



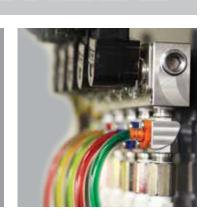






INDUSTRIAL PRODUCTS CATALOG





www.demaeng.com

DEMA has a wide variety of industrial products,
Solenoid Valves, Float Valves, Strainers, Pumps, and Injectors
to fit a range of industrial applications in the
Food & Beverage, Carwash, Brewing, Machining,
and Industrial Cleaning industries.

STRATEGY STATEMENT



Customized Solutions

Customization at DEMA could mean anything from a custom label to a fully custom product. We will use our customized solutions to help build and enhance our customers' brands.

Industry Experience

One of DEMA's competitive advantages is the breadth and depth of our experience we have within our customers' industries. This enables us to solve problems our competitors (and sometimes even our customers) can't. We are better able to develop and implement customized solutions that create value for our customers.

Flexible & Responsive Operations

We welcome the opportunity to develop customized solutions that meet the unique needs of our customers. Each department at DEMA has a role in making this flexibility possible:

- The Sales team makes accessibility a high priority. They aren't just selling a product they serve as valuable consultants throughout the relationship.
- Engineering regularly and proactively interacts with customers not just when there are problems.
- Marketing effectively helps customers capitalize on the opportunity to enhance their branding and differentiation through DEMA's products.
- Manufacturing adeptly handles prototyping, quick turns, custom pack-outs. DEMA offers lower minimum order quantities and stronger build-to-order capabilities than the competition.
- Quality Control is dedicated to continuous improvement and avoiding potential issues before they occur.
- Calls to Customer Service and Technical Support are answered by knowledgeable representatives
 who are well-connected with the rest of the company so that the right resources are deployed quickly
 on customer requests.
- The Administrative teams play a vital role in enabling all other departments to exceed customer expectations.

Cultural Commitment to Customers' Success

All DEMA departments stay close to and interact with customers. We listen first. We recognize our customers rely on DEMA products in their businesses so we hold ourselves to the highest standards of service. We think long-term and prioritize relationships over short-term financial gain.



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SOLENOID VALVES

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 (when power is applied to the coil). The other type is the normally open valve which closes when the coil is energized.

Our valves are suitable for most industrial applications. They are ideal for water, air, light oil, noncorrosive and nonexplosive liquids. Valves are rated for 200°F/93°C fluid temperature and 120°F/49°C ambient temperature except for the Mini Diaphragm Valves which are rated for 180°F/82°C fluid and 120°F/49°C ambient. 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 valves, reference number available upon request).

Construction

DEMA solenoid valves are constructed to ensure 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 stages of manufacturing 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, or body housing colors.

, g	LEADS		MOLDED SPADE
12 VDC/24 VDC	Black	12 VDC/24 VDC	Black
24/50-60 AC	Orange	24/60 VAC	Blue
120/50-60 AC	Blue	120/60 VAC	Green
208-240/50-60 AC	Red	240/60 VAC	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.

NORMALLY CLOSED

Direct Acting Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and non

explosive 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.

PIPE SIZE: 1/4" NPT

MOPD: Max 150 PSI Min 0 PSI

BENEFITS: Requires 0 PSI to open/close the valve because

of operation

Valves rated 200F/93C fluid, 120F/49C ambient * For Repair Kits see page 23







4925 (with Din) 303 SS

Model No.	Body	Seal	Orifice	CV
401P	Brass	Buna N	7/64	0.27
4925-8	303 SS	*Buna N	1/8	0.27
492SM-8	303 SS	*Buna N	1/8	0.27

- * Available with EPDM and Viton
- ** Metering Screw available to adjust flow through valve

Pilot-Piston Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and

nonexplosive 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

BODY: Brass **SEAL:** Teflon

MOPD: Max 150 PSI Min 3 PSI

BENEFITS: High durability, Industrial construction

Valves rated 200F/93C fluid, 120F/49C ambient * For Repair Kits see page 23



412/A413P



A416P



A414P



A418P

Model No.	Pipe Size	Orifice	CV
*412P	3/8 N.P.T.	9/32	1.2
A413P	3/8 N.P.T.	5/16	2.0
*A414P	1/2 N.P.T.	7/16	3.1
*A416P	3/4 N.P.T.	19/32	5.0
*A418P	1 N.P.T.	3/4	8.0

^{*} High Pressure valves available up to 450 PSI MOPD

NORMALLY CLOSED

Diaphragm Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and nonexplosive 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

MOPD: Max 150 PSI Min 1 PSI

BENEFITS: Forgiving with contaminents in water **SEAL:** BUNA Standard, Teflon available on most models

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



473P



476P



474P



476PS

Model No.	Pipe Size	Orifice	CV
473P	3/8 N.P.T.	9/16	3.5
474P	1/2 N.P.T.	9/16	4.0
476P	3/4 N.P.T.	3/4	5.0
476PS	3/4 N.P.T.	3/4	5.0
478PS	1" N.P.T	1"	13.0

High Pressure Valves Up to 1200 psi

NORMALLY CLOSED

APPLICATION: Water

All valves have stainless steel pistons and seats.

(S) designates stainless steel sleeve

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.

BODY: Brass **SEAL:** Teflon

MOPD: Max 1200 PSI Min 10 PSI

BENEFITS: Industrial design and stainless steel pistons

make for a workhorse valve.

Valves rated 200F/93C fluid, 120F/49C ambient For Valve Reference and Repair Kits see page 22



453P



454P



458P

Model No.	Pipe Size	Orifice	CV
453P	3/8 N.P.T.	11/32	1.8
453S	3/8 N.P.T.	11/32	1.8
454P	1/2 N.P.T.	1/2	3.7
458P	1 N.P.T.	15/16	11.1
458PS	1 N.P.T.	15/16	11.1

Mini Diaphragm Valves



NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive & nonexplosive liquids. 60 mesh stainless steel filter on series 442 and 443, rated for 180°F/82°C fluid and 120°F/49°C ambient.

SEAL: Available with EPDM (Std), Viton **PRESSURE:** Max 125 PSI Min 3 PSI

BENEFITS: Mini diaphragm valve is cost competitive and not sensitive to contaminents in water.



442P, 443P



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



464PSJ NSF Std. 61, C-2 Approved



P462, P463NSF Std. 61, C-2 Approved



463PS, 464PS 303SS NSF Std. 61, C-2 Approved



443PFB Flow Disc, *Optional disc available

Model No.	Body	Pipe Size	Orifice
442/443P	Brass	1/4 & 3/8 N.P.T.	1/4
P442/P443	Celcon	1/4 & 3/8 N.P.T.	1/4
PP442 /3	Polypropylene	1/4 & 3/8 N.P.T.	1/4
P462/3	Celcon	1/4 & 3/8 N.P.T.	1/4
463PS/464PS	303 SS	3/8 & 1/2 N.P.T.	3/8
463PSJ/ 464PSJ	303 SS	3/8 & 1/2 N.P.T.	3/8

Special Purpose Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and nonexplosive liquids.

BODY: PVC

SEAL: EPDM (Std), Viton Standard 466P



466P Glass Filled Nylon



481-2 200 PSI maximum pressure Injector mounted, dual inlet used with corrosive liquids. Can be mounted on all B and C series injectors.



481P*
Direct acting diaphragm used on vacuum lines with corrosive liquids.



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.	Max/Min Pressure	Orifice	CV
481P*	vacuum	5/32	0.27
481-2	vacuum	5/32	0.27
482-2	vacuum	5/32	0.2
466P	150 psi / 3 psi	3/4	10.0

For Valve Reference and Repair Kits see page 22

MANIFOLD VALVES

Direct Acting Single Station and Manifold Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and nonexplosive liquids.

PIPE SIZE: 1/4" NPT

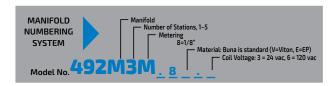
SEAL: Buna standard, EPDM & Viton available

303 Stainless steel single station round body valve

Metering screw available on 1/4"(NPT model).

Model No.	No. Sta.	Orifice	CV Flow-Factor
Less Metering		*	
4925-8	1	1/8	0.27
With Metering			
492SM-8-3	1	1/8	0.27
492SM-8-6	1	1/8	0.27

^{*} available with Viton and EPDM



Manifold Valves Brass

Stainless steel valves mounted on a solid brass manifold block.

Common inlet port for "fluid supply to all valves on both ends. Metering screw available."

Model No.	No. Sta.	Seal	Orifice	CV
Less Metering		**		
492M1-8*	1	Buna N	1/8	0.27
492M2-8*	2	Buna N	1/8	0.27
492M3-8*	3	Buna N	1/8	0.27
492M4-8*	4	Buna N	1/8	0.27
492M5-8*	5	Buna N	1/8	0.27
*All ctyloc available	o with motorin	ıα **Δvəiləhle wit	h Viton & FDDM	

Stainless Steel

303 Stainless steel block. Common inlet port for chemical supply to all valves on both ends.

Model No. Less Metering	# Sta.	Seal **	Orifice	CV
492MSS2-8-3*	2	Buna N	1/8	0.27
492MSS3-8-3*	3	Buna N	1/8	0.27
492MSS4-8-3*	4	Buna N	1/8	0.27
492MSS5-8-3*	5	Buna N	1/8	0.27
*All styles available	with meteri	ng **Availahle w	ith Viton & FPDM	

Diaphragm Manifold Valves

NORMALLY CLOSED

APPLICATION: Water, air, light oil, noncorrosive and nonexplosive liquids.

PIPE SIZE: 1/2" NPT inlets (2 per valve), 3/8" NPT Outlet

SEAL: Viton standard, EPDM available

COIL: DIN Coil standard, SPADE, Leaded Coil available

Model No.	# Sta.	Seal	Orifice	CV
464M3	3	EPDM	3/8	2.0
464M4	4	EPDM	3/8	2.0
464M5	5	EPDM	3/8	2.0

For Valve Reference and Repair Kits see page 22



4925 Single Station



492M1M One Station



492MSS3 Three Station



492MSS4M Four Station



492M5M Five Station



464M Five Station

NORMALLY OPEN

Normally Open Diaphragm Valves

APPLICATION: Water, air, light oil, noncorrosive & nonexplosive liquids.

BODY: Brass **SEAL:** Buna

MOPD: Max 150 PSI Min 1 PSI Valves rated 200F/93C fluid, 120F/49C ambient



0473P



0474P



0476P Shown with Din

Model No.	Pipe Size	Orifice	CV
0473P	3/8 N.P.T.	9/16	3.5
0474P	1/2 N.P.T.	9/16	4.0
0476P	3/4 N.P.T.	3/4	5.0

^{*}Teflon Available

OPP442/OPP443



OP442/OP443

Normally Open High Pressure Valves Up to 1000 psi

APPLICATION: Water, air, light oil, noncorrosive & nonexplosive liquids. (S) designates stainless steel piston

BODY: Brass **SEAL:** Teflon

MOPD: Max 1000 PSI Min 10 PSI



0453P

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

Model No.	Pipe Size	Orifice	CV
0453P	3/8 N.P.T.	11/32	1.8
04535	3/8 N.P.T.	11/32	1.8

Normally Open Mini Diaphragm Valves

APPLICATION: Water, air, light oil, noncorrosive &

nonexplosive liquids.

SEAL: EPDM, Viton available

PIPESIZE: 1/4" NPT, 3/8" NPT, 1/2" NPT PRESSURE: Max 125 PSI Min 3 PSI

- Ideal for weep systems
- 442 and 443 series valves rated for 180°F/82°C fluid

and 120°F/49°C ambient.



0442P/0443P

0463PS/ 0464PS

Model No.	Body	Orifice	CV	
OP442/ OP443	Celcon	1/4	1	
0442P/ 0443P	Brass	1/4	1	
OPP442	Polypropylene	1/4	1	
OPP443	Polypropylene	1/4	1	
0463PS/0464PS	303 SS	3/8	2	
0412P	Brass	9/32	1.2	
0A414P	Brass	7/16	3.1	

SOLENOID COILS

Coil Options

Coils rated NEMA 1, Conduit and Din Coils NEMA 4



Din #1 & #2 Coils



Junction Box #1 & #2 Coils Only



Conduit #1 & #2 Coils Only



Spade #1 Coils Only



Molded Spade #5 & #7 Coils Only *Available on: 442 & 443 Series P462, P463, P404J, 463PS 476PS, 464PS, 463PSJ, 464PSJ, 491S, 492S, 492SM, 491M's, and 492M's Series



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

Flying lead coil

#5 & #7 Coils Only

Coil Designation	Voltage	Housing Color*	Lead Wire**
2	12VDC	Black	Black
4	24 VDC	Black	Black
3	24VAC	Blue	Orange
6	120VAC	Green	Blue
9	240VAC	Red	Red

*For #5 & #7 Valves **For Coil #1 & #2

Connection Options



59-98 NEMA 4 Wiring Connector for #5 & #7 Spade Coils 18"Leads *Other lengths available on request



connector 41-77-100110 Additional connectors with alternate size and wiring available by special order

Din Female



Din Wired 24"
Female connector
41-77-100110-24-US
Additional wiring lengths available by special order.

For More Information On Coils See Page 23

Y TYPE STRAINERS

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

*Add .40 for 40 Mesh Add .80 for 80 Mesh

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 (420 microns) or 80 mesh (177 microns) stainless steel wire screens available



 $S2B \ \mathsf{Forged} \ \mathsf{Brass}$



 ${\sf S6B}\,\,{\sf Forged}\,\,{\sf Brass}$



S10B Cast Bronze

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 (150 microns) stainless steel screen
- FDA approved: All materials have FDA approval for use in food and beverage preparation equipment



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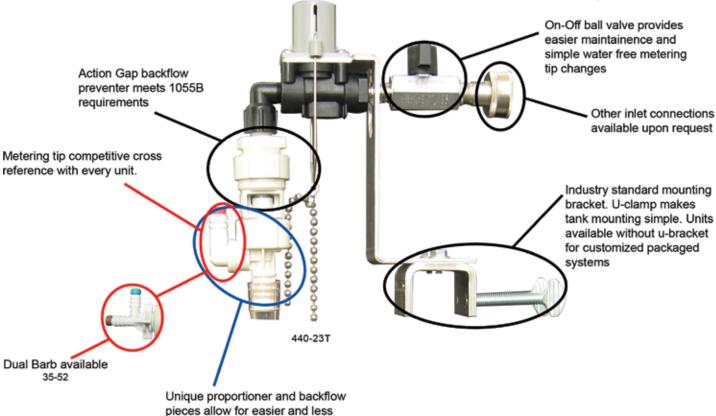
S3P

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.





Chemical Proportioning

costly replacement and repair

Model No.	Seal	Pressure	Description	Flow Rate	Max. Induction	Min. Induction
440-23BT*	EPDM	Max 150 psi Min 15 psi.	float valve w/ small barb and tip	4 GPM at 50 psi	7:1	387:1
440-23T*	EPDM	Max 150 psi Min 15 psi	float valve w/ large barb and tip	4 GPM at 50 psi	4:1	430:1
440-22T*	EPDM	Max 150 psi Min 15 psi	Std. Hose. float valve w/large barb & tip, no backflow preventer	4 GPM at 50 psi	4:1	430:1
440-24*	EPDM	Max 150 psi Min 15 psi	Std. Hose. float valve, high induction, medium flow	2.5 GPM at 50 psi	2:1	145:1
437P-21*	Buna N	Max 150 psi Min 15 psi	3/4" N.P.T. float valve high flow, induction	22 GPM at 50 psi	10:1	512:1

^{*} Add "X" to part number for units without U-Bracket for OEM mounting.

Water Fill Valve Systems

Model No.	Connection	Description	Flow Rate
440N	Garden Hose	low flow water fill	6.0
437PN	3/4" NPT	high flow water fill	64.0



437PN



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 (diffuser) 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 12)

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 24 and 25.

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 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 (see below).

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.

INJECTORS

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 24).

Model No.	Pipe Size	Max Inj	Flow at 300 PSI
200.3	1/8 NPT	3oz/min	.3776 GPM
200C	1/8 NPT	5oz/min	.76-1.5 GPM
201C	1/8 NPT	7oz/min	1.5-2.9 GPM
202C	1/4 NPT	11oz/min	2.9-6.0 GPM
203C	3/8 NPT	21oz/min	6.0-12 GPM
204C	1/2 NPT	30oz/min	12-24 GPM
206C	3/4 NPT	55oz/min	24-47 GPM
208C	1 NPT	60 oz/min	47-94 GPM





100-15KU

100-15K

100-15K Tip kit 100-15KU Ultra lean tip kit 44-61P Capillary metering tip for lean dilutions

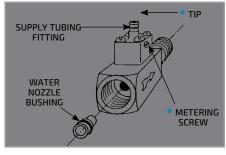


Figure No. 1

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

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.

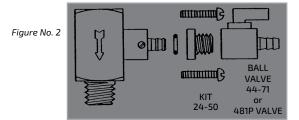


Figure No. 3

- 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)

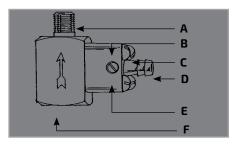


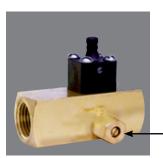
Figure No. 3

*For More Information See page 24

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
- 23-32ST 3/8" SS Barb
- 24-32ST 1/4" SS Barb



Water flow adjusting screw

204B

Model No.	Pipe Size	Variant	Flow
202B	1/4 N.P.T.	8oz/min	.73-5.7
203B	3/8 N.P.T.	16oz/min	1.4-11
204B	1/4 N.P.T.	30oz/min	5.7 19
206B	3/8 N.P.T.	42oz/min	11–39



All stainless steel version of the 204B available with metering tips.

204BS-2 303 SS (same flow as 204B)

All stainless steel version of the 203B available with metering tips.



203BS-2 303 SS (same flow as 203B)

Special Injectors for Corrosive Applications



A low cost chemical resistant unit. Seals can be customized to chemical being used in unit.

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

Rocket Injectors 210 Series Injectors

- Stainless Steel Body
- Polypropelene Injection Molded
- 316 SS Removable nozzle threaded into body
- · Removable chemical barb
- Color coded chemical barb to orifice size in nozzle
- · Dual barb available for multi-chemical injection





For More Information See Page 25

MixRite Water Powered Proportioning Pump

Accurate Dispensing; ±5%

 Uses only 20% of pressure to drive the pump

No electricity required

 Low maintenance and easy to adjust Optional chemical shut-off (Models 571, 573, 1410M, 577, 579)

Chemically resistant polypropylene 12 and fiberglass construction

Larger check valve with Hastelloy

spring and Viton Extreme seals for more

Viton foot valve with ceramic weight

Easily replaceable lip seals

Viton O-Rings

viscous products

3/8" I.D. pickup tube

SPECIFICATIONS:

- Available with or without control valve that allows the shutoff of chemical while water is still flowing through the unit
- Injection rate from .1% to 10%
- Injection ratios from 1:1000 to 1:10
- Flows from .9 gpm to 14 gpm
- Water pressure from 2.9 psi to 120 psi
- Chemical resistant construction
- Incudes 7 ft. inlet tubing and strainer
- Dimensions are 19 1/2" high, 7" wide
- 3/4" Hose barbs with swivel for easy installation included, or attach a
 3/4" garden hose







14.CW.05

579IN

MixRite Models to meet your applications

FLOW RANGE .5-14 GPM (1.89-41.6 LPM)

OPERATING TEMP. 39F-122 F (4C-50 C) Note: Models 577 and 579 39F-104 F (4C-40C)

571

PRESSURE RANGE: 3-120 PSI

		_	_	
MODEL	INDUCTION			OPTIONS
500 Series	Ratio	Percent	Oz/GAL	
569	1000:1 to 111:1	.1% to .9%	.13 to 1.5	CW/CL PVDF
570	500:1 to 50:1	.2% to 2%	.25 to 2.5	CW/CL PVDF
571	500:1 to 50:1	.2% to 2%	.25 to 2.5	Chemical On/Off
572	250:1 to 25:1	.4% to 4%	.51 to 5.0	CW/CL PVDF
573	250:1 to 25:1	.4% to 4%	.51 to 5.0	Chemical On/Off
BYPASS				
577IN	500:1 to 50:1	.2% to 2%	.25 to 2.5	Chemical On/Off
579IN	250:1 to 25:1	.4% to 4%	.51 to 5.0	Chemical On/Off
14 Series				
14.CW.05	100:1 to 20:1	1% to 5%	1.28 to 6.4	
1410A/1410M	100:1 to 10:1	1% to 10%	1.28 to 12.8	
1402A/1402M	500:1 to 50:1	.2% to 2%	.25 to 2.5	

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"x 3/8" barb adapter



50-41-1 Strainer

3/4"NPT Strainer with 80 micron filter cleans up any installation and improves water quality and length of service for MixRite.

50-42

Replacement Mesh



294DC.DS

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



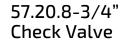
50-42-1

Tee adapter to induct two chemicals simultaneously.



57-UFR - Low Flow Booster

Works with any 500 Series MixRite to take low flows) less than .9GPM) and allows unit to work in conditions without electricity.



Check Valve helps limit backflow situations if unit is being used to pump the mixture a distance.





14 Series Units

Hastelloy Springs Aflas Seals Robust Design 14 GPM Capacity

Easy To Read Chemical Adjustment

For Repair Kit Information See Page 25

DISPENSING EQUIPMENT

633 Blend Centers





633GAP-B1

3 MODEL 633GAP UNITS SHOWN COUPLED TOGETHER

Blend Center's modular design lets you easily couple together any number of stations to create any system to meet your needs. Mix and match bottle and bucket fill and choose from blue, red, green, yellow, black, or white buttons. Models listed include Action Gap backflow. Use AG instead of GAP for air gap.

Model 633GAP-1

Action Gap backflow with 1 gpm (4 liters/minute) proportioner

Model 633GAP-4

Action Gap backflow with 4 gpm (16 liters/minute) proportioner

681 Blend Centers

681 units are stainless steel and plastic cover dispensers. Models listed below include 4 gpm (16 liters/minute) proportioners but can be ordered with any combination of high/low flow.





681GAP-3P

681GAP-2

Station	Model No.	Cover Material
1	681GAP-1	Stainless Steel
2	681GAP-2	Stainless Steel
2	681GAP-2P	Plastic
3	681GAP-3	Stainless Steel
3	681GAP-3P	Plastic
4	681GAP-4	Stainless Steel
5	681GAP-5	Stainless Steel

High Flow Fill Station

Model 607-3 High Flow Dispenser fills Auto Scrubbers and other large reservoirs at 10 gallons per minute (40 liters per minute) to reduce fill time.



607-3

- •10 gpm flow rate at 40 psi (3/4" or larger water supply required)
- Vacuum breaker installed
- •10 feet discharge hose
- Metering tips determine dilution ratio
- Stainless steel cover offers durability and industrial appearance
- •PVC proportioner allows dual chemical injection

DEMA One



For products that can't use closed loop inserts, DEMA has developed an open feed portable dispenser designed for multiple product use. Based off the major design features of SafeLink One, the DEMA One incorporates those into an offering with a dip tube attachment. Sized for 38mm neck openings and will work with ½ gallon (2L), 1 gallon (4L), 2.5 gallon (5L) bottles and available for custom sized bottles as well, as required.

Dispensers

Single Flow/Dilution	Model No.
Low Flow	DM15.1
High Flow	DM15.3
Basic Spray	DM1SS.1
Premium Spray	DM1SS.2
Multi Flow/Dilution	
High Flow	DM1D.1
Basic Spray w/Rinse	DM1D.2
Premium Spray w/Rinse	DM1DS.4

302 Series Hand Pump

Designed to pump 1 or 2 ounces (30 or 60 milliliters) of detergent, sanitizer, or other chemical into kitchen sink, bottle, dry cleaning machine, or any open container where chemical is mixed with water. Each push delivers 1 or 2 ounces with the pump automatically maintaining its prime for future use.





302-1E

302-2S-SP

Features and Benefits

- 1 or 2 ounce pumps available (30 or 60 milliliters)
- Polypropylene body and polyethylene bellows for chemical resistance
- Epdm, silicone, or viton seals available on check valves
- · Chemical does not come in contact with spring
- · Mounts on any vertical or horizontal surface
- Optional spout available (part number 30-81-1)

MODEL No.	FLOW	CHECK VALVE SEAL
302-1E	1 ounce (30 ml)	EPDM
302-15	1 ounce	Silicone
302-1V	1 ounce	Viton
302-2E	2 ounce (60 ml)	EPDM
302-25	2 ounce	Silicone
302-2V	2 ounce	Viton

Drum Mount Dispensers

Model 161 and 162 Series drum mount dispensers mount to any 2 1/2" bung opening to dispense chemical solution directly from the drum or tote at the correct dilution. Various models are available to meet standard and high induction applications.

Model 162 Standard model dispenses 5 gpm (20 liters per minute) with maximum induction of 5-1, metering screw adjustment.

Model 162-3 Standard model dispenses 5 gpm with a maximum induction of 5-1, metering tip adjustment.

Model 161 High induction model dispenses 5 gpm with a maximum induction of 1.5-1, brass construction with metering screw adjustment.

Model 162HC High induction model dispenses 1/2 gallon per minute (2 liters per minute) with a maximum induction of more than 1-1 ratio. Ideal dispenser for applications such as antifreeze mixing where more product than water is required.

Model 162HDM-2 High Flow Drum Mount Proportioner mounts directly to a 2 1/2" bung opening on a drum or tote and dispenses at 10 gallons per minute (40 liters per minute). Draws up to 12 ounces per gallon chemical solution and discharge hose can be up to 25 feet (8 meters) long. Shutoff valve (DEMA #90-15) can be put at end of hose for on/off control and uses metering tips to determine dilution ratio.





162HDM-2

162HC



FOAM EQUIPMENT

Compressed Air Foamers

Model 294D

PVC Compressed Air Foamer body with air inlet port, air adjustment gauge, water inlet connection and tubing for chemical supply. Simply hook up compressed air and water and adjust to produce desired foam. Metering tips determine correct chemical dilution. Minimum recommended air and water pressure with 25 feet of hose is 40 psi.





294D

294DC

Model 294DC

Designed for applications that require a compressed air foamer enclosed in a Stainless Steel housing and ball valves for on/off control of water and air. Air pressure guage is seen through front cover and easily adjusted while the unit is mounted. Metering tips determine the correct chemical dilution.

Model 93-18

PVC Foam wand used with all DEMA compressed air foamers. Includes water inlet coupling, ball valve for on/off control nozzle. Foam throw varies based on water and air pressure mixture. Average throw is 25 feet (8 meters).



93-18

Foam Accessories



28-1QD & 292GQD

Spray Gun and Foam Wand set (order items separately)



40-14QD/292QD

Spray Gun and Foam Wand



44-3N-25 25 Feet (8 meters) nylon braided outlet hose

44-3 25 Feet (8 meters) black outlet hose

44 3RG (shown)

25 Feet (8 meters) red outlet hose



44-3N-6

6 feet (2 meters) nylon braided water supply hose

44-3-6 (shown)

6 feet (2 meters) black water supply hose

44-45

Stainless Steel hose bracket



900 WALL

900 Wall Mounted Foaming Dispenser The 900-WALL operates with a pre-mix solution of foaming chemical and water. The unit produces 30 gallons of foam per minute and covers 5-10 cubic feet per minute at 40-80 PSI with up to 35 feet of foam distance.



900 2LHH

The 900 2LHH is a small 2 liter handheld foamer. This is great for spot cleaning and foaming in small applications. This unit could be used in detail shops, for tire cleaning, in food and beverage sanitation, or any use where spray and foaming is needed.



900-2PU

Pump Up Foaming Dispenser
The 900-2PU pump-up foamer
technology provides spot cleaning
and sanitation solutions for the
industrial and institutional markets.
Draws the chemical and air from the
tank creating thick foam when mixed
at the trigger operated foam wand.



900 DS4

Doorway Foaming Sanitizer System. The 900-DS4 Doorway sanitizer foaming system allows the control box to be mounted up to 150 feet away from the spray tip assembly. The new foam enhancing nozzle is constructed of Stainless Steel and produces large amounts of foam. This allows for shorter run times and a larger foam coverage area. The 900-DS4 can operate up to three nozzle assemblies simultaneously.

CUSTOM SOLUTIONS

At DEMA, Custom Solutions come in an array of packages. We have a full engineering staff to meet all the needs of our customers. We think there are several advantages to partnering with us to find a solution that meets our customers' needs.

We are Collaborators.

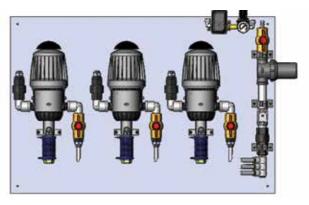
We partner with our customers in a variety of ways to effectively promote their brand they have been building. We take the utmost care to provide quality custom solutions to our partners to help them speed up manufacturing, time to market, and produce quality products their customer's need to have. Our marketing staff effectively helps our customers capitalize on the opportunity to enhance their brand and differentiate themselves from their competition.

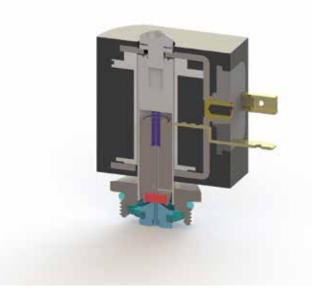
We are Manufacturers.

All of our manufacturing is done here in Saint Louis, Missouri. We have a full machine shop to support our design work as we go through iterations of designs to test for life cycle, form, fit, and function. We can easily customize a unit with our manufacturing group from changing a pack out to changing a diaphragm. Customization at this level means that we have the most flexible operations for our customers to be able to get the exact product they need at exactly the moment they need it.

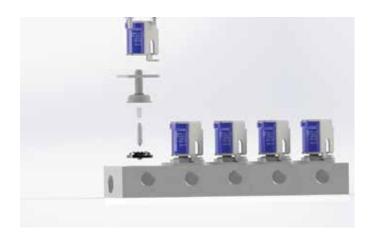
We are Designers.

We utilize the deep industry knowledge of our sales staff, engineering team, and customers to come up with innovative designs. We continually look for ways to improve upon our products and we are set up to quickly turnaround any design we have in house. We can easily start from scratch on a new design for our customer's specific needs in any application or tailor an existing design to meet different applications' needs.











Definitions

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

CV (Flow Factor)

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

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

GPM =

CV Flow Factor=

Pressure Drop (PSIG)=

Gravity PSI = Centipoise (CPS), Viscosity of fluid

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

(CV flow factor) X pressure drop across valve

(GPM) : pressure drop (PSIG)

.432 x héight (in feet)

1 Water

75 10 weight oil 200 30 weight oil 500 Honey

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

METRIC CONVERSIONS:

To go from	Multiply by	To get	To go from	Multiply by	To get
Gallons	3.785	Liters	Liters	0.2642	Gallons
Ounces	29.57	Milliliters	Milliliter	.034	Ounces
PSI	0.068	Bar	Bar	14.5	PSI
Inches	25.4	Millimeters	Millimeters	0.0394	Inches
Fahrenheit	5/9(F-32)	Celsius	Celsius	9/5C+32	Fahrenheit

REFERENCE MATERIAL

Solenoid Valve Information

Valve		1	Pressure	Differentia	al				Pipe		GPM @ 60 psi		
Model Number	Action	max psi	min psi	max bar	min bar	Body Material	Orifico Inch		Size N.P.T.	CV Flow Factor #	(cv # x sq. root psi)	Liters/M@ 4.08 bar	Page Number
Standard D)utv												
401P	Direct	150	0	10.2	0	BRASS	7/64	.109	1/4	0.27	2.09	7.92	3
412P	Pilot-Piston	150	1	10.2	0.068	BRASS	9/32	.281	3/8	1.20	9.30	35.20	3
A413P	Pilot-Piston	150	3	10.2	0.204	BRASS	5/16	.313	3/8	2.00	15.50	58.67	3
A414P	Pilot-Piston	150	3	10.2	0.204	BRASS	7/16	.438	1/2	3.10	24.03	90.93	3
A416P	Pilot-Piston	150	3	10.2	0.204	BRASS	19/32	.593	3/4	5.00	38.75	146.67	3
A418P	Pilot-Piston	150	3	10.2	0.204	BRASS	3/4	.750	1	8.00	62.00	234.67	3
	s Normally Closed	125			0.207	22.455	1//	250		1.00	7.75	20.22	
442P	Diaphragm	125	3	8.5	0.204	BRASS	1/4	.250	1/4	1.00	7.75	29.33	5
443P P442	Diaphragm	125 125	3	8.5	0.204	BRASS	1/4 1/4	.250 .250	3/8	1.00 1.00	7.75	29.33 29.33	5
P442 P443	Diaphragm	125	3	8.5 8.5	0.204	CELCON CELCON	1/4	.250	1/4 3/8	1.00	7.75 7.75	29.33	5 5
P443 P462	Diaphragm							.250				29.33	
P463	Diaphragm Diaphragm	125 125	3	8.5 8.5	0.204 0.204	CELCON CELCON	1/4 1/4	.250	1/4 3/8	1.00 1.00	7.75 7.75	29.33	5 5
Mini Valves 0P442	s Normally Open Diaphragm	125	3	8.5	0.204	CELCON	1/4	.250	1/4	1.00	7.75	29.33	7
OP442	Diaphragm	125	3	8.5	0.204	CELCON	1/4	.250	3/8	1.00	7.75	29.33	7
0442P	Diaphragm	125	3	8.5	0.204	BRASS	1/4	.250	1/4	1.00	7.75	29.33	7
0442P	Diaphragm	125	3	8.5	0.204	BRASS	1/4	.250	3/8	1.00	7.75	29.33	7
OPP442	Diaphragm	125	3	8.5	0.204	GLASS FILED POLY	1/4	.250	1/4	1.00	7.75	29.33	7
OPP443	Diaphragm	125	3	8.5	0.204	GLASS FILED POLY	1/4	.250	3/8	1.00	7.75	29.33	7
	Valves Normally C												
463PS	Diaphragm	150	3	10.2	0.204	303 SS	3/8	.375	3/8	2.00	15.50	58.67	5
464PS	Diaphragm	150	3	10.2	0.204	303 SS	3/8	.375	1/2	2.00	15.50	58.67	5
466P	Diaphragm	150	3	10.2		GLASS FILLED NYLON	3/4	.750	3/4	10.00	77.50	293.34	5
473P	Diaphragm	150	1	10.2	0.068	BRASS	9/16	.563	3/8	3.50	27.13	102.67	4
474P	Diaphragm	150	1	10.2	0.068	BRASS	9/16	.563	1/2	4.00	31.00	117.34	4
476P	Diaphragm	150	1	10.2	0.068	BRASS	3/4	.750	3/4	5.00	38.75	146.67	4
476PS 478PS	Diaphragm	150 150	1	10.2 10.2	0.068	303 SS 303 SS	3/4 1	.750 1	3/4 1	5.00 13.00	38.75 100.70	146.67 381.K	4
	Diaphragm		'	10.2	0.003	202 23	'	'	'	13.00	100.70	אווטכ	4
Diaphragm 0463PS	Valves Normally 0 Diaphragm)pen 150	3	10.2	0.204	303 SS	3/8	.375	3/8	2.00	15.50	58.67	7
0464PS	Diaphragm	150	3	10.2	0.204	303 SS	3/8	.375	1/2	2.00	15.50	58.67	7
0473P	Diaphragm	150	1	10.2	0.068	BRASS	9/16	.563	3/8	3.50	27.13	102.67	7
0474P	Diaphragm	150	1	10.2	0.068	BRASS	9/16	.563	1/2	4.00	31.00	117.34	7
0476P	Diaphragm	150	1	10.2	0.068	BRASS	3/4	.750	3/4	5.00	38.75	146.67	7
Corrosive L	inuids												
481P	Direct-Dia.	vac				PVC	5/32	.172	1/8	0.27	2.09	7.92	5
481-2	Direct-Dia. "injector, dual ir	vac				PVC	5/32	.172		0.27	2.09	7.92	5
482-2	Direct-Dia.	vac				PVC	5/32	.172	1/4	0.27	2.09	7.92	5
402 Z	adjustable	vac				1 00	3/32	.172	17 4	0.27	2.03	1.52	
	y, Single Station Va				_								
4925xxx	Direct	150	0	10.2	0	303 SS	1/8	.125	1/4	0.27	2.09	7.92	3
Manifold V		150		10.2		DDACC DLOCK /	1/0	175	1/0	0.27	2.00	7.02	- 6
491Mxxx	Direct	150	0	10.2		BRASS BLOCK /	1/8	.125	1/8	0.27	2.09	7.92	6
492Mxxx	Direct	150	0	10.2	0	SS SEATS	1/8	.125	1/4	0.27	2.09	7.92	6
492MSSxx) 464M	x Direct Diaphragm	150 150	0 3	10.2 10.2	.204	303 SS 303 SS	1/8 3/8	.125 .375	1/4 1/2	0.27 2.00	2.09 15.50	7.92 58.67	6 6
			,		0 .	202 22	2, 0	.5,5	., -		.5.50	23.07	J
453P*	ure Normally Close Pilot-Piston	a 1200	10	81.6	0.68	BRASS	7/20	.350	3/8	1.80	13.95	52.80	4
4535***	Pilot-Piston	1200		81.6	0.68	BRASS	7/20	.350	3/8	1.80	13.95	52.80	4
4535*** 454P**	Pilot-Piston Pilot-Piston												
454P** 458P**		1200		81.6	0.68	BRASS	1/2	.500	1/2	3.70	28.68	108.53	4
458PS***	Pilot-Piston Pilot-Piston	1200 1200		81.6 81.6	0.68 0.68	BRASS BRASS	15/16 15/16	.939 .939	1	11.10 11.10	86.03 86.03	325.60 325.60	4
			10	01.0	0.00	DIVIJJ	13/10	.555		11.10	00.03	323.00	
High Pressi 0453P**	ure Normally Open Norm-Open	1000	10	68	0.68	BRASS	7/20	.350	3/8	1.80	13.95	52.80	7
04535***	Norm-Open	1000		68	0.68	BRASS	7/20	.350	3/8	1.80	13.95	52.80	7
	non open	1000			0.00	5.0.55	., 20	.550	3, 0			32.00	,

^{*} 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.

Electrical Specifications

	AC AMPERES INRUSH AMPERES HOLDING								DC		
Coil No.	Watts	Volts	50Hz	60Hz	50Hz	60Hz	Watts	Volts	Amps		
Coil No. 1 Used On	10	24	1.8	1.5	1.0	.75	15	12	1.25		
401P, 473P, 474P,		120	.38	.33	.21			24	0.625		
476P, 0473P, 0474P,		208	.16	.14	.12	.09					
0476P, 481P, 482-2,		240	.19	.16	.10	.07					
466P											
Coil No. 2 Used On	15	24	3.7	3.0	1.6	1.2	18	12	1.5		
411P, 412P, A413P,		120	.73	.60	.33	.24		24	0.75		
A414P, A416P, A418P,		208	.41	.35	.19	.14					
453P, 454P, 458P,		240	.36	.30	.16	.12					
458PS, 0453P, 0453S											
Coil No. 5 Used On	10	24	na	.67	na	.48	10	12	0.83		
442P, 443P, P442,		120	na	.15	na	.102		24	0.42		
P443, P462, P463,		240	na	.075	na	.05					
463PS, 464PS, 463PS-											
D, 464PS-D, 463PSJ, 464PSJ, P404J											
Coil No. 7 Used On											
491M, 492M, 491S,	10	24	na	.67	na	.48	13	24	.54		
492S, 492SM, 476PS		120	na	.15	na	.102					

^{*}Valves listed for which Coil # used

Valve Repair Kits

			Closing	Plunger		Valve	Piston	Backup	Piston I	Diaphragi		Enclosing
Model	Kit P/N	0-Ring	Spring	Spring	Plunger	Seat	Ring	Spring	Assembly		Operator	Assembl
401P	41-24	Υ		Υ	Υ	Υ						
412P	41-26	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
A413P	41-27	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
A414P	41-28	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
A416P	41-29	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
A418P	41-30	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
442P & 443P	61-78		Υ		Υ					Υ		
P442 & P443	61-78		Υ		Υ					Υ		
P462 & P463	61-78		Υ		Υ					Υ		
463PS & 464PS	61-78		Υ		Υ					Υ		
OP442 & OP443	41-44-1									Υ		,
OPP442 & OPP443	3 41-44-1									Υ		Υ
0463PS & 0P464PS	41-44-1									Υ		Υ
453P & 453S	41-31	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
454P	41-32	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
458P	41-33	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
458PS	41-33-2	Υ	Υ	Υ	Υ		Υ	Υ	Υ			
0453P & 0453S	41-58	Υ	Υ				Υ	Υ	Υ		Υ	
473P & 474P	41-47	Υ		Υ	Υ					Υ		
0473P & 0474P	41-50	Υ	Υ							Υ	Υ	
0476P	41-50-1	Υ	Υ							Υ	Υ	
476P	41-49	Υ		Υ	Υ					Υ		
466P & 466PV		No Kit Num	oer, Order Indi	vidual Parts								
492M *49-	1-8 (1/8"Orifi	ice) Y		Υ	Υ	Υ			Υ			
*49-	1-6 (3/32"Ori	fice)Y		Υ	Υ	γ			Υ			
464M	61.78		Υ		Υ					Υ		
*No	te: Add su	ffix (Β) Βι	ına, (E) EP,	(V) Viton i	i.e. 49-1-8V							

REFERENCE MATERIAL

C Series Injector Selection Table

Total Spray Nozzle Flow - GPM

Pipi Martal Sirangs						Pump Disch	arge Pressure PSI	(Inlet)					Max.Injection OZ/MIN	N
Model SizeNPT	T Bushing	15	30	45	60	75	90	120	150	230	300	390	*Viscosity - CPS 1 75 220 50	500
200-3C and 1/3 200-3CT	02 8 03 04	.10 .12 .12 .16 .16 .20	.13 .16 .16 .21 .21 .26	.15 .19 .19 .24 .24 .30	.17 .21 .21 .28 .28 .34	.19 .22 .22 .27 .27 .39	.21 .26 .26 .33 .33 .41	.24 .30 .30 .38 .38 .47	.26 .33 .33 .42 .42 .52	.31 .37 .37 .45 .45 .65	.37 .44 .44 .53 .53 .76	.41 .49 .49 .59 .59 .85	3 0.5 0.3 0.).2
200C and 1/ 200CT	3	.20 .25 .25 .32 .32 .39	.26 .32 .32 .41 .41 .51	.30 .38 .38 .48 .48 .60	.34 .43 .43 .55 .55 .68	.39 .46 .46 .56 .56 .76	.41 .52 .52 .66 .66 .82	.47 .59 .59 .76 .76 .95	.52 .66 .66 .84 .84 1.0	.65 .77 .77 .92 .92 1.3	.76 .91 .91 1.1 1.1 1.5	.85 1.0 1.0 1.2 1.2 1.7	5 1.5 0.5 0.	0.3
201C and 1/ 201CT	8 5 6	.39 .49 .49 .63 .63 .79	.51 .64 .64 .82 .82 1.0	.60 .76 .76 .97 .97 1.2	.68 .86 .86 1.1 1.1 1.4	.76 .96 .96 1.2 1.2 1.5	.82 1.0 1.0 1.3 1.3 1.6	.95 1.2 1.2 1.5 1.5 1.9	1.0 1.3 1.3 1.7 1.7 2.1	1.3 1.6 1.6 1.9 1.9 2.5	1.5 1.9 1.9 2.3 2.3 2.9	1.7 2.1 2.1 2.5 2.5 3.3	7 4 2 1	1
202C and 1/ 202CT	9	.79 .98 .98 1.3 1.3 1.6	1.0 1.3 1.3 1.6 1.6 2.0	1.2 1.5 1.5 1.9 1.9 2.4	1.4 1.7 1.7 2.2 2.2 2.7	1.5 1.9 1.9 2.3 2.3 3.0	1.6 2.1 2.1 2.6 2.6 3.3	1.9 2.4 2.4 3.0 3.0 3.8	2.1 2.6 2.6 3.4 3.4 4.2	2.5 3.2 3.2 3.7 3.7 5.0	2.9 3.8 3.8 4.5 4.5 6.0	3.3 4.2 4.2 5.0 5.0 6.7	11 6 2.5 1.	1.3
203C and 3/ 203CT	10 '8 11 12	1.6 2.0 2.0 2.5 2.5 3.2	2.0 2.6 2.6 3.3 3.3 4.1	2.4 3.0 3.0 3.9 3.9 4.8	2.7 3.4 3.4 4.4 4.4 5.5	3.0 3.6 3.6 4.8 4.8 6.1	3.3 4.1 4.1 5.3 5.3 6.6	3.8 4.7 4.7 6.0 6.0 7.6	4.2 5.2 5.2 6.7 6.7 8.3	5.0 6.0 6.0 8.0 8.0 10	6.0 7.1 7.1 9.1 9.1 12	6.7 7.9 7.9 10 10 13	21 7 3 1.	1.3
204C and 1/ 204CT	13 2 14 15	3.2 3.9 3.9 5.1 5.1 6.3	4.1 5.1 5.1 6.6 6.6 8.2	4.8 6.0 6.0 7.7 7.7 9.7	5.5 7.6 7.6 8.8 8.8 11	6.1 8.2 8.2 9.6 9.6 13	6.6 8.3 8.3 11 11 13	7.6 9.4 9.4 12 12 15	8.3 10 10 14 14 17	10 14 14 16 16 21	12 15 15 18 18 24	13 17 17 20 20 27	30 8 3.5 1.	1.3
206C and 3/ 206CT	16 ′4 17 18	6.3 7.9 7.9 10 10 13	8.2 10 10 13 13 16	9.7 12 12 15 15 19	11 14 14 18 18 22	13 16 16 19 19 24	13 17 17 21 21 26	15 19 19 24 24 30	17 21 21 27 27 33	21 26 26 31 31 40	24 30 30 36 36 47	27 34 34 40 40 52	55 33 18 12	12
208C and 1 208CT	19 20 21	13 16 16 20 20 25	16 20 20 26 26 33	19 24 24 31 31 39	22 27 27 35 35 44	24 30 30 37 37 48	26 33 33 42 42 53	30 38 38 48 48 61	33 42 42 54 54 67	40 50 50 56 56 80	47 59 59 66 66 94	52 65 65 74 74 99	60 33 18 12	12
Outlet Pres	sure	10	20	30	40	50	60	80	100	150	200	250		

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

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:	Viscosi	ity - 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)	23-325 (with metering screw)							
Special	23-32T (with metering tips)	23-32ST (with metering tips)							

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

B Series Injector Information

Fluid									
Viscosity CPS	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		Operating	Range GPM	
Pressure PSI	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

MixRite Repair Kit Information

Model #	Percentage or ratio	CW - Aflas Chem. Seals, CL - Viton Seals, PVDF - Kynar Body, Viton Seals	00	0	● 40 ●0	Chemical Suction Cylinder	g8 g8	Includes Engine Assembly with lip seals, does not include connecting rod
569	.19% or 1000:1 -100:1	CW CL	57.K01.001	57.1VE	3600000145		36000000191	57.2B 57.2B.CL
		PVDF	57.K01.001P	57.1P				57.2B.P
1401A 1401M	.19% or 1000:1 -100:1	14 Series Aflas and Hastalloy	36300000015	36300000016		3630000017		36300000006 36300000019 LFR Engine
570	.3-2% or 500:1 - 50:1	CW CL	57.K02.005	57.3VE		57.10.7.2		57.2B 57.2B.CL
		PVDF	57.K02.005P	57.3P				57.2B.P
571	.3-2% or 500:1 - 50:1	CW CL	57.K02.005	57.3VE				57.2B 57.2B.CL
		PVDF	57.K02.005P	57.3P				57.2B.P
1402A 1402M	.3-2% or 500:1 - 50:1	14 Series Aflas and Hastalloy	36300000011	36300000014		3630000018		36300000006 36300000019 LFR Engine
572	.4-4% or 250:1 - 25:1	CW CL	57.K04.012	57.8VE		57.10.7.4		57.2B 57.2B.CL
		PVDF	57.K04.012P	57.8P				57.2B.P
573	.4-4% or 250:1 - 25:1	CW CL	57.K04.012	57.8VE				57.2B 57.2B.CL
		PVDF	57.K04.012P	57.8P				57.2B.P
14.CW.05 1405M	.5-5% or 200:1 - 20:1	14 Series Aflas and Hastalloy	36300000001	36300000003	36000000128	3630000005		36300000006 36300000019
1410A 1410M	1-10% or 100:1 - 10:1	14 Series Aflas and Hastalloy	36300000007	36300000008	36000000152	3600000178		LFR Engine



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