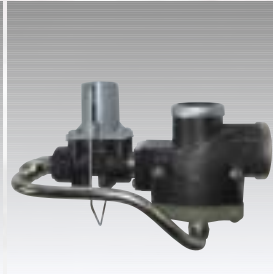




Industrial Products Catalog



DEMA Engineering Company

History

The roots of DEMA Engineering

date back to 1940, when brothers Bela and Herman Deutsch joined together to manufacture industrial controls and accessories.

Sixteen years later, after receiving several inquiries from chemical manufacturers for dispensing equipment, the team capitalized on the industry's demand for quality chemical dispensing equipment. With an initial product line consisting of two proportioners, a dispensing pump and a few spray guns, the brothers formed **DEMA** Engineering Company.

Nearly five decades later, **DEMA** has become a world leader in both the chemical dispensing and proportioning industries. The company has over 500 employees working at five manufacturing facilities worldwide, including locations in Australia, the Netherlands, and three in the St. Louis, Missouri area. **DEMA** now manufactures solenoid valves, chemical injectors, liquid level proportioning controls, inline strainers and a variety of other fluid dispensing systems.

DEMA's product components are manufactured on state of the art equipment, including computer controlled machining and turning centers and injection molding machines. They are then assembled and tested in a modern dedicated assembly facility. This facility has been expanded to serve the car wash, agriculture, beverage dispensing, reverse osmosis, misting, whirlpool, high pressure cleaning and dish and laundry machine industries worldwide. **DEMA** continues to introduce new products to meet the demands of an ever changing market.

Despite **DEMA's** success and growth, it is still a family owned and operated business. Its current leadership is the third generation of the Deutsch family active in the company, and is continuing the tradition of innovation and quality into the 21st century.



The DEMA Mission:

To expand our heritage as designers and manufacturers of high quality dispensing and fluid control products by being the most innovative company in our industry, providing quality products with unique features that meet or exceed the need of our global customers, and doing so in a timely manner at a competitive price.

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SOLENOID VALVES

| Valve Model Number | Action | Pressure Differential | | | | Body Material | Orifice Dia. | | Pipe Size N.P.T. | CV Flow Factor # | GPM @ 60 psi (cv # x sq. root psi) | Liters/M@ 4.08 bar | Page Number |
|---|---------------------------------------|-----------------------|---------|---------|---------|--------------------|----------------|--------|------------------|------------------|------------------------------------|--------------------|-------------|
| | | max psi | min psi | max bar | min bar | | Inches | Inches | | | | | |
| Standard Duty | | | | | | | | | | | | | |
| 401P | Direct | 150 | 0 | 10.2 | 0 | BRASS | 7/64 | .109 | 1/4 | 0.27 | 2.09 | 7.92 | 4 |
| 412P | Pilot-Piston | 150 | 1 | 10.2 | 0.068 | BRASS | 9/32 | .281 | 3/8 | 1.20 | 9.30 | 35.20 | 4 |
| A413P | Pilot-Piston | 150 | 3 | 10.2 | 0.204 | BRASS | 5/16 | .313 | 3/8 | 2.00 | 15.50 | 58.67 | 4 |
| A414P | Pilot-Piston | 150 | 3 | 10.2 | 0.204 | BRASS | 7/16 | .438 | 1/2 | 3.10 | 24.03 | 90.93 | 4 |
| A416P | Pilot-Piston | 150 | 3 | 10.2 | 0.204 | BRASS | 19/32 | .593 | 3/4 | 5.00 | 38.75 | 146.67 | 4 |
| A418P | Pilot-Piston | 150 | 3 | 10.2 | 0.204 | BRASS | 3/4 | .750 | 1 | 8.00 | 62.00 | 234.67 | 4 |
| Mini Valves Normally Closed | | | | | | | | | | | | | |
| 442P | Diaphragm | 125 | 3 | 8.5 | 0.204 | BRASS | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 7 |
| 443P | Diaphragm | 125 | 3 | 8.5 | 0.204 | BRASS | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 7 |
| 443PFB | Dia/flow disc | 125 | 3 | 8.5 | 0.204 | BRASS | 1/4 | .250 | 3/8 | 1.00 | disc .106 or 2.38 gpm | 29.33 | 7 |
| P442 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 7 |
| P443 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 7 |
| P462 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 7 |
| P462F | Dia/flow disc | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 1/4 | 1.00 | disc .5 - 1.0 - 1.5 gpm | 29.33 | 7 |
| P463 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 7 |
| P463F | Dia/flow disc | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 3/8 | 1.00 | disc .5 - 1.0 - 1.5 gpm | 29.33 | 7 |
| P404J | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 3/8 | .375 | 1/2 | 1.00 | 7.75 | 29.33 | 9 |
| Mini Valves Normally Open | | | | | | | | | | | | | |
| OP442 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 8 |
| OP443 | Diaphragm | 125 | 3 | 8.5 | 0.204 | CELCON | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 8 |
| O442P | Diaphragm | 125 | 3 | 8.5 | 0.204 | BRASS | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 8 |
| O443P | Diaphragm | 125 | 3 | 8.5 | 0.204 | BRASS | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 8 |
| OPP442 | Diaphragm | 125 | 3 | 8.5 | 0.204 | GLASS FILED POLY | 1/4 | .250 | 1/4 | 1.00 | 7.75 | 29.33 | 9 |
| OPP443 | Diaphragm | 125 | 3 | 8.5 | 0.204 | GLASS FILED POLY | 1/4 | .250 | 3/8 | 1.00 | 7.75 | 29.33 | 9 |
| Diaphragm Valves Normally Closed | | | | | | | | | | | | | |
| 463PS | Diaphragm | 150 | 3 | 10.2 | 0.204 | STL. STEEL | 3/8 | .375 | 3/8 | 2.00 | 15.50 | 58.67 | 7 |
| 464PS | Diaphragm | 150 | 3 | 10.2 | 0.204 | STL. STEEL | 3/8 | .375 | 1/2 | 2.00 | 15.50 | 58.67 | 7 |
| 466P | Diaphragm | 150 | 3 | 10.2 | 0.204 | GLASS FILLED NYLON | 3/4 | .750 | 3/4 | 10.00 | 77.50 | 293.34 | 9 |
| 473P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 9/16 | .563 | 3/8 | 3.50 | 27.13 | 102.67 | 5 |
| 474P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 9/16 | .563 | 1/2 | 4.00 | 31.00 | 117.34 | 5 |
| 476P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 3/4 | .750 | 3/4 | 5.00 | 38.75 | 146.67 | 5 |
| 476PS | Diaphragm | 150 | 1 | 10.2 | 0.068 | STL. STEEL | 3/4 | .750 | 3/4 | 5.00 | 38.75 | 146.67 | 5 |
| Diaphragm Valves Normally Open | | | | | | | | | | | | | |
| O463PS | Diaphragm | 150 | 3 | 10.2 | 0.204 | STL. STEEL | 3/8 | .375 | 3/8 | 2.00 | 15.50 | 58.67 | 9 |
| O464PS | Diaphragm | 150 | 3 | 10.2 | 0.204 | STL. STEEL | 3/8 | .375 | 1/2 | 2.00 | 15.50 | 58.67 | 9 |
| O473P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 9/16 | .563 | 3/8 | 3.50 | 27.13 | 102.67 | 8 |
| O474P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 9/16 | .563 | 1/2 | 4.00 | 31.00 | 117.34 | 8 |
| O476P | Diaphragm | 150 | 1 | 10.2 | 0.068 | BRASS | 3/4 | .750 | 3/4 | 5.00 | 38.75 | 146.67 | 8 |
| Corrosive Liquids | | | | | | | | | | | | | |
| 481P | Direct-Dia. | vac | | | | PVC | 5/32 | .172 | 1/8 | 0.27 | 2.09 | 7.92 | 10 |
| 481-2 | Direct-Dia. "injector, dual inlet" | vac | | | | PVC | 5/32 | .172 | | 0.27 | 2.09 | 7.92 | 10 |
| 482-2 | Direct-Dia. adjustable | vac | | | | PVC | 5/32 | .172 | 1/4 | 0.27 | 2.09 | 7.92 | 10 |
| Round Body, Single Station Valves | | | | | | | | | | | | | |
| 491Sxxx | Direct | 150 | 0 | 10.2 | 0 | STL. STEEL | 1/8 | .125 | 1/8 | 0.27 | 2.09 | 7.92 | 6 |
| 492Sxxx | Direct | 150 | 0 | 10.2 | 0 | STL. STEEL | 1/8 | .125 | 1/4 | 0.27 | 2.09 | 7.92 | 6 |
| | | | | | | | 3/32 available | | | | | | |
| Manifold, Brass Block with Stainless Steel Seats | | | | | | | | | | | | | |
| 491Mxxx | Direct | 150 | 0 | 10.2 | 0 | BRASS MAN./ | 1/8 | .125 | 1/8 | 0.27 | 2.09 | 7.92 | 6 |
| 492Mxxx | Direct | 150 | 0 | 10.2 | 0 | STL. STEEL | 1/8 | .125 | 1/4 | 0.27 | 2.09 | 7.92 | 6 |
| | | | | | | VALVES | 3/32 available | | | | | | |
| High Pressure Normally Closed | | | | | | | | | | | | | |
| 453P* | Pilot-Piston | 1200 | 10 | 81.6 | 0.68 | BRASS | 7/20 | .350 | 3/8 | 1.80 | 13.95 | 52.80 | 5 |
| 453S*** | Pilot-Piston | 1200 | 10 | 81.6 | 0.68 | BRASS | 7/20 | .350 | 3/8 | 1.80 | 13.95 | 52.80 | 5 |
| 454P** | Pilot-Piston | 1200 | 10 | 81.6 | 0.68 | BRASS | 1/2 | .500 | 1/2 | 3.70 | 28.68 | 108.53 | 5 |
| 458P** | Pilot-Piston | 1200 | 10 | 81.6 | 0.68 | BRASS | 15/16 | .939 | 1 | 11.10 | 86.03 | 325.60 | 5 |
| 458PS*** | Pilot-Piston | 1200 | 10 | 81.6 | 0.68 | BRASS | 15/16 | .939 | 1 | 11.10 | 86.03 | 325.60 | 5 |
| High Pressure Normally Open | | | | | | | | | | | | | |
| O453P** | Norm-Open | 1000 | 10 | 68 | 0.68 | BRASS | 7/20 | .350 | 3/8 | 1.80 | 13.95 | 52.80 | 8 |
| O453S*** | Norm-Open | 1000 | 10 | 68 | 0.68 | BRASS | 7/20 | .350 | 3/8 | 1.80 | 13.95 | 52.80 | 8 |

* stainless steel piston (no sleeve)
 ** stainless steel sleeve with brass piston
 *** (s) designates stainless steel sleeve and piston

Note: All high pressure valves with a DC Coil must be derated to 900 psi.

Solenoid Valves

There are two basic types of solenoid valves. The most common is the normally closed type in which the valve opens when the coil is energized. The other type is the normally open valve which closes when the coil is energized.

These valves are suitable for most industrial applications. They are ideal for water, air, light oil, and other noncorrosive liquids. Valves are rated for 200°F/93°C fluid and 120°F/49°C ambient except for the Mini Valves which are rated for 180°F/82°C fluid and 120°F/49°C ambient, (see pages 7-9). The molded waterproof coils have wiring options that include a junction box, spade, conduit and din. They have voltage options of 12VDC, 24VDC, and 24, 120, 208, and 240VAC 50/60 cycle on most models. Component materials are available in Buna N, EPDM, Viton, Teflon and Silicone. DEMA offers valves made from brass, stainless steel, Celcon, PVC, polypropylene and nylon. Stainless steel seats are standard on all pilot piston, diaphragm (except mini series), and high pressure valves. Valves may be mounted in any position except with the coil under the valve. Listed by Underwriter's Laboratories, Inc. (except high pressure).

Construction

DEMA solenoid valves are constructed to insure long, trouble free life. They employ proven design features for reliable performance on all applications. Quality is maintained by strict control methods in all phases of production. Detailed testing of every valve produced during all phases of production is followed by 100% testing for body and seat tightness, electrical characteristics, and valve operation. All DEMA valves are manufactured in our Missouri plants.

Electrical

DEMA solenoid valves are available in many AC and DC voltage ratings.

For ease of identification, coils are manufactured with the following lead wire colors.

| | |
|-----------------|--------|
| 12 vdc / 24 vdc | Black |
| 24/50-60 | Orange |
| 120/50-60 | Blue |
| 208-240/50-60 | Red |

Leads on valves with a conduit boss and flying lead coils are 18" long while coil leads on valves with a junction box are 6" in length.

SOLENOID VALVES

Direct Acting Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids.

Operation: The stem and plunger assembly opens the port of the valve directly. Limited to the smaller valves with port sizes of less than 1/4 inch. Requires no minimum pressure to operate.

Valves rated 200F/93C fluid, 120F/49C ambient



401P



492SM (with Din)

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|---------------|-----------------|---------|-----------------------|------------|----------------|----------------|
| 401P | Brass | Buna N | max 150 psi min 0 psi | 1/4 N.P.T. | 7/64 | 0.27 |
| 401PV | Brass | Viton | max 150 psi min 0 psi | 1/4 N.P.T. | 7/64 | 0.27 |
| Less Metering | | | | | | |
| 491S-8 | Stainless Steel | *Buna N | max 150 psi min 0 psi | 1/8 N.P.T. | 1/8 | 0.27 |
| 492S-8 | Stainless Steel | *Buna N | max 150 psi min 0 psi | 1/4 N.P.T. | 1/8 | 0.27 |
| With Metering | | | | | | |
| 492SM-8 | Stainless Steel | *Buna N | max 150 psi min 0 psi | 1/4 N.P.T. | 1/8 | 0.27 |
| | | | | | 3/32 available | |
| | | | | | 3/32 available | |

* Available with EPDM and Viton (see page 6)

Pilot-Piston Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids.

Operation: The stem and plunger assembly opens the port. This releases the pressure on top of the piston, which moves upward and opens the main valve port.

- All pilot piston valves have stainless steel seats

Valves rated 200F/93C fluid, 120F/49C ambient



412P



A413P



A414P

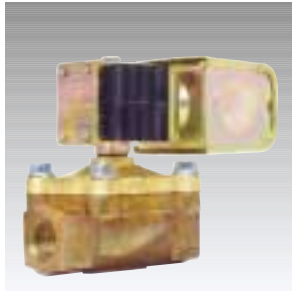


A416P



A418P

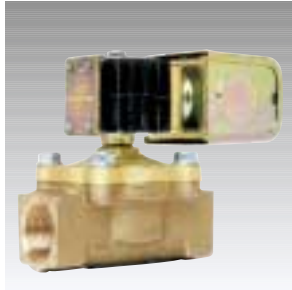
| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|-------|--------|-----------------------|------------|---------|----------------|
| 412P | Brass | Teflon | max 150 psi min 1 psi | 3/8 N.P.T. | 9/32 | 1.2 |
| A413P | Brass | Teflon | max 150 psi min 3 psi | 3/8 N.P.T. | 5/16 | 2.0 |
| A414P | Brass | Teflon | max 150 psi min 3 psi | 1/2 N.P.T. | 7/16 | 3.1 |
| A416P | Brass | Teflon | max 150 psi min 3 psi | 3/4 N.P.T. | 19/32 | 5.0 |
| A418P | Brass | Teflon | max 150 psi min 3 psi | 1 N.P.T. | 3/4 | 8.0 |



473P



474P



476P



476PS

Diaphragm Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids. Recommended for applications that have unfiltered fluid.

Operation: When energized, the plunger is pulled to the top plug, thus opening the small "pilot port" in the center of the diaphragm plate. This releases the pressure on top of the diaphragm allowing incoming pressure to lift it off the large center port. When de-energized, the solenoid plunger is pushed from the top plug by the kick-off spring and closes the pilot port. Fluid passes through the diaphragm bleed hole until pressure is equalized on both sides of the diaphragm to shut off the large port.

All diaphragm valves have stainless steel seats

Valves rated 200F/93C fluid, 120F/49C ambient

- Suitable for up to 10 psi steam, 240F/115C with Teflon Diaphragm, add suffix (T) for Teflon Diaphragm

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|----------|--------|-----------------------|------------|---------|----------------|
| 473P | Brass | Buna N | max 150 psi min 1 psi | 3/8 N.P.T. | 9/16 | 3.5 |
| 474P | Brass | Buna N | max 150 psi min 1 psi | 1/2 N.P.T. | 9/16 | 4.0 |
| 476P | Brass | Buna N | max 150 psi min 1 psi | 3/4 N.P.T. | 3/4 | 5.0 |
| 476PS | S. Steel | Buna N | max 150 psi min 1 psi | 3/4 N.P.T. | 3/4 | 5.0 |



453P



454P



458P

High Pressure Valves Up to 1200 psi

Normally Closed

Application: Water

All valves have stainless steel sleeves and seats except 453P. (S) designates stainless steel piston

Operation: Same as a pilot operated valve except the pilot port is in a separate chamber from the piston. This allows the plunger to operate closer to the top plug with more force and consequently higher opening pressure.

Valves rated 200F/93C fluid, 120F/49C ambient

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|--------------------------------|--------|-------------------------|------------|---------|----------------|
| 453P | Brass | Teflon | max 1200 psi min 10 psi | 3/8 N.P.T. | 11/32 | 1.8 |
| 453S | Brass w/Stainless Steel Piston | Teflon | max 1200 psi min 10 psi | 3/8 N.P.T. | 11/32 | 1.8 |
| 454P | Brass | Teflon | max 1200 psi min 10 psi | 1/2 N.P.T. | 1/2 | 3.7 |
| 458P | Brass | Teflon | max 1200 psi min 10 psi | 1 N.P.T. | 15/16 | 11.1 |
| 458PS | Brass w/Stainless Steel Piston | Teflon | max 1200 psi min 10 psi | 1 N.P.T. | 15/16 | 11.1 |

SOLENOID VALVES

Direct Acting Single Station and Manifold Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids.

Manifold Valves: Stainless steel valves mounted on a solid brass manifold block. Common inlet port for chemical supply to all valves on both ends. Individual metering screw available. **Single Station Valves:** Round body stainless steel valve. Metering screw available on 1/4" NPT model.



492SM Single Station



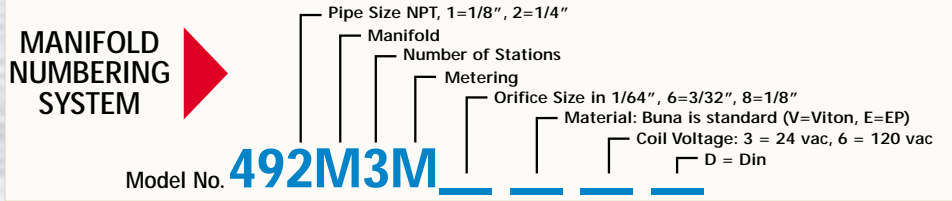
492M1M One Station

Stainless steel single station round body valve

| Model No. | # Sta. | Coil/Voltage | Seal | Pressure | Pipe Size | Orifice | CV Flow Factor |
|---------------|--------|------------------|--------|-----------------------|-----------|------------------|----------------|
| Less Metering | | * | | | | ** | |
| 491S-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491S-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492S-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492S-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 492SM-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492SM-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| | | *add (D) for Din | | | | **3/32 available | |



492M2M Two Station



Manifold Valves

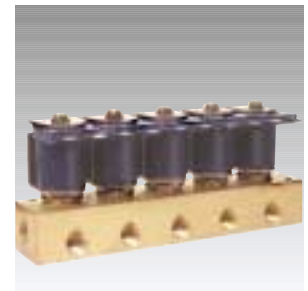
| Model No. | # Sta. | Coil/Voltage | Seal | Pressure | Pipe Size | Orifice | CV Flow Factor |
|---------------|--------|------------------|--------|-----------------------|-----------|------------------|----------------|
| Less Metering | | * | | | | ** | |
| 491M1-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M1-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M1-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M1-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 491M1M-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M1M-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M1M-8-3 | 1 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M1M-8-6 | 1 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| Less Metering | | | | | | **3/32 available | |
| 491M2-8-3 | 2 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M2-8-6 | 2 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M2-8-3 | 2 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M2-8-6 | 2 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 491M2M-8-3 | 2 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M2M-8-6 | 2 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M2M-8-3 | 2 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M2M-8-6 | 2 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| Less Metering | | | | | | **3/32 available | |
| 491M3-8-3 | 3 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M3-8-6 | 3 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M3-8-3 | 3 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M3-8-6 | 3 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 491M3M-8-3 | 3 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M3M-8-6 | 3 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M3M-8-3 | 3 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M3M-8-6 | 3 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| Less Metering | | | | | | **3/32 available | |
| 491M4-8-3 | 4 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M4-8-6 | 4 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M4-8-3 | 4 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M4-8-6 | 4 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 491M4M-8-3 | 4 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M4M-8-6 | 4 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M4M-8-3 | 4 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M4M-8-6 | 4 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| Less Metering | | | | | | **3/32 available | |
| 491M5-8-3 | 5 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M5-8-6 | 5 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M5-8-3 | 5 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M5-8-6 | 5 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| With Metering | | | | | | **3/32 available | |
| 491M5M-8-3 | 5 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 491M5M-8-6 | 5 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/8 NPT | 1/8 | 0.27 |
| 492M5M-8-3 | 5 | Spade 24 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| 492M5M-8-6 | 5 | Spade 120 vac | Buna N | max 150 psi min 0 psi | 1/4 NPT | 1/8 | 0.27 |
| | | *add (D) for Din | | | | **3/32 available | |



492M3M Three Station



492M4M Four Station



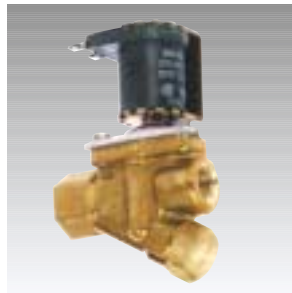
492M5M Five Station

Mini Diaphragm Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids.

60 mesh stainless steel filter on series 442 and 443, rated for 180°F/82°C fluid and 120°F/49°C ambient.



442P, 443P



P442, P443
NSF Std. 61, C-2 Approved



463PS, 464PS
NSF Std. 61, C-2 Approved



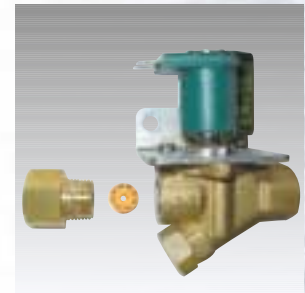
463PS-D, 464PS-D
NSF Std. 61, C-2 Approved



463PSJ, 464PSJ
NSF Std. 61, C-2 Approved



P462, P463
NSF Std. 61, C-2 Approved



443PFB Flow Disc,
*Optional disc available

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor | NSF Std. 61, C-2 Approved |
|-----------|---------------|-------------------|-----------------------|------------|---------|-----------------------------|---------------------------|
| 442P | Brass | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | No |
| 443P | Brass | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | No |
| 443PFB | Brass | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 2.38 or 1.06 gpm flow disc* | No |
| P442 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | Yes |
| P443 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | Yes |
| PP442 | Polypropylene | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | No |
| PP443 | Polypropylene | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | No |
| P462 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | Yes |
| P463 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | Yes |
| P462F-5 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | .5 gpm flow disc | Yes |
| P462F-10 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1.0 gpm flow disc | Yes |
| P462F-15 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1.5 gpm flow disc | Yes |
| P463F-5 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | .5 gpm flow disc | Yes |
| P463F-10 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1.0 gpm flow disc | Yes |
| P463F-15 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1.5 gpm flow disc | Yes |
| 463PS | Stainless | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 3/8 | 2 | Yes |
| 463PS-D | Stainless | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 3/8 | 2 | Yes |
| 463PSJ | Stainless | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 3/8 | 2 | Yes |
| 464PS | Stainless | EPDM | max 125 psi min 3 psi | 1/2 N.P.T. | 3/8 | 2 | Yes |
| 464PS-D | Stainless | EPDM | max 125 psi min 3 psi | 1/2 N.P.T. | 3/8 | 2 | Yes |
| 464PSJ | Stainless | EPDM ^o | max 125 psi min 3 psi | 1/2 N.P.T. | 3/8 | 2 | Yes |

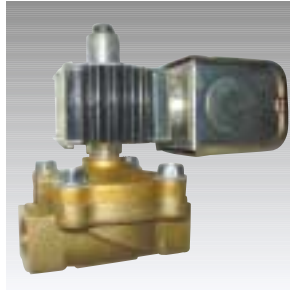
SOLENOID VALVES

Normally Open Diaphragm Valves

Application: Water, air, light oil, and other noncorrosive liquids.

Valves rated 200F/93C fluid, 120F/49C ambient

- Stainless steel seat



O473P



O474P



O476P Shown with Din

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|-------|--------|-----------------------|------------|---------|----------------|
| O473P | Brass | Buna N | max 150 psi min 1 psi | 3/8 N.P.T. | 9/16 | 3.5 |
| O474P | Brass | Buna N | max 150 psi min 1 psi | 1/2 N.P.T. | 9/16 | 4.0 |
| O476P | Brass | Buna N | max 150 psi min 1 psi | 3/4 N.P.T. | 3/4 | 5.0 |

Normally Open High Pressure Valves Up to 1000 psi

Application: Water (S) designates stainless steel piston

Valves rated 200F/93C fluid, 120F/49C ambient



O453P

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|-------|--------|-------------------------|------------|---------|----------------|
| O453P | Brass | Teflon | max 1000 psi min 10 psi | 3/8 N.P.T. | 11/32 | 1.8 |
| O453S | Brass | Teflon | max 1000 psi min 10 psi | 3/8 N.P.T. | 11/32 | 1.8 |

Normally Open Mini Diaphragm Valves

Application: Water, air, light oil, and other noncorrosive liquids.

- Ideal for weep systems
- 442 and 443 series valves rated for 180F/82C fluid and 120F/49C ambient.



O442P/O443P



OP442/OP443
NSF Std. 61, C-2 Approved



OPP442/OPP443



O463PS/O464PS

NSF Std. 61, C-2 Approved

Normally Open Mini Diaphragm Valves

Continued

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor | NSF Std. 61, C-2 Approved |
|-----------|---------------|------|-----------------------|------------|---------|----------------|---------------------------|
| OP442 | Celcon | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | Yes |
| OP443 | Celcon | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | Yes |
| O442P | Brass | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | No |
| O443P | Brass | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | No |
| OPP442 | Polypropylene | EPDM | max 125 psi min 3 psi | 1/4 N.P.T. | 1/4 | 1 | No |
| OPP443 | Polypropylene | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 1/4 | 1 | No |
| O463PS | SS | EPDM | max 125 psi min 3 psi | 3/8 N.P.T. | 3/8 | 2 | Yes |
| O464PS | SS | EPDM | max 125 psi min 3 psi | 1/2 N.P.T. | 3/8 | 2 | Yes |

Special Purpose Valves

Normally Closed

Application: Water, air, light oil, and other noncorrosive liquids.

Manifolding diaphragm valves can be joined together to form a manifold without bushings or connectors.



P404J

* 30% Glass Filled Polypropylene



P404J

(two valves coupled together)

* 30% Glass Filled Polypropylene



466P

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|--------------------|-------|-----------------------|------------|---------|----------------|
| P404J | * | EPDM | max 125 psi min 3 psi | 1/2 N.P.T. | 3/8 | 1.0 |
| 466P | Glass Filled Nylon | Viton | max 150 psi min 3 psi | 3/4 N.P.T. | 3/4 | 10.0 |

SOLENOID VALVES

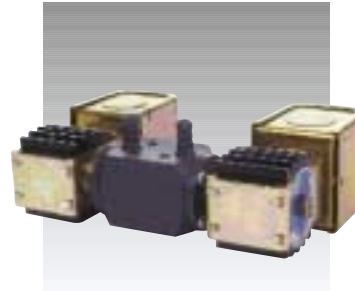
Direct Acting Valves for Corrosive Liquids

Normally closed



481P*

Direct acting diaphragm used on vacuum lines with corrosive liquids.



481-2 200 PSI maximum pressure

Injector mounted, dual inlet used with corrosive liquids. Can be mounted on all B and C series injectors.



482-2

Direct acting diaphragm used on vacuum lines with corrosive liquids, adjustable.

* Can be injector mounted by using Kit 24-50 for 1/4 inch metering knob (see page 15).

| Model No. | Body | Seal | Pressure | Pipe Size | Orifice | CV Flow-Factor |
|-----------|------|------|----------|------------------|---------|----------------|
| 481P* | PVC | EPDM | vacuum | 1/8 N.P.T. | 5/32 | 0.27 |
| 481-2 | PVC | EPDM | vacuum | Injector Mounted | 5/32 | 0.27 |
| 482-2 | PVC | EPDM | vacuum | 1/4 N.P.T. | 5/32 | 0.27 |

Coil Options

Coils rated NEMA 1,
Conduit and Din Coils NEMA 4



Junction Box



Conduit



Spade



Spade

* Available on:
442 & 443 Series
P462, P463, P404J, 463PS
476PS, 464PS, 463PSJ, 464PSJ,
491S, 492S, 492SM, 491M's,
and 492M's Series



Flying lead coil

24 VAC and 120 VAC only
* Available on:
442 & 443 Series
P462, P463, P404J, 463PS, 476PS,
464PS, 463PSJ, 464PSJ, 491S,
492S, 492SM, 491M's, and
492M's Series



Din



Din Female connector
41-77-100110

Additional connectors with alternate size and wiring available by special order

| Electrical Connection |
|----------------------------|
| JB - Junction Box Standard |
| C - Conduit |
| D - Din |
| S - Spade |

| Coil Designation | Voltage | Color |
|------------------|---------|-------|
| 2 | 12VDC | Black |
| 4 | 24 VDC | Black |
| 3 | 24VAC | Blue |
| 6 | 120VAC | Green |
| 9 | 240VAC | Red |

Electrical Specifications

| Coil No. | AC | | | | | | DC | | |
|--|-------|-------|---------------|------|----------------|------|-------|-------|------|
| | Watts | Volts | AMPERS INRUSH | | AMPERS HOLDING | | Watts | Volts | Amps |
| | | | 50Hz | 60Hz | 50Hz | 60Hz | | | |
| Coil No. 1 Used On 401P, 473P, 474P, 476P, O473P, O474P, O476P, 481P, 482-2, 466P | 10 | 24 | 1.8 | 1.5 | 1.0 | .75 | 15 | 12 | 1 |
| | | 120 | .38 | .33 | .21 | .15 | | 24 | 0.05 |
| | | 208 | .16 | .14 | .12 | .09 | | | |
| | | 240 | .19 | .16 | .10 | .07 | | | |
| Coil No. 2 Used On 411P, 412P, A413P, A414P, A416P, A418P, 453P, 454P, 458P, 458PS, O453P, O453S | 15 | 24 | 3.7 | 3.0 | 1.6 | 1.2 | 18 | 12 | 1.5 |
| | | 120 | .73 | .60 | .33 | .24 | | 24 | 0.07 |
| | | 208 | .41 | .35 | .19 | .14 | | | |
| | | 240 | .36 | .30 | .16 | .12 | | | |
| Coil No. 5 Used On 442P, 443P, P442, P443, P462, P463, 463PS, 464PS, 463PS-D, 464PS-D, 463PSJ, 464PSJ, P404J | 10 | 24 | na | .67 | na | .48 | 10 | 12 | 0.74 |
| | | 120 | na | .15 | na | .102 | | 24 | 0.37 |
| | | 240 | na | .075 | na | .05 | | | |
| | | | | | | | | | |
| Coil No. 7 Used On 491M, 492M, 491S, 492S, 492SM, 476PS | 10 | 24 | na | .67 | na | .48 | na | na | na |
| | | 120 | na | .15 | na | .102 | na | na | na |

Valve Repair Kits

| Model | Kit P/N | O-Ring | Closing Spring | Plunger Spring | Plunger | Valve Seat | Piston Ring | Backup Spring | Piston Assembly | Diaphragm | Valve Operator | Enclosing Assembly |
|------------------|---------------------------------------|--------|----------------|----------------|---------|------------|-------------|---------------|-----------------|-----------|----------------|--------------------|
| 401P | 41-24 | Y | | Y | Y | Y | | | | | | |
| 412P | 41-26 | Y | Y | Y | Y | | Y | Y | Y | | | |
| A413P | 41-27 | Y | Y | Y | Y | | Y | Y | Y | | | |
| A414P | 41-28 | Y | Y | Y | Y | | Y | Y | Y | | | |
| A416P | 41-29 | Y | Y | Y | Y | | Y | Y | Y | | | |
| A418P | 41-30 | Y | Y | Y | Y | | Y | Y | Y | | | |
| 442P & 443P | 61-78 | | Y | | Y | | | | | Y | | |
| P442 & P443 | 61-78 | | Y | | Y | | | | | Y | | |
| P462 & P463 | 61-78 | | Y | | Y | | | | | Y | | |
| 463PS & 464PS | 61-78 | | Y | | Y | | | | | Y | | |
| OP462 & OP463 | 41-44-1 | | | | | | | | | Y | | Y |
| OP442 & OP443 | 41-44-1 | | | | | | | | | Y | | Y |
| OPP442 & OPP443 | 41-44-1 | | | | | | | | | Y | | Y |
| O463PS & OP464PS | 41-44-1 | | | | | | | | | Y | | Y |
| 453P & 453S | 41-31 | Y | Y | Y | Y | | Y | Y | Y | | | |
| 454P | 41-32 | Y | Y | Y | Y | | Y | Y | Y | | | |
| 458P & 458PS | 41-33 | Y | Y | Y | Y | | Y | Y | Y | | | |
| O453P & O453S | 41-58 | Y | Y | | | | Y | Y | Y | | Y | |
| 473P & 474P | 41-47 | Y | | Y | Y | | | | | Y | | |
| O473P & O474P | 41-50 | Y | Y | | | | | | | Y | Y | |
| O476P | 41-50-1 | Y | Y | | | | | | | Y | Y | |
| 476P | 41-49 | Y | | Y | Y | | | | | Y | | |
| 466P & 466PV | No Kit Number, Order Individual Parts | | | | | | | | | | | |
| 492M | * 49-1-8 (1/8" Orifice) | Y | | Y | Y | Y | | | Y | | | |
| | * 49-1-6 (3/32" Orifice) | Y | | Y | Y | Y | | | Y | | | |

*Note: Add suffix (B) Buna, (E) EP, (V) Viton i.e. 49-1-8V

Y TYPE STRAINERS



S2B Forged Brass



S3B Forged Brass



S4B Forged Brass



S6B Forged Brass



S10B Cast Bronze



S2P



S3P

Y-Type Line Strainers

For use in waterlines ahead of solenoid valves, chemical injectors, spray nozzles, or any equipment where operation could be impaired by foreign matter.

Brass or Cast Bronze

For water applications and other liquids.

| Model No. | Size NPT |
|-----------|----------|
| S2B | 1/4 |
| S3B | 3/8 |
| S4B | 1/2 |
| S6B | 3/4 |
| S10B | 1 |

Maximum Pressure 300 psi at 150 F
150 psi at 375 F

- Large capacity screen has open area 3 times the pipe area
- Quick cleaning: screen assembly easily removed
- Corrosion resistant stainless steel screen
- 40 mesh or 80 mesh stainless steel wire screens available

Delrin

For line pressure water applications and fluids corrosive to brass.

| Model No. | Size NPT |
|-----------|----------|
| S2P | 1/4 |
| S3P | 3/8 |

Maximum Pressure 125 psi at 180 F

- Large capacity screen has open area 3 times the pipe area
- Corrosion resistant: Delrin plastic body
- 100 mesh stainless steel screen
- FDA approved: All materials have FDA approval for use in food and beverage preparation equipment

FLOAT VALVES

Float Valves

Automatically maintains a desired level of proportioned mixture in any drum, tank or other type reservoir. Magnetically activated “snap acting” float valves provide full water flow to activate the chemical proportioners. Ideal for car washes, carpet cleaning machines, and rapid filling of totes.



440-23



437PN

| Model No. | Body | Seal | Pressure | Pipe Size | Description | Flow Rate | Max. Oz/Gal Induction |
|-----------|--------|--------|------------------------|------------|--|-------------------|-----------------------|
| 440N | Celcon | Buna N | | Std. Hose. | float valve only | 6 GPM at 50 psi | - |
| 440-23BT | Celcon | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve with small barb and tip | 4 GPM at 50 psi | 12 |
| 440-23T | Celcon | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve with large barb and tip | 4 GPM at 50 psi | 35 |
| 440-22BT | Celcon | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve with small barb and tip, no backflow preventer | 4 GPM at 50 psi | 12 |
| 440-23AG | Celcon | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve with large barb and tip with air gap | 4 GPM at 50 psi | 35 |
| 440-24 | Celcon | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve, high induction | 2.5 GPM at 50 psi | 70 |
| 437-PN | * | Buna N | | Std. Hose. | float valve only | 64 GPM at 50 psi | - |
| 437P-21 | * | Buna N | Max 150 psi Min 15 psi | Std. Hose. | float valve high flow | 22 GPM at 50 psi | 10 |

* 30% Glass Filled Nylon

INJECTORS

Inline Chemical Injectors for injecting fluids or air into lines conveying liquid under pressure.

The DEMA injector is a jet pump. A liquid under pressure, usually water, enters the injector and accelerates into a jet through the nozzle. This high velocity jet creates a vacuum, which causes fluid to be drawn through the suction tube and into the injector. The mixture then flows into a diverging (venturi) passage where pressure is recovered as the flow slows down. A portion of the energy of the water is imparted to the injected fluid so the reconverted pressure cannot be as high as the pressure supply. In effect the fluid is pumped into the water line; the reduction in pressure reflects the energy required to operate the "pump".

A minimum 35% pressure drop is required to create the vacuum.

Advantages of the Injector

Injectors have no moving parts, nothing to wear out or lubricate, resulting in extremely low maintenance. They are compact, needing no foundation or mounting bracket, and can be installed in any position. Injectors require no wiring, are self-priming and need no bleeding or filling. Injection rate is simple to set and can be quickly adjusted during operation. There is nothing to drain for seasonal shut down.

General Information

Standard C series have a molded Ryton knob with a stainless steel metering screw.

For special requirements add the following suffixes to the model number.

P: Special C20 stainless steel metering screw for highest corrosion resistance.

S: Stainless steel knob for high pressures (over 700psi).

T: Uses metering tip kit. (see page 15)

All injectors have a check valve to prevent backflow into the fluid container when there is no water flowing or while rinsing. An 8 ft. length of flexible vinyl suction tubing with a foot strainer is supplied.

Application and Selection

DEMA injector selection must be based on the water flow and pressure at the location where the injector is to be installed. DO NOT size the injector by pipe size. If these quantities are known, choose correct model from Tables on (pages 16 and 17). If these quantities are not known, it is permissible to use spray nozzle rating at any pressure for selection. Once an injector has been matched to a spray nozzle system, it will continue to function regardless of fluctuations in line pressure, as the water flow will also fluctuate in proportion. Flow rating of 40 psi is the basis of the spray nozzle numbering system see glossary on (page 21) and is, therefore, most frequently used. Lengthy piping, hose, or other restrictions resulting in pressure loss must be added to the rated pressure before selection.

Injection Capabilities

Every injector is supplied with a metering screw or metering tips (T) for setting injection rates within maximum and minimum capacities shown in Tables. Maximum injections of viscous fluids (above 75cps) can be increased by ordering the high induction metering knob kit, p/n 24-56 (page 15).

NOTE: Three nozzle bushings are supplied with each C series injector for precise sizing of the injector to water flow within the ranges shown. The maximum injection quantities can be doubled by using a nozzle bushing one size smaller than specified, but the pressure loss will be 50%. If your flow is in the lower third of the GPM range, order the next smallest injector to double the injection rate.

C Series Injectors

Pressure:

Ryton metering knob and check valve core for high chemical resistance.
 700 PSI (48 Bar) water at room temperature.
 500 PSI (34 Bar) water at 150 degrees F (66 degrees C).
 Stainless steel metering knob (S) for high pressure
 (700-3000 PSI or 48-204 Bar)

Chemical adjustment:

Metering screw standard on "C" Series injectors (i.e. 204C).
 Metering tips are color-coded orifices of different sizes used to proportion the chemical (add a "T" to the model number (i.e. 204CT).
 Tip Kit ordered separately

Metering knob assembly (bolted onto the body with four screws) can be oriented in any direction for ease of access in tight spots. Small (1/4 inch barb) and large (3/8 inch barb) metering knobs are interchangeable on all inline injectors.



204C



208C

Each injector is supplied with 3 water nozzle bushings (Figure No. 1) for precise sizing of the injector to water flow within the ranges shown. Nozzle selection is specified in the installation instructions included with each injector. All injectors are equipped with a metering screw or metering tips "T" to adjust injection rate up to figures shown in tables (page 16).

For applications using caustic or acidic solutions order metering tip adjustment and metering tip kit, specify "T" after the model number. Metering tip adjusts injection rate instead of metering screw.

HIGH INDUCTION METERING KNOB KIT No. 24-56, 24-56T, 24-56S

Higher induction rates (especially of viscous liquids) can be obtained by replacing the standard metering knob with a high capacity metering knob and check valve parts.

DRUM MOUNTING KIT No. 24-32DM

Allows injector sizes up through 204C to be mounted directly on a drum or tote with a 2 inch bung.

DRUM MOUNTING KIT No. 23-26CDM, 23-26CTDM

Allows injector sizes 206C and 208C to be mounted on a drum or tote with a 2 inch bung.

PIPE ADAPTER KIT No. 24-50 FOR MOUNTING A VALVE ON THE INJECTOR CHEMICAL INTAKE BARB: Model 44-71 PVC Ball Valve or Model 481P Solenoid Valve (Figure No. 2)

May be placed in the chemical supply line to turn the chemical supply on or off. **DEMA Kit 24-50** slips over the metering knob barb and provides a 1/8" MNPT (Male National Pipe Taper) for the valves to screw directly onto the metering knob for models 200-3C through 204C.

Models 206 and 208 use metering knob part number 23-33-1.



100-15K



100-15KU

100-15K Tip kit

100-15KU Ultra lean tip kit

44-61P Capillary metering tip for lean dilutions

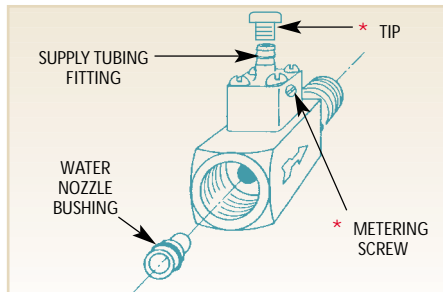


Figure No. 1

* Metering Knobs are either screw or tip type, not both.

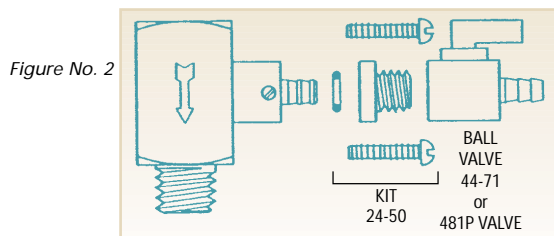


Figure No. 2

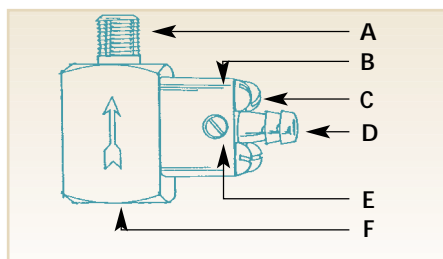


Figure No. 3

Figure No. 3

- A. MNPT Outlet (Male National Pipe Taper)
- B. Metering Knob
- C. Mounting screws
- D. Metering Tip (optional, add a "T" to the model number if you want metering tips for chemical adjustment)
- E. Metering Screw (is standard when metering tips are not specified)
- F. FNPT Inlet (Female National Pipe Taper)

INJECTORS

C Series Injector Selection Table

Total Spray Nozzle Flow - GPM

| Pipe Model | Nozzle Size NPT | Bushing | Pump Discharge Pressure PSI (Inlet) | | | | | | | | | | | | | | Max. Injection OZ/MIN | | | | | | | | | | | |
|-----------------|-----------------|---------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | | | | | | | *Viscosity - CPS | | | | | | | | | | | |
| | | | 15 | 30 | 45 | 60 | 75 | 90 | 120 | 150 | 230 | 300 | 390 | 1 | 75 | 220 | 500 | | | | | | | | | | | |
| 200-3C | and | 02 | .10 | .12 | .13 | .16 | .15 | .19 | .17 | .21 | .22 | .21 | .26 | .24 | .30 | .26 | .33 | .31 | .37 | .37 | .44 | .41 | .49 | 3 | 0.5 | 0.3 | 0.2 | |
| | | 03 | .12 | .16 | .16 | .21 | .19 | .24 | .21 | .28 | .22 | .27 | .26 | .33 | .30 | .38 | .33 | .42 | .37 | .45 | .44 | .53 | .49 | .59 | | | | |
| 200-3CT | | 04 | .16 | .20 | .21 | .26 | .24 | .30 | .28 | .34 | .27 | .39 | .33 | .41 | .38 | .47 | .42 | .52 | .45 | .65 | .53 | .76 | .59 | .85 | | | | |
| 200C | and | 1 | .20 | .25 | .26 | .32 | .30 | .38 | .34 | .43 | .39 | .46 | .41 | .52 | .47 | .59 | .52 | .66 | .65 | .77 | .76 | .91 | .85 | 1.0 | 5 | 1.5 | 0.5 | 0.3 |
| | | 2 | .25 | .32 | .32 | .41 | .38 | .48 | .43 | .55 | .46 | .56 | .52 | .66 | .59 | .76 | .66 | .84 | .77 | .92 | .91 | 1.1 | 1.0 | 1.2 | | | | |
| 200CT | | 3 | .32 | .39 | .41 | .51 | .48 | .60 | .55 | .68 | .56 | .76 | .66 | .82 | .76 | .95 | .84 | 1.0 | .92 | 1.3 | 1.1 | 1.5 | 1.2 | 1.7 | | | | |
| 201C | and | 4 | .39 | .49 | .51 | .64 | .60 | .76 | .68 | .86 | .76 | .96 | .82 | 1.0 | .95 | 1.2 | 1.0 | 1.3 | 1.3 | 1.6 | 1.5 | 1.9 | 1.7 | 2.1 | 7 | 4 | 2 | 1 |
| | | 5 | .49 | .63 | .64 | .82 | .76 | .97 | .86 | 1.1 | .96 | 1.2 | 1.0 | 1.3 | 1.2 | 1.5 | 1.3 | 1.7 | 1.6 | 1.9 | 1.9 | 2.3 | 2.1 | 2.5 | | | | |
| 201CT | | 6 | .63 | .79 | .82 | 1.0 | .97 | 1.2 | 1.1 | 1.4 | 1.2 | 1.5 | 1.3 | 1.6 | 1.5 | 1.9 | 1.7 | 2.1 | 1.9 | 2.5 | 2.3 | 2.9 | 2.5 | 3.3 | | | | |
| 202C | and | 7 | .79 | .98 | 1.0 | 1.3 | 1.2 | 1.5 | 1.4 | 1.7 | 1.5 | 1.9 | 1.6 | 2.1 | 1.9 | 2.4 | 2.1 | 2.6 | 2.5 | 3.2 | 2.9 | 3.8 | 3.3 | 4.2 | 11 | 6 | 2.5 | 1.3 |
| | | 8 | .98 | 1.3 | 1.3 | 1.6 | 1.5 | 1.9 | 1.7 | 2.2 | 1.9 | 2.3 | 2.1 | 2.6 | 2.4 | 3.0 | 2.6 | 3.4 | 3.2 | 3.7 | 3.8 | 4.5 | 4.2 | 5.0 | | | | |
| 202CT | | 9 | 1.3 | 1.6 | 1.6 | 2.0 | 1.9 | 2.4 | 2.2 | 2.7 | 2.3 | 3.0 | 2.6 | 3.3 | 3.0 | 3.8 | 3.4 | 4.2 | 3.7 | 5.0 | 4.5 | 6.0 | 5.0 | 6.7 | | | | |
| 203C | and | 10 | 1.6 | 2.0 | 2.0 | 2.6 | 2.4 | 3.0 | 2.7 | 3.4 | 3.0 | 3.6 | 3.3 | 4.1 | 3.8 | 4.7 | 4.2 | 5.2 | 5.0 | 6.0 | 6.0 | 7.1 | 6.7 | 7.9 | 21 | 7 | 3 | 1.3 |
| | | 11 | 2.0 | 2.5 | 2.6 | 3.3 | 3.0 | 3.9 | 3.4 | 4.4 | 3.6 | 4.8 | 4.1 | 5.3 | 4.7 | 6.0 | 5.2 | 6.7 | 6.0 | 8.0 | 7.1 | 9.1 | 7.9 | 10 | | | | |
| 203CT | | 12 | 2.5 | 3.2 | 3.3 | 4.1 | 3.9 | 4.8 | 4.4 | 5.5 | 4.8 | 6.1 | 5.3 | 6.6 | 6.0 | 7.6 | 6.7 | 8.3 | 8.0 | 10 | 9.1 | 12 | 10 | 13 | | | | |
| 204C | and | 13 | 3.2 | 3.9 | 4.1 | 5.1 | 4.8 | 6.0 | 5.5 | 7.6 | 6.1 | 8.2 | 6.6 | 8.3 | 7.6 | 9.4 | 8.3 | 10 | 10 | 14 | 12 | 15 | 13 | 17 | 30 | 8 | 3.5 | 1.3 |
| | | 14 | 3.9 | 5.1 | 5.1 | 6.6 | 6.0 | 7.7 | 7.6 | 8.8 | 8.2 | 9.6 | 8.3 | 11 | 9.4 | 12 | 10 | 14 | 14 | 16 | 15 | 18 | 17 | 20 | | | | |
| 204CT | | 15 | 5.1 | 6.3 | 6.6 | 8.2 | 7.7 | 9.7 | 8.8 | 11 | 9.6 | 13 | 11 | 13 | 12 | 15 | 14 | 17 | 16 | 21 | 18 | 24 | 20 | 27 | | | | |
| 206C | and | 16 | 6.3 | 7.9 | 8.2 | 10 | 9.7 | 12 | 11 | 14 | 13 | 16 | 13 | 17 | 15 | 19 | 17 | 21 | 21 | 26 | 24 | 30 | 27 | 34 | 55 | 33 | 18 | 12 |
| | | 17 | 7.9 | 10 | 10 | 13 | 12 | 15 | 14 | 18 | 16 | 19 | 17 | 21 | 19 | 24 | 21 | 27 | 26 | 31 | 30 | 36 | 34 | 40 | | | | |
| 206CT | | 18 | 10 | 13 | 13 | 16 | 15 | 19 | 18 | 22 | 19 | 24 | 21 | 26 | 24 | 30 | 27 | 33 | 31 | 40 | 36 | 47 | 40 | 52 | | | | |
| 208C | and | 19 | 13 | 16 | 16 | 20 | 19 | 24 | 22 | 27 | 24 | 30 | 26 | 33 | 30 | 38 | 33 | 42 | 40 | 50 | 47 | 59 | 52 | 65 | 60 | 33 | 18 | 12 |
| | | 20 | 16 | 20 | 20 | 26 | 24 | 31 | 27 | 35 | 30 | 37 | 33 | 42 | 38 | 48 | 42 | 54 | 50 | 56 | 59 | 66 | 65 | 74 | | | | |
| 208CT | | 21 | 20 | 25 | 26 | 33 | 31 | 39 | 35 | 44 | 37 | 48 | 42 | 53 | 48 | 61 | 54 | 67 | 56 | 80 | 66 | 94 | 74 | 99 | | | | |
| Outlet Pressure | | | 10 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | | | | | | | | | | | | | | | |

| Pipe Model | Nozzle Size NPT | Bushing | Pump Discharge Pressure PSI (Inlet) | | | | | | | | | | | Max. Injection OZ/MIN | | | | | | | | | | | | | | |
|-----------------|-----------------|---------|-------------------------------------|-----|-----|------|------|------|-------|-------|-------|-------|-------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | | | | *Viscosity - CPS | | | | | | | | | | | | | | |
| | | | 460 | 540 | 620 | *700 | *770 | *930 | *1100 | *1230 | *1540 | *2000 | *3000 | 1 | 75 | 220 | 500 | | | | | | | | | | | |
| 200-3C | and | 02 | .44 | .53 | .48 | .57 | .51 | .61 | .54 | .65 | .57 | .68 | .62 | .75 | .67 | .81 | .72 | .86 | .80 | .95 | .90 | 1.1 | 1.3 | 3 | 0.5 | 0.3 | 0.2 | |
| | | 03 | .53 | .64 | .57 | .69 | .61 | .74 | .65 | .78 | .68 | .82 | .75 | .89 | .81 | .97 | .86 | 1.0 | .95 | 1.1 | 1.1 | 1.3 | 1.3 | 1.6 | | | | |
| 200-3CT | | 04 | .64 | .92 | .69 | 1.0 | .74 | 1.1 | .78 | 1.1 | .82 | 1.2 | .89 | 1.3 | .97 | 1.4 | 1.0 | 1.5 | 1.1 | 1.7 | 1.3 | 1.9 | 1.6 | 2.3 | | | | |
| 200C | and | 1 | .92 | 1.1 | 1.0 | 1.2 | 1.1 | 1.2 | 1.1 | 1.3 | 1.2 | 1.4 | 1.3 | 1.5 | 1.4 | 1.7 | 1.5 | 1.8 | 1.7 | 2.0 | 1.9 | 2.3 | 2.3 | 2.8 | 5 | 1.5 | 0.5 | 0.3 |
| | | 2 | 1.1 | 1.3 | 1.2 | 1.4 | 1.2 | 1.5 | 1.3 | 1.6 | 1.4 | 1.7 | 1.5 | 1.8 | 1.7 | 2.0 | 1.8 | 2.1 | 2.0 | 2.4 | 2.3 | 2.7 | 2.8 | 3.3 | | | | |
| 200CT | | 3 | 1.3 | 1.8 | 1.4 | 2.0 | 1.5 | 2.1 | 1.6 | 2.2 | 1.7 | 2.3 | 1.8 | 2.5 | 2.0 | 2.7 | 2.1 | 2.9 | 2.4 | 3.2 | 2.7 | 3.7 | 3.3 | 4.5 | | | | |
| 201C | and | 4 | 1.8 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.3 | 3.0 | 2.5 | 3.2 | 2.7 | 3.5 | 2.9 | 3.7 | 3.2 | 4.1 | 3.7 | 4.7 | 4.5 | 5.8 | 7 | 4 | 2 | 1 |
| | | 5 | 2.3 | 2.7 | 2.5 | 3.0 | 2.7 | 3.2 | 2.8 | 3.4 | 3.0 | 3.5 | 3.2 | 3.8 | 3.5 | 4.2 | 3.7 | 4.4 | 4.1 | 4.9 | 4.7 | 5.6 | 5.8 | 6.9 | | | | |
| 201CT | | 6 | 2.7 | 3.6 | 3.0 | 3.8 | 3.2 | 4.1 | 3.4 | 4.3 | 3.5 | 4.6 | 3.8 | 5.0 | 4.2 | 5.4 | 4.4 | 5.8 | 4.9 | 6.4 | 5.6 | 7.3 | 6.9 | 8.9 | | | | |
| 202C | and | 7 | 3.6 | 4.6 | 3.8 | 4.9 | 4.1 | 5.3 | 4.3 | 5.6 | 4.6 | 5.9 | 5.0 | 6.4 | 5.4 | 6.9 | 5.8 | 7.4 | 6.4 | 8.2 | 7.3 | 9.4 | 8.9 | 11 | 11 | 6 | 2.5 | 1.3 |
| | | 8 | 4.6 | 5.4 | 4.9 | 5.8 | 5.3 | 6.2 | 5.6 | 6.6 | 5.9 | 6.9 | 6.4 | 7.6 | 6.9 | 8.2 | 7.4 | 8.7 | 8.2 | 9.7 | 9.4 | 11 | 11 | 13 | | | | |
| 202CT | | 9 | 5.4 | 7.3 | 5.8 | 7.9 | 6.2 | 8.4 | 6.6 | 8.9 | 6.9 | 9.3 | 7.6 | 10 | 8.2 | 11 | 8.7 | 12 | 9.7 | 13 | 11 | 15 | 13 | 18 | | | | |
| 203C | and | 10 | 7.3 | 8.6 | 7.9 | 9.2 | 8.4 | 9.9 | 8.9 | 10 | 9.3 | 11 | 10 | 12 | 11 | 13 | 12 | 14 | 13 | 15 | 15 | 18 | 18 | 21 | 21 | 7 | 3 | 1.3 |
| | | 11 | 8.6 | 11 | 9.2 | 12 | 9.9 | 13 | 10 | 13 | 11 | 14 | 12 | 15 | 13 | 17 | 14 | 18 | 15 | 20 | 18 | 23 | 21 | 28 | 21 | 7 | 3 | 1.3 |
| 203CT | | 12 | 11 | 15 | 12 | 16 | 13 | 17 | 13 | 18 | 14 | 19 | 15 | 20 | 17 | 22 | 18 | 24 | 20 | 26 | 23 | 30 | 28 | 36 | | | | |
| 204C | and | 13 | 15 | 19 | 16 | 20 | 17 | 21 | 18 | 23 | 19 | 24 | 20 | 26 | 22 | 28 | 24 | 30 | 26 | 33 | 30 | 40 | 36 | 49 | | | | |
| | | 14 | 19 | 22 | 20 | 24 | 21 | 26 | 23 | 27 | 24 | 28 | 26 | 31 | 28 | 34 | 30 | 36 | 33 | 40 | 40 | 47 | 49 | 58 | 30 | 8 | 3.5 | 1.3 |
| 204CT | | 15 | 22 | 30 | 24 | 32 | 26 | 34 | 27 | 36 | 28 | 38 | 31 | 41 | 34 | 45 | 36 | 48 | 40 | 53 | 47 | 62 | 58 | 75 | | | | |
| 206C | and | 16 | 30 | 37 | 32 | 40 | 34 | 42 | 36 | 45 | 38 | 47 | 41 | 52 | 45 | 56 | 48 | 60 | 53 | 66 | 62 | 76 | 75 | 93 | 55 | 33 | 18 | 12 |
| | | 17 | 37 | 43 | 40 | 47 | 42 | 49 | 45 | 53 | 47 | 56 | 52 | 61 | 56 | 66 | 60 | 70 | 66 | 78 | 76 | 91 | 93 | 99 | | | | |
| 206CT | | 18 | 43 | 57 | 47 | 61 | 49 | 65 | 53 | 69 | 56 | 73 | 61 | 80 | 66 | 86 | 70 | 92 | 78 | 99 | 91 | 99 | | | | | | |
| 208C | and | 19 | 57 | 71 | 61 | 77 | 65 | 82 | 69 | 87 | 73 | 91 | 80 | 99 | 86 | 99 | 92 | 99 | | | | | | | 60 | 33 | 18 | 12 |
| | | 20 | 71 | 80 | 77 | 86 | 82 | 92 | 87 | 98 | 91 | 99 | | | | | | | | | | | | | | | | |
| 208CT | | 21 | 80 | 99 | 86 | 99 | 92 | 99 | 98 | 99 | | | | | | | | | | | | | | | | | | |
| Outlet Pressure | | | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 1000 | 1300 | 1950 | | | | | | | | | | | | | | | |

Injector outlet pressure - Spray nozzle pressure plus line losses

160F /77C maximum fluid temperature

* For pressures above 700 PSI specify Model with suffix (S) Stainless Steel Metering Knob

Note: Injection figures are for a nominal 35% pressure loss. By sizing the injector for a 50% or greater loss the figures indicated can be doubled. On Models 200-3C through 204C higher induction rates (especially of viscous materials) can also be obtained by replacing the standard metering knob with a High Capacity Metering Knob DEMA Kit No. 24-56, 24-56T or 24-56S.

***Note: Viscosity - CPS**

| | |
|-----|------------------------------|
| 1 | Water |
| 75 | 10 wt. Oil |
| 200 | 30 wt. Oil or dish detergent |
| 500 | Honey |

Knob Kit NO. 24-56

| | | |
|----------|-----------------------------|------------------------------|
| | Under 700psi | 700 - 3000psi |
| | Ryton plastic | Stainless Steel |
| Standard | 23-32 (with metering screw) | 23-32S (with metering screw) |
| Special | 23-32T (with metering tips) | 23-32ST (with metering tips) |

B Series Injectors



Externally adjustable injectors with external water flow ranges

- External adjusting screw for easy compensation to system variations.
- Efficiently adjusts to flow or pressure changes after installation.
- Allows system to operate at maximum performance level without a teardown.
- Useful in high pressure pump discharge line applications when it is desired to keep pressure loss to a minimum.

Water flow adjusting screw

204B

| Fluid Viscosity CPS | Maximum Injection Ounces Per Minute | | | |
|---------------------|-------------------------------------|-------------|-------------|-------------|
| | 3/8 NPT | 3/8 NPT | 1/2 NPT | 3/4 NPT |
| | 202B | 203B | 204B | 206B |
| 1 | 8 | 16 | 36 | 42 |
| 75 | 4 | 8 | 13 | 18 |
| 220 | 2 | 4 | 5 | 8 |
| 500 | 1 | 2 | 2 | 4 |
| 1000 | 0.5 | 1 | 1 | 1 |

Note: Add suffix "T" for metering tip knob
For highly viscous fluids order part #24-56, 24-56T or 24-56S
high induction metering knob kit on (page 15)

| Inlet Pressure PSI | Operating Range GPM | | | |
|--------------------|---------------------|-------------|-------------|-------------|
| | 3/8 NPT | 3/8 NPT | 1/2 NPT | 3/4 NPT |
| | 202B | 203B | 204B | 206B |
| 10 | .25-2.0 | .50-3.5 | 2.0-6.4 | 3.6-11 |
| 20 | .30-2.3 | .55-4.4 | 2.3-7.5 | 4.2-13 |
| 40 | .37-2.9 | .70-5.4 | 2.9-9 | 5.3-17 |
| 60 | .43-3.4 | .80-6.4 | 3.4-11 | 6.2-19 |
| 100 | .54-4.2 | 1.0-8.0 | 4.2-14 | 7.7-24 |
| 200 | .73-5.7 | 1.4-11 | 5.7-19 | 11-33 |
| 400 | 1.0-7.9 | 1.9-15 | 7.9-26 | 15-46 |
| 500 | 1.2-8.9 | 2.1-17 | 8.9-29 | 17-51 |
| *700 | 1.4-11 | 2.5-20 | 11-35 | 20-60 |
| *1000 | 1.6-13 | 3.0-23 | 13-41 | 23-70 |
| *1500 | 2.0-16 | 3.5-28 | 16-50 | 28-87 |
| *2000 | 2.2-18 | 4.7-37 | 18-58 | 33-100 |
| *3000 | 2.7-20 | 5.0-45 | 20-70 | 40-100 |

*Specify "S" Stainless Steel Knob Part #24-32S for pressure exceeding 700psi

Special Injectors for Corrosive Applications



P203C
Polypropylene Plastic
(same flow as 203C with # 11 nozzle bushing)
125 PSI maximum pressure

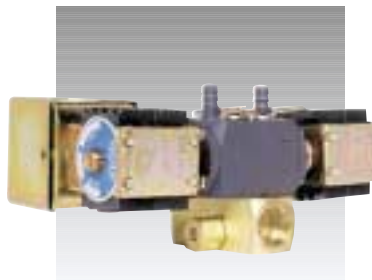


203BS-2
Stainless Steel
(same flow as 203B)



204BS-2
Stainless Steel
(same flow as 204B)

Multiple Injection Capabilities



203B2V2
Top dual assembly is p/n 481-2,
200 PSI maximum pressure

B Series

203B2V2 3/8 inch
204B2V2 1/2 inch
206B2V2 3/4 inch

- Dual Injector
- Dual Solenoids
- "B" Series - Adjustable
- PVC Valve manifold

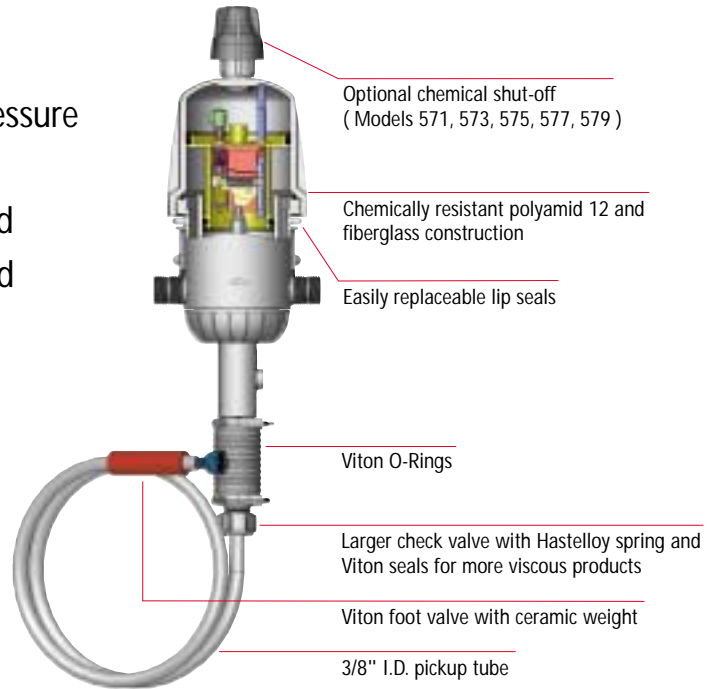
Note: Add suffix "T" for metering tip knob



295CS-2
High Pressure Foaming Includes:
• Injector
• Plastic backup washer
• Spray wand, aerator and nozzle
• Plastic tubing with foot strainer

MixRite Water Powered Proportioning Pump

- Accurate Dispensing
- Uses only 20% of pressure to drive the pump
- No electricity required
- Low maintenance and easy to adjust



SPECIFICATIONS:

- Available with or without control valve that allows the shutoff of chemical while water is still flowing through the unit
- Injection rate from .2% to 10%
- Injection ratios from 1:500 to 1:10
- Flows from .09 gpm to 11 gpm
- Water pressure from 2.9 psi to 85 psi
- Chemical resistant construction, Buna upper seals and 302 stainless springs
- Viton O-ring and hastelloy spring chemical check valve
- Bypass models for harsh chemicals
- Includes 7 ft. inlet tubing and foot valve strainer
- Dimensions are 19 1/2" high, 7" wide
- Hose barbs with swivel for easy installation



571



574



578

MixRite 10 Models to meet your applications

FLOW RANGE .09-11 GPM (.34-41.6 LPM)

OPERATING TEMP. 39F-122 F (4C-50 C) Note: Models 576 and 577 39F-104 F (4C-40C)

| MODEL | PRESSURE | | INDUCTION | | | | OPTIONS |
|------------------------------|--------------|-----------------|---------------|------------|-------------|----------|---------------------------|
| | | | Ratio | Percent | Oz/Gal | MI/Liter | |
| 570 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .2% to 2% | .25 to 2.5 | 2 to 20 | * Tip Kit |
| 571 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .2% to 2% | .25 to 2.5 | 2 to 20 | Chemical On/Off * Tip Kit |
| * Note: With Tip Kit 57-11-1 | | 2000:1 to 750:1 | .05% to .13% | .06 to .17 | .5 to 1.3 | | |
| 572 | 2.9 - 85 PSI | .19-5.8 BAR | 250:1 to 25:1 | .4% to 4% | .51 to 5.0 | 4 to 40 | |
| 573 | 2.9 - 85 PSI | .19-5.8 BAR | 250:1 to 25:1 | .4% to 4% | .51 to 5.0 | 4 to 40 | Chemical On/Off |
| 574 | 2.9 - 60 PSI | .19-4.08 BAR | 33:1 to 10:1 | 3% to 10% | 3.8 to 12.8 | 3 to 100 | |
| 575 | 2.9 - 60 PSI | .19-4.08 BAR | 33:1 to 10:1 | 3% to 10% | 3.8 to 12.8 | 3 to 100 | Chemical On/Off |
| BYPASS | | | | | | | |
| 576 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .2% to 2% | .25 to 2.5 | 2 to 20 | * Tip Kit |
| 577 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .2% to 2% | .25 to 2.5 | 2 to 20 | Chemical On/Off * Tip Kit |
| * Note: With Tip Kit 57-11-1 | | 2000:1 to 750:1 | .05% to .13% | .06 to .17 | .5 to 1.3 | | |
| 578 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .4% to 4% | .51 to 5.0 | 4 to 40 | |
| 579 | 2.9 - 85 PSI | .19-5.8 BAR | 500:1 to 50:1 | .4% to 4% | .51 to 5.0 | 4 to 40 | Chemical On/Off |

INDUCTION RATIOS ARE BASED ON WATER THIN PRODUCTS (1CPS); HIGHER VISCOSITIES WILL AFFECT INDUCTIONS

MixRite Accessories



57-11-1 Tip Kit for Lean Dilution Ratios

750:1
1000:1
1500:1
2000:1

Includes 4 metering tips,
8 ft. 1/4" vinyl hose (not shown) and
1/4"x3/8" barb adapter



50-41-1 Strainer

200 Mesh (80 Micron) Strainer
recommended on all MixRite installations

MixRite Parts Kits

| KIT No. | | MODEL |
|---------------|--------------------------------|-------------------------|
| 57-1 | Cover Kit with on/off | 571, 573, 575, 577, 579 |
| 57-2B | Engine Repair Kit | 570, 571, 572, 573 |
| 57-3B (Buna) | Chemical Piston Kit 2% | 570, 571 |
| 57-3V (Viton) | Chemical Piston Kit 2% | 570, 571 |
| 57-4B | Cover and Air Release Kit | 570, 572, 574, 576, 578 |
| 57-5B | Chemical Check Valve Kit Buna | * |
| 57-5V* | Chemical Check Valve Kit Viton | * |
| 57-8B (Buna) | Chemical Piston Kit 4% | 572, 573 |
| 57-8V (Viton) | Chemical Piston Kit 4% | 572, 573 |
| 57-10-65 | Mounting Bracket | All |
| 57-11-1 | Tip Kit | 570, 571, 576, 577 |
| 50-41-1 | 200 Mesh Strainer (80 Micron) | All |
| 57-K10-210 | Chemical Piston Kit 10% | 574, 575 |
| 57-K2B-222 | Chemical Piston Kit Bypass 2% | 576, 577 |
| 57-K2B-244 | Chemical Piston Kit Bypass 4% | 578, 579 |
| 57-15-V | Chemical Inlet Tubing Kit | All |
| 57-K57-011 | Lip Seal Kit | All |
| 57-2B-10 | Engine Repair Kit | 574, 575 |
| 57-2B-BP | Engine Repair Kit | 576, 577, 578, 579 |

* Viton Standard on all Models

SPECIALTY APPLICATIONS



Wall Mount FOAM SYSTEM

Compressed Air Foam Systems that include MixRite, foam chamber, 25' hose, and foam wand. (Wall mount spray systems also available).

| MODEL No. | WALL MOUNT | INDUCTION |
|-----------|--|-----------|
| 570WS | Spray Dispenser | .2% to 2% |
| 573WSR | Spray Dispenser with Rinse | .4% to 4% |
| 573WAFR | Compressed Air Foam Dispenser | .4% to 4% |
| 579WBAF | Compressed Air Foam Dispenser with Chemical Bypass | .4% to 4% |

All models include dispenser, hose, spray gun or foam wand

Cart Mount

Mobil Cleaning/Sanitizing Systems that include MixRite, 25' hose and spray gun. (Mobile Foam systems also available).



| MODEL No. | CART MOUNT | INDUCTION |
|-----------|--|-----------|
| 570CS | Spray Dispenser | .2% to 2% |
| 573CSR | Spray Dispenser with Rinse | .4% to 4% |
| 573CAFR | Compressed Air Foam Dispenser | .4% to 4% |
| 579CBAF | Compressed Air Foam Dispenser with Chemical Bypass | .4% to 4% |

All models include dispenser, hose, spray gun or foam wand



570 VWP-1

Panel System

Central Cleaning/Sanitizing Carwash

- Tri-foam
- Wheel cleaning
- Presoak

Unit includes MixRite, filter, check valve, and DEMA solenoid valve mounted to a Plexiglas panel.

Custom units available upon request.



Drop Station

Central Foam Systems can be built using any MixRite and multiple drop station dispensers throughout a facility.

GLOSSARY

To find the gpm of a valve multiply the rated CV (flow factor) by the square root of the pressure drop across the valve.

CV (Flow Factor) Quantity of 60F/16°C water in GPM that will pass through a valve with a PSIG drop of one.

GPM = (CV flow factor) X $\sqrt{\text{pressure drop across valve}}$

CV Flow Factor= (GPM) $\div \sqrt{\text{pressure drop (PSIG)}}$

Pressure Drop (PSIG)= $\left(\frac{\text{GPM}}{\text{CV}}\right)^2$

Centipoise (CPS), Viscosity of fluid

| | |
|-----|---------------|
| 1 | Water |
| 75 | 10 weight oil |
| 200 | 30 weight oil |
| 500 | Honey |

Gravity PSI = .432 x hight (in feet)

SEAL MATERIAL

| | |
|--------|----------------------------|
| Buna N | -40°F/-40°C to 250°F/120°C |
| EPDM | -60°F/-50°C to 300°F/150°C |
| Viton | -20°F/-29°C to 400°F/205°C |
| Teflon | -75°F/-60°C to 450°F/230°C |

GENERALLY RESISTANT TO:

oil, grease, hydraulic fluids, water, alcohols
 animal and vegetable oils, ozone, oxidizing chemicals. (Not to be used with petroleum based fluids)
 resistant to swelling (citrus based products)
 extreme temperatures

| | |
|--|---|
| MOPD | Maximum Operating Pressure Differential Maximum differential against which solenoid valve can open |
| MRP | Maximum Rated Pressure Maximum pressure which can be applied to the valve |
| GPM | Gallons per minute flow |
| PSIG | Pounds per square inch gauge |
| Nozzle numbering system at 40 PSI | First two numbers designate the spray angle Second two numbers, move decimal left one place designates the gpm i.e. nozzle number 2540 is 25 degree spray at 4 gpm |

METRIC CONVERSIONS:

| To go from | Multiply by | To get |
|-------------|-------------|-------------|
| Gallons | 3.785 | Liters |
| Ounces | 29.57 | Milliliters |
| PSI | 0.068 | Bar |
| Inches | 25.4 | Millimeters |
| Fahrenheit | 5/9(F-32) | Celsius |
| Liters | 0.2642 | Gallons |
| Milliliters | 0.34 | Ounces |
| Bar | 14.5 | PSI |
| Millimeters | 0.0394 | Inches |
| Celsius | 9/5C+32 | Fahrenheit |



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