

Capacitive Sensors

Tube Sensor Series - TS



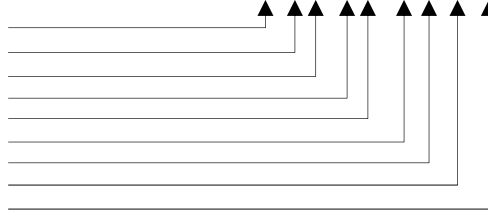
- Superior sensing performance
- Designed for nonmetal tubes and pipes, ¼" to 2" OD
- Detects "hard to see" liquids through residue with ease
- "Ultra" sensitivity design for low dielectric liquid sensing



Order Template

TS-M55AP-6X-W1-S-C

Mechanical length	: M55	
Function	: A (N.O.), R (N.C.), V (Analog)*	(see note 1)
Output	: N (NPN), P (PNP)	(see note 2)
Voltage Range	: 4* (10..65 VDC), 6 (10..40VDC)	(see note 3)
Display	: X (LED), X2* (2 LEDs)	(see note 4)
Connector Type	: W (cable), Y* (cable w/ connector)	(see note 5)
Wiring Type	: 1 (standard), 2* (custom)	(see note 6)
Option Code	: S (Standard)	(see note 7)
Environmental	: I* (Industrial) C (Commercial)	(see note 8)



Electrical Specifications

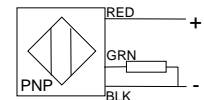
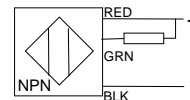
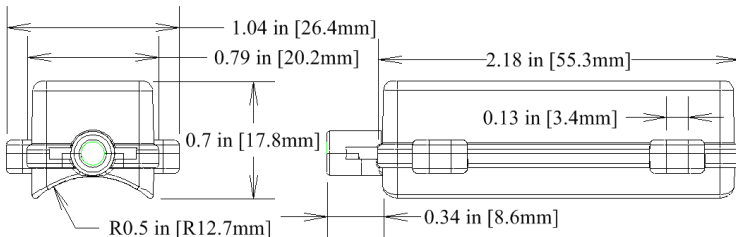
Wiring	.	. 3 wire
Supply Voltage	.	. See order template
Supply Current (no load)	.	. <5 mA
Supply Current (load)	.	. 200 mA
Ripple (LINE)	.	. DC (<= 30mV p-p)
Hysteresis (Travel differential)	.	. <= 2%
Voltage Drop (sensor)	.	. DC (<=1.8VDC)
Overload Protection	.	. YES
Offstate Current	.	. < 100uA
Time Delay (ON state)	.	. < 10 ms
Reverse Polarity	.	. YES
Short Circuit Protection	.	. YES
Repeatability	.	. < 2% of rated operating distance

Mechanical Specifications

Shock	.	. 30g, 11ms
Vibration	.	. 55 Hz, 1mm Amplitude in all 3 planes
IP Rating	.	. IP67
Material	.	. ACETAL (Delrin)
Mounting	.	. Longitudinal

Operating Specifications

Proximity	.	. Shielded (0-20 mm)
Temperature	.	. -40 to 85 C
Switching Frequency	.	. > 100Hz
"ON" state duration	.	. < 10 ms



Note 1
material under test
Note 2
respectively.

Note 3
Note 4
Power RED = State)

Note 5
Note 6
Note 7
Note 8

: Analog option – ratiometric to dielectric
: NPN and PNP are current sink and source
Output analog (V) if selected.
: 4 (10..65 VDC) special order only
: X (Red LED, power and state) X2 (GRN =
(X2 special order only)
: Y cable w/ connector special order only
: 2 (custom) special order only
: S (Standard, potentiometer level adjustment)
: I (Industrial – potted housing)