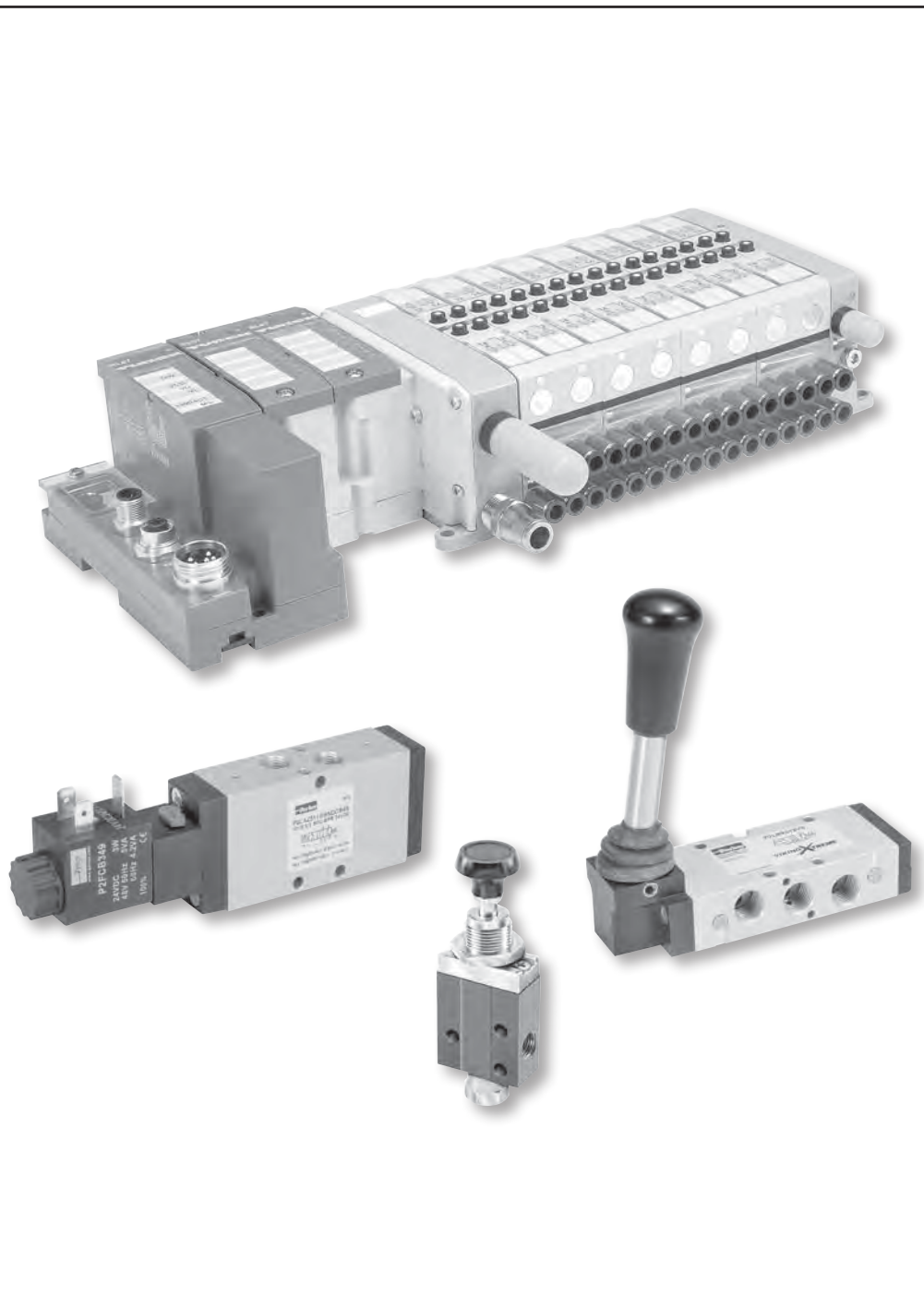
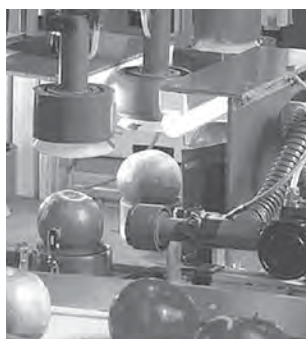




# Valve Products

## Direct Acting Valves

### XM Series - Direct Acting



D4

- Inline or stacking
- 1/8 inch ports
- Pressures 0 to 125 PSIG
- Temperatures 32°F to 125°F
- Flow - .15 Cv

### 15mm Series - Direct Acting



D8

- Subbase or manifold
- 1/8 inch ports
- Pressures VAC to 145 PSIG
- Temperatures 5°F to 140°F
- Flow - .033 to .05 Cv

## Inline Valves

### Viking Lite Series - Inline



D11

- Inline or bar manifold
- 1/8 through 3/8 inch ports
- Pressures 22 to 145 PSIG
- Temperatures 14°F to 122°F
- Flow - .6 to 2.5 Cv

### Viking Xtreme Series - Inline



D19

- Inline or bar manifold
- 1/8 through 1/2 inch ports
- Pressures VAC to 232 PSIG
- Temperatures -40°F to 140°F
- Flow - .7 to 2.7 Cv

### B Series - Inline



D43

- Inline, subbase or bar manifold
- 1/8 through 3/4 inch ports
- Pressures VAC to 145 PSIG
- Temperatures 5°F to 120°F
- Flow - .75 to 7.0 Cv

### ADEX Series - Inline



D68

- Inline, subbase or bar manifold
- M3, M5, 1/8 inch ports
- Pressures VAC to 100 PSIG
- Temperatures 32°F to 122°F
- Flow - .1 to .47 Cv

## Inline – continued

### N Series - Inline Poppet



D78

- Inline mounted
- 3/8 through 1-1/2 inch ports
- Pressures 30 to 250 PSIG
- Temperatures 0°F to 200°F
- Flow - 3.6 to 29.9 Cv

## Subbase & Manifold Valves

### Moduflex Series Valves



D89

- Inline or stacking
- 4mm tube, 1/4, 3/8 inch ports
- Pressures VAC to 120 PSIG
- Temperatures 5°F to 140°F
- Flow - .18 to .80 Cv

### Isys Micro Series



D113

- Subbase or manifold
- 4mm through 1/4 tube
- Pressures VAC to 145 PSIG
- Temperatures 5°F to 120°F
- Flow - .35 Cv

### Isys ISO Series



D124

- Subbase or manifold
- 1/8 through 3/4 inch ports
- Pressures VAC to 145 PSIG
- Temperatures 5°F to 120°F
- Flow - .55 to 6.0 Cv

### Fieldbus Series



D166

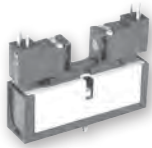
- Fieldbus interface for Isys and Moduflex valves
- Up to 256 inputs
- Up to 256 outputs
- Digital or analog

D

Pictorial Index  
Valve Products

## Subbase & Manifold – continued

### DX ISOMAX Series



D185

- Subbase or manifold
- 1/8 through 3/4 inch ports
- Pressures VAC to 145 PSIG
- Temperatures 14°F to 140°F
- Flow - .55 to 4.15 Cv

### Valvair II Series

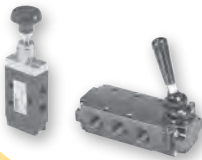


D198

- Subbase or manifold
- 3/8 through 1-1/2 inch ports
- Pressures VAC to 225 PSIG
- Temperatures 0°F to 200°F
- Flow - 1.9 to 12.0 Cv

## Manual / Mechanical Valves

### Directair 2 & 4



D208

- Manual / mechanical
- 1/8 and 1/4 inch ports
- Pressures VAC to 150 PSIG
- Temperatures 32°F to 175°F
- Flow - .20 to .84 Cv

### Viking Xtreme



D218

- Manual / mechanical
- 1/8, 1/4 and 3/8 inch ports
- Pressures:  
Type A & B - VAC to 232 PSIG  
Type C & D - VAC to 174 Psig
- Temperatures -40°F to 140°F
- Flow - .5 to 2.7 Cv

### 42 Series



D225

- Manual / mechanical
- 1/4 and 3/8 inch ports
- Pressures VAC to 150 PSIG
- Temperatures 0°F to 140°F
- Flow - 1.3 to 2.9 Cv

## Manual / Mechanical – continued

### M0 Series



D227

- Air Pilot, Manual / mechanical
- 1/4 and 1 inch ports
- Pressures VAC to 225 PSIG
- Temperatures -15°F to 200°F
- Flow - .5 to 1.25 Cv

### LV / EZ Lockout Valves



D231

- Port sizes 3/8 through 1-1/4 inch
- Max. supply pressure 300 PSIG
- Max. operating temperature 175°F
- Cv from 3.7 to 14

### Brass Poppet, Sliding Seal



D233

- 4-way, 3-position rotary disc, direct air operated valves
- Pressures 0 to 150 PSIG
- Temperatures 18°F to 200°F
- Flow - 2.5 to 6.2 Cv

## Valve Accessories

### Control Panel Products



D236

- A wide variety of push buttons and selector switches
- Visual indicators
- Foot pedal switches
- Modular pneumatic / electric push buttons

### Sensing / Limit Switches



D240

- Limit switches in a variety of sizes and configurations
- Pressure switches with many adjustable ranges
- Components designed specifically for pneumatic technology using pressure variation, air bleed or blocking for detection

## Directair 2 & 4 Series

### Features

**Directair 2, 1/8" valves**

**Poppet style – .17 Cv**

- Economical
- 3-way normally closed function

**Directair 2, 1/8" valves**

**Packed bore style – .20 Cv**

- Stainless steel spool
- Fluorocarbon o-rings
- 3-way & 4-way

**Directair 4, 1/4" valves**

**Packed bore style – .83 Cv**

- Stainless steel spool
- Fluorocarbon o-rings
- 3-way & 4-way

### Material specifications

|                            |                    |
|----------------------------|--------------------|
| Body and operator housings | Aluminum extrusion |
| Bushings and pilot piston  | Brass              |
| Dynamic seals              | Fluorocarbon       |
| O-rings                    | Buna (nitrile)     |
| Poppet ball                | Nylon              |
| Spacers - Directair 2      | Aluminum           |
| Spacers - Directair 4      | Zinc die cast      |
| Spool                      | Stainless steel    |

### Lubrication

For maximum service life use clean, lubricated air. Valves are shipped pre-lubricated and can be operated without additional lubrication with reduced service life.

### Suggested Lubricant

F442 Oil



### Operating information

|                    |                                             |
|--------------------|---------------------------------------------|
| Operating pressure | Vacuum to 150 PSI<br>(28 inHg to 1035 kPa)* |
| Temperature range  | 32°F to 175°F (0°C to 80°C)                 |

\* Poppet valves cannot be used for vacuum.  
 Minimum operating pressure = 0 PSIG.



#### CAUTION:

*If it is possible that the ambient temperature may fall below freezing, the medium must be moisture free to prevent internal damage or unpredictable behavior.*

### Mechanically operated actuating forces in lbs. 1/4" Directair 4 valves

|                            | 2-Position<br>Spring<br>Return | 2-Position<br>Manual<br>Return | 3-Position<br>Spring<br>Return | 3-Position<br>Manual<br>Return |
|----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <b>Button<br/>Actuator</b> | 13.0                           | 2.0                            | 13.0                           | N/A                            |
| <b>Roller<br/>Actuator</b> | 13.0                           | N/A                            | N/A                            | N/A                            |
| <b>Lever<br/>Actuator</b>  | 4.0                            | 2.0                            | 4.0                            | 2.5                            |

**Notes:** N/A = Not Applicable

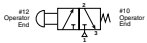
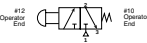
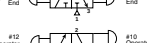
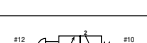
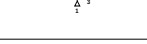
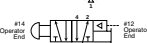
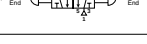
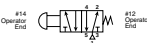
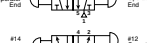
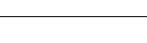
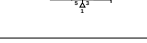
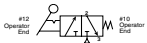
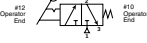
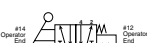
All valves are at 100 PSIG inlet pressure to the valve.

Most popular.





### 3-way & 4-way Valves

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Symbol                    | Port size | Cv  | Description                        | Valve type | Part number |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|-----|------------------------------------|------------|-------------|
| <br><br><br><br><br><br><br><br><br><br><br> | Button operated, 3-way    | 1/8"      | .17 | 3-way, spring return               | Poppet     | 404411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, spring return               | Spool      | 414411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, spring return, foot mounted | Spool      | 414421000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, pilot return                | Spool      | 414451000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, manual return               | Spool      | 414931000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, manual return, foot mounted | Spool      | 414941000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, manual or pilot return      | Spool      | 414951000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 3-way, spring return               | Spool      | 524411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 3-way, pilot return                | Spool      | 524451000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 3-way, manual return               | Spool      | 524431000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return               | Spool      | 410411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | 410421000   |
| <br><br><br><br><br><br><br><br>                                                                                                                                                                                                                                                         | Button operated, 4-way    | 1/8"      | .20 | 4-way, spring return               | Spool      | 410411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | 410421000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, pilot return                | Spool      | 410451000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, manual return               | Spool      | 410931000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, manual return, foot mounted | Spool      | 410941000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, manual or pilot return      | Spool      | 410951000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 4-way, spring return               | Spool      | 520411000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 4-way, pilot return                | Spool      | 520451000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/4"      | .83 | 4-way, manual return               | Spool      | 520431000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .17 | 3-way, spring return               | Poppet     | 404811000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, spring return               | Spool      | 414811000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 3-way, spring return, foot mounted | Spool      | 414821000   |
| <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Toggle operated, detented | 1/8"      | .20 | 4-way, spring return               | Spool      | 410811000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | 410821000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return               | Spool      | 410811000   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | 410821000   |

Directair 2,  
Directair 4

Viking Xtreme  
Lever Series

42 Lever /  
Pedal Series

M0  
Series

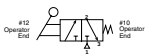
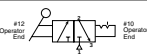
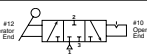
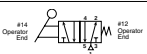
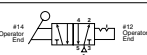
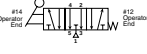
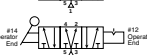
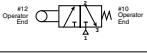
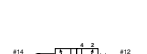
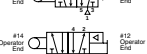
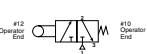
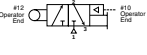
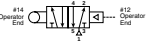
LV-EZ Series  
Lockout Valves

Brass Poppet /  
Sliding Seal

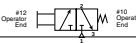
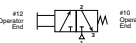
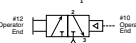
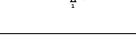
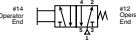
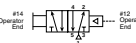
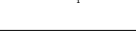
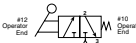
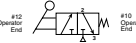
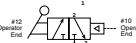
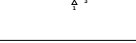
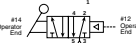
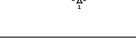
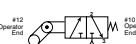
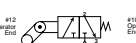
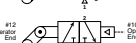
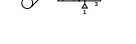
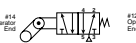
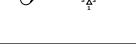
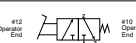
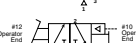
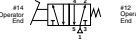
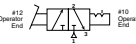
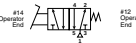
**D**

Manual / Mechanical  
Valve Products

### 3-way & 4-way Valves

|                                                                                                                   | Symbol                                                                              | Port size | Cv  | Description                                   | Valve type | Part number      |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----|-----------------------------------------------|------------|------------------|
| <b>Lever operated</b><br><br>    |    | 1/4"      | .83 | 3-way, spring return                          | Spool      | <b>524811000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 3-way, manual return                          | Spool      | <b>524831000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 3-way, 3-Position detented, all ports blocked | Spool      | <b>523831000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, spring return                          | Spool      | <b>520811000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, manual return                          | Spool      | <b>520831000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, spring centered, closed center         | Spool      | <b>521811000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, spring centered, pressure center       | Spool      | <b>522811000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, spring centered, exhaust center        | Spool      | <b>529811000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, detented, closed center                | Spool      | <b>521831000</b> |
|                                                                                                                   |    | 1/4"      | .83 | 4-way, detented, pressure center              | Spool      | <b>522831000</b> |
| <b>Roller operated</b><br><br> |   | 1/8"      | .20 | 3-way, spring return                          | Poppet     | <b>404211000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 3-way, spring return                          | Spool      | <b>414211000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 3-way, spring return, foot mounted            | Spool      | <b>414221000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 3-way, pilot return                           | Spool      | <b>414251000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 4-way, spring return                          | Spool      | <b>410211000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 4-way, spring return, foot mounted            | Spool      | <b>410221000</b> |
|                                                                                                                   |  | 1/8"      | .20 | 4-way, pilot return                           | Spool      | <b>410251000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 3-way, spring return, delrin roller           | Spool      | <b>524211000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 3-way, pilot return, delrin roller            | Spool      | <b>524251000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 3-way, spring return, steel roller            | Spool      | <b>524A11000</b> |
| <b>Roller operated</b><br><br> |  | 1/4"      | .83 | 3-way, pilot return, steel roller             | Spool      | <b>524A51000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 4-way, spring return, delrin roller           | Spool      | <b>520211000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 4-way pilot return, delrin roller             | Spool      | <b>520251000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 4-way, spring return, steel roller            | Spool      | <b>520A11000</b> |
|                                                                                                                   |  | 1/4"      | .83 | 4-way, pilot return, steel roller             | Spool      | <b>520A51000</b> |

### 3-way & 4-way Valves

|                                                                                                                                                                                                               | Symbol                                                                              | Port size | Cv  | Description                        | Valve type | Part number      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----|------------------------------------|------------|------------------|
| <b>Plunger operated</b><br><br>             |    | 1/8"      | .17 | 3-way, spring return               | Poppet     | <b>404111000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 3-way, spring return               | Spool      | <b>414111000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 3-way, spring return, foot mounted | Spool      | <b>414121000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 3-way, pilot return                | Spool      | <b>414151000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .17 | 4-way, spring return               | Spool      | <b>410111000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | <b>410121000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 4-way, pilot return                | Spool      | <b>410151000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .17 | 3-way, spring return               | Poppet     | <b>404711000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 3-way, spring return               | Spool      | <b>414711000</b> |
| <b>Hand lever operated</b><br><br>         |    | 1/8"      | .20 | 3-way, spring return, foot mounted | Spool      | <b>414721000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 3-way, pilot return                | Spool      | <b>414751000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 4-way, spring return               | Spool      | <b>410711000</b> |
|                                                                                                                                                                                                               |    | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | <b>410721000</b> |
|                                                                                                                                                                                                               |   | 1/8"      | .20 | 4-way, pilot return                | Spool      | <b>410751000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .17 | 3-way, spring return               | Poppet     | <b>404311000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .20 | 3-way, spring return               | Spool      | <b>414311000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .20 | 3-way, spring return, foot mounted | Spool      | <b>414321000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .20 | 3-way, pilot return                | Spool      | <b>414351000</b> |
| <b>One way tripper operated</b><br><br> |  | 1/8"      | .20 | 4-way, spring return               | Spool      | <b>414311000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .20 | 4-way, spring return, foot mounted | Spool      | <b>414321000</b> |
|                                                                                                                                                                                                               |  | 1/8"      | .20 | 4-way, pilot return                | Spool      | <b>414351000</b> |
| <b>Pedal operated</b><br>                                                                                                  |  | 1/4"      | .83 | 3-way, spring return               | Spool      | <b>524711000</b> |
|                                                                                                                                                                                                               |  | 1/4"      | .83 | 3-way, pilot return                | Spool      | <b>524751000</b> |
|                                                                                                                                                                                                               |  | 1/4"      | .83 | 4-way, spring return               | Spool      | <b>520711000</b> |
|                                                                                                                                                                                                               |  | 1/4"      | .83 | 4-way, pilot return                | Spool      | <b>520751000</b> |
|                                                                                                                                                                                                               |  | 1/4"      | .83 | 3-way, treadle operated, detented  | Spool      | <b>524931000</b> |
|                                                                                                                                                                                                               |  | 1/4"      | .83 | 4-way, treadle operated, detented  | Spool      | <b>520931000</b> |
| <b>Treadle operated</b><br>                                                                                                |                                                                                     |           |     |                                    |            |                  |



#### CAUTION:

*This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217.*



#### CAUTION:

*This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217.*

Directair 2,  
Directair 4

Viking Xtreme  
Lever Series

42 Lever /  
Pedal Series

M0  
Series

LV-EZ Series  
Lockout Valves

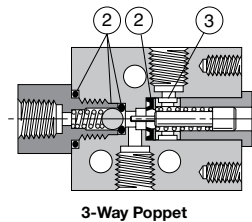
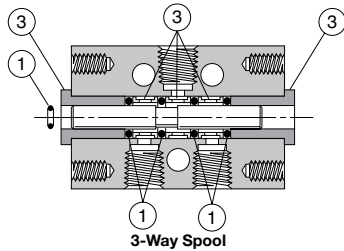
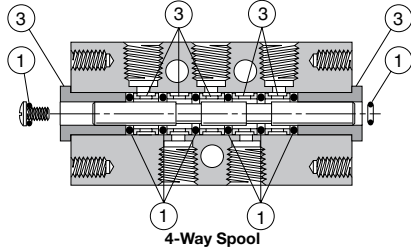
Brass Poppet /  
Sliding Seal

**D**

Manual / Mechanical  
Valve Products

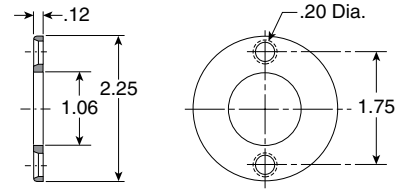
### Service kits – 1/8 port size valves (DA2)

|   |                                                         |           |
|---|---------------------------------------------------------|-----------|
| ① | Spool valve seal kit<br>(3 & 4-way, direct pipe ported) | 410008000 |
| ② | Poppet valve seal kit                                   | 404118000 |
| ③ | Body service kit                                        | 410008005 |



### Panel Mounting Kit – No. 520838004

Available for panel mounting direct pipe ported, lever operated 1/4" Directair 4 Series valves only. Kit includes a flange and two screws.

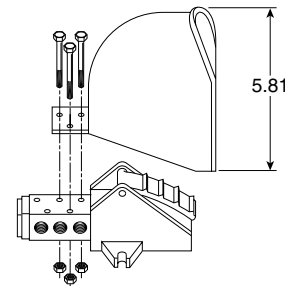


### Pedal Guard Kit – No. 520718001

Pedal guard meets safety requirements for foot operated valves by protecting pedal from accidental tripping from all angles. Guard is constructed of lightweight aluminum casting for strength and durability. Bolts quickly into place with only three screws without special valve mounting. One model fits any pedal (not treadle) operated 1/4" Directair 4 Series valve.

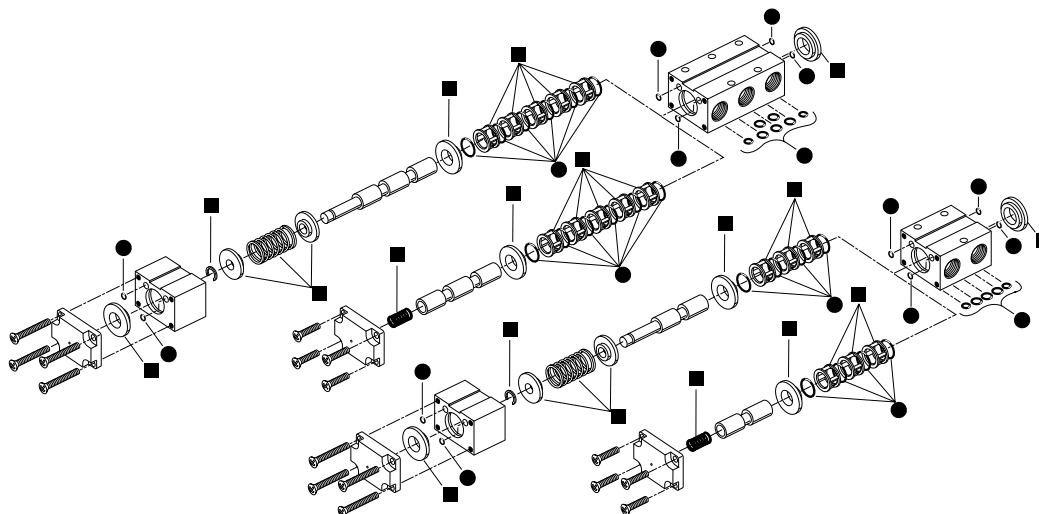
#### ! CAUTION:

*This valve shall not be used to actuate a punch press.  
 Do not use this valve on punch presses or press brakes.  
 See OSHA 1910.217.*



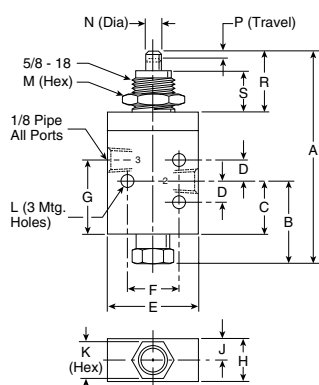
### Service kits – 1/4 port size valves (DA4)

|   |                                                                                                                    |           |
|---|--------------------------------------------------------------------------------------------------------------------|-----------|
| ● | <b>Valve seal kit</b><br>(Contains all soft seals found in 3 & 4-way bodies and all actuator styles.)              | 520008050 |
|   | All fluorocarbon                                                                                                   | 520008500 |
| ■ | <b>Body service kit</b><br>(Contains bushing, springs, retainers and shell from 2 & 3-position, 3 & 4-way bodies.) | 520018005 |

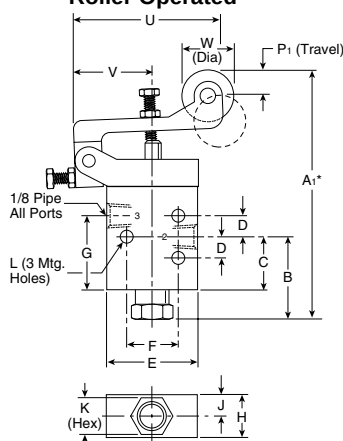


**Plunger, Roller, One-way Tripper & Toggle Operated — 3-Way, 3-Port, 2-Position – 1/8" Ports**

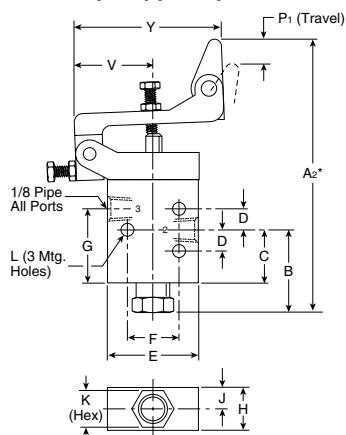
**Plunger Operated**



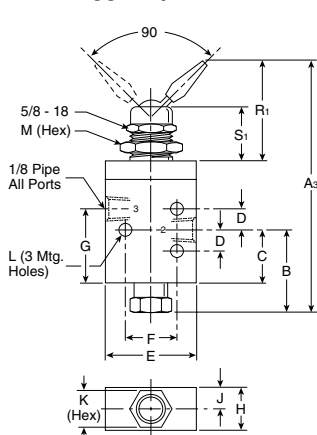
**Roller Operated**



**One-Way Tripper Operated**



**Toggle Operated**



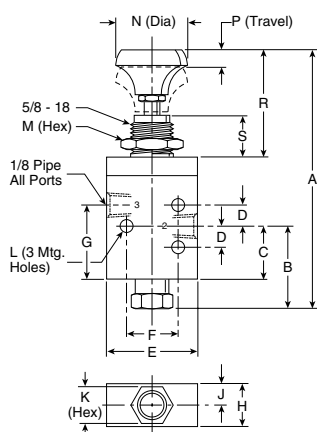
**3-Way, 3-Port, 2-Position**

| A            | A <sub>1</sub> * | A <sub>2</sub> * | A <sub>3</sub> | B              |
|--------------|------------------|------------------|----------------|----------------|
| 3.37<br>(86) | 4.21<br>(107)    | 4.46<br>(113)    | 3.99<br>(101)  | 1.03<br>(26)   |
| C            | D                | E                | F              | G              |
| .55<br>(14)  | .31<br>(8)       | 1.31<br>(33)     | .75<br>(19)    | .90<br>(23)    |
| H            | J                | K                | L              | M              |
| .62<br>(16)  | .31<br>(8)       | .56<br>(14)      | .19<br>(5)     | .88<br>(22)    |
| N            | P                | P <sub>1</sub>   | R              | R <sub>1</sub> |
| .25<br>(6)   | .17<br>(4)       | .38<br>(10)      | .91<br>(23)    | 1.53<br>(39)   |
| S            | S <sub>1</sub>   | U                | V              | W              |
| .62<br>(16)  | .78<br>(20)      | 2.28<br>(58)     | 1.19<br>(30)   | .75<br>(19)    |
| X            | Y                |                  |                |                |
| .19<br>(5)   | 2.19<br>(56)     |                  |                |                |

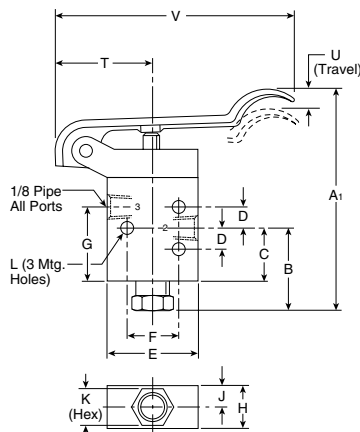
\* Dimensions may be reduced .44"  
 using adjusting screw.  
 Inches (mm)

**Button & Hand Lever Operated — 3-Way, 3-Port, 2-Position – 1/8" Ports**

**Button Operated**



**Hand Lever Operated**



**3-Way, 3-Port, 2-Position**

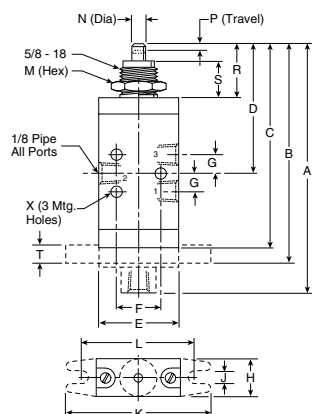
| A             | A <sub>1</sub> | B            | C            | D            |
|---------------|----------------|--------------|--------------|--------------|
| 4.13<br>(105) | 3.34<br>(85)   | 1.03<br>(26) | .55<br>(14)  | .31<br>(8)   |
| E             | F              | G            | H            | J            |
| 1.31<br>(33)  | .75<br>(19)    | .90<br>(23)  | .62<br>(16)  | .31<br>(8)   |
| K             | L              | M            | N            | P            |
| .56<br>(14)   | .19<br>(5)     | .88<br>(22)  | 1.06<br>(27) | .17<br>(4)   |
| R             | S              | T            | U            | V            |
| 1.67<br>(42)  | .63<br>(16)    | 1.19<br>(30) | .53<br>(13)  | 3.38<br>(86) |

Inches (mm)

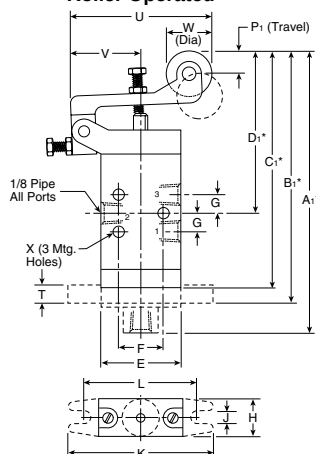


Plunger, Roller, One-way Tripper & Toggle Operated — 3-Way, 3-Port, 2-Position – 1/8" Ports

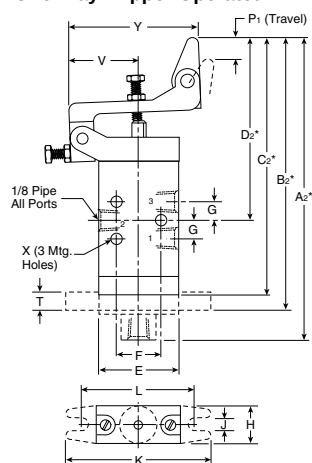
Plunger Operated



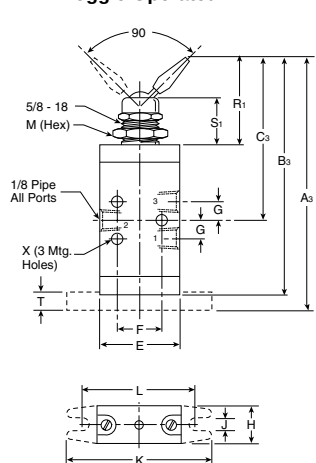
Roller Operated



One-Way Tripper Operated



Toggle Operated



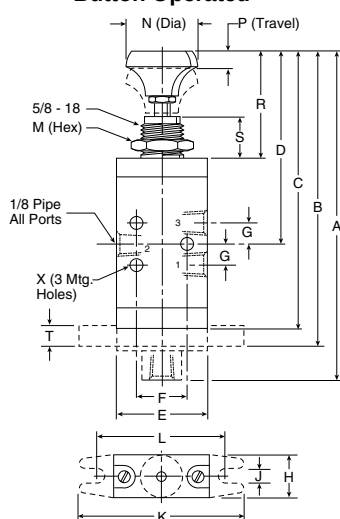
3-Way, 3-Port, 2-Position

| A             | A1*           | A2*           | A3            | B             |
|---------------|---------------|---------------|---------------|---------------|
| 4.14<br>(105) | 4.98<br>(126) | 5.23<br>(133) | 4.23<br>(107) | 3.61<br>(92)  |
| B1            | B2            | B3            | C             | C1            |
| 4.45<br>(113) | 4.70<br>(119) | 4.00<br>(102) | 3.38<br>(86)  | 4.22<br>(107) |
| C2            | C3            | D             | D1            | D2            |
| 4.47<br>(113) | 2.75<br>(70)  | 2.05<br>(52)  | 2.98<br>(76)  | 3.22<br>(82)  |
| E             | F             | G             | H             | J             |
| 1.31<br>(33)  | .75<br>(19)   | .31<br>(8)    | .62<br>(16)   | .20<br>(5)    |
| K             | L             | M             | N             | P             |
| 2.38<br>(60)  | 1.88<br>(48)  | .88<br>(22)   | .25<br>(6)    | .17<br>(4)    |
| P1            | R             | R1            | S             | S1            |
| .38<br>(10)   | .91<br>(23)   | 1.53<br>(39)  | .62<br>(16)   | .78<br>(20)   |
| T             | U             | V             | W             | X             |
| .25<br>(6)    | 2.28<br>(58)  | 1.19<br>(30)  | .75<br>(19)   | .19<br>(5)    |
| Y             |               |               |               |               |
| 2.19<br>(56)  |               |               |               |               |

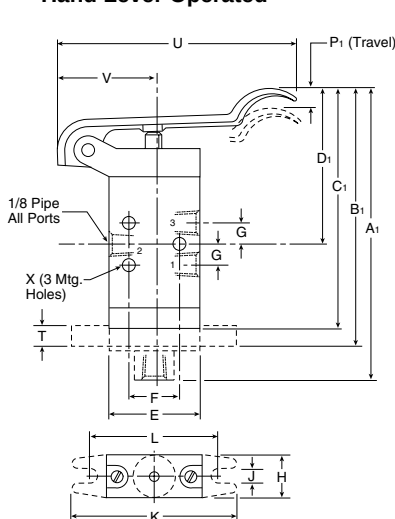
\* Dimensions may be reduced .44" using adjusting screw.  
Inches (mm)

Button, Hand Lever Operated — 3-Way, 3-Port, 2-Position – 1/8" Ports

Button Operated



Hand Lever Operated



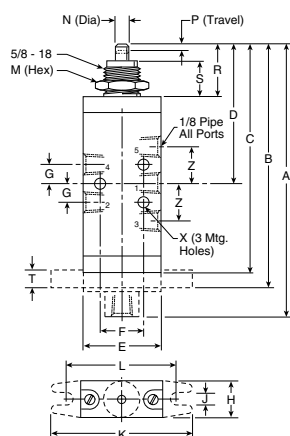
3-Way, 3-Port, 2-Position

| A             | A1            | B             | B1           | C             |
|---------------|---------------|---------------|--------------|---------------|
| 5.08<br>(129) | 4.29<br>(109) | 4.55<br>(115) | 3.77<br>(96) | 4.31<br>(109) |
| C1            | D             | D1            | E            | F             |
| 3.53<br>(90)  | 3.08<br>(78)  | 2.29<br>(58)  | 1.31<br>(33) | .75<br>(19)   |
| G             | H             | J             | K            | L             |
| .31<br>(8)    | .62<br>(16)   | .20<br>(5)    | 2.38<br>(60) | 1.88<br>(48)  |
| M             | N             | P             | P1           | R             |
| .88<br>(22)   | 1.06<br>(27)  | .17<br>(4)    | .53<br>(13)  | 1.67<br>(42)  |
| S             | T             | U             | V            | X             |
| .63<br>(16)   | .25<br>(6)    | 3.38<br>(86)  | 1.19<br>(30) | .19<br>(5)    |
| Y             |               |               |              |               |
| .59<br>(15)   |               |               |              |               |

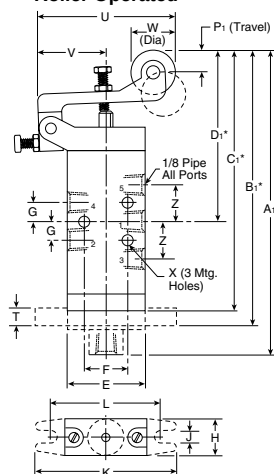
Inches (mm)

## Plunger, Roller, One-way Tripper & Toggle Operated — 4-Way, 5-Port, 2-Position – 1/8" Ports

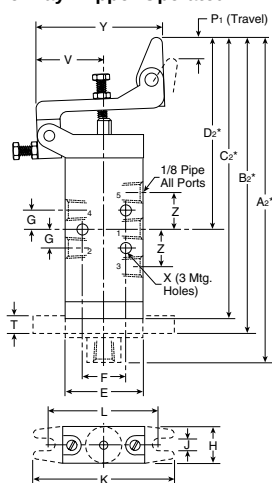
### Plunger Operated



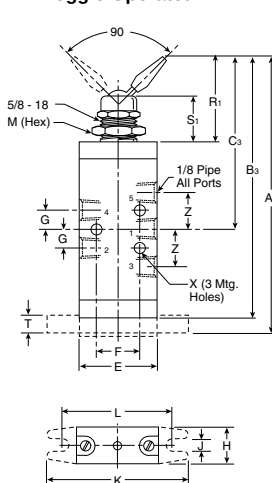
### Roller Operated



### One-Way Tripper Operated



### Toggle Operated



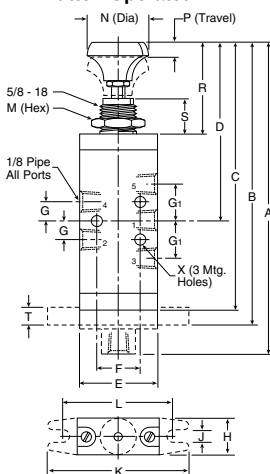
### 4-Way, 5-Port, 2-Position

|                             |                             |                             |                            |                             |
|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|
| <b>A</b><br>4.75<br>(121)   | <b>A1*</b><br>5.59<br>(142) | <b>A2*</b><br>5.84<br>(148) | <b>A3</b><br>4.84<br>(123) | <b>B</b><br>4.22<br>(107)   |
| <b>B1*</b><br>5.06<br>(128) | <b>B2*</b><br>5.31<br>(135) | <b>B3</b><br>4.61<br>(117)  | <b>C</b><br>3.99<br>(102)  | <b>C1*</b><br>4.83<br>(123) |
| <b>C2*</b><br>5.08<br>(129) | <b>C3</b><br>3.06<br>(78)   | <b>D</b><br>2.44<br>(62)    | <b>D1*</b><br>3.28<br>(83) | <b>D2*</b><br>3.53<br>(90)  |
| <b>E</b><br>1.31<br>(33)    | <b>F</b><br>.75<br>(19)     | <b>G</b><br>.31<br>(8)      | <b>H</b><br>.62<br>(16)    | <b>J</b><br>.20<br>(5)      |
| <b>K</b><br>2.38<br>(60)    | <b>L</b><br>1.88<br>(48)    | <b>M</b><br>.88<br>(22)     | <b>N</b><br>.25<br>(6)     | <b>P</b><br>.17<br>(4)      |
| <b>P1</b><br>.38<br>(10)    | <b>R</b><br>.91<br>(23)     | <b>R1</b><br>1.53<br>(39)   | <b>S</b><br>.62<br>(16)    | <b>S1</b><br>.78<br>(20)    |
| <b>T</b><br>.25<br>(6)      | <b>U</b><br>2.28<br>(58)    | <b>V</b><br>1.19<br>(30)    | <b>W</b><br>.75<br>(19)    | <b>X</b><br>.19<br>(5)      |
| <b>Y</b><br>2.19<br>(56)    | <b>Z</b><br>.62<br>(16)     |                             |                            |                             |

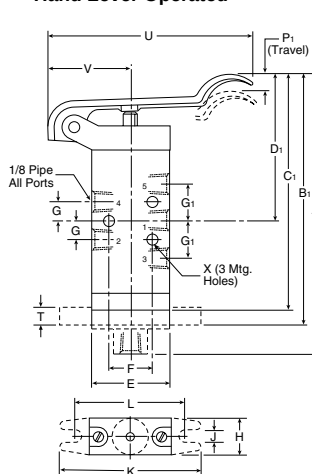
\* Dimensions may be reduced .44" using  
adjusting screw.

### Button & Hand Lever Operated — 4-Way, 5-Port, 2-Position — 1/8" Ports

### Button Operated



### Hand Lever Operated

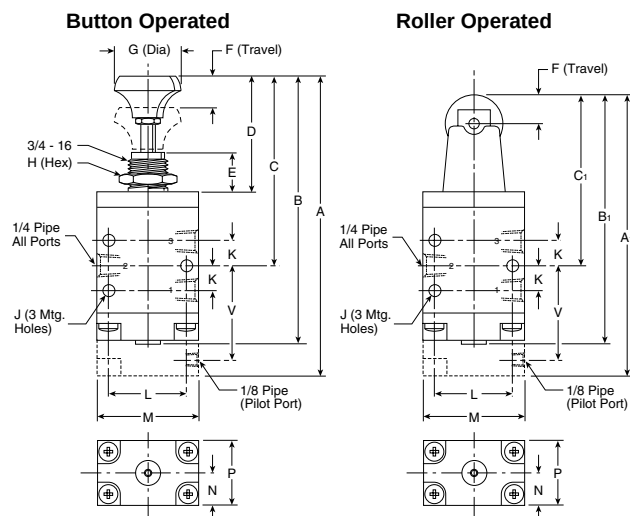


### 4-Way, 5-Port, 2-Position

|                                       |                                       |                                      |                                       |                                     |
|---------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| <b>A</b><br>5.69<br>(144)             | <b>A<sub>1</sub></b><br>4.90<br>(124) | <b>B</b><br>5.16<br>(131)            | <b>B<sub>1</sub></b><br>4.38<br>(111) | <b>C</b><br>4.92<br>(125)           |
| <b>C<sub>1</sub></b><br>4.14<br>(105) | <b>D</b><br>3.67<br>(93)              | <b>D<sub>1</sub></b><br>2.90<br>(74) | <b>E</b><br>1.31<br>(33)              | <b>F</b><br>.75<br>(19)             |
| <b>G</b><br>.31<br>(8)                | <b>G<sub>1</sub></b><br>.63<br>(16)   | <b>H</b><br>.62<br>(16)              | <b>J</b><br>.20<br>(5)                | <b>K</b><br>2.38<br>(60)            |
| <b>L</b><br>1.88<br>(48)              | <b>M</b><br>.88<br>(22)               | <b>N</b><br>1.06<br>(27)             | <b>P</b><br>.17<br>(4)                | <b>P<sub>1</sub></b><br>.53<br>(13) |
| <b>R</b><br>1.67<br>(42)              | <b>S</b><br>.63<br>(16)               | <b>T</b><br>.25<br>(6)               | <b>U</b><br>3.38<br>(86)              | <b>V</b><br>1.19<br>(30)            |
| <b>X</b><br>.19<br>(5)                | <b>Y</b><br>.59<br>(15)               |                                      |                                       |                                     |

Inches (mm)

**Button & Roller Operated — 3-Way, 3-Port, 2-Position**

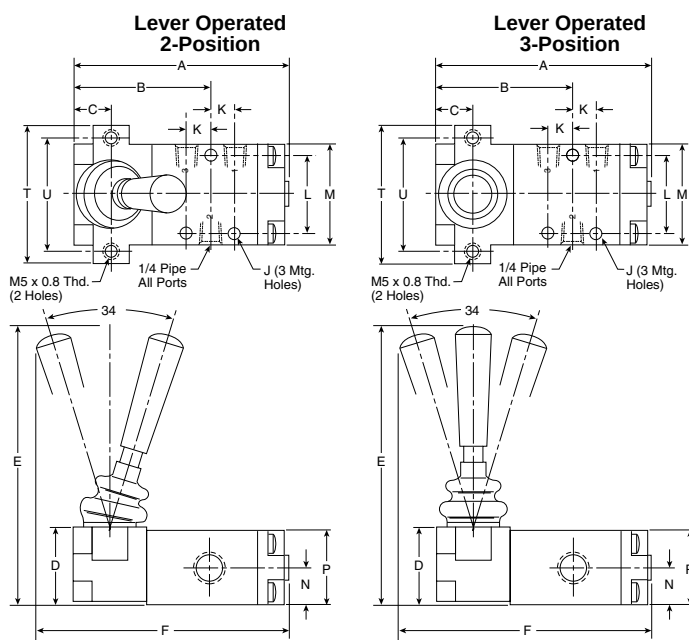


**3-Way, 3-Port, 2-Position**

| A              | A <sub>1</sub> | B             | B <sub>1</sub> | C            |
|----------------|----------------|---------------|----------------|--------------|
| 4.91<br>(125)  | 4.25<br>(108)  | 4.44<br>(113) | 3.78<br>(96)   | 3.10<br>(79) |
| C <sub>1</sub> | D              | E             | F              | G            |
| 2.44<br>(62)   | 2.00<br>(51)   | .63<br>(16)   | .32<br>(8)     | 1.05<br>(27) |
| H              | J              | K             | L              | M            |
| 1.00<br>(25)   | .19<br>(5)     | .41<br>(10)   | 1.25<br>(32)   | 1.63<br>(42) |
| N              | P              | V             |                |              |
| .53<br>(14)    | 1.06<br>(27)   | 1.52<br>(39)  |                |              |

Inches (mm)

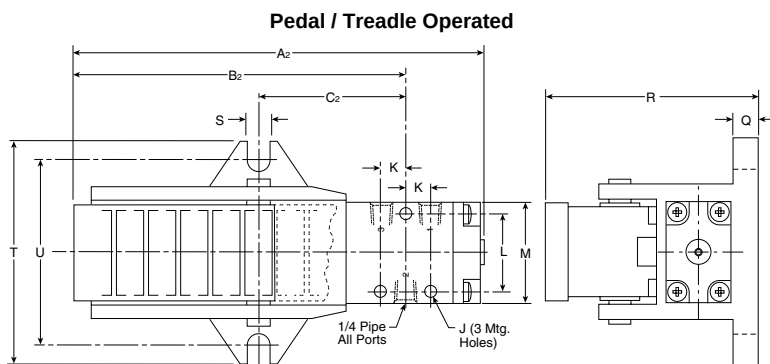
**Lever & Pedal Operated — 3-Way, 3-Port, 2 & 3-Position**



**3-Way, 3-Port, 2 & 3-Position**

| A              | A <sub>1</sub> | B             | B <sub>1</sub> | C              |
|----------------|----------------|---------------|----------------|----------------|
| 3.31<br>(84)   | 6.55<br>(166)  | 1.97<br>(50)  | 5.20<br>(132)  | .53<br>(14)    |
| C <sub>1</sub> | D              | E             | F              | J              |
| 2.19<br>(56)   | 1.12<br>(28)   | 4.06<br>(103) | 3.90<br>(99)   | .19<br>(5)     |
| K              | L              | M             | N              | P              |
| .41<br>(10)    | 1.25<br>(32)   | 1.63<br>(42)  | .53<br>(14)    | 1.06<br>(27)   |
| Q              | R              | S             | T              | T <sub>1</sub> |
| .37<br>(10)    | 2.40<br>(61)   | .34<br>(9)    | 2.13<br>(54)   | 3.50<br>(89)   |
| U              | U <sub>1</sub> |               |                |                |
| 1.75<br>(44)   | 3.00<br>(76)   |               |                |                |

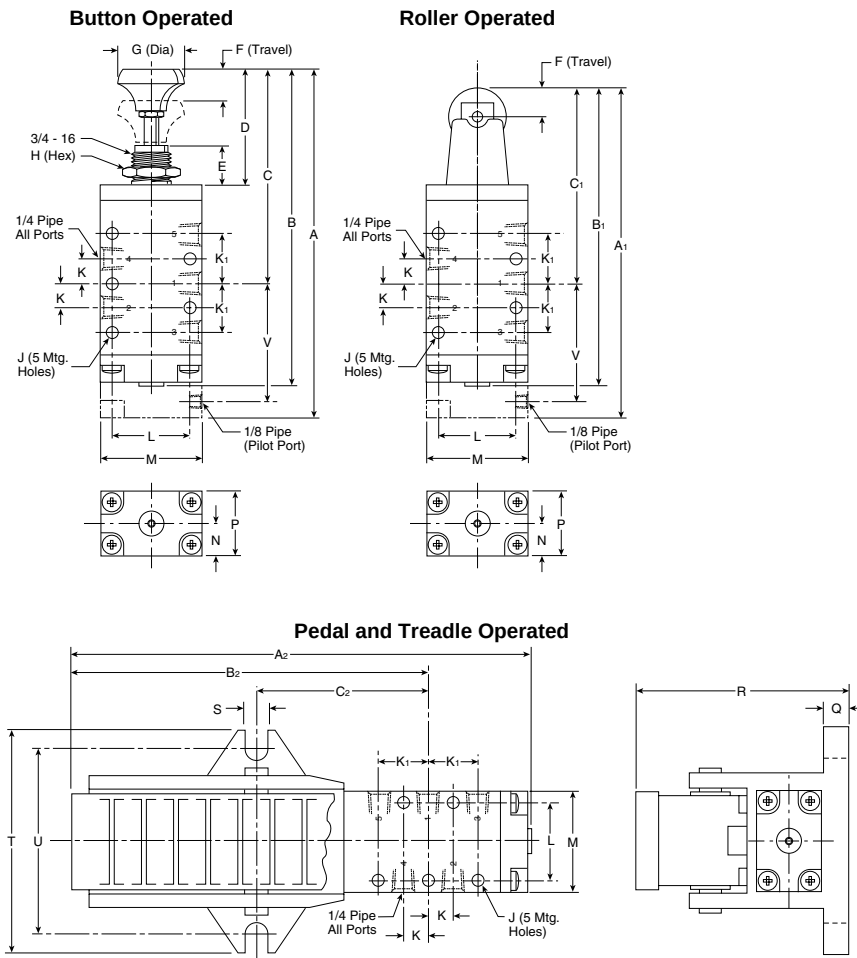
Inches (mm)



**CAUTION:**

*This valve shall not be used to actuate a punch press.  
 Do not use this valve on punch presses or press brakes.  
 See OSHA 1910.217.*

**Button, Roller, Pedal & Treadle, Lever Operated — 4-Way, 5-Port, 2-Position**



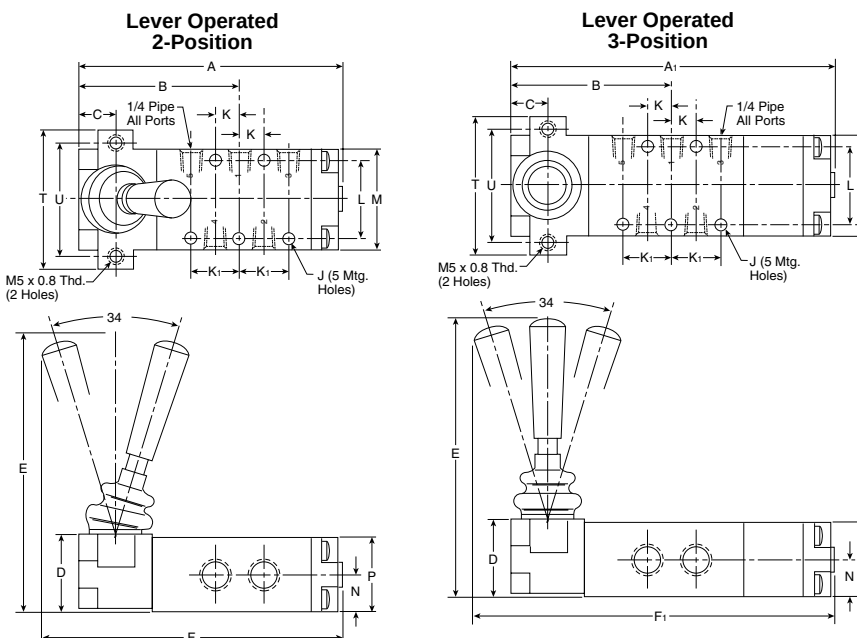
**4-Way, 5-Port, 2-Position**

| A              | A <sub>1</sub> | A <sub>2</sub> | B              | B <sub>1</sub> |
|----------------|----------------|----------------|----------------|----------------|
| 5.75<br>(146)  | 5.13<br>(130)  | 7.41<br>(189)  | 5.28<br>(134)  | 4.66<br>(118)  |
| B <sub>2</sub> | C              | C <sub>1</sub> | C <sub>2</sub> | D              |
| 5.63<br>(143)  | 3.50<br>(89)   | 2.88<br>(73)   | 2.64<br>(67)   | 2.00<br>(51)   |
| E              | F              | G              | H              | J              |
| .63<br>(16)    | .32<br>(8)     | 1.05<br>(27)   | 1.00<br>(25)   | .19<br>(5)     |
| K              | K <sub>1</sub> | L              | M              | N              |
| .44<br>(11)    | .84<br>(21)    | 1.25<br>(32)   | 1.63<br>(41)   | .53<br>(14)    |
| P              | Q              | R              | S              | T              |
| 1.06<br>(27)   | .37<br>(10)    | 2.40<br>(61)   | .34<br>(9)     | 3.50<br>(89)   |
| U              | V              |                |                |                |
| 3.00<br>(76)   | 1.96<br>(50)   |                |                |                |

Inches (mm)

**CAUTION:**  
This valve shall not be used to actuate a punch press.  
Do not use this valve on punch presses or press brakes.  
See OSHA 1910.217.

**Lever Operated — 4-Way, 5-Port, 2 & 3-Position**



**4-Way, 5-Port, 2 & 3-Position**

| A              | A <sub>1</sub> | B              | C           | D            |
|----------------|----------------|----------------|-------------|--------------|
| 4.19<br>(106)  | 5.09<br>(129)  | 2.41<br>(61)   | .53<br>(14) | 1.12<br>(28) |
| E              | F              | F <sub>1</sub> | J           | K            |
| 4.06<br>(103)  | 4.78<br>(121)  | 5.78<br>(147)  | .19<br>(5)  | .44<br>(11)  |
| K <sub>1</sub> | L              | M              | N           | P            |
| .84<br>(21)    | 1.25<br>(32)   | 1.63<br>(42)   | .53<br>(14) | 1.06<br>(27) |
| T              | U              |                |             |              |
| 2.13<br>(54)   | 1.75<br>(44)   |                |             |              |

Inches (mm)

## Viking Xtreme Lever Operated Series

The Viking Xtreme Manual valve range is robust, versatile and combines high performance with compact installation dimensions. The valves rugged lever actuator has been specifically designed for gloved hands to suit mobile applications in the most arduous of environments. Available in 3/2, 5/2 and 5/3 functions with either spring return or detented lever. The lever actuated versions are available across the entire range from 1/8 to 1/2 port sizes.

- **Heavy duty lever**
- **Inline valve**
  - 1/8", 1/4", 3/8", 1/2" NPT & BSPP
- **2-position models**
  - 4-way & 3-way
- **3-position models**
  - all ports blocked
  - pressure center
  - center exhaust
- **Over-moulded single piece aluminium spool**
  - Reduced product complexity
  - Increased flow
  - Wide operating temperature range
  - Stable seal performance even with high flow / pressure drop across spool.



### Operating information

Operating pressure: Type A & B: Vacuum to 232 PSIG (Vacuum to 16 bar Max.)

Type C & D: Vacuum to 174 PSIG (Vacuum to 12 bar Max.)

Temperature range: Xtreme: -40°F to 140°F (-40°C to 60°C)

### Material specifications

|               |                                    |
|---------------|------------------------------------|
| End covers    | Anodized aluminum                  |
| Lever         | Reinforced polyamide plastic       |
| Lever housing | Acetal plastic                     |
| Piston        | Acetal plastic / anodized aluminum |
| Seals         | Nitrile rubber                     |
| Screws        | Stainless steel                    |
| Spool         | Aluminum & nitrile rubber          |
| Springs       | Stainless steel                    |
| Valve body    | Anodized aluminum                  |

### Lever Handle – 1/8" valve size, 5/2 & 5/3 only



### Twist Handle – 1/4" valve sizes



### Lever Handle – All other valve sizes



### Features

- Variety of manual actuators
- Robust Knobs
- Stainless steel shafts
- Handle boots for ingress protection

### Over Molded Spool

### Over Molded Spool

- Aluminum spool with nitrile rubber coating ground to exact size for optimum performance
- Precision ground for maximum performance
- Wide operating temperature range
  - Low temperature to -40°

Robust anodized aluminum valve body

Diecast end covers with stainless steel screws to resist aggressive environments.

Sintered bronze pilot chamber breathers provide increased protection against ingress of dust and dirt.

The bore is polished to a very high surface finish for maximum flow capacity and long life.

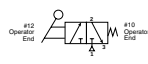
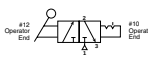
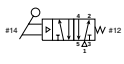
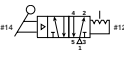
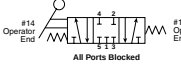
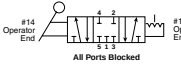
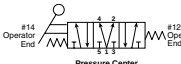
Stainless steel return spring



D218

**Parker Hannifin Corporation**  
 Pneumatic Division  
 Richland, Michigan  
[www.parker.com/pneumatics](http://www.parker.com/pneumatics)



| 3/2 - 2-position                                                                    | Symbol                                                                              | Valve type             | Port size | Cv  | Weight lb (kg) | Part number NPT   | Part number BSPP  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------|-----------|-----|----------------|-------------------|-------------------|
|    |    | Lever<br>spring return | 1/8       | 0.6 | 0.73 (0.33)    | <b>P2LAX391VS</b> | <b>P2LAX311VS</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.5 | 0.73 (0.33)    | <b>P2LBX392VS</b> | <b>P2LBX312VS</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 0.88 (0.40)    | <b>P2LCX393VS</b> | <b>P2LCX313VS</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.32 (0.60)    | <b>P2LDX394VS</b> | <b>P2LDX314VS</b> |
|    |    | Lever<br>detent        | 1/8       | 0.7 | 0.73 (0.33)    | <b>P2LAX391VV</b> | <b>P2LAX311VV</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX392VV</b> | <b>P2LBX312VV</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 0.88 (0.40)    | <b>P2LCX393VV</b> | <b>P2LCX313VV</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.32 (0.60)    | <b>P2LDX394VV</b> | <b>P2LDX314VV</b> |
| 5/2 - 2-position                                                                    | Symbol                                                                              | Valve type             | Port size | Cv  | Weight lb (kg) | Part number NPT   | Part number BSPP  |
|    |    | Lever<br>spring return | 1/8       | 0.6 | 0.40 (0.18)    | <b>P2LAX591VS</b> | <b>P2LAX511VS</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.5 | 0.73 (0.33)    | <b>P2LBX592VS</b> | <b>P2LBX512VS</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 0.88 (0.40)    | <b>P2LCX593VS</b> | <b>P2LCX513VS</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.32 (0.60)    | <b>P2LDX594VS</b> | <b>P2LDX514VS</b> |
|    |    | Lever<br>detent        | 1/8       | 0.7 | 0.40 (0.18)    | <b>P2LAX591VV</b> | <b>P2LAX511VV</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX592VV</b> | <b>P2LBX512VV</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 0.88 (0.40)    | <b>P2LCX593VV</b> | <b>P2LCX513VV</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.32 (0.60)    | <b>P2LDX594VV</b> | <b>P2LDX514VV</b> |
| 5/3 - 3-position,<br>all ports blocked                                              | Symbol                                                                              | Valve type             | Port size | Cv  | Weight lb (kg) | Part number NPT   | Part number BSPP  |
|  |  | Lever<br>spring center | 1/8       | 0.6 | 0.40 (0.18)    | <b>P2LAX69111</b> | <b>P2LAX61111</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.5 | 0.73 (0.33)    | <b>P2LBX69211</b> | <b>P2LBX61211</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX69311</b> | <b>P2LCX61311</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX69411</b> | <b>P2LDX61411</b> |
|  |  | Lever<br>detent        | 1/8       | 0.7 | 0.40 (0.18)    | <b>P2LAX69122</b> | <b>P2LAX61122</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX69222</b> | <b>P2LBX61222</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX69322</b> | <b>P2LCX61322</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX69422</b> | <b>P2LDX61422</b> |
| 5/3 - 3-position,<br>pressure center                                                | Symbol                                                                              | Valve type             | Port size | Cv  | Weight lb (kg) | Part number NPT   | Part number BSPP  |
|  |  | Lever<br>spring center | 1/8       | 0.6 | 0.40 (0.18)    | <b>P2LAX79111</b> | <b>P2LAX71111</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.5 | 0.73 (0.33)    | <b>P2LBX79211</b> | <b>P2LBX71211</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX79311</b> | <b>P2LCX71311</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX79411</b> | <b>P2LDX71411</b> |
|  |  | Lever<br>detent        | 1/8       | 0.7 | 0.40 (0.18)    | <b>P2LAX79122</b> | <b>P2LAX71122</b> |
|                                                                                     |                                                                                     |                        | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX79222</b> | <b>P2LBX71222</b> |
|                                                                                     |                                                                                     |                        | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX79322</b> | <b>P2LCX71322</b> |
|                                                                                     |                                                                                     |                        | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX79422</b> | <b>P2LDX71422</b> |

 Most popular.



D219

**Parker Hannifin Corporation**  
 Pneumatic Division  
 Richland, Michigan  
[www.parker.com/pneumatics](http://www.parker.com/pneumatics)

Directair 2,  
Directair 4

Viking Xtreme  
Lever Series

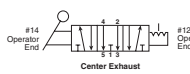
42 Lever /  
Pedal Series

M0  
Series

LV-EZ Series  
Lockout Valves

Brass Poppet /  
Sliding Seal

**D**  
Manual / Mechanical  
Valve Products

| 5/3 - 3-position,<br>center exhaust                                               | Symbol                                                                            | Valve type                | Port size | Cv  | Weight lb (kg) | Part number NPT   | Part number BSPP  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------|-----------|-----|----------------|-------------------|-------------------|
|  |  | Lever<br>spring<br>center | 1/8       | 0.6 | 0.40 (0.18)    | <b>P2LAX89111</b> | <b>P2LAX81111</b> |
|                                                                                   |                                                                                   |                           | 1/4       | 1.5 | 0.73 (0.33)    | <b>P2LBX89211</b> | <b>P2LBX81211</b> |
|                                                                                   |                                                                                   |                           | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX89311</b> | <b>P2LCX81311</b> |
|                                                                                   |                                                                                   |                           | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX89411</b> | <b>P2LDX81411</b> |
|  |  | Lever<br>detent           | 1/8       | 0.7 | 0.40 (0.18)    | <b>P2LAX89122</b> | <b>P2LAX81122</b> |
|                                                                                   |                                                                                   |                           | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX89222</b> | <b>P2LBX81222</b> |
|                                                                                   |                                                                                   |                           | 3/8       | 2.5 | 1.56 (0.71)    | <b>P2LCX89322</b> | <b>P2LCX81322</b> |
|                                                                                   |                                                                                   |                           | 1/2       | 2.7 | 1.61 (0.73)    | <b>P2LDX89422</b> | <b>P2LDX81422</b> |
| 3/2 - 2-position                                                                  | Symbol                                                                            | Valve type                | Port size | Cv  |                | Part number NPT   | Part number BSPP  |
|  |  | Twist<br>handle<br>detent | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX392JJ</b> | <b>P2LBX312JJ</b> |
| 5/2 - 2-position                                                                  | Symbol                                                                            | Valve type                | Port size | Cv  |                | Part number NPT   | Part number BSPP  |
|  |  | Twist<br>handle<br>detent | 1/4       | 1.3 | 0.73 (0.33)    | <b>P2LBX592JJ</b> | <b>P2LBX512JJ</b> |

## Manual Operated Valves

Vacuum to 232 PSIG (Vacuum to 16 bar) -40°F to 158°F (-40°C to 70°C)

P2L

A

X

5

91

VS

Valve size

|      |   |
|------|---|
| 1/8" | A |
| 1/4" | B |
| 3/8" | C |
| 1/2" | D |

Valve type / function

|                     |   |
|---------------------|---|
| 3/2 NC - 2-position | 3 |
| 5/2 2-position      | 5 |
| 5/3 3-position, APB | 6 |
| 5/3 3-position, PC  | 7 |
| 5/3 3-position, CE  | 8 |

Actuator / return

|     |                                                 |
|-----|-------------------------------------------------|
| JJ* | Twist handle detent, 2-position                 |
| VS  | Spring return lever, 2-position, 90° to ports   |
| VV  | Lever, detent, 2-position, 90° to ports         |
| 11  | Spring centered lever, 3-position, 90° to ports |
| 22  | Lever, detent, 3-position, 90° to ports         |

Main port thread

|    |                 |
|----|-----------------|
| 11 | G1/8 (P2LA)     |
| 12 | G1/4 (P2LB)     |
| 13 | G3/8 (P2LC)     |
| 14 | G1/2 (P2LD)     |
| 91 | 1/8" NPT (P2LA) |
| 92 | 1/4" NPT (P2LB) |
| 93 | 3/8" NPT (P2LC) |
| 94 | 1/2" NPT (P2LD) |

If you want to build the valve part number for a remote pilot valve, build the valve part number for the valve and add the remote pilot index for remote pilot and add “-EX” following the

Example: 5/3 3-position, PC, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 1/4" NPT, 1/2" NPT, 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\* Not available with 3-position valves. Available Size B only.

**NOTE:** For ATEX certified remote air pilot valves, build the valve part number from the model number index for remote pilot and add "-EX" following the number.

Example: P2LAX591PS-EX

 Most popular.



## Exhaust Mufflers

| Pipe thread | Part number     |
|-------------|-----------------|
| M5          | <b>P6M-PAC5</b> |
| 1/8" NPT    | <b>EM12</b>     |
| 1/4" NPT    | <b>EM25</b>     |
| 3/8" NPT    | <b>EM37</b>     |
| 1/2" NPT    | <b>EM50</b>     |

P6M - Plastic; EM - Sintered bronze

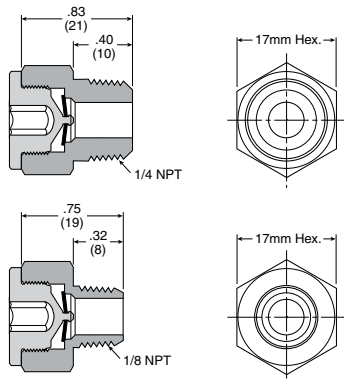


## Plastic Silencers

| Thread size | Part number   |              | A<br>(mm) | B<br>(mm) |
|-------------|---------------|--------------|-----------|-----------|
|             | NPT           | BSPT         |           |           |
| M5          | <b>AS-5</b>   |              | .43 (11)  | .32 (8)   |
| 1/8"        | <b>ASN-6</b>  | <b>AS-6</b>  | 1.57 (40) | .63 (16)  |
| 1/4"        | <b>ASN-8</b>  | <b>AS-8</b>  | 2.56 (65) | .83 (21)  |
| 3/8"        | <b>ASN-10</b> | <b>AS-10</b> | 3.35 (85) | .98 (25)  |
| 1/2"        | <b>ASN-15</b> | <b>AS-15</b> | 3.74 (95) | 1.18 (30) |



## Exhaust Protector



### Features

- 1/8 and 1/4 NPT male sizes
- Fitted with a brass pipe adapter and a fluorocarbon membrane
- Resistant to rust, clog, wash down and contamination

### Applications

These protectors are intended for mobile applications, quick venting applications and alternative exhaust port breathers that require protection against clogging.

Ideal for valves exposed to harsh environmental conditions (which can cause a "caking up" in the exhaust pipe ports where the bronze mufflers or breather vents are installed).

Particularly suitable for time-sensitive applications such as axle-lift suspensions or pushers or tag axles.

### Specifications

**Operating pressure** ..... 0 – 150 PSIG  
(0 to 10 bar, 0 to 1034 kPa)

**Operating temperature** ..... -40°F to 158°F (-40°C to 70°C)

#### Material:

Body and pipe adapter ..... Brass  
 Membrane ..... Fluorocarbon

### Flow Data (SCFM)

| Part number   | Size | 60 PSIG inlet | 90 PSIG inlet | 125 PSIG inlet |
|---------------|------|---------------|---------------|----------------|
| <b>E90016</b> | 1/8" | 40.1          | 56.5          | 75.5           |
| <b>E90017</b> | 1/4" | 44.6          | 62.7          | 83.5           |

## P2LAX 3/2 Hand Lever Operated

### P2LAX 3/2 (hand lever)

| A            | B             | C            |
|--------------|---------------|--------------|
| 3.88<br>(99) | 5.23<br>(133) | 1.57<br>(40) |

| C <sub>1</sub> | C <sub>2</sub> | D            |
|----------------|----------------|--------------|
| 1.26<br>(32)   | .16<br>(4)     | 1.06<br>(27) |

| E           | E <sub>1</sub> | E <sub>2</sub> |
|-------------|----------------|----------------|
| .79<br>(20) | .39<br>(10)    | .63<br>(16)    |

| F           | G           | H           |
|-------------|-------------|-------------|
| .55<br>(14) | .98<br>(25) | .87<br>(22) |

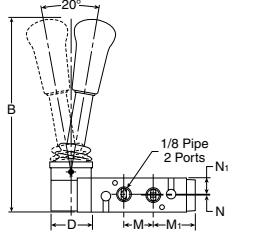
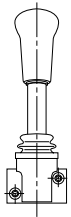
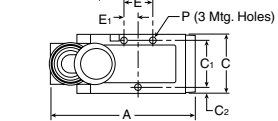
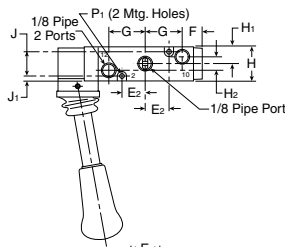
| H <sub>1</sub> | H <sub>2</sub> | J             |
|----------------|----------------|---------------|
| .42<br>(10.6)  | .02<br>(0.5)   | .65<br>(16.5) |

| J <sub>1</sub> | M           | M <sub>1</sub> |
|----------------|-------------|----------------|
| .11<br>(2.9)   | .79<br>(20) | 1.14<br>(29)   |

| N            | N <sub>1</sub> | P                |
|--------------|----------------|------------------|
| .18<br>(4.5) | .26<br>(6.6)   | Ø .17<br>Ø (4.3) |

| P <sub>1</sub>   |
|------------------|
| Ø .12<br>Ø (3.1) |

Inches (mm)



## P2LAX 5/2 & 5/3 Hand Lever Operated

### P2LAX 5/2 & 5/3 (hand lever)

| A             | A <sub>1</sub> | B            |
|---------------|----------------|--------------|
| 4.02<br>(102) | 1.89<br>(48)   | 3.23<br>(82) |

| C            | C <sub>1</sub> | C <sub>2</sub> |
|--------------|----------------|----------------|
| 1.57<br>(40) | 1.30<br>(33)   | .14<br>(3.5)   |

| D            | E <sub>2</sub> | E <sub>3</sub> |
|--------------|----------------|----------------|
| 1.18<br>(30) | 1.42<br>(36)   | .33<br>(8.5)   |

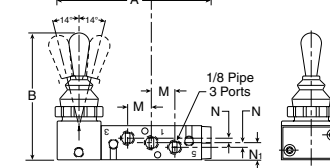
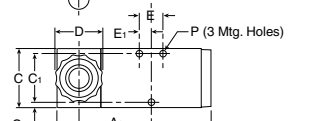
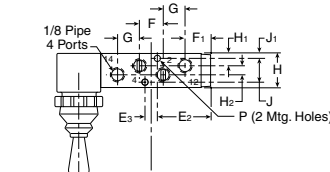
| F           | F <sub>1</sub> | G           |
|-------------|----------------|-------------|
| .63<br>(16) | .67<br>(17)    | .59<br>(15) |

| H           | H <sub>1</sub> | H <sub>2</sub> |
|-------------|----------------|----------------|
| .87<br>(22) | .31<br>(8)     | .24<br>(6)     |

| J           | J <sub>1</sub> | M           |
|-------------|----------------|-------------|
| .63<br>(16) | .12<br>(3)     | .63<br>(16) |

| N          | N <sub>1</sub> | P                |
|------------|----------------|------------------|
| .12<br>(3) | .43<br>(11)    | Ø .16<br>Ø (4.1) |

Inches (mm)



## P2LBX 3/2 Hand Lever Operated

### P2LBX 3/2 (hand lever)

| A            | B             | C            |
|--------------|---------------|--------------|
| 3.88<br>(99) | 5.23<br>(133) | 1.57<br>(40) |

| C <sub>1</sub> | C <sub>2</sub> | D            |
|----------------|----------------|--------------|
| 1.26<br>(32)   | .16<br>(4)     | 1.06<br>(27) |

| E           | E <sub>1</sub> | E <sub>2</sub> |
|-------------|----------------|----------------|
| .79<br>(20) | .39<br>(10)    | .63<br>(16)    |

| F           | G           | H           |
|-------------|-------------|-------------|
| .55<br>(14) | .98<br>(25) | .87<br>(22) |

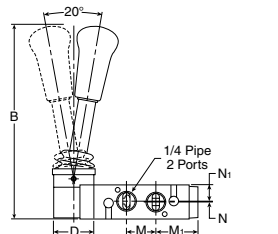
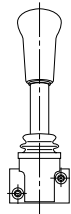
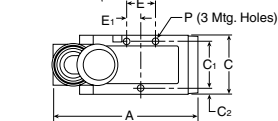
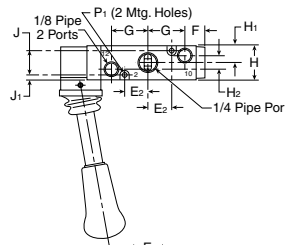
| H <sub>1</sub> | H <sub>2</sub> | J             |
|----------------|----------------|---------------|
| .42<br>(10.6)  | .02<br>(0.5)   | .65<br>(16.5) |

| J <sub>1</sub> | M           | M <sub>1</sub> |
|----------------|-------------|----------------|
| .11<br>(2.9)   | .79<br>(20) | 1.14<br>(29)   |

| N            | N <sub>1</sub> | P                |
|--------------|----------------|------------------|
| .18<br>(4.5) | .26<br>(6.6)   | Ø .17<br>Ø (4.3) |

| P <sub>1</sub>   |
|------------------|
| Ø .12<br>Ø (3.1) |

Inches (mm)



## P2LBX 5/2 & 5/3 Hand Lever Operated

### P2LBX 5/2 & 5/3 (hand lever)

| A               | A <sub>1</sub> | B               |
|-----------------|----------------|-----------------|
| 4.67<br>(118.5) | 5.51<br>(140)  | 5.19<br>(131.8) |

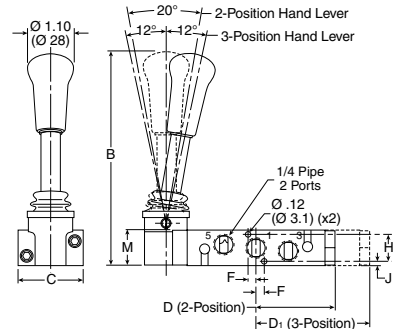
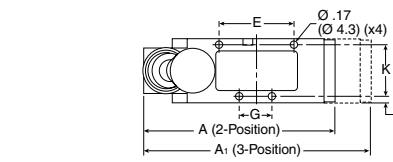
| C            | D            | D <sub>1</sub> |
|--------------|--------------|----------------|
| 1.57<br>(40) | 1.93<br>(49) | 2.35<br>(59.8) |

| E            | F          | G           |
|--------------|------------|-------------|
| 1.81<br>(46) | .20<br>(5) | .79<br>(20) |

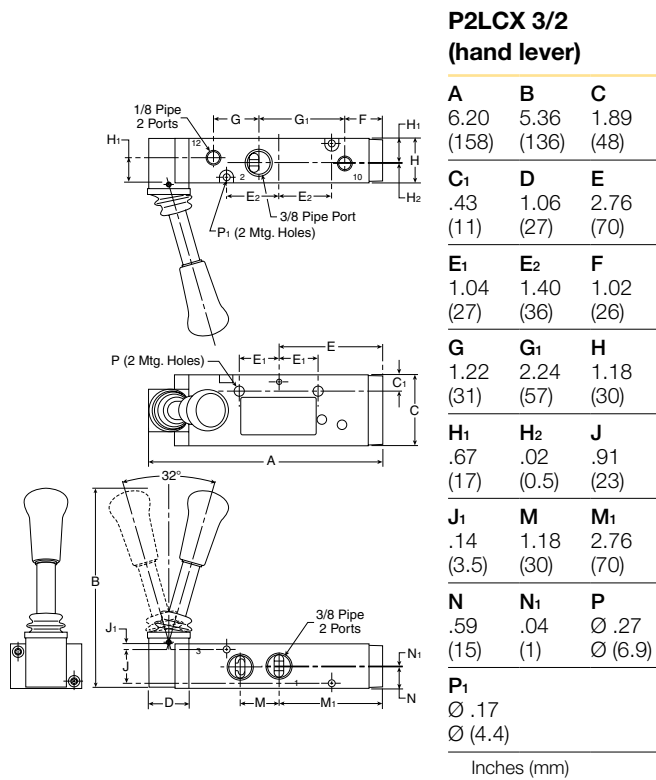
| H             | J             | K            |
|---------------|---------------|--------------|
| .65<br>(16.5) | .11<br>(2.85) | 1.26<br>(32) |

| L          | M             |
|------------|---------------|
| .16<br>(4) | .87<br>(22.2) |

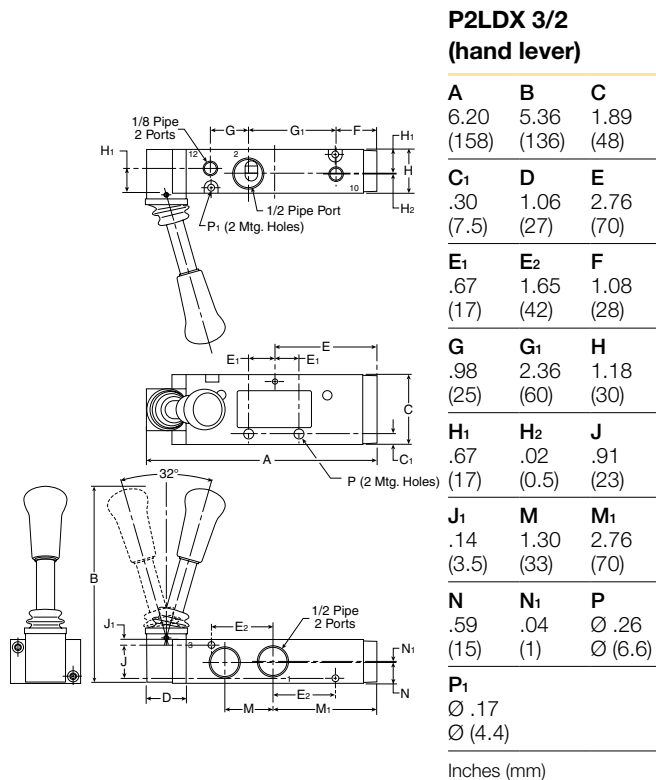
Inches (mm)



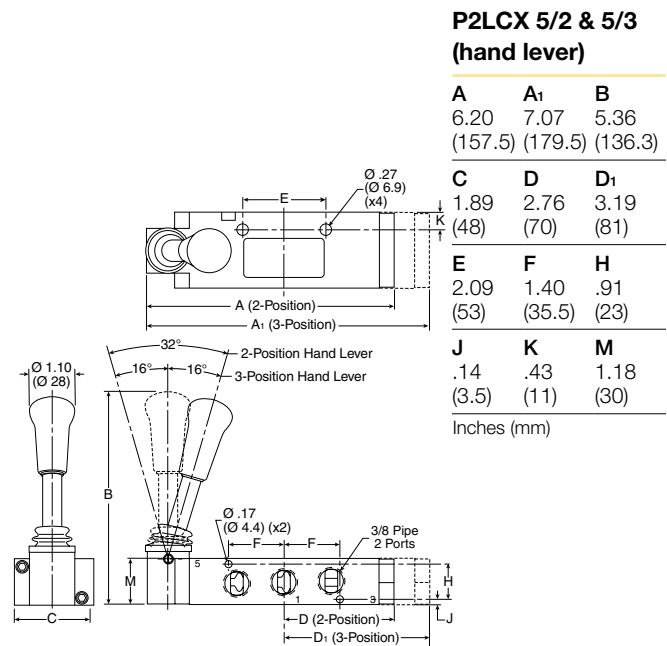
## P2LCX 3/2 Hand Lever Operated



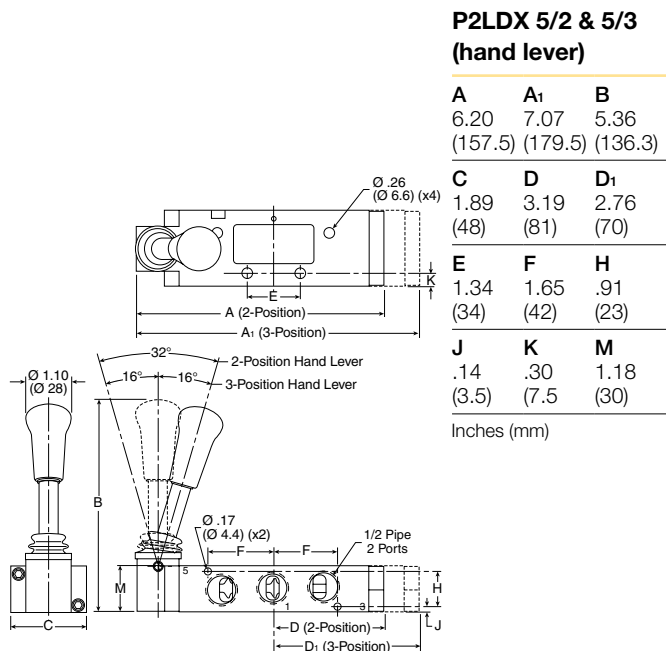
## P2LDX 3/2 Hand Lever Operated



## P2LCX 5/2 & 5/3 Hand Lever Operated



## P2LDX 5/2 & 5/3 Hand Lever Operated

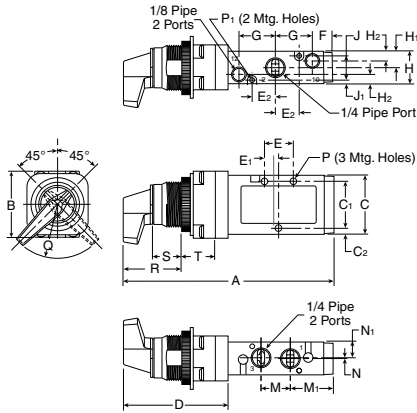


## P2LBX 3/2 Twist Lever Operated

### P2LBX 3/2 (hand lever)

| A                | B               | C                |
|------------------|-----------------|------------------|
| 5.67<br>(144)    | 1.79<br>(45.5)  | 1.57<br>(40)     |
| C <sub>1</sub>   | C <sub>2</sub>  | D                |
| 1.26<br>(32)     | .16<br>(4)      | 2.87<br>(73)     |
| E                | E <sub>1</sub>  | E <sub>2</sub>   |
| .79<br>(20)      | .39<br>(10)     | .63<br>(16)      |
| F                | G               | H                |
| .55<br>(14)      | .98<br>(25)     | .87<br>(22.2)    |
| H <sub>1</sub>   | H <sub>2</sub>  | J                |
| .44<br>(11.1)    | .26<br>(6.6)    | .65<br>(16.5)    |
| J <sub>1</sub>   | M               | M <sub>1</sub>   |
| .11<br>(2.9)     | .79<br>(20)     | 1.14<br>(29)     |
| N                | N <sub>1</sub>  | P                |
| .02<br>(0.5)     | .42<br>(10.6)   | Ø .17<br>Ø (4.3) |
| P <sub>1</sub>   | Q               | R                |
| Ø .12<br>Ø (3.1) | 1.5R<br>(38.1)R | 1.85<br>(47)     |
| S                | T               |                  |
| 1.10<br>(28)     | .67<br>(17)     |                  |

Inches (mm)

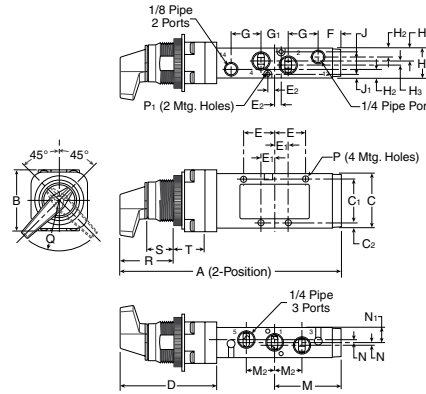


## P2LBX 5/2 Twist Lever Operated

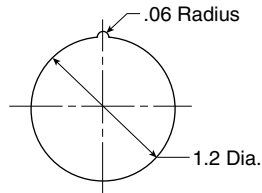
### P2LBX 5/2 (hand lever)

| A                | B                | C               |
|------------------|------------------|-----------------|
| 6.46<br>(164)    | 1.79<br>(45.5)   | 1.57<br>(40)    |
| C <sub>1</sub>   | C <sub>2</sub>   | D               |
| 1.26<br>(32)     | .15<br>(4)       | 2.87<br>(73)    |
| E                | E <sub>1</sub>   | E <sub>2</sub>  |
| .91<br>(23)      | .39<br>(10)      | .20<br>(5)      |
| F                | G                | G <sub>1</sub>  |
| .67<br>(17)      | .87<br>(22)      | .79<br>(20)     |
| H                | H <sub>1</sub>   | H <sub>2</sub>  |
| .87<br>(22.2)    | .44<br>(11.1)    | .26<br>(6.6)    |
| H <sub>3</sub>   | J                | J <sub>1</sub>  |
| .12<br>(3)       | .65<br>(16.5)    | .11<br>(2.9)    |
| M                | N                | N <sub>1</sub>  |
| 1.93<br>(49)     | .08<br>(0.2)     | .44<br>(11.1)   |
| P                | P <sub>1</sub>   | Q               |
| Ø .17<br>Ø (4.3) | Ø .12<br>Ø (3.1) | 1.5R<br>(38.1)R |
| R                | S                | T               |
| 1.85<br>(47)     | 1.10<br>(28)     | .67<br>(17)     |

Inches (mm)



## Panel Cutout Detail (All Port Sizes)





## 42 Lever / Pedal Series

### Features

#### Heavy duty lever

- Parallel mount handle
- Perpendicular mount handle

#### Heavy duty foot pedal

#### 2 port sizes

- 1/4" port – 1.3 to 2.2 Cv
- 3/8" port – 1.3 to 2.9 Cv

#### 2-position and 3-position valves



### Operating information

Operating pressure: Vacuum to 150 PSI (710 mmHg to 1035 kPa)  
Temperature range: 0°F to 140°F (-18°C to 60°C)

### Lever Valve - 2-Position

|  | Symbol | Port size | Cv  | Description           | Valve type                | Part number      |
|--|--------|-----------|-----|-----------------------|---------------------------|------------------|
|  |        | 1/4"      | 2.2 | Inline, parallel      | 2-position, spring return | <b>422CS011K</b> |
|  |        | 3/8"      | 2.9 | Inline, parallel      | 2-position, spring return | <b>422CS021K</b> |
|  |        | 1/4"      | 2.2 | Inline, parallel      | 2-position, detent        | <b>422CS011W</b> |
|  |        | 3/8"      | 2.9 | Inline, parallel      | 2-position, detent        | <b>422CS021W</b> |
|  |        | 1/4"      | 2.2 | Inline, perpendicular | 2-position, spring return | <b>422CR011K</b> |
|  |        | 3/8"      | 2.9 | Inline, perpendicular | 2-position, spring return | <b>422CR021K</b> |
|  |        | 1/4"      | 2.2 | Inline, perpendicular | 2-position, detent        | <b>422CR011W</b> |
|  |        | 3/8"      | 2.9 | Inline, perpendicular | 2-position, detent        | <b>422CR021W</b> |

### Lever Valve - 3-Position

|  | Symbol | Port size | Cv  | Description           | Valve type      | Part number      |
|--|--------|-----------|-----|-----------------------|-----------------|------------------|
|  |        | 1/4"      | 1.3 | Inline, parallel      | 3-position APB  | <b>422CS013W</b> |
|  |        | 3/8"      | 1.3 | Inline, parallel      | 3-position, APB | <b>422CS023W</b> |
|  |        | 1/4"      | 1.3 | Inline, parallel      | 3-position, CE  | <b>422CS014W</b> |
|  |        | 3/8"      | 1.3 | Inline, parallel      | 3-position, CE  | <b>422CS024W</b> |
|  |        | 1/4"      | 1.3 | Inline, perpendicular | 3-position, APB | <b>422CR013W</b> |
|  |        | 3/8"      | 1.3 | Inline, perpendicular | 3-position, APB | <b>422CR023W</b> |
|  |        | 1/4"      | 1.3 | Inline, perpendicular | 3-position, CE  | <b>422CR014W</b> |
|  |        | 3/8"      | 1.3 | Inline, perpendicular | 3-position, CE  | <b>422CR024W</b> |

### Foot Pedal Valve - 2-Position

|  | Symbol | Port size | Cv  | Description      | Valve type                | Part number      |
|--|--------|-----------|-----|------------------|---------------------------|------------------|
|  |        | 1/4"      | 2.2 | Foot pedal       | 2-position, spring return | <b>422CT011K</b> |
|  |        | 3/8"      | 2.9 | Foot pedal       | 2-position, spring return | <b>422CT021K</b> |
|  |        |           |     | Foot pedal guard |                           | <b>PS2043P</b>   |



#### CAUTION:

*This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217.*

### Valve body service kits, single pressure

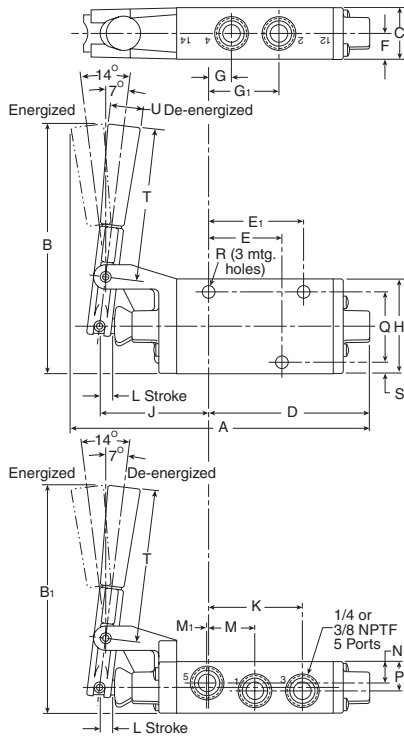
|                  |                |
|------------------|----------------|
| 2-position valve | <b>PS2038P</b> |
| 3-position valve | <b>PS2041P</b> |

Kit includes: all soft seals and spool.

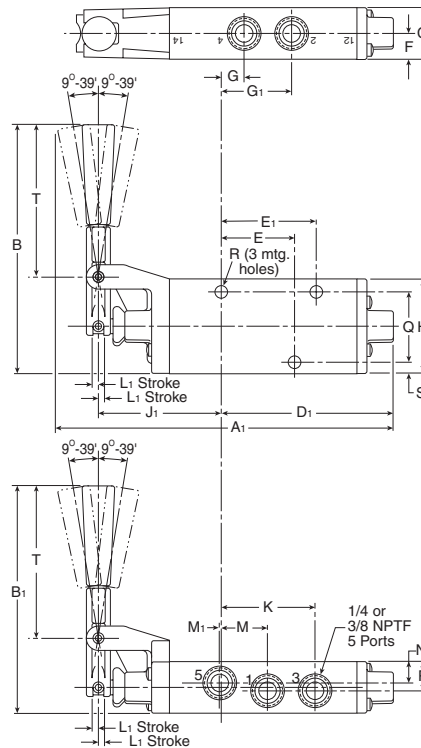
Most popular.



## 2-Position



## 3-Position



## Lever Valve

| A              | A <sub>1</sub>     | B                  | B <sub>1</sub> | C            |
|----------------|--------------------|--------------------|----------------|--------------|
| 6.70<br>(170)  | 7.58<br>(193)      | 5.55<br>(141)      | 5.05<br>(128)  | 1.15<br>(29) |
| D              | D <sub>1</sub>     | E                  | E <sub>1</sub> | F            |
| 3.59<br>(91)   | 3.83<br>(97)       | 1.58<br>(40)       | 2.06<br>(52)   | .57<br>(14)  |
| G NPT          | G <sub>1</sub> NPT |                    | H              |              |
| 1/4" .51 (13)  | 1/4"               | 1.56 (40)          | 2.13           |              |
| 3/8" .55 (14)  | 3/8"               | 1.51 (38)          | (54)           |              |
| J              | J <sub>1</sub>     | K NPT              |                | L            |
| 2.44<br>(62)   | 2.80<br>(71)       | 1/4" 2.08 (53)     | .25<br>(6)     |              |
|                |                    | 3/8" 2.13 (54)     |                |              |
| L <sub>1</sub> | M                  | M <sub>1</sub> NPT |                | N            |
| .18<br>(5)     | 1.03<br>(36)       | 1/4" .02 (.5)      | .50<br>(13)    |              |
|                |                    | 3/8" .06 (2)       |                |              |
| P              | Q                  | R                  | S              | T            |
| .65<br>(17)    | 1.58<br>(40)       | .33<br>(8)         | .27<br>(7)     | 3.42<br>(87) |
| U Dia          |                    |                    |                |              |
| .75<br>(19)    |                    |                    |                |              |

Inches (mm)

## Foot Pedal Valve

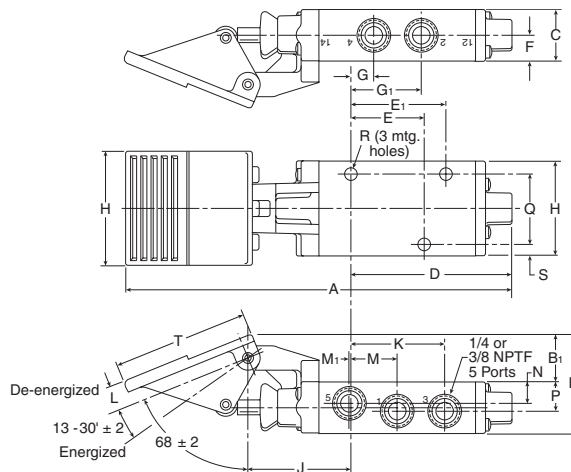
| A                  | B              | B <sub>1</sub> | C              | D                    |
|--------------------|----------------|----------------|----------------|----------------------|
| 8.64<br>(220)      | 2.18<br>(55)   | 1.03<br>(26)   | 1.15<br>(29)   | 3.59<br>(91)         |
| E                  | E <sub>1</sub> | F              | G NPT          |                      |
| 1.58<br>(40)       | 2.06<br>(52)   | .57<br>(14)    | 1/4" 3/8"      | .51 (13)<br>.55 (14) |
| G <sub>1</sub> NPT |                | H              | H <sub>1</sub> | J                    |
| 1/4"               | 1.56 (40)      | 2.13<br>(54)   | 2.50<br>(64)   | 2.32<br>(59)         |
| 3/8"               | 1.51 (38)      |                |                |                      |
| K NPT              |                | L              | M              |                      |
| 1/4"               | 2.08 (53)      | .60<br>(15)    | 1.03<br>(26)   |                      |
| 3/8"               | 2.13 (54)      |                |                |                      |
| M <sub>1</sub> NPT |                | N              | P              | Q                    |
| 1/4"               | .02 (.5)       | .50<br>(13)    | .65<br>(17)    | 1.58<br>(40)         |
| 3/8"               | .06 (2)        |                |                |                      |
| R                  | S              | T              | U              |                      |
| .33<br>(8)         | .27<br>(7)     | 3.00<br>(76)   | .48<br>(11)    |                      |

Inches (mm)

## Foot Valve Guard: PS2043P

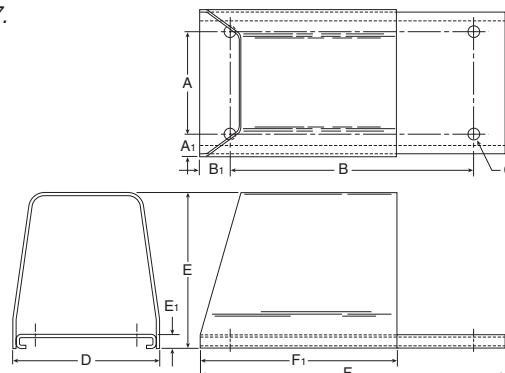
| A             | A <sub>1</sub> | B              | B <sub>1</sub> | C              |
|---------------|----------------|----------------|----------------|----------------|
| 4.50<br>(114) | .75<br>(19)    | 10.50<br>(267) | 1.25<br>(32)   | .48<br>(11)    |
| D             | E              | E <sub>1</sub> | F              | F <sub>1</sub> |
| 6.00<br>(152) | 7.13<br>(181)  | .50<br>(13)    | 13.00<br>(330) | 8.38<br>(213)  |

Inches (mm)



## CAUTION:

*This valve shall not be used to actuate a punch press.  
 Do not use this valve on punch presses or press brakes.  
 See OSHA 1910.217.*



## M0 Series

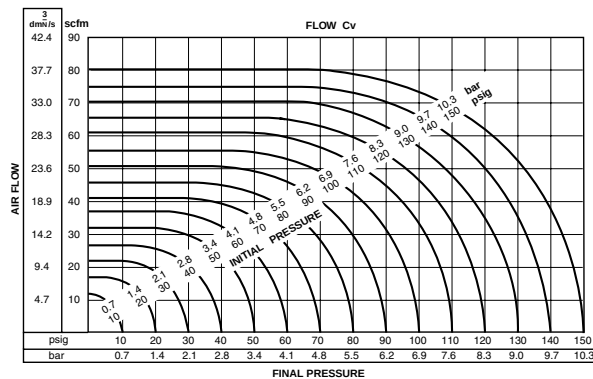
### Features

- 1/4" to 3/4" NPTF ports
- Standard operators listed. Consult factor for variations in orientation
- Standard 2 position 3-way and 4-way valves listed. Consult factory for 2-way and 3 position valves
- Corrosion resistant bronze body
- High flow brass spacers position o-ring, permit reverse piping and vacuum service
- Specially compounded o-rings suitable for non-lube air service and low pressure oil service
- Floating stem of hard chrome plated stainless steel; no metal to metal contact
- Closed at crossover design for air savings
- Piped exhaust convenient for muffling
- Interchangeable operators
- Interchangeable end sections
- Service without disturbing plumbing
- Dual mounting brackets on most models

### Flow Cv ratings

| Valve type       | Port size | Port 1 to 2 | Port 1 to 3 | Port 2 to 3 | Port 2 to 4 | Port 3 to 4 |
|------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| 3-way 2-position | 1/4       | 2.4         | —           | 2.4         | —           | —           |
|                  | 3/8       | 3.2         | —           | 3.4         | —           | —           |
|                  | 1/2       | 5.0         | —           | 5.1         | —           | —           |
|                  | 3/4       | 9.5         | —           | 9.8         | —           | —           |
| 4-way 2-position | 1/4       | 2.4         | 2.4         | —           | 2.0         | 2.2         |
|                  | 3/8       | 3.4         | 3.2         | —           | 3.0         | 3.1         |
|                  | 1/2       | 5.2         | 5.3         | —           | 4.7         | 4.7         |
|                  | 3/4       | 8.7         | 9.2         | —           | 7.9         | 8.0         |

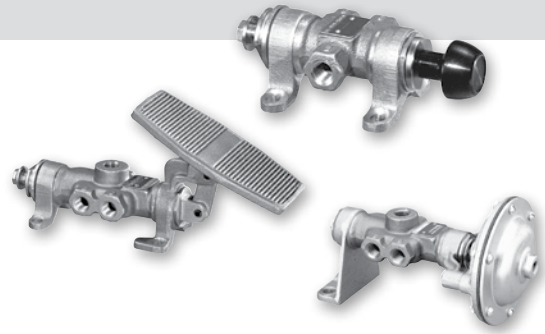
### Flow Cv



### Flow capacities

The capacity curves shown in the chart are for a theoretical valve having a Cv = 1.0 for air at standard conditions.

Flow rating determined in accordance with NFPA recommended standard NFPA/T3.21.3 - 1974.



### Operating information

**Pressure limitations**  
knob (manual and spring return) and palm operators (manual and spring return)

| Media             | Port size       | PSI (kPa)               |            |
|-------------------|-----------------|-------------------------|------------|
|                   |                 | 3-way                   | 4-way      |
| Air and Hydraulic | 1/4             | 200 (1380)              | 180 (1240) |
|                   | 3/8             | 175 (1210)              | 170 (1170) |
|                   | 1/2             | 160 (1100)              | 150 (1030) |
|                   | 3/4             | 150 (1030)              | 150 (1030) |
| Vacuum            | All             | Within 1" Hg of perfect |            |
| Other             | Consult factory |                         |            |

**Pressure limitations**  
knob (detent), lever, pedal, treadle, clevis, cam air operated diaphragm and cylinder

| Media             | Port size       | PSI (kPa)               |            |
|-------------------|-----------------|-------------------------|------------|
|                   |                 | 3-way                   | 4-way      |
| Air and Hydraulic | 1/4             | 225 (1550)              | 225 (1550) |
|                   | 3/8             | 225 (1550)              | 225 (1550) |
|                   | 1/2             | 215 (1480)              | 215 (1480) |
|                   | 3/4             | 200 (1380)              | 200 (1380) |
| Vacuum            | All             | Within 1" Hg of perfect |            |
| Other             | Consult factory |                         |            |

Temperature range: -15°F to 200°F (-26° to 93°C)

Lubrication: For best results and service life use clean, moisture free lubricated air.

### Material specifications

|                          |                                                                             |
|--------------------------|-----------------------------------------------------------------------------|
| Body                     | High pressure valve bronze                                                  |
| Knobs and palm buttons   | Anodized aluminum                                                           |
| Operators                | Iron castings; steel rod, bar and tube, and plated for corrosion resistance |
| O-rings                  | Buna-N and impregnated with Molybdenum Disulfide                            |
| Spacers and end bearings | Brass bar stock                                                             |
| Springs                  | high quality steel and plated for corrosion resistance                      |
| Stem                     | Stainless steel and hard chrome plated                                      |

### Warnings

⚠ Install guards on all hand operated valves if accidental operation can cause personal injury.

⚠ Foot operated valves must be protected against inadvertent operation that can cause serious bodily injury. Use of a guard is strongly recommended as it will reduce the likelihood of inadvertent operation.

## M0 Series Air Pilot, Manual & Mechanically Actuated Valves

| 3-way and 4-way knob operated                                                       |                                                                                     | Description                                                                         | Part number<br>1/4 NPT                                                        | Part number<br>3/8 NPT | Part number<br>1/2 NPT | Part number<br>3/4 NPT |           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------|------------------------|------------------------|-----------|
|    |    | 3-way, detent ball, foot bracket                                                    | M05422448                                                                     | M05432448              | M05442448              | M05462448              |           |
|                                                                                     |                                                                                     | 3-way, detent ball, panel mount with nut                                            | M05822451                                                                     | M05832451              | M05842451              | M05862451              |           |
|                                                                                     |    | 3-way, N.C., manual, foot bracket                                                   | M08521848                                                                     | M08531848              | M08541848              | M08561848              |           |
|                                                                                     |                                                                                     | 3-way, N.C., manual, panel nut                                                      | M08521851                                                                     | M08531851              | M08541851              | M08561851              |           |
|                                                                                     |    | 3-way, N.C., pull to operate, spring return, foot bracket                           | M09721848                                                                     | M09731848              | M09741848              | M09761848              |           |
|                                                                                     |                                                                                     | 3-way, N.C., pull to operate, spring return, panel mount with nut                   | M06421851                                                                     | M06431851              | M06441851              | M06461851              |           |
|    |    | 3-way, N.C., push to operate, spring return, foot bracket                           | M09821848                                                                     | M09831848              | M09841848              | M09861848              |           |
|                                                                                     |                                                                                     | 3-way, N.C., push to operate, spring return, panel mount with nut                   | M06521851                                                                     | M06531851              | M06541851              | M06561851              |           |
|                                                                                     |    |    | 4-way, detent ball, foot bracket                                              | M05425448              | M05435448              | M05445448              | M05465448 |
|                                                                                     |                                                                                     |                                                                                     | 4-way, detent ball, panel mount with nut                                      | M05825451              | M05835451              | M05845451              | M05865451 |
|                                                                                     |                                                                                     |    | 4-way, manual, foot bracket                                                   | M08524648              | M08534648              | M08544648              | M08564648 |
|                                                                                     |                                                                                     |                                                                                     | 4-way, manual, panel nut                                                      | M08524651              | M08534651              | M08544651              | M08564651 |
|    |                                                                                     | 4-way, pull to operate, spring return, foot bracket                                 | M09724648                                                                     | M09734648              | M09744648              | M09764648              |           |
|                                                                                     |                                                                                     | 4-way, pull to operate, spring return, panel mount with nut                         | M06424651                                                                     | M06434651              | M06444651              | M06464651              |           |
|    |    | 4-way, push to operate, spring return, foot bracket                                 | M09824648                                                                     | M09834648              | M09844648              | M09864648              |           |
|                                                                                     |                                                                                     | 4-way, push to operate, spring return, panel mount with nut                         | M06524651                                                                     | M06534651              | M06544651              | M06564651              |           |
|                                                                                     | 3-way and 4-way palm button operated                                                |                                                                                     |                                                                               |                        |                        |                        |           |
|                                                                                     |  |  | 3-way, N.C., pull palm button to operate, spring return, panel mount with nut | M06421859              | M06431859              | M06441859              | M06461859 |
|                                                                                     |                                                                                     |  | 3-way, N.C., push palm button to operate, spring return, panel mount with nut | M06521859              | M06531859              | M06541859              | M06561859 |
|                                                                                     |                                                                                     |  | 4-way, pull palm button to operate, spring return, panel mount with nut       | M06424659              | M06434659              | M06444659              | M06464659 |
|  |                                                                                     | 4-way, push palm button to operate, spring return, panel mount with nut             | M06524659                                                                     | M06534659              | M06544659              | M06564659              |           |
| 3-way and 4-way lever operated                                                      |                                                                                     |                                                                                     |                                                                               |                        |                        |                        |           |
|  |  | 3-way, detent ball, foot bracket                                                    | M05422443                                                                     | M05432443              | M05442443              | M05462443              |           |
|                                                                                     |  | 3-way, manual, foot bracket                                                         | M08521843                                                                     | M08531843              | M08541843              | M08561843              |           |
|                                                                                     |  | 3-way, N.C., pull lever to operate, spring return, foot bracket                     | M09621843                                                                     | M09631843              | M09641843              | M09661843              |           |
|                                                                                     |  | 3-way, N.C., push lever to operate, spring return, foot bracket                     | M09521843                                                                     | M09531843              | M09541843              | M09561843              |           |
|                                                                                     |  | 4-way, detent ball, foot bracket                                                    | M05425443                                                                     | M05435443              | M05445443              | M05465443              |           |
|                                                                                     |  | 4-way, manual, foot bracket                                                         | M08524643                                                                     | M08534643              | M08544643              | M08564643              |           |
|                                                                                     |  | 4-way, pull lever to operate, spring return, foot bracket                           | M09624643                                                                     | M09634643              | M09644643              | M09664643              |           |
|                                                                                     |  | 4-way, push lever to operate, spring return, foot bracket                           | M09524643                                                                     | M09534643              | M09544643              | M09564643              |           |

 Most popular.

## M0 Series Air Pilot, Manual & Mechanically Actuated Valves

| 3-way and 4-way, foot operated: treadle / pedal type                              | Description                                                                                                                                | Part number<br>1/4 NPT | Part number<br>3/8 NPT | Part number<br>1/2 NPT | Part number<br>3/4 NPT |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|
|  |  3-way, treadle operated, detent ball, foot bracket       | <b>M05422488</b>       | <b>M05432488</b>       | <b>M05442488</b>       | —                      |
|                                                                                   |  3-way, treadle operated, manual return, foot bracket     | <b>M08521888</b>       | <b>M08531888</b>       | <b>M08541888</b>       | —                      |
|                                                                                   |  3-way, N.C., spring return, pedal operated, foot bracket | <b>M06221840</b>       | <b>M06231840</b>       | <b>M06241840</b>       | —                      |
|  |  4-way, treadle operated, detent ball, foot bracket       | <b>M05425488</b>       | <b>M05435488</b>       | <b>M05445488</b>       | —                      |
|                                                                                   |  4-way, treadle operated, manual return, foot bracket     | <b>M08524688</b>       | <b>M08534688</b>       | <b>M08544688</b>       | —                      |
|                                                                                   |  4-way, spring return, pedal operated, foot bracket       | <b>M06224640</b>       | <b>M06234640</b>       | <b>M06244640</b>       | —                      |

**CAUTION:**  
This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217.

### 3-way and 4-way air operated : diaphragm or cylinder

|                                                                                     |                                                                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
|    |  3-way, N.C., single air diaphragm, air signal to actuate, spring return foot bracket | <b>M08421830</b> | <b>M08431830</b> | <b>M08441830</b> | —                |
|                                                                                     |  3-way, single air cylinder signal to actuate, spring return foot bracket             | <b>M08521826</b> | <b>M08531826</b> | <b>M08541826</b> | <b>M08561826</b> |
|    |  3-way, double air diaphragm                                                          | <b>M03321833</b> | <b>M03331833</b> | <b>M03341833</b> | —                |
|                                                                                     |  3-way, double air cylinder foot bracket                                             | <b>M01921819</b> | <b>M01931819</b> | <b>M01941819</b> | <b>M01961819</b> |
|   |  4-way, single air diaphragm, air signal to actuate, spring return foot bracket      | <b>M08424630</b> | <b>M08434630</b> | <b>M08444630</b> | —                |
|                                                                                     |  4-way, single air cylinder signal to actuate, spring return foot bracket           | <b>M08524626</b> | <b>M08534626</b> | <b>M08544626</b> | <b>M08564626</b> |
|  |  4-way, double air diaphragm                                                        | <b>M03324633</b> | <b>M03334633</b> | <b>M03344633</b> | —                |
|                                                                                     |  4-way, double air cylinder foot bracket                                            | <b>M01924619</b> | <b>M01934619</b> | <b>M01944619</b> | <b>M01964619</b> |

**Note:** diaphragm operators : pilot signal pressures from 20 to 60 psi. Cylinder operators : pilot signal pressures from 20 to 250 psi.

### 3-way and 4-way clevis operated

|                                                                                     |                                                                                                                                                |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
|  |  3-way, manual, foot bracket                                | <b>M08521805</b> | <b>M08531805</b> | <b>M08541805</b> | <b>M08561805</b> |
|                                                                                     |  3-way, N.C., pull to operate, spring return foot bracket   | <b>M09621805</b> | <b>M09631805</b> | <b>M09641805</b> | <b>M09661805</b> |
|                                                                                     |  3-way, N.C., push to operate, spring return, foot bracket  | <b>M09521805</b> | <b>M09531805</b> | <b>M09541805</b> | <b>M09561805</b> |
|  |  4-way, manual, foot bracket                                | <b>M08524605</b> | <b>M08534605</b> | <b>M08544605</b> | <b>M08564605</b> |
|                                                                                     |  4-way, pull clevis to operate, spring return, foot bracket | <b>M09624605</b> | <b>M09634605</b> | <b>M09644605</b> | <b>M09664605</b> |
|                                                                                     |  4-way, push clevis to operate, spring return, foot bracket | <b>M09524605</b> | <b>M09534605</b> | <b>M09544605</b> | <b>M09564605</b> |

### 3-way and 4-way cam operated

|                                                                                     |                                                                                                                                            |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
|  |  3-way, N.C., spring return, cam operated, foot bracket | <b>M09521803</b> | <b>M09531803</b> | <b>M09541803</b> | <b>M09561803</b> |
|                                                                                     |  4-way, spring return, cam operated, foot bracket       | <b>M09524603</b> | <b>M09534603</b> | <b>M09544603</b> | <b>M09564603</b> |

Directair 2,  
Directair 4

Viking Xtreme  
Lever Series

42 Lever /  
Pedal Series

M0  
Series

LV-EZ Series  
Lockout Valves

Brass Poppet /  
Sliding Seal

**D**

Manual / Mechanical  
Valve Products



## Pedal Guard

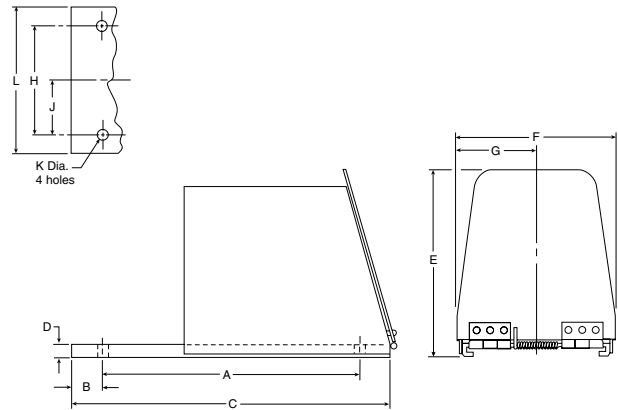
(Fits all pedal operated valves)

| Description                              | Model number    |
|------------------------------------------|-----------------|
| Guard with door                          | <b>M232001</b>  |
| Guard without door                       | <b>M232002</b>  |
| Guard with door for 1/4 and 3/8 valve    | <b>M232003*</b> |
| Guard without door for 1/4 and 3/8 valve | <b>M232004*</b> |
| Guard with door for 1/2 and 3/4          | <b>M232005*</b> |
| Guard without door for 1/2 and 3/4       | <b>M232006*</b> |

\* Includes mounting hardware.

### CAUTION:

Foot valves utilizing this guard shall not be used to actuate a punch press.  
 Do not use this valve on punch presses or press brakes.  
 See OSHA 1910.217.



### Dimensions

| A     | B    | C     | D    | E     | F     | G    |
|-------|------|-------|------|-------|-------|------|
| 10.50 | 1.25 | 13.00 | .50  | 7.38  | 6.36  | 3.18 |
| 266.7 | 31.8 | 330.2 | 12.7 | 187.4 | 161.5 | 80.8 |

| H     | J    | K    | L     |
|-------|------|------|-------|
| 4.50  | 2.25 | .44  | 6.00  |
| 114.3 | 57.2 | 11.2 | 152.4 |

## Service Kits

(Field service instructions)

| Description<br>(For all 3 & 4-way valves) | 1/4            | 3/8            | 1/2            | 3/4            |
|-------------------------------------------|----------------|----------------|----------------|----------------|
| Manual & mechanical operators             | <b>M242001</b> | <b>M242002</b> | <b>M242003</b> | <b>M242004</b> |
| Cylinder (single, double & double-acting) | <b>M242006</b> | <b>M242007</b> | <b>M242008</b> | <b>M242009</b> |
| Diaphragm (single & double)               | <b>M242011</b> | <b>M242012</b> | <b>M242013</b> | <b>M242014</b> |

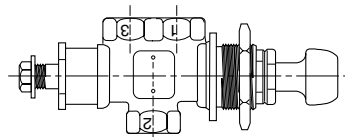
## M0 valve 9 digit part number dissection

The M0 Valve Series has with wide variety of operating and return ends which can be ordered either on the left or right hand side of the valve body. Common part numbers on the previous pages can be ordered with the left and right hand ends swapped. Swapping operator and return end sections does not change the spool function, but can reverse the

expected function of the valve. For example, a 3-way, normally closed, "NC", spring return valve will become a 3-way normally open, "NO", valve when the operator and return section is swapped. There are other non-cataloged options available and this part number dissection will enable you to discuss your valve part number with the factory for options.

### 3-way

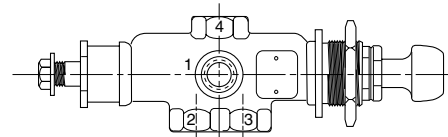
| Series name | Left end  | Port size | Body function | Right end |
|-------------|-----------|-----------|---------------|-----------|
| <b>M0</b>   | <b>XX</b> | <b>X</b>  | <b>XX</b>     | <b>XX</b> |



Left End Section in relation to port #2 ← → Right End Section in relation to port #2

### 4-way

| Series name | Left end  | Port size | Body function | Right end |
|-------------|-----------|-----------|---------------|-----------|
| <b>M0</b>   | <b>XX</b> | <b>X</b>  | <b>XX</b>     | <b>XX</b> |



Left End Section in relation to port #2 ← → Right End Section in relation to port #3



## LV / LVSS Series

Lockout valves are installed in pneumatic drop legs, or individual pneumatic control lines. In accordance with OSHA procedures, lockout valves are used during maintenance and service procedures of pneumatically (air) operated equipment.

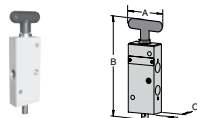
- Used for compliance with OSHA 29 CFR part 1910
- 1/4" to 2" pipe sizes. NPT or BSPP
- Yellow cast aluminum body with red handle or stainless steel (NACE MR0175 / ISO 15156)
- Inline or surface mountable
- Built in port for pressure verification to meet ANSI B11 and PMMI B155 requirements

### Material specifications

| Description    | LV / EZ                  | LVSS                     |
|----------------|--------------------------|--------------------------|
| Body:          | Cast aluminum alloy      | Stainless steel          |
| Handle:        | Plastic                  | Stainless steel          |
| Spool:         | Aluminum                 | Stainless steel          |
| Seals:         | Carboxylated nitrile     | Carboxylated nitrile     |
| Detent spring: | Stainless steel          | Stainless steel          |
| Grease:        | Magnalube G <sup>†</sup> | Magnalube G <sup>†</sup> |

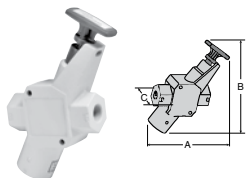
<sup>†</sup> Trademark Magnalube

### Compact



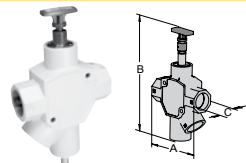
| Port in / out | Port exhaust | A (in) | B (in) | C (in) | Wt (lb) | Part number * |
|---------------|--------------|--------|--------|--------|---------|---------------|
| 1/4           | 3/8          | 2.3    | 6.5    | 1.0    | 0.9     | <b>LV2N3B</b> |
| 3/8           | 3/8          | 2.3    | 6.5    | 1.0    | 0.9     | <b>LV3N3B</b> |

### Standard



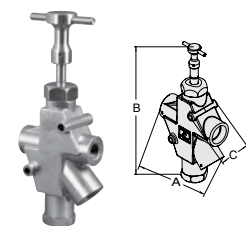
| Port in / out | Port exhaust | A (in) | B (in) | C (in) | Wt (lb) | Part number * |
|---------------|--------------|--------|--------|--------|---------|---------------|
| 3/8           | 3/4          | 6.4    | 8.8    | 2.0    | 2.0     | <b>LV3N6B</b> |
| 1/2           | 3/4          | 6.4    | 8.8    | 2.0    | 2.0     | <b>LV4N6B</b> |
| 3/4           | 3/4          | 6.4    | 8.8    | 2.0    | 2.0     | <b>LV6N6B</b> |
| 3/4           | 1-1/4        | 7.6    | 10.6   | 2.3    | 3.2     | <b>LV6NAB</b> |
| 1             | 1-1/4        | 7.6    | 10.6   | 2.3    | 3.2     | <b>LV8NAB</b> |
| 1-1/4         | 1-1/4        | 7.6    | 10.6   | 2.3    | 3.2     | <b>LVANAB</b> |

### High Flow



| Port in / out | Port exhaust | A (in) | B (in) | C (in) | Wt (lb) | Part number * |
|---------------|--------------|--------|--------|--------|---------|---------------|
| 1-1/2         | 2            | 8.2    | 14.9   | 3.0    | 8.2     | <b>LVBNCB</b> |
| 2             | 2            | 8.2    | 14.9   | 3.0    | 8.2     | <b>LVCNCB</b> |

### Stainless Steel



| Port in / out | Port exh. | A (in) | B (in) | C (in) | Wt (lb) | Part number *   |
|---------------|-----------|--------|--------|--------|---------|-----------------|
| 1/4           | 1/4       | 3.5    | 8.6    | 2.1    | 3.8     | <b>LV2N2BSS</b> |
| 3/8           | 1/2       | 4.3    | 10.5   | 1.8    | 6.0     | <b>LV3N4BSS</b> |
| 1/2           | 1/2       | 4.3    | 10.5   | 1.8    | 6.0     | <b>LV4N4BSS</b> |
| 3/4           | 1         | 6.0    | 14.1   | 2.5    | 13      | <b>LV6N8BSS</b> |
| 1             | 1         | 6.0    | 14.1   | 2.5    | 13      | <b>LV8N8BSS</b> |
| 1-1/2         | 2         | 8.2    | 18.5   | 4.0    | 35      | <b>LVBNCBSS</b> |
| 2             | 2         | 8.2    | 18.5   | 4.0    | 35      | <b>LVCNCBSS</b> |

\* For BSPP ports, change 4th digit from "N" to "B"



### Operating information

| Operating pressure:    | LV                                    | EZ             | LVSS           |
|------------------------|---------------------------------------|----------------|----------------|
| Compact                | 15 to 145 PSIG                        | –              | –              |
| Standard               | 15 to 300 PSIG                        | 15 to 300 PSIG | 15 to 300 PSIG |
| High flow              | 15 to 300 PSIG                        | –              | –              |
| Operating temperature: | 40°F to 175°F                         | 40°F to 175°F  | 30°F to 175°F  |
| Operating media:       | Clean, dry, compressed air (5 micron) |                |                |

Directair 2,  
Directair 4

Viking Xtreme  
Lever Series

42 Lever /  
Pedal Series

M0  
Series

LV-EZ Series  
Lockout Valves

Brass Poppet /  
Sliding Seal

**D**

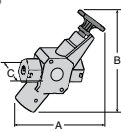
Manual / Mechanical  
Valve Products

## EZ Series

The EZ series meets all the same standards as the LV series with the added feature of a soft start when opened. There are still 2 detented positions for the handle (push close, pull to open), but when pulled open, an adjustable needle valve controls the rate of pressure build-up. This can protect equipment during start up after maintenance. The EZ is distinguishable from the LV series by the blue dot on the label.



### EZ Series



| Port in / out | Port exhaust | A (in) | B (in) | C (in) | Wt (lb) | Part Number *  |
|---------------|--------------|--------|--------|--------|---------|----------------|
| 3/8           | 3/4          | 6.4    | 8.8    | 2.0    | 2.1     | <b>EZ03NB6</b> |
| 1/2           | 3/4          | 6.4    | 8.8    | 2.0    | 2.1     | <b>EZ04NB6</b> |
| 3/4           | 3/4          | 6.4    | 8.8    | 2.0    | 2.1     | <b>EZ06NB6</b> |
| 3/4           | 1-1/4        | 7.7    | 10.8   | 2.3    | 3.2     | <b>EZ06NBA</b> |
| 1             | 1-1/4        | 7.7    | 10.8   | 2.3    | 3.2     | <b>EZ08NBA</b> |
| 1-1/4         | 1-1/4        | 7.7    | 10.8   | 2.3    | 3.2     | <b>EZ0ANBA</b> |

\* For BSPP ports, change 5th digit from "N" to "B"

### LV / EZ Accessories

#### High Flow Silencers



| Pipe size | Part number NPT | Part number BSPT |
|-----------|-----------------|------------------|
| 3/8       | <b>ES37MC</b>   | <b>ESB37MC</b>   |
| 3/4       | <b>ES75MC</b>   | <b>ESB75MC</b>   |
| 1-1/4     | <b>ES125MC</b>  | <b>ESB125MC</b>  |
| 2         | <b>ES200MC</b>  | <b>ESB200MC</b>  |

#### Stainless Steel Mufflers



| Pipe size | Part number NPT     |
|-----------|---------------------|
| 1/4       | <b>5500A2004</b>    |
| 1/2       | <b>5500A4004</b>    |
| 1         | <b>5500A6004</b>    |
| 2         | <b>5500A9004 **</b> |

\*\* Nickel Plated

#### Pop-up Pressure Indicator



**Brass** – Part # 988A30 – Can be used on all LV or EZ series to provide visual verification of line exhaust



**Stainless** – Part# 1155H30 – Can be used on SS LV series to provide visual verification of line exhaust

#### Pressure Switch



- Part # PPS1-2C3-RHM (DIN 9.4mm connector)
- Part # PPS1-2C3-RWL (18" leads)
- Signal verification of line exhaust
- Field adjustable set point

☐ Most popular.



## PL / VL Series

These are 4-Way, 3-Position, rotary disc, direct-operated air valves. Two different types of control are offered. The forged bronze disc and the cast iron surface upon which the disc works are ground and lapped to provide a leak-proof seal. Air pressure from the inlet port is confined beneath the disc, making the seal tighter as the pressure increases, yet friction between the lapped surfaces is so low that only 15 pounds of force is required to move the lever at 100 PSI line pressure. The need for packing to seal around the stem is eliminated.

Valve can be furnished for gasketing to a manifold on customer's machine or with an adaptor for tapped bottom porting.

Valves are detented.

Operating handles may be installed in any of four positions.



### Operating information

Operating pressure: 0 to 150 PSI (0 to 1035 kPa)

Temperature range: 18°F to 200°F (-8°C to 93°C)

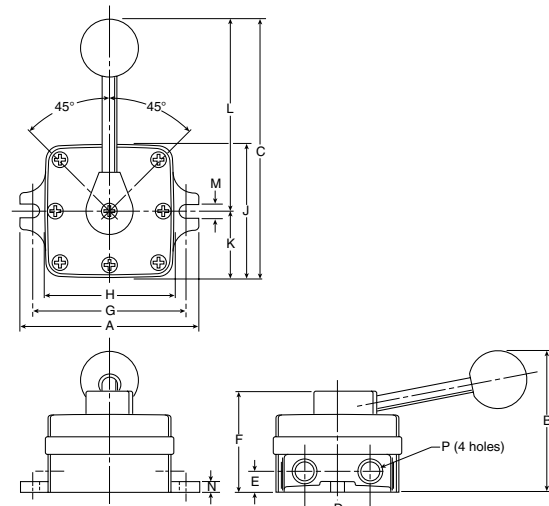
Lubrication: Filtered and lubricated air recommended for maximum valve life and minimum maintenance.

## PL-VL Series Valves

| Symbol | Port Size | Description                               | Cv  | Part number |
|--------|-----------|-------------------------------------------|-----|-------------|
|        | 1/4" NPT  | 4-way, 3-position, detent, closed center  | 2.5 | <b>PL25</b> |
|        | 3/8" NPT  | 4-way, 3-position, detent, closed center  | 3.0 | <b>PL37</b> |
|        | 1/2" NPT  | 4-way, 3-position, detent, closed center  | 6.2 | <b>PL50</b> |
|        | 1/4" NPT  | 4-way, 3-position, detent, exhaust center | 2.5 | <b>VL25</b> |
|        | 3/8" NPT  | 4-way, 3-position, detent, exhaust center | 3.0 | <b>VL37</b> |
|        | 1/2" NPT  | 4-way, 3-position, detent, exhaust center | 6.2 | <b>VL50</b> |

## Service kits

| Description                 | Valve size                               | Part number     |
|-----------------------------|------------------------------------------|-----------------|
| Lever assembly service kits | PL25, PL25HP, PL37, PL37HP, VL25, & VL37 | <b>PL2425BP</b> |
|                             | PL50, PL50HP & VL50                      | <b>PL2424BP</b> |
| Body gasket                 | PL25, PL25HP, PL37, PL37HP, VL25, & VL37 | <b>P66837</b>   |
|                             | PL50, PL50HP & VL50                      | <b>P66829</b>   |



## PL-VL Dimensions

|              | A     | B     | C     | D    | E    | F    | G     | H     | J     | K    | L     | M   | N   | P   |
|--------------|-------|-------|-------|------|------|------|-------|-------|-------|------|-------|-----|-----|-----|
| <b>PL-25</b> | 4.75  | 3.81  | 6.81  | 1.69 | .56  | 2.75 | 4.12  | 3.50  | 3.50  | 1.69 | 5.06  | .34 | .28 | 1/4 |
| <b>VL-25</b> | (121) | (97)  | (173) | (43) | (14) | (70) | (105) | (89)  | (89)  | (43) | (129) | (9) | (7) | NPT |
| <b>PL-37</b> | 4.75  | 3.81  | 6.81  | 1.69 | .56  | .56  | 4.12  | 3.50  | 3.50  | 1.69 | 5.06  | .34 | .28 | 3/8 |
| <b>VL-37</b> | (121) | (97)  | (173) | (43) | (14) | (14) | (105) | (89)  | (89)  | (43) | (129) | (9) | (7) | NPT |
| <b>PL-50</b> | 5.62  | 4.44  | 8.94  | 2.12 | .66  | 3.25 | 5.00  | 4.38  | 4.38  | 2.12 | 6.75  | .34 | .34 | 1/2 |
| <b>VL-50</b> | (143) | (113) | (227) | (54) | (17) | (83) | (127) | (111) | (111) | (54) | (171) | (9) | (9) | NPT |

inches (mm)

Most popular.



## HV Valve Series

### Features

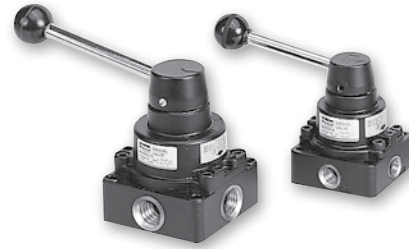
- Compact and simple design
- Rotary disc, direct operated valves
- Side porting
- Detent action smooth lever actuation
- General pneumatic applications

### Lubrication

Filtered and lubricated air recommended for maximum valve life and minimum maintenance.

### Material specifications

|       |              |
|-------|--------------|
| Cover | Zinc         |
| Body  | Aluminum     |
| Seals | Polyurethane |



### Operating information

Operating pressure: 0 to 150 PSI (0 to 10 bar)

Temperature range: 32°F to 166°F (0°C to 60°C)

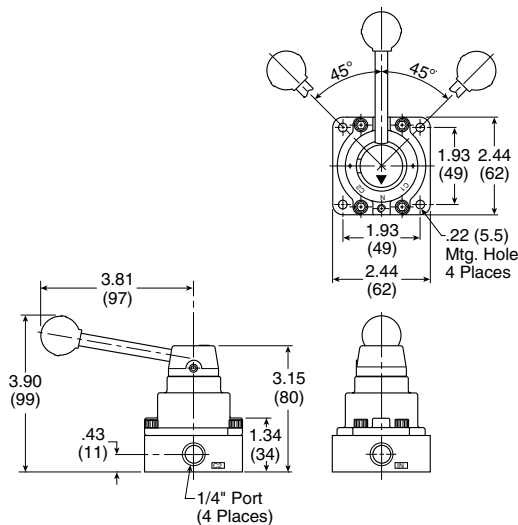
Lubrication: Filtered and lubricated air recommended for maximum valve life and minimum maintenance.

### HV Valve Series

| Symbol | Port size | Description       | Cv (ANSI) | Cv (JIS) | Part number       |
|--------|-----------|-------------------|-----------|----------|-------------------|
|        | 1/4" NPT  | 4-way, 3-position | 0.5       | 0.4      | <b>HVN4200-8</b>  |
|        | 3/8" NPT  | 4-way, 3-position | 1.4       | 2.72     | <b>HVN4400-10</b> |
|        | 1/2" NPT  | 4-way, 3-position | 1.5       | 3.26     | <b>HVN4400-15</b> |

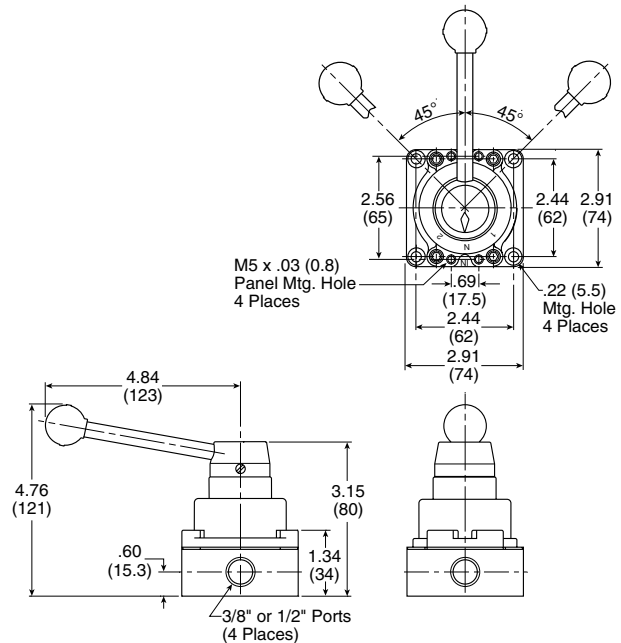
### Service kits

| Description  | Valve size | Part number       |
|--------------|------------|-------------------|
| Disk & seal  | HV4200     | <b>HVRK420001</b> |
| service kits | HV4400     | <b>HVRK440001</b> |



**HVN4200-8**

Most popular.



**HVN4400-10, 15**



## Hand Operated Sliding Seal Valves

Sliding seal valves provide 3 or 4-Way directional control in a compact body size. Comfortable hand lever is easy to operate and maintains set position. Disc type valve has minimum number of moving parts. Valves should be used with filtered and lubricated air.

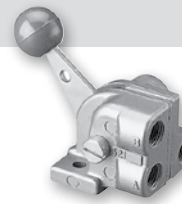


### CAUTION:

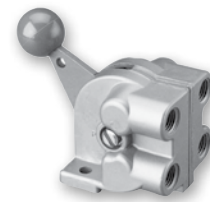
Install guards on all hand operated valves.  
Accidental operation can cause personal injury.

### Material specifications

|                     |                        |
|---------------------|------------------------|
| Internal components | Brass, stainless steel |
| Body                | Die cast zinc          |
| Seals               | Buna N                 |



1/8" 3-Way



1/4" 4-Way

### Operating information

Operating pressure: Max. 200 PSIG air only  
Min. 26" Hg vacuum

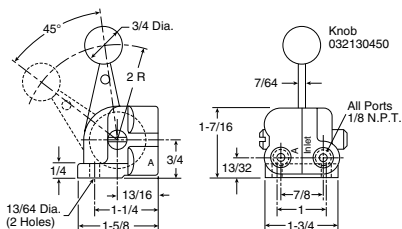
Temperature range: -40°F to 212°F (-40°C to 100°C)  
(If it is possible that the ambient temperature may fall below freezing, the medium must be moisture free to prevent internal damage or unpredictable behavior.)

### Hand Operated Sliding Seal Valve

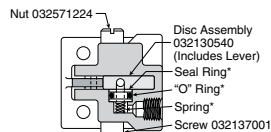
| Symbol | Port size | Function                                    | Cv (Avg) | Service kit*     | Part number      |
|--------|-----------|---------------------------------------------|----------|------------------|------------------|
|        | 1/8"      | 3-way, 2-position, detented                 | 0.54     | <b>032130899</b> | <b>032130599</b> |
|        | 1/8"      | 4-way, 2-position, detented                 | 0.54     | <b>032130899</b> | <b>032140299</b> |
|        | 1/4"      | 3-way, 2-position, detented                 | 1.25     | <b>008230299</b> | <b>008230109</b> |
|        | 1/4"      | 4-way, 3-position, detented, center blocked | 1.25     | <b>008230299</b> | <b>008240109</b> |

Note: 3-Way exhaust passage is through an untapped hole in bottom side of valve.

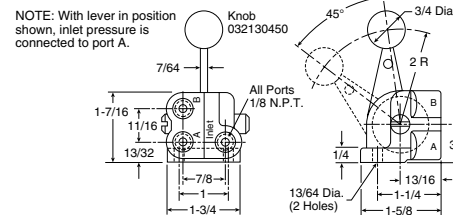
#### 1/8" 3-Way 032130599



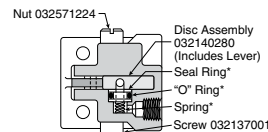
#### Service Kit 032130899\*



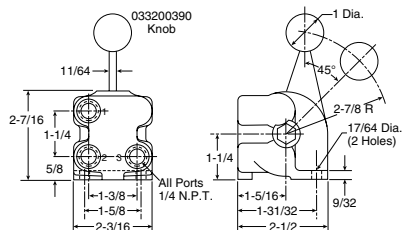
#### 1/8" 4-Way 032140299



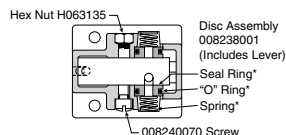
#### Service Kit 032130899\*



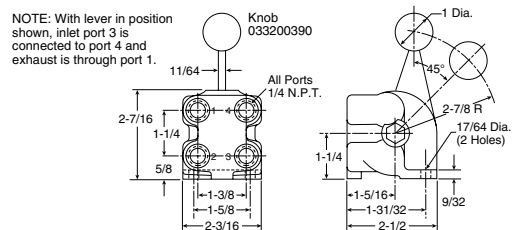
#### 1/4" 3-Way 008230109



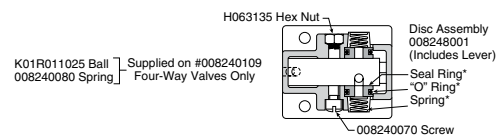
#### Service Kit 032130899\*



#### 1/4" 4-Way 008240109



#### Service Kit 032130899\*



Most popular.

\* Service kits contain asterisk items

