



# 3-WAY SOLENOID PILOT VALVE WITH TRIO PLASTIC BASE NORMALLY OPEN

## Model S-390-T-NO

The BERMAD S-390T-3W with TRIO base is a compact 3-way normally open or normally close solenoid pilot valve, specially designed for reliable long-life service in irrigation systems controlled by continuous current controllers. The S-390T-3W solenoid pilot valve connects to variety of 3-way control circuits. It is compliant with all continuous current output irrigation controllers on the market and excels in its low power demand and low sensitivity to dirt and voltage variations.



### Features & Benefits

- Advanced Construction Materials, Unique Plastic Casing
  - Proven pressure, voltage and weather resistance
  - Highly durable in corrosive environments
  - Protection Class: IP68 – max 3m depth, 7 days submersion
- Superb Internal Design and Finish
  - Reliable operation under dirt loaded water
  - Low sensitivity to voltage variations
- Low Power Consumption
  - Low coil heating and sediment damage
  - Saves wires and infrastructures costs
  - Suites all Continuous Current Controllers on the market
- Angled Plastic Base with Installation Bracket
  - High flow capacity quickens valve response
  - 3 position TRIO manual override (Open, Auto and Close)
  - Simple installation to valve or manifold
- Simple Installation, Operation and Maintenance
- Reliable and Durable Product that Bears the Stamp of BERMAD Quality

### Typical Applications

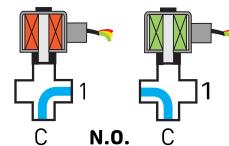
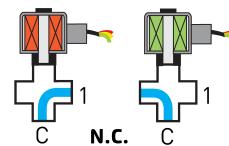
- Solenoid controlled on/off valves
- Solenoid controlled pressure and flow control valves
- Multiple valve systems
- Systems distanced from control center

### Operation:

**3-way, normally open (for normally closed valve):** When de-energized, the spring pushes the plunger out, connecting actuator port (command) to port C (control chamber) blocking port 1 (vent). Energizing the solenoid pulls the plunger in, cutting command pressure & venting control chamber via port 1.

**3-way, normally closed (for normally open valve):** When de-energized, the spring pushes the plunger out, connecting actuator port (vent) to port C (control chamber) blocking port 1 (command). Energizing the solenoid pulls the plunger in, cutting vent and pressurizing control chamber via port 1.

All images in this catalog are for illustration only



## Technical Data

### Specifications:

**Pressure Rating:** 0-10 bar

**Solenoid to Base Connection:**  $\frac{3}{4}$ " 20 UNEF Male Threaded

**Leads:** 2 leads x  $0.32 \text{ mm}^2$  x 80 cm

**Base Orifice Diameter:** 1.8 mm (N.O.) ; 1.6 mm (N.C.)

**Actuator Orifice Diameter:** 1.6 mm

**Base Flow Factor:**  $K_v = 0.08 \text{ m}^3/\text{h} @ 1 \text{ bar } \Delta P$

**Length (L):** 40 mm

**Height (H):** 92 mm

**Width (W):** 42 mm

### Materials:

**Actuator Casing:** Nylon

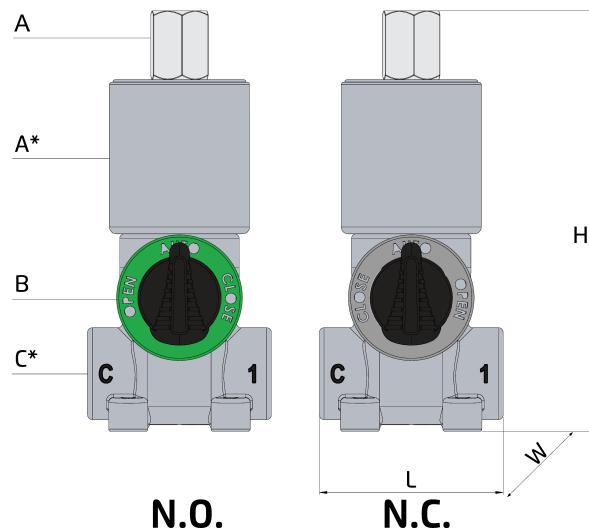
**Seals:** NBR

**Wetted Parts:** Stainless steel and polyamide

**Base:** Nylon

## Electrical Data

Actuator Type	Cable Color	Power (Watt)	Current (Amp)		Coil Resistance ohm@20°C
			Inrush	Hold	
S-390-T-NO-24VAC-R	Red/Red	2.3	0.40	0.18	75
S-390-T-NO-24VAC-D	Red/Orange	2.2	0.13	0.13	56
S-390-T-NO-24 V DC	Black/Black	4.3	0.18	0.18	127
S-390-T-NO-12 V DC	Orange/Blue	4.0	0.33	0.33	36



Port	Size	Connections
A	$\frac{1}{8}$ " NPT	Actuator Port-Pressure (N.O.); Vent (N.C.)
1	$\frac{1}{4}$ " NPT	Vent (N.O.); Pressure (N.C.)
C	$\frac{1}{4}$ " NPT	Valve Control Chamber

Part	Description
A*	Actuator Port-Pressure (N.O.); Vent (N.C.)
B	Vent (N.O.); Pressure (N.C.)
C*	Valve Control Chamber