

3-Way Solenoid Valve

General Purpose and UL-Listed types

These solenoid valves are direct-acting and suitable for use with a normal firewater supply, providing safe and long-life operation.

The 3-way construction does not require a minimum operating pressure and can be mounted in any position.

The coil is designed for continuous duty, with a molded epoxy or integral terminal box construction, appropriate for corrosive environments.

These solenoids are suitable for activating BERMAD Deluge and Water Control Valves, using freshwater or air, refer to the Technical Data for further details.

Features

- No mechanical wetted parts
- Solenoid isolated from fluid
- Suitable for freshwater or air
- Seawater compatible construction available

Power

- 8 Watts, 24V DC or 120, 220 VAC/50-60 Hz.
- Voltage Tolerance: +10% -35% for BE370D and ±10% for other models

Materials

- Body: Brass or Stainless Steel 316
- Internals: Stainless steel
- Elastomeric Membrane: NBR
- Enclosure: Molded Epoxy as Standard
- Epoxy Coat Aluminium Terminal Box on BE370-16

Temperature

- Maximum Ambient⁽¹⁾: 50°C (125°F)
- Maximum Fluid: 80°C (176°F)

Notes: ⁽¹⁾ Max. ambient temperature is determined under continuously energized conditions.

Installation and Maintenance

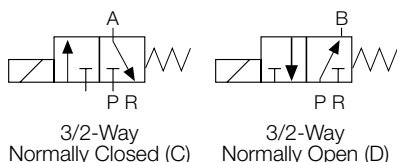
The Solenoid Valve is the most critical unit in the Deluge system, it should be installed and wired by qualified and trained personnel only.

The coil should be wired in accordance with the requirements of the applied norm such as NEC/NFPA, NEMA, NEC or other code and standards. Ensure that the voltage supply and frequency corresponds with the markings on the enclosure label.

After installation, the cable or conduit must be well supported to avoid excessive load on the conduit hub.

Warning: The solenoid enclosure bolts must not be loosened or disassembled. Loosening or disassembling the solenoid enclosure may result in changing of the factory seal adjustment and may effect the proper operation of the valve, rendering void the warranty and the manufacturer's liability.

Circuit Functions



Model 330D-UL-SS



Model 8320G136



Note: Images, illustrations and icons are for display only, refer to selection table for specific data.

This product shall be wired by an authorized electrician only. The conduit hub on the enclosure must be supported against torque during the assembly using appropriate tools. While tightening a fitting into the conduit hub, attention must be paid that a max. torque of 20Nm is not exceeded.

Maintenance: Proper operation of the Solenoid Valve should be periodically verified.

Testing and Maintenance should be performed according to the IOM (Installation Operation & Maintenance) Manual for the specific BERMAD Valve in use. It is recommended that the Solenoid Valve be inspected monthly for proper wiring and for leakage. The Solenoid valve must be Tested Annually. It must be operated when maximum system working conditions are applied to simulate the extreme conditions. The unit should be replaced if a malfunction occurs.

Technical Data

BE370-16 Series with Integral Terminal Box

This solenoid valve is used in non-classified locations where no special certification is required. It is rated for IP66/67 ingress protection, continuous duty design with class H coil insulation. These BE370 solenoid valves are specially designed for use with BERMAD deluge and water control valves and are FM approved when used with BERMAD Deluge valves.

This solenoid type is equipped with an integral epoxy coated aluminum terminal box, including screw terminals, with a ½" NPT cable entry.

UL-Listed Models

These solenoid valves are UL-Listed and also FM approved and for use in Class I Division 2, T4 to NEC 500 hazardous locations, where flammable materials are present abnormally (refer to the table below for more data). They are rated for IP 65 ingress protection, continuous duty design with class F coil insulation. The 0330C-UL and 0330D-UL models are equipped with integral cable plug type 2509 of PA material, including screw terminals (max. 0.75 mm² lead. These models are provided with ½" NPT entry.

Exproof NEC Div. 1, Model 0330-EX

This Explosion proof solenoid valve is FM Approved to be used in Class I Div. 1 and 2 Groups A, B, C, D and Class II Groups E, F, G hazardous locations according to ANSI/NFPA 70, NEC 500, where hazardous materials are present intermittently.

The solenoid enclosure is watertight, NEMA 4, 7, 9 rated, continuous duty design with T4 class F coil insulation. This type is provided with flying leads and ½" NPT metal conduit hub.

Solenoid Valve Selection Table

Model	Normally	Body Materials	Enclosure Type / Class	Code	Cable Entry	Port Size"	Orifice mm	bar / psi	Power Watts	Approval See Notes
BE370C-B2-16	N.C.	Brass	GP Terminal Box	-	½" NPT	¼	1.6	20 / 300	8	(1)
0330C-UL		Brass	Div. 2	-	½" NPT, Plug	¼	2	16 / 235	8	UL/FM(2)
0330C-EX		Brass	Div. 1	7	½" NPT	¼	2	16 / 235	8	UL/FM(3)
370C-SS-16		SS316	GP Terminal Box	-	½" NPT	¼	1.6	20 / 300	8	(1)
0330C-UL-SS		SS316	Div. 2	-	½" NPT, Plug	¼	2	16 / 235	8	UL/FM(2)
0330C-EX-SS		SS316	Div. 1	7	½" NPT	¼	2	16 / 235	8	UL/FM(3)
BE370C-B2-16	N.O.	Brass	GP Terminal Box	-	½" NPT	¼	1.6	25 / 365	8	FM(1), (4)
8320G136		Brass	GP Flying leads	-	½" NPT	⅜	1.2	14 / 200(5)	10.6	UL(5)
0330D-UL		Brass	Div. 2	-	½" NPT, Plug	¼	2	16 / 235	8	UL/FM(2)
0330D-EX		Brass	Div. 1	7	½" NPT	¼	2	16 / 235	8	UL/FM(3)
EF8320G136		Brass	GP Flying leads	-	½" NPT	⅜	1.2	14 / 200(5)	10.6	UL(3), (5)
BE370D-SS-16		SS316	GP Terminal Box	-	½" NPT	¼	1.6	25 / 365	8	FM(1), (4)
6014D-UL		SS316	Div.2	-	½" NPT, Plug	¼	2	20 / 300	8	UL/FM(2)
0330D-UL-SS		SS316	Div. 2	-	½" NPT, Plug	¼	2	16 / 235	8	UL/FM(2)
0330D-EX-SS		SS316	Div. 1	7	½" NPT	¼	2	16 / 235	8	UL/FM(3)

Notes:

(1) General purpose / watertight, IP66/67 Ingress Protection to IEC Spec.

(2) UL-Listed. FM Approved for Class I, Div 2, Groups A, B, C, D

(3) Approved for hazardous locations Class I, Division 1, Groups A, B, C, D; Class II Gr. E, F, G.

(4) FM approved for BERMAD Deluge valves, with 24V coil.

(5) UL-Listed for 12bar / 175psi to be installed on BERMAD Deluge valves and manufactured by ASCO, this model is marked with 200psi (14bar) max working pressure, includes NEMA-4X rated coil.

(6) Specifications subject to change without notice.

