



# DRY MAGNETIC LATCH SOLENOID

with Isolating Membrane &  
Hydraulic Base

3-Way, 12VDC Latch, 3- Leads

## Model S-985-3W

The BERMAD S-985-3W-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-985-3W-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 & 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

*All images in this catalog are for illustration only*



## Specifications

### Base Ports: 1/8" NPT

- 1- Vent
- 2- Control Chamber
- 3- Pressure

### Valve Anchoring:

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

**Leads:** 3 leads x 0.32 mm<sup>2</sup> x 85 cm

### Operation Modes (electrical connections):

- + White: Fixed Common
- Red: Solenoid vents
- Black: Solenoid pressurizes

Cable is black PVC sheathed

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

**Base Orifice Diameter:** 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:

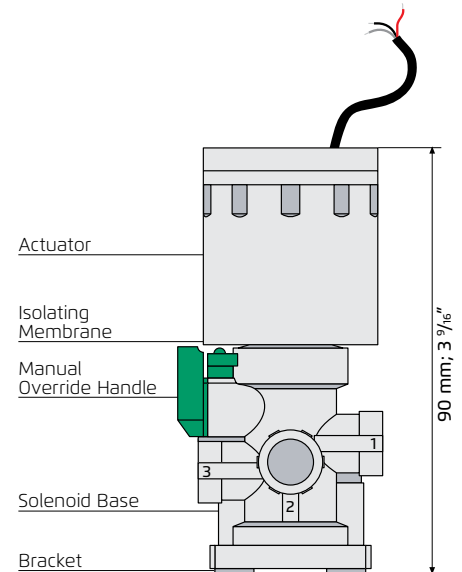
**Voltage Range:** 12-50 VDC

**Coil Resistance:** 2 Coils - 4.2 Ω On; 7.5 Ω Off

**Pulse Width:** 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.