

CAPACITANCE POINT LEVEL SWITCH – 'CPLS'

A versatile single point level switch, specially designed for reliable detection of conductive and non-conductive liquids, powders, granules and slurries.

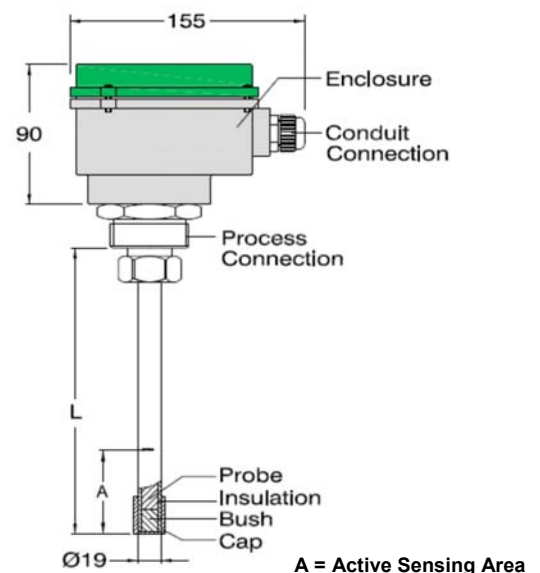
Salient Features

- Compact and robust design
- Trouble free operation with minimal maintenance
- Ignores build-up on sensor
- Simple to configure probe in covered and uncovered condition through two keys
- Easy to configure output switching function
- Configuration lock facility for safeguard

Construction and Working

It consists of integral sense and reference terminals enclosed within PTFE insulated probe and microcontroller-based electronics housed in a cast aluminium enclosure. It operates on the principle of capacitance formed due to process medium around the active sensing area of the probe. The change in capacitance is sensed and processed to provide PNP switching output, which can be wired to PLC/DCS. The switch is factory set for output of PNP (NO) function. Its advanced circuitry ensures reliable performance by ignoring material build-up on the probe, thereby eliminating false signals.

Techtrol Switch Amplifier (TSA) with 5A, 250 VAC relay output along with CPLS can be used to control auxiliary devices like pumps & solenoid valves.



Specifications

Probe MOC	: SS304 full PTFE insulated
Probe Length	: 1) 150 mm, 2) 300 mm
Active Sensing Area	: 70 mm
Process Connection	: SS304 x 1-1/2" BSP Screwed or 1-1/2" NB Flanged 150#
Supply	: 12 to 28 VDC
Output	: PNP or NPN @ 35 mA load with NO or NC : Settable thru buttons
Power Consumption	: 8 mA @ 24 VDC (w/o load)
LED Indication	: Red (NC), Green (NO)
Programming	: Through two push keys to configure - Probe uncovered (Empty state) - Probe covered (Full state) - Selection of switch function NO/NC - Lock or Unlock
Enclosure	: Cast Al. WP IP65 or ABS IP65
Conduit Connection	: 1 no. x PG 11 Cable Gland (Nylon)
Max. Temperature	: 60 °C
Max. Pressure	: Atmospheric

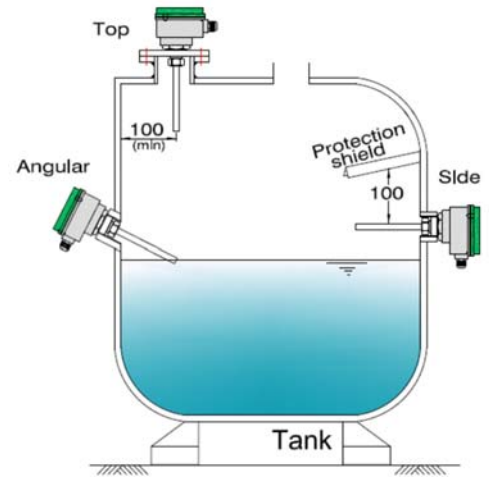
Techtrol Switch Amplifier (TSA)-

Used along with CPLS when relay output is required.

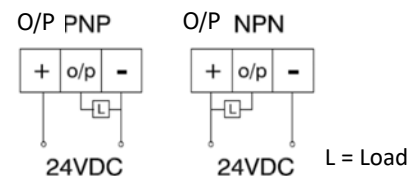


Model	: TSA
Enclosure	: ABS Panel Mounted, IP41 : Size - 72 x 72 x 120 D mm
Supply	: 90 – 270 VAC
Input	: PNP (Optional – NPN)
Output	: Relay x 1 SPDT, 5A@250 VAC
LED Indication	: Green – Supply, Red – Relay Status

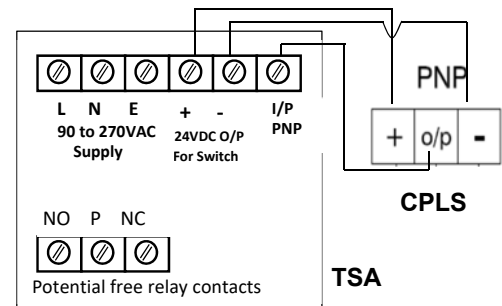
Installation



Terminations and Wiring



Wiring with Switch Amplifier - TSA



Applications - Coolants, Lubricants, Slurries, Pastes, Powders, Grains and Granules.

Model Identification

	CPLS -			
Probe Length				
150 mm	1			
300 mm	2			
Process Connection				
1-1/2" BSP (M) Screwed		S		
1-1/2" NB ASME Flange 150#		F		
Enclosure x Conduit Connection				
Cast Al. IP65 x PG11 Cable Gland				A
ABS IP65 x PG11 Cable Gland				B

Ordering Information

Model No. x Service Media, Operating Temperature & Pressure. Techtrol Switch Amplifier (TSA) to be ordered separately

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