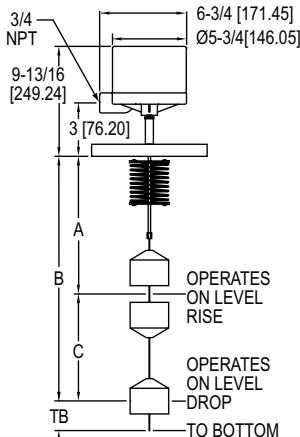


# LIQUID LEVEL SWITCHES-CONTROLS

Top Mounted Displacer Type, Adjustable Setpoints, Magnetic Operation, Optional Hermetically Sealed Snap Switch



DIMENSIONS FOR 1.0 S.G. @ 100°F (38°C)					
A		C		TB	B
Max.	Min.	Max.	Min.	Max.	Min.
116-1/2" (2.66 m)	6-1/2" (165 mm)	114" (2.9 m)	6-3/4" (172 mm)	2-1/2" (64 mm)	122-1/4" (3.1 m)

The **SERIES B-190** Liquid Level Switches and Controls is a top mount displacer type level control. They work on the principle that submerged solids weigh less in liquids, and as the liquid level rises and their weight decreases, the tension on the spring by which they are suspended is decreased. This Series is offered in a range of cable lengths, specific gravities, circuit types and enclosure ratings.

**FEATURES/BENEFITS**

- Extremely versatile design
- Displacers are suspended on a coil spring and do not float on the surface of liquids and are unaffected by turbulence or pressure
- Excellent for applications with viscous or dirty liquids

**APPLICATIONS**

- Pumping stations
- Foaming liquids
- Sanitary/sewage treatment
- Paints & varnishes
- Agitated or turbulent fluids
- Heavy oil refineries
- Chemical plants
- Power generating stations
- Viscous or dirty liquids

MODEL CHART		
Model	Switch Type	
B190-WT-4810-P-A-1.0-2	SPDT mercury	
B190-WT-7810-P-A-1.0-2	SPDT snap	
B190-WT-7810HM-P-A-1.0-2	SPDT hermetically sealed snap	

**SPECIFICATIONS**

**Service:** Compatible liquids.  
**Wetted Materials:** Cable, spring and stops: 316 SS; Optional Inconel® spring; Displacers: Porcelain; Optional 304 SS, 316 SS, or carbon graphite.  
**Temperature Limits:** Ambient Temperature: 32 to 200°F (0 to 93°C); Process Temperature: 32 to 200°F (0 to 93°C).  
**Pressure Limit:** 125 psig (8.6 bar). Higher ratings available.  
**Enclosure Rating:** NEMA 4X. Optional general purpose or explosion-proof.  
**Switch Type:** SPDT snap switch, hermetically sealed snap switch, or mercury switch. Optional DPDT or two stage.  
**Electrical Rating:** Snap switch: 12 A @ 120 VAC, 5 A @ 240 VAC, 0.5 A @ 125 VDC resistive, 0.25 A @ 250 VDC resistive; Hermetically sealed snap switch: 5 A @ 120 VAC, 5 A @ 240 VAC, 5 A @ 30 VDC resistive; Mercury switch: 4 A @ 120 VAC/DC, 2 A @ 240 VAC/DC. Higher contact ratings available for the mercury switch.

**Electrical Connections:** Screw terminal.  
**Conduit Connection:** 3/4" female NPT.  
**Process Connections:** 4" 125 cast iron flange. Other material, size, and rating flanges are available.  
**Mounting Orientation:** Vertical.  
**Set Point Adjustment:** Adjustable by moving displacers see dimension chart for minimum and maximum values.  
**Deadband:** Adjustable by moving displacers see dimension chart for minimum and maximum values.  
**Specific Gravity:** Standard is 1.0. Specify when ordering by replacing 1.0 in model number with specific gravity setting desired. Settable range is 0.5 to 1.2.  
**Cable Length:** 10' (3 m) standard. Optional up to 100' (30.5 m).  
**Weight:** 25 lb (11.34 kg).  
**Agency Approvals:** UL (None on HM switch).

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Level Switches  
Optical/Displacer