

# AIR-MITE

Pneumatic Air Components



[www.airmite.com](http://www.airmite.com)

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## INTRODUCTION

Air-Mite is a manufacturer of various pneumatic automation components. Our product line, proudly made in the USA, includes air arbor presses, air cylinders, various air and hydraulic valves, several safety circuit components, and many miniaturized accessories. Air-Mite components may be found servicing industries such as packaging, medical, textiles, construction, electronics, and many others. Air-Mite offers a very competitively priced line of products which can often be shipped directly from stock.

This catalog features our most commonly purchased products. Please contact customer support for additional or custom products. For Orders and Customer Support: (224) 338-0071 Monday-Friday 9am-5pm (CST)  
sales@airmite.com

**Air-Mite Inc.**  
608 Long Lake Drive  
Round Lake, IL 60073

**Phone:** (224) 338-0071  
**Email:** sales@airmite.com

## SHIPPING

All products are shipped FOB Round Lake, IL. Orders of standard valves and micro cylinders will be shipped same day if ordered by 3:00 pm CST. All other products can take up to ten working days to ship. Rush service is available for an extra fee. Please contact us for details.

## GUARANTEE

AIR MITE CYLINDERS or VALVES are guaranteed against defective workmanship and material for a period of 60 days from date of purchase. In the event of defect, a cylinder or valve returned Prepaid will be replaced at NO CHARGE, F.O.B. our factory. No product can be returned for a credit after 6 months.

## PNEUMATIC PRESSES

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### PNEUMATIC PRESSES

Air-Mite has been manufacturing pneumatic presses since 1952. We are continuously improving the durable, time-tested design of our presses — our current line offers versatility, ease of use, and affordability. Pneumatic presses offer a simple means of applying force by using standard compressed air to perform a variety of pressing operations.

### PNEUMATIC CYLINDERS

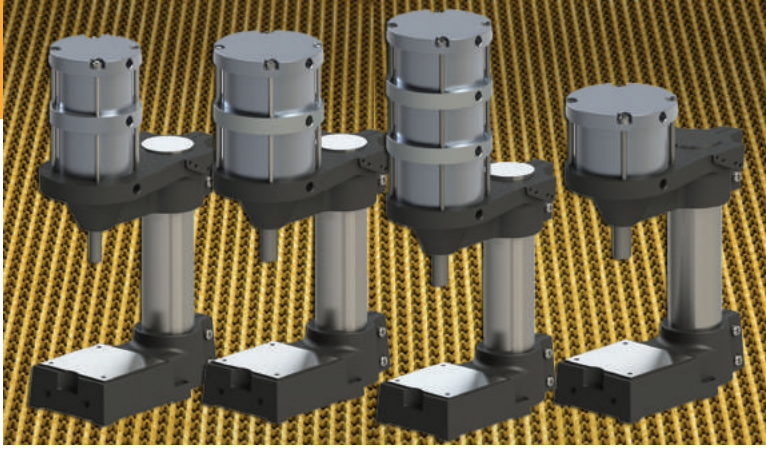
Air-Mite offers three main types of pneumatic cylinders- Tie Rod, Round Line, and Micro Cylinders. Our versatile cylinder product line can be used for a variety of applications. Custom cylinders are also available to fulfil specific needs. We regularly work with customers to design and develop new cylinders to meet their requirements.

### PNEUMATIC VALVES

Air-Mite valves are available in 3 or 4 way configurations with a large variety of solenoid, pilot, manual, or mechanical operators. They are available as 2-position, or in some cases, 3-position. Port sizes range from 1/8" to 1/2" NPT. These valves are easily configured to custom applications.

### CUSTOM ORDERS

This catalog has been designed to provide you with all the necessary information you need to select the proper AIR-MITE equipment to meet your specific requirements. Variations or special units other than those shown are available upon request.



## DESCRIPTION

Air-Mite has been manufacturing pneumatic presses since 1952. We are continuously improving the durable, time-tested design of our presses – our current line offers versatility, ease of use, and affordability. Pneumatic presses offer a simple means of applying force by using standard compressed air to perform a variety of pressing operations. By adjusting the pressure of the incoming air (within the limits), the user is able to greatly change the force applied by the press. Air-Mite presses are uniquely designed with adjustable height cylinders. Raising or lowering the cylinder on the column changes the distance between the worktable surface and the retracted rod (also known as “daylight”). This feature accommodates a variety of workpiece and tooling sizes with the purchase of only one press. All Air-Mite presses are easily customizable to fit your exact needs. In fact, most presses sold today are made to order (see below for common options).

**PRESS SELECTION** - Air-Mite press models are classified by the amount of force that they exert. From the smallest DPS4 model, which provides 400 pounds of force at 100 psi of compressed air, to the largest CMS58, which delivers nearly 5800 pounds of force at the same line pressure, Air-Mite presses offer a wide range of pressing power.

After determining the model of press needed, the next step in selecting a press is specifying the stroke length. Our unique design allows for virtually any stroke length required. After that, just select from the wide variety of options offered to determine the press best suited for your specific application.

**APPLICATIONS** - Air-Mite presses can be used for a variety of applications including, but not limited to, staking, forming, punching, riveting, fastening, crimping, pressing, stamping, broaching, and shearing.

## FEATURES AND OPTIONS

### STANDARD FEATURES

- Sturdy bench top design
- Heavy-duty cast iron base with machined platen (work surface)
- Solid steel column Reliable, maintenance-free Air-Mite tie rod cylinders
- Rigid cast iron cylinder mounting brackets
- Durable powder-coated finish on all cast iron parts
- 6” maximum standard daylight
- 120 psi maximum supplied air pressure
- 250° F maximum operating temperature (higher temperature option available)
- Made in USA

### WARNING:

Whenever air arbor presses are manually operated two hand anti-tie down controls must be used. Presses are sold under conditions that all OSHA regulations be met by users.

### OPTIONS

- Variety of pneumatic or electric press safety control packages available
- Special machining of rod end, such as internal threads, external threads, milled flats, drilled holes, custom length, etc.
- Double rod provides two benefits— adjustable stroke limiter (for micro adjustment of the piston rod travel on the down stroke) and extra stability of the rod
- Extra column height offers additional daylight to accommodate tall tooling or parts
- Filter/regulator both ensures clean air supply and allows for adjustable force
- Flow controls to regulate press speed
- FKM seals to accommodate high temperature applications up to 400° F
- Non-rotating rod with internal guide; new design eliminates pinch points (Standard rod can rotate in cylinder)
- Custom machining to platen
- Stainless steel rod and column for added corrosion resistance
- Quick exhaust valves to provide faster operation



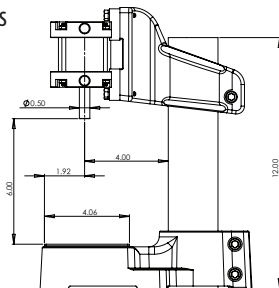
## DPS 4 400 lb Pneumatic Press

### Features Include:

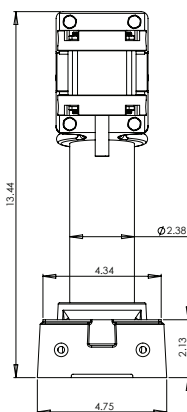
- 400 lbs of force at 100 psi
- 2.25" Bore, single piston cylinder
- 0.5" rod diameter
- 4" throat depth
- 120 psi maximum supplied air pressure
- Rigid cast iron cylinder mounting brackets
- 6061 aluminum machined cylinder caps
- Made in USA

### Ordering

DPS4DR- N T4 W D8-33  
1 2 3 4 5 6 7 8



- 1 A= single-acting (spring return) cylinder  
D= double-acting cylinder
- 2 blank= single rod  
DR= double rod
- 3 stroke length in inches
- 4 blank= standard rotatable rod  
N= non-rotating rod
- 5 blank= no rod threading  
T2= 1/2"-20 external threaded rod  
T3= 7/16"-20 reduced external threaded rod  
T4= 1/4"-28 internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats
- 7 blank= standard 6" daylight  
D\_\_= daylight (e.g. D8= 8" total daylight)
- 8 blank= no safety controls  
-33= standard pneumatic safety control package



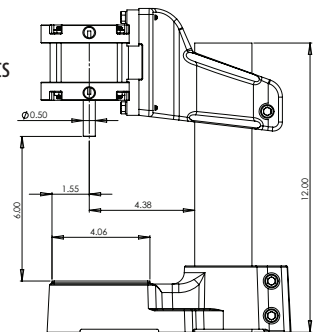
## DPS 700 lb Pneumatic Press

### Features Include:

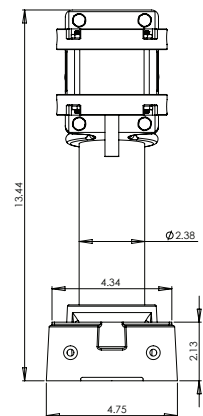
- 710 lbs of force at 100 psi
- 3" Bore, single piston cylinder
- 0.5" rod diameter
- 4" throat depth
- 120 psi maximum supplied air pressure
- Rigid cast iron cylinder mounting brackets
- 6061 aluminum machined cylinder caps
- Made in USA

### Ordering

DPS7DR- N T4 W D8-33  
1 2 3 4 5 6 7 8



- 1 A= single-acting (spring return) cylinder  
D= double-acting cylinder
- 2 blank= single rod  
DR= double rod
- 3 stroke length in inches
- 4 blank= standard rotatable rod  
N= non-rotating rod
- 5 blank= no rod threading  
T2= 1/2"-20 external threaded rod  
T3= 7/16"-20 reduced external threaded rod  
T4= 1/4"-28 internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats
- 7 blank= standard 6" daylight  
D\_\_= daylight (e.g. D8= 8" total daylight)
- 8 blank= no safety controls  
-33= standard pneumatic safety control package





### CMS 12 1200 lb Pneumatic Press

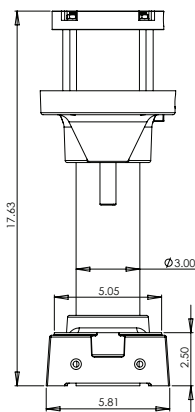
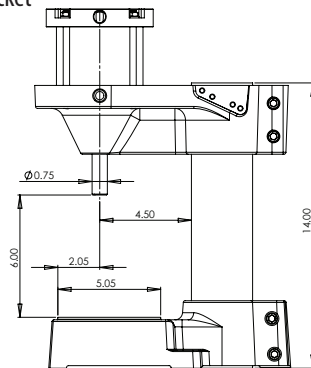
#### Features Include:

1260 lbs of force at 100 psi  
 4" Bore, single piston cylinder  
 Double-acting cylinder\*  
 0.75" rod diameter  
 4.5" throat depth  
 120 psi maximum supplied air pressure  
 Rigid ductile iron cylinder mounting bracket  
 6061 aluminum machined cylinder cap  
 PTFE piston wear strips  
 Hardcoat anodized tubing  
 Made in USA

#### Ordering

CMS12DR- N T4 W D8-33  
 1 2 3 4 5 6 7

- 1 blank=single rod  
 DR= double rod
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
 N= non-rotating rod
- 4 blank= no rod threading  
 T2= 3/4"-16 external threaded rod  
 T3= 1/2"-20 reduced external threaded rod  
 T4= 3/8"-24 internal threaded rod  
 T5= other custom rod
- 5 blank= no wrench flats  
 W= wrench flats
- 6 blank= standard 6" daylight  
 D\_\_= daylight (e.g. D8= 8" total daylight)
- 7 blank= no safety controls  
 -33= standard pneumatic safety control package



\* Contact us for single acting option.



### CMS 19 1900 lb Pneumatic Press

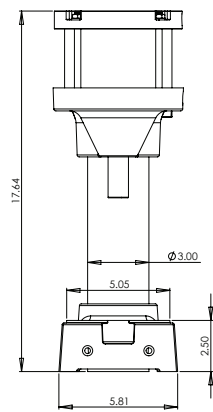
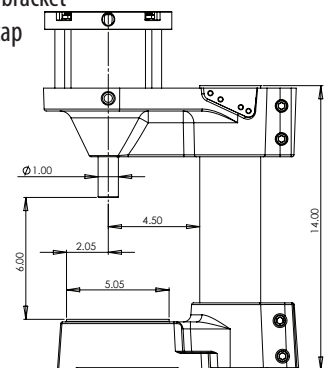
#### Features Include:

1960 lbs of force at 100 psi  
 5" Bore, single piston cylinder  
 Double-acting cylinder\*  
 1" rod diameter  
 4.5" throat depth  
 120 psi maximum supplied air pressure  
 Rigid ductile iron cylinder mounting bracket  
 6061 aluminum machined cylinder cap  
 PTFE piston wear strips  
 Hardcoat anodized tubing  
 Made in USA

#### Ordering

CMS19DR- N T4 W D8-33  
 1 2 3 4 5 6 7

- 1 blank=single rod  
 DR= double rod
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
 N= non-rotating rod
- 4 blank= no rod threading  
 T2= 1"-14 external threaded rod  
 T3= 3/4"-16 reduced external threaded rod  
 T4= 1/2"-20 internal threaded rod  
 T5= other custom rod
- 5 blank= no wrench flats  
 W= wrench flats
- 6 blank= standard 6" daylight  
 D\_\_= daylight (e.g. D8= 8" total daylight)
- 7 blank= no safety controls  
 -33= standard pneumatic safety control package



\* Contact us for single acting option.





## CMS 24 2400 lb Pneumatic Press

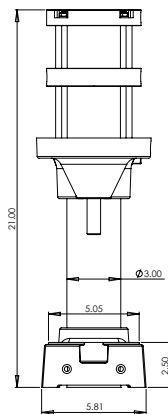
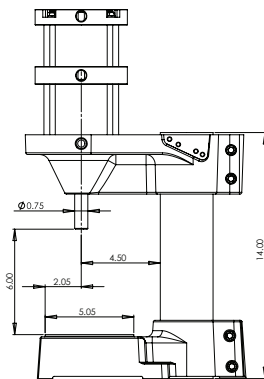
### Features Include:

2470 lbs of force at 100 psi  
 4" Bore, double piston cylinder  
 Double-acting cylinder  
 0.75" rod diameter  
 4.5" throat depth  
 120 psi maximum supplied air pressure  
 Rigid ductile iron cylinder mounting bracket  
 6061 aluminum machined cylinder cap  
 PTFE piston wear strips  
 Hardcoat anodized tubing  
 Made in USA

### Ordering

CMS24DR- N T4 W D8-33  
 1 2 3 4 5 6 7

- 1 blank=single rod  
 DR= double rod
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
 N= non-rotating rod
- 4 blank= no rod threading  
 T2= 3/4"-16 external threaded rod  
 T3= 1/2"-20 reduced external threaded rod  
 T4= 3/8"-24 internal threaded rod  
 T5= other custom rod
- 5 blank= no wrench flats  
 W= wrench flats
- 6 blank= standard 6" daylight  
 D\_\_= daylight (e.g. D8= 8" total daylight)
- 7 blank= no safety controls  
 -33= standard pneumatic safety control package



## CMS 38 3800 lb Pneumatic Press

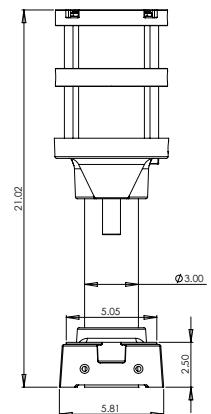
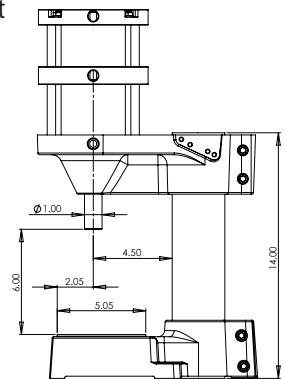
### Features Include:

3850 lbs of force at 100 psi  
 5" Bore, double piston cylinder  
 Double-acting cylinder  
 1" rod diameter  
 4.5" throat depth  
 120 psi maximum supplied air pressure  
 Rigid ductile iron cylinder mounting bracket  
 6061 aluminum machined cylinder cap  
 PTFE piston wear strips  
 Hardcoat anodized tubing  
 Made in USA

### Ordering

CMS38DR- N T4 W D8-33  
 1 2 3 4 5 6 7

- 1 blank=single rod  
 DR= double rod
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
 N= non-rotating rod
- 4 blank= no rod threading  
 T2= 1"-14 external threaded rod  
 T3= 3/4"-16 reduced external threaded rod  
 T4= 1/2"-20 internal threaded rod  
 T5= other custom rod
- 5 blank= no wrench flats  
 W= wrench flats
- 6 blank= standard 6" daylight  
 D\_\_= daylight (e.g. D8= 8" total daylight)
- 7 blank= no safety controls  
 -33= standard pneumatic safety control package





### CMS 58 5800 lb Pneumatic Press

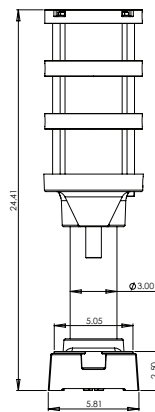
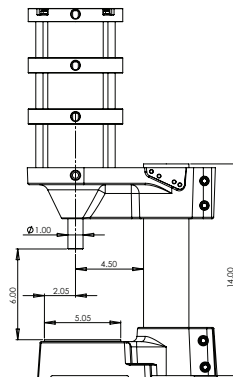
#### Features Include:

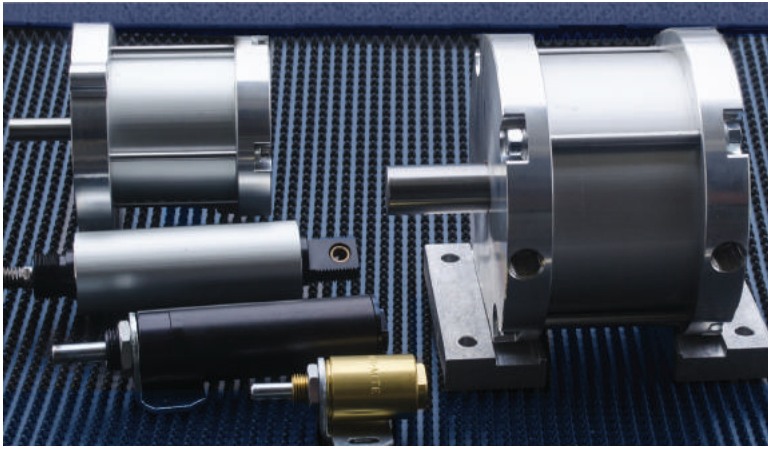
5730 lbs of force at 100 psi  
 5" Bore, triple piston cylinder  
 Double-acting cylinder  
 1" rod diameter  
 4.5" throat depth  
 120 psi maximum supplied air pressure  
 Rigid ductile iron cylinder mounting bracket  
 6061 aluminum machined cylinder cap  
 PTFE piston wear strips  
 Hardcoat anodized tubing  
 Made in USA

#### Ordering

CMS58DR- N T4 W D8-33  
 1 2 3 4 5 6 7

- 1 blank=single rod  
 DR= double rod
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
 N= non-rotating rod
- 4 blank= no rod threading  
 T2= 1"-14 external threaded rod  
 T3= 3/4"-16 reduced external threaded rod  
 T4= 1/2"-20 internal threaded rod  
 T5= other custom rod
- 5 blank= no wrench flats  
 W= wrench flats
- 6 blank= standard 6" daylight  
 D\_\_= daylight (e.g. D8= 8" total daylight)
- 7 blank= no safety controls  
 -33= standard pneumatic safety control package





## AIR-MITE PNEUMATIC CYLINDERS

Air-Mite offers three main types of pneumatic cylinders- Tie Rod, Round Line, and Micro Cylinders. Our versatile cylinder product line can be used for a variety of applications. Custom cylinders are also available to fulfill specific needs. We regularly work with customers to design and develop new cylinders to meet their requirements.

## TIE ROD CYLINDERS

Tie Rod Cylinders offer the greatest strength and power output with bore sizes from 1½" to 5". The 4" and 5" bore cylinders are available with double or triple piston configurations to provide double or triple the force in the same diameter cylinder. (Contact us for 1½" bore configurations)

## FEATURES AND OPTIONS

- 20-120 psi operating pressure
- CNC machined billet aluminum pistons, end caps, and compartments
- Bronze-filled PTFE piston wear strips
- Hardcoat anodized aluminum tubing (pre-lubed surface for extended life)
- Stainless steel tie rods to prevent corrosion
- Ground and polished steel rod (stainless steel and chrome optional)
- Plain rod ends standard (custom machining available)
- Nitrile U-cups and O-rings (FKM optional for high temperature applications)
- Self-lubricating bronze rod bearing
- Single-acting cylinder stroke lengths – up to 4" standard
- Double-acting cylinder stroke lengths – unlimited
- Double rod ends available on most cylinders

PLEASE NOTE: Air cylinders and air presses are required to be used with guards or anti tie-down controls as per OSHA regulations. This applies to all cylinders shown in this catalog

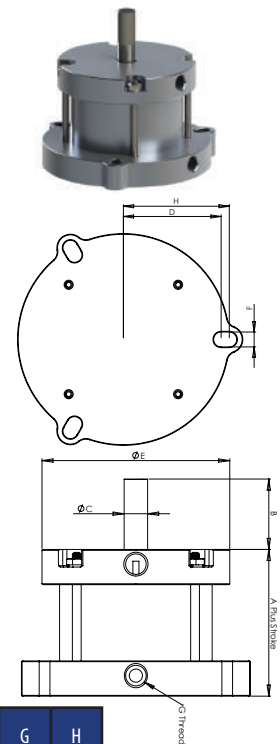
All Air-Mite's cylinders proudly carry the "Made in USA" label. Cylinders have a durable, maintenance-free construction that assures uninterrupted service. We have a state of the art CNC machining facility in our factory in Round Lake, IL, where the components for each cylinder are precisely machined. Then, they are carefully assembled using high quality seals. Finally, each cylinder is cycled and inspected before shipment. All of this is done in a timely, efficient manner. Rush service is available to meet aggressive timelines.

Every cylinder manufactured by Air-Mite is completely rebuildable. Repair kits are available for all current and past models of cylinders.

## VS Single-Acting, Rear Flange Mount Tie Rod Cylinder

VS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number
- 2 blank=single rod  
DR= double rod
- 3 stroke length in inches (4" max)
- 4 blank= standard rotatable rod  
N= non-rotatable rod
- 5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats



Model	Bore Size	A	B	C	D	E	F	G	H
VS225	2.25	2.63	1.50	.50	1.88	3.25	.28	¼-18	2.00
VS300	3.00	2.63	1.50	.50	2.25	4.00	.34	¼-18	2.44
VS400	4.00	3.63	2.00	.75	3.00	5.25	.41	⅜-18	3.00
VS500	5.00	3.63	2.00	1.00	3.50	6.25	.41	⅜-18	3.50

Strokes above 2" please consult factory for dimension A

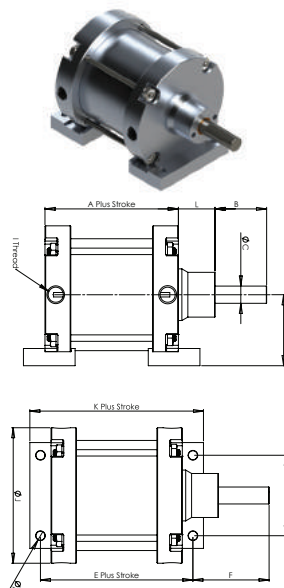
Please call 224-338-0071 for current prices



## PS Single-Acting, Foot Mount Tie Rod Cylinder

PS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number  
2 blank= single rod  
DR= double rod  
3 stroke length in inches (4" max)  
4 blank= standard rotatable rod  
N= non-rotating rod  
5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod  
6 blank= no wrench flats  
W= wrench flats

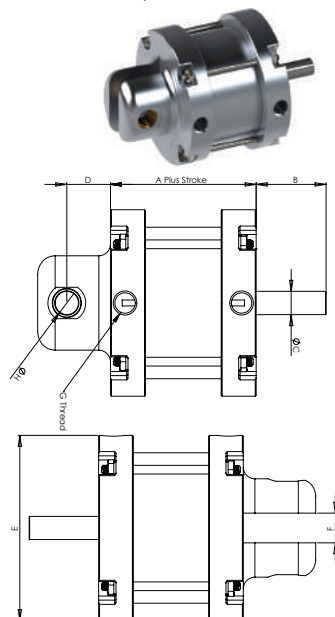


Model	Bore Size	A	B	C	D	E	F	G	H	I	J	K	L
PS225	2.25	1.88	1.50	.50	1.69	2.50	2.25	2.38	.27	1/4-18	3.25	3.13	1.06
PS300	3.00	1.88	1.50	.50	2.06	2.50	2.25	2.38	.27	1/4-18	4.00	3.13	1.06
PS400	4.00	2.13	2.00	.75	2.75	3.13	3.00	3.38	.39	3/8-18	5.25	4.13	1.50
PS500	5.00	2.13	2.00	1.00	3.31	3.13	3.00	3.38	.39	3/8-18	6.25	4.13	1.50

## CS Single-Acting, Clevis Mount Tie Rod Cylinder

CS300-2 N T4 W  
1 2 3 4 5

- 1 cylinder size model number  
2 stroke length in inches (4" max)  
3 blank= standard rotatable rod  
N= non-rotating rod  
4 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod  
5 blank= no wrench flats  
W= wrench flats



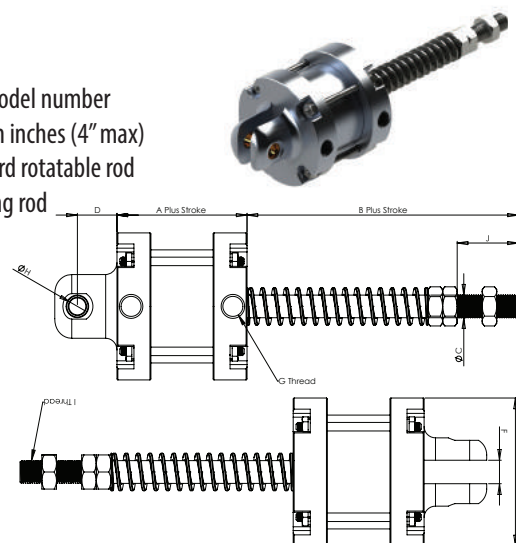
Model	Bore Size	A	B	C	D	E	F	G	H
CS225	2.25	2.63	1.50	.50	.88	3.25	.52	1/4-18	.38
CS300	3.00	2.63	1.50	.50	.94	4.00	.64	1/4-18	.50
CS400	4.00	3.63	2.00	.75	1.25	5.25	.78	3/8-18	.63
CS500	5.00	3.63	2.00	1.00	1.25	6.25	1.00	3/8-18	.75

Strokes above 2" please consult factory for dimension A

CPS Single-Acting, Clevis Mount Tie Rod Cylinder  
Pull Type- Normally Extended

CPS300-2 N  
1 2 3

- 1 cylinder size model number  
2 stroke length in inches (4" max)  
3 blank= standard rotatable rod  
N= non-rotating rod



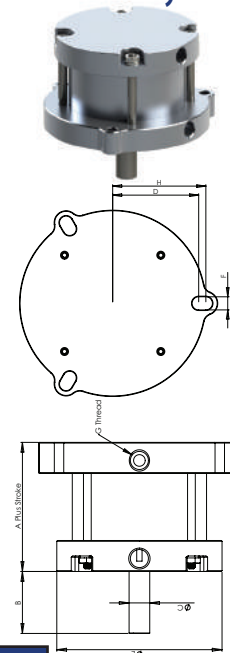
Model	Bore Size	A	B	C	D	E	F	G	H	I	J
CPS225	2.25	1.88	5.00	.50	.88	3.25	.52	1/4-18	.38	1/2-20	1.25
CPS300	3.00	1.88	5.00	.50	.94	4.00	.64	1/4-18	.50	1/2-20	1.25
CPS400	4.00	2.13	5.00	.75	1.25	5.25	.78	3/8-18	.63	3/4-16	1.25
CPS500	5.00	2.13	5.00	1.00	1.25	6.25	1.00	3/8-18	.75	1-14	1.25

Strokes above 2" please consult factory for dimension A

## VFS Single-Acting, Front Flange Mount Tie Rod Cylinder

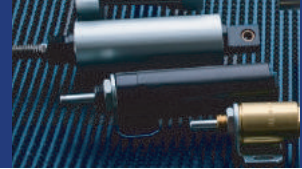
VFS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number  
2 blank= single rod  
DR= double rod  
3 stroke length in inches (4" max)  
4 blank= standard rotatable rod  
N= non-rotating rod  
5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod  
6 blank= no wrench flats  
W= wrench flats



Model	Bore Size	A	B	C	D	E	F	G
VFS225	2.25	2.63	1.50	.50	2.00	3.25	.28	1/4-18
VFS300	3.00	2.63	1.50	.50	2.44	4.00	.34	1/4-18
VFS400	4.00	3.63	2.00	.75	3.00	5.25	.41	3/8-18
VFS500	5.00	3.63	2.00	1.00	3.50	6.25	.41	3/8-18

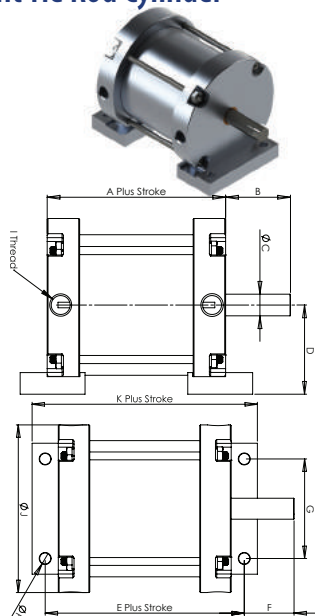
Strokes above 2" please consult factory for dimension A



## DPS Double-Acting, Foot Mount Tie Rod Cylinder

DPS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number
- 2 blank=single rod  
DR= double rod
- 3 stroke length in inches
- 4 blank= standard rotatable rod  
N= non-rotating rod
- 5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats

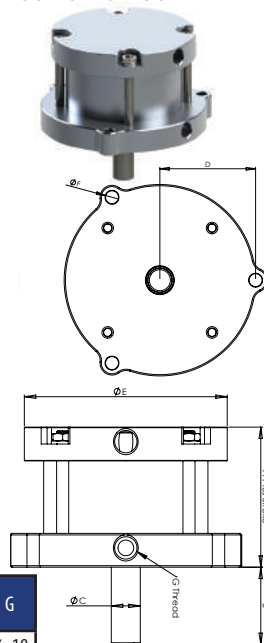


Model	Bore Size	A	B	C	D	E	F	G	H	I	J	K
DPS225	2.25	2.13	1.50	.50	1.69	2.75	1.19	2.38	.27	1/4-18	3.25	3.38
DPS300	3.00	2.13	1.50	.50	2.06	2.75	1.19	2.38	.27	1/4-18	4.00	3.38
DPS400	4.00	2.63	2.00	.75	2.75	3.63	1.50	3.38	.39	3/8-18	5.25	4.63
DPS450	4.00	4.00	2.00	.75	2.75	5.00	1.50	3.38	.39	3/8-18	5.25	6.00
DPS500	5.00	2.63	2.00	1.00	3.31	3.63	1.50	3.38	.39	3/8-18	6.25	4.63
DPS550	5.00	4.02	2.00	1.00	3.31	5.02	1.50	3.38	.39	3/8-18	6.25	6.02
DPS580	5.00	5.41	2.00	1.00	3.31	6.41	1.50	3.38	.39	3/8-18	6.25	7.41

## DVFS Double-Acting, Front Flange Mount Tie Rod

DVFS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number
- 2 blank=single rod  
DR= double rod
- 3 stroke length in inches
- 4 blank= standard rotatable rod  
N= non-rotating rod
- 5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats

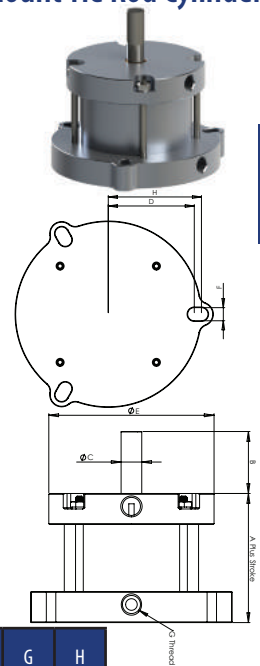


Model	Bore Size	A	B	C	D	E	F	G
DVFS225	2.25	2.13	1.50	.50	2.00	3.25	.28	1/4-18
DVFS300	3.00	2.13	1.50	.50	2.44	4.00	.34	1/4-18
DVFS400	4.00	2.63	2.00	.75	3.00	5.25	.41	3/8-18
DVFS450	4.00	4.00	2.00	.75	3.00	5.25	.41	3/8-18
DVFS500	5.00	2.63	2.00	1.00	3.50	6.25	.41	3/8-18
DVFS550	5.00	4.02	2.00	1.00	3.50	6.25	.41	3/8-18
DVFS580	5.00	5.41	2.00	1.00	3.50	6.25	.41	3/8-18

## DVS Double-Acting, Rear Flange Mount Tie Rod Cylinder

DVS300 DR-2 N T4 W  
1 2 3 4 5 6

- 1 cylinder size model number
- 2 blank=single rod  
DR= double rod
- 3 stroke length in inches
- 4 blank= standard rotatable rod  
N= non-rotating rod
- 5 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod
- 6 blank= no wrench flats  
W= wrench flats

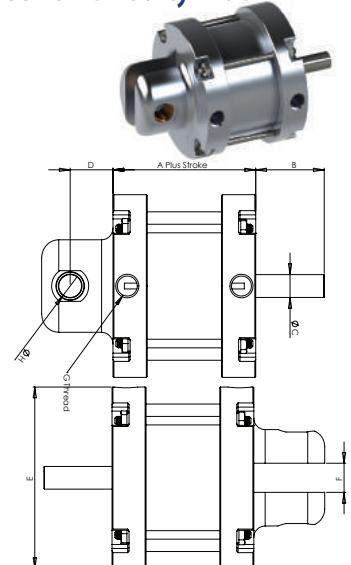


Model	Bore Size	A	B	C	D	E	F	G	H
DVS225	2.25	2.13	1.50	.50	1.88	3.25	.28	1/4-18	2.00
DVS300	3.00	2.13	1.50	.50	2.25	4.00	.34	1/4-18	2.44
DVS400	4.00	2.63	2.00	.75	3.00	5.25	.41	3/8-18	3.00
DVS450	4.00	4.00	2.00	.75	3.00	5.25	.41	3/8-18	3.00
DVS500	5.00	2.63	2.00	1.00	3.50	6.25	.41	3/8-18	3.50
DVS550	5.00	4.02	2.00	1.00	3.50	6.25	.41	3/8-18	3.50
DVS580	5.00	5.41	2.00	1.00	3.50	6.25	.41	3/8-18	3.50

## DCS Double-Acting, Clevis Mount Tie Rod Cylinder

DCS300-2 N T4 W  
1 2 3 4 5

- 1 cylinder size model number
- 2 stroke length in inches
- 3 blank= standard rotatable rod  
N= non-rotating rod
- 4 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod
- 5 blank= no wrench flats  
W= wrench flats



Model	Bore Size	A	B	C	D	E	F	G	H
DCS225	2.25	2.13	1.50	.50	.88	3.25	.52	1/4-18	.38
DCS300	3.00	2.13	1.50	.50	.94	4.00	.64	1/4-18	.50
DCS400	4.00	2.63	2.00	.75	1.25	5.25	.78	3/8-18	.63
DCS450	4.00	4.00	2.00	.75	1.25	5.25	.78	3/8-18	.63
DCS500	5.00	2.63	2.00	1.00	1.25	6.25	1.00	3/8-18	.75
DCS550	5.00	4.02	2.00	1.00	1.25	6.25	1.00	3/8-18	.75
DCS580	5.00	5.41	2.00	1.00	1.25	6.25	1.00	3/8-18	.75

## MICRO CYLINDERS

Micro Cylinders are our smallest line of cylinders with bore sizes from 3/4" to 1 1/4". Single and double acting models provide ample power for many applications such as clamping, locking, ejecting, and throttling.

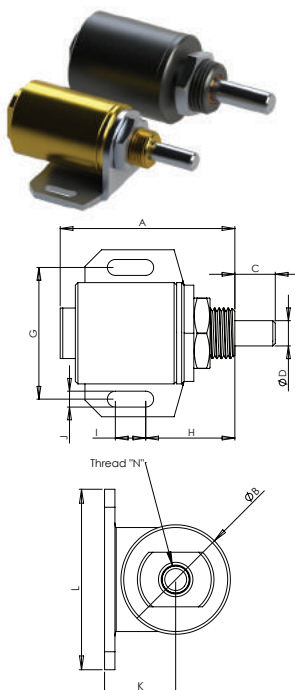
## FEATURES AND OPTIONS

- 10-150 psi operating pressure
- CNC machined cylinder bodies, tubes, and end caps
- Zinc plated steel piston rod assemblies
- Plain rod ends standard (custom machining available)
- Nitrile U-cups and O-rings (FKM optional for high temperature applications)
- V and DAV model Micro Cylinders are nose mount only
- P and DAP model Micro Cylinders include steel foot mounting bracket
- Includes zinc plated steel jam nut for mounting

### Micro Cylinder, Single-Acting Foot and Nose Mount

P 100-1-T2  
1 2 3 4

- 1 P= foot mount  
V= nose mount  
2 75= 3/4" bore  
100= 1" bore  
110= 1 1/8" bore  
125= 1 1/4" bore  
3 stroke length in inches  
4 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod

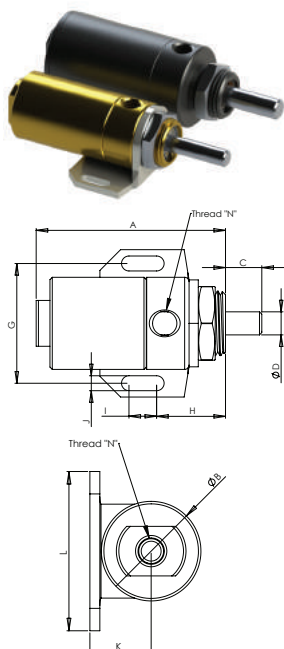


Foot Mount	Nose Mount	Stroke	A	B	C	D	E	F	G	H	I	J	K	L	M
P75-1/2	V75-1/2	.50	2.12	.88	.75	.25	.38	.50	1.25	.88	.00	.20	.68	1.63	1/8-27
P75-1	V75-1	1.00	2.62	.88	.75	.25	.38	.50	1.25	.88	.00	.20	.68	1.63	1/8-27
P75-2	V75-2	2.00	4.12	.88	.75	.25	.38	.50	1.25	.88	.00	.20	.68	1.63	1/8-27
P75-3	V75-3	3.00	5.12	.88	.75	.25	.38	.50	1.25	.88	.00	.20	.68	1.63	1/8-27
P100	V100	.63	2.16	1.25	.50	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P100AC	V100AC	.63	1.88	1.25	.38	.31	.38	.63	1.63	1.10	.38	.20	.81	2.06	1/4-18
P100-1	V100-1	1.00	2.53	1.25	.75	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P100-2	V100-2	2.00	4.47	1.25	1.00	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P100-3	V100-3	3.00	5.47	1.25	1.00	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P110-1	V110-1	1.00	2.53	1.31	.75	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P120-1	V120-1	2.00	4.47	1.31	1.00	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P130-1	V130-1	3.00	5.47	1.31	1.00	.31	.63	.63	1.63	1.10	.38	.20	.81	2.06	1/8-27
P125-1/2	V125-1/2	.50	2.04	1.50	1.00	.38	.63	.88	1.63	1.13	.00	.20	.91	2.00	1/8-27
P125-1	V125-1	1.00	2.54	1.50	1.00	.38	.63	.88	1.63	1.13	.00	.20	.91	2.00	1/8-27

### Micro Cylinder, Double-Acting Foot and Nose Mount

DAP 100-1-T2  
1 2 3 4

- 1 P= foot mount  
V= nose mount  
2 75= 3/4" bore  
100= 1" bore  
110= 1 1/8" bore  
125= 1 1/4" bore  
3 stroke length in inches  
4 blank= no rod threading  
T2= external threaded rod  
T3= reduced external threaded rod  
T4= internal threaded rod  
T5= other custom rod



Foot Mount	Nose Mount	Stroke	A	B	C	D	E	F	G	H	I	J	K	L	M
DAP75-1/2	DAV75-1/2	.50	2.38	.88	.75	.25	.44	.50	1.25	.94	.00	.20	.68	1.63	1/8-27
DAP75-1	DAV75-1	1.00	2.88	.88	.75	.25	.44	.50	1.25	.94	.00	.20	.68	1.63	1/8-27
DAP75-2	DAV75-2	2.00	3.88	.88	.75	.25	.44	.50	1.25	.94	.00	.20	.68	1.63	1/8-27
DAP75-3	DAV75-3	3.00	4.88	.88	.75	.25	.44	.50	1.25	.94	.00	.20	.68	1.63	1/8-27
DAP75-4	DAV75-4	4.00	5.88	.88	.75	.25	.44	.50	1.25	.94	.00	.20	.68	1.63	1/8-27
DAP100-1/2	DAV100-1/2	.50	2.57	1.25	.50	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-1	DAV100-1	1.00	3.14	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-2	DAV100-2	2.00	4.26	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-3	DAV100-3	3.00	5.26	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-4	DAV100-4	4.00	6.26	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-5	DAV100-5	5.00	7.26	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP100-6	DAV100-6	6.00	8.26	1.25	1.12	.31	.50	.88	1.63	.94	.38	.20	.77	2.00	1/8-27
DAP125-1	DAV125-1	1.00	3.53	1.50	1.00	.38	.63	.88	1.63	1.13	.00	.20	.91	2.00	1/8-27
DAP125-2	DAV125-2	2.00	4.53	1.50	1.00	.38	.63	.88	1.63	1.13	.00	.20	.91	2.00	1/8-27
DAP125-3	DAV125-3	3.00	5.53	1.50	1.00	.38	.63	.88	1.63	1.13	.00	.20	.91	2.00	1/8-27



ROUND LINE CYLINDERS

Round Line Cylinders offer space saving design for many types of equipment and machinery. Air-Mite Round Line Cylinders are interchangeable with round line cylinders from other manufacturers. They are available in bore sizes from 1½" to 4".

FEATURES AND OPTIONS

- 20-150 psi operating pressure
- Double-acting cylinders (single-acting available as special)
- CNC machined billet aluminum pistons and end caps
- Black anodized end caps
- Hardcoat anodized aluminum tubing (pre-lubed surface for extended life)
- Ground and polished steel rod (stainless steel and chrome optional)
- Threaded rod end with wrench flats (custom machining available)
- Nitrile U-cups and O-rings (FKM optional for high temperature applications)
- Tough, low-friction polymer rod bearing
- Double rod ends available on all cylinders
- Removal of rear tang optional

cylinders

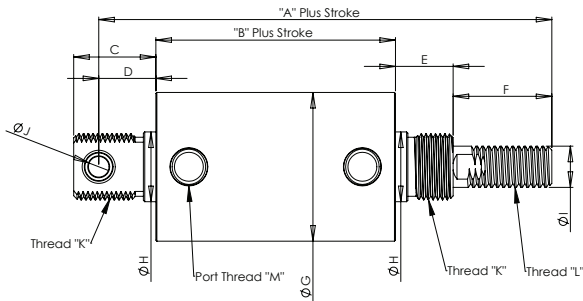
Round Line Cylinder

DRS 20-1  
1 2

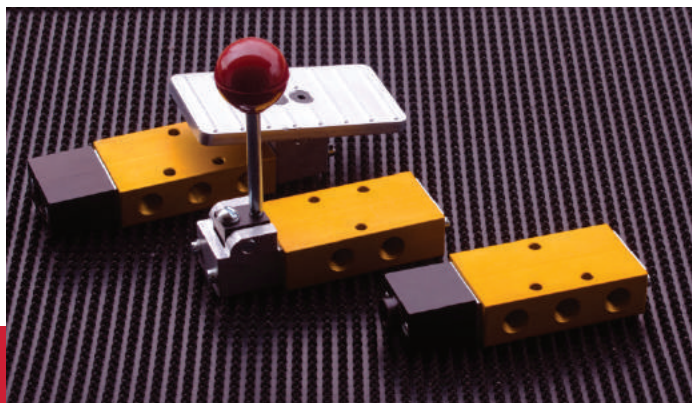
- 1 10=1½" bore
- 15=1½" bore
- 20=2" bore
- 25=2½" bore
- 30=3" bore
- 40=4" bore
- 2 stroke length in inches



Model	Bore Size	A	B	C	D	E	F	G	H	I	J	K	L	M
DRS10	1.13	4.37	2.06	1.00	.69	.63	1.00	1.38	.75	.38	.25	¾-16	¾-16	½-27
DRS15	1.50	5.81	2.63	1.24	.82	.87	1.49	1.75	1.06	.50	.31	1-14	½-13	¼-18
DRS20	2.00	5.85	2.63	1.24	.86	.87	1.49	2.25	1.06	.63	.31	1-14	¾-11	¼-18
DRS25	2.50	6.94	2.88	2.00	1.38	1.00	1.68	2.75	1.37	.75	.44	1¾-12	¾-10	¾-18
DRS30	3.00	6.94	2.88	2.00	1.38	1.00	1.68	3.25	1.37	.75	.44	1¾-12	¾-10	¾-18
DRS40	4.00	10.69	5.88	2.19	1.44	1.13	2.25	4.25	1.75	1.00	.50	1¾-12	1-14	½-14







## FEATURES AND OPTIONS

Anodized Aluminum Body - one basic design permits use of different operators precision ground spools, shifting spool design, manual, solenoid, or pilot operated. 3 position available for some valves Buna N seals-standard Viton seals-available. Prelubed with Magnalube G for longevity in cycling Safety Foot Guard-FG300-recommended Operating Pressures: Air- $\frac{1}{8}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ " models-150 psi,  $\frac{1}{2}$ " model-120 psi Hydraulic - all models-300 psi

Cv Factors: 3-way:  $\frac{1}{8}$ " &  $\frac{1}{4}$ " npt-1.8  $\frac{3}{8}$ " &  $\frac{1}{2}$ " npt-2.9  
4-way:  $\frac{1}{8}$ " &  $\frac{1}{4}$ " npt-1.8  $\frac{3}{8}$ " &  $\frac{1}{2}$ " npt-2.9

## ORDERING INFORMATION

### V SERIES - MODEL NUMBERS (4 Digits)

1st Digit	2nd Digit	3rd & 4th Digit	
Type	Port Size	Actuator/Return-2 position	
V3 = 3-Way	1 = $\frac{1}{8}$ " npt	00 = Basic/Spring	08 = Pedal/Spring
V4 = 4-Way-2 pos.	2 = $\frac{1}{4}$ " npt	01 = Palm Button/Manual	09 = Treadle/Manual
V5 = 4 Way-2 pos./Dual Inlet	3 = $\frac{3}{8}$ " npt	02 = Palm Button/Spring	10 = Treadle/Spring
V4...3P = 4 Way-3 pos.	4 = $\frac{1}{2}$ " npt	03 = Handball/Manual	11 = Roller Cam/Spring
V5...3P = 4 Way-3 pos.		04 = Handball/Spring	12 = Ball Cam/Spring
		06 = Finger Tip/Spring	15 = Double Pilot
			16 = Single Pilot

Example: V4210 = 4-Way, 2 pos.  $\frac{1}{4}$ " single inlet treadle w/spring return.

Note: Modifications & some custom valve numbers can be created by combining primary model numbers with many of the below noted primary modifications.

### PRIMARY MODIFICATIONS - 2 & 3 POSITION VALVES

#### Manual Control Valve Suffixes - 2 Position Valves

A = Special mtg holes	LP = Low pressure pilot	S = Selector valve
D = Detent	NO = Normally open	T = Light duty spring
G = Heavy duty spring	P = Pilot return	V = Viton seals
H = Hydraulic (Low Pressure)	PM = Panel mount	X = X201 mufflers in ports
HD = Heavy duty actuator	R = Diverter valve	Y = Shorter hand ball assy. 3 OAL

#### Manual Control Valve Suffixes 3 Position Valves

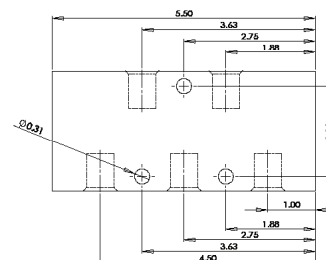
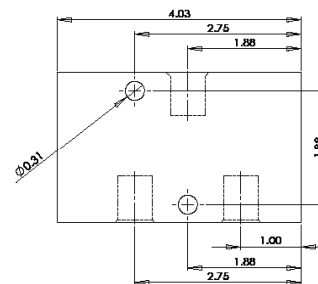
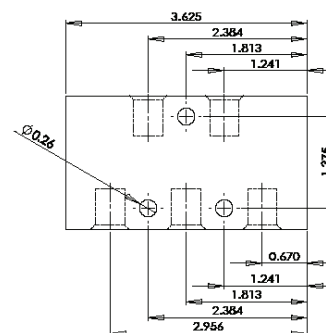
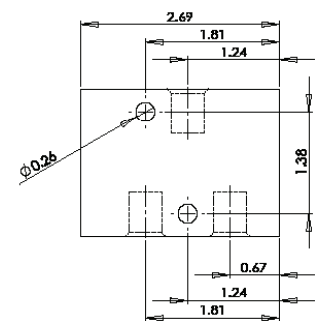
-To order 3 position valves, add the following suffix to 4-way, 2 pos. primary valve numbers

3P = 3 position, closed center, spring to center	3PD = 3 position, closed center, detented
3PO = 3 position, open center, spring to center	3POD = 3 position, open center, detented

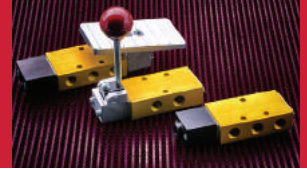
## AIR-MITE PNEUMATIC VALVES

Air-Mite offers two main types of pneumatic valves- V-Series and Miniature Valves. Our V-Series Valves are available in both 3-way and 4-way configurations for the control of single and double-acting cylinders. These valves are available with a variety of different operators- manual, mechanical, solenoid, or air-piloted. The unique design of our valves allows for custom designs to be easily created to adapt to your special needs. If you don't see what you need in our catalog, please contact us as we most likely can make something for your application.

Air-Mite's Miniature valves line of small 3-way poppet and spool valves offer a variety of manual and mechanical operators in a space-saving design.



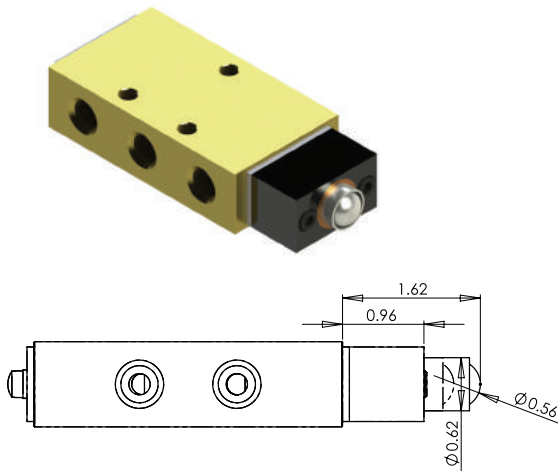




## Ball Cam Control Valve

### Features Include:

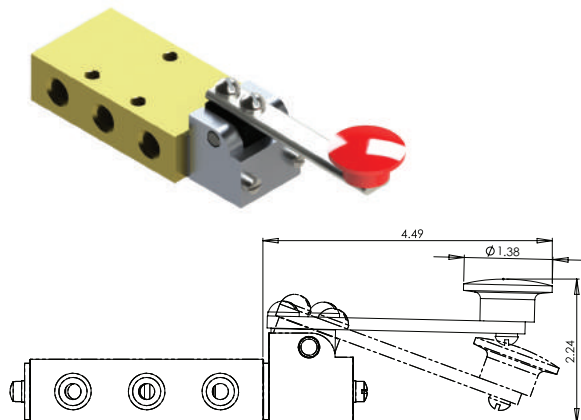
- Mechanically operated by ball plunger
- 3-way or 4-way configuration
- 1/8", 1/4", 3/8", or 1/2" port sizes
- Available as 2-position spring-return or 2-position pilot return



## Finger Lever Control Valve

### Features Include:

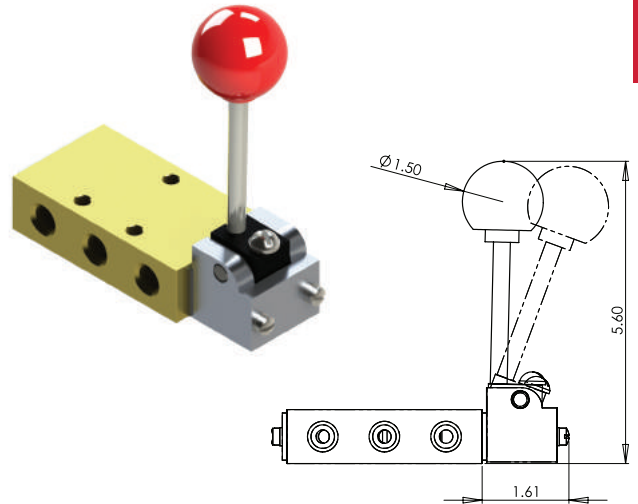
- Manually operated by finger lever
- 3-way or 4-way configuration
- 1/8", 1/4", 3/8", or 1/2" port sizes
- Available as 2-position spring-return



## Hand Ball Control Valve

### Features Include:

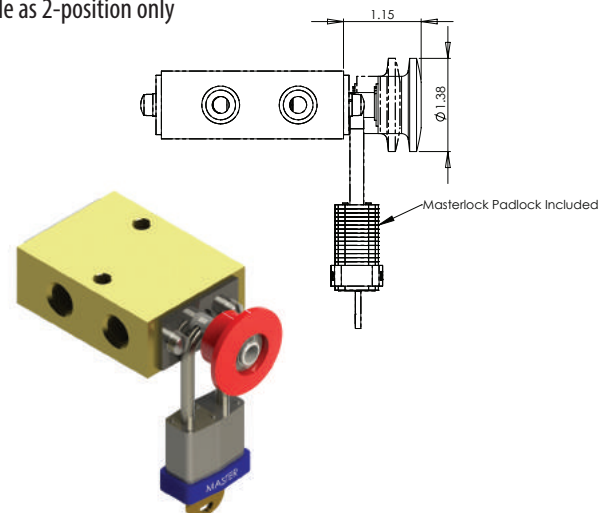
- Manually operated by hand lever
- 3-way or 4-way configuration
- 1/8", 1/4", 3/8", or 1/2" port sizes
- Available as 2-position, 2-position spring-return, 3-position detented, or 3-position spring to center
- Open or closed center for 3-position



## Lockout Control Valve

### Features Include:

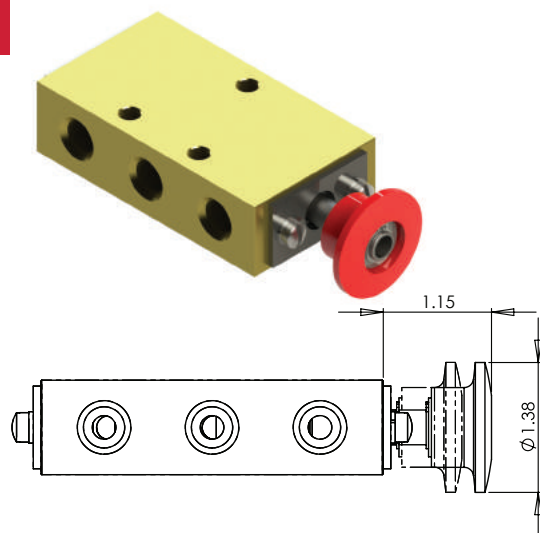
- Manually operated by palm button
- Can be locked out in off position
- Includes padlock
- 3-way or 4-way configuration
- 1/8", 1/4", 3/8", or 1/2" port sizes
- Available as 2-position only



### Palm Button Control Valve

#### Features Include:

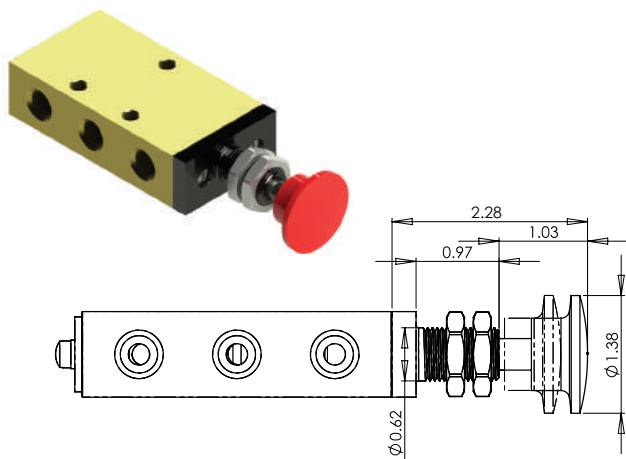
Manually operated by palm button  
 3-way or 4-way configuration  
 1/8", 1/4", 3/8", or 1/2" port sizes  
 Available as a 2-position, 2-position spring-return, 3-position detented, 3-position spring to center  
 Open or closed center for 3-position



### Panel Mount Control Valve

#### Features Include:

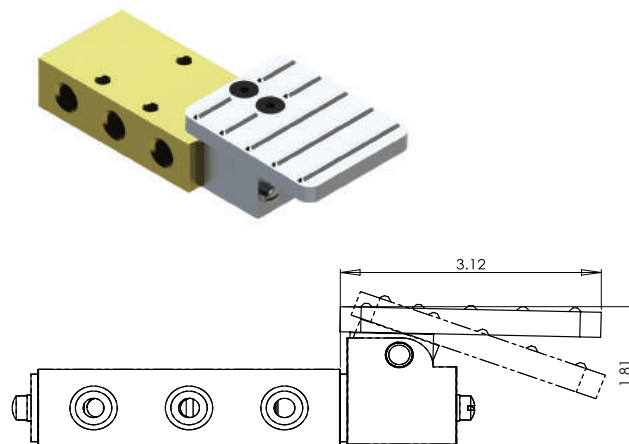
Manually operated by palm button  
 Allows for mounting through a panel  
 3-way or 4-way configuration  
 1/8", 1/4", 3/8", or 1/2" port sizes  
 Available as 2-position only



### Pedal Control Valve

#### Features Include:

Foot operated by pedal  
 3-way or 4-way configuration  
 1/8", 1/4", 3/8", or 1/2" port sizes  
 Available as 2-position spring-return  
 Safety Foot Guard- FG300 is strongly recommended to prevent accidental tripping of valve



### Pilot Control Valve

#### Features Include:

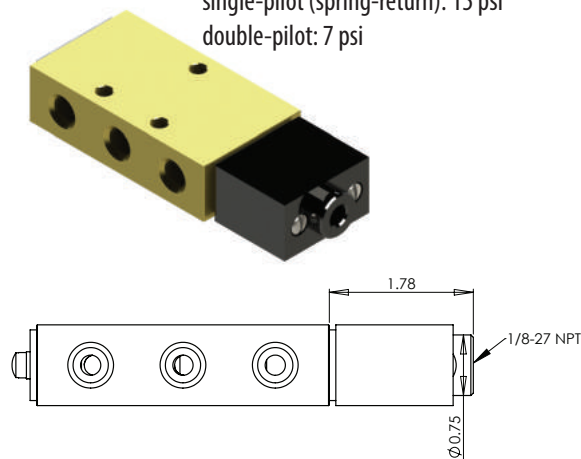
Pilot operated by air pressure  
 3-way or 4-way configuration  
 1/8", 1/4", 3/8", or 1/2" port sizes  
 Available as a 2-position single-pilot (spring-return) or 2-position double-pilot  
 Minimum Operating Pressures:

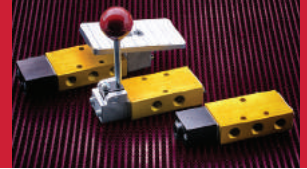
#### Standard Pilot

single-pilot (spring-return): 25 psi  
 double-pilot: 10 psi

#### Low Pressure Pilot

single-pilot (spring-return): 15 psi  
 double-pilot: 7 psi

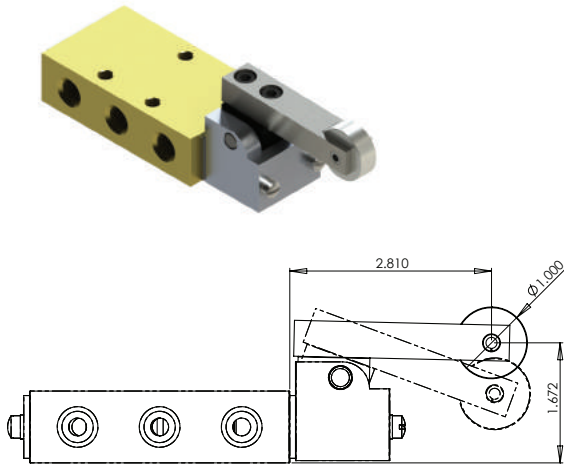




## Roller Cam Control Valve

### Features Include:

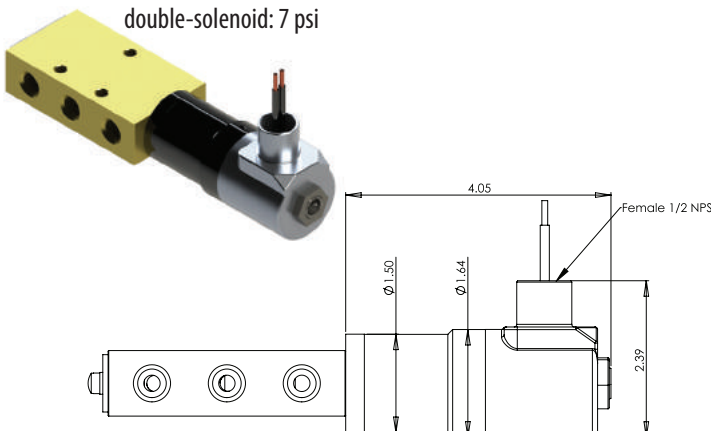
- Mechanically operated by roller cam
- 3-way or 4-way configuration
- $\frac{1}{8}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ ", or  $\frac{1}{2}$ " port sizes
- Available as 2-position spring-return or 2-position pilot-return



## Solenoid Control Valve

### Features Include:

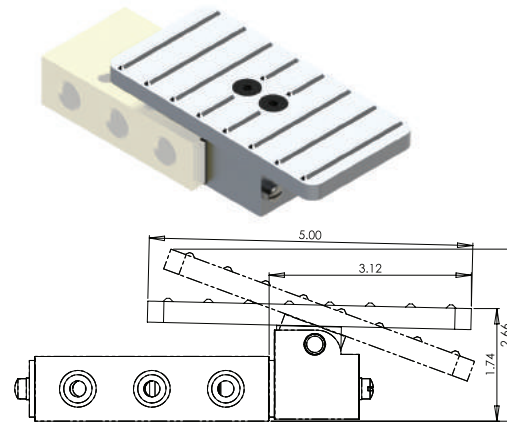
- Electrically operated by solenoid
- Variety of voltages available from stock
- Valves are internally piloted- no secondary air supply is required
- Explosion proof operators optional
- 3-way or 4-way configuration
- $\frac{1}{8}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ ", or  $\frac{1}{2}$ " port sizes
- Available as a 2-position single-solenoid (spring-return) or 2-position double-solenoid
- Minimum Operating Pressures:
  - single-solenoid (spring-return): 15 psi
  - double-solenoid: 7 psi



## Treadle Control Valve

### Features Include:

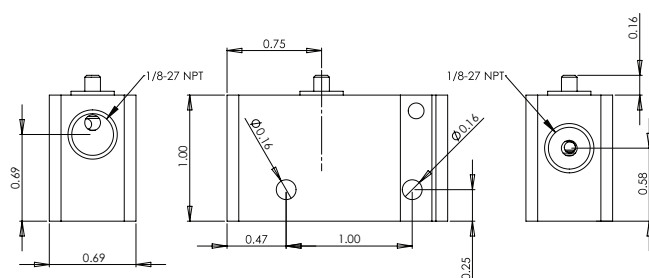
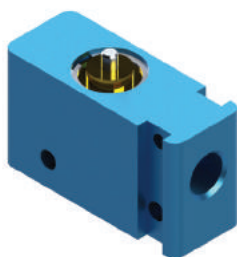
- Foot operated by pedal that allows motion both backwards and forwards
- 3-way or 4-way configuration
- $\frac{1}{8}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ ", or  $\frac{1}{2}$ " port sizes
- Available as a 2-position, 3-position detented, 3-position spring to center
- Open or closed center for 3-position
- Safety Foot Guard- FG300 is strongly recommended to prevent accidental tripping of valve



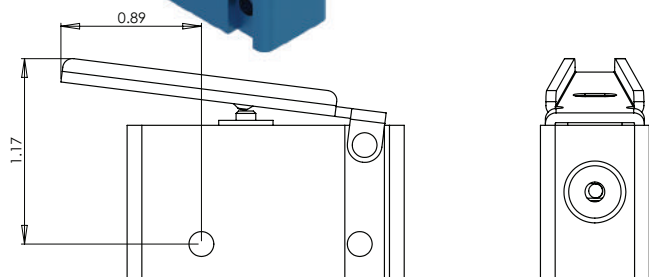
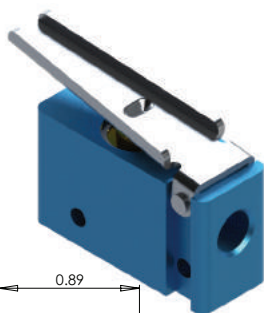
**WARNING:** All hand and foot operated valves should be guarded to prevent accidental or unintended operation in accordance with OSHA Section 1910.217 and AIS Section B11.1

**MV2-A Miniature Valve****Features Include:**

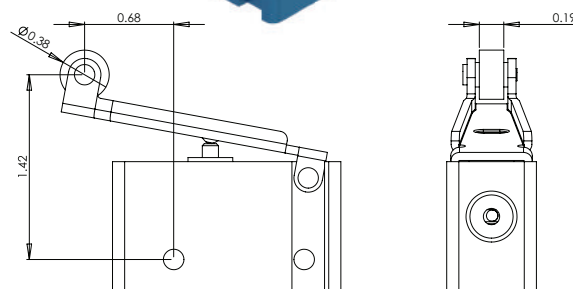
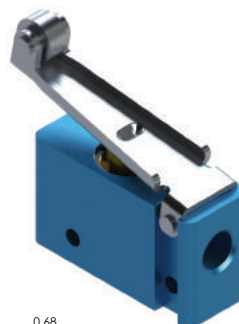
Basic valve with no operator  
 $\frac{1}{8}$ " diameter push button  
 Spring return  
 3-way configuration  
 $\frac{1}{8}$ " port size  
 Can be used normally open or normally closed

**MV2-B Miniature Valve****Features Include:**

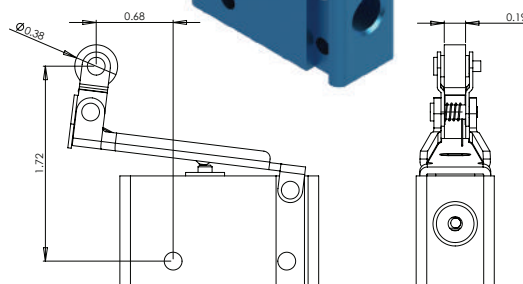
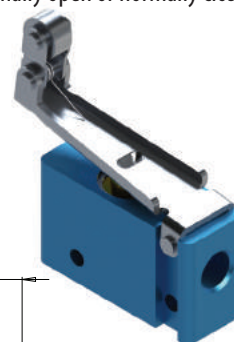
Lever operator  
 $1\frac{7}{8}$ " long steel lever  
 Spring return  
 3-way configuration  
 $\frac{1}{8}$ " port size  
 Can be used normally open or normally closed

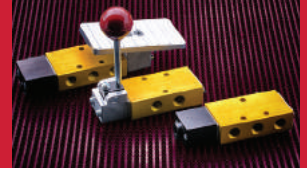
**MV2-C Miniature Valve****Features Include:**

Roller lever operator  
 $\frac{3}{8}$ " diameter roller on lever  
 Spring return  
 3-way configuration  
 $\frac{1}{8}$ " port size  
 Can be used normally open or normally closed

**MV2-D Miniature Valve****Features Include:**

One-way roller lever operator  
 $\frac{3}{8}$ " diameter roller on lever  
 Valve only actuates from one direction  
 Spring return  
 3-way configuration  
 $\frac{1}{8}$ " port size  
 Can be used normally open or normally closed

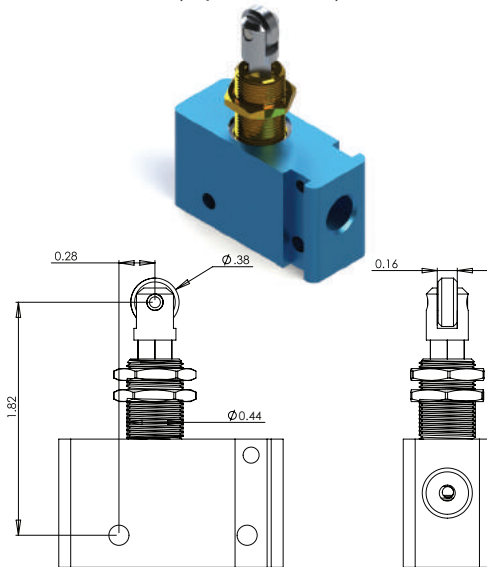




## MV2-E Miniature Valve

### Features Include:

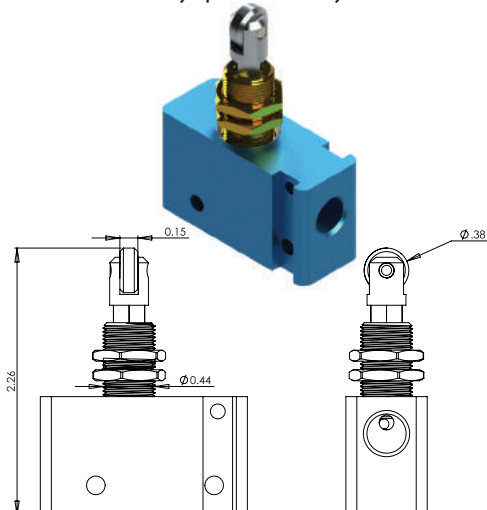
- Roller plunger operator
- $\frac{3}{8}$ " diameter roller on plunger
- Roller is oriented parallel to valve body
- Spring return
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed



## MV2-F Miniature Valve

### Features Include:

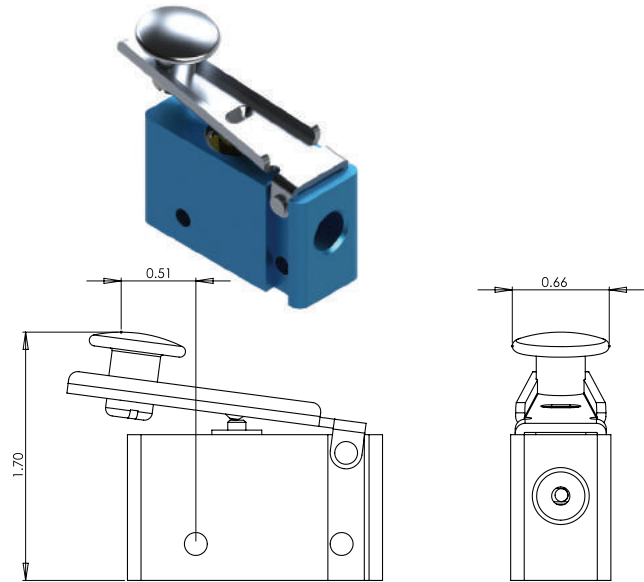
- Roller plunger operator
- $\frac{3}{8}$ " diameter roller on plunger
- Roller is oriented perpendicular to valve body
- Spring return
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed



## MV2-G Miniature Valve

### Features Include:

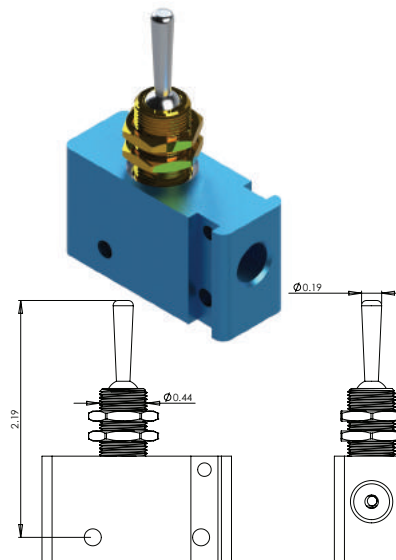
- Fingertip lever operator
- Finger button mounted on lever
- Spring return
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed



## MV2-H Miniature Valve

### Features Include:

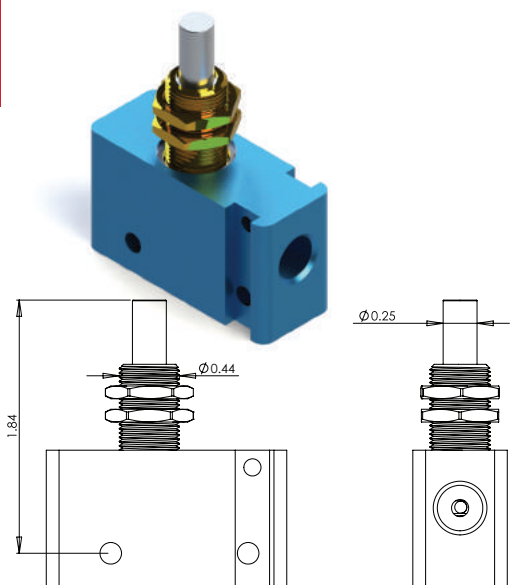
- Toggle operator
- Toggle can be operated in any direction
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed



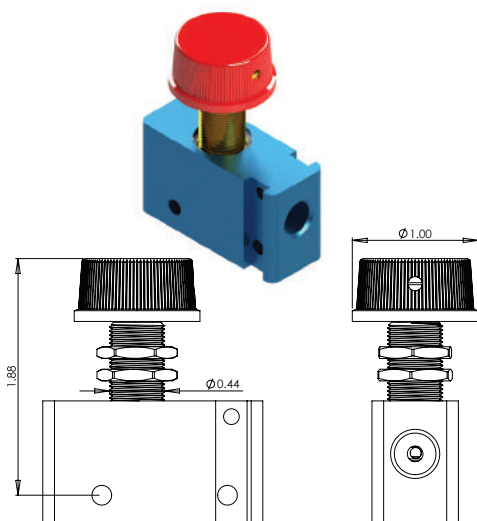


**MV2-J Miniature Valve****Features Include:**

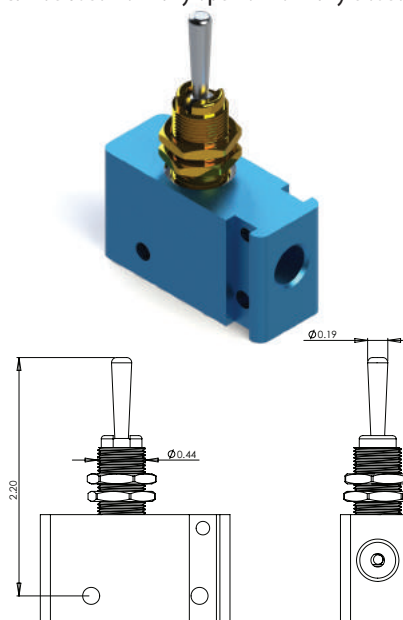
- Plunger operator
- $\frac{1}{32}$ " diameter steel plunger
- Spring return
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed

**MV2-K Miniature Valve****Features Include:**

- Knob operator
- 1" diameter plastic knob mounted on plunger
- Spring return
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed

**MV2-L Miniature Valve****Features Include:**

- Toggle operator
- Toggle can only be operated in a straight line
- Can be mounted through a panel
- 3-way configuration
- $\frac{1}{8}$ " port size
- Can be used normally open or normally closed



# AIR-MITE SAFETY PRODUCTS/SAFETY CONTROL SYSTEMS

We offer the latest safety controls designed to meet OSHA 1910 section 217 requirements. Please contact us regarding installation instructions. Designed with quick and easy installation in mind, these controls are designed to retrofit with existing or new equipment.



The Air-Mite Safety Foot Guard provides protection against accidental tripping of foot operated, spring, manual, or pilot return valves. It can be used with all Air-Mite foot operated valves—either 2-position or 3-position—and with all port sizes—1/8", 1/4", 3/8", & 1/2" npt.



Model SC3400 (Includes Reset Button) Ideal safety control for clamp and hold safety control systems. Integrate with double pilot valves or logic modules for safe and secure applications.



Air-Mite SC3000 Series two hand safety controls, the buttons and logic are provided in a completely self-contained, stand alone unit. Press Ready Model - SC3300 attaches directly to Air-Mite press base providing a clean and safe control system.

**WARNING: ALL AIR-MITE CONTROLS ARE DESIGNED TO OPERATE PNEUMATIC VALVES AND CYLINDERS. THEY ARE NOT TO BE USED WITH FLYWHEEL PRESSES, BRAKE PRESSES OR SIMILAR DEVICES. IT IS THE BUYERS RESPONSIBILITY TO DETERMINE THE USE AND MOUNTING LOCATION OF THIS DEVICE. THIS EQUIPMENT PERFORMS THE FUNCTION OF A TWO HAND NO TIE DOWN CONTROL ONLY. ALL OTHER PRESCRIBED SAFETY DEVICES, INCLUDING GUARDING, MUST BE USED WITH THIS EQUIPMENT. IT IS THE BUYERS RESPONSIBILITY TO DETERMINE THE PROPER APPLICATION, LOCATION AND USE OF THIS EQUIPMENT.**