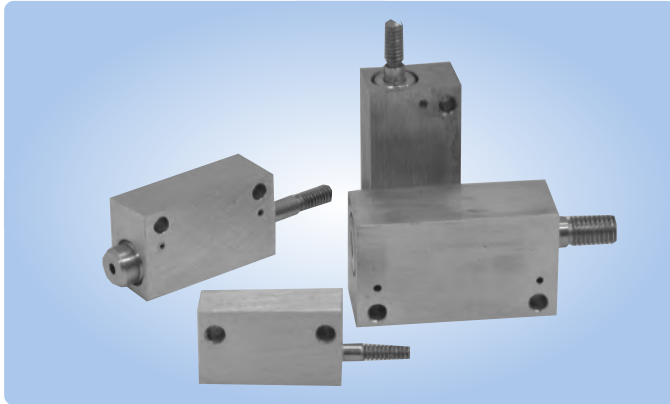


## Mini Cylinders Mount Anywhere!

Mead's line of miniature air cylinders offers users a wide range of low-profile linear actuators. These versatile cylinders are available in both single-acting and double-acting models. They are ideal actuators in any application where space is limited.



General Specifications	
Seals:	Buna N (Viton Optional)
Temperature:	Buna N seals = 0°F to 220°F
Viton seals:	0°F to 400°F
Operating Pressure:	to 125 psi
Piston Rods:	Stainless Steel
Rod Bearings:	660 Bronze
Lubrication:	Recommended - non detergent petroleum based
Filtration:	40 Micron

## MF Series - Mini Flat Mount Cylinders

Mead's MF Series are miniature, rectangular flat mount cylinders. MF cylinders are available in both single and double-acting models with strokes up to 2".

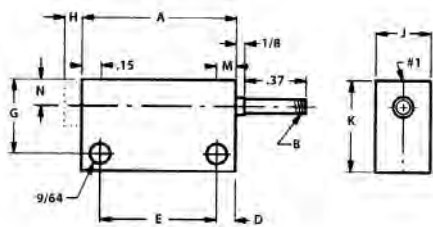
All ports are tapped 10-32 except the front ports of 1/4" bore models, which have a 6-32 barb fitting. The standard location for the rear extend port is denoted by location "N" on the dimensional drawing. As an option, a rear side port can be ordered special. Contact Mead for details.

## Stroke Length Availability - MF Series

This series is available in 1/4" and 1/2" standard stroke lengths.\* By adding a spacer, all models are also available in fractional stroke lengths for no additional charge. (Dimensionally the cylinder will be the same as the next closest size up.) If other strokes are required, contact Mead to quote a custom stroke length.

\*NOTE: The MF-250 (1/4" bore), Single Acting (SR or SE) is only available in 1/4" standard stroke length.

## MF Cylinder Dimensions

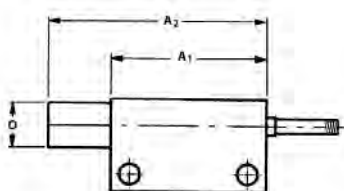


**Figure 1:**  
For strokes up to 1/2"  
# 1  
Indicates port locations. The H dimension is for spring extend cylinders only.

When nominal forces are adequate, this table may be helpful.

Typical Spring Forces			
Spring Return		Spring Extend	
250 - 1/4" stroke	..... 14-18 ozs.	250 - 1/4" stroke	..... 25-29 ozs.
375 - 1/4" stroke	..... 22-26 ozs.	375 - 1/4" stroke	..... 30-34 ozs.
375 - 1/2" stroke	..... 22-26 ozs.	375 - 1/2" stroke	..... 54-58 ozs.
500 - 1/4" stroke	..... 42-46 ozs.	500 - 1/4" stroke	..... 62-66 ozs.
500 - 1/2" stroke	..... 51-55 ozs.	500 - 1/2" stroke	..... 78-80 ozs.

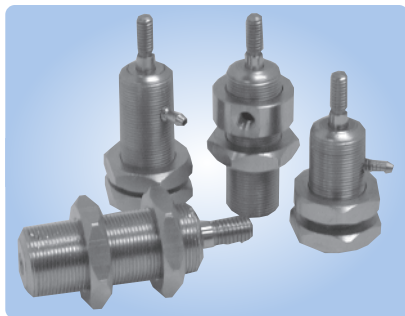
Bore	Stroke	A	B	D	E	G	H	I	J	K	M	N	O	Front Port	Rear Port
1/4"	1/4"	1.06	6-32	.12	0.81	7/16"	.10	.31	3/8"	5/8"	.20	.18	5/16"	6-32	10-32
	1/2"	1.31	6-32	.12	1.06	7/16"	-	.31	3/8"	5/8"	.20	.18	5/16"	Barb	Tap
3/8"	1/4"	1.25	8-32	.15	0.93	5/8"	.18	.37	1/2"	3/4"	.37	.25	7/16"	10-32	10-32
	1/2"	1.50	8-32	.15	1.18	5/8"	.18	.37	1/2"	3/4"	.37	.25	7/16"	Tap	Tap
1/2"	1/4"	1.31	1/4-28	.15	1.00	3/4"	-	.37	5/8"	7/8"	.37	.31	9/16"	10-32	10.32
	1/2"	1.56	1/4-28	.15	1.25	3/4"	-	.37	5/8"	7/8"	.37	.31	9/16"	Tap	Tap



**Dimensions For Cylinders With Strokes Over 1/2"**

Bore	A <sub>1</sub>	A <sub>2</sub>
1/4"	1.06	0.81 + Stroke
3/8"	1.25	1.00 + Stroke
1/2"	1.31	1.06 + Stroke

**Figure 2:** For Strokes Over 1/2"



**MA Series - Mini Adjustable Location Cylinders**

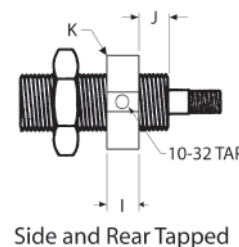
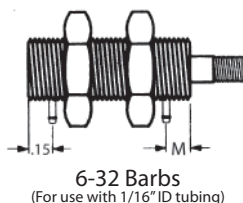
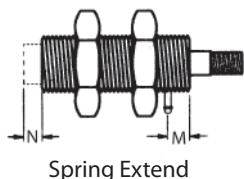
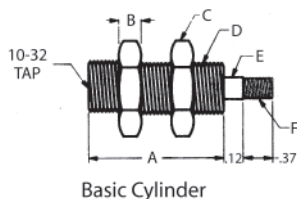
These threaded body cylinders install quickly and easily without special mounting devices. Either drill a hole, insert your cylinder, and position with the pair of jam nuts or tap a hole and lock into position with a single jam nut. The MA-Series cylinders are electroless nickel plated for excellent corrosion resistance and a gleaming appearance.

**Non-rotating:** This option is available on 3/8" and 1/2" bore, single-acting, spring return cylinders.

**Stroke Length Availability - MA Series**

The MA-250 (1/4" Bore) single acting is only available in a 1/4" stroke lengths. The MA-250 double acting is available in 1/4", 1/2" and 1" stroke lengths. The MA-375 (3/8" Bore) and MA-500 (1/2" Bore) single acting is available in 1/4" and 1/2"; the double acting version is available in 1/4", 1/2", 1", 1-1/2" and 2" stroke lengths. By adding a spacer, all models are also available in fractional stroke lengths for no additional charge. (Dimensionally the cylinder will be the same as the next closest size up.) If other strokes are required, contact Mead to quote a custom stroke length.

**MA Cylinder Dimensions**



Bore	A=Stroke+	B	C	D	E	F	I	J	K	M	N
1/4"	0.81	.15	.62	3/8-32	.14	6-32	.31	.06	.62	.20	.10
3/8"	1.00	.18	.75	1/2-32	.17	8-32	.31	.21	.75	.37	.18
1/2"	1.06	.18	.87	5/8-32	.25	1/4-28	.31	.21	.87	.37	-

**Ordering Miniature Cylinders:**

**MA - 500 x 1.00 DA - RB ( \* \* \* )**

**Family**

MA = Mini Adjustable  
MF = Mini Flat

**Bore**

250 = 1/4" Bore  
375 = 3/8" Bore  
500 = 1/2" Bore

**Stroke (in inches)**

See "Stroke Length Availability..." for particular series.

**Type**

DA = Double Acting  
SR = Spring Return  
SE = Spring Extended

**Options**

V = Viton Seals  
NR = Non-Rotating (Hex Rod) (MA Series Only)

**Front Port**

O = None (Spring Return)  
S = Side Tapped (10-32)  
B = 6-32 Barb (For 1/16" ID Hose)

**Rear Port**

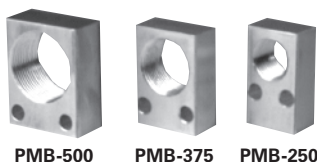
O = None (Spring Extend)  
R = Rear Tapped (10-32)  
S = Side Tapped (10-32)\*  
B = 6-32 Barb (For 1/16" ID Hose)

\* Special Order (Non-Stock, contact factory)

**Accessories**

- Fitting: 10-32 to 1/16" ID Hose . . . . .PMHF
- Fitting: 6-32 Barb to 1/16" ID Hose . . . . .PMBF
- Hex Nut for 1/4" Bore Cylinder . . . . .PMH-250
- Hex Nut for 3/8" Bore Cylinder . . . . .PMH-375
- Hex Nut for 1/2" Bore Cylinder . . . . .PMH-500
- 1/16" ID Tube Clear Polyurethane (50 ft.)..11NAT

**Mounting Blocks**



	PMB 250	PMB 375	PMB 500
<b>Bore</b>	1/4"	3/8"	1/2"
<b>Width</b>	0.503	0.626	0.75
<b>Height</b>	0.879	0.876	0.94
<b>Depth</b>	0.314	0.314	0.38
<b>Hole (2)</b>	0.14	0.139	0.136