

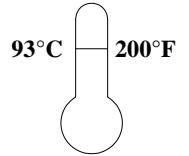
# SOLENOID VALVE

## MODELS: 463PS, 464PS & 466PS

### INSTALLATION INSTRUCTIONS

#### 1. INSTALLATION:

Model 463PS has 3/8" NPT female pipe connections. Model 464PS has 1/2" NPT female pipe connections. Model 466PS has 3/4" NPT female pipe connections. They all have stainless steel bodies. The valves may be installed in any position other than with the coil down. Make sure fluid flow is in the direction of the arrow on the body. Apply pipe dope to male threads, hand tighten, and then turn 1 1/2 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 **not** 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 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 larger center port. When the coil is de-energized, the solenoid plunger is pushed down by the kick-off spring and closes the pilot port. Fluid passes through the small diaphragm bleed holes until pressure is equalized on both sides of the diaphragm to shut off the larger port.

#### 4. SPECIFICATIONS:

<b>Maximum operating pressure differential:</b>	125 PSI	<b>Power:</b>	10 Watts
<b>Safe working pressure:</b>	150 PSI	<b>Volt-Amp Rating:</b>	Inrush - 16.0 VA
<b>Flow factor (CV):</b>	2.0		Holding - 11.5 VA
<b>Maximum temperature:</b>	180 °F fluid temp.		120 °F ambient temp.

#### 5. TROUBLE SHOOTING:

##### A) Failure to open:

- 1) No power or low voltage.
- 2) Coil burnout or an open circuit to coil.
- 3) Dirt prevents the plunger/diaphragm from operating.
- 4) Pressure differential over the (125 PSI Max.).
- 5) Low differential pressure ( 3 PSI Min. ).

- 2) Valve installed backward.

- 3) Dirt in diaphragm bleed hole.

- 4) Low differential pressure ( 3 PSI Min. ).

##### 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.

##### B) Failure to close:

- 1) Coil still energized.

**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:

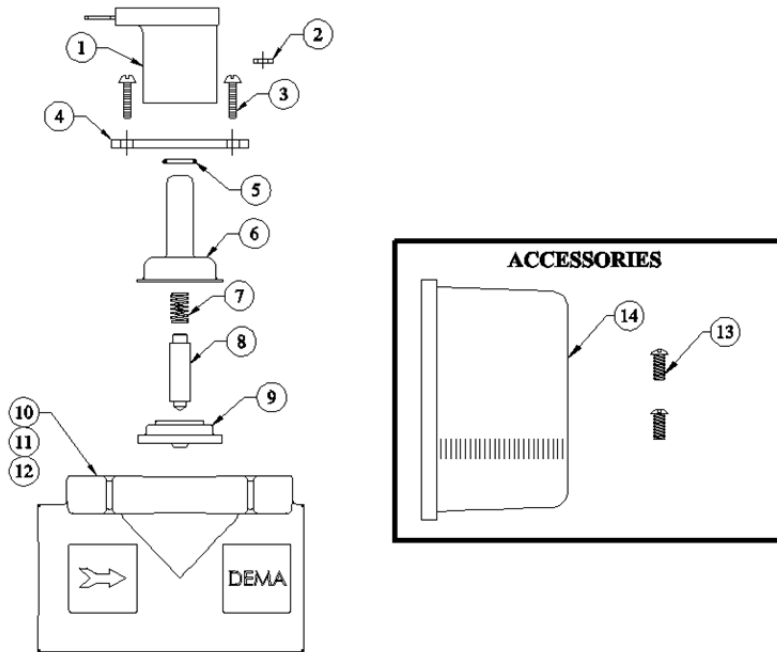
DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper 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.

# SOLENOID VALVE

## MODELS: 463PS, 464PS & 466PS

### INSTALLATION INSTRUCTIONS



NO.	PART NO.	DESCRIPTION
1	41-9-5A	Solenoid Coil (Specify Voltage)
2	41-41 41-42	Nylon Washer Nylon Spacer Washer (for DIN)
3	41-16-9 41-16-8	#8-18 Hex Washer Head Screw (4 Reqd.) 8/32" x 5/8" Hex Washer Screw (for DIN)
4	41-72-2	Flange
5	41-34	Spacer Ring
6	41-7-25	Enclosing Tube (Stainless)
7	41-1-8	Kick-Off Spring
8	41-10-11	Plunger
9	41-15-10 41-15-6 41-15-7	Diaphragm (EPDM) - Standard Diaphragm (Viton) Diaphragm (Buna-N)
10	35-40	Valve Body (464PS)
11	35-41	Valve Body (463PS)
12	35-49	Valve Body (466PS)

ACCESSORIES		
NO.	PART NO.	DESCRIPTION
13	41-63-2	Screw #8-32 X 3/8 Rd Hd Phil S.S. (2 Reqd.)
14	41-73	Solenoid Cover