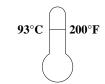
## **DEMA® MANIFOLD VALVE MODELS: 454M and 456M**INSTALLATION INSTRUCTIONS

#### 1. INSTALLATION:

The valves may be installed in any position other than with the coil down. Make sure fluid flows in the direction of the markings on the body indicating **IN** and **OUTLET**. Apply pipe dope to male threads, hand tighten, and then turn 1½ times with a wrench. **Note: Wiring must comply with Local and National Electrical Codes.** 

#### 2. FLUIDS:

Valves are intended for water, air, light oil, and other noncorrosive fluids. They should <u>not</u> be used for gasoline and other hazardous or explosive fluids. Maximum fluid temperature is 200° F (93.3°C). Ambient temperature shall not exceed 120°F (48.8°C).



#### WARNING: NOT FOR USE WITH HAZARDOUS OR CORROSIVE OR EXPLOSIVE FLUIDS.

#### 3. OPERATION:

When the solenoid coil is energized, the plunger is pulled up, thus opening the "port". This releases the pressure above the seat. When the coil is de-energized, the solenoid plunger is pushed down by the kick-off spring and closes the port.

#### 4. SPECIFICATIONS:

Maximum operating pressure differential: 1000 PSI

Safe working pressure: 1200 PSI

Flow factor (CV): 3.70

Maximum temperature: 180 degree fluid temp.

120 degree ambient temp.

Power: 18 Watts Volt-Amp rating:

Volts	Amps
12 DC	1.5
24 DC	0.7

#### **5. TROUBLE SHOOTING:**

#### A) Failure to open:

- 1) No power or low voltage.
- 2) Coil burnout (over voltage) or an open circuit to coil connections.
- 3) Dirt, scale or sludge may prevent the plunger from operating.
- 4) Pressure differential exceeds the MOPD rating of the valve.

#### B) Failure to close:

- 1) Coil still energized.
- 2) Pressure in the outlet or valve installed backward.
- 3) Dirt, deposits, on valve seat or enclosing tube, keeping plunger from closing.

#### C) Water Hammer:

Quick acting valves may cause water hammer when operated. If this occurs, it may be minimized by the use of a standpipe or other commercially available shock absorber installed near the valve inlet.

### **DEMA® MANIFOLD VALVE MODELS: 454M and 456M** INSTALLATION INSTRUCTIONS

CAUTION: WHEN SERVICING THE VALVE, BE SURE THAT REPLACEMENT PARTS HAVE BEEN INSTALLED ACCORDING TO THE DRAWING ON THE LAST PAGE.

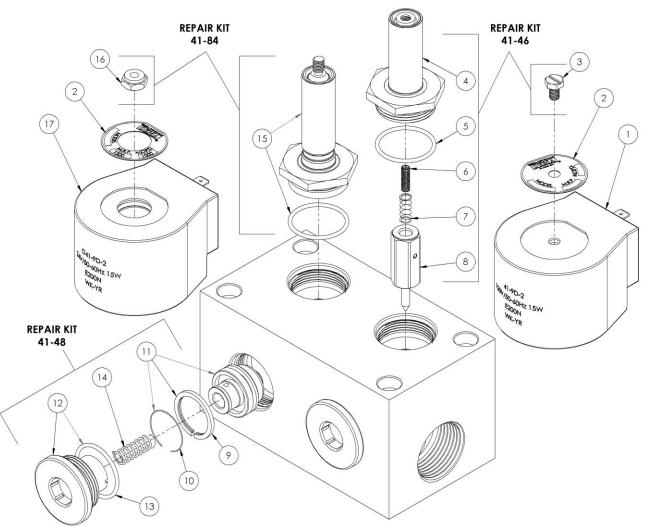
**RETURNS:** 

NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT DEMA'S WRITTEN PERMISSION. RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.

WARRANTY: DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "O"- rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty will be void.

> Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number, to return units for repair or replacement, must be granted in advance of return.

# DEMA® MANIFOLD VALVE MODELS: 454M and 456M INSTALLATION INSTRUCTIONS



NO.	PART NO.	REPAIR KIT 41-46	REPAIR KIT 41-48	REPAIR KIT 41-84	DESCRIPTION
1	X15882				Normally Closed Din Coil (Specify Voltage)
2	11042-15				Nameplate (Specify Model No.)
3	41-85-1	X			Top Plug Screw
4	41-7-27	X			Enclosing Tube
5	1328-22	X			O-Ring, Buna-N (1 X 1 1/8 X 1/16)
6	14086-1	X			Plunger Spring Return
7	14087-1	X			Plunger Spring Kickoff
8	X15487-1	X			Plunger Assembly
9	X13555-1				Piston Ring
10	13997-2				Backup Spring
11	41-3-10		X		Piston Assembly
12	41-18-10		X		Guide Cap with O-Ring
13	1328-22				Guide Cap O-Ring
14	13472-1		X		Closing Spring
15	41-7-28			X	Operator Assembly with O-Ring
16	1025-1			X	Normally Open Top Nut
17	X15936				Normally Open Din Coil (Specify Voltage)

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