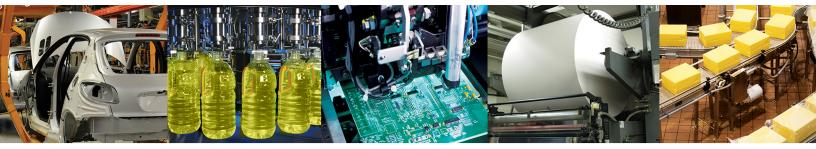


# **M** Series

Round Line, Non-Repairable Cylinder Line







## **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<sup>®</sup>, 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<sup>®</sup> is a registered trademark to the Loctite Corporation.

## Standard Specifications:

- 303 stainless steel piston rods
- 304 stainless steel cylinder tube
- Aluminum head and caps
- Maximum pressure rating: 250 psi air
- Except for derlin (corrosion resistant) versions: 100 psi air Twelve bore sizes: 5/16" – 3"
- Standard temperature: -10°F to +165°F
- Except for derlin (corrosion resistant) versions: +32°F to +160°F
  Single and double acting
- Single and double
   Devictor and double
- Double rods

#### **Optional Specifications:**

- Corrosion Resistant Delrin<sup>®</sup> Head and End Cap
- Position Feedback ACCU M Series Magnetic pistons
- Magnetic pistons
- Adjustable cushions
- 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 Front Block** 

Mount (S02)

Single Acting Spring

**Return Rear Pivot** 

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



Mount (D02)

Mount (S05)

Spring Extend Nose

Single Acting

Mount (R01)

Single Acting Spring **Return Trunnion** Mount (S06)



Double Acting Through Rod Mount (D03)

Double Acting Through

Rod Hollow Rod Mount

(DH3)

Single Acting Spring **Extend Rear Pivot** Mount (R02)



Single Acting Spring **Extend Front Block** Mount (R05)



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



Single Acting Spring **Extend Trunnion Mount** (R06)



## **Double Acting**

**Double Acting Nose** Mount (D01)

Double Acting Trunnion Mount (D06)



**Double Acting Corrosion Resistant Nose Mount** (DC1)



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

**Double Acting Rear Pivot** 



**Double Acting Corrosion Resistant Rear Pivot** Mount (DC2)



Double Acting Corrosion Double Acting Nose Resistant Through Rod Mount (DC3)



Double Acting

**Double Acting Double** 

Nose Mount (D04)

Adjustable Cushion Nose Mount (DG1)



Mount, 2" Bore, 1" Rod (DL1)



**Double Acting Front** Block Mount (D05)



**Double Acting** Adjustable Cushion **Rear Pivot Mount** (DG2)



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



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



3

## **Volume Chambers**

Nose Mount Volume Chamber (V01)



Rear Pivot Mount Volume Chamber (V02)



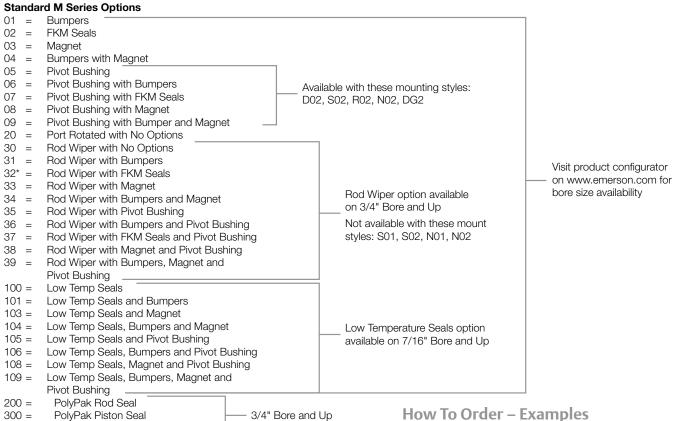


How to Order

Base Models 1500 Dot 00 A	01 10010
<u>1500</u> <u>D01</u> - <u>02</u> <u>A</u>	
Bore Size	Rod and/or Thread Extension
0313 = 5/16"	Note: Leave blank if rod and/or thread extension is not required. 1A = Rod Extension (must specify extension)
0438 = 7/16"	
0563 = 9/16"	Example: 1A <b>01A (full and fractional length)</b> 2A = Thread Extension (must specify extension)
0750 = 3/4"	Example: 2A 01A (full and fractional length)
0875 = 7/8"	
1062 = 1 - 1/16"	RT = Rod and Thread Extension (must specify extension) Example: RT 01A01A (full and fractional length)
1250 = 1 - 1/4"	
1500 = 1 - 1/2"	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
1750 = 1-3/4"	for double-rod cylinders.
2000 = 2"	
$2500 = 2 \cdot 1/2"$	Options
3000 = 3"	00 = No Options (or leave blank)
	01 = Bumpers*
Mounting Style	02 = FKM Seals
S01 = Single Acting Spring Return	03 = Magnet**
Nose Mount	04 = Bumpers with Magnet* (see notes below for details)
S02 = Single Acting Spring Return	$05 = \text{Pivot Bushing}^{***}$
Rear Pivot	06 = Pivot Bushing with Bumpers* (see notes below for details)
R01 = Single Acting Spring Extend	07 = Pivot Bushing with FKM Seals
Nose Mount	08 = Pivot Bushing with Magnet* (see notes below for details)
R02 = Single Acting Spring Extend	09 = Pivot Bushing with Bumper
Rear Pivot	and Magnet* (see notes below for details)
N01 = Single Acting Spring Return	See next page for a comprehensive list of options.
Non-Rotating Nose Mount	* Bumpers available on 9/16" through 3" Bore Cylinders. See specific drawing/section and/or
N02 = Single Acting Spring Return	length adder charts for length adder information. (N/A on DG1 and DG2 types.)
Non-Rotating Rear Pivot	** Magnet available on 9/16" Bore. See specific drawing/section and/or length adder charts
D01 = Double Acting Nose Mount	for length adder information. *** Pivot Bushing standard on 5/16", 9/16", 2", 2-21/2", and 3" bore sizes. Optional on all
D02 = Double Acting Rear Pivot	other Rear Pivot cylinders.
D03 = Double Acting Through Rod	
D04 = Double Acting Double Nose	Fractional Inch Stroke
D05 = Double Acting Front Block D13 = Interchange Option for 1-1/16" Bore	A = 0" Stroke
	B = 1/16" Stroke
Double Acting, Through Rod	C = 1/8" Stroke
DH3 = Double Acting Through Rod Hollow Rod	D = 3/16" Stroke
D06 = Double Acting Trunnion Mount	E = 1/4" Stroke
DG1 = Double Acting Adjustable Cushion	F = 5/16" Stroke
Nose Mount	G = 3/8" Stroke
DG2 = Double Acting Adjustable Cushion	H = $7/16$ " Stroke
Rear Pivot	I = 1/2" Stroke
DL1 = Double Acting Nose Mount	J = 9/16" Stroke
2" Bore, 1" Rod	K = 5/8" Stroke
DL2 = Double Acting Rear Pivot	L = 11/16" Stroke
2" Bore, 1" Rod	M = 3/4" Stroke
DC1 = Double Acting Corrosion Resistant	N = 13/16" Stroke
Nose Mount	O = 7/8" Stroke
DC2 = Double Acting Corrosion Resistant	P = 15/16" Stroke
Rear Pivot	
DC3 = Double Acting Corrosion Resistant	Full Inch Stroke
Through Rod	00 = 0" Stroke
V01 = Nose Mount Volume Chamber	01 = 1" Stroke
V02 = Rear Pivot Mount Volume Chamber	02 = 2" Stroke
DM1 = Nose Mount MRS Interchange	03 = 3" Stroke
DM2 = Rear Pivot Mount MRS Interchange	
DS1 = Stainless Steel Double Acting Nose Mount*	32 = 32" Stroke (maximum)
	See specific cylinder drawing/section at www.asco.com for maximum stroke.

## How to Order

#### Standard M Series Options



PolyPak Piston Seal 300 =

400 =

3/4" Bore and Up

\* 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

PolyPak Piston and Rod Seal

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

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

## 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-RT02A01I

2000 = 2" Bore DG2 = Double Acting, Adjustable Cushion, Rear Pivot Mount 20 = 20" Stroke H = .4375 Fractional Stroke 03 = Magnet RT02A01I = 2" Rod Extension and 1-1/2" Thread Extension



# Length Adders

## 01 Option (Bumpers)

Bore	Single Acting S01, S02, RO1, R02 N01, N02	Double Acting D01, D02	Corrosion Resistant DC1, DC2	Double Acting D03
5/16	N/A	N/A	N/A	N/A
7/16	N/A	N/A	N/A	N/A
9/16	0.062	0.125	N/A	0.125
3/4	0.125	No Adder	0.281	0.25
7/8	No Adder	No Adder	N/A	0.25
1-1/16	0.125	0.125	0.375	0.25
1-1/4	No Adder	No Adder	N/A	0.25
1-1/2	No Adder	0.125	0.375	0.25
1-3/4	No Adder	No Adder	N/A	0.25
2	No Adder	0.250	N/A	0.25
2-1/2	N/A	0.062	N/A	N/A
3	N/A	0.062	N/A	N/A

## 03 Option (Magnet)

Bore	Single Acting S01, S02, RO1, R02 N01, N02	Double Acting D01, D02, D03	Corrosion Resistant DC1, DC2
5/16	N/A	N/A	N/A
7/16	N/A	N/A	N/A
9/16	0.531	0.250	N/A
3/4	0.688	No Adder	0.281
7/8	0.531	No Adder	N/A
1-1/16	0.562	No Adder	0.250
1-1/4	0.531	No Adder	N/A
1-1/2	0.437 (R01 = 0.500)	No Adder	0.250
1-3/4	0.656	No Adder	N/A
2	0.461 (R01 & R02 = 0.714)	No Adder	N/A
2-1/2	N/A	No Adder	N/A
3	N/A	No Adder	N/A

#### 04 Option (Bumper and Magnet)

Bore	Single Acting S01, S02, RO1, R02 N01, N02	Double Acting D01, D02	Corrosion Resistant DC1, DC2	Double Acting D03
5/16	N/A	N/A	N/A	N/A
7/16	N/A	N/A	N/A	N/A
9/16	0.713	0.375	N/A	0.375
3/4	0.890	0.125	0.406	0.25
7/8	0.733	0.125	N/A	0.25
1-1/16	0.765 (R01 = 0687)	0.125	0.375	0.25
1-1/4	0.734	0.125	N/A	0.25
1-1/2	0.765 (R01 = 0827, N01 = 0.750)	0.250	0.500	0.25
1-3/4	0.735	0.000	N/A	0.25
2	0.789	0.250	N/A	0.25
2-1/2	N/A	0.062	N/A	N/A
3	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	

.359Ø

.250

#10-32 UNF-2B THREAD

#### 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 – **0313S02-00**A 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 – **0313R02-00**A Double Nose or Rear Pivot Mount

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

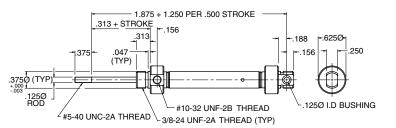
Maximum Stroke: 4"

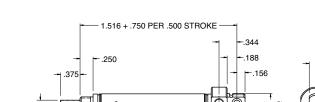
Base Weight: .05 lbs., plus .03 lbs. per inch of stroke

\*Optional Accessories:

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

EMERSON





1.125 + .750 PER .500 STROKE

/4-28 UNF-2A THREAD

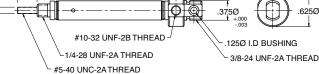
#5-40 UNC-2A THREAD

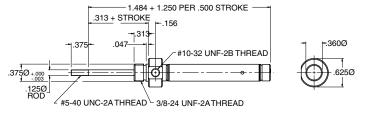
.250

.375

.125Ø\_ ROD

> .125Ø\_ ROD





## 5/16" Bore Cylinder

Double Acting – **0313D01-<u>00</u>A** 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 – **0313D02-00**A Double Nose or Rear Pivot Mount

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

#### Maximum Stroke: 4"

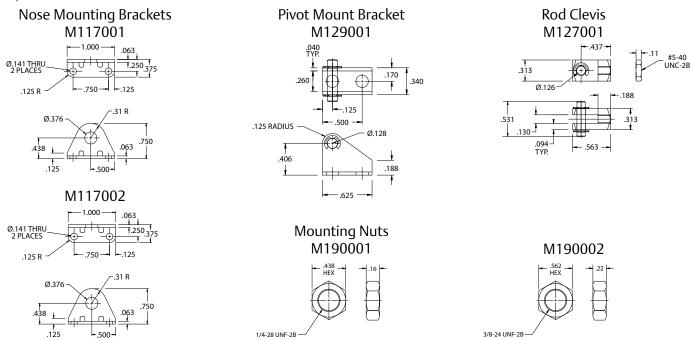
Base Weight: .06 lbs., plus .01 lbs. per inch of stroke

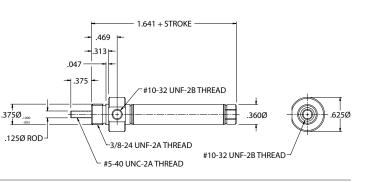
- \*Optional Accessories:
- M117002 Mounting Bracket
- M129001 Pivot Bracket
- M127001 Rod Clevis

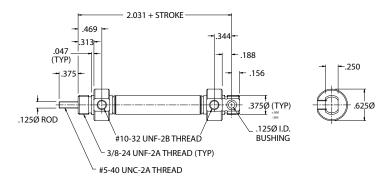
## 5/16" Bore Cylinder Specifications

- (0.07) x (Air Line Pressure) = 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 °F to 350 °F applications.

## 5/16" Bore Accessories







.500Ø

.750Ø

## 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-<u>00</u>A** 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

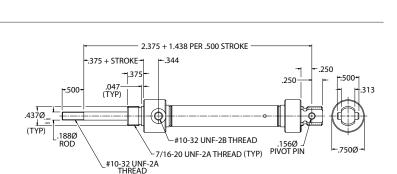
#### Single Acting Spring Extend – 0438R02-00A Rear Pivot Mount

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

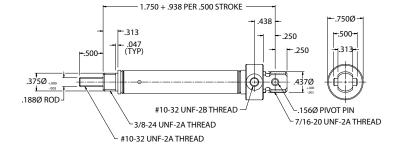
Maximum Stroke: 6"

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

- \*Optional Accessories:
- M029002 Pivot Bracket
- M127002 Rod Clevis







1 938 + 1 438 PER 500 STROKE

7/16-20 UNF-2A THREAD

#10-32 UNF-2B THREAD

.344

1.313 + .938 PER .500 STROKE

3/8-24 UNF-2A THREAD

#10-32 UNF-2A THREAD

.188--

.37

#10-32 UNF-2B THREAD

.313

047

375 + STROKE

047

<del>.</del>500

.437Ø

.188Ø ROD 1.375

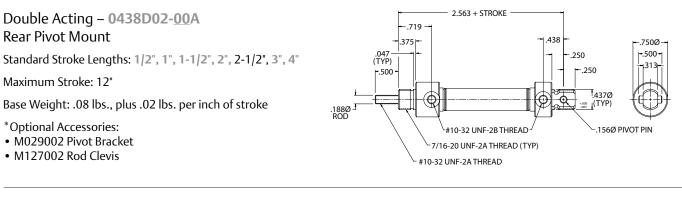
#10-32 UNE-2A THREAD

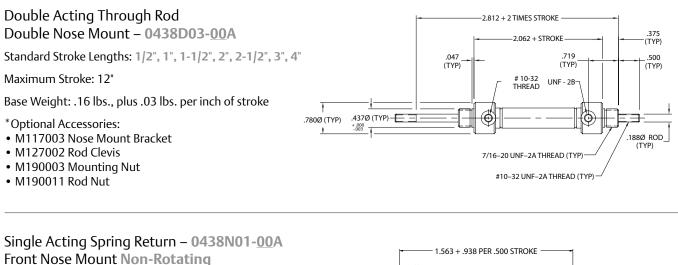
+ 500

.375Ø+...

.1880 ROD

#### 7/16" Bore Cylinder 2.125 + STROKE .719 Double Acting - 0438D01-00A 375 Front Nose Mount ⊢.750Ø 047 .500Ø Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" .188 -.500 #10-32 UNF-2B THREAD Maximum Stroke: 12" 13<sup>'</sup>7Ø Base Weight: .07 lbs., plus .02 lbs. per inch of stroke .188Ø ROD #10-32 UNF-2B THREAD \*Optional Accessories: 7/16-20 UNF-2A THREAD M117003 Mounting Bracket #10-32 UNF-2A THREAD M127002 Rod Clevis





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

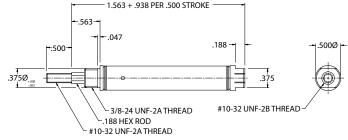
Maximum Stroke: 6"

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

\*Optional Accessories:

• M117004 Mounting Bracket

M127002 Rod Clevis





## 7/16" Bore Cylinder

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

#### .750Ø .438 -.563 250 -.500 - .047 (TYP) .250 313 <del>-</del>.500-.375Ø<sub>+.000</sub> #10-32 UNF-2B THREAD 156Ø PIVOT PIN 3/8-24 UNF-2A THREAD 7/16-20 UNF-2A THREAD .188 HEX ROD #10-32 UNF-2A THREAD

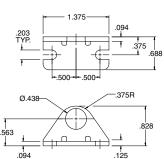
2.000 + .938 PER .500 STROKE

#### 7/16" Bore Cylinder Specifications

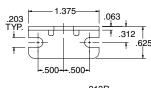
- (0.15) x (Air Line Pressure) = Approximate Force Extended
- Enclosed spring force: 1 lbs. retracted, 2 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.

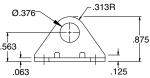
## 7/16" Bore Accessories

#### Nose Mounting Brackets M117003

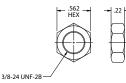


M117004



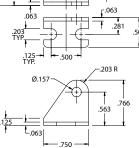


Mounting Nuts M190002

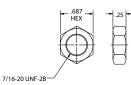




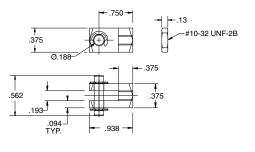
# Pivot Mount Bracket M029002



## M190003

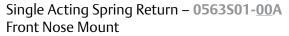


#### Rod Clevis M127002



+.625Ø

## 9/16" Bore Cylinder



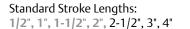
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

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 – **0563S02-00**A Double Nose or Rear Pivot Mount



#### 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

For bumper option, add .062" to overall length.

For bumper option, add .062" to overall length.

.188

.500

#10-32 UNF-2A THREAD

- 1.531 + 1.625 PER 1.00 STROKE

7/16-20 UNE-2A THREAD

#10-32 UNF-2A THREAD

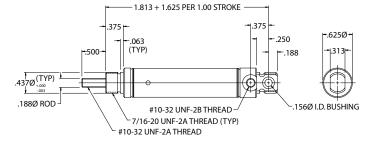
.375

063

-500

.437Ø

.188Ø ROD-



## Single Acting Spring Extend – **0563R01-<u>00</u>A** 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 – **0563R02-00**A Double Nose or Rear Pivot Mount

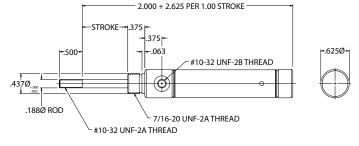
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3"

#### Maximum Stroke: 6"

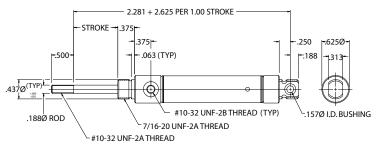
Base Weight: .08 lbs., plus .04 lbs. per inch of stroke

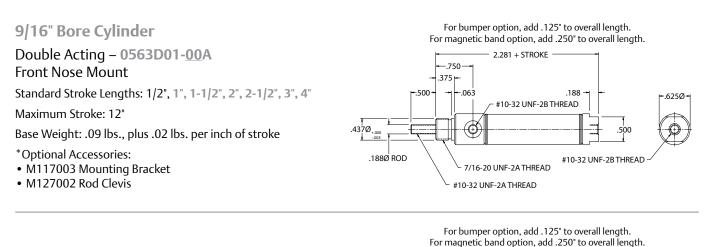
- \*Optional Accessories:
- M117003 Mounting Bracket
- M129002 Pivot Bracket
- M127002 Rod Clevis

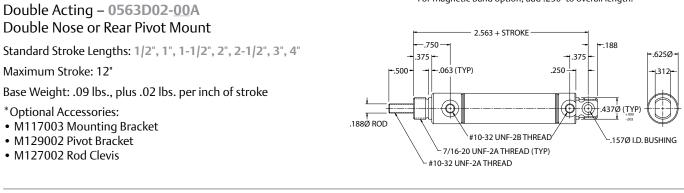
For bumper option, add .062" to overall length.

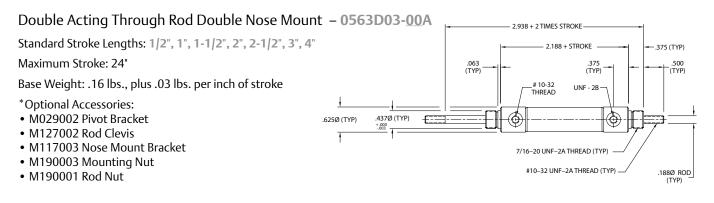


For bumper option, add .062" to overall length.









Single Acting Spring Return – 0563N01-<u>00</u>A Front Nose Mount Non-Rotating

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

Maximum Stroke: 6"

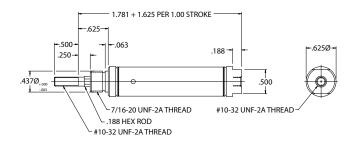
Base Weight: .06 lbs., plus .05 lbs. per inch of stroke

\*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis

EMERSON

14



## 9/16" Bore Cylinder

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

Double Acting – 0563D03-<u>00</u>A

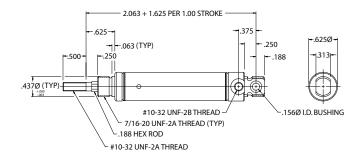
Through Rod

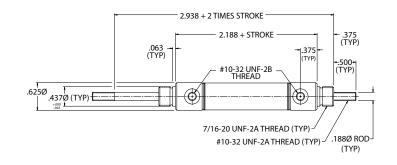
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12" Base Weight: .16 lbs., plus .03 lbs. per inch of stroke

\*Optional Accessories:

- M117003 Mounting Bracket
- M127002 Rod Clevis

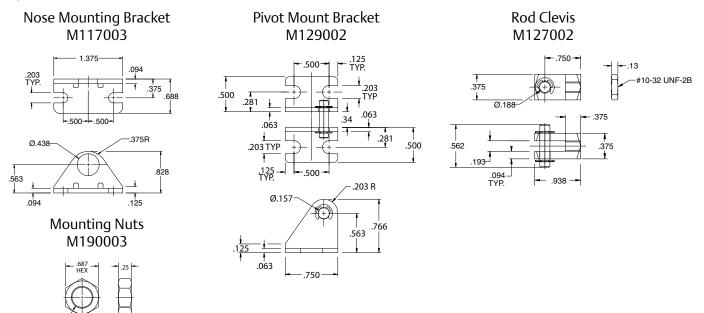




## 9/16" Bore Cylinder Specifications

- (0.25) x (Air Line Pressure) = 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 °F to 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



7/16-20 UNF-2B

## 3/4" Bore Cylinder

Single Acting Spring Return – **0750S01-<u>00</u>A** 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-<u>00</u>A** 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-<u>00</u>A** 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-<u>00</u>A** Rear Pivot Mount

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

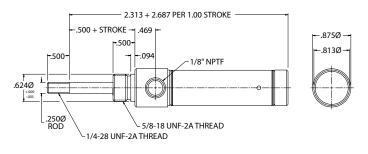
Maximum Stroke: 6"

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

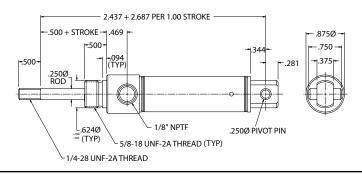
\*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis

For magnet option, add .687 to overall length.

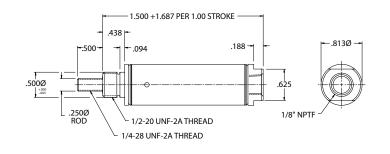


For magnet option, add .687 to overall length.



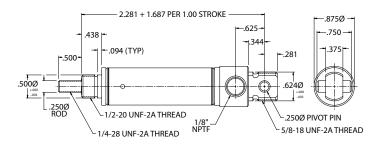


**AVENTICS**<sup>®</sup>



For magnet option, add .687 to overall length.

For magnet option, add .687 to overall length.



-.875Ø

#### 3/4" Bore Cylinder

Double Acting – **0750D01-<u>00</u>A** 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:

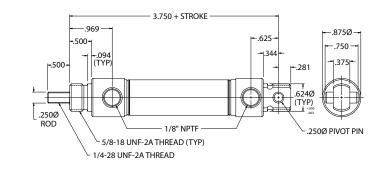
• M117005 Mounting Bracket

• M127003 Rod Clevis

-500 

2.969 + STROKE

969



3.750 + STROKE

-.625

.875Ø

375

2510 PIVOT HOLE

-.281

4Ø

Rear Pivot Mount Standard Stroke Lengths:

Double Acting - 0750D02-00A

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 – **0750D04-00**A 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-<u>00</u>A Front Nose Mount Non-Rotating

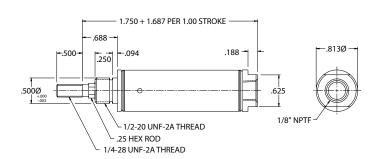
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

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

\*Optional Accessories:

- M117006 Mounting Bracket
- M127003 Rod Clevis



2500 ROD 5/8-18 UNF-2A THREAD (TYP) 1/4-28 UNF-2A THREAD

969

.09

(TYF

.500-

500

## 3/4" Bore Cylinder

Single Acting Spring Return – 0750N02-<u>00</u>A Rear Pivot Mount Non-Rotating

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

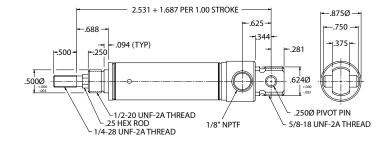
Maximum Stroke: 6"

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

\*Optional Accessories:

M029003 Pivot Bracket

• M127003 Rod Clevis



4.000 + 2 TIMES STROKE

.094 (TYP)

.250Ø ROD (TYP)

.875Ø (TYP) .624Ø

+.00

3.000 + STROKE

1/8" NPTF

5/8-18 UNF-2A THREAD (TYP)

1/4-28 UNF-2A THREAD (TYP)

+.500-(TYP)

> <del>.</del>500-(TYP)

469

(TYP

Double Acting – 0750D03-<u>00</u>A 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-<u>00</u>A 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-<u>00</u>A Trunnion Mount

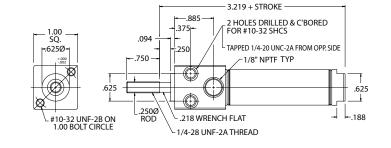
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

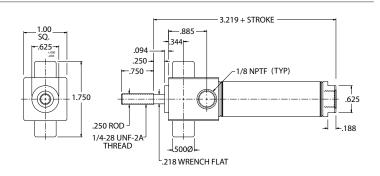
Maximum Stroke: 12"

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

\*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis







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## 3/4" Bore Cylinder Specifications

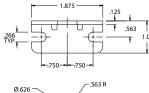
- (0.4) x (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 3 lbs. retracted, 6 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- Bumpers are optional on all 3/4" bore cylinders (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.

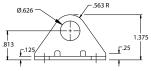
3/4" Bore Accessories

#### Nose Mounting Brackets M117005

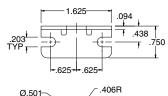
Pivot Mount Bracket M029003

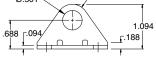




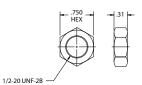


M117006

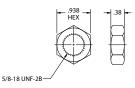


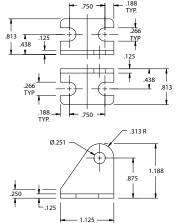


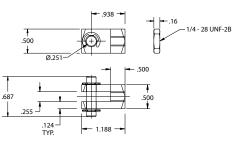
Mounting Nuts M190004



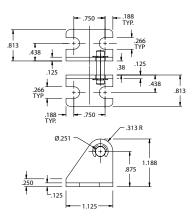
M190005







M129003



## 7/8" Bore Cylinder

Single Acting Spring Return – 0875S01-00A Front Nose Mount

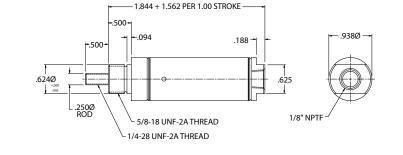
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

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

\*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



2.469 + 1.562 PER 1.00 STROKE

500

.500

.250Ø ROD

(TYP)

.624Ø

.094 (TYP)

.625

.938Ø

75

.375

2500 PIVOT PIN

.281

#### 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**

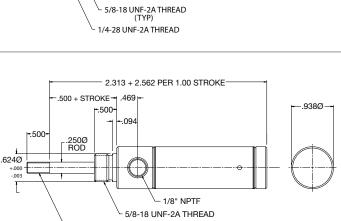
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

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

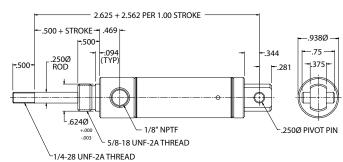
\*Optional Accessories:

- M029003 Pivot Bracket
- M127003 Rod Clevis



1/8" NPTF





#### 7/8" Bore Cylinder

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

Double Acting – **0875D01-<u>00</u>A** 

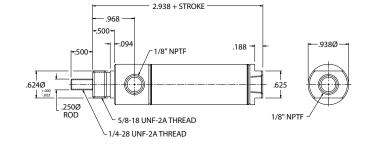
#### Front Nose Mount

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-<u>00</u>A** Rear Pivot Mount

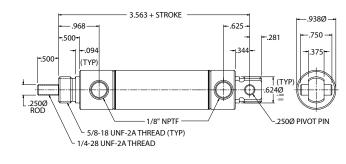
Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 3", 4", 5", 6"

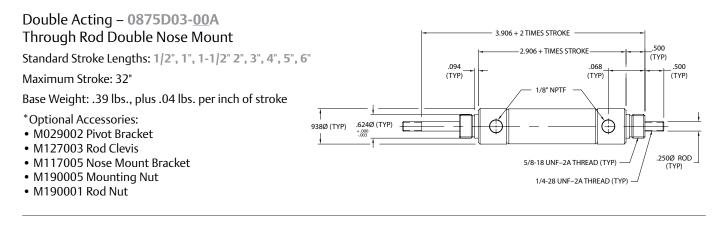
Maximum Stroke: 32"

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 – **0875D04-00**A Double Nose or Rear Pivot Mount

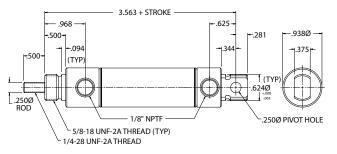
Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6"

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

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## 7/8" Bore Cylinder

Single Acting Spring Return – **0875N01-<u>00</u>A** Front Nose Mount **Non-Rotating** 

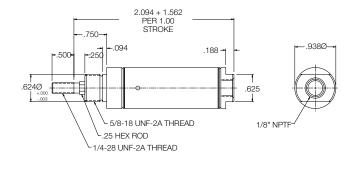
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

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

\*Optional Accessories:

- M117005 Mounting Bracket
- M127003 Rod Clevis



Single Acting Spring Return – 0875N02-00A Rear Pivot Mount Non-Rotating

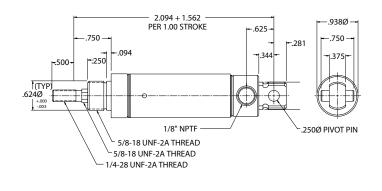
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

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

\*Optional Accessories:

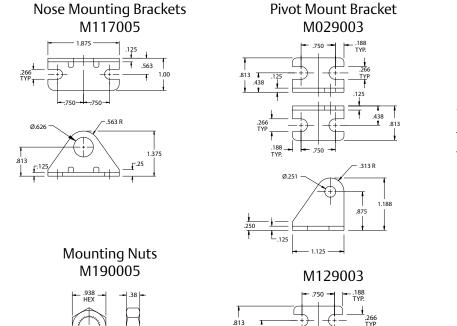
- M029003 Pivot Bracket
- M127003 Rod Clevis

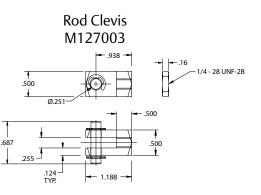


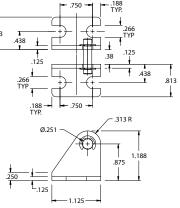
## 7/8" Bore Cylinder Specifications

- (0.6) x (Air Line Pressure) = 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 °F to 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







5/8-18 UNF-2B

## 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

1.938 + 1.562 PER 1.00 5/80KE .125 .18 .125 .250 WENCH FLATS .5/16-24 UNF-2A THREAD

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

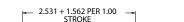
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

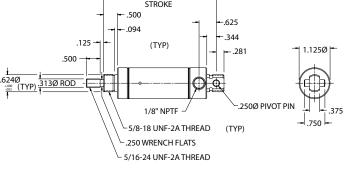
Base Weight: .24 lbs., plus .11 lbs. per inch of stroke

\*Optional Accessories:

- M029003 Pivot Bracket
- M127004 Rod Clevis



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



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

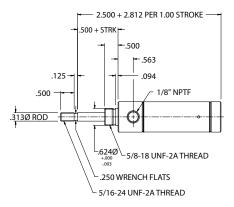
#### Single Acting Spring Extend – **1062R01-<u>00</u>A** Front Nose Mount

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

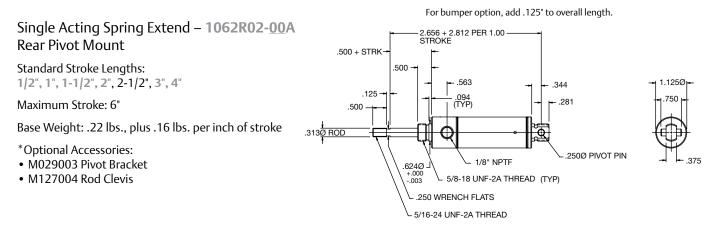
- \*Optional Accessories:
- M117005 Mounting Bracket
- M127004 Rod Clevis





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

## 1-1/16" Bore Cylinder



#### Double Acting – **1062D01-00**A 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

#### Double Acting – **1062D02-<u>00</u>A** Rear Pivot Mount

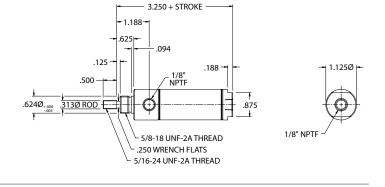
Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

#### Maximum Stroke: 32"

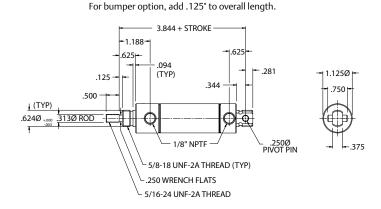
Base Weight: .33 lbs., plus .05 lbs. per inch of stroke

\*Optional Accessories:

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



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





## 1-1/16" Bore Cylinder

#### 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

#### 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

Single Acting Spring Return – 1062N02-00A

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

\*Optional Accessories:

M117005 Mounting Bracket

**Rear Pivot Mount Non-Rotating** 

Double Acting – 1062D03-00A

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

• M127004 Rod Clevis

Standard Stroke Lengths:

Maximum Stroke: 6"

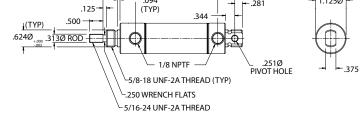
\*Optional Accessories:

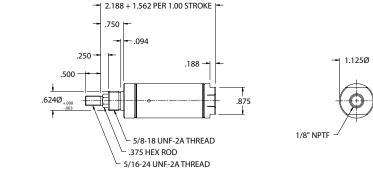
M127004 Rod Clevis

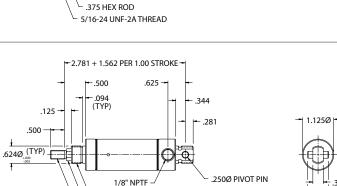
M029003 Pivot Bracket

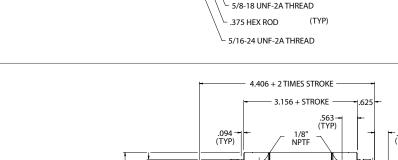
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

3.844 + STROKE -1.188 .625 .094 1.125Ø H .281 .125-(TYP) .500









.500 Ŧ

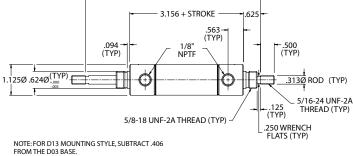


Standard Stroke Lengths:

**Through Rod** 

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

- \*Optional Accessories:
- M117005 Mounting Bracket
- M127004 Rod Clevis





750

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

## 1-1/16" Bore Cylinder

Double Acting – 1062DH3-<u>00</u>A Through Rod Hollow Rod

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

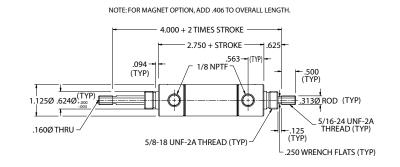
Maximum Stroke: 12"

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

\*Optional Accessories:

• M117005 Mounting Bracket

• M127004 Rod Clevis



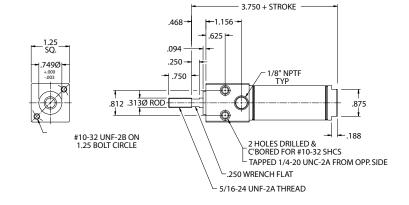


Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

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

\*Optional Accessories: • M127004 Rod Clevis



#### Bore Double Acting – 1062D06-<u>00</u>A Trunnion Mount

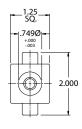
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

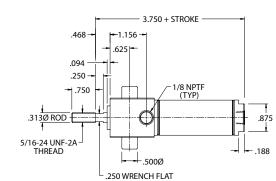
Maximum Stroke: 12"

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

\*Optional Accessories:

- M029006 Pivot Bracket
- M127004 Rod Clevis



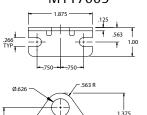


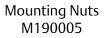
## 1-1/16" Bore Cylinder Specifications

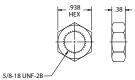
- (0.9) x (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 3 lbs. retracted, 6 lbs. extended. Note that R01 and R02 is 6 lbs. retracted, 12 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- 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 .25" to overall length.

#### 1-1/16" Bore Accessories

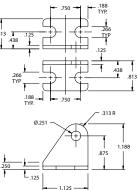
Nose Mounting Brackets M117005



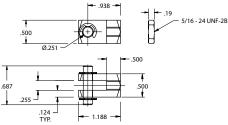




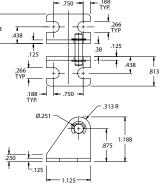
Pivot Mount Bracket M029003











#### 1-1/4" Bore Cylinder 2.656 + 1.812 PER 1.00 STROKE-Single Acting Spring Return – 1250S01-00A 750 Front Nose Mount .875 Standard Stroke Lengths: 1.344Ø .094 .250 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" 250 Maximum Stroke: 6" .749Ø<sub>+.000</sub>4<u>38Ø ROD</u> .875 Base Weight: .39 lbs., plus .21 lbs. per inch of stroke 1/8" NPTF \*Optional Accessories: 3/4-16 UNF-2A THREAD M117007 Mounting Bracket .375 WRENCH FLATS 7/16-20 UNF-2A THREAD • M127005 Rod Clevis Single Acting Spring Return – 1250S02-00A - 3.375 + 1.812 PER 1.00 STROKE Double Nose or Rear Pivot Mount .750 .78 •1.344Ø-.875 .406 Standard Stroke Lengths: 490 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" .094 - 406 (TYP) .250 TYP Maximum Stroke: 6" .438Ø ROD Base Weight: .53 lbs., plus .21 lbs. per inch of stroke 2510 PIVOT HOLE 1/8" NPTF \*Optional Accessories: 500 3/4-16 UNF-2A THREAD (TYP) • M117007 Mounting Bracket .375 WRENCH FLATS • M229003 Pivot Bracket 7/16-20 UNE-2A THREAD • M127005 Rod Clevis Single Acting Spring Extend – 1250R01-00A 3.469 + 2.812 PER 1.00 STROKE Front Nose Mount 750 .875 + STK .750 Standard Stroke Lengths: 62 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" 1.344Ø 1/8" NPTF -.250 Maximum Stroke: 6" .7490 .4380 ROD Base Weight: .50 lbs., plus .21 lbs. per inch of stroke \*Optional Accessories: 3/4-16 UNF-2A THREAD • M117007 Mounting Bracket 375 WRENCH FLATS 7/16-20 UNF-2A THREAD M127005 Rod Clevis Single Acting Spring Extend – 1250R02-00A 3.781 + 2.812 PER 1.00 STROKE Double Nose or Rear Pivot Mount 875 STK-1.750 Standard Stroke Lengths: 62 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4" .38 1 3440 TYP .250 Maximum Stroke: 6" .749,.00 .438Ø ROD Base Weight: .57 lbs., plus .21 lbs. per inch of stroke \_\_\_\_.251Ø PIVOT HOLE 1/8" NPTF \*Optional Accessories: 3/4-16 UNF-2A THREAD (TYP) M117007 Mounting Bracket .375 WRENCH FLATS 7/16-20 UNF-2A THREAD M229003 Pivot Bracket



## 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 – **1250D02-00**A 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



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

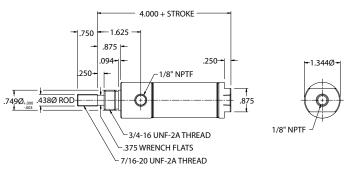
Standard Stroke Lengths: 1/2", **1**", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

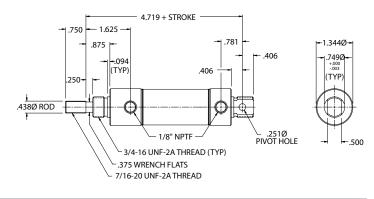
Base Weight: .25 lbs., plus .12 lbs. per inch of stroke

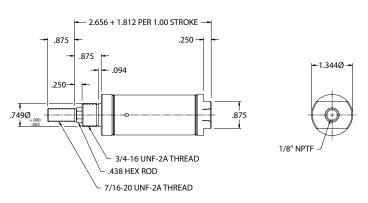
\*Optional Accessories:

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

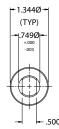


For bumpers and magnetic band option add .125" to overall length.





3.375 + 1.812 PER 1.00 STROKE .875 .781 .406 .875 .094 .406 (TYP) .250 Ð .251Ø PIVOT HOLE 1/8" NPTF 3/4-16 UNF-2A THREAD (TYP) .438 HEX ROD 7/16-20 UNF-2A THREAD





#### 1-1/4" Bore Cylinder

Double Acting – 1250D03-<u>00</u>A 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-<u>00</u>A 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:

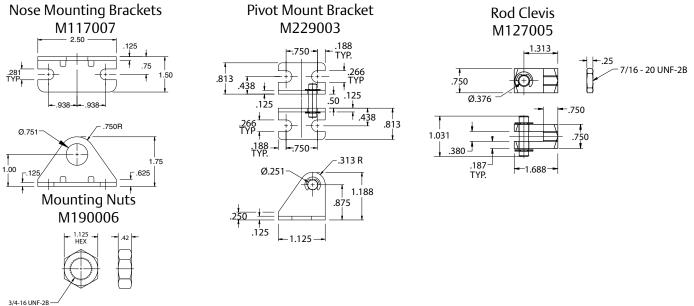
• M117007 Mounting Bracket

• M127005 Rod Clevis

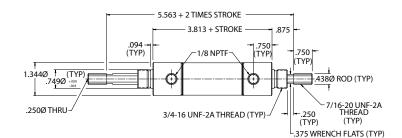
#### 1-1/4" Bore Cylinder Specifications

- (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 °F to 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







5.563 + 2 TIMES STROKE

.094 (TYP)

1.344Ø (TYP) .749Ø <u>-.003</u> 3.813 + STROKE

1/8" NPTF

3/4-16 UNF-2A THREAD (TYP)

.875

(TYP

250

(TYP)

.438Ø ROD (TYP)

/16-20 UNF-2A THREAD

(TYP)

.375 WRENCH FLATS (TYP)

750

TYP

#### 1-1/2" Bore Cylinder 2.438 + 1.687 PER 1.00 STROKE Single Acting Spring Return – 1500S01-00A 750 Front Nose Mount .875 Standard Stroke Lengths: 1.563Ø 094 .250-1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" 250 Maximum Stroke: 6" .749Ø .438Ø ROD-Base Weight: .44 lbs., plus .22 lbs. per inch of stroke 1/8" NPTF \*Optional Accessories: 3/4-16 UNF-2A THREAD M117007 Mounting Bracket .375 WRENCH FLATS • M127005 Rod Clevis 7/16-20 UNF-2A THREAD Single Acting Spring Return – 1500S02-00A -3.125 + 1.687 PER 1.00 STROKE **Rear Pivot Mount** 750 -1.563Ø .813 .875 1.00-Standard Stroke Lengths: .500 094 . (TYP) 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" 375 Maximum Stroke: 6" Base Weight: .45 lbs., plus .22 lbs. per inch of stroke 1/8" NPTF .375Ø PIVOT PIN (TYP) \*Optional Accessories: 3/4-16 UNF-2A THREAD M029004 Pivot Bracket .375 WRENCH FLATS • M127005 Rod Clevis 7/16-20 UNF-2A THREAD Single Acting Spring Extend – 1500R01-00A 3.188 + 3.000 PER 1.00 STROKE Front Nose Mount -1.250--.875 + STK+1625 Standard Stroke Lengths: .094 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" 1.563Ø -1/8" NPTF -.250 Maximum Stroke: 6" .7490 .4380 ROD Base Weight: .44 lbs., plus .22 lbs. per inch of stroke \*Optional Accessories: 3/4-16 UNF-2A THREAD • M117007 Mounting Bracket 375 WRENCH FLATS 7/16-20 UNF-2A THREAD M127005 Rod Clevis Single Acting Spring Extend – 1500R02-00A 3.875 + 3.000 PER 1.00 STROKE **Rear Pivot Mount** 1.250 STK-1625 -1.563Ø +1.00+ Standard Stroke Lengths: .094 -(TYP) .500 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4" - 250 375 (TYP) Maximum Stroke: 6" .7490 .4380 ROD Base Weight: .45 lbs., plus .22 lbs. per inch of stroke .375Ø PIVOT PIN 1/8" NPTF \*Optional Accessories: 3/4-16 UNE-2A THREAD

M127005 Rod Clevis



33

(TYP)

.375 WRENCH FLATS

7/16-20 UNF-2A THREAD

#### 1-1/2" Bore Cylinder

Double Acting – **1500D01-<u>00</u>A** 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-<u>00</u>A** 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-<u>00</u>A** 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-<u>00</u>A Front Nose Mount Non-Rotating

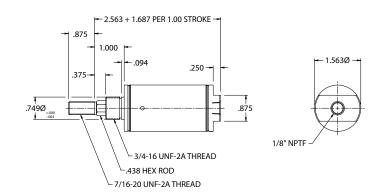
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

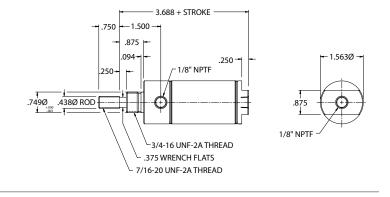
Maximum Stroke: 6"

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

\*Optional Accessories:

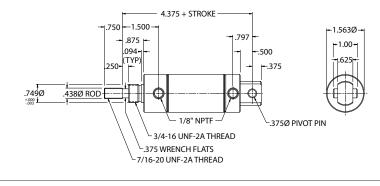
- M117007 Mounting Bracket
- M127005 Rod Clevis



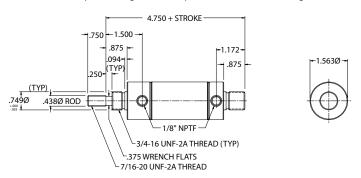


For bumper and magnetic band option add .250" to overall length.

For bumper and magnetic band option add .250" to overall length.



For bumper and magnetic band option add .250" to overall length.



## 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"

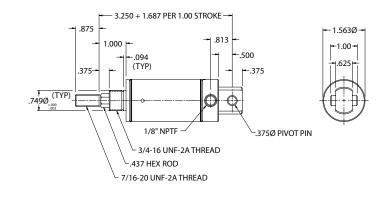
Maximum Stroke: 6"

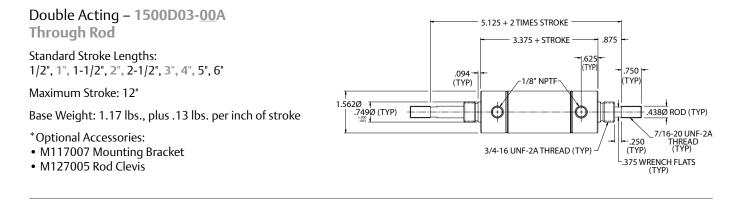
Base Weight: .46 lbs., plus .22 lbs. per inch of stroke

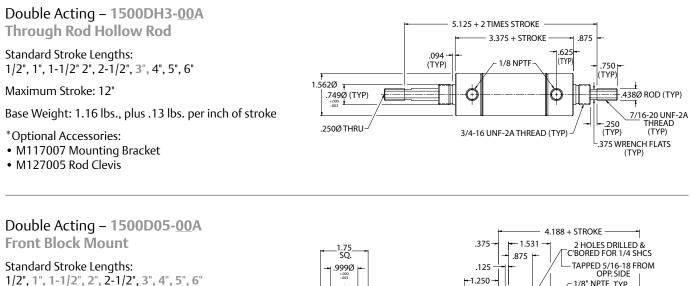
\*Optional Accessories:

M029004 Pivot Bracket

M127005 Rod Clevis





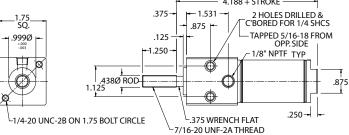


Maximum Stroke: 12"

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

\*Optional Accessories:

• M127005 Rod Clevis





### 1-1/2" Bore Cylinder

Double Acting – 1500D06-<u>00</u>A Trunnion Mount

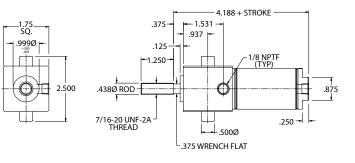
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

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

\*Optional Accessories:

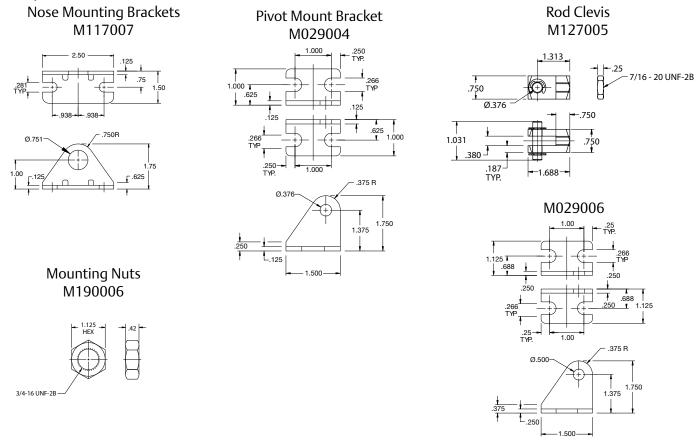
- M029006 Pivot Bracket
- M127005 Rod Clevis



### 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 °F to 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



## **AVENTICS**

## 1-3/4" Bore Cylinder

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

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

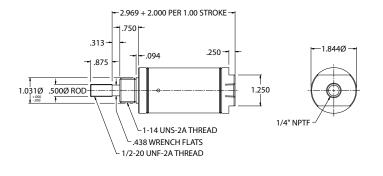
Maximum Stroke: 6"

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

\*Optional Accessories:

• M117008 Mounting Bracket

• M127006 Rod Clevis



Single Acting Spring Return – **1750S02-00**A 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 – **1750D01-00**A Front Nose Mount

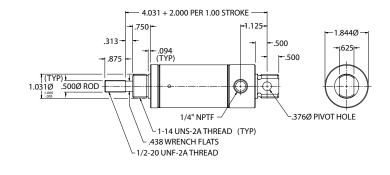
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

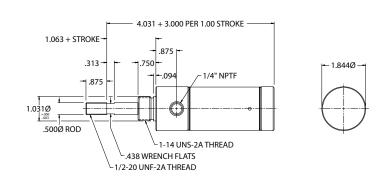
Maximum Stroke: 12"

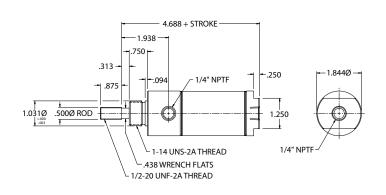
Base Weight: 1.29 lbs., plus .11 lbs. per inch of stroke

\*Optional Accessories:

- M117008 Mounting Bracket
- M127006 Rod Clevis







#### 1-3/4" Bore Cylinder

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

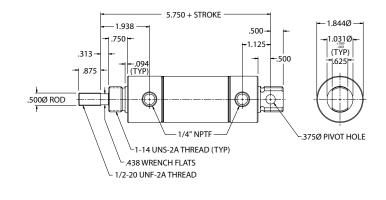
Standard Stroke Lengths: 1/2", 1", 1-1/2" 2", 2-1/2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12"

Maximum Stroke: 32"

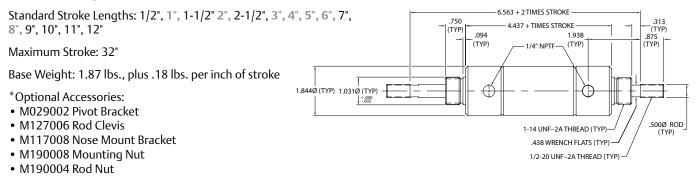
Base Weight: 1.64 lbs., plus .11 lbs. per inch of stroke

\*Optional Accessories:

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



#### Double Acting Double Nose Mount - 1750D03-00A

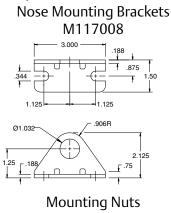


#### 1-3/4" Bore Cylinder Specifications

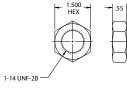
- (2.4) x (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 11 lbs. retracted, 24 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- Bumpers are optional on all 1-3/4" bore cylinders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

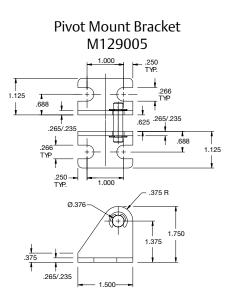


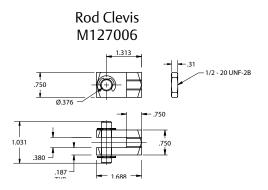
## 1-3/4" Bore Accessories













#### 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-<u>00</u>A** Double Nose or Rear Pivot Mount

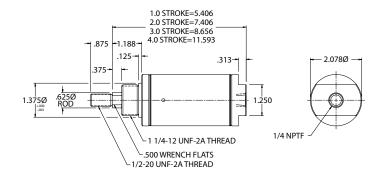
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

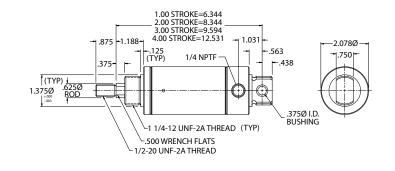
Maximum Stroke: 4"

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

\*Optional Accessories:

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





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

1.00 STROKE=7.109

2.00 STROKE=10.109 3.00 STROKE=12.344 4.00 STROKE=16.344

1/4 NPTF

125

500 WRENCH FLATS 1/2-20 UNF-2A THREAD

1.188 + STROKE

.813

875

375

.625Ø ROD

1.375Ø

#### Single Acting Spring Extend – **2000R01-00**A 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

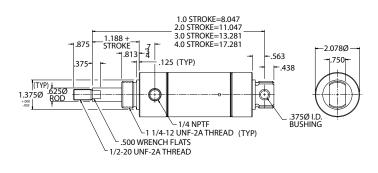
\*Optional Accessories:

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



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

1 1/4-12 UNF-2A THREAD



2.078Ø

## 2" Bore Cylinder

Double Acting – **2000D01-<u>00</u>A** 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"

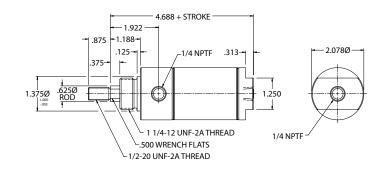
Base Weight: 1.40 lbs., plus .15 lbs. per inch of stroke

\*Optional Accessories:

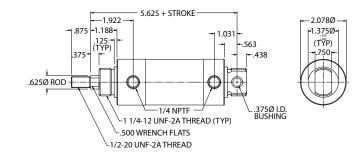
M117009 Mounting Bracket

M127006 Rod Clevis

For bumper option, add .250 to overall length.



For bumper option, add .250 to overall length.



## Double Nose or Rear Pivot Mount Standard Stroke Lengths:

Double Acting - 2000D02-00A

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-<u>00</u>A 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

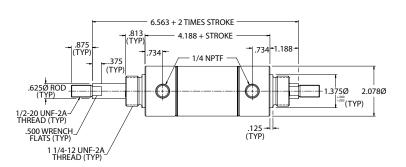
\*Optional Accessories:

M117009 Mounting Bracket

• M127006 Rod Clevis

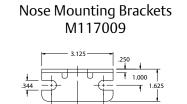
# 2" Bore Cylinder Specifications

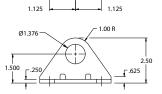
- (3.1) x (Air Line Pressure) = Approximate Force Exerted
- Enclosed spring force: 15 lbs. retracted, 30 lbs. extended.
- Mounting nuts are standard on all nose mount cylinders.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- Bumpers are optional on all 2" bore cylinders (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.

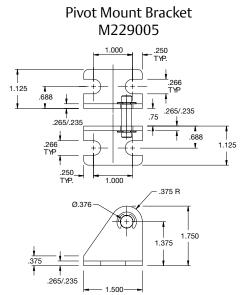


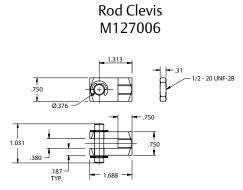
EMERSON.

## 2" Bore Accessories

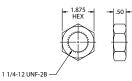








## Mounting Nuts M190009





## 2-1/2" Bore Cylinder

Double Acting – **2500D01-<u>00</u>A** 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-<u>00</u>A** 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

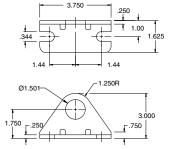
• M127006 Rod Clevis

#### 2-1/2" Bore Cylinder Specifications

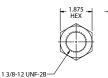
- (5.0) x (Air Line Pressure) = Approximate Force Exerted
- Type 303 stainless steel rod as standard.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- Magnetic piston optional on all 2-1/2" bore cylinders.
- Bumper option on all 2-1/2" bore cylinders adds .063" to overall length.
- NOTE: Consult factory for 2-1/2" bore D03 mount information.

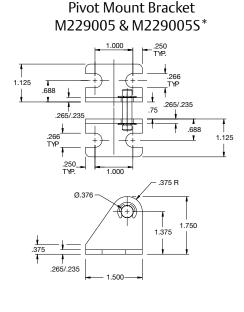
## 2-1/2" Bore Accessories

#### Nose Mounting Brackets M117010 & M117010S\*

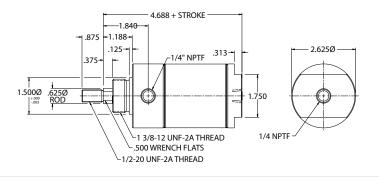


#### Mounting Nuts M190012 & M190012S\*

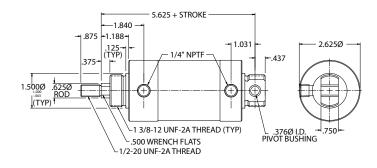




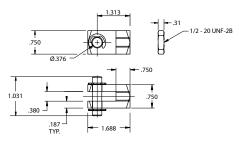
For bumper option, add .063" to overall length.



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



Rod Clevis M127006 & M127006S\*



\* The "S" suffix indicates a 304 stainless steel part.



#### **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

#### 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"

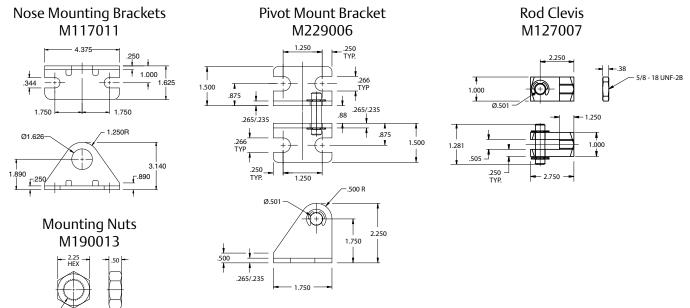
Base Weight: 3.87 lbs., plus .26 lbs. per inch of stroke

- \*Optional Accessories:
- M117009 Mounting Bracket
- M229005 Pivot Bracket
- M127007 Rod Clevis

#### **3**" Bore Cylinder Specifications

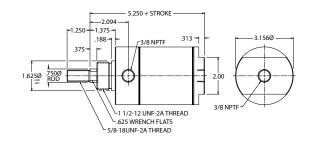
- (7.0) x (Air Line Pressure) = Approximate Force Exerted
- Type 303 stainless steel rod as standard.
- FKM seals are optional on all cylinders for 200 °F to 350 °F applications.
- Magnetic piston optional on all 3" bore cylinders.
- Bumper option on all 3" bore cylinders adds .063" to overall length.

#### **3**" Bore Accessories



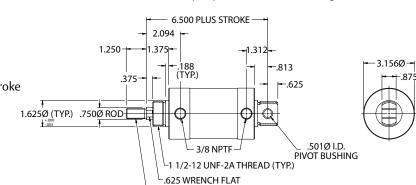
1 1/2-12 UNE-2B





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

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



5/8-18 UNF-2A THREAD

## **Adjustable Cushion Cylinders**

#### **3/4**" **Bore** Double Acting – **0750DG1-00**A 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 – **0750DG2-00**A 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 – **1062DG1-00**A 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

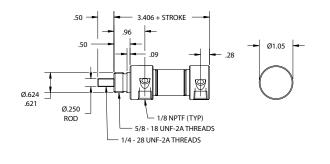
\*Optional Accessories:

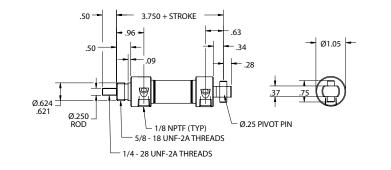
- M117005 Mounting Bracket
- M029003 Pivot Bracket
- M127004 Rod Clevis

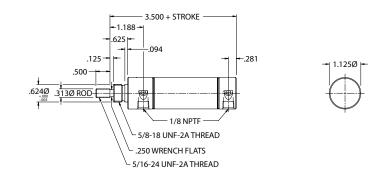
## Adjustable Cushion Cylinder Specifications

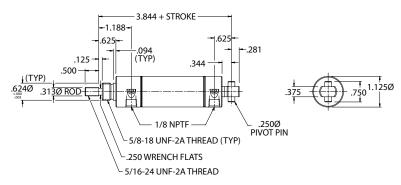
• Refer to specific bore size in standard cylinder section for specifications.

\* See page 51 – 58 for accessory details.











1.563Ø

## **Adjustable Cushion Cylinders**

**1-1/2**" **Bore** Double Acting – **1500DG1-**<u>00</u>**A** 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 – **2000DG2-00**A Rear Pivot Mount with Cushions

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

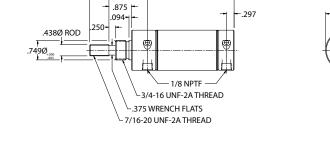
Maximum Stroke: 32"

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

\*Optional Accessories:

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

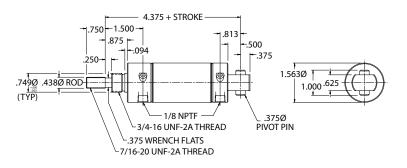
\* See page 51 – 58 for accessory details.

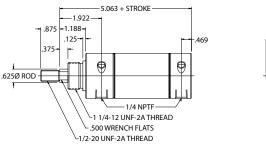


3.875 + STROKE

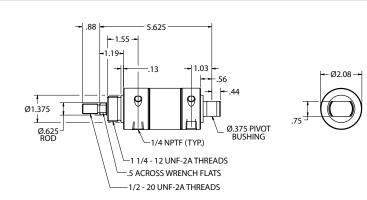
-1.500

.750



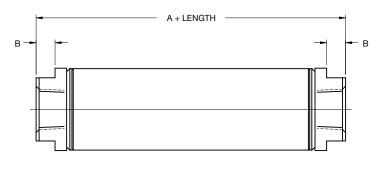


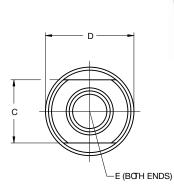




## **AVENTICS**

## **Volume Chambers**

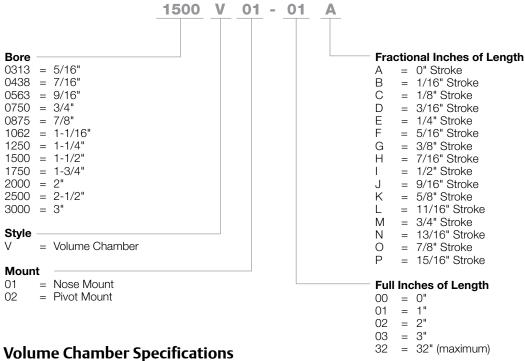




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Bore	А	В	с	D	E	Cubic Inches Per Inch	Standard Length	Maximum Length
3/4"	1.062	0.190	0.625	0.813	1/8"	0.440	1" Increments to 4"	32"
1-1/16"	1.188	0.190	0.875	1.125	1/8"	0.886	1" Increments to 8"	32"
1-1/2"	1.375	0.250	0.875	1.563	1/8"	1.767	1" Increments 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



• Type 304 stainless steel body.

• Aluminum alloy end caps.

• Pressure rating: 250 psi.



#### **Multi-Position Cylinders**

#### 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.

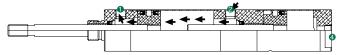
#### Step 1

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



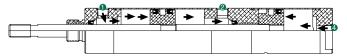
#### Step 2

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



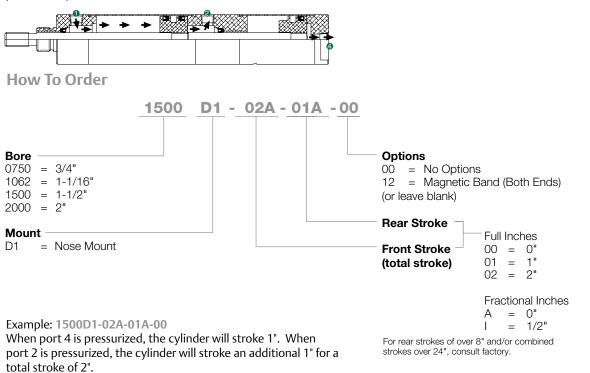
#### Step 3

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.



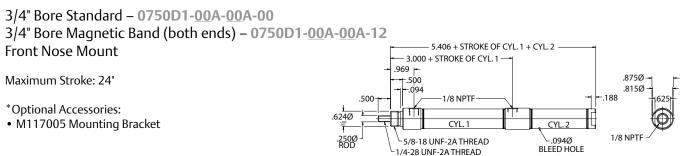


1.125Ø

1/8 NPT

└-.094Ø BLEED HOLE

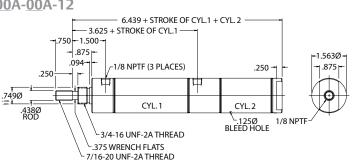
### **Multi-Position Cylinders**



1-1/16" Bore Standard – 1062D1-00A-00A-00 1-1/16" Bore Magnetic Band (both ends) - 1062D1-00A-00A-12 5.782 + STROKE of CYL. 1 + CYL. 2 Front Nose Mount - 3.219 + STROKE of CYL. 1 1.188-Maximum Stroke: 24" 625<del>-</del> .094 125 \*Optional Accessories: 1/8 NPTF 188 .500 M117005 Mounting Bracket .624Ø CYL.1 CYL.2 .313 Ø ROD

## 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



5/8-18 UNE-2A THREAD

- .250 WRENCH FLATS 5/16-24 UNF-2A THREAD

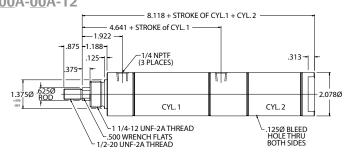
## 2" Bore Standard – **2000D1-<u>00</u>A-<u>00</u>A-00**

2" Bore Magnetic Band (both ends) – 2000D1-<u>00</u>A-00A-12 Front Nose Mount

Maximum Stroke: 24"

\*Optional Accessories:

• M117009 Mounting Bracket





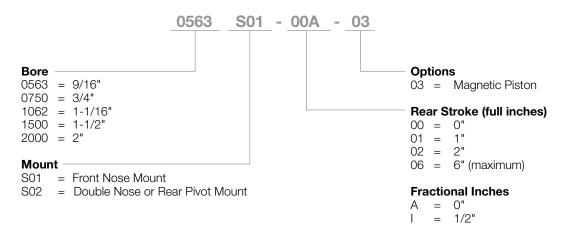
## Single Acting with Magnet Cylinders

#### Features

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



**How To Order** 





## Single Acting with Magnet Cylinders

9/16" Bore Single Acting Spring Return – **0563S01-<u>00</u>A-03** Front Nose Mount with Magnetic Band

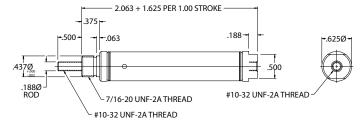
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", **3",** 4"

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"

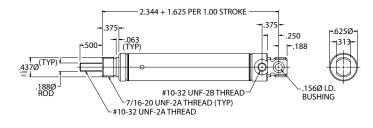
Maximum Stroke: 6"

\*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

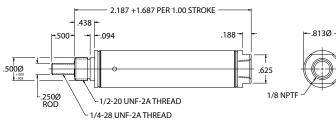
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

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

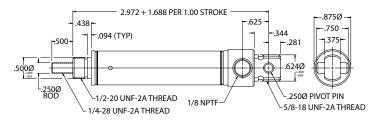
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

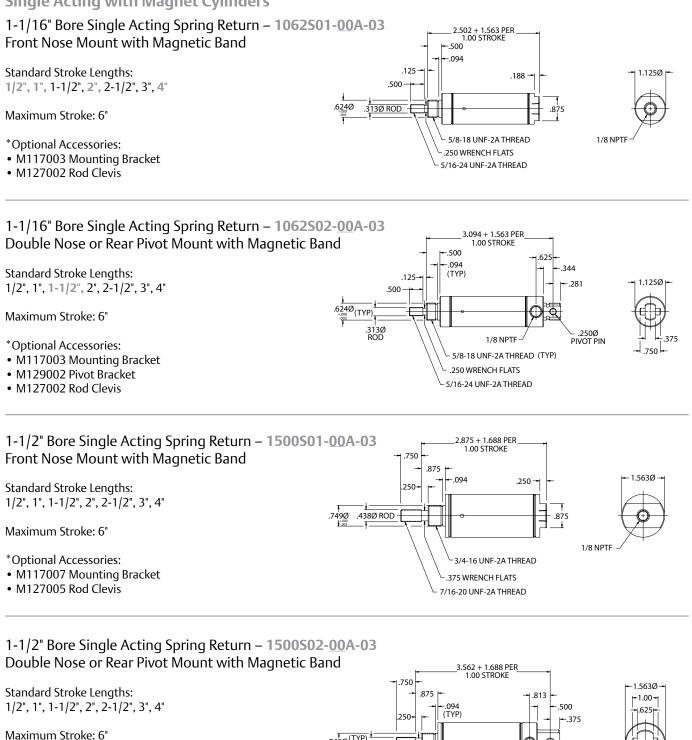
\*Optional Accessories:

- M029003 Pivot Bracket
- M127002 Rod Clevis

\* See page 51-58 for accessory details.





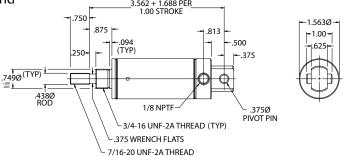


\*Optional Accessories:

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

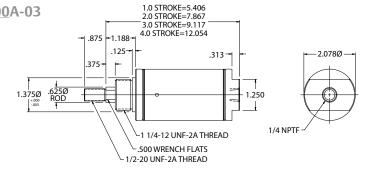
Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

\*Optional Accessories:

• M117009 Mounting Bracket

• M127006 Rod Clevis



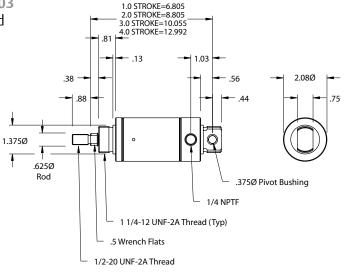
2" Bore Single Acting Spring Return – **2000S02-00A-03** Double Nose or Rear Pivot Mount with Magnetic Band

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

54

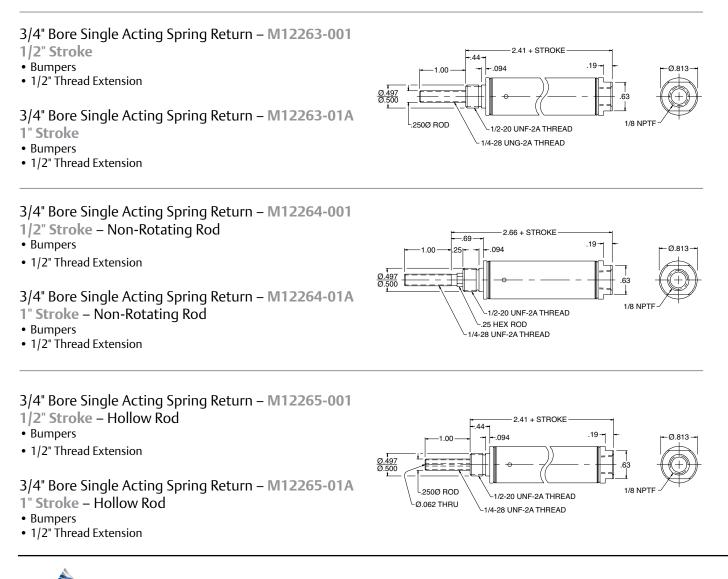
EMERSON

The durable design of our Hole Punch Cylinder enables you to punch millions of maintenancefree 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".

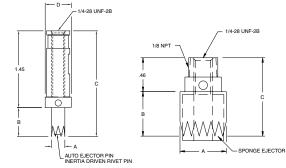
Our punches may be used with any of our M Series cylinders that have 1/4-28 UNF-2A male threads. For your convenience, configured three standard Hole Punch Cylinders designed specifically for hole punch applications. The standard Hole Punch Cylinder is 3/4" bore with 1" stroke, nose mount, spring return, 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.



## 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' Shown with AB-1A Adapter

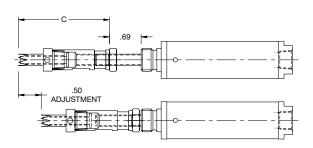
Hole Diameters 3/8" – 3/4"

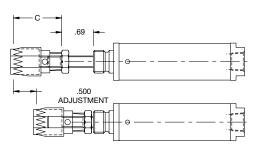
NOTE:
1. Punches come in packages of 5.

- 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	В	с	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

### M190001



M190002



M190004



1/4-28 UNF-28

M190005



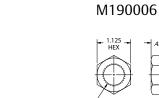
5/8-18 UNF-2B-

M190009

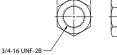




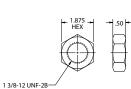
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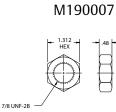


3/8-24 UNF-2B



M190012

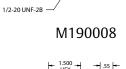




7/16-20 UNF-2B

M190013





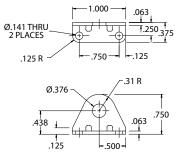
1-14 UNF-28

1 1/2-12 UNF-2B

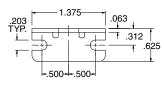
#### **Nose Mounting Brackets**

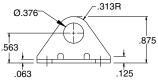
M117001



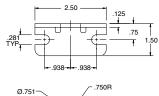


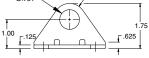
M117004 Single Acting 7/16" Bore



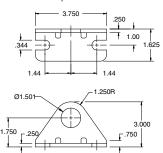


M117007 1-1/4" and 1-1/2" Bore

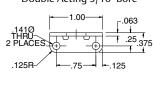


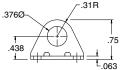


M117010 2-1/2" Bore



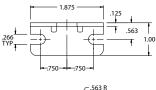
M117002 Double Acting 5/16" Bore

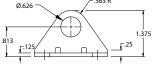




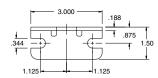
M117005

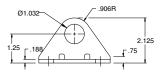
3/4", 7/8" and 1-1/16" Bore



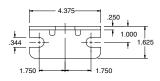


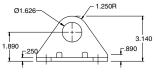
M117008 1-3/4" Bore



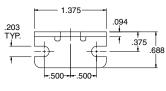


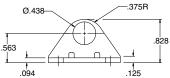
M117011 3" Bore



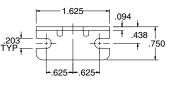


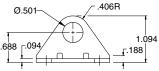
M117003 7/16" and 9/16" Bore



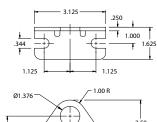


M117006 Single Acting 3/4" Bore





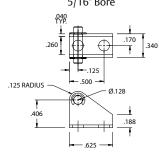
M117009 2" Bore



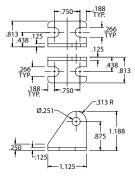


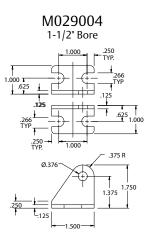
## **Pivot Mounting Brackets**

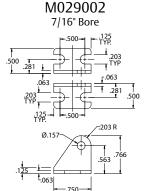
M129001 5/16" Bore



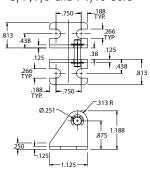
M029003 3/4", 7/8" and 1-1/16" Bore







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



M129005 1-3/4" Bore 1.000 .250 TYP .266 TYP .688 i offi .625 .265/.235 .265/.235 -1-.688 .266 TYP .250 · TYP. 1.000 ∕−.375 R Ø.376 Ð 1.750 1.375

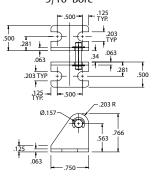
-1.500

1.125

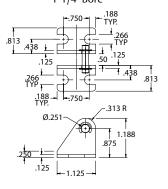
1.125

.265/.235

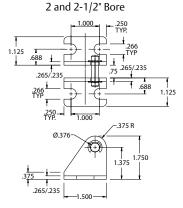
M129002 9/16" Bore



M229003 1-1/4" Bore

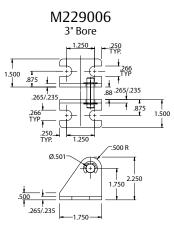


M229005





**Pivot Mounting Brackets** 

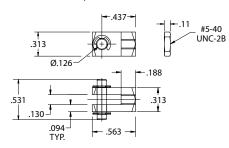


\* The "S" suffix indicates a 304 stainless steel part.

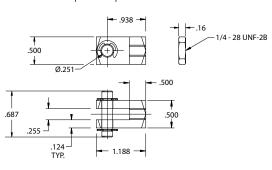


Rod Clevis

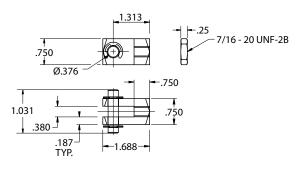
M127001 5/16" Bore



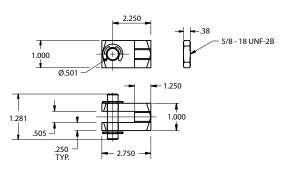
M127003 3/4" and 7/" Bore



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



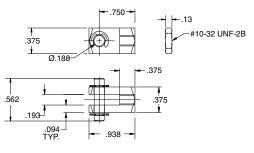
M127007 3" Bore



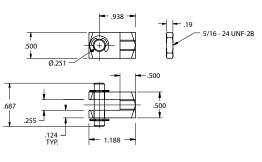
60 EMERSON

M127002

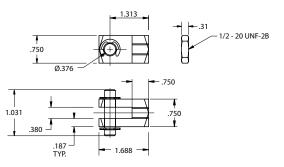
7/16" and 9/16" Bore







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

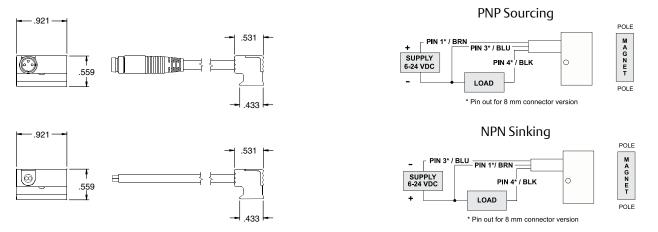
#### M Series Switch Rails (W, X, Y, Z)

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 Rat- ing	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	-25º to 75º C
SH6-032	Flying Lead	NPN	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25º to 75º C
SH6-021	M8 Connector	PNP	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25º to 75º C
SH6-022	M8 Connector	NPN	Normally Open	6-24 VDC	0.3 Amps Max.	7.2 Watts Max.	0.5 Volts	NEMA 6	-25º to 75º C

## Hall Effect Switch

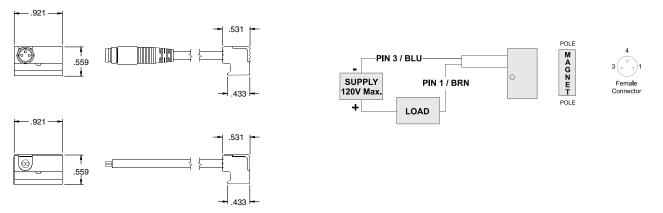




## M Series World Switch Reed Switch Part Numbers

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 °C 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 ºC to 75 ºC
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 ºC to 75 ºC
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 ºC to 75 ºC

## Reed Switch – Normally Open Type SR6



## Non-Repairable Cylinders

#### **M** Series

Bore	Bracket P/N
9/16"	P494AK129600A00
3/4"	P494AL129600A00
7/8"	P494AL129600A00
1-1/16"	P494A3129600A00
1-1/4"	P494A3129600A00
1-1/2"	P4995051700N001
1-3/4"	P494A4129600A00
2"	P494A4129600A00
2-1/2"	P4995051710N001
3"	P4995051720N001



Sensor Description	Standard Cord Set	Quick Disconnect
Reed Switch	P494A0021300A00	P494A0021600A00
Hall PNP	P494A0022300A00	P494A0022600A00
Hall NPN	P494A0022400A00	P494A0022700A00

See page 58, 59, & 60 for sensor specifications

Sensing Part Numbers

P464A0022300A00

P494A0022600A00

#### 98 [25 0] - 98 [25 0] .25 [6.4] ±25 [6.4] -1.46 [37.0] PART NUMBER PART LED LED .20 [5.1] .20 [5.1] 1.50 [38.1] NUMBER 494A0022600A00 (0) P494A0022300A00 .20 [5.0] (0) .20 [5.0] SENSING FACE -SENSING FACE 78.74 [2000.0] 11.81 [300.0] -BLUE (-) BLACK (OUTPUT) BROWN (+) 26 GAUGE WIRES -M8 x 1.0 -FASTENING CLAMP FASTENING CLAMP ELECTRICAL DESIGN DC PNP ELECTRICAL DESIGN DC PNP OUTPUT Normally Open OUTPUT Normally Open **OPERATING VOLTAGE** 10-30 VDC **OPERATING VOLTAGE** 10-30 VDC CURRENT RATING 100 mA CURRENT RATING 100 mA SHORT-CIRCUIT PROTECTION SHORT-CIRCUIT PROTECTION Yes Yes OVERLOAD OVERLOAD Yes Yes PROTECTION PROTECTION **REVERSE POLARITY REVERSE POLARITY** Yes Yes PROTECTION PROTECTION **VOLTAGE DROP** < 2.5 V VOLTAGE DROP < 2.5 V CURRENT CURRENT < 12 mA < 12 mA CONSUMPTION CONSUMPTION REPEATABILITY <.2mm REPEATABILITY <.2mm **POWER-ON DELAY** POWER-ON DELAY < 30 ms < 30 ms TIME TIME SWITCH FREQUENCY > 3000 Hz SWITCH FREQUENCY > 3000 Hz AMBIENT AMBIENT -25 °C to 85 °C -25 °C to 85 °C TEMPERATURE TEMPERATURE PROTECTION IP67, III PROTECTION IP67, III HYSTERESIS 1.0mm HYSTERESIS 1.0mm MAGNETIC MAGNETIC 2.0 mT 2.0 mT SENSITIVITY SENSITIVITY TRAVEL SPEED TRAVEL SPEED >10 m/s > 10 m/s PA (Polyamide) Black; Fastening Clamp: PA (Polyamide) Black; Fastening Clamp: HOUSING MATERIAL HOUSING MATERIAL Stainless Steel Stainless Steel FUNCTION DISPLAY FUNCTION DISPLAY Yellow LED Yellow LED SWITCHING STATUS SWITCHING STATUS Flying Leads, Pur Cable CONNECTION CONNECTION M8 Connector (Snap Fit), Pur Cable (.3m) (2m Long, 3 x 26 Gauge Wire) Clamping Screw with Combined Slot/Hexagon Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 Socket Head AF 1.5 REMARKS REMARKS cULus - Class 2 Source Required cULus - Class 2 Source Required Rubber Placehold, Cable Clip, and Cut Sheet Rubber Placehold, Cable Clip, and Cut Sheet ACCESSORIES ACCESSORIES To Be Provided with Every Switch To Be Provided with Every Switch E c(UL)us

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

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**Sensing Part Numbers** 

P4	94A0022400A00	P49	94A0022700A00
			PART LED
LBLUE (-) BLACK (OUTPUT) BROWN (+) 26 GAUGE WIRES	_ FASTENING CLAMP	M8 × 1.0	-FASTENING CLAMP
ELECTRICAL DESIGN	DC NPN	ELECTRICAL DESIGN	DC NPN
OUTPUT	Normally Open	OUTPUT	Normally Open
OPERATING VOLTAGE	10-30 VDC	OPERATING VOLTAGE	10-30 VDC
CURRENT RATING	100 mA	CURRENT RATING	100 mA
SHORT-CIRCUIT PROTECTION	Yes	SHORT-CIRCUIT PROTECTION	Yes
OVERLOAD PROTECTION	Yes	OVERLOAD PROTECTION	Yes
REVERSE POLARITY PROTECTION	Yes	REVERSE POLARITY PROTECTION	Yes
VOLTAGE DROP	< 2.5 V	VOLTAGE DROP	<2.5 V
CURRENT CONSUMPTION	< 12 mA	CURRENT CONSUMPTION	< 12 mA
REPEATABILITY	<.2mm	REPEATABILITY	<.2mm
POWER-ON DELAY TIME	< 30 ms	POWER-ON DELAY TIME	< 30 ms
SWITCH FREQUENCY	> 3000 Hz	SWITCH FREQUENCY	> 3000 Hz
AMBIENT TEMPERATURE	-25 °C to 85 °C	AMBIENT TEMPERATURE	-25 ℃ to 85 ℃
PROTECTION	IP67, III	PROTECTION	IP67, III
HYSTERESIS	1.0mm	HYSTERESIS	1.0mm
MAGNETIC SENSITIVITY	2.0 mT	MAGNETIC SENSITIVITY	2.0 mT
TRAVEL SPEED	> 10 m/s	TRAVEL SPEED	> 10 m/s
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel	HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED	FUNCTION DISPLAY SWITCHING STATUS	Yellow LED
CONNECTION	Flying Leads, Pur Cable (2m Long, 3 x 26 Gauge Wire)	CONNECTION	M8 Connector (Snap Fit) , Pur Cable (.3m)
REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required	REMARKS	Clamping Screw with Combined Slot/Hexagon Socket Head AF 1.5 cULus - Class 2 Source Required
ACCESSORIES	Rubber Placehold, Cable Clip, and Cut Sheet To Be Provided with Every Switch	ACCESSORIES	Rubber Placehold, Cable Clip, and Cut Sheet To Be Provided with Every Switch
AGENCY APPROVALS		AGENCY APPROVALS	

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

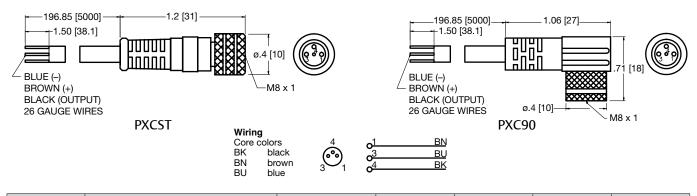


Sensing Part Numbers P494A0021300A00 P494A0021600A00								
.22 [5.7]	1.20 [30.5] PART NUMBER P494A0021300A00 LED	-1.46 [37.0]	1.20 [30.5] PART NUMBER P494A0021600A00 20 [5.0] LED					
L BLUE (-) BROWN (+) 26 GAUGE WIRES	LFASTENING CLAMP	└──M8 x 1.0	└FASTENING CLAMP					
ELECTRICAL DESIGN	AC/DC REED	ELECTRICAL DESIGN	AC/DC REED					
OUTPUT	Normally Open	OUTPUT	Normally Open					
OPERATING VOLTAGE	5-120 VAC/DC	OPERATING VOLTAGE	*5-60 VDC/5-50 VAC					
CURRENT RATING	100 mA*	CURRENT RATING	100 mA					
SHORT-CIRCUIT PROTECTION	No	SHORT-CIRCUIT PROTECTION	No					
OVERLOAD PROTECTION	No	OVERLOAD PROTECTION	No					
REVERSE POLARITY PROTECTION	Yes	REVERSE POLARITY PROTECTION	Yes					
VOLTAGE DROP	<5V	VOLTAGE DROP	<5V					
REPEATABILITY	±.2mm	REPEATABILITY	± .2mm					
MAKETIME INCLUDING BOUNCE	<.6 ms	MAKETIME INCLUDING BOUNCE	<.6 ms					
BREAKTIME	< .1 ms	BREAKTIME	<.1 ms					
SWITCHING POWER (MAX)	5 W	SWITCHING POWER (MAX)	5 W					
SWITCH FREQUENCY	1000 Hz	SWITCH FREQUENCY	1000 Hz					
AMBIENT TEMPERATURE	-25 °C to 70 °C	AMBIENT TEMPERATURE	-25 °C to 70 °C					
PROTECTION	IP67, II	PROTECTION	IP67, II					
HYSTERESIS	.9mm	HYSTERESIS	.9mm					
HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel	HOUSING MATERIAL	PA (Polyamide) Black; Fastening Clamp: Stainless Steel					
FUNCTION DISPLAY SWITCHING STATUS	Yellow LED	FUNCTION DISPLAY SWITCHING STATUS	Yellow LED					
CONNECTION	Flying Leads, Pur Cable	CONNECTION	M8 Connector (Snap Fit), Pur Cable (.3m)					
CONNECTION	(2m Long, 2 x 26 Gauge Wire) *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	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					
ACCESSORIES	Rubber Placehold, Cable Clip, and Cut Sheet To Be Provided with Every Switch	ACCESSORIES	Operation Rubber Placehold, Cable Clip, and Cut Sheet To Be Provided with Every Switch					
AGENCY APPROVALS	CE ROHS	AGENCY APPROVALS	CE RoHS					

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## **Quick Disconnect Cables**



Order Code	Туре	Operating Voltage	Current Rating	Cable Material	Protection	Connector
PXCST	Straight 5m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP68, III	M8
PXC90	90° 5m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP68, III	M8



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