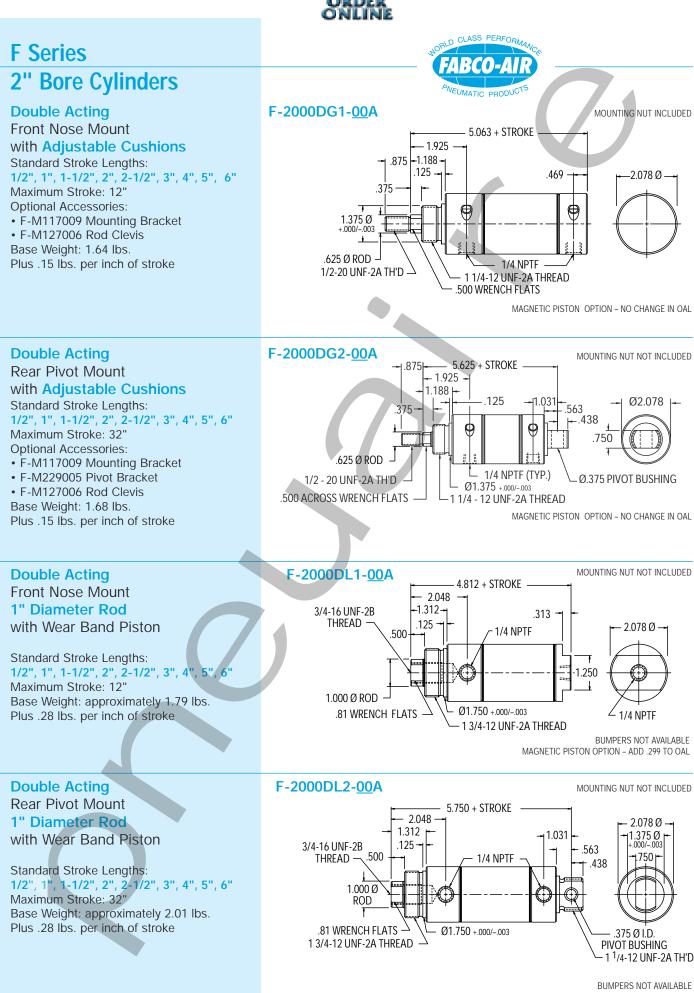
OF

9-15-04



Documents Provided by Coast Pneumatics

Or



BUMPERS NOT AVAILABLE MAGNETIC PISTON OPTION – ADD .299 TO OAL

Specifications and prices subject to change without notice or incurring obligation

ORDEN





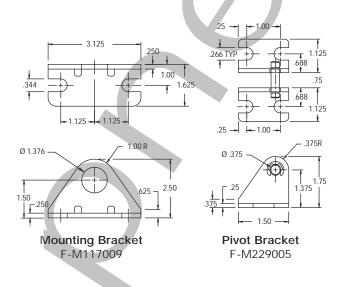
F Series 2" Bore Cylinders

Standard Cylinder Specifications – Options & Accessories

- -10° to +165°F
- Piston Rod: Ground and Polished, 303 Stainless Steel (Except for 1" Rod Models. See below).
- Bronze rod guide bushing is standard.
- Approximate force exerted = (3.1) x (air line pressure).
- Spring force: 15 lbs. relaxed, 30 lbs. compressed.
- Mounting nuts are standard on all nose mount cylinders except 1" rod models.
- Bumpers are optional on all 2" bore cylinders (except in combination with Viton[®] option).
- Magnetic piston optional on all 2" bore cylinders (except in combination with Viton® option).

1" Rod Cylinder Specifications

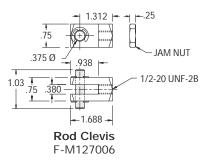
- 1" chrome rod is standard.
- Magnetic piston optional.
- Viton[®] seals optional.

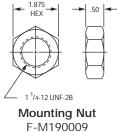


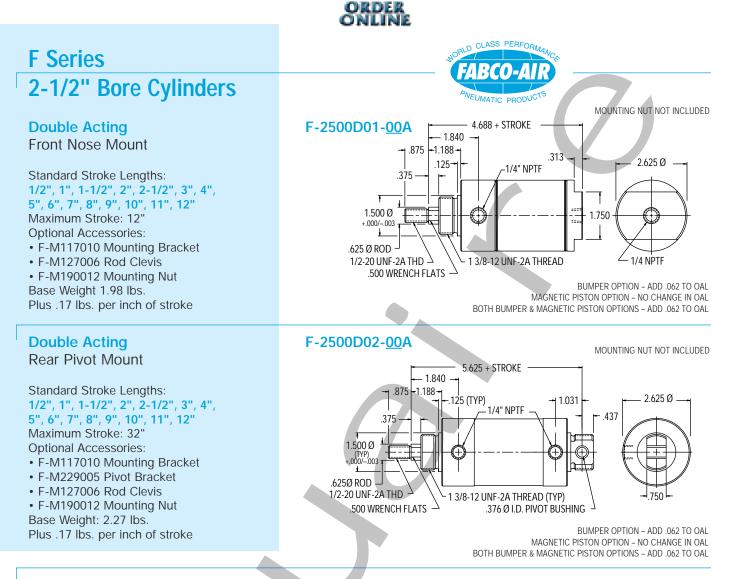
Documents Provided by Coast Pneumatics

OPTION

- Bumpers Single Acting
 Double Acting
- Viton[®] Seals Not available with bumpers or magnetic piston Spring Return (–15° F to 300° F)
- Double Acting (-15° F to 350° F)
- Spring Extend (-15° F to 300° F)
- Double Rod (-15° F to 350° F)
- Magnetic Piston
- · Pivot Bushing Bronze sleeve standard
- Ports Rotated 90°
- on S02, R02, or D02 models (both)
- Rod Wiper Not available in spring return models
- Side Port Cap end port on S01 or D01 models Add .38 to OAL
- Low Temperature Seals Applications to –40° F Spring Return Double Acting
 - Spring Extend
 - Double Rod
- Rod Extension Single, reverse and double acting
- Rod Thread Extension

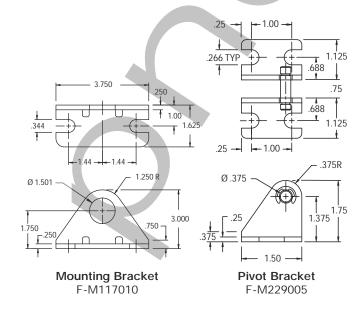






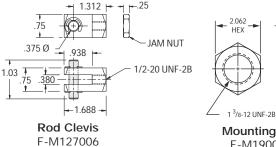
2-1/2" Bore Cylinder Specifications – Options & Accessories

- -10° to +165°F
- · Piston Rod: Ground and Polished, 303 Stainless Steel.
- Bronze rod guide bushing is standard.
- Approximate force exerted = $(5.0) \times (air line pressure)$.
- Magnetic piston optional on all 2-1/2" bore cylinders (except in combination with Viton option).



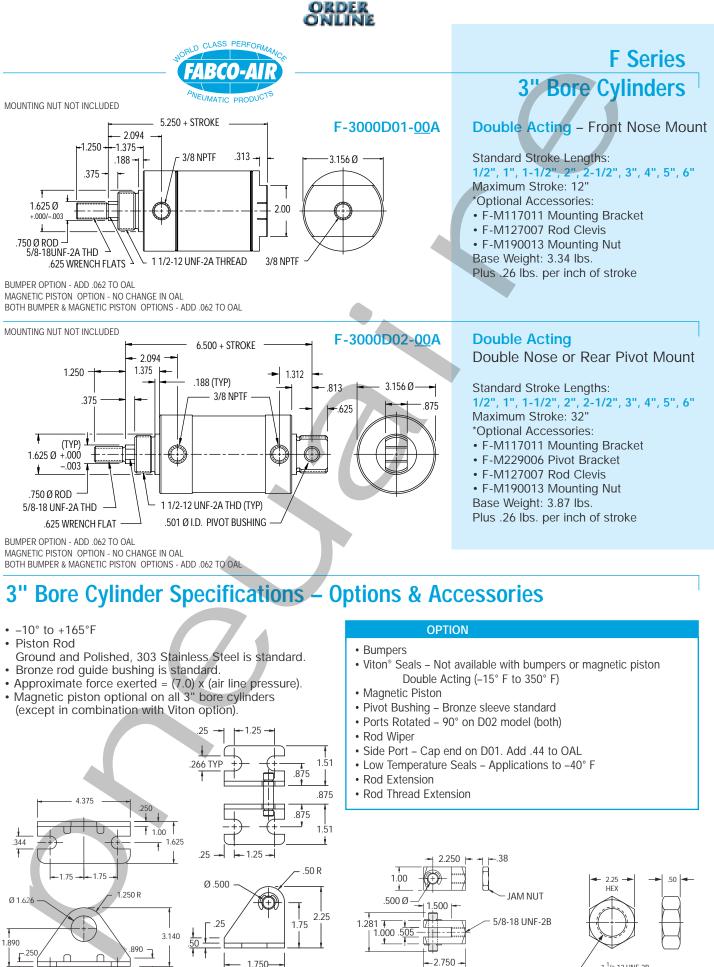
OPTION

- · Bumpers
- Viton[®] Seals Not available with bumpers or magnetic piston Double Acting (-15° F to 350° F)
- Magnetic Piston
- Pivot Bushing Bronze sleeve
- Ports Rotated 90° on D02 (both)
- Rod Wiper
- Side Port Cap end on D01. Add .38 to overall length
- Low Temperature Seals Applications to –40° F
- Rod Extension
- · Rod Thread Extension



Mounting Nut F-M190012

Specifications and prices subject to change without notice or incurring obligation ORDE



1¹/2-12 UNE-2B Mounting Nut F-M190013

Specifications and prices subject to change without notice or incurring obligation ORDE

OF

Pivot Bracket

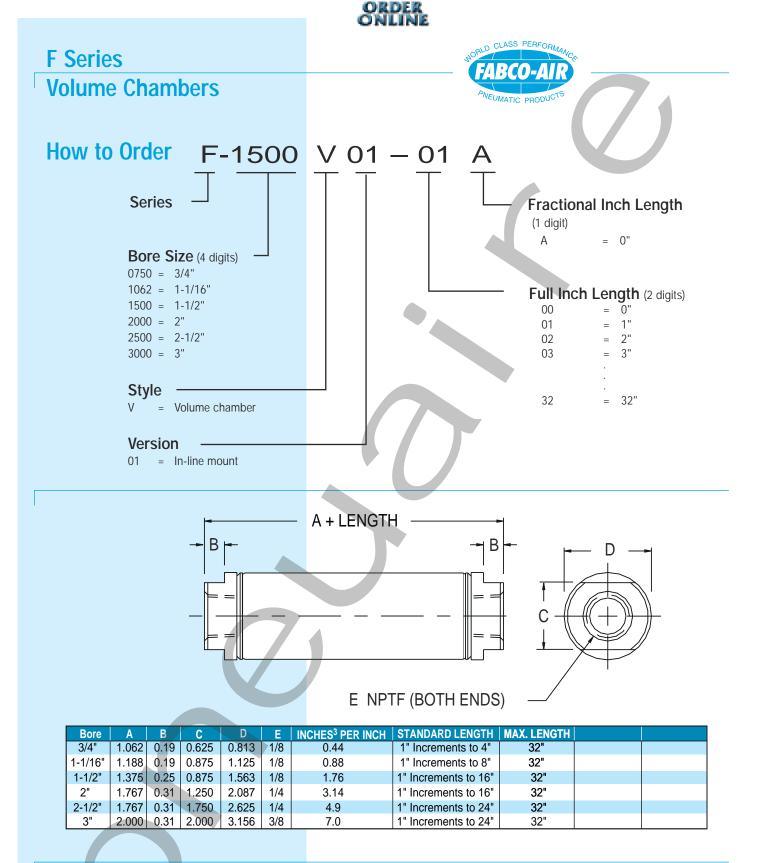
F-M229006

Rod Clevis

F-M127007

Mounting Bracket

F-M117011



Volume Chamber Specifications

- -40° to +350°F
- 303 stainless steel body.
- Aluminum alloy end caps.
- Pressure rating: 250 psi.





Delrin® Corrosion Resistant Cylinders

Features

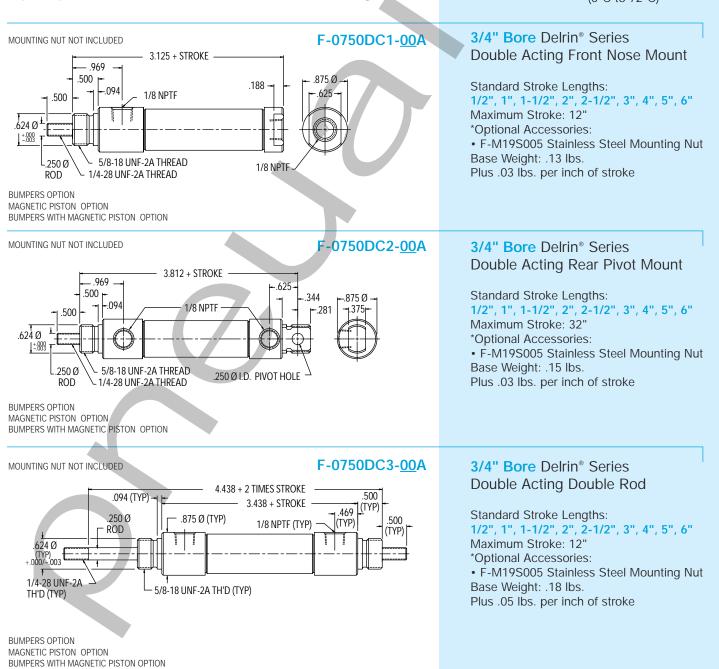
- Delrin[®] head, Delrin[®] cap and aluminum piston provide excellent corrosion resistance in wash down environments where cylinders are exposed to moisture and certain solvents.*
- Stainless steel rod and tube complete the corrosion resistance package and provide long life.
- Corrosion resistant cylinders are offered in three standard bore sizes: 3/4", 1-1/16" and 1-1/2" with both nose and rear pivot mounts.
- Stroke tolerance +/-.032

Delrin[®] is a registered trademark of DuPont. ★ Call DuPont (800) 441-0575 for information regarding properties of this material.

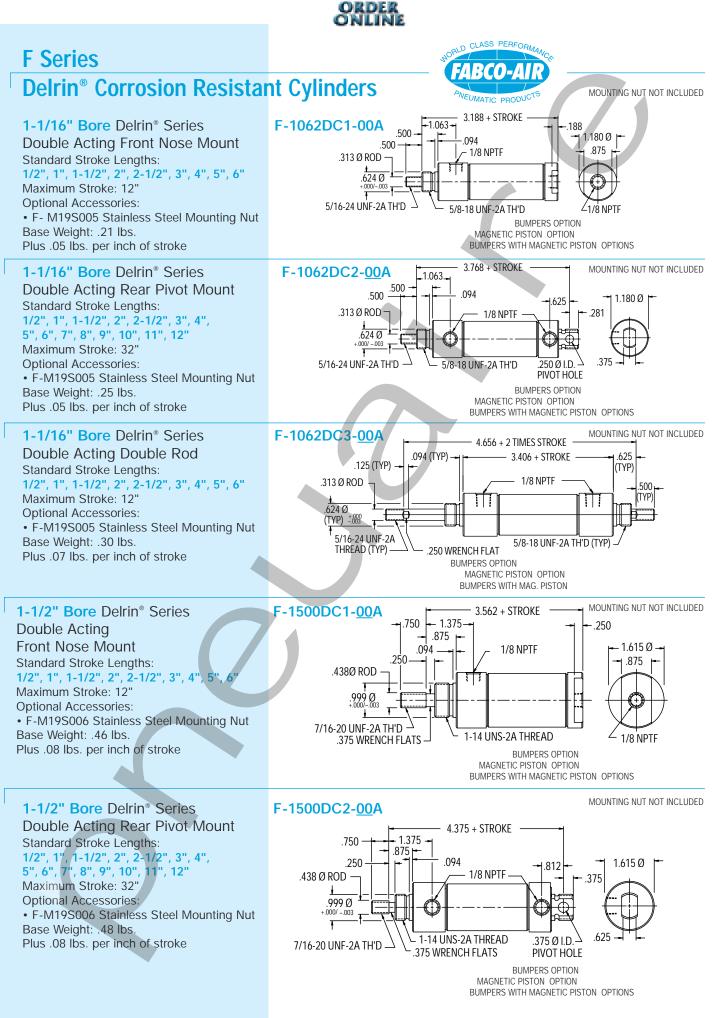
 Max Operating Pressure: 100 psi Air
 Temperature Range: 32°F to 160°F (0°C to 72°C)

F Series

news.











.875

5.125 + 2 TIMES STROKE

3.375 + STROKE

1/8 NPTF

1-14 UNS-2A THREAD (TYP)

.625 (TYP)

Delrin® Corrosion Resistant Cylinders

F-1500DC3-<u>00</u>A

.750 (TYP)

.438 Ø ROD (TYP)

7/16-20 UNF-2A

THREAD (TYP)

.375 WRENCH FLATS



Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 12" Optional Accessories: • F-M19S006 Stainless Steel Mounting Nut Base Weight: .60 lbs. Plus .13 lbs. per inch of stroke

F Series

BUMPERS OPTION MAGNETIC PISTON OPTION BUMPERS WITH MAGNETIC PISTON

.999 Ø (TYP)

MOUNTING NUT NOT INCLUDED

1.615Ø

.094 (TYP)

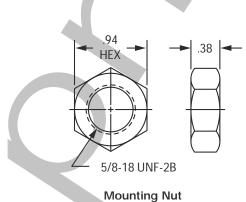
Delrin[®] Cylinder Specifications – Options & Accessories

.250 (TYP)

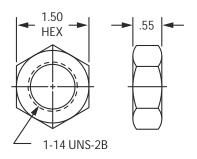
- Maximum operating pressure 100psi Air.
- Temperature range +32° to +160°F.
- Piston Rod
- Ground and polished, 303 stainless steel is standard. • Magnetic piston optional on all bore cylinders
- (except in combination with Viton option).

OPTION

- Viton[®] Seals Not available with bumpers or magnetic piston (for media or environment compatibility only)
- 3/4 Bore ; 1-1/16 Bore 1-1/2 Bore
- Pivot BushingNot Available
- Ports RotatedNot Available
- Rod WiperNot Available
 Side PortNot Available
- Low Temp. SealsNot Available
- Rod Extension –
- 3/4 Bore; 1-1/16 Bore 1-1/2 Bore
- Rod Thread Extension -

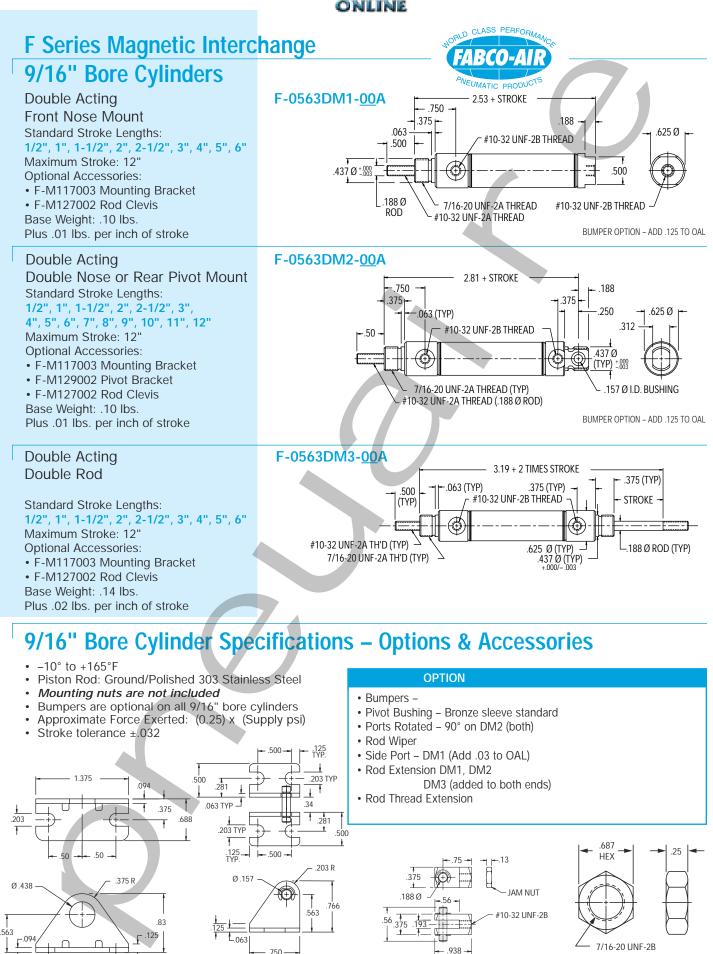


F-M19S005 Max. Recommended Torque 12 in-lbs



Mounting Nut F-M19S006 Max. Recommended Torque 30 in-Ibs





Mounting Bracket F-M117003

Documents Provided by Coast Pneumatics

Rod Clevis

F-M127002

Pivot Bracket

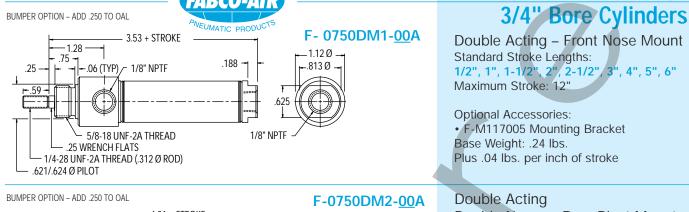
F-M129002

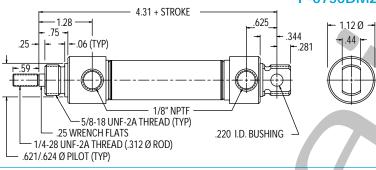
Mounting Nut

F-M190003



F Series Magnetic Interchange





CLASS PERFORMAN

BUMPER OPTION - ADD .250 TO OAL

4.91 + 2 TIMES STROKE .25 + STROKE 1.28 1.03 .75 -.50 .25 .06 1/8" NPTF **+−**.06 59 .59 5/8-18 UNF-2A THREAD (TYP) 1.12 Ø (TYP) .25 WRENCH FLATS 1/4-28 UNF-2A THREAD (.312 Ø ROD) .621/.624 Ø PILOT (TYP)

Double Nose or Rear Pivot Mount Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 32"

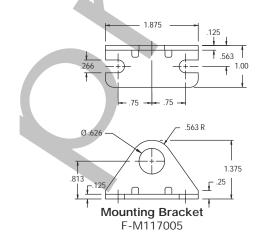
Optional Accessories: F-M117005 Mounting Bracket Base Weight: .30 lbs. Plus .04 lbs. per inch of stroke

Double Acting Double Rod Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6" Maximum Stroke: 12"

Optional Accessories: F-M117005 Mounting Bracket Base Weight: .41 lbs. Plus .06 lbs. per inch of stroke

3/4" Bore Cylinder Specifications – Options & Accessories

- -10° to +165°F
- · Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 3/4" bore cylinders
- Approximate Force Exerted: (0.4) x (Supply psi)
- Stroke tolerance ±.032



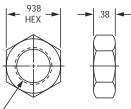
Documents Provided by Coast Pneumatics

OPTION

· Bumpers -

F-0750DM3-00A

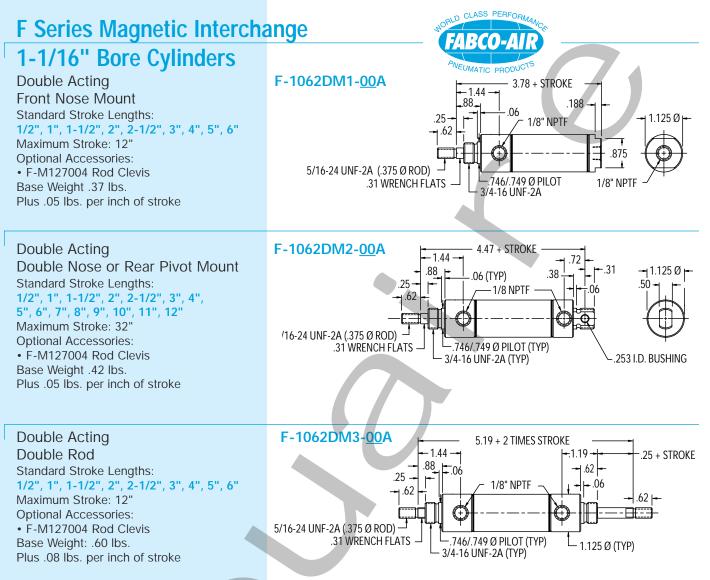
- · Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper
- Side Port DM1 (Add .44 to OAL)
- Rod Extension DM1, DM2
- DM3 (added to both ends) Rod Thread Extension



5/8-18 UNF-2B

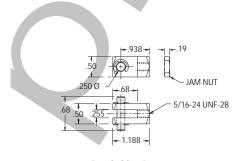
Mounting Nut F-M190005





1-1/16" Bore Cylinder Specifications – Options & Accessories

- -10° to +165°F
- · Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 1-1/16" bore cylinders
- Approximate Force Exerted: (0.9) x (Supply psi)
- Stroke tolerance ±.032

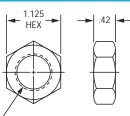


Rod Clevis F-M127004

Documents Provided by Coast Pneumatics

OPTION

- Bumpers -
- Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper
- Side Port DM1 (Add .25 to OAL)
- Rod Extension DM1, DM2
 - DM3 (added to both ends)
- Rod Thread Extension

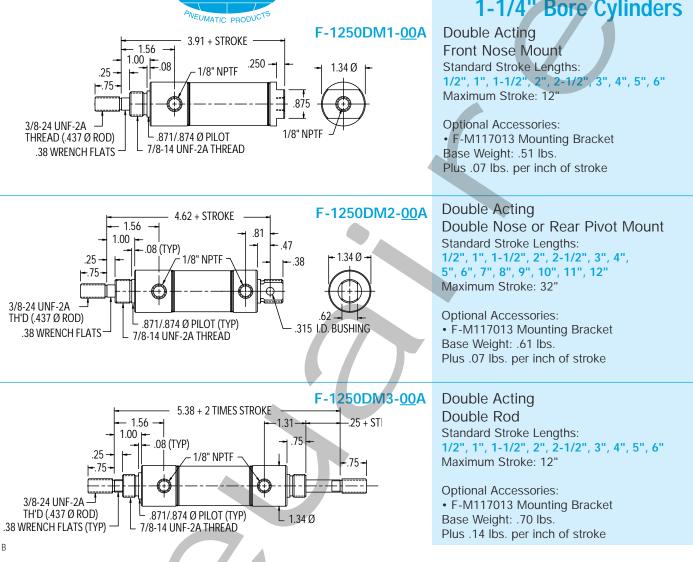


 — 3/4-16 UNF-2B
 Mounting Nut F-M190006

ORDER	
ONLIN	ε

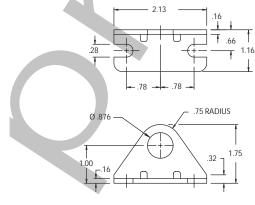
D CLASS PERFORMAN

F Series Magnetic Interchange 1-1/4" Bore Cylinders



1-1/4" Bore Cylinder Specifications – Options & Accessories

- -10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 1-1/4" bore cylinders
- Approximate Force Exerted: (1.2) x (Supply psi)
- Stroke tolerance ±.032

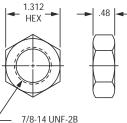


Documents Provided by Coast Pneumatics

Mounting Bracket F-M117013

OPTION

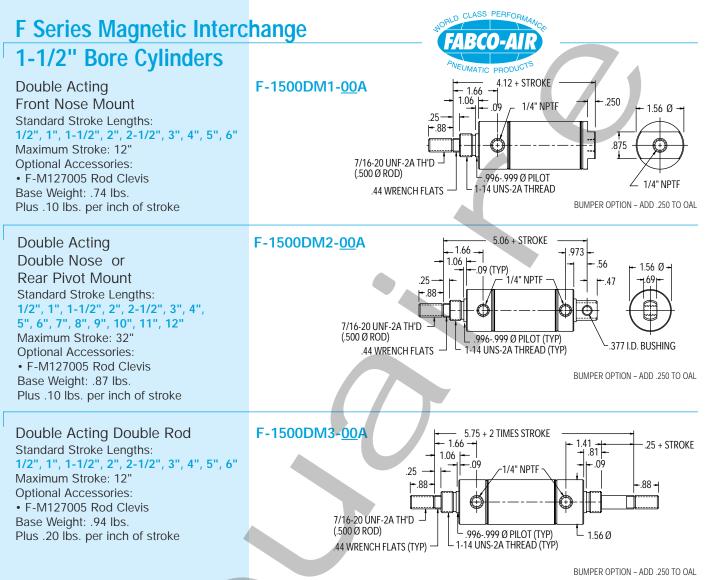
- Bumpers
- Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper -
- Side Port DM1 (Add .25 to OAL)
- Rod Extension DM1, DM2
 - DM3 (added to both ends)
- Rod Thread Extension



Mounting Nut F-M190007

OF

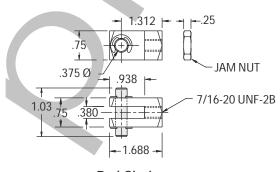




1-1/2" Bore Cylinder Specifications – Options & Accessories

• -10° to +165°F

- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 1-1/2" bore cylinders
- Approximate Force Exerted: (1.7) x (Supply psi)
- Stroke tolerance ±.032

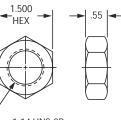


Rod Clevis F-M127005

Documents Provided by Coast Pneumatics

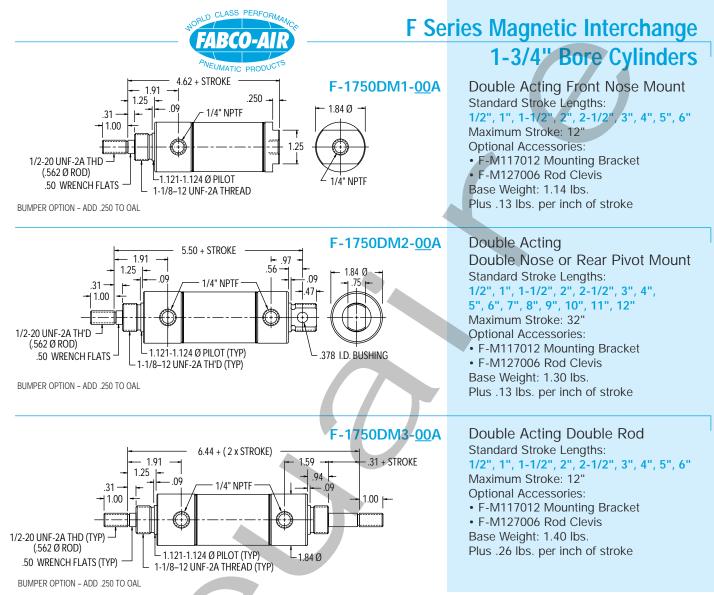
OPTION

- Bumpers -
- Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper -
- Side Port DM1 (Add .25 to OAL)
- Rod Extension DM1, DM2
 - DM3 (added to both ends)
- Rod Thread Extension



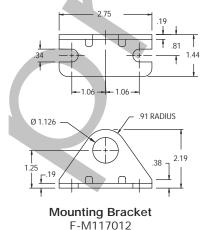
1-14 UNS-2B **Mounting Nut** F-M190008





1-3/4" Bore Cylinder Specifications – Options & Accessories

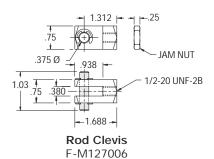
- -10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 1-3/4" bore cylinders
- Approximate Force Exerted: (2.4) x (Supply psi)
- Stroke tolerance ±.032

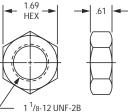


Documents Provided by Coast Pneumatics

OPTION

- Bumpers Double Acting (add .250 to OAL)
- · Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- · Rod Wiper -
- Side Port DM1 (Add .56 to OAL)
- Rod Extension DM1, DM2
 - DM3 (added to both ends)
- Rod Thread Extension

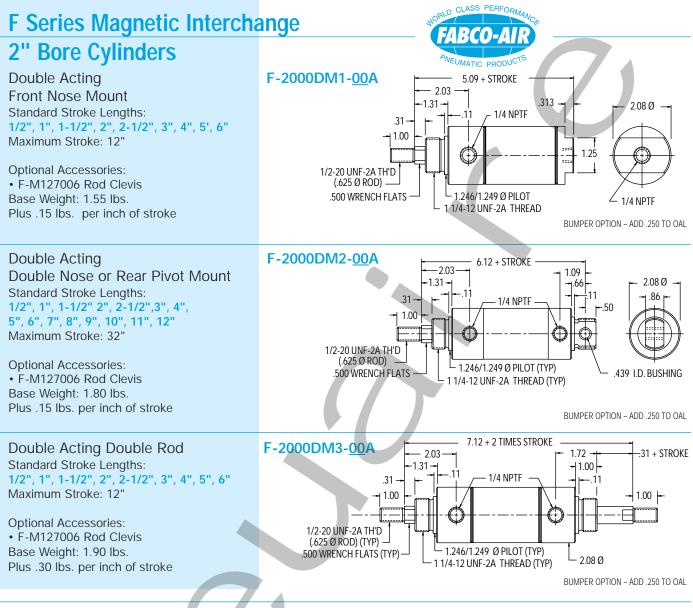




Mounting Nut F-M190015

Or

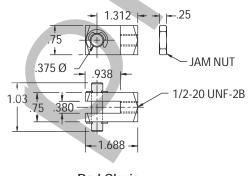




2" Bore Cylinder Specifications – Options & Accessories

• -10° to +165°F

- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 2" bore cylinders
- Approximate Force Exerted: (3.1) x (Supply psi)
- Stroke tolerance ±.032

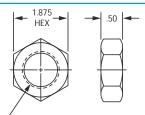


Rod Clevis F-M127006

Documents Provided by Coast Pneumatics

OPTION

- Bumpers –
- Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper -
- Side Port DM1 (Add .56 to OAL)
- Rod Extension DM1, DM2
- DM3 (added to both ends)
- Rod Thread Extension





Mounting Nut F-M190009



2.625 Ø –

3/8 NPTE

F-2500DM1-00A



Double Acting Front Nose Mount Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6 Maximum Stroke: 12"

Optional Accessories: • F-M127007 Rod Clevis Base Weight: 2.48 lbs. Plus .20 lbs. per inch of stroke

Double Acting Double Nose or **Rear Pivot Mount** Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4",

5", 6", 7", 8", 9", 10", 11", 12" Maximum Stroke: 32"

Optional Accessories: • F-M127007 Rod Clevis Base Weight: 2.90 lbs. Plus .20 lbs. per inch of stroke

Double Acting Double Rod Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4",5", 6"

Maximum Stroke: 12"

Optional Accessories: • F-M127007 Rod Clevis Base Weight: 3.15 lbs. Plus .40 lbs. per inch of stroke

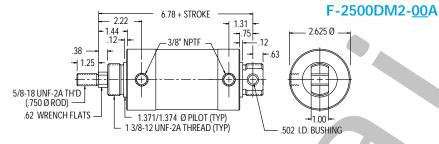
1 3/8-12 UNF-2A THREAD BUMPER OPTION - ADD .250 TO OAL

.38

5/8-18 UNF-2A TH'D (.750 Ø ROD) —

.62 WRENCH FLATS

+ 1.25



CLASS PERFORMAN

1.75

EUMATIC

-3/8" NPTF .31 -

5.41 + STROKE

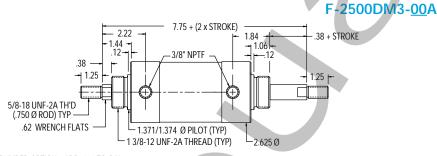
1.371/1.374 Ø PILOT

2.22

.44 -

12

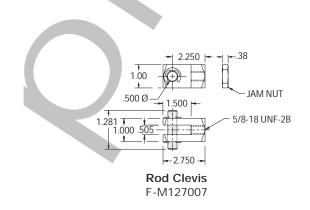
BUMPER OPTION - ADD .250 TO OAL



BUMPER OPTION - ADD .250 TO OAL

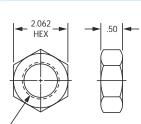
2-1/2" Bore Cylinder Specifications – Options & Accessories

- -10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 2-1/2" bore cylinders
- Approximate Force Exerted: (5.0) x (Supply psi)
- Stroke tolerance ±.032



OPTION

- Bumpers -
- Pivot Bushing Bronze sleeve standard
- Ports Rotated 90° on DM2 (both)
- Rod Wiper -
- · Side Port Cap end DM1. Add .38 to OAL
- Rod Extension DM1, DM2
- DM3 (added to both ends) Rod Thread Extension





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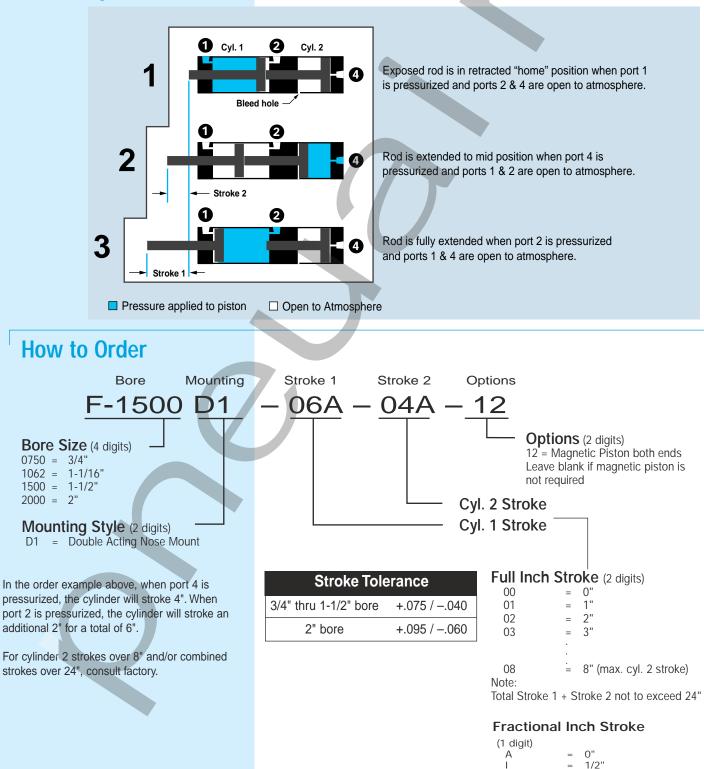


F Series 3-Position (Tandem) Cylinders



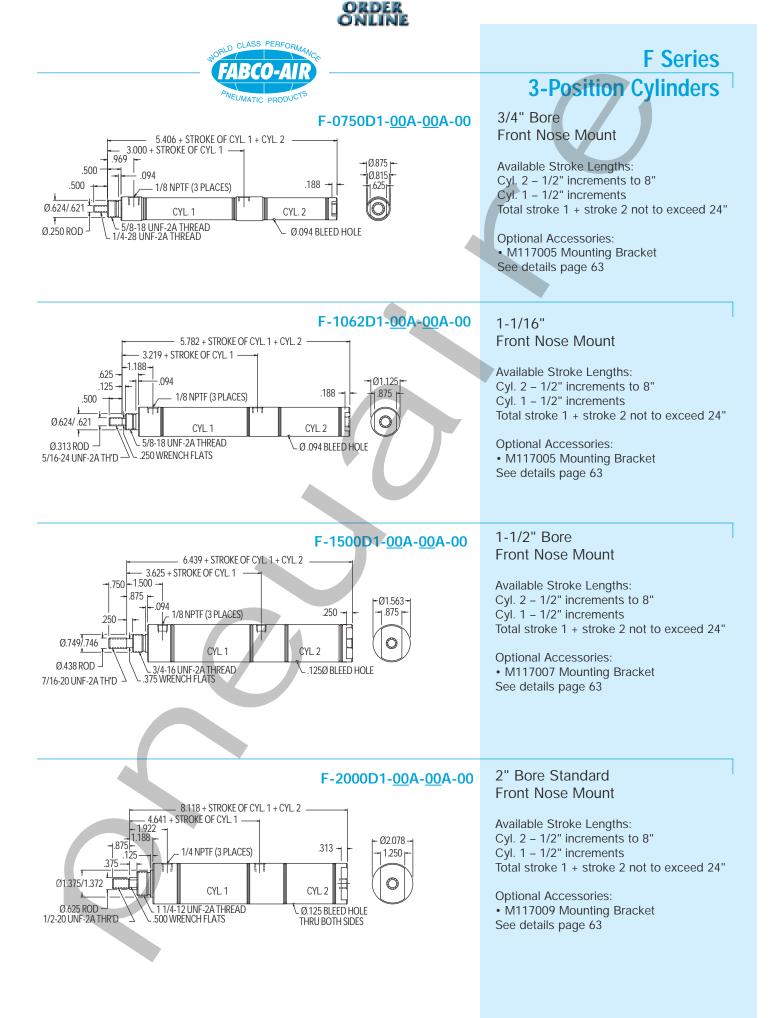
Tandem cylinders are generally used when three distinct rod positions are required from a single cylinder body. Two cylinders are assembled tip-to-tail with a common center head. Using cylinders with two different lengths (the shorter located on the rear cylinder), enables the front rod to be extended from "home" to a positive mid-position or to full extension.

How they work



Specifications and prices subject to change without notice or incurring obligation

9-15-04



Documents Provided by Coast Pneumatics

Or



F Series Hole Punch Cylinders

Fabco-Air's rugged Hole Punch Cylinder enables trouble-free punching of millions of holes in plastic film; ideally suited for LLDPE (linear low density polyethylene). A major feature allows punch replacement without having to replace the cylinder. Available in eight different hole punch sizes from 1/8" to 3/4," razor sharp plastic punches are self-sharpening and significantly outlast conventional steel punches in most applications.

An air ejector, foam ejector, and auto ejector are offered as options. These ejectors discharge material slugs from the center of the punch and prevent debris build-up.

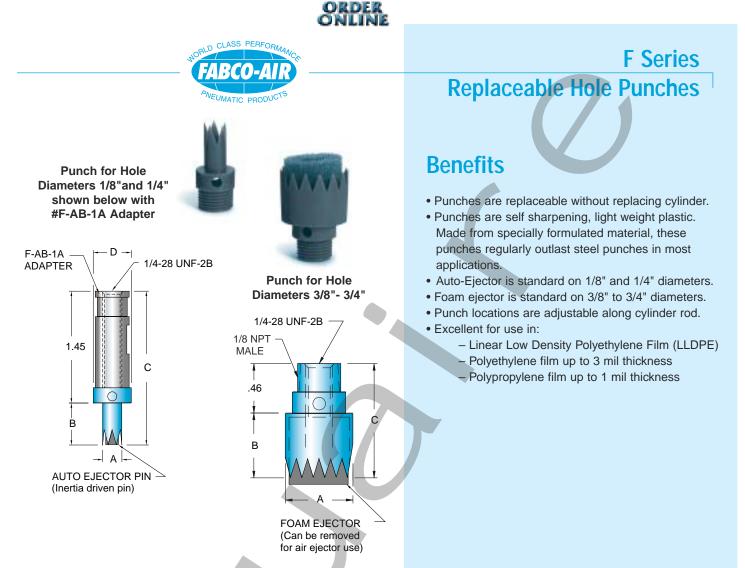




D CLASS PERFORM

Documents Provided by Coast Pneumatics

Mounting Nut Included



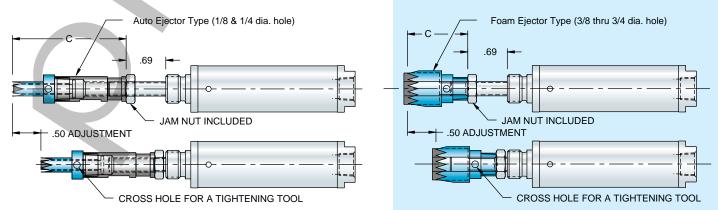
Part #	Hole Dia.	Α	В	С	D	Ejector Type	Adapter Required	
F-PCN-18	1/8"	.125	.54	1.99	.44	Auto Ejector Pin	F-AB-1A	
F-PCN-14	1/4"	.250	.54	1.99	.44	Auto Ejector Pin	F-AB-1A	
F-PCN-38	3/8"	.375	.54	1.00	NA	Foam Ejector	None	
F-PCN-716	7/16"	.437	.54	1.00	NA	Foam Ejector	None	
F-PCN-12	1/2"	.500	.54	1.00	NA	Foam Ejector	None	
F-PCN-916	9/16"	.562	.60	1.06	NA	Foam Ejector	None	
F-PCN-58	5/8"	.625	.60	1.06	NA	Foam Ejector	None	
F-PCN-34	3/4"	.750	.60	1.06	NA	Foam Ejector	None	

Note:

- 1. [†]Punch standard package quantity is 5 pieces.
- 2. Adapters are available individually, and are not supplied with the punch.
- 3. For air ejection applications, use hollow rod cylinders type FM12265.
- 4. Jam nuts are included with all "Hole Punch" cylinders.

Cylinder and Punch Assemblies

Documents Provided by Coast Pneumatics



Specifications and prices subject to change without notice or incurring obligation



PFA Series Position Feedback Cylinders

General Technical Data

The **PFA Series** is an economical pneumatic linear actuator that contains an internal Linear Resistive Transducer (LRT). It is ideal for applications where traditional magnetic position sensing is not acceptable. Additionally, the **PFA Series** is conducive where variations in cylinder stroke and speed are required or where an application calls for continuous position monitoring.

• Operating pressure: 150 psi max.

• Recommended Media: Filtered, clean, dry "non-condensing" compressed air. Do not apply any fluids that may be electrically conductive. Water-based fluids should not be used.

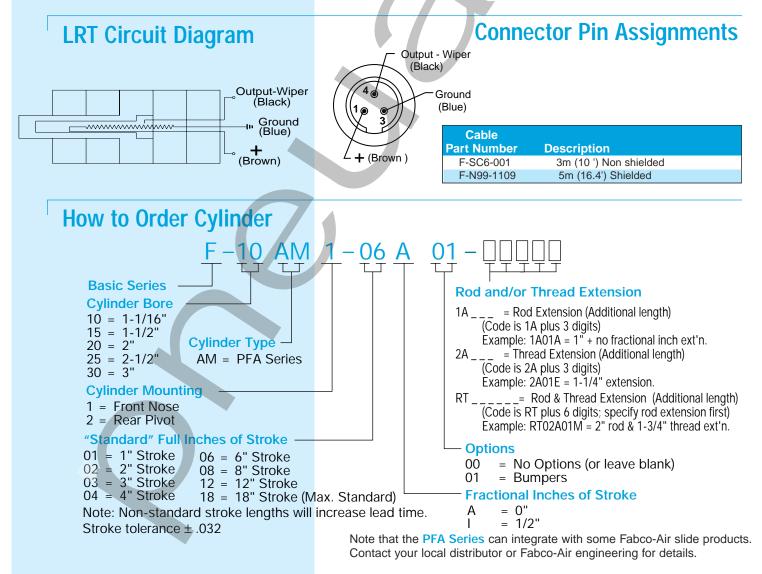
Electrical Specifications

Electrical Resistance	1000 ohms (± 20%) per inch of stroke
Resolution	Infinite (limited by interfacing electronics)
Temperature Range	0° F to 160° F
Life Rating	500 million inches of travel on transducer
Linearity	±1% of stroke (or better)
Interface	6" cable with M8x1 Quick Connect
Signal Input	Typically 10 VDC
Maximum Speed	50 in/sec
Maximum Standard Stroke	18 inches (longer strokes available upon request)
Maximum Current	1 microamp required from the transducer

CLASS PERFORM

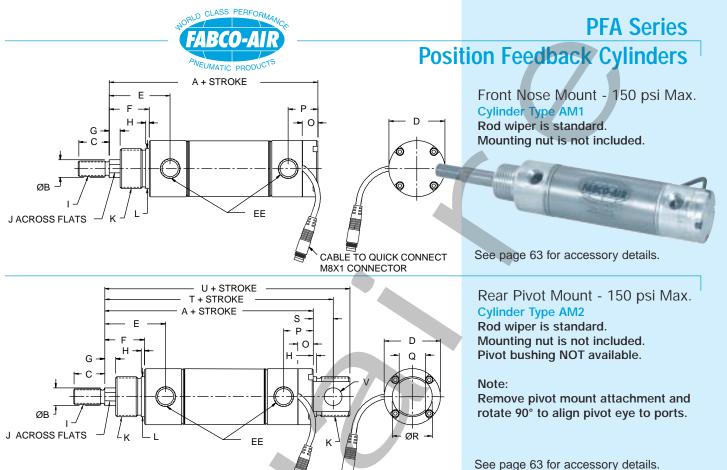
EUMATIC PRO

Note: Control Module Units sold separately can have scalable output of 4-20 mA or 0-10 VDC and input of 120 VAC or 12-24 VDC. See pages 58 and 59.



Documents Provided by Coast Pneumatics





PFA Cylinder Dimensions

CABLE TO QUICK CONNECT M8X1 CONNECTOR

	1-1/16" Bore Bore Code 10	1-1/2" Bore Bore Code 15	2" Bore Bore Code 20	2-1/2" Bore Bore Code 25	3" Bore Bore Code 30
А	4.59	4.88	5.46	6.41	6.78
В	0.375	0.500	0.625	0.750	0.750
С	0.63	0.88	1.00	1.25	1.25
D	1.312	1.58	2.08	2.63	3.16
E	1.75	1.72	1.92	2.25	2.16
F	1.06	1.13	1.188	1.50	1.138
G	0.31	0.31	0.38	0.44	0.44
Н	0.09	0.09	0.13	0.13	0.19
I	5/16-24 UNF	7/16-20 UNF	1/2-20 UNF	5/8-18 UNF	5/8-18 UNF
J	0.31	0.44	0.50	0.63	0.63
К	7/8-14 UNF	1 1/8-12 UNF	1 1/4-12 UNF	1 3/8-12 UNF	1 1/2-12 UNF
L	0.875	1.125	1.375	1.500	1.625
0	0.44	0.41	0.50	0.56	0.63
Р	0.84	0.83	0.93	1.13	1.47
Q	0.38	0.63	0.75	0.88	0.88
R	0.875	1.125	1.375	1.500	1.625
S	0.47	0.56	0.56	0.75	0.81
Т	5.06	5.44	6.02	7.16	7.59
U	5.34	5.91	6.46	7.78	8.22
V	0.313	0.375	0.375	0.500	0.500
EE	1/8 NPTF	1/4 NPTF	1/4 NPTF	3/8 NPTF	3/8 NPTF

Documents Provided by Coast Pneumatics

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PFA Series – Position Feedback **Digital Displays**



F-TDRO-40 Panel Meter 4 Digit 0.56" in a 1/8 DIN Case

An economical smart programmable meter with optional relay with isolated 4 to 20 mA and 0-10 VDC retransmission or control loop output capability for measurement and control applications.

Specifications

Input Specs: A/D Converter: Accuracy: Temp. Coeff.: Warm Up Time: Conversion Rate: Display:

Polarity: Decimal Selection: Positive Overrange: **Relay Output:** (optional)

Analog Output: AIC (mA out) (opt) Power Supply: 1-PS1 (std) 2-PS2 (opt) **Operating Temp.:** Storage Temp.: **Relative Humidity:** Case Dimensions:

IR03 Input Module 14 bit single slope $\pm (0.05\% \text{ of reading} + 2 \text{ counts})$ 100 ppm/°C (Typical) 2 minutes 10 conversions per second (Typical) 4 digit 0.56" Red LED display (Range - 1999 to 9999 counts) Assumed positive. Displays - negative Front panel button selectable, X•X•X•X• Top segments of digital display flash Negative Overrange: Bottom segments of digital display flash Available combinations shown in "How to Order" page 59: 5Amp Form A is solid state; 10Amp Form C is mechanical. Isolated 16 bit user scalable mA or V 4-20 mA @ 0 to 500 Ω max loop resistance AIV (volts out) (opt) 0-10 DC @ 500 Ω or higher resistance AC/DC Auto sensing wide range supply 85-265 VAC/95-370 VDC @ 2.5W max 3.5W 15-48 VAC/10-72 VDC @ 2.5W max 3.5W 0 to 60°C -20 to 70°C 95% (non-condensing) 1/8 DIN, Bezel: 96x48mm (3.78"x1.89") Depth behind bezel: 117mm (4.61") Plus 11.8mm (0.47") for Right-angled connectors, or plus 20 mm (0.79") for straight-thru connector.

Weight:

Software Features

F-TDRO-40

· Three-button programming from the front panel (UP, DOWN and PROGRAM buttons).

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- Three front panel selectable ranges.
- · Front panel selectable four-level brightness control of digital display, and setpoint LEDs.
- · Up to four programmable setpoints.
- Relay activation can be selected to occur above (HI) or below (LO) each setpoint.

6.5 oz., 8.5 oz. when packed

- · Hysteresis setting for all four setpoints. Delay on make and delay on break for SP1 and SP2.
- · Peak and Valley. View and Reset.

F-TDBRO-40 101 Segment Bargraph 4 Digit 0.31" in a 9/64 DIN Case

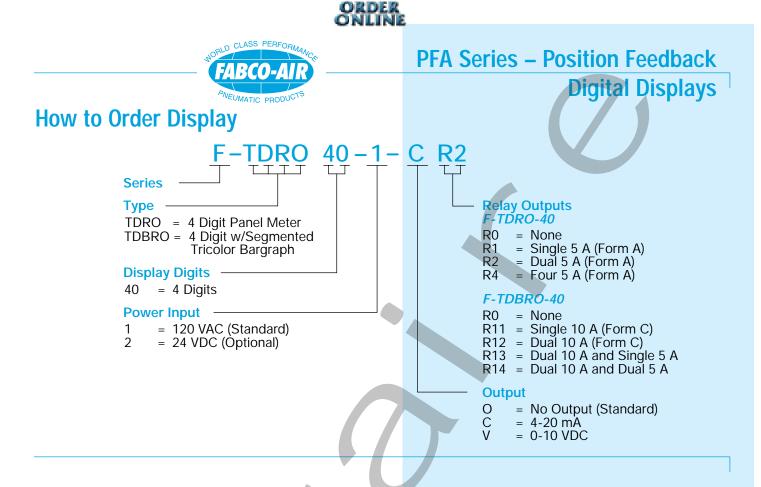
Smart Tricolor digital bargraph with four fully programmable setpoints and optional relay with isolated 4 to 20 mA and 0-10 VDC retransmission or control loop output for monitoring measurement and control applications.

Specifications

Input Specs: **IR03** Input Module A/D Converter: 14 bit single slope Accuracy: $\pm (0.05\% \text{ of reading} + 2 \text{ counts})$ Temp. Coeff.: 100 ppm/°C (Typical) Warm Up Time: 2 minutes **Conversion Rate:** 10 conversions per second (Typical) 4 digit 0.31" LED red **Digital Display:** (Range - 1999 to 9999 counts) Bargraph Display: 101 segment 4" tri-color vertical Assumed positive. Displays - negative Polarity: **Decimal Selection:** Front panel button selectable, X•X•X•X• Positive Overrange: Bargraph and Top segments of digital display flash Negative Overrange: First segment of Bargraph and Bottom segments of digital display flash Relay Output: Available combinations shown in "How to (optional) Order" page 59: 5Amp Form A is solid state; 10Amp Form C is mechanical. Analog Output: Isolated 16 bit user scalable mA or V AIC (mA out)(opt) 4-20 mA @ 0 to 500 Ω max loop resistance AIV (volts out)(opt) 0-10 DC @ 500 Ω or higher resistance Power Supply: AC/DC Auto sensing wide range supply 1-PS1 (std) 85-265 VAC/95-370 VDC @ 2.5W max 4.2W 15-48 VAC/10-72 VDC @ 2.5W max 4.2W 2-PS2 (opt) Operating Temp.: 0 to 60°C -20 to 70°C Storage Temp.: Relative Humidity: 95% (non-condensing) Case Dimensions: 9/64 DIN, Bezel: 36Wx144Hmm Depth behind bezel: 148mm (5.83") Plus 18mm (0.7") connectors. Weight: 9.5 oz., 12 oz. when packed

F-TDBRO-40

- Digital display and the 101 segment bargraph can be independently scaled.
- Bargraph center zero function.
- Four programmable setpoints. (optional)
- Adjustable delay-on-make and delay-on-break time for setpoints 1 and 2.
- Relay activation can be selected to occur above (HI) or below (LO) each setpoint.
- · Digital display blanking.
- Decimal point setting.
- Four-level brightness control of bargraph, digital display, and setpoint LEDs.





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ORDER
onts Provided by Coast Pneumatics 1-27-03

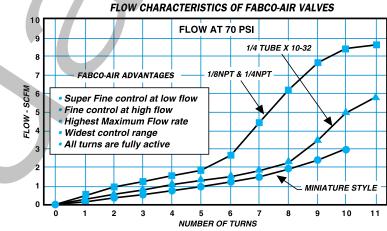


Swivel, Molded Body Flow Controls

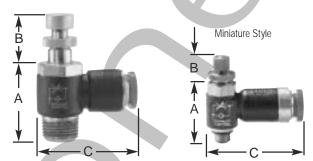
• Full 360° Swivel • Compact Size • Pre-applied thread sealant

SPECIFICATIONS

- Male sizes:
- #10-32, 1/8 NPT, 1/4 NPT, 3/8 NPT
- Female instant tube connections: 5/32" T, 1/4" T, 3/8" T
- Operating pressure to 150 PSI (10 bar)
- Operating temperature: 0 to 160°F (-18°C to 70°C)
- High flow rates (see chart at right)
- Use with air or other inert gas only
- Not recommended for use with liquids
- Meter out only

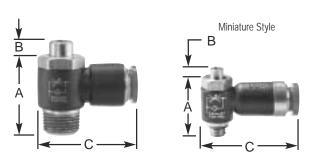


How to Order Model Numbers & Dimensions



KNOB ADJUSTABLE VALVES

Model No.	Description	Α	B max	С	Flow (Cv)	
PK-82010	5/32 tubing x 10-32	0.68	0.45	1.08	0.05	
PK-82012	5/32 tubing x 1/8 NPT	1.05	0.75	1.25	0.13	
PK-82014	5/32 tubing x 1/4 NPT	1.17	0.75	1.37	0.13	
PK-82040	1/4 tubing x 10-32	0.95	0.75	1.30	0.08	
PK-82042	1/4 tubing x 1/8 NPT	1.05	0.75	1.30	0.13	
PK-82044	1/4 tubing x 1/4 NPT	1.17	0.75	1.40	0.13	
PK-82046	1/4 tubing x 3/8 NPT	1.38	0.92	1.75	0.27	
PK-82064	3/8 tubing x 1/4 NPT	1.34	0.92	1.70	0.27	
PK-82066	3/8 tubing x 3/8 NPT	1.38	0.92	1.75	0.27	

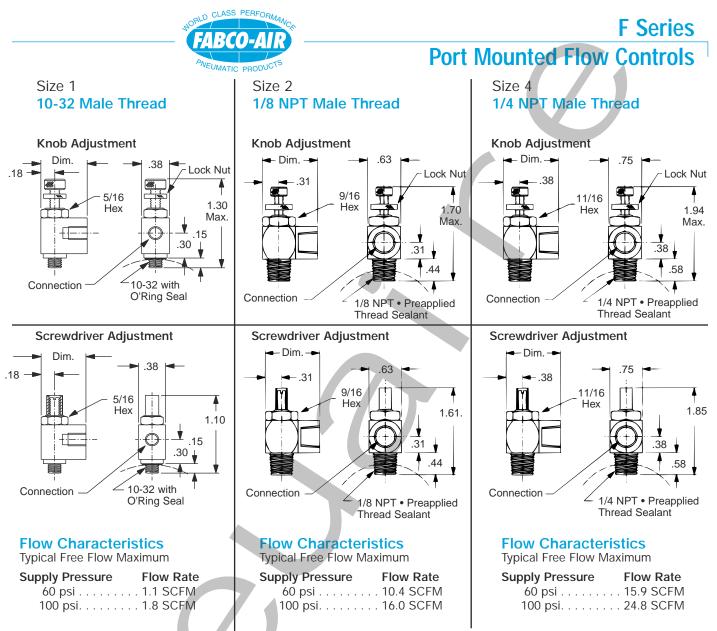


RECESSED SCREW ADJUSTABLE VALVES

Model No.	Description	Α	B max	С	Flow (Cv)
PR-82110	5/32 tubing x 10-32	0.68	0.11	1.08	0.05
PR-82112	5/32 tubing x 1/8 NPT	1.05	0.20	1.25	0.13
PR-82114	5/32 tubing x 1/4 NPT	1.17	0.20	1.37	0.13
PR-82140	1/4 tubing x 10-32	0.95	0.20	1.30	0.08
PR-82142	1/4 tubing x 1/8 NPT	1.05	0.20	1.30	0.13
PR-82144	1/4 tubing x 1/4 NPT	1.17	0.20	1.40	0.13
PR-82146	1/4 tubing x 3/8 NPT	1.38	0.28	1.75	0.27
PR-82164	3/8 tubing x 1/4 NPT	1.34	0.28	1.70	0.27
PR-82166	3/8 tubing x 3/8 NPT	1.38	0.28	1.75	0.27







			Model Number							
Male Thread	Adjustment	Connection	Valve Mount Meter In		Cylinder Mount Meter Out		Dim.			
	Knob	10-32 Tap	PV1-A	\$11.15	PC1-A	\$10.15	.63			
Size #1		5/32" Tube	PV1-C	12.65	PC1-C	16.40	1.16			
#10-32	Screwdriver	10-32 Tap	PV1-K	10.25	PC1-K	9.25	.63			
		5/32" Tube	PV1-M	11.10	PC1-M	10.10	1.16			
Size #2	Knob	1/8 NPT Tap	PV2-A	12.95	PC2-A	11.95	1.00			
1/8 NPT	-	5/32" Tube	PV2-C	14.80	PC2-C	13.80	1.65			
		1/4" Tube	PV2-D	14.80	PC2-D	13.80	1.63			
	Screwdriver	1/8 NPT Tap	PV2-K	11.90	PC2-K	10.90	1.00			
		5/32" Tube	PV2-M	13.00	PC2-M	12.00	1.65			
		1/4" Tube	PV2-N	13.00	PC2-N	12.00	1.63			
Size #4	Knob	1/4 NPT Tap	PV4-A	16.60	PC4-A	15.60	1.25			
1/4 NPT		1/4" Tube	PV4-B	18.65	PC4-B	17.65	1.75			
		3/8" Tube	PV4-C	18.65	PC4-C	17.65	2.00			
	Screwdriver	1/4 NPT Tap	PV4-K	14.95	PC4-K	13.95	1.25			
~		1/4" Tube	PV4-L	16.40	PC4-L	15.40	1.75			
		3/8" Tube	PV4-M	16.40	PC4-M	15.40	2.00			

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Cylinder Accessories Magnetic Position Sensors



Temperature range:-4° to +176°F (-20° to +80C)

Magnetically operated reed switches and electronic sensors can be mounted anywhere along the length and circumferance of the cylinder. A magnetic piston is required and is standard on Magnetic Interchange cylinders. Specify Magnetic Piston Option "-03" for other F-Series models or "-12" for 3-position models

		other r benes models of									
	Dovetail Style Sensors	5	Prewired 9 ft. Leadwir	e Quick Disconnect*							
Sensor Type	Electrical Characteristics		Part No.	Part No.							
Reed (No LED)	0-120 VDC/VAC, 0.5 Amp Max current, 7	10 Watt Max, 0 Voltage Drop	949-000-001	949-000-301							
Reed (LED)	5-120 VDC/VAC, 0.03 Amp Max current,		949-000-002	949-000-302							
Electronic (LED)	Sourcing PNP 6-24 VDC, 0.20 Amp Max	current, 0.5 Voltage Drop	949-000-031	949-000-331							
Electronic (LED)	Sinking NPN 6-24 VDC, 0.20 Amp Max	current, 0.5 Voltage Drop	949-000-032	949-000-332							
*Note: Quick disconnect styles are supplied with 6 inch pigtail with male connector. Order female cordsets separately from chart below.											
 Encased in a plastic housing, dovetail style sensors are corrosion resistant. 45° wire outlet allows close mounting. Two methods of mounting are available: one is fastened to the cylinder barrel with a band clamp (not included with sensor – must be ordered separately); the second is an adhesive-backed mounting rail with twin dovetail slots. 											
Mounting Options											
 Band Clamp Adapter for Dovetail Sensors (Must be ordered separately) Part No. 900-300-000 Part No. 900-300-000 Part No. 900-300-000 Corder by Part No. "ER – length" where the length is known, or by "ER – cylinder model no." Example: "ER-F-1062D02-04A-03" Model no. of cylinder allows factory to determine the length needed. (Estimated length for pricing purposes is "stroke + 1") Dovetail Rail as shown above (must be ordered separately). Order by Part No. "ER – length" where the length is known, or by "ER – cylinder model no." Example: "ER-F-1062D02-04A-03" Model no. of cylinder allows factory to determine the length needed. (Estimated length for pricing purposes is "stroke + 1") Dovetail Rail as shown above (must be ordered separately). Order by Part No. "ER – length" where the length is known, or by "ER – cylinder model no." Example: "ER-F-1062D02-04A-03" Model no. of cylinder allows factory to determine the length needed. (Estimated length for pricing purposes is "stroke + 1") Do not apply the rail over the crimped body edge. Double check positioning of the rail. High performance double sided tape offers convenient "peel and stick" but is very aggressive, giving you only one chance. Be careful ! Remove protective film from tape ar place rail in desired position. Firmly press the rail to cylinder body. Alternatively, the extruded aluminum rail 											
Application recommendations: a) Clean cylinder body O.D. with acetone. Remove all oil from surface. can be fastened using Loctite® U-05FL urethane adhesive or similar. Follow product manufacturer's recommendations for application. Clamp on Style Sensors Prewired 9 ft. Leadwire Quick Disconnect*											
			Prewired 9 II. LeadW	re Quick Disconnect*							
Sensor Type	Electrical Characteristics		Part No.	Part No.							
Reed (LED)			Part No.								
Reed (LED) Electronic (LED)	Electrical Characteristics	Max, SPST N.O. 3.5 voltage drop 1.0 voltage drop	Part No.	Part No.							



Cordset Length

1 Meter

2 Meters 5 Meters



Prewired style sensors are supplied with a 9 foot leadwire.

> *Quick disconnect style sensors are supplied with male connector as shown in this photo. Order female cordsets separately from the chart below.



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ORDES

Part No.

CFC-1M CFC-2M

CFC-5M





F Series

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J RADIUS

K

G

Mounting Accessories

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В

I THRU +.002/-.000

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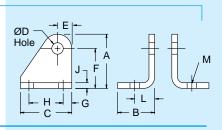
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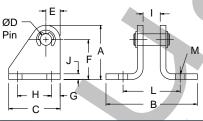
Nose Mounting Brackets

Α	B	C	D	E	F	G	H		J	K	Part #	
1.00	.38	.063	.25	.38	.14	.13	.438	.251	.31	.75	F-M117001	
1.00	.38	.063	.25	.38	.14	.13	.438	.376	.31	.75	F-M117002	
1.38	.50	.094	.38	.69	.20	.13	.563	.438	.38	.83	F-M117003	
1.38	.50	.063	.31	.63	.20	.13	.563	.376	.31	.88	F-M117004	
1.88	.75	.125	.56	1.00	.26	.25	.813	.626	.56	1.38	F-M117005	
1.63	.63	.094	.44	.75	.20	.19	.688	.501	.41	1.09	F-M117006	
2.50	.94	.125	.75	1.50	.28	.63	1.000	.751	.75	1.75	F-M117007	
3.00	1.13	.188	.88	1.50	.34	.75	1.250	1.032	.91	2.13	F-M117008	
3.13	1.13	.250	1.00	1.63	.34	.63	1.500	1.376	1.00	2.50	F-M117009	
3.75	1.44	.250	1.00	1.63	.34	.75	1.750	1.501	1.25	3.00	F-M117010	
4.38	1.75	.250	1.00	1.63	.34	.89	1.890	1.626	1.25	3.14	F-M117011	
2.75	1.06	.188	.81	1.44	.34	.38	1.250	1.126	.91	2.19	F-M117012	
2.13	.78	.157	.66	1.16	.28	.32	1.000	.876	.75	1.75	F-M117013	
												-

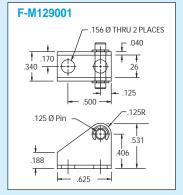
Pivot Mounting Brackets

Α	В	С	D	E	F	G	Н	J	L	M	Part #	
.77	.50	.75	.157	.20	.56	.13	.50	.063	.28	.20	F-M029002	
1.19	.81	1.13	.250	.31	.88	.19	.75	.125	.44	.26	F-M029003	
1.75	1.00	1.50	.375	.38	1.38	.25	1.00	.125	.63	.26	F-M029004	
1.75	1.13	1.50	.500	.38	1.38	.25	1.00	.250	.69	.26	F-M029006	





Α	В	С	D	E	F	G	H		J	L	М	Part #	
.77	1.34	.75	.157	.20	.56	.13	.50	.34	.063	.90	.20	F-M129002	
1.19	2.00	1.13	.250	.31	.88	.19	.75	.38	.125	1.25	.26	F-M129003	
1.75	2.88	1.50	.375	.38	1.38	.25	1.00	.63	.250	2.00	.26	F-M129005	Í
1.19	2.12	1.13	.250	.31	.88	.19	.75	.50	.125	1.38	.26	F-M229003	
1.75	3.00	1.50	.375	.38	1.38	.25	1.00	.75	.250	2.13	.26	F-M229005	Í
2.25	3.88	1.75	.500	.50	1.75	.25	1.25	.88	.250	2.63	.26	F-M229006	



Rod Clevises

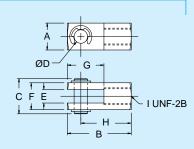
Α		В	С	D	E	F	G	Н		Part #	
.3	1	.56	.53	.125	.13	.31	.38	.44	#5-40	F-M127001	
.38	8	.94	.56	.188	.19	.38	.56	.75	#10-32	F-M127002	
.50	0	1.19	.68	.250	.25	.50	.68	.94	1/4-28	F-M127003	
.50	0	1.19	.68	.250	.25	.50	.68	.94	5/16-24	F-M127004	
.7	5	1.69	1.03	.375	.38	.75	.94	1.31	7/16-20	F-M127005	
.7	5	1.69	1.03	.375	.38	.75	.94	1.31	1/2-20	F-M127006	
1.00	0	2.75	1.28	.500	.50	1.00	1.50	2.25	5/8-18	F-M127007	

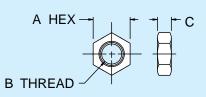
Mounting Nuts & Rod Thread Nuts

Part #	A	В	С	
F-M18-004	.500	5/16-24	.19	
F-M190001	.438	1/4-28	.16	
F-M190002	.562	3/8-24	.22	
F-M190003	.687	7/16-20	.25	
F-M190004		1/2-20	.31	
F-M190005	.938	5/8-18	.38	
F-M190006	1.125	3/4-16	.42	
F-M190007	1.312	7/8-14	.48	

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Part #	Α	В	С
F-M190008	1.500	1-14	.55
F-M190009	1.875	1 1/4-12	.50
F-M190012	2.062	1 3/8-12	.50
F-M190013	2.250	1 1/2-12	.50
F-M190015	1.688	1 1/8-12	.61
F-M19S005	.938	5/8-18	.38
F-M19S006	1.500	1-14	.55





1-18-03

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