



ASCO SCIENTIFIC®

For use with 1/16" OD to 3/8" OD Soft Tubing

The Series 284 are 2-way, normally closed and normally open, solenoid operated pinch valves designed to control the flow of corrosive or high purity fluids in medical equipment, analytical instruments, and industrial applications. Pinch valves control fluid flow by locating soft tubing in a mechanism that "pinches" the tubing to block flow and releases to allow flow.

- Large open gap for high flow and handling of particulate media
- Zero dead volume prevents cross-contamination
- Electrical connections can be kept separate from fluid area via built-in panel mount bracket
- Built-in manual operator for easy tubing change out and testing
- Removable/Rotatable coil for easy service and installation

Construction

| Valve Parts in Contact with Fluids | |
|------------------------------------|---|
| Recommended Tubing | VMQ (Silicone), max. hardness 50 Shore A (Not supplied with valve. Sold separately, see page 74) |

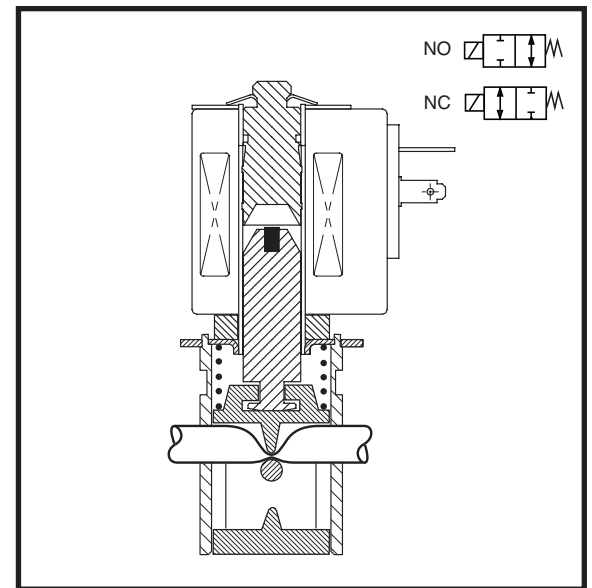
| Other Parts | |
|--------------------------------|-----------------------------------|
| Body | Anodized Aluminum |
| Pinch Mechanism | POM (reinforced acetal copolymer) |
| Internal Solenoid Parts | Stainless Steel |
| Core Tube | Nickel plated brass |

Electrical

| | |
|---|-------------------------------|
| Standard Voltage | 12, 24 VDC +10%, -5% |
| Power Consumption | 4, 9, 13 Watts |
| Duty Cycle Rating | Continuous |
| Coil Insulation | Class F |
| Ambient Temperature | 14°F to 140°F (-10°C to 60°C) |
| Electrical Connection | DIN Spade Terminals |
| DIN Connectors (not included with valve. See page 75) | |
| - 4 Watt Coil | Size 9.4 mm, Form C |
| - 9 Watt Coil | Size 18 mm, Form A |
| - 13 Watt Coil | Size 18 mm, Form A |
| Protection Rating | IP65 with DIN Plug Connector |

Valve

| | |
|----------------------|---------|
| Response Time | ~ 20 ms |
|----------------------|---------|





Specifications

| Tubing ID (Inches) | Tubing OD (Inches) | Differential Pressure (psi) | | | | | Catalog Number | Constr. Ref. No. | Power (Watts) | Weight (oz.) |
|------------------------|-----------------------|-----------------------------|---------|---------|---------|---------|----------------|---------------------|---------------|--------------|
| | | Min. | Max. AC | | Max. DC | | | | | |
| | | | Gases | Liquids | Gases | Liquids | | | | |
| NORMALLY CLOSED | | | | | | | | | | |
| 0.030 | 0.065 | | - | - | 15 | 15 | SCH284A001 | 1 | 4 | 1.8 |
| 0.040 | 0.085 | 0 | - | - | 15 | 15 | SCH284A002 | 1 | 4 | 1.8 |
| 0.062 | 0.125 | 0 | - | - | 15 | 15 | SCH284A003 | 1 | 4 | 1.8 |
| 0.078 | 0.125 | 0 | - | - | 15 | 15 | SCH284A004 | 1 | 4 | 1.8 |
| 0.104 | 0.192 | 0 | - | - | 15 | 15 | SCH284A005 | 2 | 9 | 9 |
| 0.132 | 0.183 | 0 | - | - | 15 | 15 | SCH284A005 | 2 | 9 | 9 |
| 0.187 | 0.313 | 0 | - | - | 15 | 15 | SCH284B006 | 3 | 13 | 15 |
| 0.250 | 0.375 | 0 | - | - | 15 | 15 | SCH284B007 | 3 | 13 | 15 |
| NORMALLY OPEN | | | | | | | | | | |
| 0.030 | 0.065 | 0 | - | - | 15 | 15 | SCH284A009 | 4 | 4 | 1.8 |
| 0.040 | 0.085 | 0 | - | - | 15 | 15 | SCH284A010 | 4 | 4 | 1.8 |
| 0.062 | 0.125 | 0 | - | - | 15 | 15 | SCH284A011 | 4 | 4 | 1.8 |
| 0.078 | 0.125 | 0 | - | - | 15 | 15 | SCH284A012 | 4 | 4 | 1.8 |
| 0.104 | 0.192 | 0 | - | - | 15 | 15 | SCH284A013 | 5 | 9 | 9 |
| 0.132 | 0.183 | 0 | - | - | 15 | 15 | SCH284A013 | 5 | 9 | 9 |
| 0.187 | 0.313 | 0 | - | - | 15 | 15 | SCH284B014 | 6 | 13 | 15 |
| 0.250 | 0.375 | 0 | - | - | 15 | 15 | SCH284B015 | 6 | 13 | 15 |

Dimensions: inches [mm]

Normally Closed

| Const. Ref. | | A | B | C | D | E | F | G | H | L | M | N |
|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1 | in. | 0.63 | 2.01 | 0.67 | 0.43 | 0.95 | 0.13 | 0.34 | 0.59 | 0.32 | 0.79 | 0.04 |
| | mm | 16 | 51 | 17 | 11 | 24 | 3.3 | 8.5 | 15 | 8 | 20 | 1 |
| 2 | in. | 0.98 | 3.31 | 1.26 | 0.69 | 1.54 | 0.18 | 0.63 | 1.06 | 0.47 | 1.26 | 0.06 |
| | mm | 25 | 84 | 32 | 17.5 | 39 | 4.5 | 16 | 27 | 12 | 32 | 1.5 |
| 3 | in. | 1.18 | 3.90 | 1.65 | 0.97 | 1.79 | 0.18 | 0.83 | 1.10 | 0.47 | 1.71 | 0.06 |
| | mm | 30 | 99 | 42 | 24.5 | 45.5 | 4.5 | 21 | 28 | 12 | 43.5 | 1.5 |

Normally Open

| Const. Ref. | | A | B | C | D | E | F | G | H | L | M | N |
|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|
| 4 | in. | 0.63 | 2.01 | 0.67 | 0.24 | 0.95 | 0.13 | 0.34 | 0.59 | 0.32 | 0.79 | 0.04 |
| | mm | 16 | 51 | 17 | 6 | 24 | 3.3 | 8.5 | 15 | 8 | 20 | 1 |
| 5 | in. | 0.98 | 3.31 | 1.26 | 0.41 | 1.54 | 0.18 | 0.63 | 1.06 | 0.47 | 1.26 | 0.06 |
| | mm | 25 | 84 | 32 | 10.5 | 39 | 4.5 | 16 | 27 | 12 | 32 | 1.5 |
| 6 | in. | 1.18 | 3.90 | 1.65 | 0.51 | 1.79 | 0.18 | 0.83 | 1.10 | 0.47 | 1.71 | 0.06 |
| | mm | 30 | 99 | 42 | 13 | 45.5 | 4.5 | 21 | 28 | 12 | 43.5 | 1.5 |