

# 2-WAY SOLENOID ACTUATOR

## S-390T-2W

The BERMAD S-390T-2W is a compact 2-Way Normally Closed Solenoid Actuator, specially designed for reliable long life service in irrigation systems controlled by Continuous Current Controllers. The BERMAD Solenoid Actuator is applicable directly to the Trio valve cover or with a Trio Base that enables combining the S-390T-2W in variety of 2-way control circuits. Model S-390T-2W is compliant with all Continuous Current Controllers on the market. It 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
  - High mechanical strength
  - Protection Class- IP68; NEMA Type 6D
- 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
  - Suits all Continuous Current Controllers on the market
- Simple Installation, Operation and Maintenance
- Robust "Trio" 3-position manual override handle, Close, Open & Automatic modes
- Reliable and Durable Product that Bears the Stamp of BERMAD Quality

### Applications

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



## Specifications

### Ports:

Base Port - 1 (1/4" NPT) - Outlet

Base Port - C (1/4" NPT) - Inlet

**Solenoid to Base Connection:** 3/4"; 20 UNEF Male Threaded

**Base orifice size:** 2 mm

**Base Flow Factor:** Kv = 0.10 m<sup>3</sup>/h @ 1 bar ΔP;  
Cv=0.12 GPM @1 psi ΔP

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

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

**Max. Temperature:** water 80°C; 180°F

## Materials:

**Actuator Casing:** Nylon

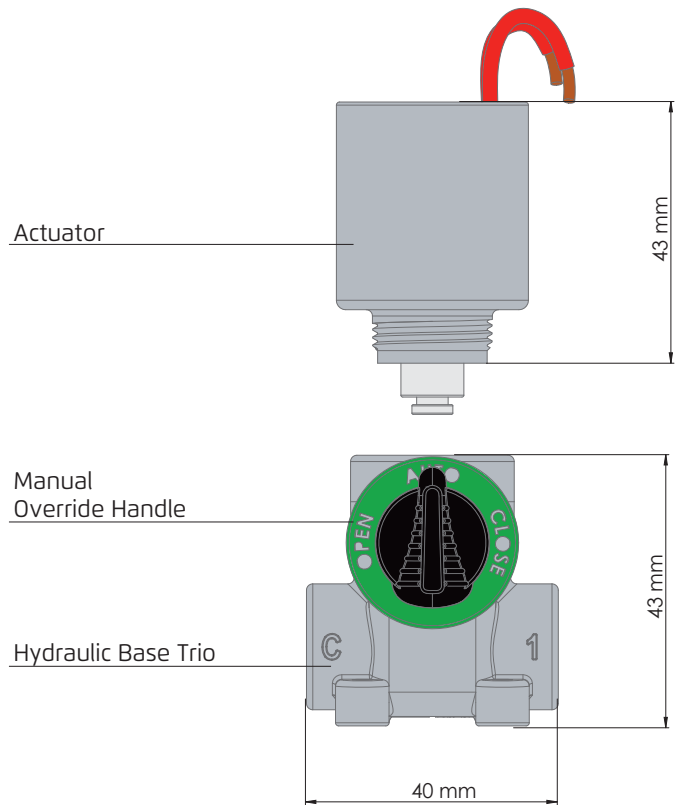
**Seals:** NBR

**Wetted parts:** Stainless steel and polyamide

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

Actuator Type	Cable Color	Power (Watt)	Current (Amp)		Coil Resistance ohm@20°C; 68°F
			Inrush	Hold	
S390T-2W-24VAC-R	Red/Red	1.7	0.25	0.125	375
S390T-2W-24VAC-D	Red/Orange	2.2	0.13	0.13	*
S390T-2W-24VDC	Black/Black	4.2	0.18	0.18	156
S390T-2W-12VDC	Blue/Blue	4.0	0.33	0.33	36

\* Coil resistance in this coil cannot be measured

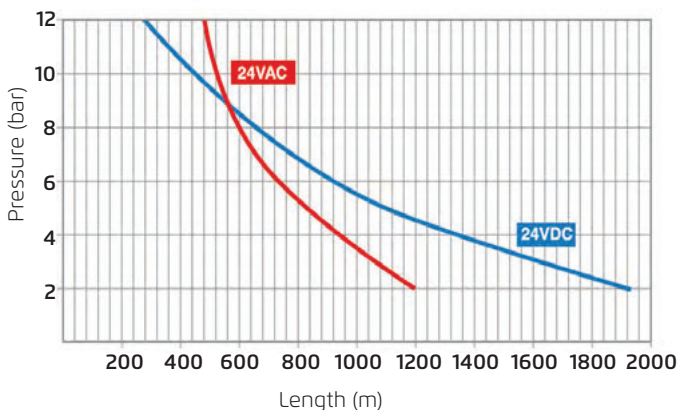


## Cable Length Data:

**Maximum cable length according to coil type**

**Cable cross section:** 0.5 mm<sup>2</sup>, orifice size:

**2 mm, air gap:** 0.7 mm



**For cables longer than shown in diagram**

In order to calculate the cross section of a length other than shown in the diagram, use the following equation:

$$S = \frac{L (SOL)}{L (diagram)} \times 0.5$$

S = Minimum conductor cross-section in mm<sup>2</sup>

L (sol) = Actual Length of cable to solenoid

L (diagram) = Length of cable shown in this diagram