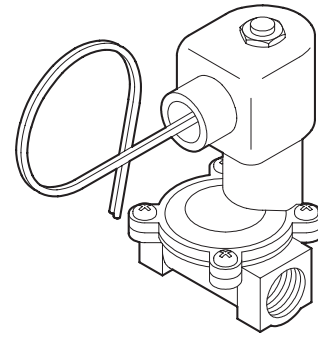




Solenoid Valves For Releasing Service



GENERAL DESCRIPTION

The Solenoid Valves For Releasing Service are intended for use with Star Deluge and Preaction Valves which are to be electrically actuated. The Solenoid Valves are used in conjunction with an electric releasing panel that is listed or approved (as appropriate) for fire protection releasing service, and where the releasing panel is operated by listed or approved (as appropriate) electric fire detectors.

WARNING

The Solenoid Valves described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the integrity of this device.

The owner is responsible for maintaining his fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted relative to any questions.

TECHNICAL DATA

Approvals

UL Listed and CSA Certified under the name of Parker Hannifin Corporation, Skinner Valve Division. The #522871024 (175 psi) and #522871124 (250 psi) are FM Approved for release of Star Deluge and Preaction Valves.

Working Water Pressure

Refer to Figure 1.

Physical Characteristics

The body is brass, and the seal is Nitrile rubber.

OPERATION

Operation of an electrical device such as a heat sensitive thermostat, smoke detector, or electric manual pull station signals the releasing panel to energize the releasing circuit. Energizing the releasing circuit opens the normally closed de-energized Solenoid Valve to release water pressure from the differential chamber of the deluge or preaction valve, which in turn permits the deluge or preaction valve to open and allow a flow of water into the system piping.

ENCLOSURE TYPE (NEMA RATINGS)	VOLTAGE	WORKING WATER PRESSURE PSI (BAR)	WATTS	AC VOLT-AMPS		DC AMPS	CATALOG	PART #
				(a) INRUSH	(b) HOLDING			
ORDINARY LOCATION (2, 4, and 4X)	120 VAC, 60 Hz 110 VAC, 50 Hz	20-175 (1.4-12.1)	10	31	16	-	73218BN4UNLVN0C111P3	522871110
	24 VDC	20-175 (1.4-12.1)	10	-	-	0.41	73218BN4UNLVN0C111C2	522871024
	24 VDC	20-250 (1.4-17.2)	22	-	-	0.83	73212BN4TNLVN0C322C2	522871124
	48 VDC	20-175 (1.4-12.1)	10	-	-	0.21	73218BN4UNLVN0C111C4	522871048
	125 VDC	20-175 (1.4-12.1)	11	-	-	0.08	73218BN4UNLVN0C1113N	522871125
	250 VDC	20-175 (1.4-12.1)	10	-	-	0.04	73218BN4UNLVN0C111N9	522871015
HAZARDOUS LOCATION (2, 4, and 4X)	110/120 VAC	20-175 (1.4-12.1)	10	31	16	-	73218BN4UNLVN0H111P3	522871210
	24 VDC	20-175 (1.4-12.1)	10	-	-	0.41	73218BN4UNLVN0H111C2	522871224
	125 VDC	20-175 (1.4-12.1)	11	-	-	0.08	73218BN4UNLVN0H1113N	522871225
	250 VDC	20-175 (1.4-12.1)	10	-	-	0.04	73218BN4UNLVN0H111N9	522871215

NOTES:

(a) Current to start plunger moving. (b) Current to hold plunger open.

**FIGURE 1
ENCLOSURE AND VOLTAGE RATINGS**

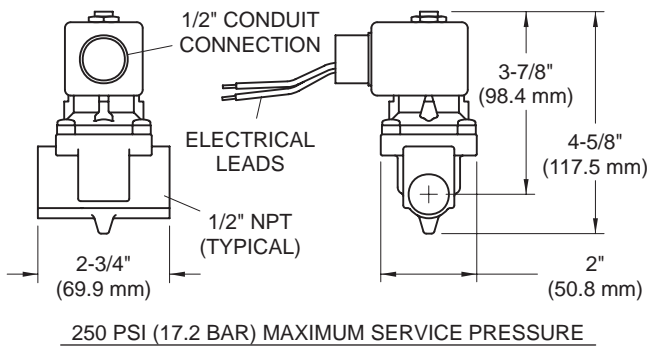
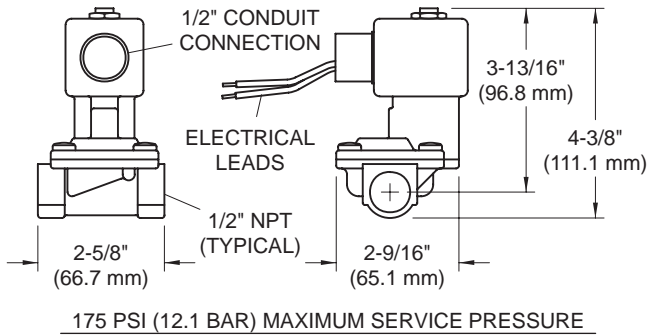


FIGURE 2
SOLENOID VALVES FOR RELEASING SERVICE

INSTALLATION

The Solenoid Valves For Releasing Service are to be installed in accordance with the following instructions:

1. Check the nameplate for the correct catalog number, NEMA classification, and voltage.
2. The Solenoid Valves are to be installed as part of the deluge or preaction valve trim in accordance with the applicable instructions provided for the deluge valve or preaction valve.

The inlet port of the Solenoid Valve is to be connected to the differential chamber of the deluge or preaction valve, and the outlet port of the Solenoid Valve is to be piped to an open drain. For best life and optimum performance the Solenoid Valve should be mounted vertically upright, as illustrated in Figure 2. This orientation minimizes wear and reduces the possibility of accumulating foreign matter.

3. Apply pipe thread sealant sparingly to the male pipe threads of the connecting pipe nipples.
4. To prevent distortion of the Solenoid Valve body, always wrench on the portion adjacent to the pipe to which it is being connected. Do not use the Solenoid Valve to force a pipeline into position. Doing so may result in distortion of the valve.
5. Conduit and electrical connections are to be made in accordance with the requirements of the authority having jurisdiction and/or the National Electric Code. The coil assembly may be reoriented, as necessary, by first loosening the nut on top of the coil. After repositioning the

coil assembly, tighten the nut with a torque of 43 to 53 inch-pounds (4.9 to 6.0 Nm).

NOTE

Turn off electrical power before connecting the Solenoid Valve to the power source.

MAINTENANCE AND SERVICE

It is recommended that the proper operation of Solenoid Valves be periodically verified in accordance with the procedure provided with the deluge or preaction valve being utilized.

In general, if the voltage to the coil is correct, sluggish valve operation, excessive leakage, or noise will indicate that cleaning is required. Clean the Solenoid Valve in accordance with the procedures outlined by Parker Hannifin Corporation, Skinner Valve Division.

Causes of Improper Operation

- **Faulty Control Circuit:** Check the electrical system by energizing the releasing circuit to the Solenoid Valve. A metallic "click" signifies that the solenoid is operating. Absence of the "click" indicates loss of power supply. Check for loose or blown fuses, open-circuited or grounded coil, broken lead wires or broken splice connections.
- **Burned-Out Coil:** Check for open-circuited coil. Replace if necessary. Check supply voltage; it must be the same as specified on label or nameplate.
- **Low Voltage:** Check voltage across the coil leads. Voltage must be at least 85% of nameplate rating.

NOTE

Before closing a fire protection system main control valve for maintenance work on either the valve or the fire protection systems which it controls, permission to shut down the affected fire protection systems must first be obtained from the proper authorities and all personnel who may be affected by this decision must be notified.

ORDERING PROCEDURE

Please Specify:

Solenoid Valve For Releasing Service (See Figure 1 for enclosure, voltage, and pressure ratings).

AVAILABILITY AND SERVICE

Star Sprinkler Inc. products and devices are available worldwide through a network of independent distributors. Please contact Star Sprinkler Inc. for information and the name and address of the Star distributor in your area.

LIMITED WARRANTY

Seller warrants for a period of one year from date of shipment (warranty period) that the products furnished hereunder will be free of defects in material and workmanship. For further details on Warranty, contact Star Sprinkler Inc.