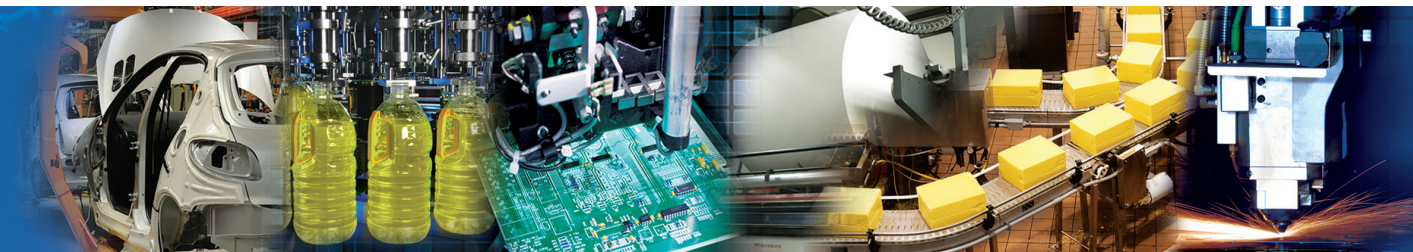


numatics®

M Series

Round Line, Non-Repairable Cylinder Line



www.numatics.com

M Series

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The **M Series** is a stainless steel body air cylinder line that is the perfect solution for tight design budgets. This cylinder is reliable and is designed and built to maximize performance. It will exceed all of your light-duty cylinder application requirements. The M Series comes standard with a multitude of value-added features such as stainless steel piston rods, roll-formed threads at both ends of the piston rod, and pre-lubed for non-lube added service. Furthermore, Numatics has the design capabilities to customize a product for your specific application. These are just a sample of things that make the M Series the Superior Interchangeable round body air cylinder line.

Piston Rod

The type 303 stainless steel piston rod is ground, polished, and roller burnished for a mirror finish to ensure corrosion-free longevity.

Rod Thread

Roll-formed rod threads (at both ends) ensure a durable customer-end connection as well as piston to rod connection.

Rod Bushing

Oil impregnated sintered bronze rod bushing provides excellent wear resistance and anti-friction qualities for smooth operation and long life.

End Caps

The end caps are made from a high strength aluminum alloy.

Ports

Unrestricted (full-flow) **ports** in conjunction with **rectangular slots** on the piston-mating surface (at both ends) enable the air to work on a larger piston area for effortless breakaway (even at low pressures).

Tube

The type 304 stainless steel tube, drawn and polished to a micro-inch finish on the I.D., enables low friction and longevity.

Crimp

The cylinder body is attached to the end caps using innovative assembly equipment that ensures a consistent and reliable double rolled-in crimp.

Piston

High strength aluminum alloy piston with blow-by flats (double acting only) ensure proper and rapid seal inflation. Piston rod connections are threaded (roll-formed threads), sealed with Loctite Threadlocker®, torqued, and staked for a solid, leak-proof connection.

Piston Seals

Low friction Buna N “U” cup **piston seals** (optional low and high temperature seals) are wear compensating for millions of maintenance free cycles.

Magnet

Magnetic band position indication is optional in 9/16” – 3” bore sizes. The **magnet** does not affect the overall length of the cylinder 3/4” – 3” bore sizes (double acting only) but does add .250” to the overall length of the 9/16” bore cylinders.

Rod Seal

The low friction Buna N “U” cup **rod seal** (optional low and high temperature seals) is wear compensating to ensure longevity.

Pre-Lubricated

Pre-lubricated with our specially formulated oil based compound for extensive maintenance free performance.

Threadlocker® is a registered trademark to the Loctite Corporation.



Standard Specifications:

- 303 stainless steel piston rods are standard
- 304 stainless steel cylinder tube
- Aluminum head and caps
- Maximum pressure rating is 250 psi air
- Twelve bore sizes – 5/16” – 3”
- Standard temperature -10°F to +165°F
- Single and double acting
- Double rods

Optional Specifications:

- Magnetic pistons
- Adjustable cushions
- Corrosion resistant end caps
- Double rods
- High and low temperature seals
- Rod wipers

Standard M Series Mounts

Single Acting

Single Acting Spring Return Nose Mount (S01)



Single Acting Spring Return Rear Pivot Mount (S02)



Single Acting Spring Extend Nose Mount (R01)



Single Acting Spring Extend Rear Pivot Mount (R02)



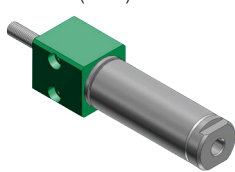
Single Acting Spring Return Non-Rotating Nose Mount (N01)



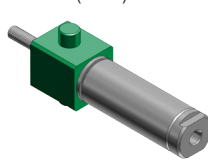
Single Acting Spring Return Non-Rotating Rear Pivot Mount (N02)



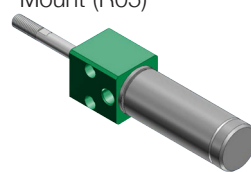
Single Acting Spring Return Front Block Mount (S05)



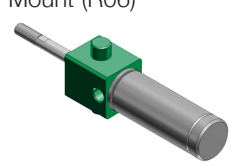
Single Acting Spring Return Trunnion Mount (S06)



Single Acting Spring Extend Front Block Mount (R05)



Single Acting Spring Extend Trunnion Mount (R06)



Double Acting

Double Acting Nose Mount (D01)



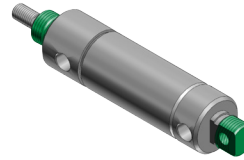
Double Acting Rear Pivot Mount (D02)



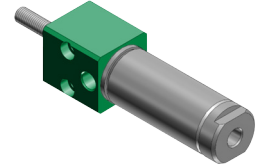
Double Acting Through Rod Mount (D03)



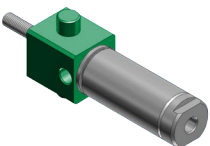
Double Acting Double Nose Mount (D04)



Double Acting Front Block Mount (D05)



Double Acting Trunnion Mount (D06)



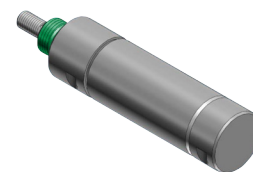
Interchange Option for the 1 1/16" Bore Double Acting Through Rod (D13)



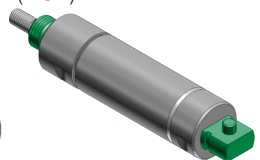
Double Acting Through Rod Hollow Rod Mount (DH3)



Double Acting Adjustable Cushion Nose Mount (DG1)



Double Acting Adjustable Cushion Rear Pivot Mount (DG2)



Double Acting Corrosion Resistant Nose Mount (DC1)



Double Acting Corrosion Resistant Rear Pivot Mount (DC2)



Double Acting Corrosion Resistant Through Rod Mount (DC3)



Double Acting Nose Mount, 2" Bore, 1" Rod (DL1)

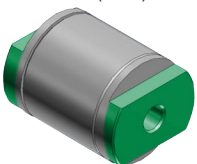


Double Acting Rear Pivot Mount, 2" Bore, 1" Rod (DL2)

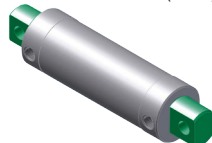


Volume Chambers

Nose Mount Volume Chamber (V01)



Rear Pivot Mount Volume Chamber (V02)



*For a complete offering a dimensional drawings by mounting type, see the comprehensive M Series catalog PDF via the following path: www.numatics.com

How to Order

Base Models

1500 D01 - 02 A - 01 - 1A01A

Bore Size

- 0313 = 5/16"
- 0438 = 7/16"
- 0563 = 9/16"
- 0750 = 3/4"
- 0875 = 7/8"
- 1062 = 1-1/16"
- 1250 = 1-1/4"
- 1500 = 1-1/2"
- 1750 = 1-3/4"
- 2000 = 2"
- 2500 = 2-1/2"
- 3000 = 3"

Mounting Style

- S01 = Single Acting Spring Return Nose Mount
- S02 = Single Acting Spring Return Rear Pivot
- R01 = Single Acting Spring Extend Nose Mount
- R02 = Single Acting Spring Extend Rear Pivot
- N01 = Single Acting Spring Return Non-Rotating Nose Mount
- N02 = Single Acting Spring Return Non-Rotating Rear Pivot
- D01 = Double Acting Nose Mount
- D02 = Double Acting Rear Pivot
- D03 = Double Acting Through Rod
- D04 = Double Acting Double Nose
- D05 = Double Acting Front Block
- D13 = Interchange Option for 1-1/16" Bore Double Acting, Through Rod
- DH3 = Double Acting Through Rod Hollow Rod
- D06 = Double Acting Trunnion Mount
- DG1 = Double Acting Adjustable Cushion Nose Mount
- DG2 = Double Acting Adjustable Cushion Rear Pivot
- DL1 = Double Acting Nose Mount 2" Bore, 1" Rod
- DL2 = Double Acting Rear Pivot 2" Bore, 1" Rod
- DC1 = Double Acting Corrosion Resistant Nose Mount
- DC2 = Double Acting Corrosion Resistant Rear Pivot
- DC3 = Double Acting Corrosion Resistant Through Rod
- V01 = Nose Mount Volume Chamber
- V02 = Rear Pivot Mount Volume Chamber
- DM1 = Nose Mount MRS Interchange
- DM2 = Rear Pivot Mount MRS Interchange

Rod and/or Thread Extension

Note: Leave blank if rod and/or thread extension is not required.

- 1A = Rod Extension (must specify extension)
Example: 1A 01A (full and fractional length)
- 2A = Thread Extension (must specify extension)
Example: 2A 01A (full and fractional length)
- RT = Rod and Thread Extension (must specify extension)
Example: RT 01A01A (full and fractional length)

Note: When applying the RT option, rod extension length must be specified first and the thread extension length must be specified last. Also, consult factory for double-rod cylinders.

Options

- 00 = No Options (or leave blank)
- 01 = Bumpers*
- 02 = FKM Seals
- 03 = Magnet**
- 04 = Bumpers with Magnet* (See notes below for details.)
- 05 = Pivot Bushing***
- 06 = Pivot Bushing with Bumpers* (See notes below for details.)
- 07 = Pivot Bushing with FKM Seals
- 08 = Pivot Bushing with Magnet* (See notes below for details.)
- 09 = Pivot Bushing with Bumper and Magnet* (See notes below for details.)

See next page for a comprehensive list of options.

* Bumpers available on 9/16" through 3" Bore Cylinders. See specific drawing/section and/or length adder charts for length adder information. (N/A on DG1 and DG2 types).

** Magnet available on 9/16" Bore. See specific drawing/section and/or length adder charts for length adder information.

*** Pivot Bushing standard on 5/16", 9/16", 2", 2-21/2", and 3" bore sizes. Optional on all other Rear Pivot cylinders.

Fractional Inch Stroke

- A = 0" Stroke
- B = 1/16" Stroke
- C = 1/8" Stroke
- D = 3/16" Stroke
- E = 1/4" Stroke
- F = 5/16" Stroke
- G = 3/8" Stroke
- H = 7/16" Stroke
- I = 1/2" Stroke
- J = 9/16" Stroke
- K = 5/8" Stroke
- L = 11/16" Stroke
- M = 3/4" Stroke
- N = 13/16" Stroke
- O = 7/8" Stroke
- P = 15/16" Stroke

Full Inch Stroke

- 00 = 0" Stroke
- 01 = 1" Stroke
- 02 = 2" Stroke
- 03 = 3" Stroke
- 32 = 32" Stroke (maximum)

See specific cylinder drawing/section at www.Numatics.com for maximum stroke

How to Order

Standard M Series Options

Standard M Series Options

- 01 = Bumpers
- 02 = FKM Seals
- 03 = Magnet
- 04 = Bumpers with Magnet
- 05 = Pivot Bushing
- 06 = Pivot Bushing with Bumpers
- 07 = Pivot Bushing with FKM Seals
- 08 = Pivot Bushing with Magnet
- 09 = Pivot Bushing with Bumper and Magnet
- 20 = Port Rotated with No Options
- 30 = Rod Wiper with No Options
- 31 = Rod Wiper with Bumpers
- 32* = Rod Wiper with FKM Seals
- 33 = Rod Wiper with Magnet
- 34 = Rod Wiper with Bumpers and Magnet
- 35 = Rod Wiper with Pivot Bushing
- 36 = Rod Wiper with Bumpers and Pivot Bushing
- 37 = Rod Wiper with FKM Seals and Pivot Bushing
- 38 = Rod Wiper with Magnet and Pivot Bushing
- 39 = Rod Wiper with Bumpers, Magnet and Pivot Bushing
- 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 = PolyPak Piston and Rod Seal

Available with these mounting styles:
D02, S02, R02, N02, DG2

Rod Wiper option available
on 3/4" Bore and Up.
Not available with these mount
styles: S01, S02, N01, N02

Low Temperature Seals option
available on 7/16" Bore and Up.

3/4" Bore and Up

Visit www.Numatics.com
for bore size availability

* The rod wiper is Urethane except for 3/4", 1-1/16", 2"

Additional M Series Options

- 21 = Bumpers with Ports Rotated
- 22 = FKM Seals with Ports Rotated
- 23 = Magnet with Ports Rotated
- 24 = Bumpers with Magnet and Ports Rotated
- 25 = Pivot Bushing with Ports Rotated
- 26 = Bumpers with Pivot Bushing and Ports Rotated
- 28 = Magnet with Pivot Bushing and Ports Rotated
- 29 = Bumpers and Magnet with Pivot Bushing and Ports Rotated
- 40 = Ports Rotated with Wiper
- 45 = Pivot Bushing with Ports Rotated and Wiper
- 50 = Side Port
- 51 = Bumpers and Side Port
- 52 = FKM Seals and Side Port
- 53 = Magnet and Side Port
- 54 = Bumpers with Magnet and Side Port

Note: Please contact factory or your sales rep for compatibility on these additional options.

How To Order – Examples

0438S01-01A

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

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

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

2000DG2-20H-03-RT02A011

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

Length Adders

01 Option (Bumpers)

Bore	Single Acting S01, S02, R01, R02 N01, N02	Double Acting D01, D02	Corrosion Resistant DC1, DC2	Double Acting D03
0.313	N/A	N/A	N/A	N/A
0.438	N/A	N/A	N/A	N/A
0.563	0.062	0.125	N/A	0.125
0.750	0.125	No Adder	0.281	0.25
0.875	No Adder	No Adder	N/A	0.25
1.062	0.125	0.125	0.375	0.25
1.250	No Adder	No Adder	N/A	0.25
1.500	No Adder	0.125	0.375	0.25
1.750	No Adder	No Adder	N/A	0.25
2.000	No Adder	0.250	N/A	0.25
2.500	N/A	0.062	N/A	N/A
3.000	N/A	0.062	N/A	N/A

03 Option (Magnet)

Bore	Single Acting S01, S02, R01, R02 N01, N02	Double Acting D01, D02, D03	Corrosion Resistant DC1, DC2
0.313	N/A	N/A	N/A
0.438	N/A	N/A	N/A
0.563	0.531	0.250	N/A
0.750	0.688	No Adder	0.281
0.875	0.531	No Adder	N/A
1.062	0.562	No Adder	0.250
1.250	0.531	No Adder	N/A
1.500	0.437 (R01 = 0.500)	No Adder	0.250
1.750	0.656	No Adder	N/A
2.000	0.461 (R01 & R02 = 0.714)	No Adder	N/A
2.500	N/A	No Adder	N/A
3.000	N/A	No Adder	N/A

04 Option (Bumper and Magnet)

Bore	Single Acting S01, S02, R01, R02 N01, N02	Double Acting D01, D02	Corrosion Resistant DC1, DC2	Double Acting D03
0.313	N/A	N/A	N/A	N/A
0.438	N/A	N/A	N/A	N/A
0.563	0.713	0.375	N/A	0.375
0.750	0.890	0.125	0.406	0.25
0.875	0.733	0.125	N/A	0.25
1.062	0.765 (R01 = 0.687)	0.125	0.375	0.25
1.250	0.734	0.125	N/A	0.25
1.500	0.765 (R01 = 0.827, N01 = 0.750)	0.250	0.500	0.25
1.750	0.735	0.000	N/A	0.25
2.000	0.789	0.250	N/A	0.25
2.500	N/A	0.062	N/A	N/A
3.000	N/A	0.062	N/A	N/A

Nose Torque Specs

D01 Mount (Aluminum Nose Thread)		
Bore	Torque (In-Lbs)	Torque (Ft-Lbs)
5/16	60.0	5.0
7/16	84.0	7.0
9/16	84.0	7.0
3/4	336.0	28.0
7/8	336.0	28.0
1-1/16	336.0	28.0
1-1/4	480.0	40.0
1-1/2	480.0	40.0
1-3/4	1200.0	100.0
2	1440.0	120.0
2-1/2	1560.0	130.0
3	1680.0	140.0

DC1 Mount (Delrin Nose Thread)		
Bore	Torque (In-Lbs)	Torque (Ft-Lbs)
3/4	12.0	1.0
1-1/16	12.0	1.0
1-1/2	30.0	2.5

5/16" Bore Cylinder

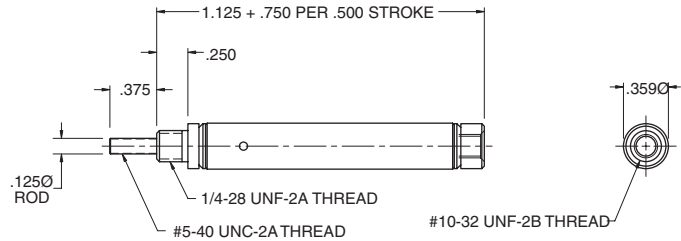
Single Acting Spring Return – **0313S01-00A**
Front Nose Mount

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

Maximum Stroke: 4"

Base Weight: .03 lbs., plus .02 lbs. per inch of stroke

- *Optional Accessories:
- M117001 Mounting Bracket
 - M127001 Rod Clevis



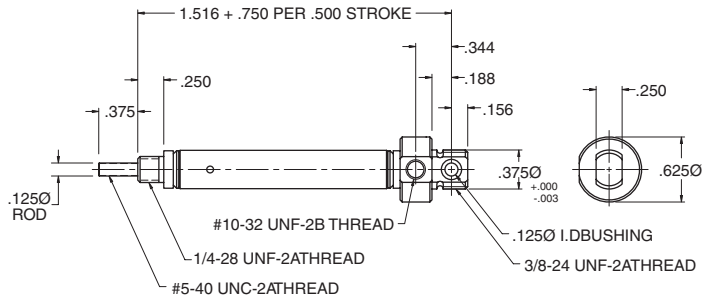
Single Acting Spring Return – **0313S02-00A**
Double Nose or Rear Pivot Mount

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

Maximum Stroke: 4"

Base Weight: .04 lbs., plus .02 lbs. per inch of stroke

- *Optional Accessories:
- M117001 Mounting Bracket (with front nose mount)
 - M117002 Mounting Bracket (with rear nose mount)
 - M129001 Pivot Bracket
 - M127002 Rod Clevis



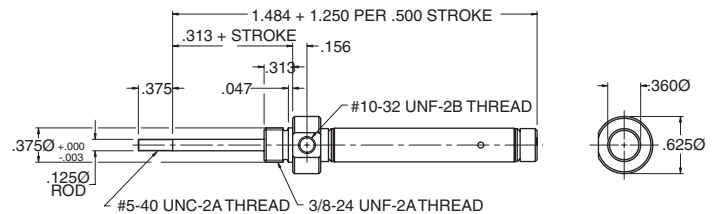
Single Acting Spring Extend – **0313R01-00A**
Front Nose Mount

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

Maximum Stroke: 4"

Base Weight: .05 lbs., plus .03 lbs. per inch of stroke

- *Optional Accessories:
- M117002 Mounting Bracket
 - M127001 Rod Clevis



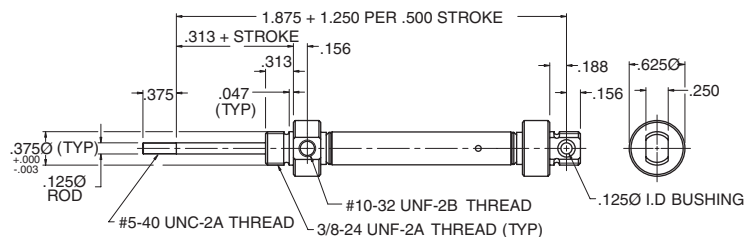
Single Acting Spring Extend – **0313R02-00A**
Double Nose or Rear Pivot Mount

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

Maximum Stroke: 4"

Base Weight: .05 lbs., plus .03 lbs. per inch of stroke

- *Optional Accessories:
- M117002 Mounting Bracket
 - M129001 Pivot Bracket
 - M127001 Rod Clevis



5/16" Bore Cylinder

Double Acting – **0313D01-00A**

Front Nose Mount

Standard- Stroke Lengths:

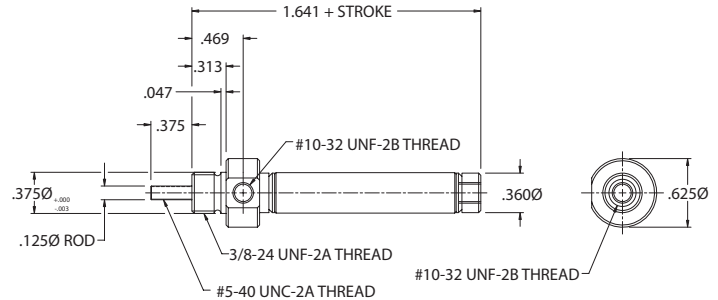
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: .05 lbs., plus .01 lbs. per inch of stroke

*Optional Accessories:

- M117002 Mounting Bracket
- M127001 Rod Clevis



Double Acting – **0313D02-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

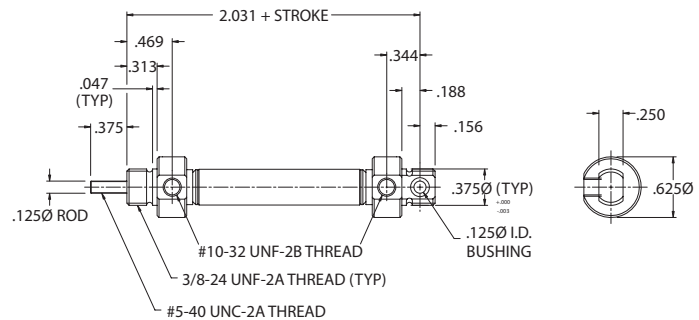
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: .06 lbs., plus .01 lbs. per inch of stroke

*Optional Accessories:

- M117002 Mounting Bracket
- M129001 Pivot Bracket
- M127001 Rod Clevis

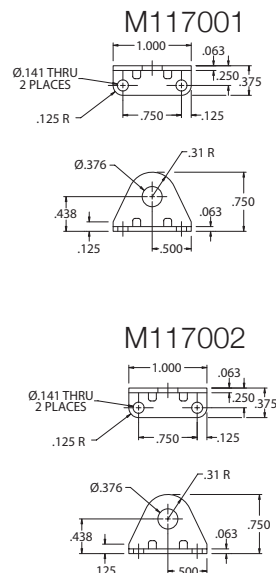


5/16" Bore Cylinder Specifications

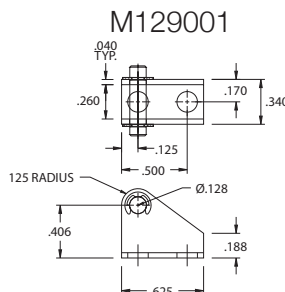
- $(0.07) \times (\text{Air Line Pressure}) = \text{Approximate Force Exerted}$
- Enclosed spring force: .5 lbs. retracted, 1 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.

5/16" Bore Accessories

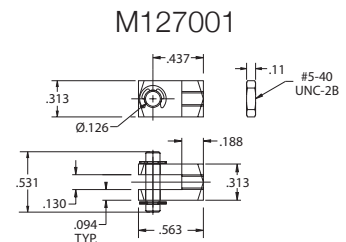
Nose Mounting Brackets



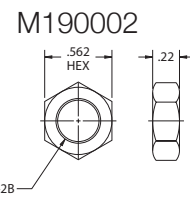
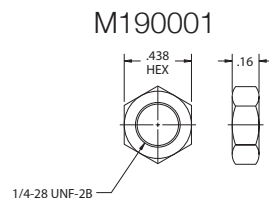
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



7/16" Bore Cylinder

Single Acting Spring Return – **0438S01-00A**

Front Nose Mount

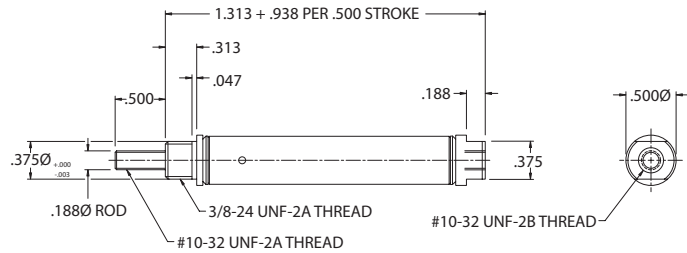
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .04 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M117004 Mounting Bracket
- M127002 Rod Clevis



Single Acting Spring Return – **0438S02-00A**

Rear Pivot Mount

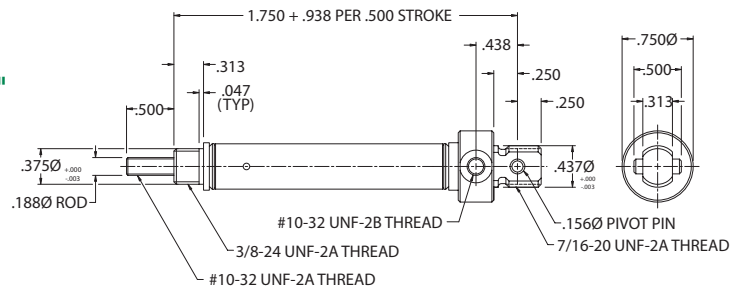
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .04 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127002 Rod Clevis



Single Acting Spring Extend – **0438R01-00A**

Front Nose Mount

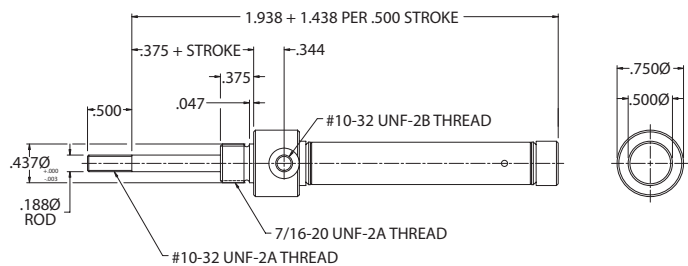
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3"**

Maximum Stroke: 6"

Base Weight: .08 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



Single Acting Spring Extend – **0438R02-00A**

Rear Pivot Mount

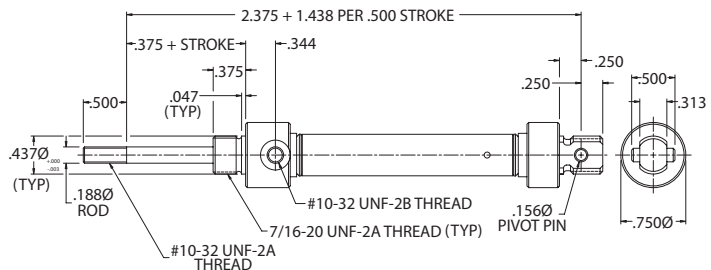
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3"**

Maximum Stroke: 6"

Base Weight: .08 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127002 Rod Clevis



7/16" Bore Cylinder

Double Acting – **0438D01-00A**

Front Nose Mount

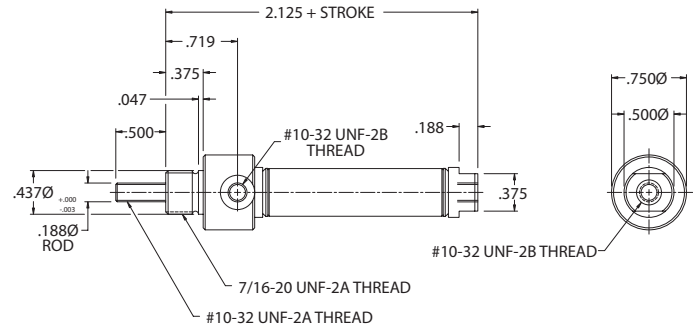
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 12"

Base Weight: .07 lbs., plus .02 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



Double Acting – **0438D02-00A**

Rear Pivot Mount

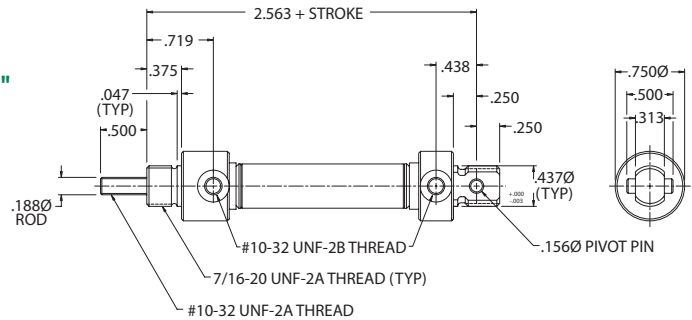
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 12"

Base Weight: .08 lbs., plus .02 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127002 Rod Clevis



Double Acting Through Rod

Double Nose Mount – **0438D03-00A**

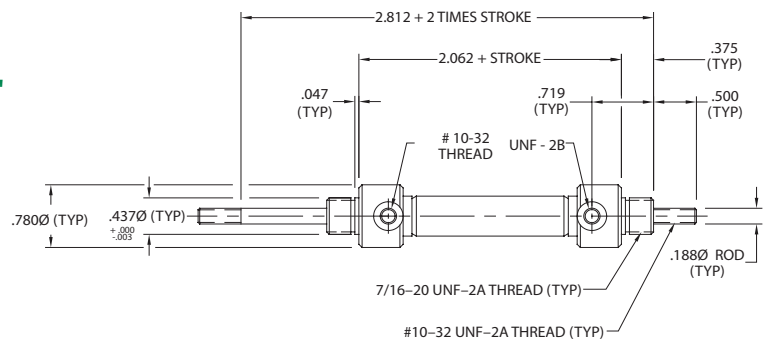
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 12"

Base Weight: .16 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117003 Nose Mount Bracket
- M127002 Rod Clevis
- M190003 Mounting Nut
- M190011 Rod Nut



Single Acting Spring Return – **0438N01-00A**

Front Nose Mount **Non-Rotating**

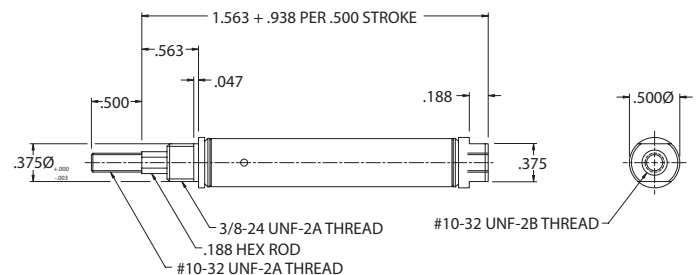
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .04 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M117004 Mounting Bracket
- M127002 Rod Clevis



Single Acting Spring Return – **0438N02-00A**

Rear Pivot Mount **Non-Rotating**

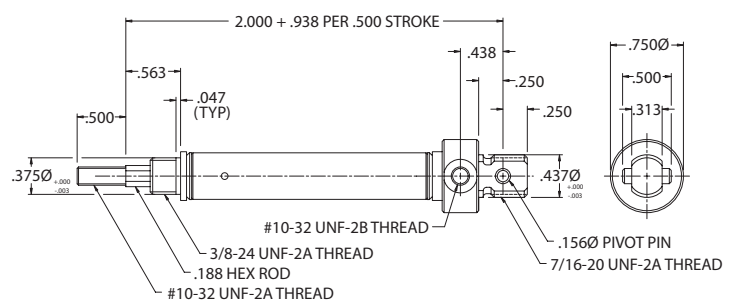
Standard Stroke Lengths: **1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .04 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127002 Rod Clevis

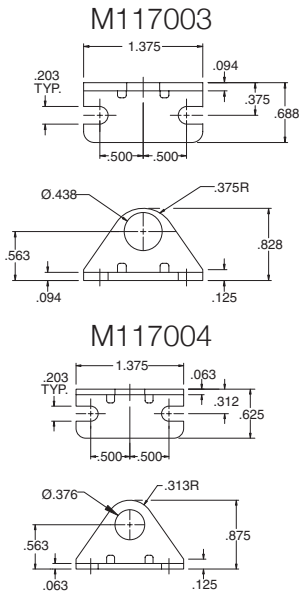


7/16" Bore Cylinder Specifications

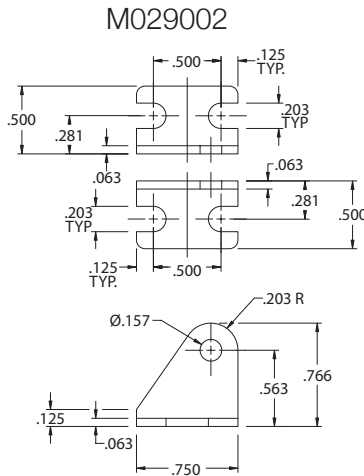
- $(0.15) \times (\text{Air Line Pressure}) = \text{Approximate Force Extended}$
- Enclosed spring force: 1 lbs. retracted, 2 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.

7/16" Bore Accessories

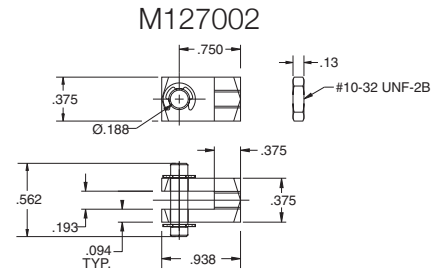
Nose Mounting Brackets



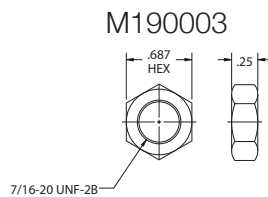
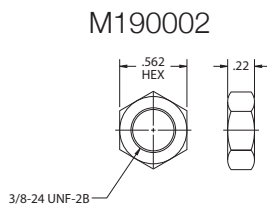
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



9/16" Bore Cylinder

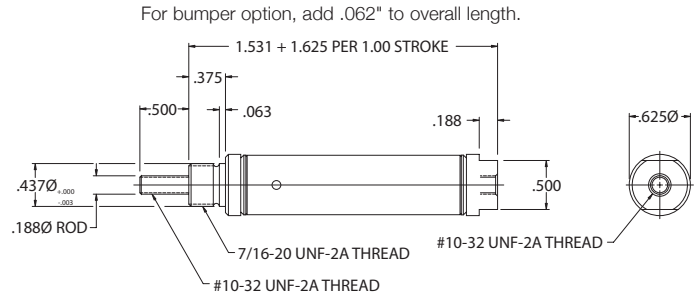
Single Acting Spring Return – **0563S01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .06 lbs., plus .05 lbs. per inch of stroke

- *Optional Accessories:
- M117003 Mounting Bracket
 - M127002 Rod Clevis



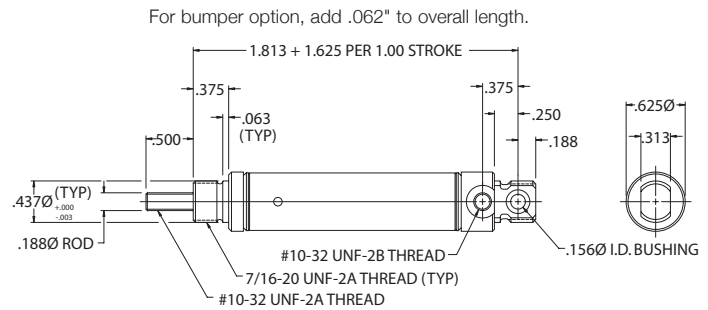
Single Acting Spring Return – **0563S02-00A**
Double Nose or Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .06 lbs., plus .05 lbs. per inch of stroke

- *Optional Accessories:
- M117003 Mounting Bracket
 - M129002 Pivot Bracket
 - M127002 Rod Clevis



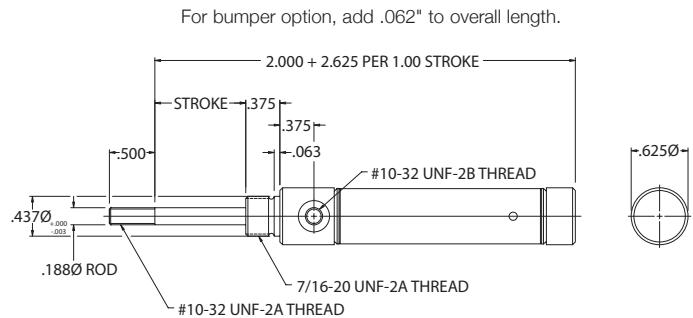
Single Acting Spring Extend – **0563R01-00A**
Front Nose Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3"

Maximum Stroke: 6"

Base Weight: .08 lbs., plus .04 lbs. per inch of stroke

- *Optional Accessories:
- M117003 Mounting Bracket
 - M127002 Rod Clevis



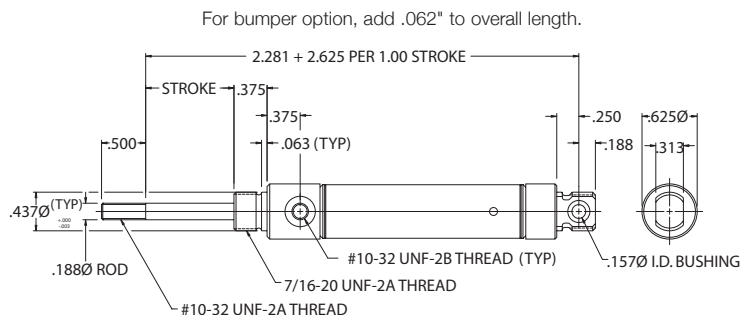
Single Acting Spring Extend – **0563R02-00A**
Double Nose or Rear Pivot Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3"

Maximum Stroke: 6"

Base Weight: .08 lbs., plus .04 lbs. per inch of stroke

- *Optional Accessories:
- M117003 Mounting Bracket
 - M129002 Pivot Bracket
 - M127002 Rod Clevis



9/16" Bore Cylinder

Double Acting – **0563D01-00A**

Front Nose Mount

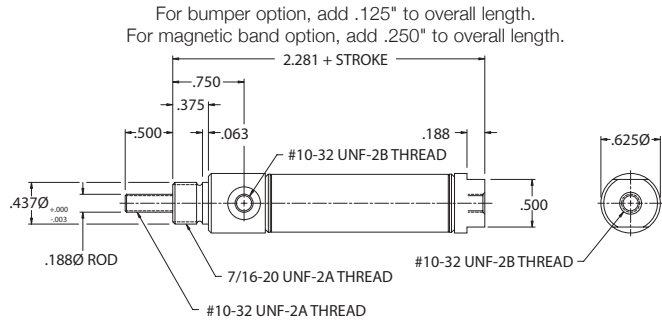
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 12"

Base Weight: .09 lbs., plus .02 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



Double Acting – **0563D02-00A**

Double Nose or Rear Pivot Mount

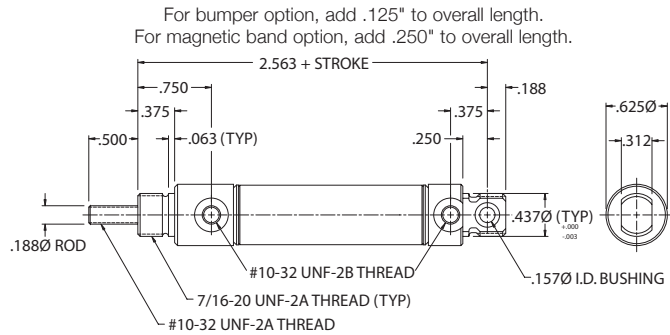
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 12"

Base Weight: .09 lbs., plus .02 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M129002 Pivot Bracket
- M127002 Rod Clevis



Double Acting Through Rod Double Nose Mount – **0563D03-00A**

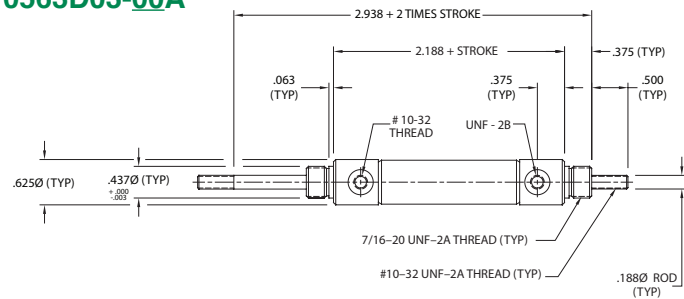
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 24"

Base Weight: .16 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127002 Rod Clevis
- M117003 Nose Mount Bracket
- M190003 Mounting Nut
- M190001 Rod Nut



Single Acting Spring Return – **0563N01-00A**

Front Nose Mount **Non-Rotating**

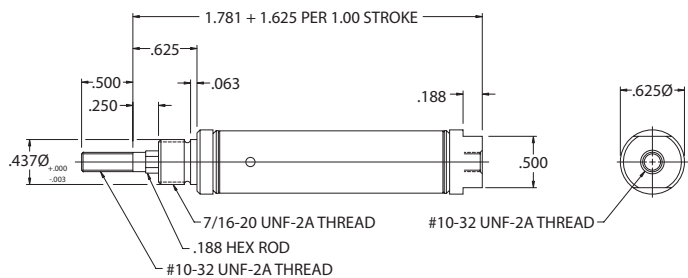
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .06 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



Single Acting Spring Return – **0563N02-00A**

Rear Pivot Mount **Non-Rotating**

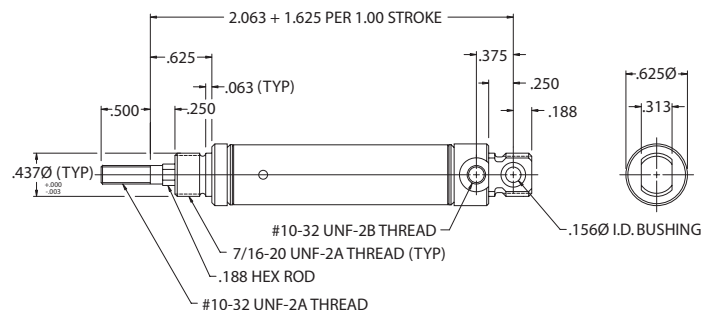
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .06 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M129002 Pivot Bracket
- M127002 Rod Clevis



9/16" Bore Cylinder

Double Acting – 0563D03-00A Through Rod

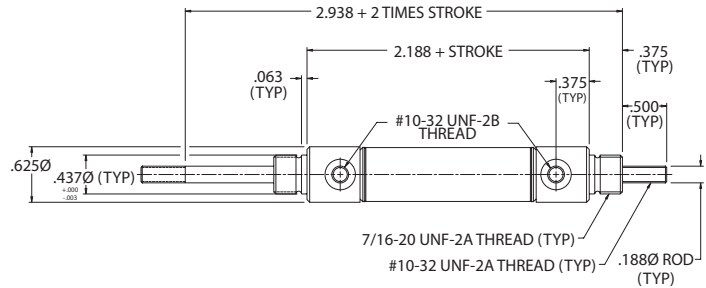
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .16 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



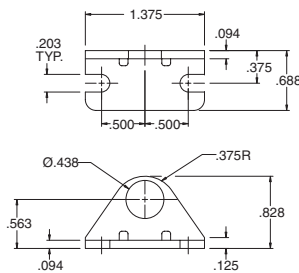
9/16" Bore Cylinder Specifications

- $(0.25) \times (\text{Air Line Pressure}) = \text{Approximate Force Extended}$
- Enclosed spring force: 2 lbs. retracted, 4 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 9/16" bore cylinders (except in combination with FKM option).
- Bumper option on single acting cylinders adds .062" to overall length.
- Bumper option on double acting cylinders adds .125" to overall length.
- Magnetic band option on 9/16" bore double acting cylinders adds .250" to overall length.

9/16" Bore Accessories

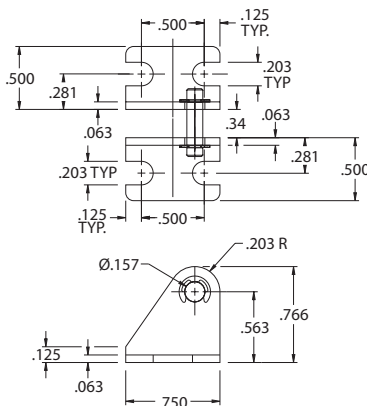
Nose Mounting Bracket

M117003



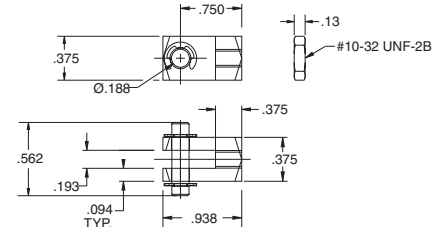
Pivot Mount Bracket

M129002



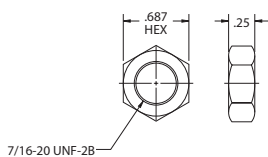
Rod Clevis

M127002



Mounting Nuts

M190003



3/4" Bore Cylinder

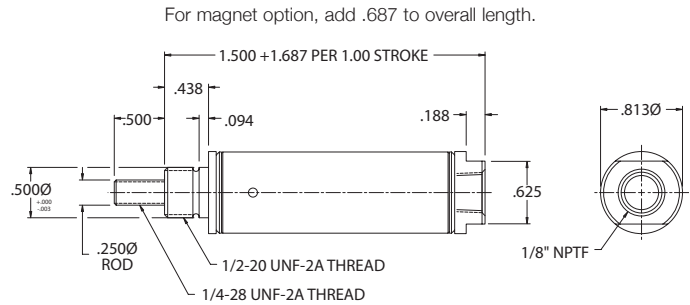
Single Acting Spring Return – **0750S01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .10 lbs., plus .08 lbs. per inch of stroke

- *Optional Accessories:
- M117006 Mounting Bracket
 - M127003 Rod Clevis



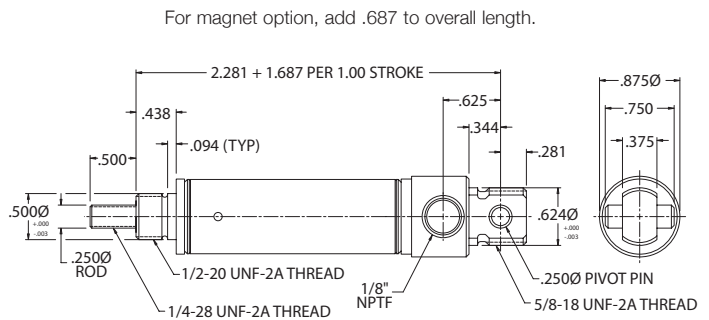
Single Acting Spring Return – **0750S02-00A**
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .13 lbs., plus .08 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis



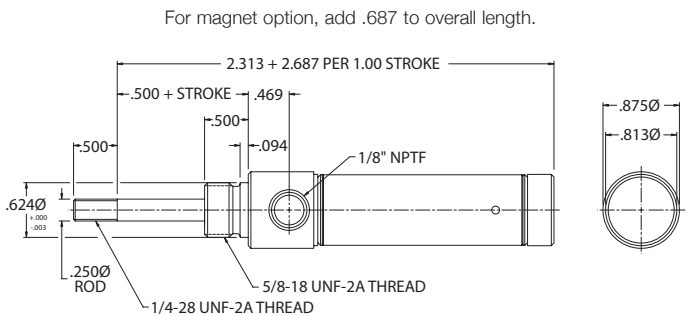
Single Acting Spring Extend – **0750R01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .18 lbs., plus .07 lbs. per inch of stroke

- *Optional Accessories:
- M117005 Mounting Bracket
 - M127003 Rod Clevis



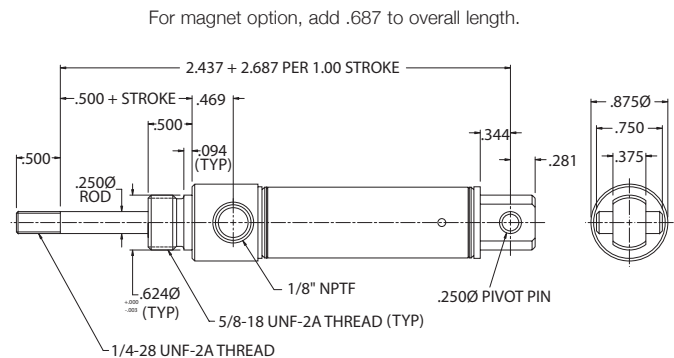
Single Acting Spring Extend – **0750R02-00A**
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .18 lbs., plus .07 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis



3/4" Bore Cylinder

Double Acting – **0750D01-00A**

Front Nose Mount

Standard Stroke Lengths:

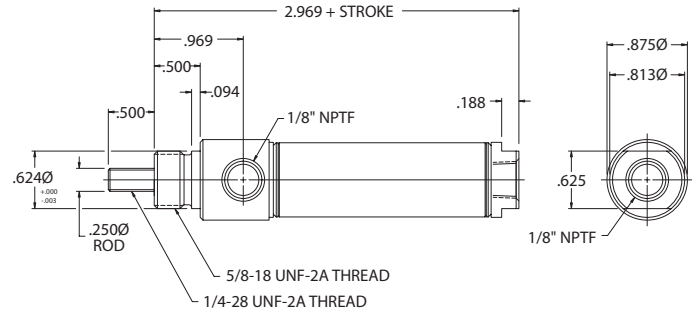
1/2", 1", 1-1/2" 2", 2-1/2", 3", **4", 5", 6"**

Maximum Stroke: 12"

Base Weight: .21 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



Double Acting – **0750D02-00A**

Rear Pivot Mount

Standard Stroke Lengths:

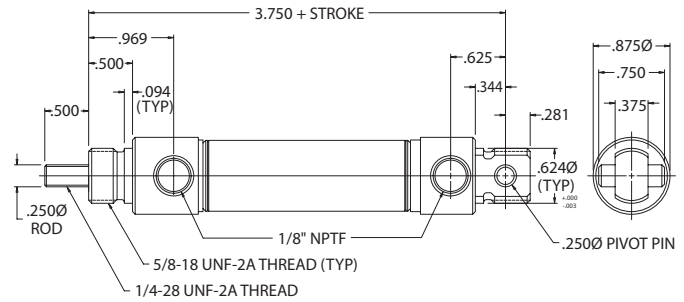
1/2", 1", 1-1/2" 2", 2-1/2", **3", 4", 5", 6", 7", 8", 9" 10", 11", 12"**

Maximum Stroke: 32"

Base Weight: .21 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis



Double Acting – **0750D04-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

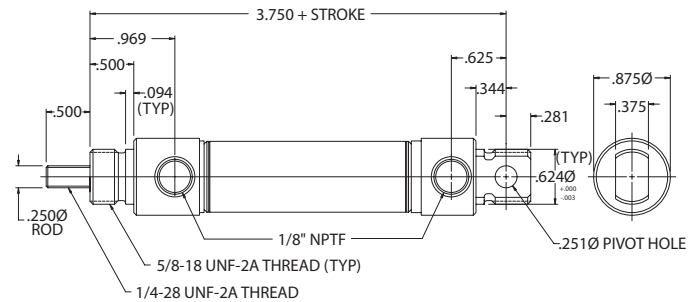
1/2", 1", 1-1/2" 2", 2-1/2", 3", **4", 5", 6", 7", 8", 9", 10", 11", 12"**

Maximum Stroke: 32"

Base Weight: .29 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M129003 Pivot Bracket
- M127003 Rod Clevis



Single Acting Spring Return – **0750N01-00A**

Front Nose Mount **Non-Rotating**

Standard Stroke Lengths:

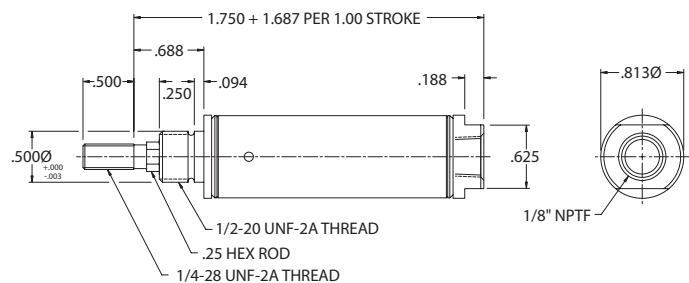
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .10 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M117006 Mounting Bracket
- M127003 Rod Clevis



3/4" Bore Cylinder

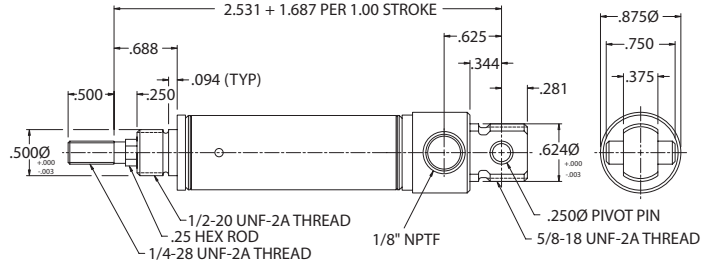
Single Acting Spring Return – **0750N02-00A**
Rear Pivot Mount **Non-Rotating**

Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, 4"

Maximum Stroke: 6"

Base Weight: .12 lbs., plus .08 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis



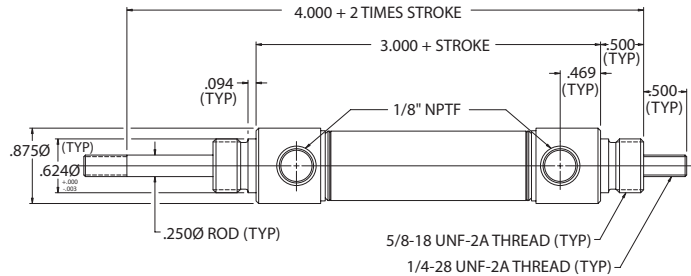
Double Acting – **0750D03-00A**
Through Rod

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

Maximum Stroke: 12"

Base Weight: .37 lbs., plus .04 lbs. per inch of stroke

- *Optional Accessories:
- M117005 Mounting Bracket
 - M127003 Rod Clevis



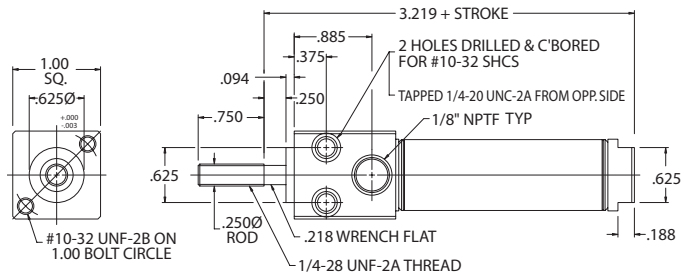
Double Acting – **0750D05-00A**
Front Block Mount

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

Maximum Stroke: 12"

Base Weight: .22 lbs., plus .03 lbs. per inch of stroke

- *Optional Accessories:
- M127003 Rod Clevis



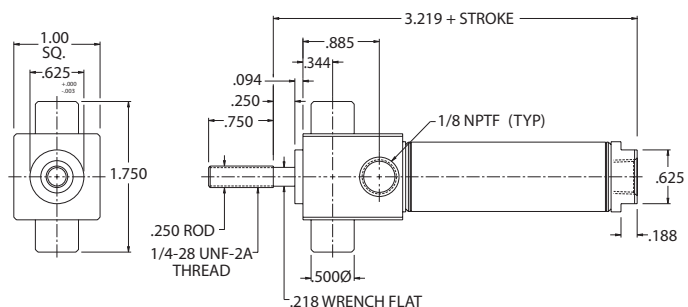
Double Acting – **0750D06-00A**
Trunnion Mount

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

Maximum Stroke: 12"

Base Weight: .29 lbs., plus .03 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis

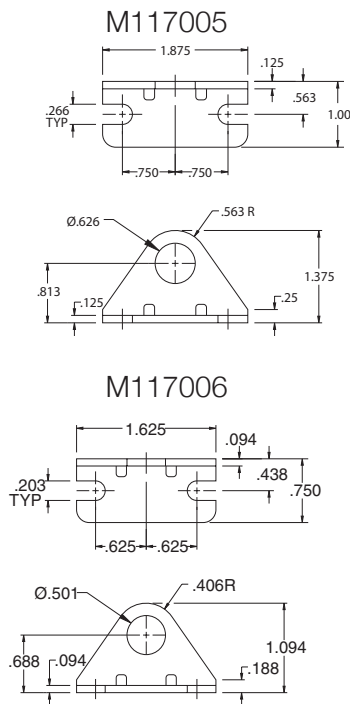


3/4" Bore Cylinder Specifications

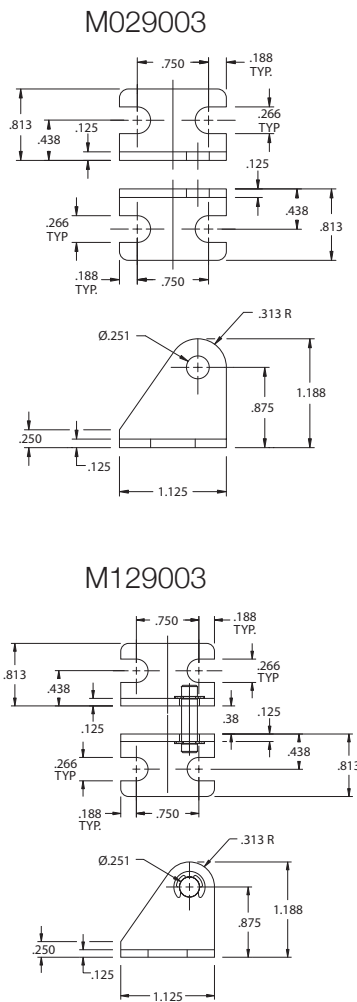
- $(0.4) \times (\text{Air Line Pressure}) = \text{Approximate Force Exerted}$
- Enclosed spring force: 3 lbs. retracted, 6 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 3/4" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 3/4" bore cylinders (except in combination with FKM option).
- Bumper option on 3/4" bore single acting cylinders adds .125" to overall length, but does not affect the overall length of double acting cylinders.

3/4" Bore Accessories

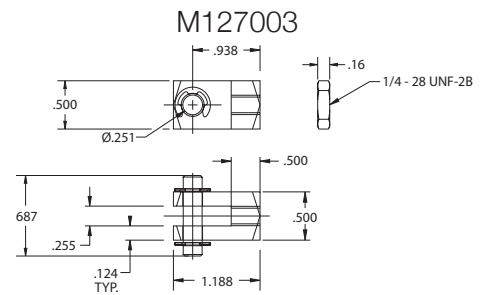
Nose Mounting Brackets



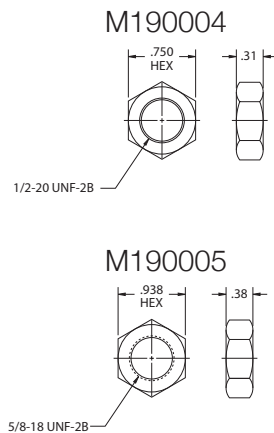
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



7/8" Bore Cylinder

Single Acting Spring Return – **0875S01-00A**

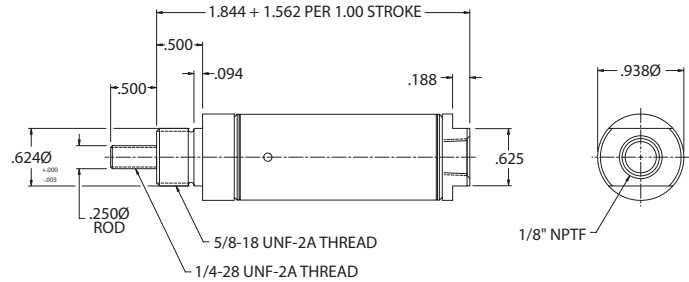
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .17 lbs., plus .09 lbs. per inch of stroke

- *Optional Accessories:
- M117005 Mounting Bracket
 - M127003 Rod Clevis



Single Acting Spring Return – **0875S02-00A**

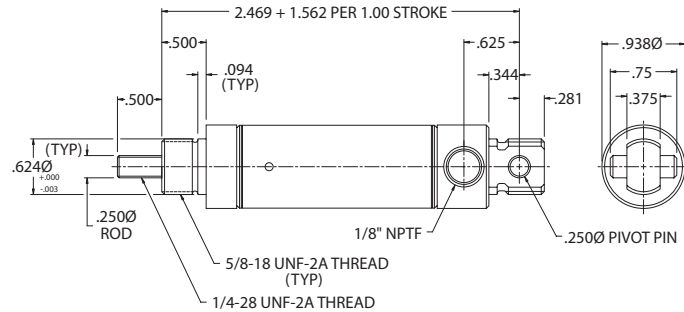
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .17 lbs., plus .09 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis



Single Acting Spring Extend – **0875R01-00A**

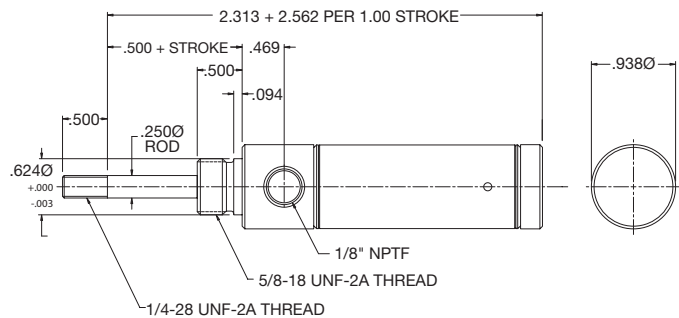
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .20 lbs., plus .09 lbs. per inch of stroke

- *Optional Accessories:
- M117005 Mounting Bracket
 - M127003 Rod Clevis



Single Acting Spring Extend – **0875R02-00A**

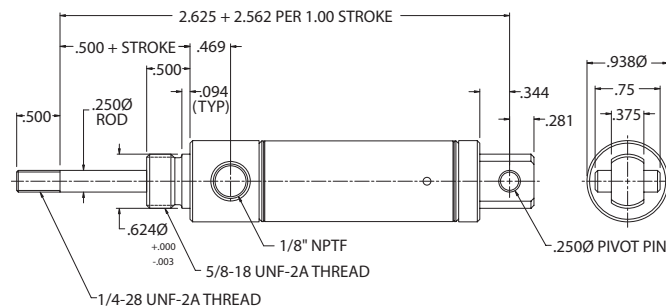
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .20 lbs., plus .09 lbs. per inch of stroke

- *Optional Accessories:
- M029003 Pivot Bracket
 - M127003 Rod Clevis



7/8" Bore Cylinder

Double Acting – **0875D01-00A**

Front Nose Mount

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

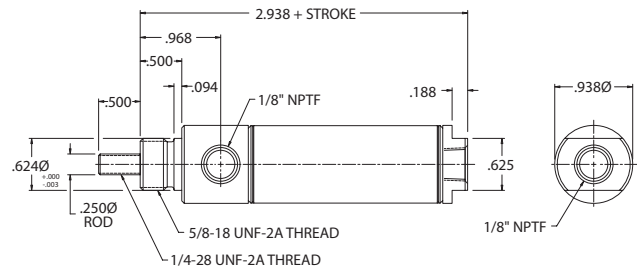
Maximum Stroke: 32"

Base Weight: .25 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis

For bumper and magnet option on 7/8" bore double acting cylinders adds .125" to overall length.



Double Acting – **0875D02-00A**

Rear Pivot Mount

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

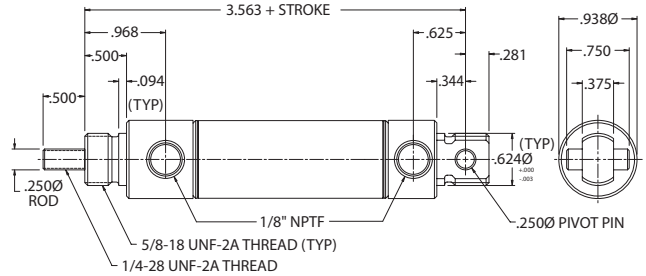
Maximum Stroke: 32"

Base Weight: .32 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis

For bumper and magnet option on 7/8" bore double acting cylinders adds .125" to overall length.



Double Acting – **0875D03-00A**

Through Rod Double Nose Mount

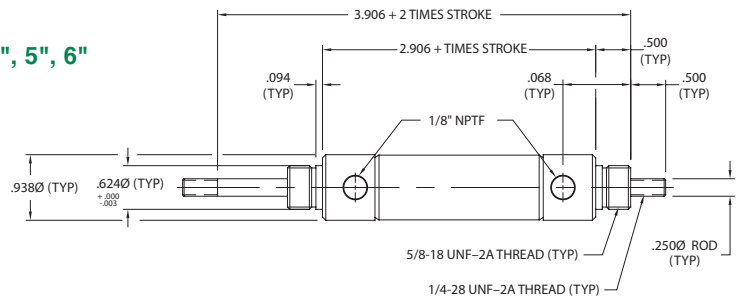
Standard Stroke Lengths: **1/2", 1", 1-1/2" 2", 3", 4", 5", 6"**

Maximum Stroke: 32"

Base Weight: .39 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127003 Rod Clevis
- M117005 Nose Mount Bracket
- M190005 Mounting Nut
- M190001 Rod Nut



Double Acting – **0875D04-00A**

Double Nose or Rear Pivot Mount

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

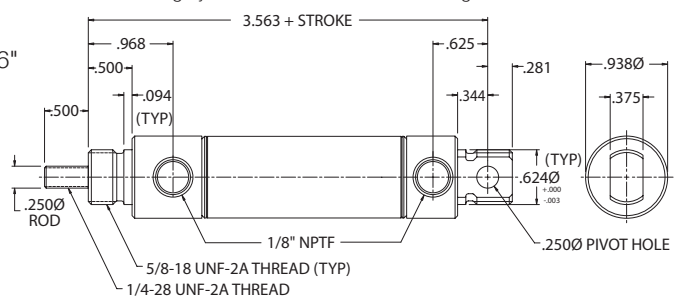
Maximum Stroke: 32"

Base Weight: .32 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M129003 Pivot Bracket
- M127003 Rod Clevis

For bumper and magnet option on 7/8" bore double acting cylinders adds .125" to overall length.



Single Acting Spring Return – **0875N01-00A**

Front Nose Mount **Non-Rotating**

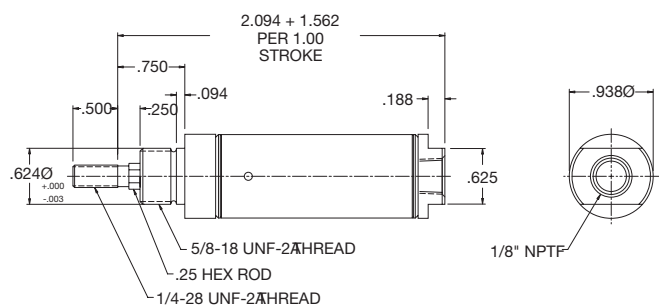
Standard Stroke Lengths: 1/2", **1", 1-1/2", 2", 2-1/2", 3", 4"**

Maximum Stroke: 6"

Base Weight: .17 lbs., plus .09 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



7/8" Bore Cylinder

Single Acting Spring Return – **0875N02-00A**

Rear Pivot Mount **Non-Rotating**

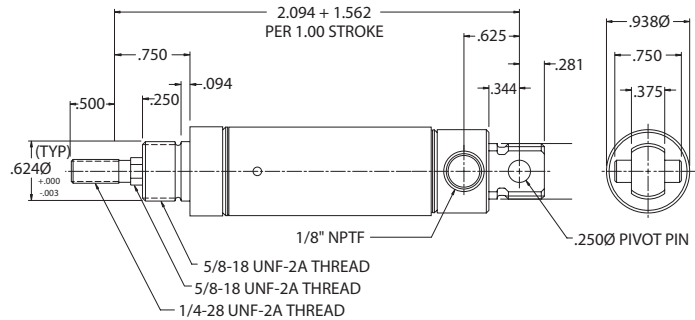
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .17 lbs., plus .09 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis

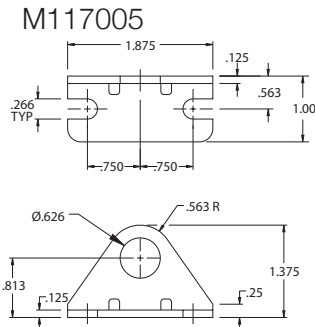


7/8" Bore Cylinder Specifications

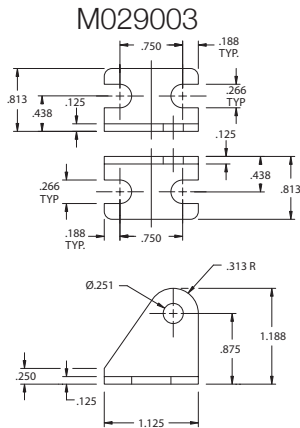
- $(0.6) \times (\text{Air Line Pressure}) = \text{Approximate Force Exerted}$
- Enclosed spring force: 3 lbs. retracted, 6 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 7/8" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 7/8" bore cylinders (except in combination with FKM option).
- Bumper and magnet option on 7/8" bore double acting cylinders adds .125" to overall length.

7/8" Bore Accessories

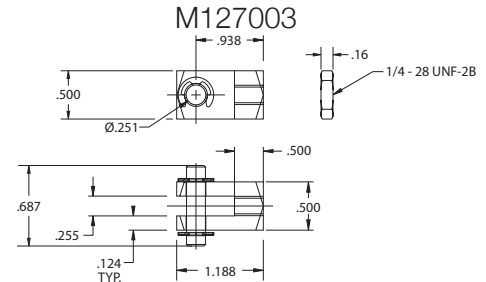
Nose Mounting Brackets



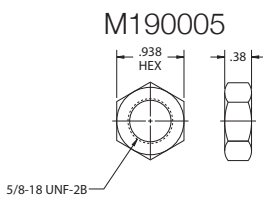
Pivot Mount Bracket



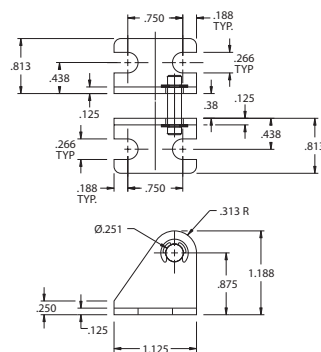
Rod Clevis



Mounting Nuts



M129003



1-1/16" Bore Cylinder

Single Acting Spring Return – **1062S01-00A**
Front Nose Mount

Standard Stroke Lengths:

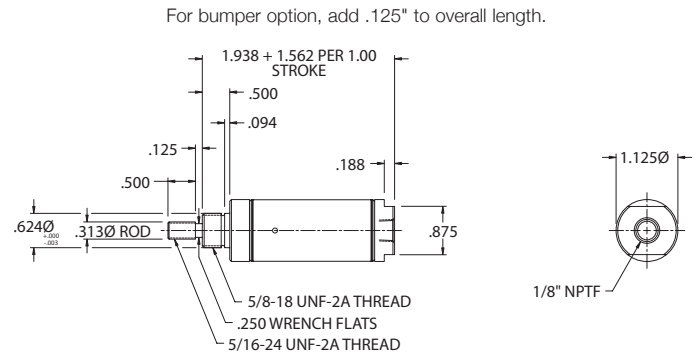
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 6"

Base Weight: .23 lbs., plus .11 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



Single Acting Spring Return – **1062S02-00A**
Rear Pivot Mount

Standard Stroke Lengths:

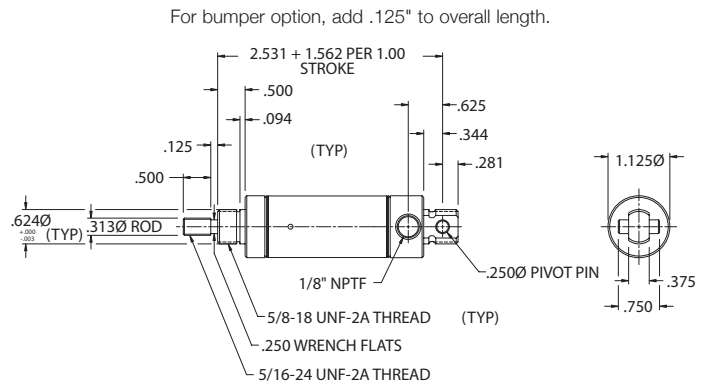
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .24 lbs., plus .11 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127004 Rod Clevis



Single Acting Spring Extend – **1062R01-00A**
Front Nose Mount

Standard Stroke Lengths:

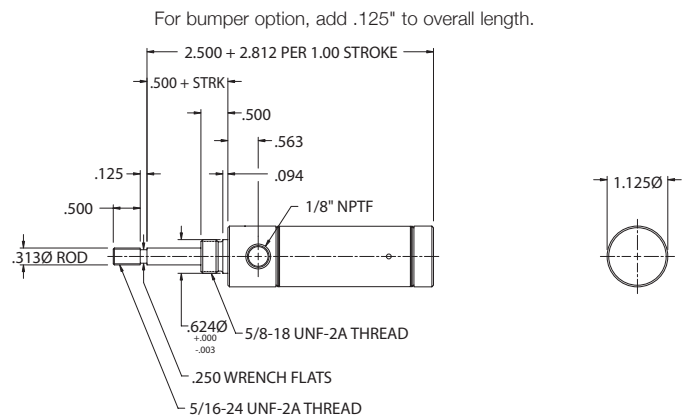
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .24 lbs., plus .16 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



Single Acting Spring Extend – **1062R02-00A**
Rear Pivot Mount

Standard Stroke Lengths:

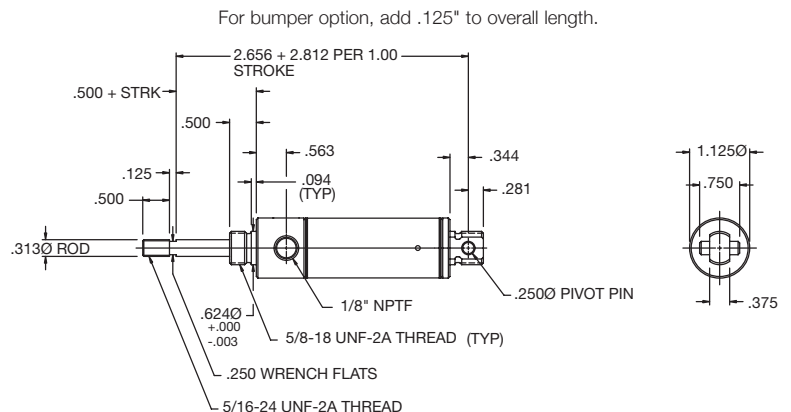
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .22 lbs., plus .16 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127004 Rod Clevis



1-1/16" Bore Cylinder

Double Acting – **1062D01-00A**

Front Nose Mount

Standard Stroke Lengths:

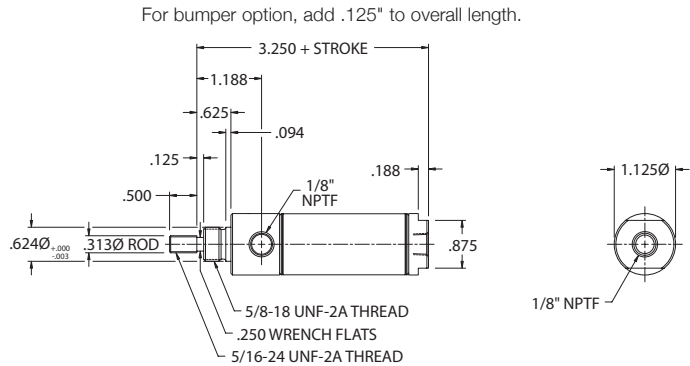
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .33 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



For bumper option, add .125" to overall length.

Double Acting – **1062D02-00A**

Rear Pivot Mount

Standard Stroke Lengths:

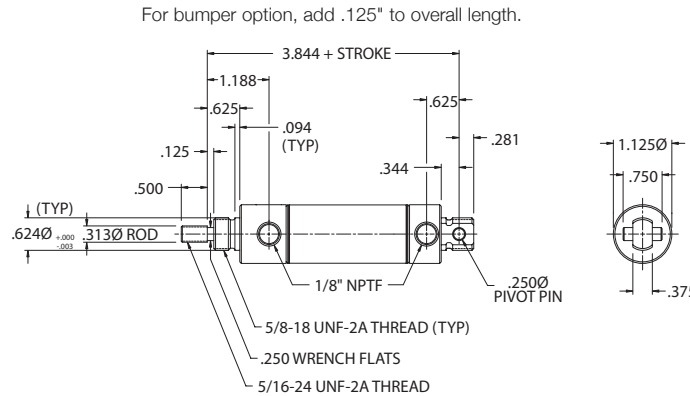
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .33 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- * M117005 Mounting Bracket
- M029003 Pivot Bracket
- M127004 Rod Clevis



For bumper option, add .125" to overall length.

Double Acting – **1062D04-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

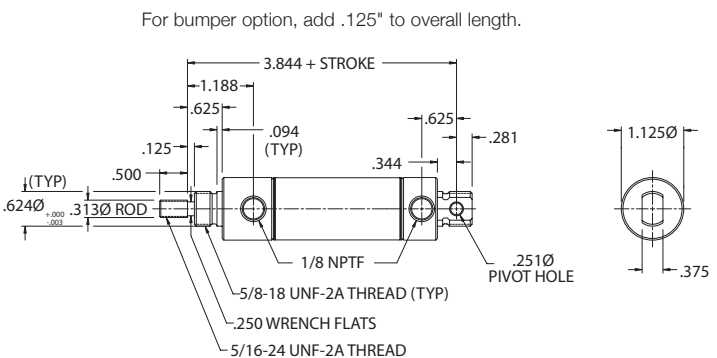
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .33 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M129003 Pivot Bracket
- M127004 Rod Clevis



For bumper option, add .125" to overall length.

Single Acting Spring Return – **1062N01-00A**

Front Nose Mount **Non-Rotating**

Standard Stroke Lengths:

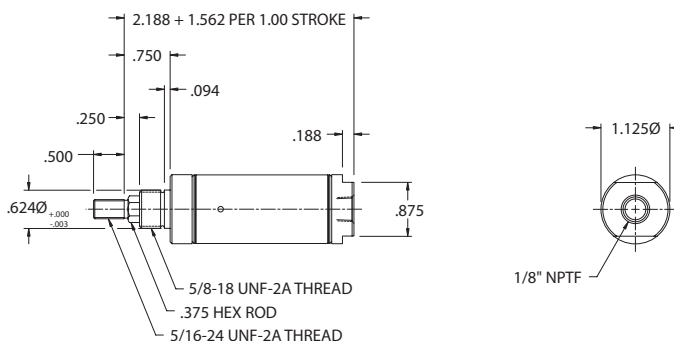
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .25 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



1-1/16" Bore Cylinder

Single Acting Spring Return – **1062N02-00A**
Rear Pivot Mount **Non-Rotating**

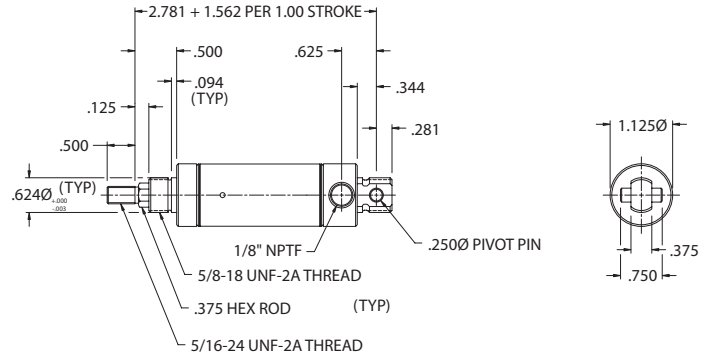
Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", 3", **4"**

Maximum Stroke: 6"

Base Weight: .25 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M029003 Pivot Bracket
- M127004 Rod Clevis



Double Acting – **1062D03-00A** Through Rod

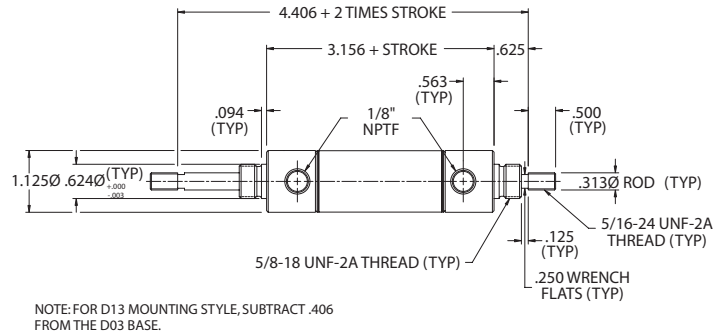
Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, **4"**, **5"**, 6"

Maximum Stroke: 12"

Base Weight: .48 lbs., plus .07 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



Double Acting – **1062DH3-00A** Through Rod Hollow Rod

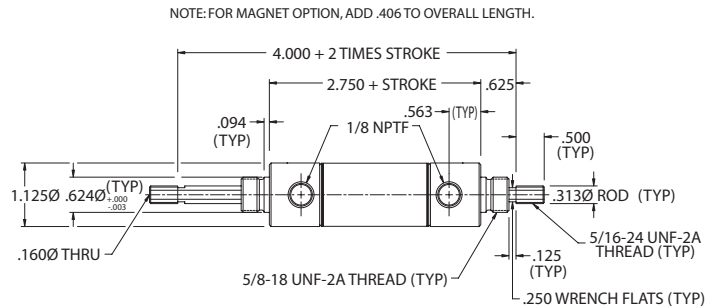
Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .47 lbs., plus .07 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127004 Rod Clevis



Double Acting – **1062D05-00A** Front Block Mount

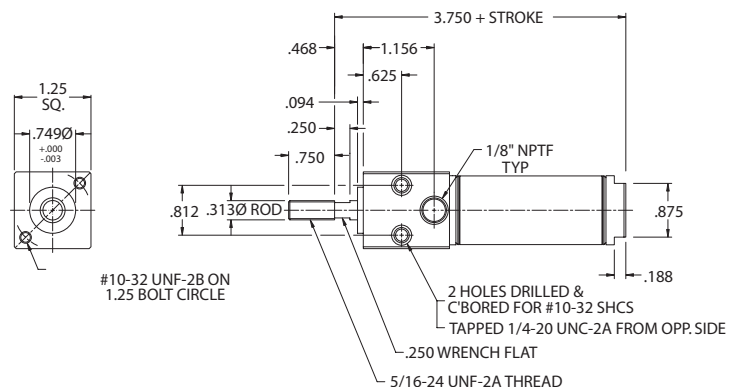
Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, **4"**, **5"**, 6"

Maximum Stroke: 12"

Base Weight: .49 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M127004 Rod Clevis



1-1/16" Bore Cylinder

Bore Double Acting – **1062D06-00A**
Trunnion Mount

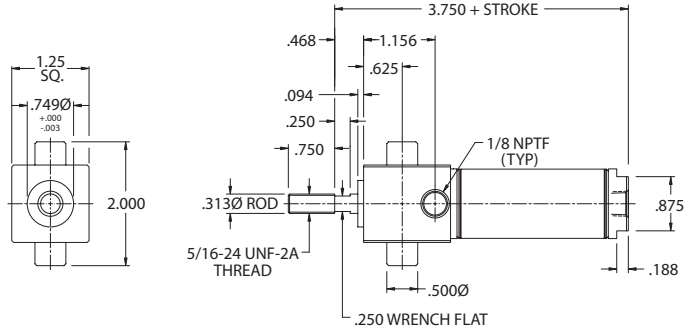
Standard Stroke Lengths:
 1/2", 1", 1-1/2", 2", **2-1/2"**, 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .49 lbs., plus .05 lbs. per inch of stroke

*Optional Accessories:

- M029006 Pivot Bracket
- M127004 Rod Clevis

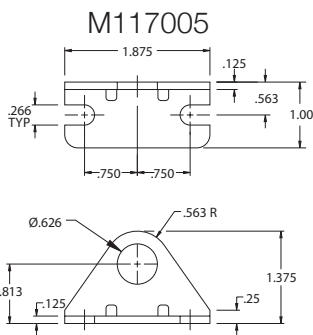


1-1/16" Bore Cylinder Specifications

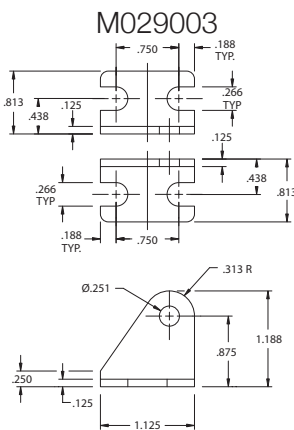
- (0.9) X (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 3 lbs. retracted, 6 lbs. extended. Note that R01 and R02 is 6 lbs. retracted, 12 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 1-1/16" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 1-1/16" bore cylinders (except in combination with FKM option).
- For bumper option, add .125" to overall length.
- Magnetic piston option on DH3 mount adds .406 to overall length. For D03 Mount, add 0.25" to overall length.

1-1/16" Bore Accessories

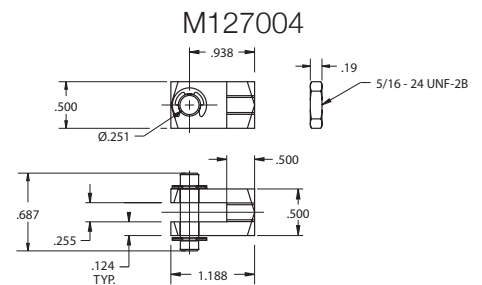
Nose Mounting Brackets



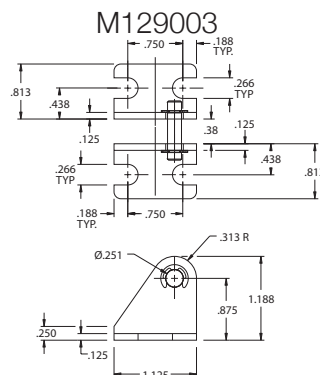
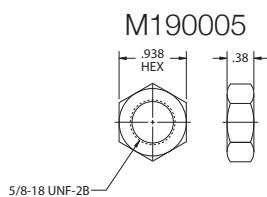
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



1-1/4" Bore Cylinder

Single Acting Spring Return – **1250S01-00A**
Front Nose Mount

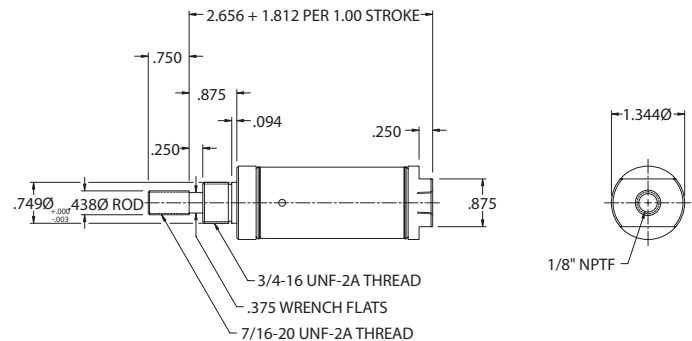
Standard Stroke Lengths:
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .39 lbs., plus .21 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Single Acting Spring Return – **1250S02-00A**
Double Nose or Rear Pivot Mount

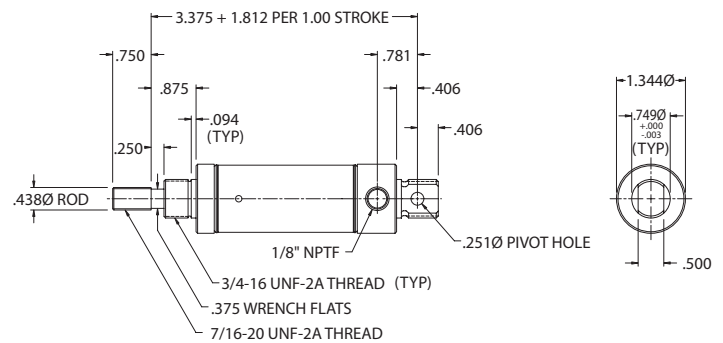
Standard Stroke Lengths:
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .53 lbs., plus .21 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M229003 Pivot Bracket
- M127005 Rod Clevis



Single Acting Spring Extend – **1250R01-00A**
Front Nose Mount

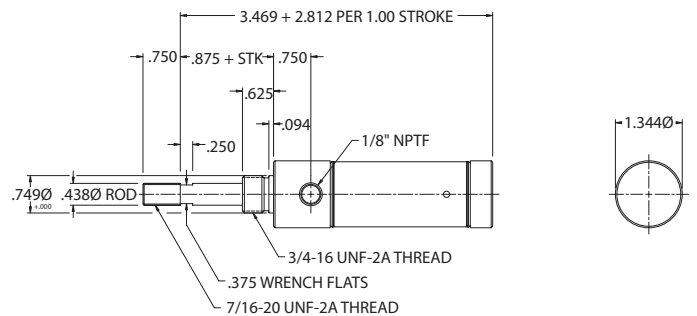
Standard Stroke Lengths:
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .50 lbs., plus .21 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Single Acting Spring Extend – **1250R02-00A**
Double Nose or Rear Pivot Mount

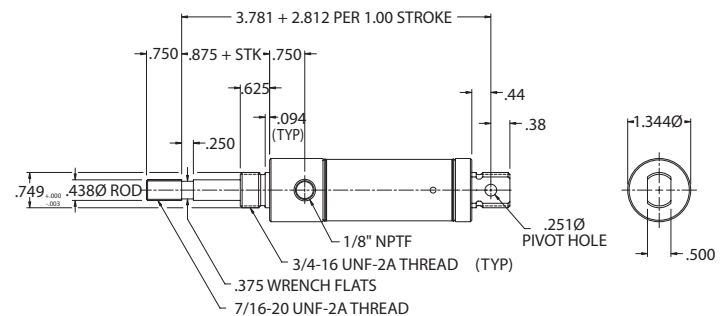
Standard Stroke Lengths:
1/2", 1", 1-1/2" 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .57 lbs., plus .21 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M229003 Pivot Bracket
- M127005 Rod Clevis



1-1/4" Bore Cylinder

Double Acting – **1250D01-00A**

Front Nose Mount

Standard Stroke Lengths:

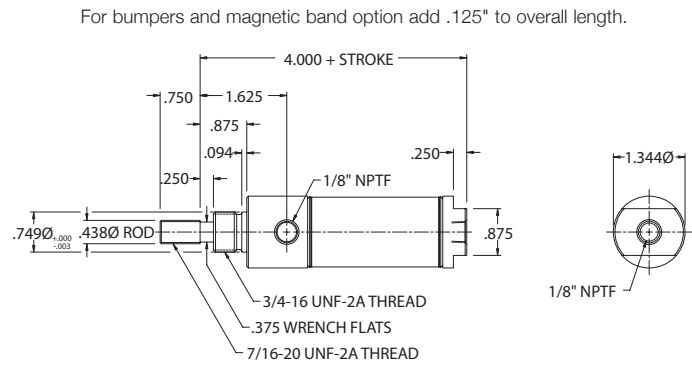
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 12"

Base Weight: .58 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Double Acting – **1250D02-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

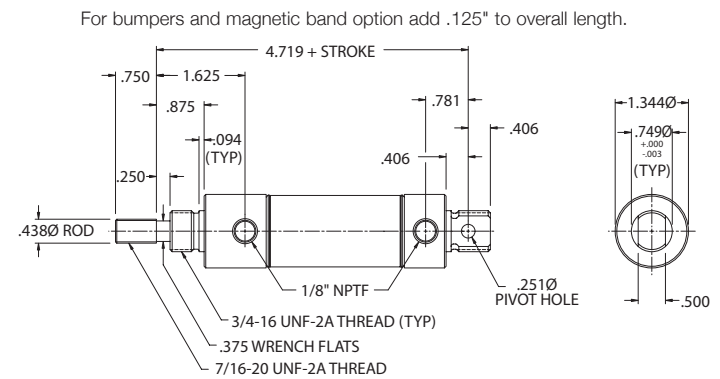
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .71 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M229003 Pivot Bracket
- M127005 Rod Clevis



Single Acting Spring Return – **1250N01-00A**

Front Nose Mount **Non-Rotating**

Standard Stroke Lengths:

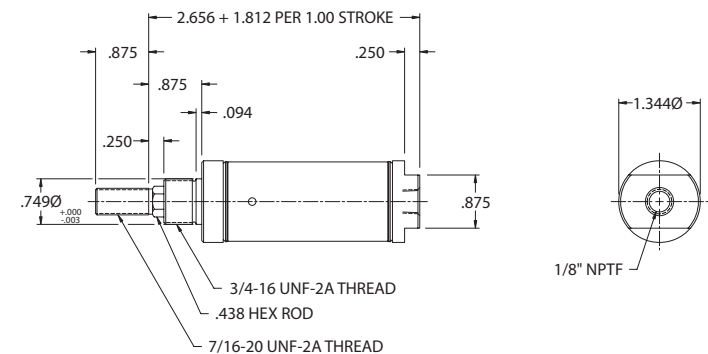
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .25 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Single Acting Spring Return – **1250N02-00A**

Rear Pivot Mount **Non-Rotating**

Standard Stroke Lengths:

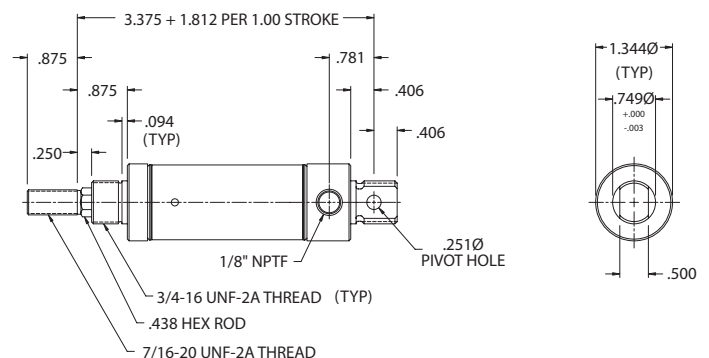
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .25 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M229003 Pivot Bracket
- M127005 Rod Clevis



1-1/4" Bore Cylinder

Double Acting – 1250D03-00A Through Rod

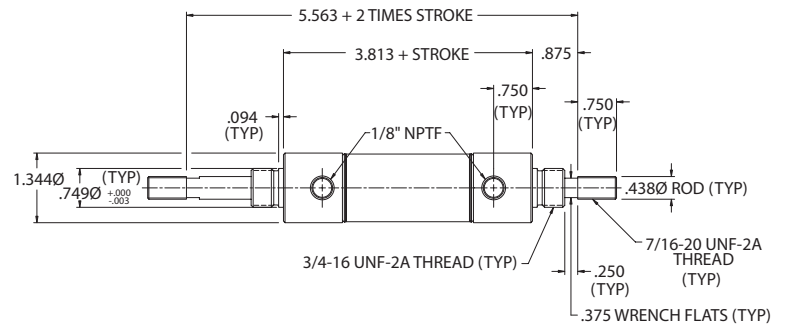
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .98 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Double Acting – 1250DH3-00A Through Rod Hollow Rod

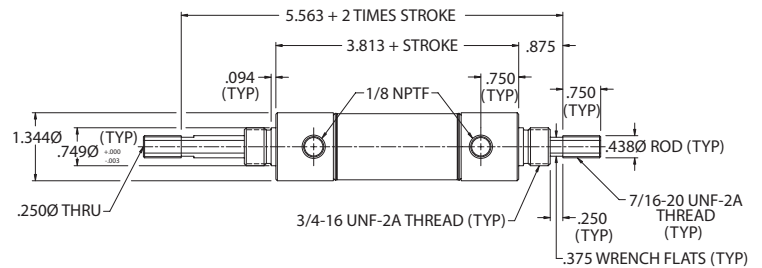
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .97 lbs., plus .12 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis

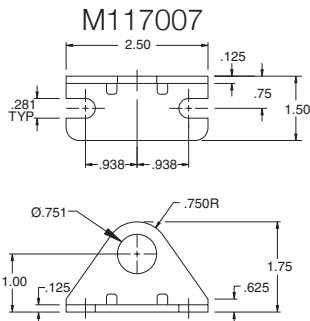


1-1/4" Bore Cylinder Specifications

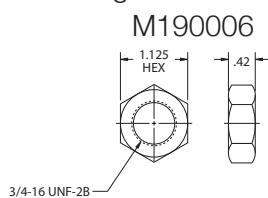
- (1.2) X (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 7.5 lbs. retracted, 15 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 1-1/4" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 1-1/4" bore cylinders (except in combination with FKM option).
- Bumper and magnet option on 1-1/4" bore double acting cylinders adds .125" to overall length.

1-1/4" Bore Accessories

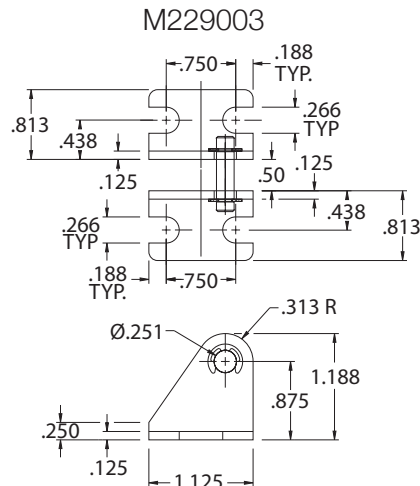
Nose Mounting Brackets



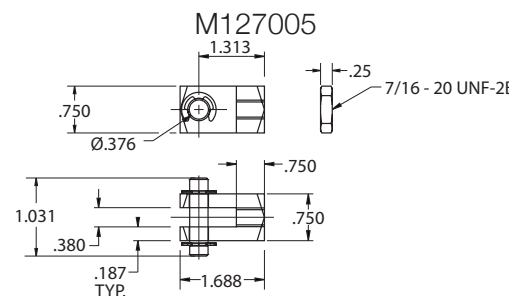
Mounting Nuts



Pivot Mount Bracket



Rod Clevis



1-1/2" Bore Cylinder

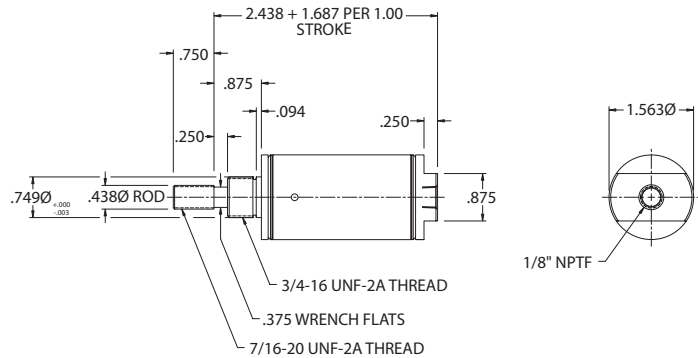
Single Acting Spring Return – **1500S01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .44 lbs., plus .22 lbs. per inch of stroke

- *Optional Accessories:
- M117007 Mounting Bracket
 - M127005 Rod Clevis



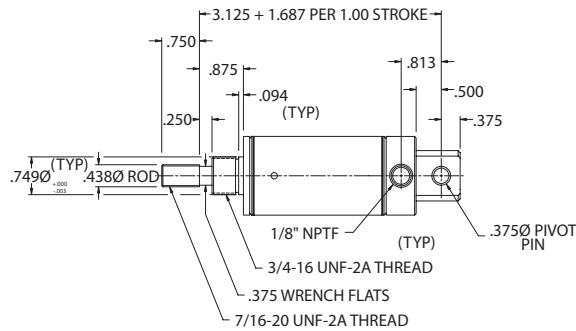
Single Acting Spring Return – **1500S02-00A**
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .45 lbs., plus .22 lbs. per inch of stroke

- *Optional Accessories:
- M029004 Pivot Bracket
 - M127005 Rod Clevis



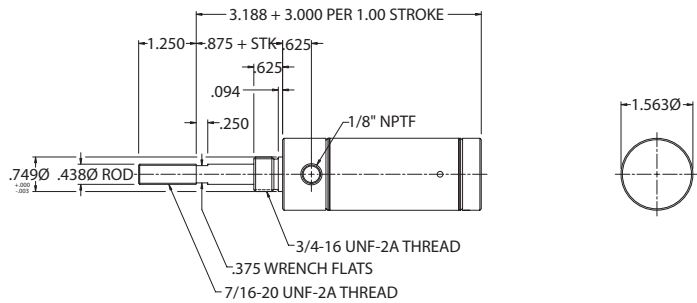
Single Acting Spring Extend – **1500R01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .44 lbs., plus .22 lbs. per inch of stroke

- *Optional Accessories:
- M117007 Mounting Bracket
 - M127005 Rod Clevis



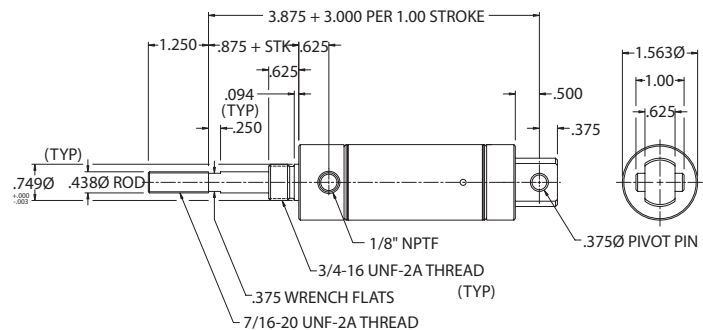
Single Acting Spring Extend – **1500R02-00A**
Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .45 lbs., plus .22 lbs. per inch of stroke

- *Optional Accessories:
- M029004 Pivot Bracket
 - M127005 Rod Clevis



1-1/2" Bore Cylinder

Double Acting – **1500D01-00A**

Front Nose Mount

Standard Stroke Lengths:

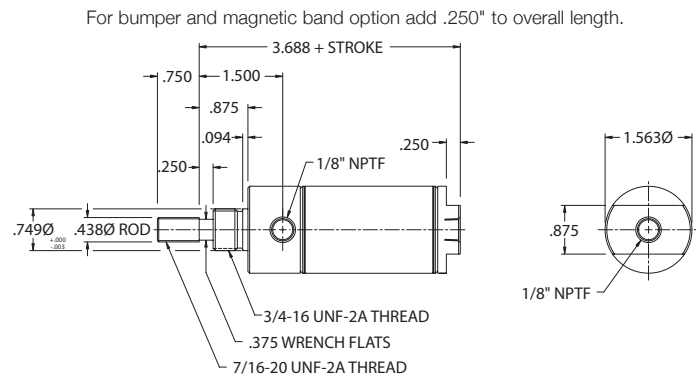
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 12"

Base Weight: .69 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Double Acting – **1500D02-00A**

Rear Pivot Mount

Standard Stroke Lengths:

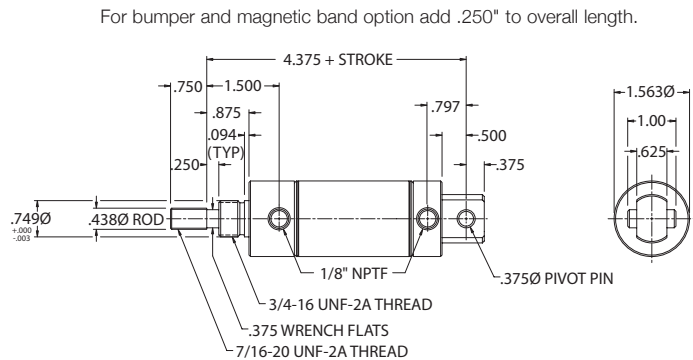
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .73 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M029004 Pivot Bracket
- M127005 Rod Clevis



Double Acting – **1500D04-00A**

Double Nose Mount

Standard Stroke Lengths:

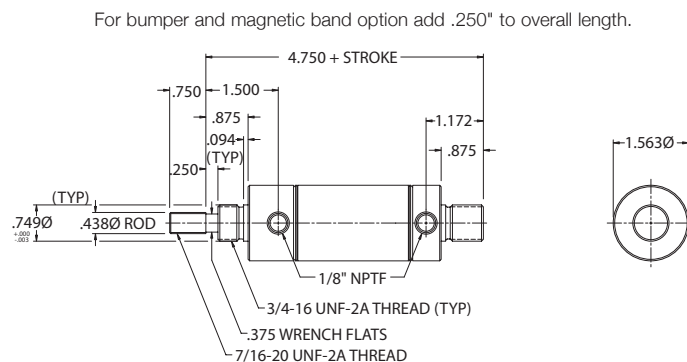
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .82 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Single Acting Spring Return – **1500N01-00A**

Front Nose Mount **Non-Rotating**

Standard Stroke Lengths:

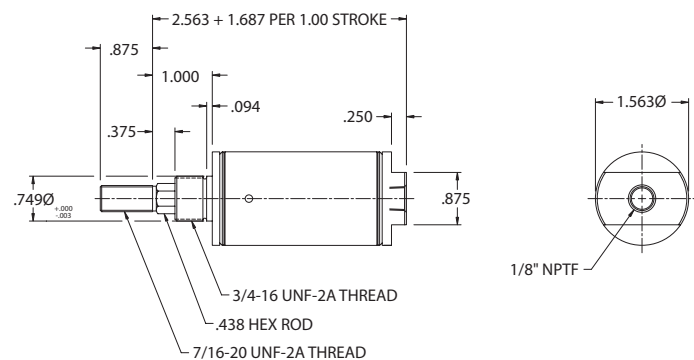
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .45 lbs., plus .22 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



1-1/2" Bore Cylinder

Single Acting Spring Return – **1500N02-00A**
Rear Pivot Mount **Non-Rotating**

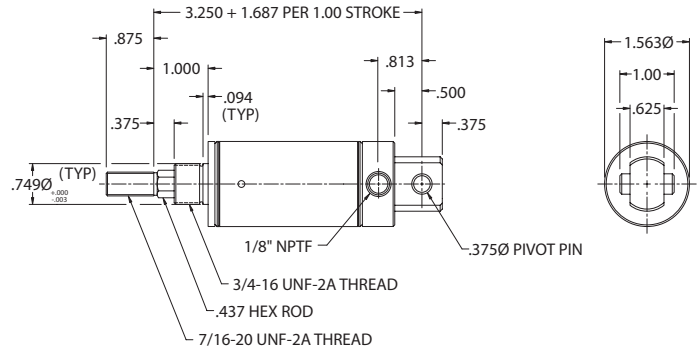
Standard Stroke Lengths:
1/2", 1", 1-1/2", **2"**, 2-1/2", 3", 4"

Maximum Stroke: 6"

Base Weight: .46 lbs., plus .22 lbs. per inch of stroke

*Optional Accessories:

- M029004 Pivot Bracket
- M127005 Rod Clevis



Double Acting – **1500D03-00A** Through Rod

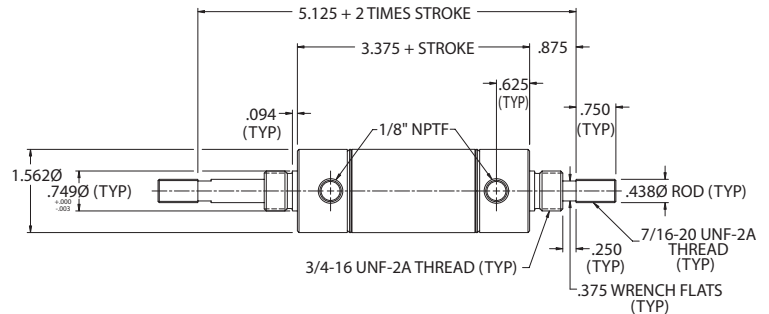
Standard Stroke Lengths:
1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, **4"**, 5", 6"

Maximum Stroke: 12"

Base Weight: 1.17 lbs., plus .13 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Double Acting – **1500DH3-00A** Through Rod Hollow Rod

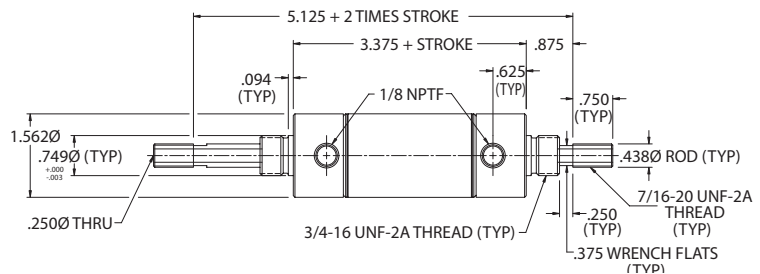
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 12"

Base Weight: 1.16 lbs., plus .13 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



Double Acting – **1500D05-00A** Front Block Mount

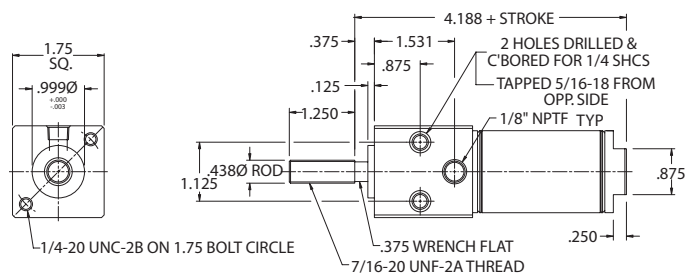
Standard Stroke Lengths:
1/2", **1"**, **1-1/2"**, **2"**, 2-1/2", **3"**, **4"**, **5"**, **6"**

Maximum Stroke: 12"

Base Weight: .99 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M127005 Rod Clevis



1-1/2" Bore Cylinder

Double Acting – **1500D06-00A**
Trunnion Mount

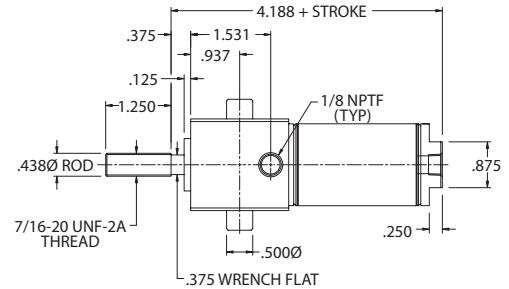
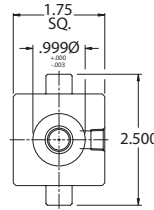
Standard Stroke Lengths:
 1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 12"

Base Weight: 1.06 lbs., plus .08 lbs. per inch of stroke

*Optional Accessories:

- M029006 Pivot Bracket
- M127005 Rod Clevis

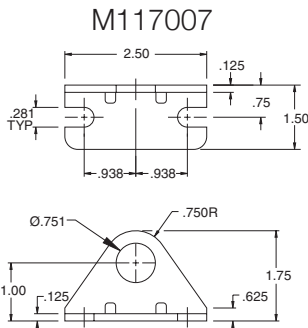


1-1/2" Bore Cylinder Specifications

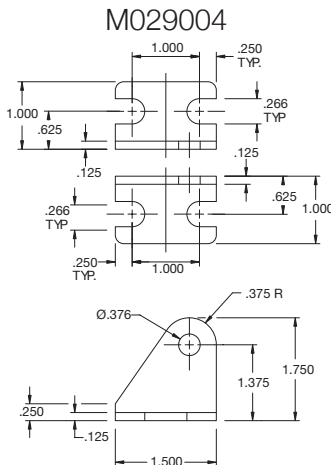
- (1.7) X (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 7 lbs. retracted, 14 lbs. extended. Note that R01 and R02 is 9 lbs. retracted, 17 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 1-1/2" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 1-1/2" bore cylinders (except in combination with FKM option).
- Bumper and magnet option on 1-1/2" bore double acting cylinder adds .250" to overall length.

1-1/2" Bore Accessories

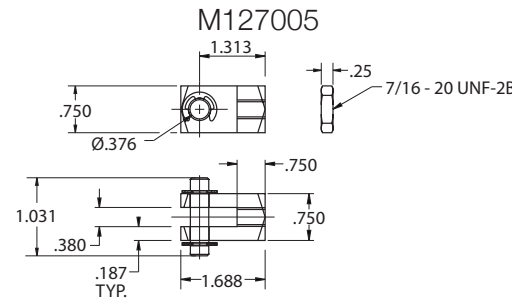
Nose Mounting Brackets



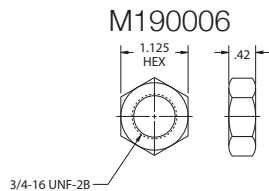
Pivot Mount Bracket



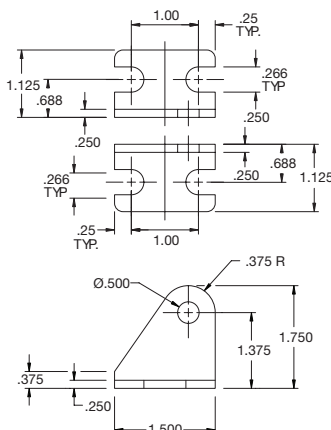
Rod Clevis



Mounting Nuts



M029006



1-3/4" Bore Cylinder

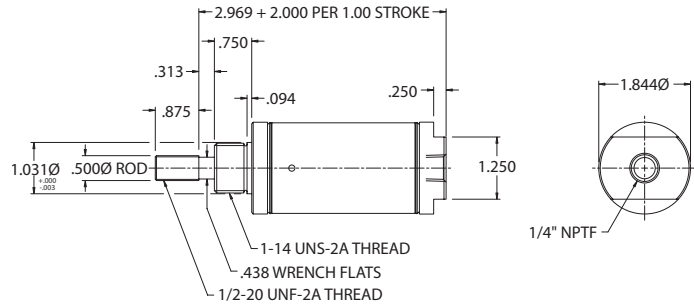
Single Acting Spring Return – **1750S01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: .85 lbs., plus .36 lbs. per inch of stroke

- *Optional Accessories:
- M117008 Mounting Bracket
 - M127006 Rod Clevis



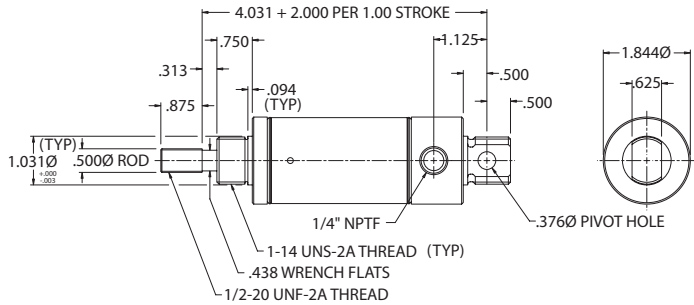
Single Acting Spring Return – **1750S02-00A**
Double Nose or Rear Pivot Mount

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

Maximum Stroke: 6"

Base Weight: .86 lbs., plus .36 lbs. per inch of stroke

- *Optional Accessories:
- M117008 Mounting Bracket
 - M129005 Pivot Bracket
 - M127006 Rod Clevis



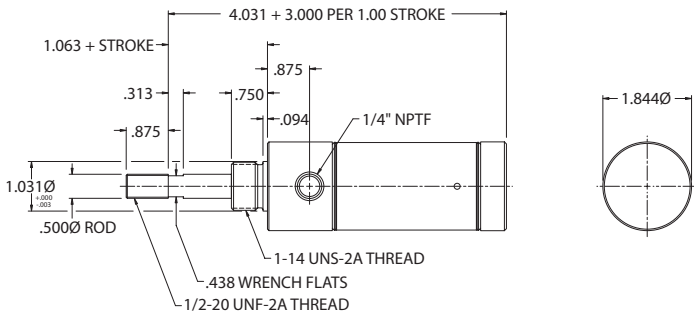
Single Acting Spring Extend – **1750R01-00A**
Front Nose Mount

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

Maximum Stroke: 6"

Base Weight: 1.17 lbs., plus .31 lbs. per inch of stroke

- *Optional Accessories:
- M117008 Mounting Bracket
 - M127006 Rod Clevis



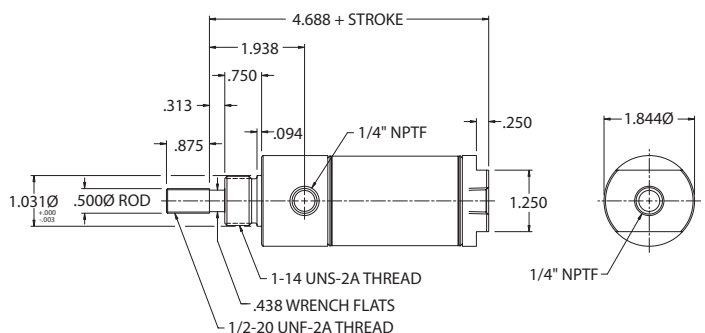
Double Acting – **1750D01-00A**
Front Nose Mount

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"

Base Weight: 1.29 lbs., plus .11 lbs. per inch of stroke

- *Optional Accessories:
- M117008 Mounting Bracket
 - M127006 Rod Clevis



1-3/4" Bore Cylinder

Double Acting – **1750D02-00A**
 Double Nose or Rear Pivot Mount

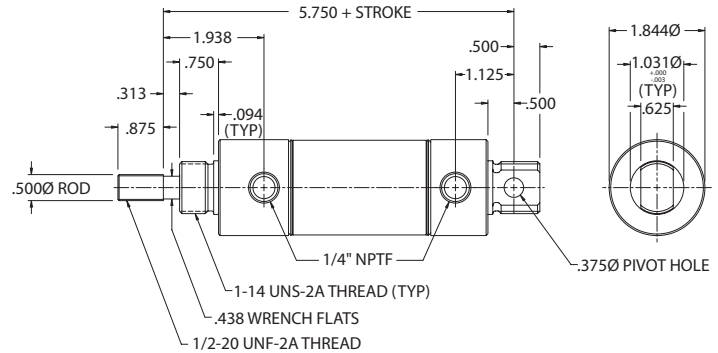
Standard Stroke Lengths: 1/2", **1"**, 1-1/2" **2"**, 2-1/2" **3"**, **4"**, **5"**, **6"**, 7", **8"**, 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: 1.64 lbs., plus .11 lbs. per inch of stroke

*Optional Accessories:

- M117008 Mounting Bracket
- M129005 Pivot Bracket
- M127006 Rod Clevis



Double Acting Double Nose Mount – **1750D03-00A**

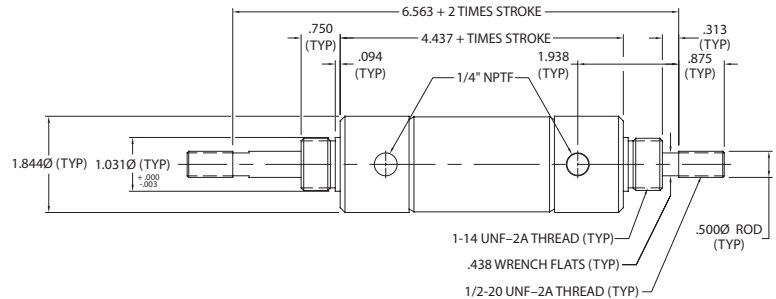
Standard Stroke Lengths: 1/2", **1"**, 1-1/2" **2"**, 2-1/2" **3"**, **4"**, **5"**, **6"**, 7", **8"**, 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: 1.87 lbs., plus .18 lbs. per inch of stroke

*Optional Accessories:

- M029002 Pivot Bracket
- M127006 Rod Clevis
- M117008 Nose Mount Bracket
- M190008 Mounting Nut
- M190004 Rod Nut

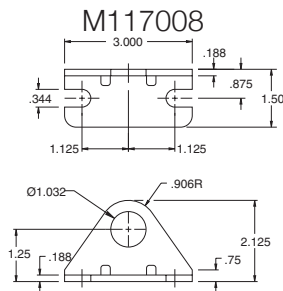


1-3/4" Bore Cylinder Specifications

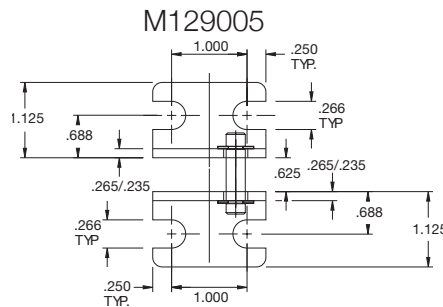
- (2.4) X (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 11 lbs. retracted, 24 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 1-3/4" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 1-3/4" bore cylinders (except in combination with FKM option).

1-3/4" Bore Accessories

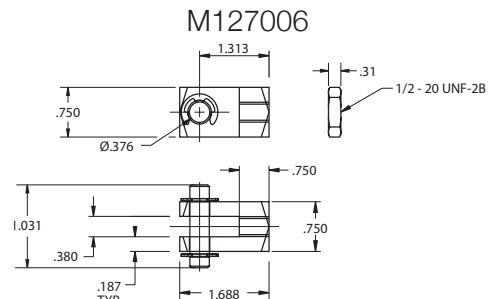
Nose Mounting Brackets



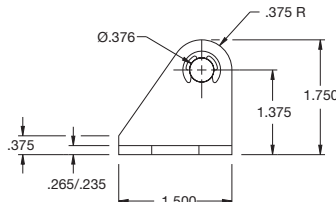
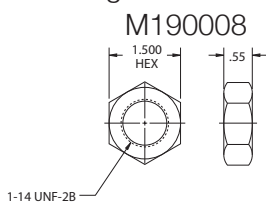
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



2" Bore Cylinder

Single Acting Spring Return – **2000S01-00A**
Front Nose Mount

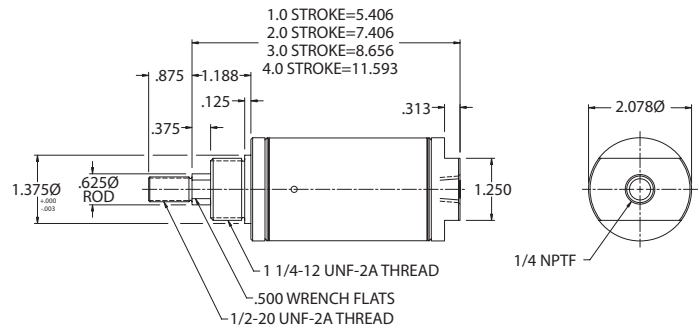
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: 1.04 lbs., plus .43 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



Single Acting Spring Return – **2000S02-00A**
Double Nose or Rear Pivot Mount

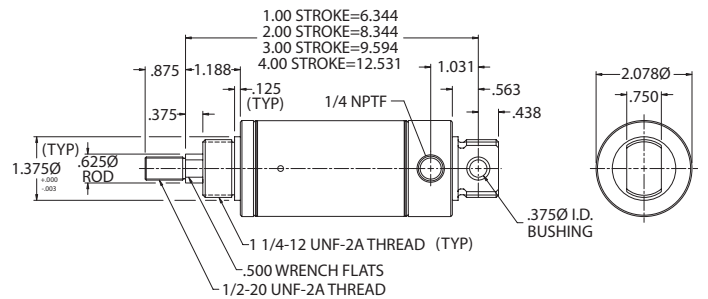
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: 1.26 lbs., plus .43 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127006 Rod Clevis



Single Acting Spring Extend – **2000R01-00A**
Front Nose Mount

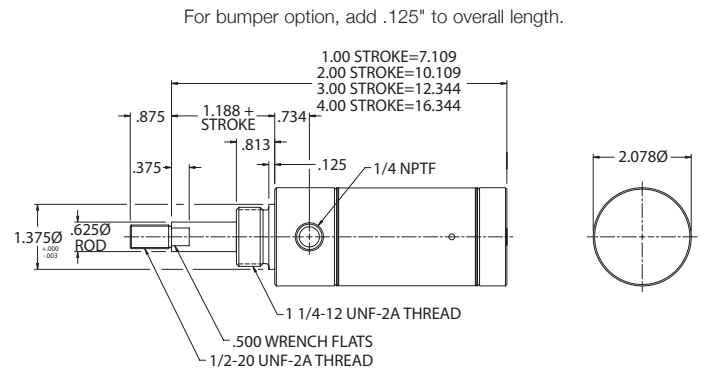
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: 1.24 lbs., plus .43 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



Single Acting Spring Extend – **2000R02-00A**
Double Nose or Rear Pivot Mount

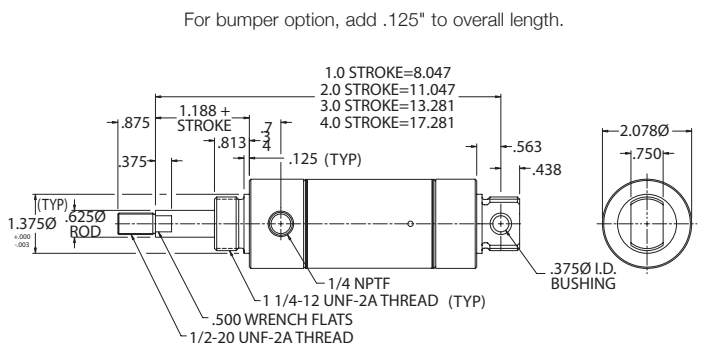
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Base Weight: 1.46 lbs., plus .43 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127006 Rod Clevis



2" Bore Cylinder

Double Acting – **2000D01-00A**

Front Nose Mount

Standard Stroke Lengths:

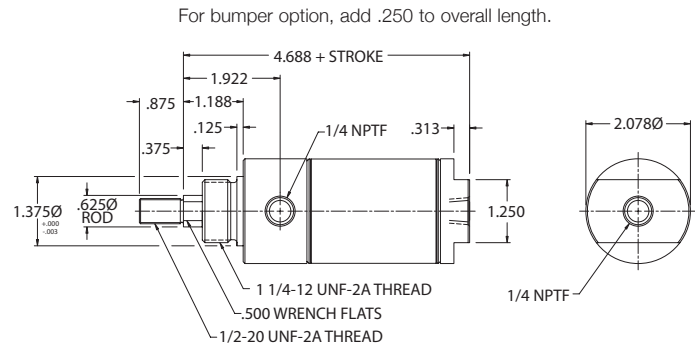
1/2", 1", 1-1/2", 2", 2-1/2", **3", 4", 5", 6", 7", 8"**

Maximum Stroke: 12"

Base Weight: 1.40 lbs., plus .15 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



Double Acting – **2000D02-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

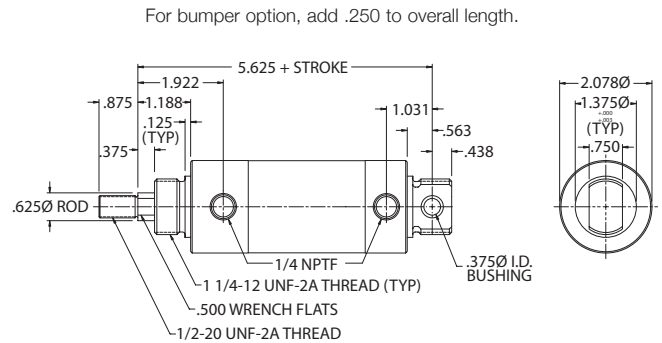
1/2", 1", 1-1/2", 2", 2-1/2", **3", 4", 5", 6", 7", 8", 9", 10", 11", 12"**

Maximum Stroke: 32"

Base Weight: 1.62 lbs., plus .15 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127006 Rod Clevis



Double Acting – **2000D03-00A**

Through Rod

Standard Stroke Lengths:

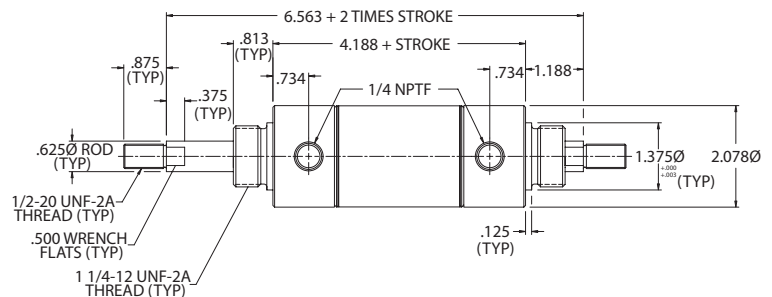
1/2", **1", 1-1/2", 2"**, 2-1/2", **3", 4", 5", 6"**

Maximum Stroke: 12"

Base Weight: 1.97 lbs., plus .24 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



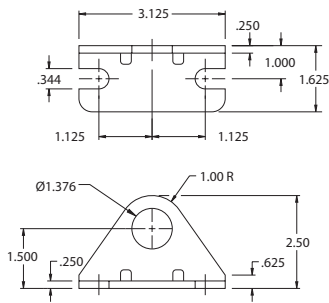
2" Bore Cylinder Specifications

- (3.1) X (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 15 lbs. retracted, 30 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Bumpers are optional on all 2" bore cylinders (except in combination with FKM option).
- Magnetic piston optional on all double acting 2" bore cylinders (except in combination with FKM option).
- Bumper option on single acting spring extend cylinders adds .125" to overall length.
- Bumper option on all double acting cylinders adds .250" to overall length.

2" Bore Accessories

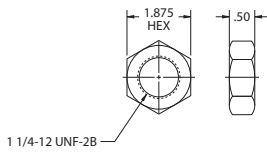
Nose Mounting Brackets

M117009



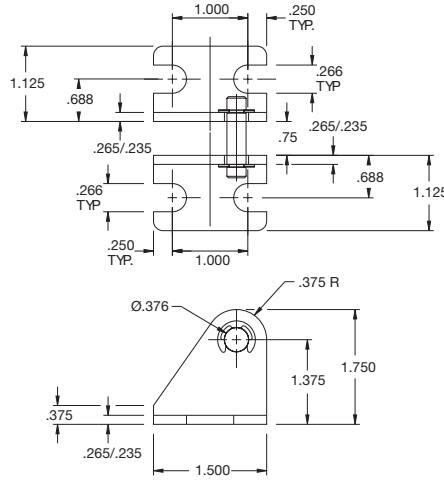
Mounting Nuts

M190009



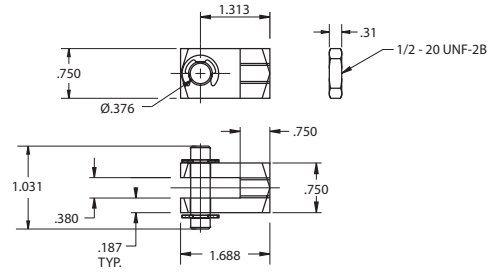
Pivot Mount Bracket

M229005



Rod Clevis

M127006



2-1/2" Bore Cylinder

Double Acting – **2500D01-00A**

Front Nose Mount

Standard Stroke Lengths:

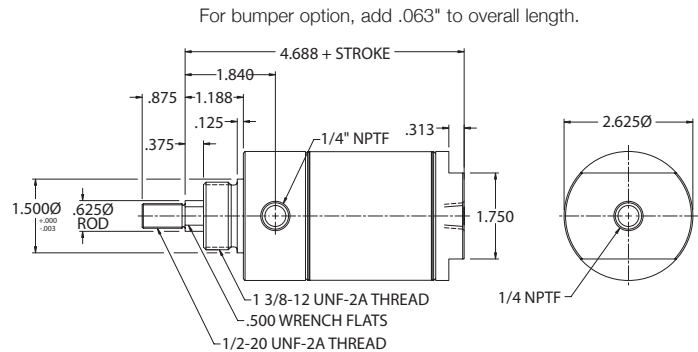
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 12"

Base Weight: 1.98 lbs., plus .17 lbs. per inch of stroke

*Optional Accessories:

- M127006 Rod Clevis



Double Acting – **2500D02-00A**

Rear Pivot Mount

Standard Stroke Lengths:

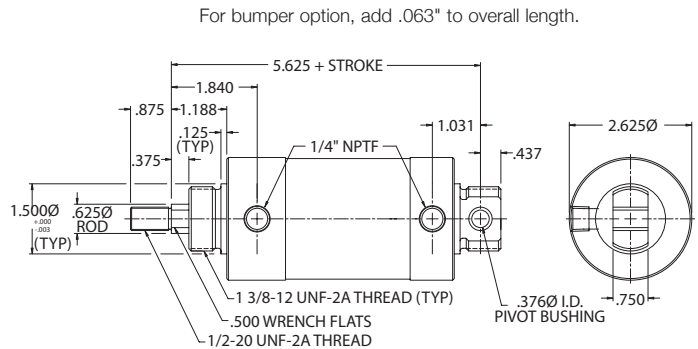
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: 2.27 lbs., plus .17 lbs. per inch of stroke

*Optional Accessories:

- M229005 Pivot Bracket
- M127006 Rod Clevis



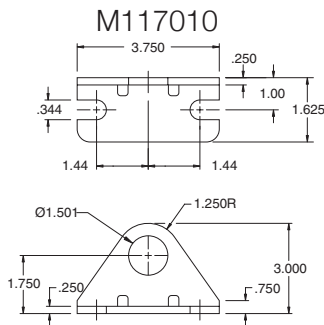
2-1/2" Bore Cylinder Specifications

- (5.0) X (Air Line Pressure) = Approximate Force Exerted
- Type 303 stainless steel rod as standard.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Magnetic piston optional on all 2-1/2" bore cylinders.
- Bumper option on all 2-1/2" bore cylinders adds .063" to overall length.

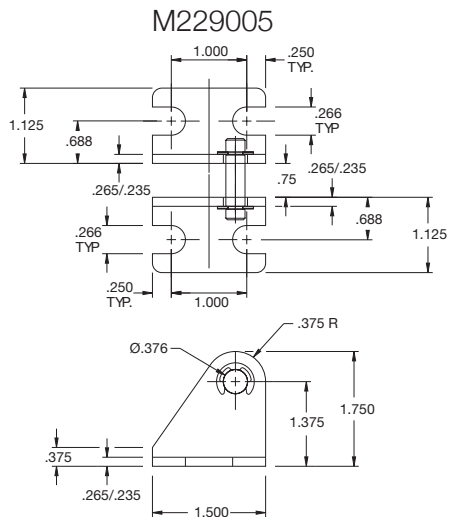
NOTE: Consult factory for 2-1/2" bore D03 mount information.

2-1/2" Bore Accessories

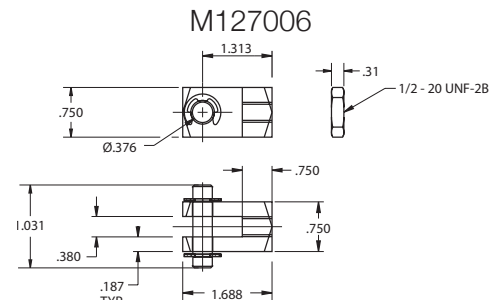
Nose Mounting Brackets



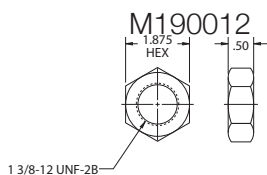
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



3" Bore Cylinder

Double Acting – **3000D01-00A**

Front Nose Mount

Standard Stroke Lengths:

1/2", **1"**, 1-1/2", **2"**, 2-1/2", **3"**, **4"**, **5"**, **6"**

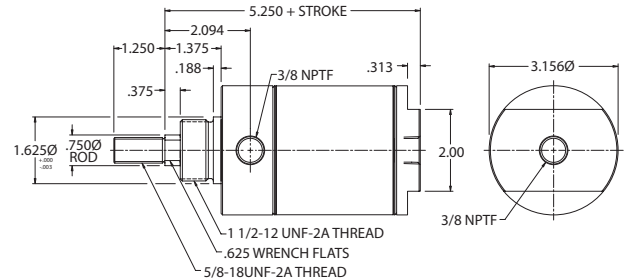
Maximum Stroke: 12"

Base Weight: 3.34 lbs., plus .26 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127007 Rod Clevis

For bumper option, add .063" to overall length.



Double Acting – **3000D02-00A**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:

1/2", **1"**, 1-1/2", **2"**, **2-1/2"**, 3", 4", 5", 6"

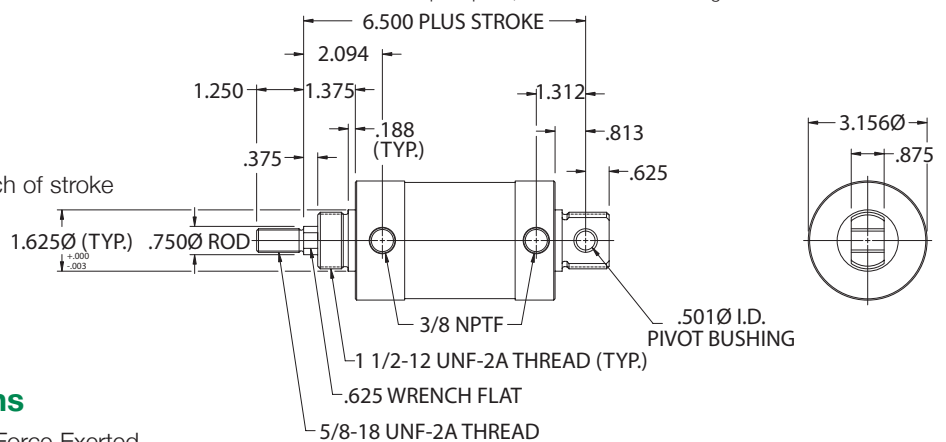
Maximum Stroke: 32"

Base Weight: 3.87 lbs., plus .26 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127007 Rod Clevis

For bumper option, add .063" to overall length.

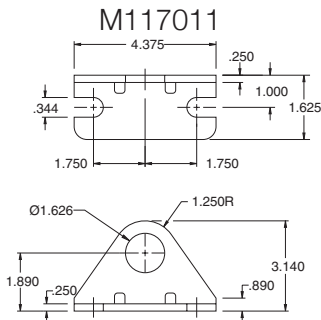


3" Bore Cylinder Specifications

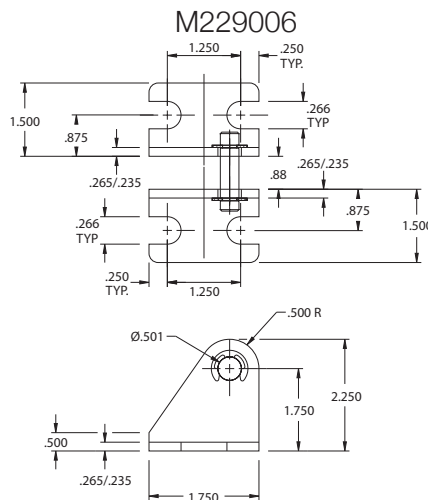
- (7.0) X (Air Line Pressure) = Approximate Force Exerted
- Type 303 stainless steel rod as standard.
- FKM seals are optional on all cylinders for 200° - 350°F applications.
- Magnetic piston optional on all 3" bore cylinders.
- Bumper option on all 3" bore cylinders adds .063" to overall length.

3" Bore Accessories

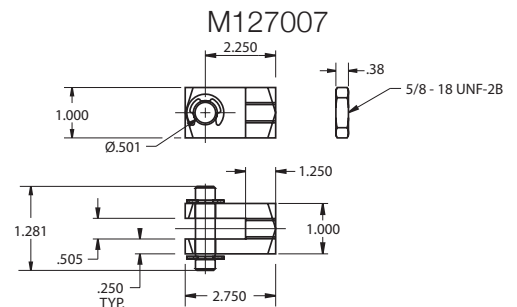
Nose Mounting Brackets



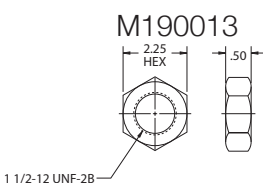
Pivot Mount Bracket



Rod Clevis



Mounting Nuts



Adjustable Cushion Cylinders

3/4" Bore Double Acting – 0750DG1-00A

Front Nose Mount with Cushions

Standard Stroke Lengths:

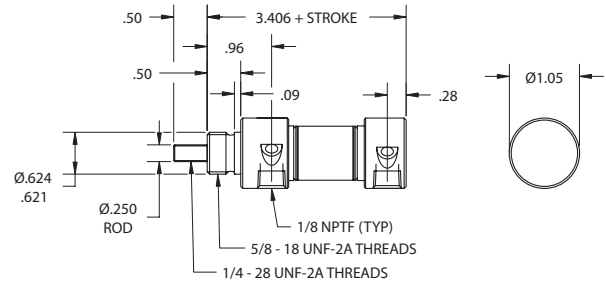
1/2", 1", 1-1/2", **2"**, 2-1/2", 3", 4", **5"**, 6"

Maximum Stroke: 12"

Base Weight: .24 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



3/4" Bore Double Acting – 0750DG2-00A

Rear Pivot Mount with Cushions

Standard Stroke Lengths:

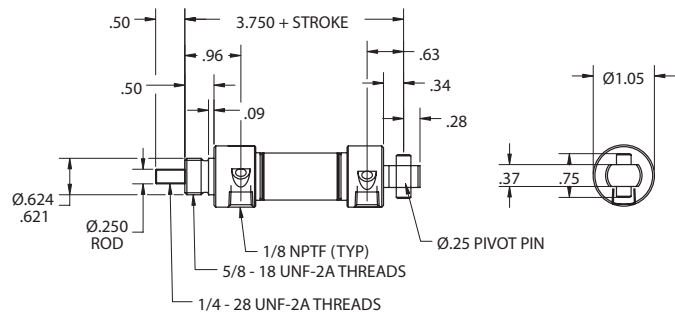
1/2", **1"**, 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .29 lbs., plus .03 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



1-1/16" Bore Double Acting – 1062DG1-00A

Front Nose Mount with Cushions

Standard Stroke Lengths:

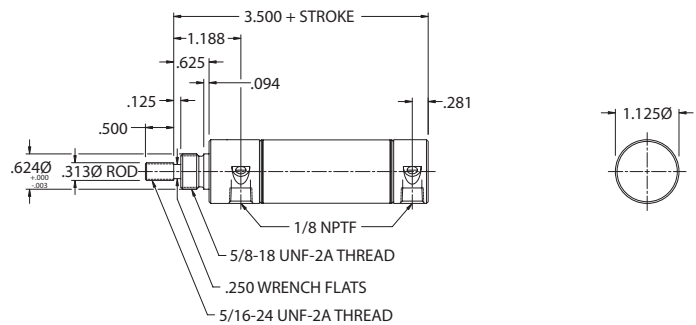
1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 12"

Base Weight: .38 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



1-1/16" Bore Double Acting – 1062DG2-00A

Rear Pivot Mount with Cushions

Standard Stroke Lengths:

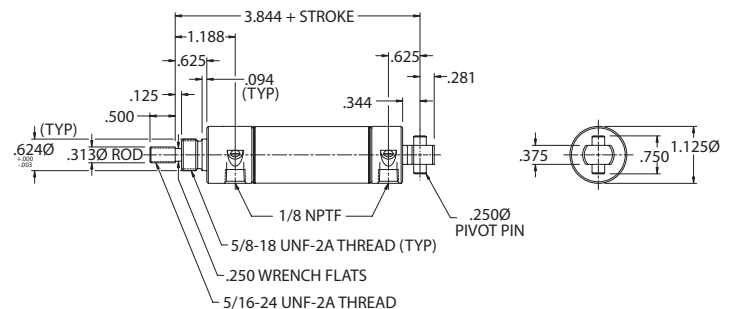
1/2", 1", 1-1/2", 2", 2-1/2", **3" with magnet**, 4", 5", 6", 7", 8", 9", **10"**, 11", 12"

Maximum Stroke: 32"

Base Weight: .44 lbs., plus .04 lbs. per inch of stroke

*Optional Accessories:

- M117005 Mounting Bracket
- M029003 Pivot Bracket
- M127004 Rod Clevis



Adjustable Cushion Cylinder Specifications

• Refer to specific bore size in standard cylinder section for specifications.

* See page 51-58 for accessory details.

Adjustable Cushion Cylinders

1-1/2" Bore Double Acting – 1500DG1-00A

Front Nose Mount with Cushions

Available Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", *3", *4", *5", *6", *7", *8", *9", *10", *11", *12"

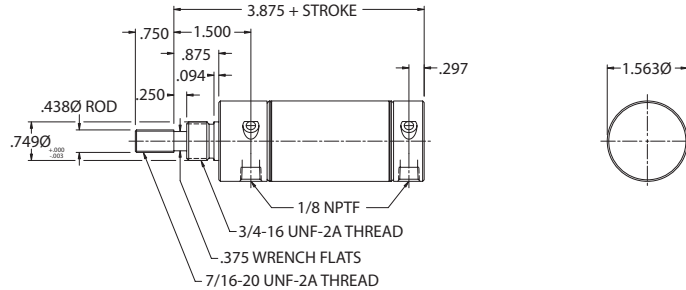
***with magnet**

Maximum Stroke: 12"

Base Weight: .77 lbs., plus .09 lbs. per inch of stroke

*Optional Accessories:

- M117007 Mounting Bracket
- M127005 Rod Clevis



1-1/2" Bore Double Acting – 1500DG2-00A

Rear Pivot Mount with Cushions

Standard Stroke Lengths:

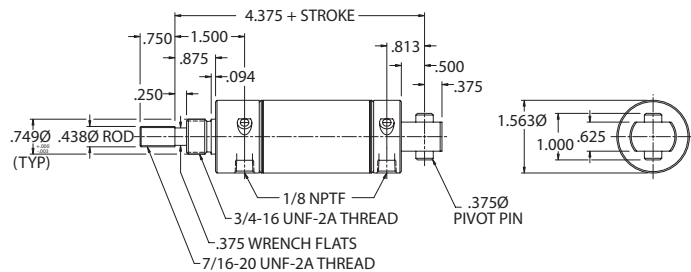
1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

Base Weight: .77 lbs., plus .09 lbs. per inch of stroke

*Optional Accessories:

- M029004 Pivot Bracket
- M127005 Rod Clevis



2" Bore Double Acting – 2000DG1-00A

Front Nose Mount with Cushions

Standard Stroke Lengths:

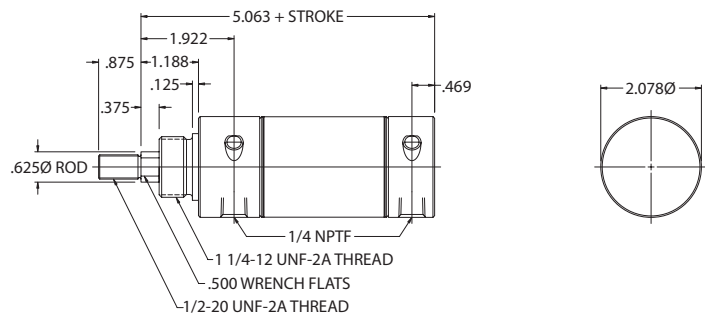
1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 12"

Base Weight: 1.64 lbs., plus .15 lbs. per inch of stroke

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



2" Bore Double Acting – 2000DG2-00A

Rear Pivot Mount with Cushions

Standard Stroke Lengths:

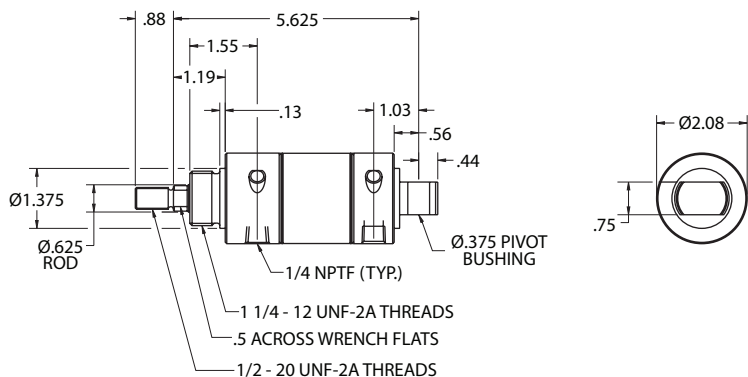
1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4", 5", 6"

Maximum Stroke: 32"

Base Weight: 1.68 lbs., plus .15 lbs. per inch of stroke

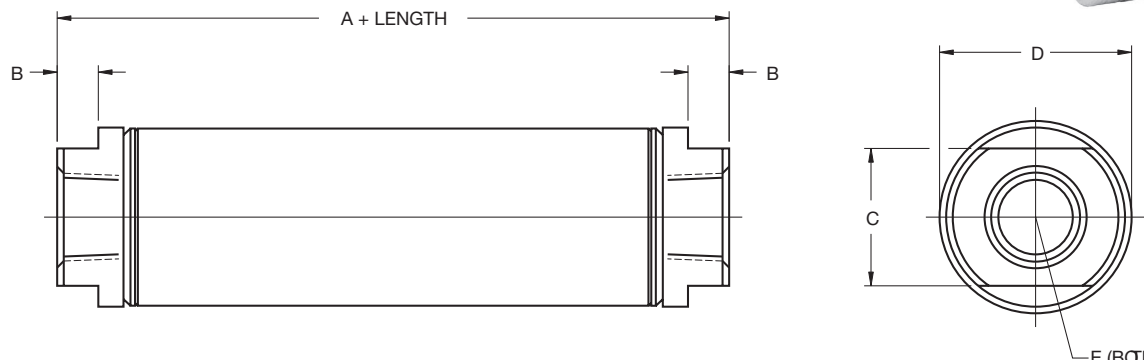
*Optional Accessories:

- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127006 Rod Clevis



* See page 51-58 for accessory details.

Volume Chambers



Bore	A	B	C	D	E	Cubic Inches Per Inch	Standard Length	Maximum Length
3/4"	1.062	0.190	0.625	0.813	1/8"	0.440	1" Increments to 4"	32"
1-1/16"	1.188	0.190	0.875	1.125	1/8"	0.886	1" Increments to 8"	32"
1-1/2"	1.375	0.250	0.875	1.563	1/8"	1.767	1" Increments to 16"	32"
2"	1.767	0.310	1.250	2.078	1/4"	3.141	1" Increments to 16"	32"
2-1/2"	1.767	0.310	1.750	2.625	1/4"	4.908	1" Increments to 24"	32"
3"	2.000	0.310	2.00	3.156	3/8"	7.069	1" Increments to 24"	32"

How To Order

1500 V 01 - 01 A

Bore

0313 = 5/16"
 0438 = 7/16"
 0563 = 9/16"
 0750 = 3/4"
 0875 = 7/8"
 1062 = 1-1/16"
 1250 = 1-1/4"
 1500 = 1-1/2"
 1750 = 1-3/4"
 2000 = 2"
 2500 = 2-1/2"
 3000 = 3"

Style

V = Volume Chamber

Mount

01 = Nose Mount
 02 = Pivot Mount

Fractional Inches of Length

A = 0" Stroke
 B = 1/16" Stroke
 C = 1/8" Stroke
 D = 3/16" Stroke
 E = 1/4" Stroke
 F = 5/16" Stroke
 G = 3/8" Stroke
 H = 7/16" Stroke
 I = 1/2" Stroke
 J = 9/16" Stroke
 K = 5/8" Stroke
 L = 11/16" Stroke
 M = 3/4" Stroke
 N = 13/16" Stroke
 O = 7/8" Stroke
 P = 15/16" Stroke

Full Inches of Length

00 = 0"
 01 = 1"
 02 = 2"
 03 = 3"
 32 = 32" (maximum)

Volume Chamber Specifications

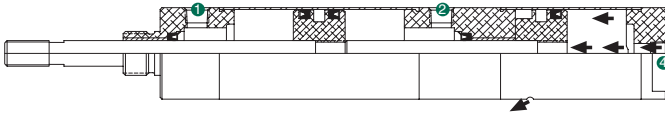
- Type 304 stainless steel body.
- Aluminum alloy end caps.
- Pressure rating: 250 psi.

Multi-Position Cylinders



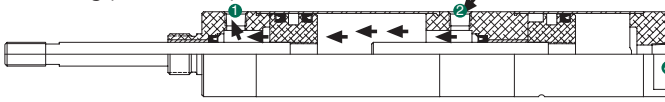
Step 1

The total stroke from full retract to the intermediate position is achieved by pressurizing port 4.



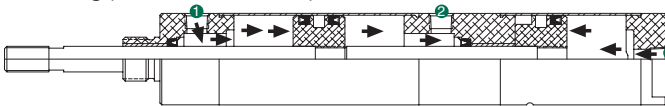
Step 2

The total stroke from the intermediate position to full extend is achieved by pressurizing port 2 with port 1 vented.



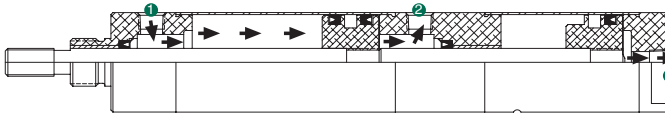
Step 3

The total stroke from full extend to the intermediate position is achieved by pressurizing ports 1 and 4 with port 2 vented.



Step 4

The total stroke from full extend to full retract is achieved by pressurizing port 1 with ports 2 and 4 vented.



Features

The M Series Multi-Position is a three-position stainless steel body cylinder with numerous application advantages. It provides three positions with a single cylinder.

How To Order

1500 D1 - 02A - 01A - 00

Bore

0750 = 3/4"
1062 = 1-1/16"
1500 = 1-1/2"
2000 = 2"

Mount

D1 = Nose Mount

Options

00 = No Options
12 = Magnetic Band (Both Ends)
(or leave blank)

Rear Stroke

Front Stroke (total stroke)

Full Inches
00 = 0"
01 = 1"
02 = 2"

Fractional Inches
A = 0"
I = 1/2"

Example: **1500D1-02A-01A-00**

When port 4 is pressurized, the cylinder will stroke 1". When port 2 is pressurized, the cylinder will stroke an additional 1" for a total stroke of 2".

For rear strokes of over 8" and/or combined strokes over 24", consult factory.

Multi-Position Cylinders

3/4" Bore Standard – **0750D1-00A-00A-00**

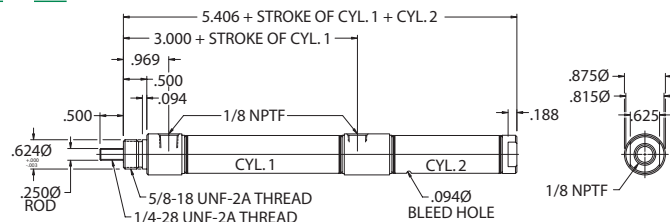
3/4" Bore Magnetic Band (both ends) – **0750D1-00A-00A-12**

Front Nose Mount

Maximum Stroke: 24"

*Optional Accessories:

- M117005 Mounting Bracket



1-1/16" Bore Standard – **1062D1-00A-00A-00**

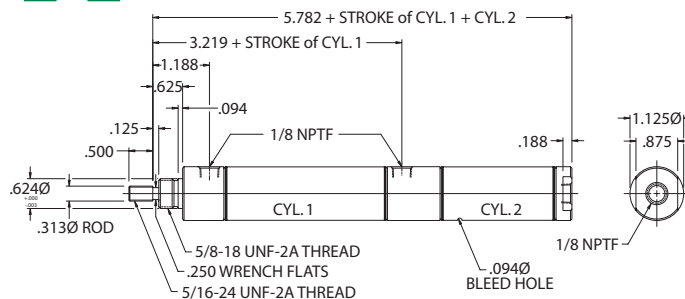
1-1/16" Bore Magnetic Band (both ends) – **1062D1-00A-00A-12**

Front Nose Mount

Maximum Stroke: 24"

*Optional Accessories:

- M117005 Mounting Bracket



1-1/2" Bore Standard – **1500D1-00A-00A-00**

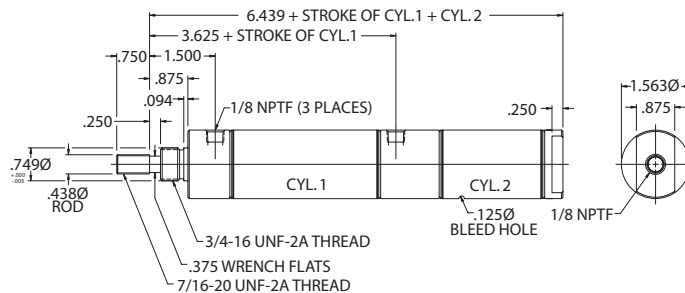
1-1/2" Bore Magnetic Band (both ends) – **1500D1-00A-00A-12**

Front Nose Mount

Maximum Stroke: 24"

*Optional Accessories:

- M117007 Mounting Bracket



2" Bore Standard – **2000D1-00A-00A-00**

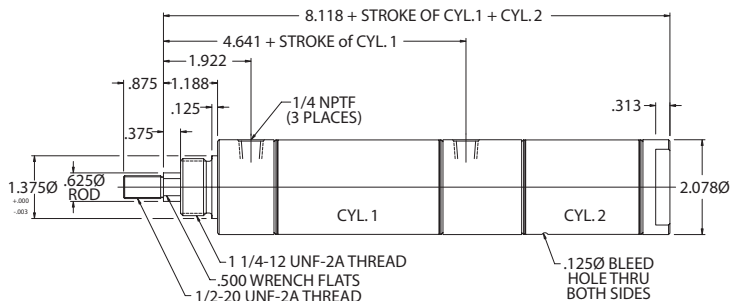
2" Bore Magnetic Band (both ends) – **2000D1-00A-00A-12**

Front Nose Mount

Maximum Stroke: 24"

*Optional Accessories:

- M117009 Mounting Bracket

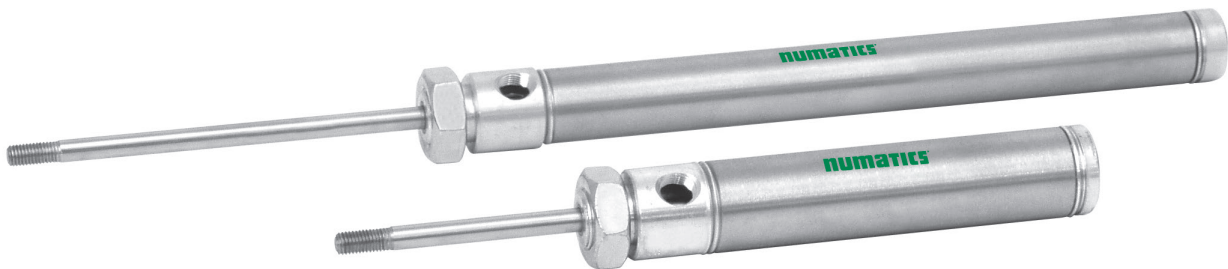


* See page 51-58 for accessory details.

Single Acting with Magnet Cylinders

Features

Single Acting M Series with a magnetic band on the piston for position sensing.



How To Order

0563 S01 - 00A - 03

Bore

0563 = 9/16"
0750 = 3/4"
1062 = 1-1/16"
1500 = 1-1/2"
2000 = 2"

Mount

S01 = Front Nose Mount
S02 = Double Nose or Rear Pivot Mount

Options

03 = Magnetic Piston

Rear Stroke (full inches)

00 = 0"
01 = 1"
02 = 2"
06 = 6" (maximum)

Fractional Inches

A = 0"
I = 1/2"

Single Acting with Magnet Cylinders

9/16" Bore Single Acting Spring Return – **0563S01-00A-03**

Front Nose Mount with Magnetic Band

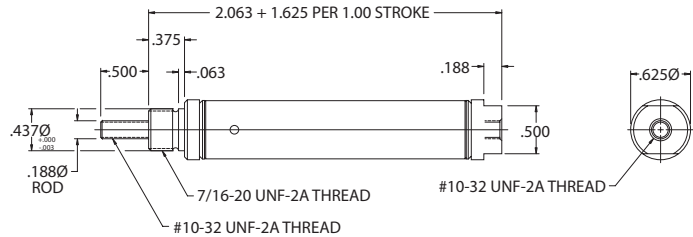
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4"

Maximum Stroke: 6"

*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis



9/16" Bore Single Acting Spring Return – **0563S02-00A-03**

Double Nose or Rear Pivot Mount with Magnetic Band

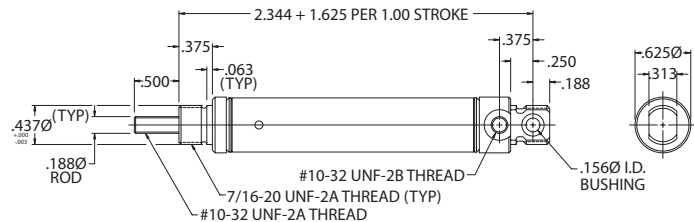
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

*Optional Accessories:

- M117003 Mounting Bracket
- M129002 Pivot Bracket
- M127002 Rod Clevis



3/4" Bore Single Acting Spring Return – **0750S01-00A-03**

Front Nose Mount with Magnetic Band

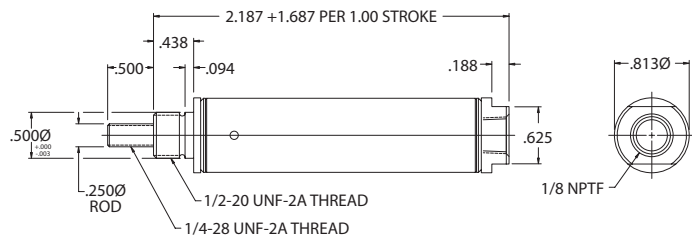
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

*Optional Accessories:

- M117006 Mounting Bracket
- M127003 Rod Clevis



3/4" Bore Single Acting Spring Return – **0750S02-00A-03**

Double Nose or Rear Pivot Mount with Magnetic Band

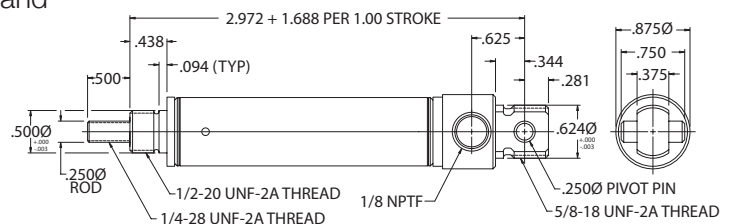
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

*Optional Accessories:

- M029003 Pivot Bracket
- M127002 Rod Clevis



* See page 51-58 for accessory details.

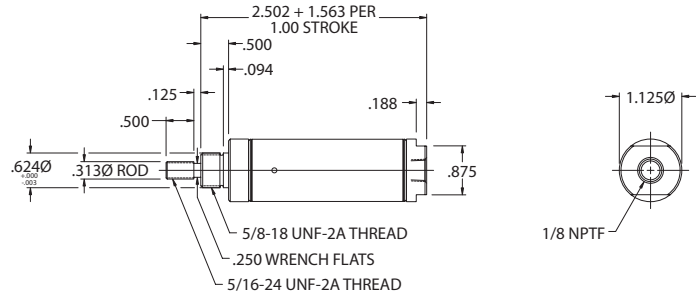
Single Acting with Magnet Cylinders

1-1/16" Bore Single Acting Spring Return – **1062S01-00A-03**
Front Nose Mount with Magnetic Band

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

Maximum Stroke: 6"

- *Optional Accessories:
- M117003 Mounting Bracket
 - M127002 Rod Clevis

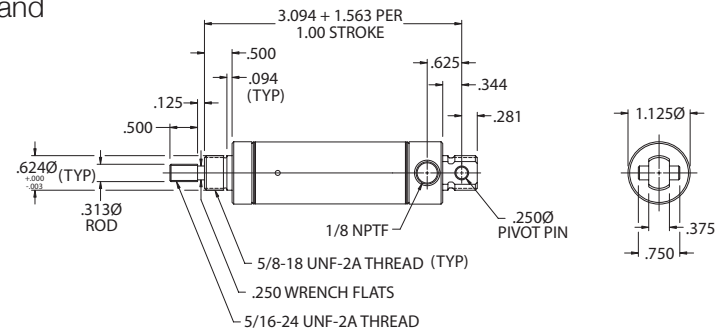


1-1/16" Bore Single Acting Spring Return – **1062S02-00A-03**
Double Nose or Rear Pivot Mount with Magnetic Band

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

Maximum Stroke: 6"

- *Optional Accessories:
- M117003 Mounting Bracket
 - M129002 Pivot Bracket
 - M127002 Rod Clevis

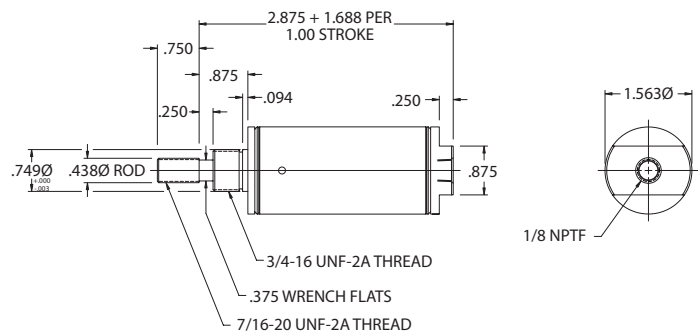


1-1/2" Bore Single Acting Spring Return – **1500S01-00A-03**
Front Nose Mount with Magnetic Band

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

Maximum Stroke: 6"

- *Optional Accessories:
- M117007 Mounting Bracket
 - M127005 Rod Clevis

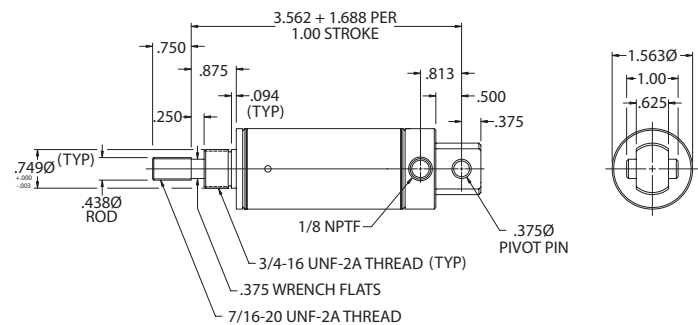


1-1/2" Bore Single Acting Spring Return – **1500S02-00A-03**
Double Nose or Rear Pivot Mount with Magnetic Band

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

Maximum Stroke: 6"

- *Optional Accessories:
- M029004 Pivot Bracket
 - M127005 Rod Clevis



* See page 51-58 for accessory details.

Single Acting with Magnet Cylinders

2" Bore Single Acting Spring Return – 2000S01-00A-03

Front Nose Mount with Magnetic Band

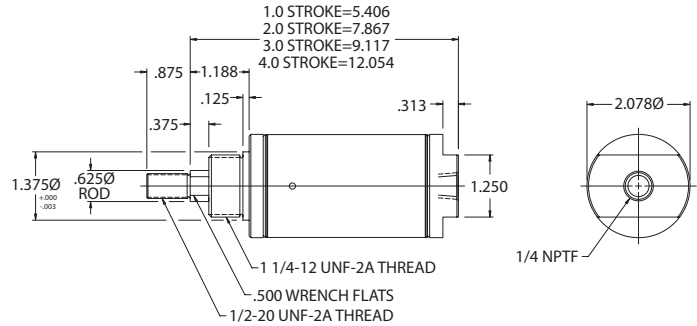
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

*Optional Accessories:

- M117009 Mounting Bracket
- M127006 Rod Clevis



2" Bore Single Acting Spring Return – 2000S02-00A-03

Double Nose or Rear Pivot Mount with Magnetic Band

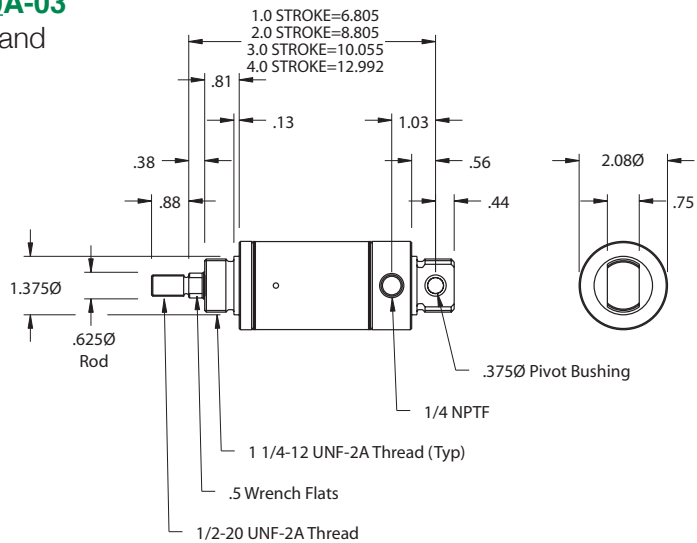
Standard Stroke Lengths:

1/2", 1", 1-1/2", 2", 2-1/2", **3"**, 4"

Maximum Stroke: 4"

*Optional Accessories:

- M117009 Mounting Bracket
- M129005 Pivot Bracket
- M127006 Rod Clevis



* See page 51-58 for accessory details.

Hole Punch Cylinders

Features

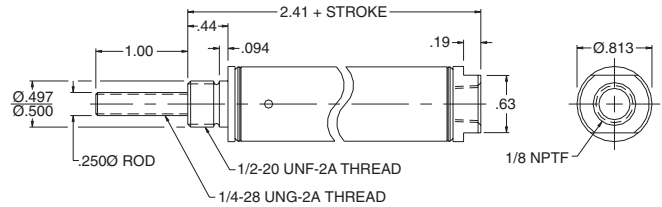
The durable design of our Hole Punch Cylinder enables you to punch millions of maintenance-free holes. The Numatics Hole Punch Cylinder is perfect for punching holes in LLDPE (Linear Low Density Polyethylene) film. The ability to replace the punch is an integral part of the design. The punches are replaceable without having to replace the cylinder. Our razor sharp plastic punches are self-sharpening and are able to significantly outlast conventional steel punches in most applications. We offer the option of an air ejector, foam ejector, and auto ejector. These ejectors discharge material slug from the center of the punch as well as prevent debris build-up. Our punches are available in eight different punch sizes from 1/8" to 3/4."



Our punches may be used with any of our M Series cylinders that have 1/4-28 UNF-2A male threads. For your convenience, configured three standard Hole Punch Cylinders designed specifically for hole punch applications. The standard Hole Punch Cylinder is 3/4" bore with 1" stroke, nose mount, spring return, stainless steel rod, 1/8" NPT port, and 1/2" of thread extension to allow for adjustment of the punch. It also includes elastomer bumpers to ensure quiet operation. The cylinder is rated for 250 psi. We offer three standard Hole Punch Cylinder types: spring return, spring return with non-rotating rod, and spring return with hollow rod version. The standard cylinder is offered with a 1" stroke, i.e., M12263-01A. Please note that 1/2" stroke Hole Punch Cylinders are available as standard i.e., 1/2" stroke = M12263-001. However, strokes greater than 1" are available upon request. Mounting nuts come standard with all Hole Punch Cylinders. Note: For air ejector use, a hollow rod cylinder is required.

3/4" Bore Single Acting Spring Return – M12263-001
1/2" Stroke

- Bumpers
- 1/2" Thread Extension

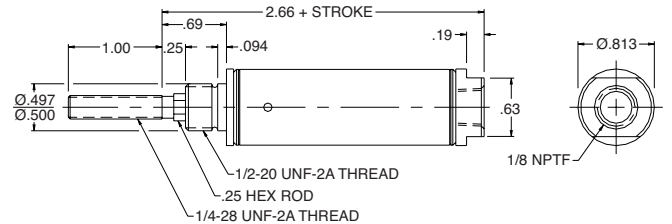


3/4" Bore Single Acting Spring Return – M12263-01A
1" Stroke

- Bumpers
- 1/2" Thread Extension

3/4" Bore Single Acting Spring Return – M12264-001
1/2" Stroke – Non-Rotating Rod

- Bumpers
- 1/2" Thread Extension

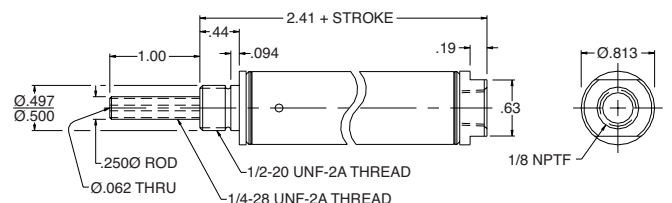


3/4" Bore Single Acting Spring Return – M12264-01A
1" Stroke – Non-Rotating Rod

- Bumpers
- 1/2" Thread Extension

3/4" Bore Single Acting Spring Return – M12265-001
1/2" Stroke – Hollow Rod

- Bumpers
- 1/2" Thread Extension



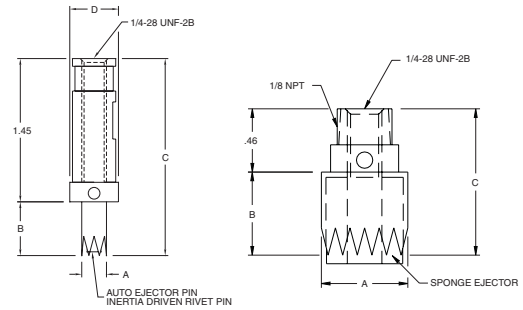
3/4" Bore Single Acting Spring Return – M12265-01A
1" Stroke – Hollow Rod

- Bumpers
- 1/2" Thread Extension

Hole Punches

Benefits

- Punches are replaceable without replacing cylinder
- Self-sharpening – outlast steel punches 2-5 times (in most applications)
- Sponge “auto” ejector standard on sizes 3/8” thru 3/4” diameter
- Auto-ejector standard on sizes 1/8” and 1/4” diameter
- Adjustable position
- Excellent for use in LLDPE (Linear Low Density Polyethylene) Film
 - Polyethylene film up to 3 mil thickness
 - Polypropylene film up to 1 mil thickness



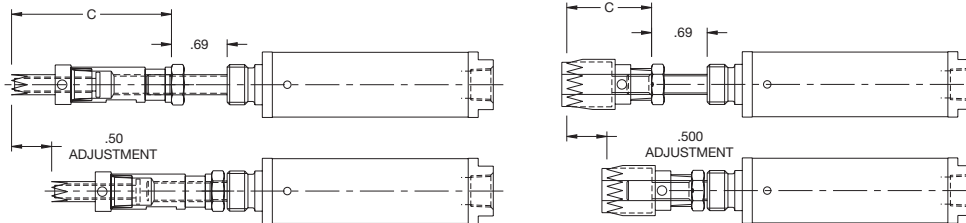
Hole Diameters 1/8"-1/4" Hole Diameters 3/8"-3/4"
Shown with AB-1A Adapter

Note

1. Punches come in packages of 5.
2. Adapters are sold individually and do not come with the punch.
3. Air ejection is available when used on hollow rod cylinder. (M12265)
4. Jam nuts come standard on “Hole Punch” cylinders.

Part #	Hole Diameter	A	B	C	Standard Ejector Type	Adapter Required
PCN-18	1/8"	.125	.54	1.00	Auto Ejector Pin	AB-1A
PCN-14	1/4"	.250	.54	1.00	Auto Ejector Pin	AB-1A
PCN-38	3/8"	.375	.54	1.00	Auto Ejector Pin	None
PCN-716	7/16"	.437	.54	1.00	Auto Ejector Pin	None
PCN-12	1/2"	.500	.54	1.00	Auto Ejector Pin	None
PCN-916	9/16"	.562	.60	1.06	Auto Ejector Pin	None
PCN-58	5/8"	.625	.60	1.06	Auto Ejector Pin	None
PCN-34	3/4"	.750	.60	1.06	Auto Ejector Pin	None

Cylinder and Punch Assemblies

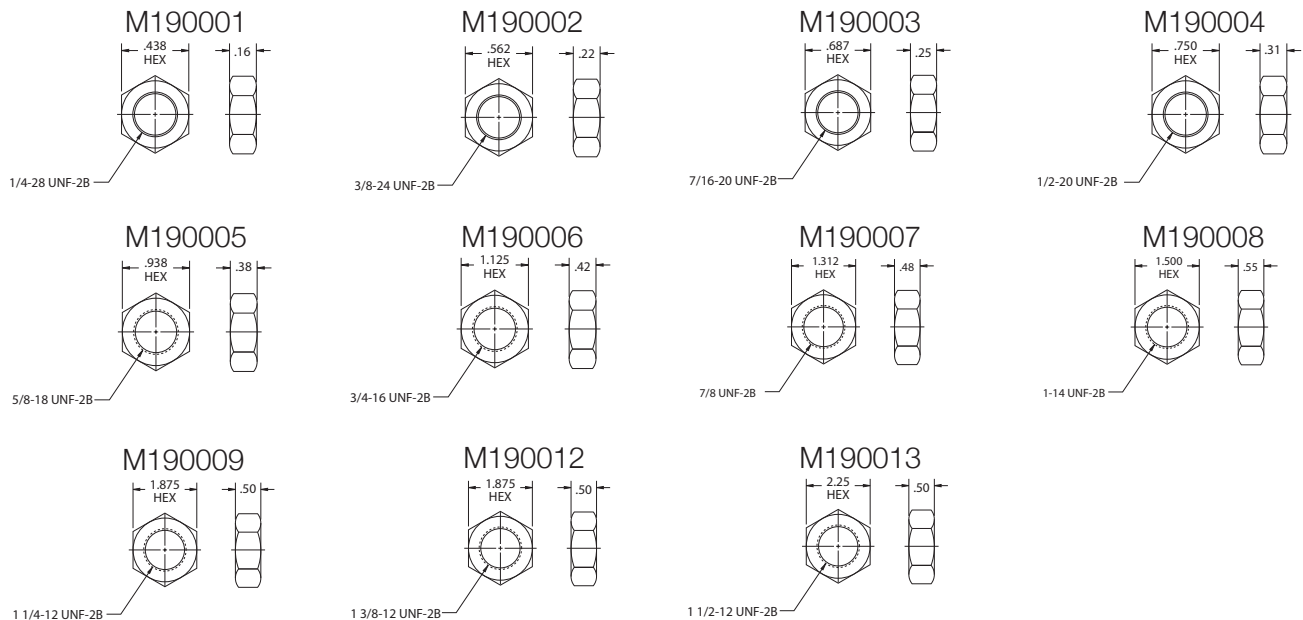


Mounting Nuts

Mounting Nuts Included on Cylinder

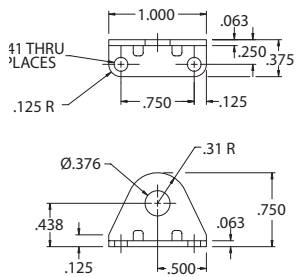
Bore	S01	S02	D01	D02	D03	D04	DG1	DG2	N01	N02	R01
0.313	Yes	No	Yes	No	Yes	Yes	N/A	N/A	N/A	N/A	Yes
0.438	Yes	No	Yes	No	Yes	Yes	N/A	N/A	Yes	No	Yes
0.563	Yes	No	Yes	No	Yes	Yes	N/A	N/A	Yes	No	Yes
0.750	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
0.875	Yes	No	Yes	No	Yes	Yes	N/A	N/A	Yes	No	Yes
1.062	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
1.250	Yes	No	Yes	No	Yes	Yes	N/A	N/A	Yes	No	Yes
1.500	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
1.750	Yes	No	Yes	No	Yes	Yes	N/A	N/A	N/A	N/A	Yes
2.000	Yes	No	Yes	No	Yes	Yes	Yes	N/A	N/A	N/A	Yes
2.500	N/A	N/A	No	No	No	No	N/A	N/A	N/A	N/A	N/A
3.000	N/A	N/A	No	No	No	No	N/A	N/A	N/A	N/A	N/A

Bore	R02	D05	D06	D13	DH3	DL1	DL2	DC1	DC2	DC3
0.313	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.438	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.563	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.750	No	No Thread	No Thread	N/A	N/A	N/A	N/A	No	No	No
0.875	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.062	No	No Thread	No Thread	Yes	Yes	N/A	N/A	No	No	No
1.250	No	N/A	N/A	N/A	Yes	N/A	N/A	N/A	N/A	N/A
1.500	No	No Thread	No Thread	N/A	Yes	N/A	N/A	No	No	No
1.750	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.000	No	N/A	N/A	N/A	N/A	No	No	N/A	N/A	N/A
2.500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3.000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

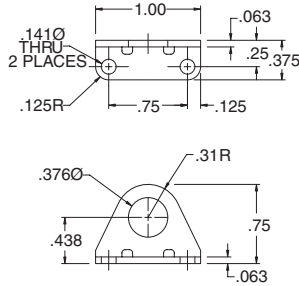


Nose Mounting Brackets

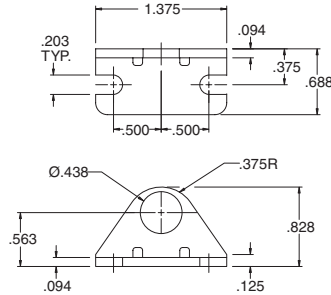
M117001
Single Acting 5/16" Bore



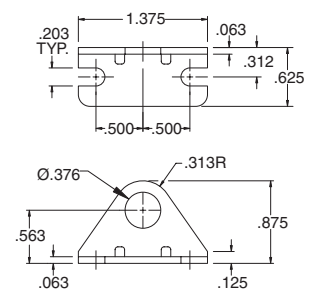
M117002
Double Acting 5/16" Bore



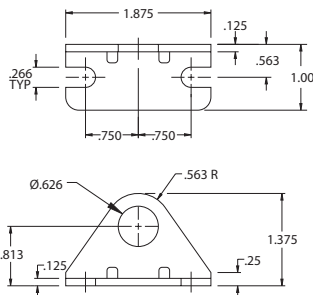
M117003
7/16" and 9/16" Bore



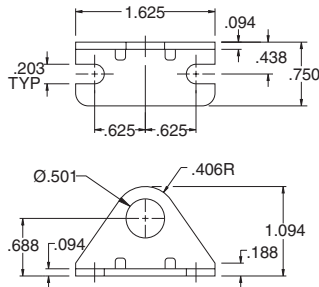
M117004
Single Acting 7/16" Bore



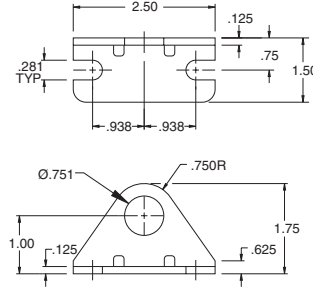
M117005
3/4", 7/8" and 1-1/16" Bore



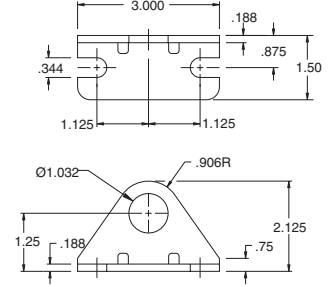
M117006
Single Acting 3/4" Bore



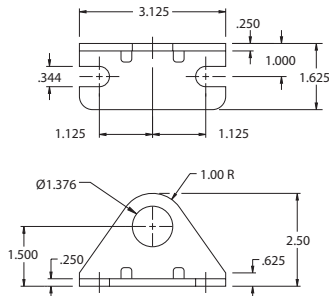
M117007
1-1/4" and 1-1/2" Bore



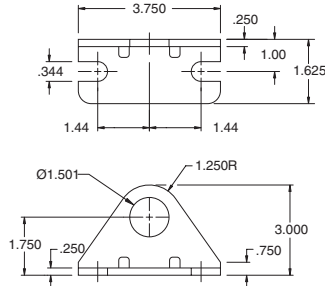
M117008
1-3/4" Bore



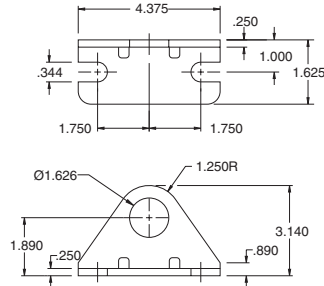
M117009
2" Bore



M117010
2-1/2" Bore

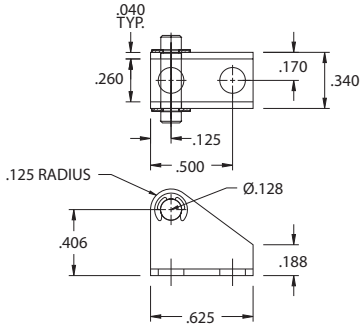


M117011
3" Bore

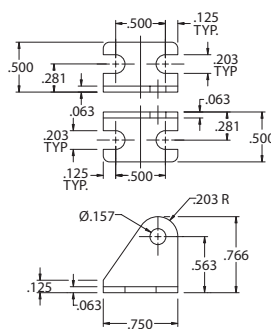


Pivot Mounting Brackets

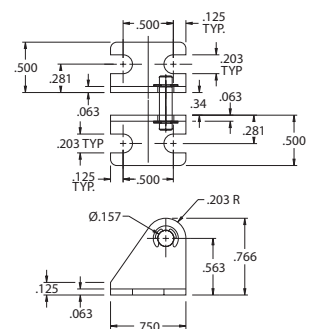
M129001
5/16" Bore



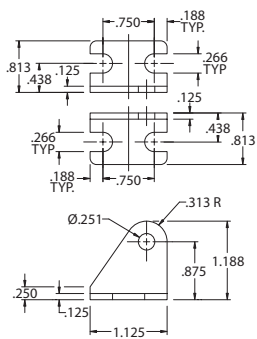
M029002
7/16" Bore



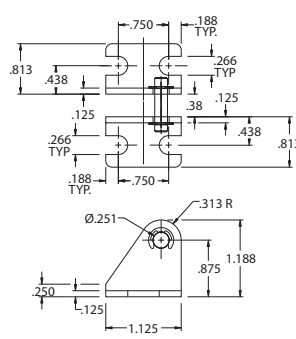
M129002
9/16" Bore



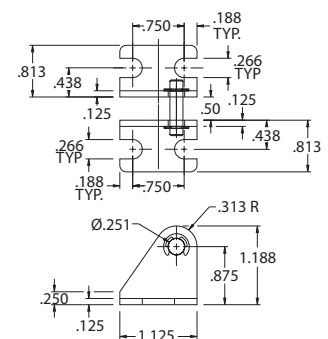
M029003
3/4", 7/8" and 1-1/16" Bore



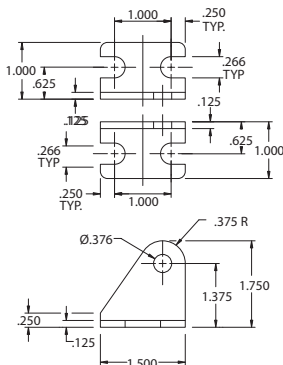
M129003
3/4", 7/8" and 1-1/16" Bore



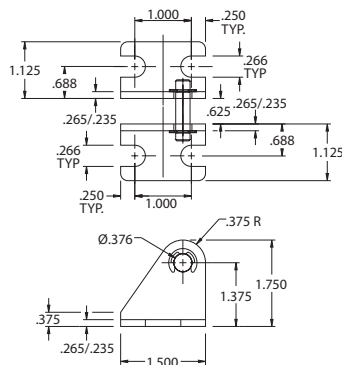
M229003
1-1/4" Bore



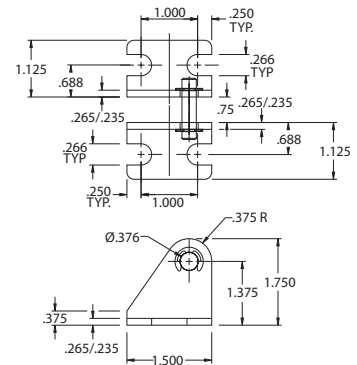
M029004
1-1/2" Bore



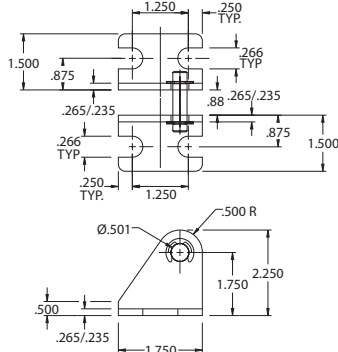
M129005
1-3/4" Bore



M229005
2 and 2-1/2" Bore

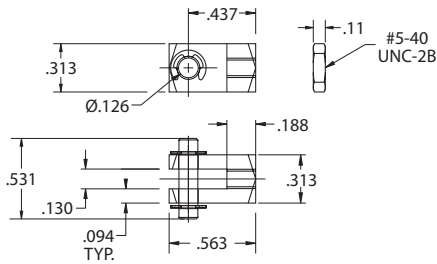


M229006
3" Bore

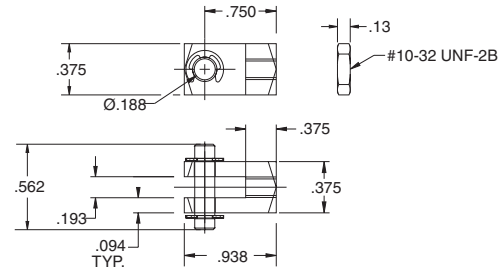


Rod Clevis

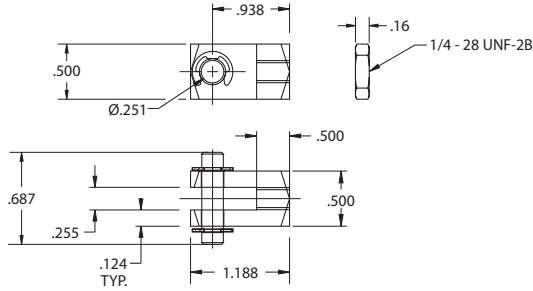
M127001
5/16" Bore



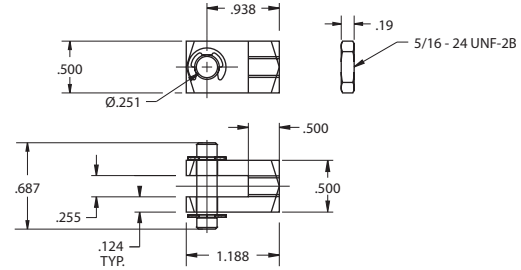
M127002
7/16" and 9/16" Bore



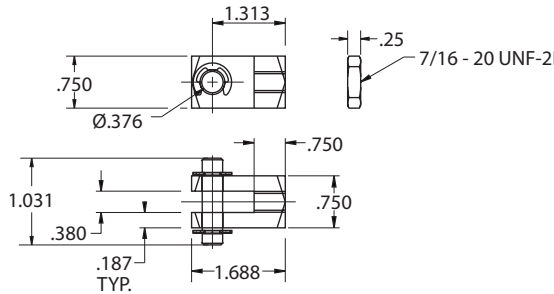
M127003
3/4" and 7/8" Bore



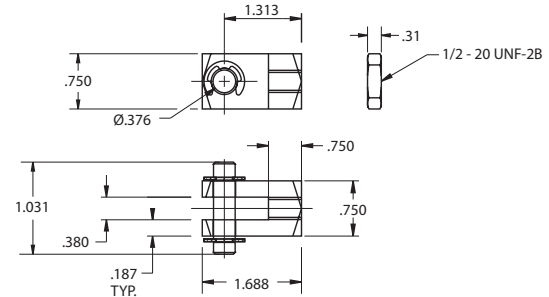
M127004
1-1/16" Bore



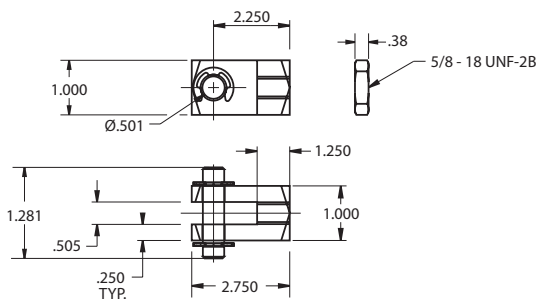
M127005
1-1/4" and 1-1/2" Bore



M127006
1-3/4", 2" and 2-1/2" Bore



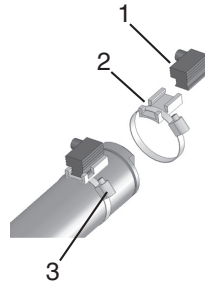
M127007
3" Bore



M Series World application Detail

Profile Tube Detail

1. World Switch
2. Band Clamp Kit
3. Adjustment Screw



M series World Switch

Cylinders	Bore	Part Number
M series Bracket Kit	9/16"	SBK056A
M series Bracket Kit	3/4"	SBK075
M series Bracket Kit	7/8"-1 1/4"	SBK106
M series Bracket Kit	1 1/2"	SBK150
M series Bracket Kit	1 3/4"-2"	SBK200
M series Bracket Kit	2.5"	SBK250A
M series Bracket Kit	3"	SBK300A

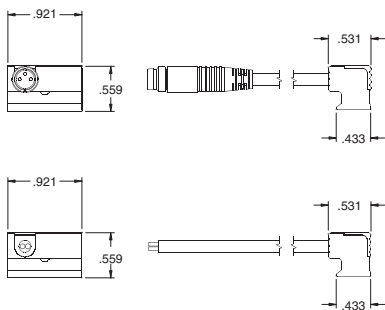
M series Switch Rails (W,X,Y,Z)

Cylinders	Bore	Part Number
M series	All	Direct Fit w/included adapter

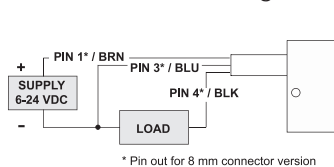
M series World Switch Hall Effect Part Numbers

P/N	Switch Style	Electrical Design	Output	Operating Voltage	Current Rating	Switching Power	Voltage Drop	NEMA IP Rating	Temperature Rating
SH6-031	Flying Lead	PNP	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25° to +75° C
SH6-032	Flying Lead	NPN	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25° to +75° C
SH6-021	M8 Connector	PNP	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25° to +75° C
SH6-022	M8 Connector	NPN	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25° to +75° C

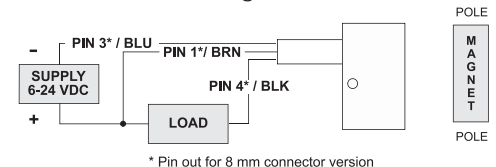
Hall Effect Switch



PNP Sourcing



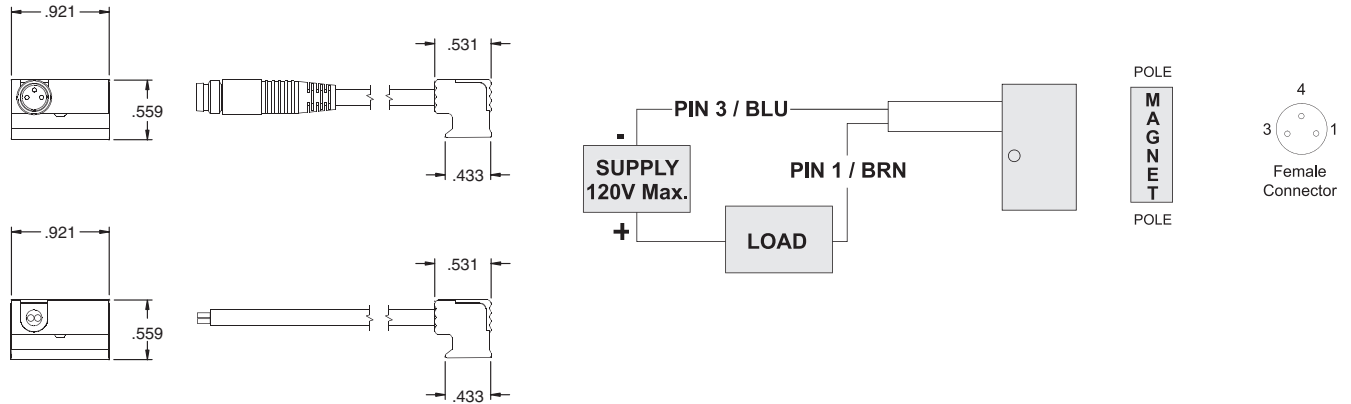
NPN Sinking



M Series World Switch Reed Switch Part Numbers

P/N	Switch Style	Electrical Design	Output	Operating Voltage	Current Rating	Switching Power	Voltage Drop	NEMA IP Rating	Temperature Rating
SR6-002	Flying Lead	AC/DC REED	Normally Open	5-120 VAC/DC	0.025 Amps Max. 0.001 Amps Min.	3 Watts Max.	3.5 Volts	NEMA 6	-25° to + 75° C
SR6-004	Flying Lead	AC/DC REED	Normally Open	5-120 VAC/DC	0.5 Amps Max. 0.005 Amps Min.	10 Watts Max.	3.0 Volts	NEMA 6	-25° to + 75° C
SR6-022	M8 Connector	AC/DC REED	Normally Open	5-50 VAC 5-60 VDC	0.025 Amps Max. 0.001 Amps Min.	12 Watts Max.	0.5 Volts	NEMA 6	-25° to + 75° C
SR6-024	M8 Connector	AC/DC REED	Normally Open	5-50 VAC 5-60 VDC	0.5 Amps Max. 0.005 Amps Min.	10 Watts Max.	3.0 Volts	NEMA 6	-25° to + 75° C

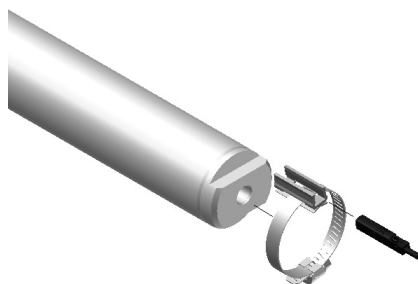
Reed Switch - Normally Open Type SR6



Non-Repairable Cylinders

M Series

Bore	Bracket P/N
9/16"	N199-1054
3/4"	N199-1055
7/8"	N199-1055
1 1/16"	N199-1056
1 1/4"	N199-1056
1 1/2"	N199-1057
1 3/4"	N199-1058
2"	N199-1058
2 1/2"	N199-1059
3"	N199-1060

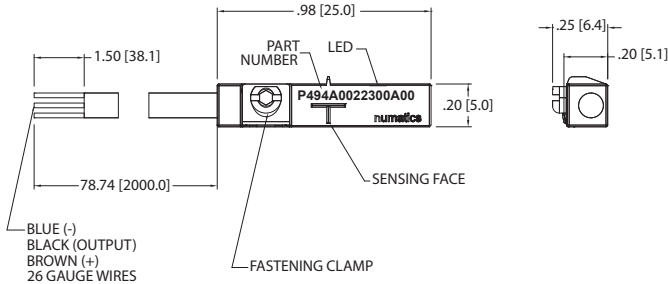


Sensor Description	Standard Cord Set	Quick Disconnect
Reed Switch	REED-FL2-00	REED-QDS-M8U
Hall PNP	PNP-FL2-00-U	PNP-QDS-M8-U
Hall NPN	NPN-FL2-00-U	NPN-QDS-M8-U

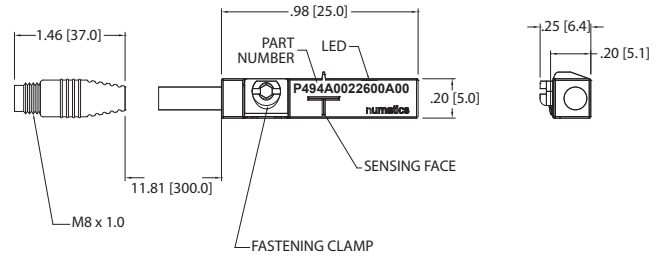
See page 58, 59, & 60 for sensor specifications

Sensing Part Numbers

PNP-FL2-00-U



PNP-QDS-M8-U

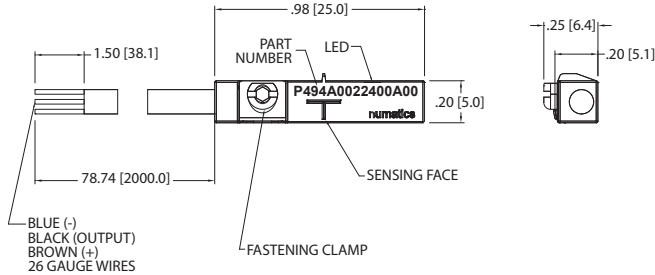


ELECTRICAL DESIGN	DC PNP
OUTPUT	Normally Open
OPERATING VOLTAGE	10-30 VDC
CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	Yes
OVERLOAD PROTECTION	Yes
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 2.5 V
CURRENT CONSUMPTION	< 12 mA
REPEATABILITY	< .2mm
POWER-ON DELAY TIME	< 30 ms
SWITCH FREQUENCY	> 3000 Hz
AMBIENT TEMPERATURE	-25°C to 85°C
PROTECTION	IP 67, III
HYSTERESIS	1.0mm
MAGNETIC SENSITIVITY	2.0 mT
TRAVEL SPEED	> 10 m/s
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	Flying Leads, Pur Cable (2m Long, 3 x26 Gauge Wire)
REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	

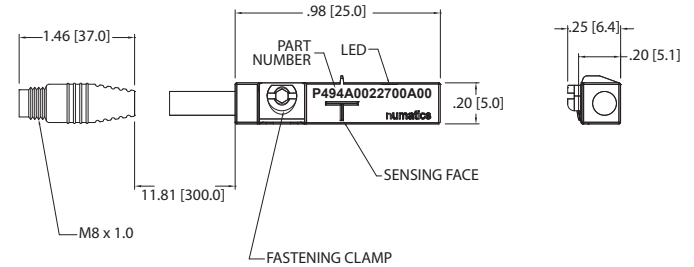
ELECTRICAL DESIGN	DC PNP
OUTPUT	Normally Open
OPERATING VOLTAGE	10-30 VDC
CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	Yes
OVERLOAD PROTECTION	Yes
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 2.5 V
CURRENT CONSUMPTION	< 12 mA
REPEATABILITY	< .2mm
POWER-ON DELAY TIME	< 30 ms
SWITCH FREQUENCY	> 3000 Hz
AMBIENT TEMPERATURE	-25°C to 85°C
PROTECTION	IP 67, III
HYSTERESIS	1.0mm
MAGNETIC SENSITIVITY	2.0 mT
TRAVEL SPEED	> 10 m/s
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	M8 Connector (Snap Fit) , Pur Cable (.3 m)
REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	

Sensing Part Numbers

NPN-FL2-00-U



NPN-QDS-M8-U



ELECTRICAL DESIGN	DC NPN
OUTPUT	Normally Open
OPERATING VOLTAGE	10-30 VDC
CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	Yes
OVERLOAD PROTECTION	Yes
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 2.5 V
CURRENT CONSUMPTION	< 12 mA
REPEATABILITY	< .2mm
POWER-ON DELAY TIME	< 30 ms
SWITCH FREQUENCY	> 3000 Hz
AMBIENT TEMPERATURE	-25°C to 85°C
PROTECTION	IP 67, III
HYSTERESIS	1.0mm
MAGNETIC SENSITIVITY	2.0 mT
TRAVEL SPEED	> 10 m/s
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	Flying Leads, Pur Cable (2m Long, 3 x26 Gauge Wire)
REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	CE cUL US RoHS

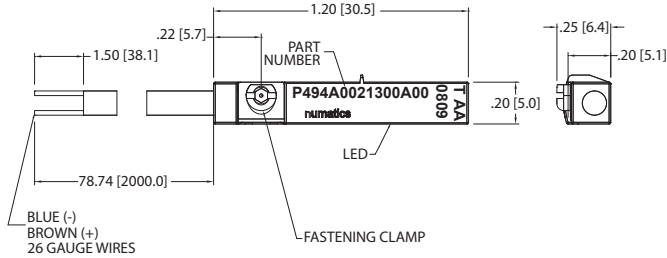
ELECTRICAL DESIGN	DC NPN
OUTPUT	Normally Open
OPERATING VOLTAGE	10-30 VDC
CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	Yes
OVERLOAD PROTECTION	Yes
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 2.5 V
CURRENT CONSUMPTION	< 12 mA
REPEATABILITY	< .2mm
POWER-ON DELAY TIME	< 30 ms
SWITCH FREQUENCY	> 3000 Hz
AMBIENT TEMPERATURE	-25°C to 85°C
PROTECTION	IP 67, III
HYSTERESIS	1.0mm
MAGNETIC SENSITIVITY	2.0 mT
TRAVEL SPEED	> 10 m/s
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	M8 Connector (Snap Fit) , Pur Cable (.3 m)
REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	CE cUL US RoHS

*Switches are not designed for wet environments. Please see your distributor for additional information.

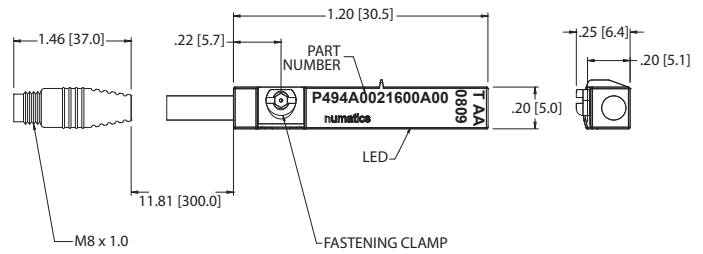
Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.

Sensing Part Numbers

REED-FL2-00



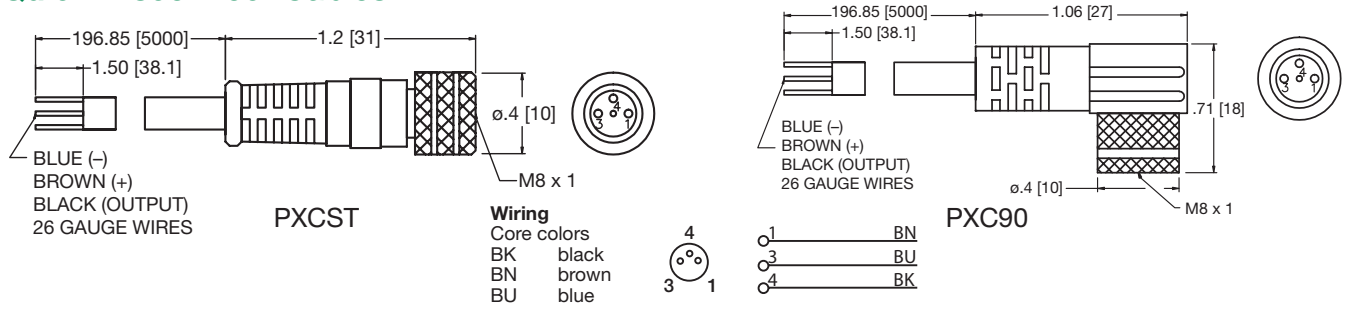
REED-QDS-M8U



ELECTRICAL DESIGN	AC/DC REED
OUTPUT	Normally Open
OPERATING VOLTAGE	5-120 VAC/DC
CURRENT RATING	100 mA*
SHORT-CIRCUIT PROTECTION	No
OVERLOAD PROTECTION	No
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 5 V
REPEATABILITY	± .2mm
MAKETIME INCLUDING BOUNCE	< .6 ms
BREAKTIME	< .1 ms
SWITCHING POWER (MAX)	5 W
SWITCH FREQUENCY	1000 Hz
AMBIENT TEMPERATURE	-25°C to 70°C
PROTECTION	IP 67, II
HYSTERESIS	.9mm
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	Flying Leads, Pur Cable (2m Long, 2 x26 Gauge Wire)
REMARKS	*External Protective Circuit for Inductive Load (Valve, Contactor, Etc..) Necessary. Conforms to 2008 NEC Section 725 III, Class 2 Circuits Clamping Screw with Combined Slot/ Hexagon Socket Head AF 1.5. No LED Function in case of Polarity in DC Operation
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	

ELECTRICAL DESIGN	AC/DC REED
OUTPUT	Normally Open
OPERATING VOLTAGE	*5-60 VDC / 5-50 VAC
CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	No
OVERLOAD PROTECTION	No
REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 5 V
REPEATABILITY	± .2mm
MAKETIME INCLUDING BOUNCE	< .6 ms
BREAKTIME	< .1 ms
SWITCHING POWER (MAX)	5 W
SWITCH FREQUENCY	1000 Hz
AMBIENT TEMPERATURE	-25°C to 70°C
PROTECTION	IP 67, II
HYSTERESIS	.9mm
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	M8 Connector (Snap Fit), Pur Cable (.3m)
REMARKS	*External Protective Circuit for Inductive Load (Valve, Contactor, Etc..) Necessary. Conforms to 2008 NEC Section 725 III, Class 2 Circuits M8 Connector voltage limited to 5-60 vdc / 5-50 vac to conform with 2008 IEC 61076-2-104 Clamping Screw with Combined Slot/ Hexagon Socket Head AF 1.5. No LED Function in case of Polarity in DC Operation
ACCESSORIES	Rubber Placeholder, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS	

Quick Disconnect Cables



Order Code	Type	Operating Voltage	Current Rating	Cable Material	Protection	Connector
PXCST	Straight 5 m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP 68, III	M8
PXC90	90° 5 m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP 68, III	M8



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