# **BERMAD** Irrigation



Latching Solenoids

## Magnetic, Latch Solenoid

with Hydraulic Base

#### S-402-3W

The BERMAD Model S-402-3W-BB is a compact 3-Way Latching Solenoid pilot valve comprised of two main components: a solenoid and a 3-way hydraulic pilot valve. The BERMAD latching solenoid can control valves independently or in combination with other control circuit accessories. Model S-402-D-3W-BB consumes power only when switching positions, using a very short electric impulse. This prolongs life of batteries and enables solar recharging. The hydraulic base features a manual override and consists of a bracket for attaching to the valve or to a solenoid manifold.

# S-10 h<sup>2</sup> 9-10 y cc Poul 9 cc Cod 9 cs x solal

#### Features and Benefits

- Advanced Construction Materials, Unique Plastic Casing
  - Proven pressure, voltage and weather resistance
  - □ Highly durable in corrosive environments
  - Protection Class- IP68; NEMA Type 6D
- Superb Internal Design and Finish
  - Reliable operation under dirt loaded water
- Short Electrical Impulse Latch Activation
  - Extremely low power consumption
  - Low voltage battery operation
  - Saves wires and infrastructures
  - No coil heating
  - Suites most Battery Operated Controllers on the market
  - Applicable in solar activated systems
- Hydraulic Base with Installation Bracket
  - High flow capacity quickens valve response
  - No dirt sedimentation inside solenoid actuator
  - Manual override open and close
  - Simple installation to valve or manifold
- Reliable and Durable Product that Bears the Stamp of BERMAD Quality

## **Applications**

- Systems distanced from control center
- Unavailable power supply locations
- Solenoid controlled on/off valves
- Solenoid controlled pressure and flow control valves
- Multiple valve systems
- Solenoid manifolds in irrigation heads





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### **Specifications**

Base Ports: 1/8" NPT

1- Vent

2- Valve Control Chamber

3- Pressure

Valve Anchoring:

By Screws (Self Tapping #8) at the Solenoid base

Leads: 2 leads x 0.32 mm<sup>2</sup> x 80 cm

Operation Modes (electrical connentions)

+Red & -Black: Solenoid vents

+Black & - Red: Solenoid pressurizes

Operating Pressure Range: 0-10 bar ( Plastic Base ); 0-16 bar (Metal Base)

Base Orifice Diameter: 2.2 mm

Base Flow Factor:  $Kv = 0.12 \text{ m3/h} @ 1 \text{ bar } \Delta P$ ;  $Cv = 0.14 \text{ GPM } @ 1 \text{ psi } \Delta P$ 

Materials:

**Actuator Casing: Nylon** 

Seals: NBR

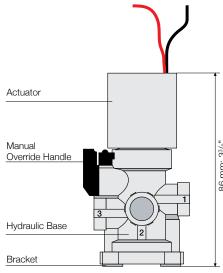
Wetted parts: Stainless Steel 400 and polyamide

Base: Nylon (Optional: Brass)

**Electrical Data:** 

Voltage Range: 9-40 VDC Coil Resistance: 6Ω Coil Inductance: 90 mH Pulse Width: 20-100 mSec Required Capacitor: 4700μF

Note: To ensure compatibility of solenoid with your system, please contact BERMAD's local representative.



weight: 0.17 kg; 0.37 ibs.

## How to Order

Please Specify the requested Solenoid as follow

• 2-wires 3-Way Magnetic Latch Solenoid with Hydraulic Base, Bermad Model:

S-402-2L-3W-9V/DC-BB

To Order installed and tested Solenoid Manifold Please Specify:

■ S-402-2L-3W-9V/DC-BB Solenoid manifold, BERMAD Model:

EM-402-\_\_\_\*



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Specify desired quantity of Solenoids (2-10 Solenoids can be ordered)