3-WAY EX D SOLENOID VALVE

Model BE370D-Ex. d

These BERMAD BE370D, Ex d solenoid valves are equipped with a heavy-duty enclosure of flameproof design, certified for use in zone 1 or 2 hazardous locations according to IECEx and ATEX or NEC® Class I Division 1. The BE370D solenoid valves are suitable for extreme industrial environmental conditions. The enclosure is IP66/67 and US Type 4X, 6, 6P rated, continuous duty design with class H high temperature insulation rating. The specific UL certified models are UL429A Listed for Fire protection Service with unique safety design, allowing a voltage tolerance of 35% below the rated voltage enabling long wiring installation.

Model BE370D-B5-87

Features

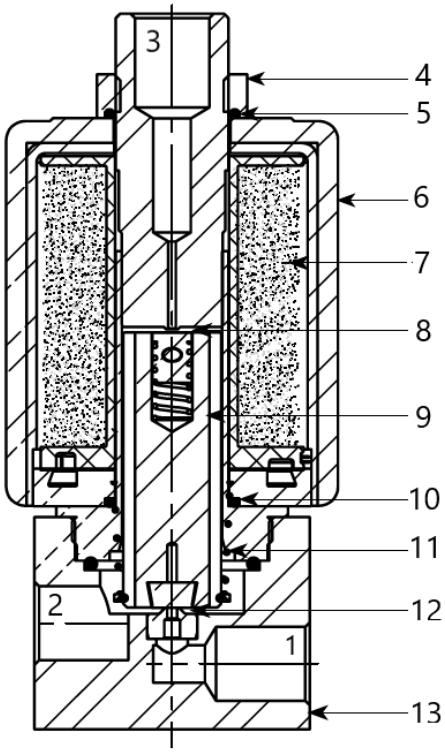
- UL-Listed/FM approved for use with BERMAD deluge valves
- 25 bar / 365 psi max working pressure, with firewater/air
- IP66/67 Enclosure with an Integral Terminal Box
- Heavy Duty Construction - Suitable for Extreme Conditions
- Corrosive Conditions construction option, refer to selection table
- Class H coil insulation with suppression diode
- Pressure Connections: 1/4" NPT(F)
- Cable Entry: ½" NPT with adaptor from M25x1.5

Technical Data

- Power: 8 Watts or 1 Watt Low Power (see selection table)
- Voltage: 24V DC, 110-120V DC/AC or 220-240V AC/50-60 Hz.
- Insulation Class: Class H
- Ingress protection: IP66/67 and US type 3, 3S, 4, 4X, 6, 6P
- Internals: Brass Construction - Stainless steel 400
- Maximum Duty Cycle (ED): 100% (continuous)
- Voltage Tolerance: +10% -35%
- Pressure Orifice: 1.6 mm (0.063")
- Pressure Connections ¼" NPT
- Electric Cable Entry: ½" NPT
- Temperature: 100°C (212°F) for T4 and 65°C (149°F) for T6

Materials

- Body: Brass, Stainless steel 316 or Monel 400
- Internal parts: Stainless Steel 316, Monel 400, Hastalloy
- Elastomer: HNBR
- Enclosure: Epoxy Coated Aluminum or Stainless steel 316



Part	Description
4	Coil Nut
5&10	O-Ring
6	Enclosure
7	Coil
8	Top Seat
9	Plunger
11	Spring
12	Seat
13	Body

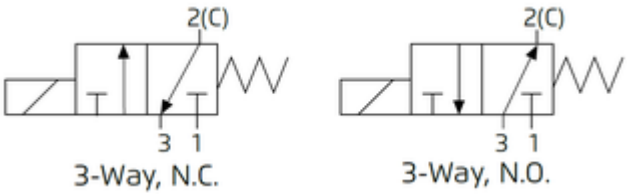
Port	Size	Connections
2	⅛" NPT	Common
1/3	¼" NPT	Inlet / Outlet

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.
Ensure that the voltage supply and frequency correspond with the markings that appear on the enclosure label. Certified fitting or cable gland shall be installed on the cable entry according to the applicable standard and it should be wired in accordance with the requirements of the client specifications and applied norm such as IEC, ATEX or NEC® codes.

Warning: This product shall be installed and wired by an authorized electrician only. It is the users responsibility to ensure that the local industry codes of practice are observed and followed, for example EN/IEC 60079, or NFPA 70/NEC 500.
Maintenance: Proper operation of the Solenoid Valve should be periodically verified. It is recommended that the Solenoid Valve be inspected monthly for proper wiring and for leakage.
The Solenoid valve must be tested annually, operated at the maximum system working conditions to simulate the most extreme conditions. The solenoid valve unit should be replaced if a malfunction occurs.

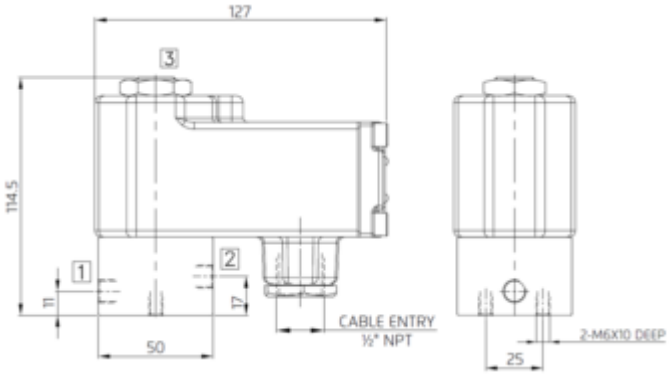
Note: Images, illustrations and icons are for display only



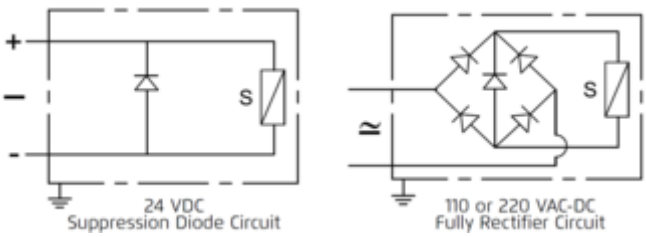
Technical Data / Specifications

This BE370D 3-way solenoid valve is UL Listed according to UL429A fire protection electrically operated valves, complete with an Ex d flameproof enclosure suited for zone 1 or division 1 hazardous locations, IEC-Ex and ATEX or NEC® certified, 8 watts power with safety factor of 65% of the rated voltage. The enclosure includes an integrated terminal box with a suppression diode and continuous duty rated coil.
The solenoid valve is certified to 25 bar / 365 psi, with a brass, Stainless Steel 316 or Monel body material and epoxy coated aluminum or Stainless Steel 316 enclosure.

Dimensions



Wiring Circuit Diagrams



Solenoid Valve Selection Tables

Ex d Standard Type

MODEL	N.O. N.C.	Body Material	Enclosure Material	Enclosure Type	Code	bar/psi	Power Watts	Certifications			
								UL(3) 429A	FM(2) Approved	IECEx ATEX(4)	NEC®(5
BE370D-U-B2-87	N.C.	Brass	Aluminum	Ex d IIC T6	9	16 / 235	8	-	-	V	-
BE370D-U-B5-87		SS316	Aluminum	Ex d IIC T6	9Jn	16 / 235	8	-	-	V	-
BE370D-U-B5-87N		SS316	SS316	Ex d IIC T6	9K	16 / 235	8	-	-	V	-
BE370D-B2-87	N.O.	Brass	Aluminum	Ex d IIC T6	9	25 / 365	8	V	V	V	-
BE370D-B5-87		SS316	Aluminum	Ex d IIC T6	9K	25 / 365	8	V	V	V	-
BE370D-B5-87N		SS316	SS316	Ex d IIC T6	9Jn	25 / 365	8	V	V	V	-
BE370D-B2-88		Brass	Aluminum	Class I, Div 1	7	25 / 365	8	V	-	-	V
BE370D-B5-88		SS316	Aluminum	Class I, Div 1	7K	25 / 365	8	V	-	-	V
BE370D-B5-88N		SS316	SS316	Class I, Div 1	7Jn	25 / 365	8	V	-	-	V

Seawater and Corrosive Fluids

MODEL	N.O. N.C.	Body Material	Enclosure Material	Enclosure Type	Code	bar/psi	Power Watts	Certifications			
								UL(3) 429A	FM(2) Approved	IECEx ATEX(4)	NEC®(5
BE370D-U-MN-87N	N.C.	Monel	SS316	Ex d IIC T6	9Jn	16/235	8	-	-	V	-
BE370D-MN-87N	N.O.	Monel	SS316	Ex d IIC T6	9Jn	25/365	8	V	V	V	-
BE370D-MN-88N		Monel	SS316	Ex d IIC T6	7Jn	25/365	8	V	-	-	V

Low Power Version

MODEL	N.O. N.C.	Body Material	Enclosure Material	Enclosure Type	Code	bar/psi	Power Watts	Certifications			
								UL(3) 429A	FM(2) Approved	IECEx ATEX(4)	NEC®(5
BE370D-B5-87-LP	N.O.	Brass	Aluminum	Ex d IIC T6	9Jn	16/235	8	-	-	V	-
BE370D-B5-87-LP		SS316	Aluminum	Ex d IIC T6	9Jn	25/365	8	-	-	V	-
BE370D-B5-87N-LP		SS316	SS316	Ex d IIC T6	7Jn	25/365	8	-	-	V	-

Notes:

(1) Add Jn suffix to the BERMAD deluge valve code for cast stainless steel 316 enclosure.
(2) FM approved for BERMAD deluge valves, with 24V coil.
(3) UL Listed according to UL429A to use with BERMAD Deluge Valve.
(4) IEC-Ex and ATEX certified for hazardous locations Zone 1 and 2, II 2 G Ex d II,gas group A, B, C T4-T6.
(5) NEC® certified: UL Certified for Explosion-Proof Class I Division 1, Groups B, C and D, and Class II, Groups E, F and G, Class III, Classification per ANSI/NFPA 70 National Electrical Code®.
(6) Specifications subject to change without notice.