# **BERMAD** Irrigation



S-Series

# Dry Magnetic Latch Solenoid

with Isolating Membrane & Hydraulic Base

3-Way, I2VDC Latch, 3- Leads

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 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
  - Suites 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





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# **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: 2.2 mm

Base Flow Factor:

Pressure port Kv = 0.12 m3/h @ 1 bar  $\Delta$ P; Cv = 0.14 GPM @1 psi  $\Delta$ P Exhaust port Kv = 0.14 m3/h @ 1 bar  $\Delta$ P; Cv = 0.16 GPM @1 psi  $\Delta$ P

### Materials:

Actuator Casing: Nylon

Seals and Isolating Membrane: NBR

Wetted parts: Nylon

Base: Nylon (Ontional:

Base: Nylon (Optional: Brass) Electrical Data:

Voltage Range: 12-50 VDC Coil Resistance: 2 Coils - 4.2  $\Omega$  On; 7.5  $\Omega$  Off

Pulse Width: mSec.
Required Capacitor: 4700µF

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

# Actuator Isolating Membrane Manual Override Handle Solenoid Base Bracket

weight: 0.18 kg; 0.4 ibs.

# 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: IRRInet.marketing@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:

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S-985-3L-3W-12V/DC-BB

To Order installed and tested Solenoid Manifold Please Specify:

S-985-3L-3W-12V/DC-BB Solenoids Manifold, BERMAD Model:

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