



## Dry Magnetic Latch Solenoid

with Isolating Membrane & Hydraulic Base

3-Way, 12VDC Latch, 2- Leads

**S-982-3W**

The BERMAD S-982-3W-BB is a compact 3-Way Latching Solenoid Pilot Valve, comprised of two main components: a dry solenoid actuator and a 3-way hydraulic pilot valve. The actuator is neutralized from water damages by an isolating membrane, which hermetically isolates it from the water. The Model S-982-3W-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.



### Features and Benefits

- Advanced Construction Materials
  - ▢ Proven pressure, voltage and weather resistance
  - ▢ Highly durable in corrosive environments
  - ▢ Protection Class- IP68; NEMA Type 6D
- Dry Actuator and Superb Finish
  - ▢ Reliable operation under dirt loaded water
  - ▢ Suitable to turbid, muddy and/or corrosive water
- Short Electrical Impulse Latch Activation
  - ▢ Extremely low power consumption
  - ▢ Low voltage battery operation
  - ▢ Saves wires and infrastructures
  - ▢ Suits most Battery Operated Controllers on the market
  - ▢ Applicable in solar activated systems
- Hydraulic Base with Installation Bracket
  - ▢ High flow capacity quickens valve response
  - ▢ Manual override open and close
  - ▢ Simple installation to valve or manifold
- Reliable and Durable Product that Bears the Stamp of BERMAD Quality



### Applications Guide

- Systems distanced from control center
- Systems irrigated with turbid or corrosive water
- Unavailable power supply locations
- Solenoid controlled pressure & flow control on/off valves
- Multiple valve systems
- Solenoid manifolds in irrigation heads

## 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 85 cm

### Operation Modes (electrical connections):

- + Red & - Black: Solenoid vents
  - + Black & - Red: Solenoid pressurizes
- Cable is black PVC sheathed

**Operating Pressure Range:** 0-10 bar

**Base Orifice Diameter:** 2.2 mm

### Base Flow Factor:

Pressure port Kv = 0.12 m<sup>3</sup>/h @ 1 bar ΔP; Cv = 0.14 GPM @1 psi ΔP

Exhaust port Kv = 0.14 m<sup>3</sup>/h @ 1 bar ΔP; Cv = 0.16 GPM @1 psi ΔP

### Materials:

**Actuator Casing:** Nylon

**Seals and Isolating Membrane:** NBR

**Wetted parts:** Nylon

**Base:** Nylon (Optional: Brass)

### Electrical Data:

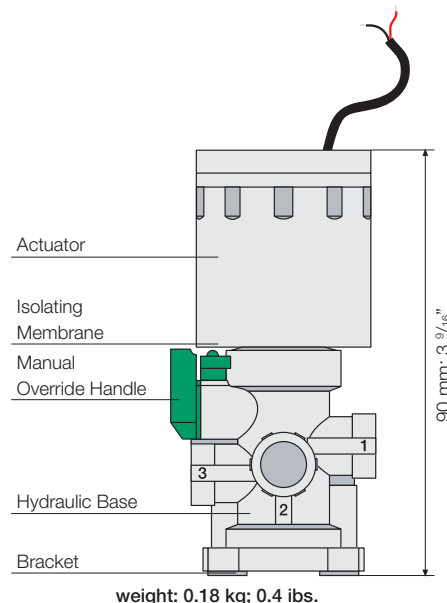
**Voltage Range:** 12-50 VDC

**Coil Resistance:** 4.2 Ω

**Pulse Width:** 20-100 mSec.

**Required Capacitor:** 4700μF

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



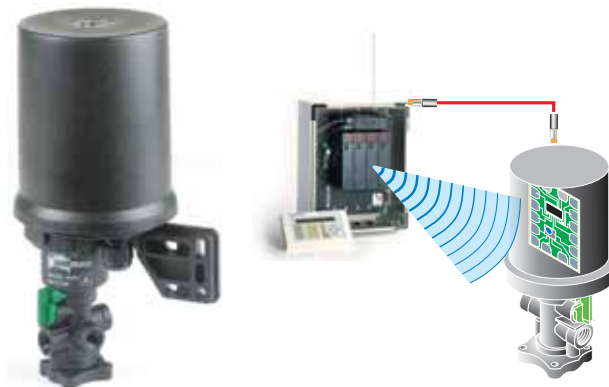
weight: 0.18 kg; 0.4 lbs.

## Solenoid Valve for RTU

BERMAD's Solenoid Valve for Remote Terminal Unit (RTU) is a solenoid pilot valve controller used in radio or cable remote control irrigation. It is a battery operated, self-contained unit.

This solenoid pilot valve is suitable for use in irrigation applications with a master radio control system.

**Note:** RTU units can be purchased only through Motorola® irrigation control department. For further details please contact: [IRRI@motorola.com](mailto:IRRI@motorola.com)



## How to Order

Please Specify the requested Solenoid as follow:

■ 2-wires, 3-Way Dry Magnetic Latch Solenoid with Hydraulic Base, Bermad Model: S-982-2L-3W-12V/DC-BB

To Order installed and tested Solenoid Manifold Please Specify:

■ S-982-2L-3W-12V/DC-BB Solenoids Manifold, BERMAD Model: EM-982-\_\_\_\_\_\*

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