

# THERMAL INSERTION LIQUID LEVEL SWITCH EXPLOSION PROOF

## TLS SERIES

**CLASS I, GROUPS A, B, C, D;**  
**CLASS II, GROUPS E, F, G; NEMA 4X**  
**Protection: IP68**

TLS Series are assembled with a thermal dispersion sensor. It designed to provide a switch function for controller or alarm when the sensor is immersed into process liquid.

### Technical Data

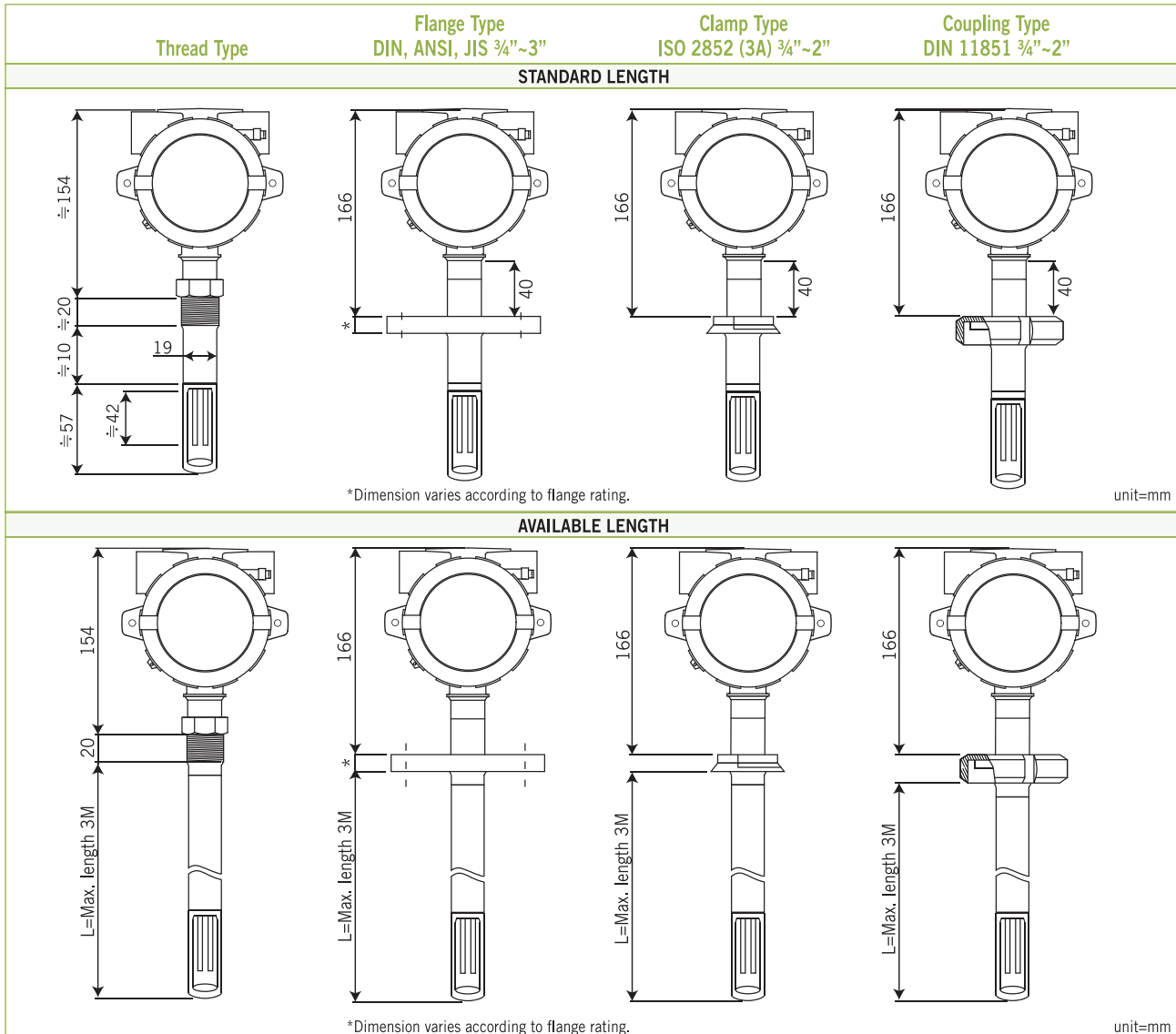
- Wetted Parts Material:** 316 stainless steel
- Thread Connection:** 3/4"NPT or 3/4"BSP Male
- Flange Connection:** from 3/4" to 3"; JIS, ANSI, DIN and Clamp available
- Detection Length:** Standard 2"; and option 2"~120" (0~3M)
- Conduit Connection:** 3/4" or 1/2"NPT Female
- Working Temperature:** -30°C~+120°C
- Working Pressure:** maximum 40 kg/cm<sup>2</sup>
- Power Supply:** 110VAC, 220VAC, 24VDC
- Contact Form:** SPDT x 2
- Contact Rating:** 10A/125VAC, 10A/250VAC
- Response Time:** 3 to 10 seconds
- Repeatability:** ±1% of setpoint



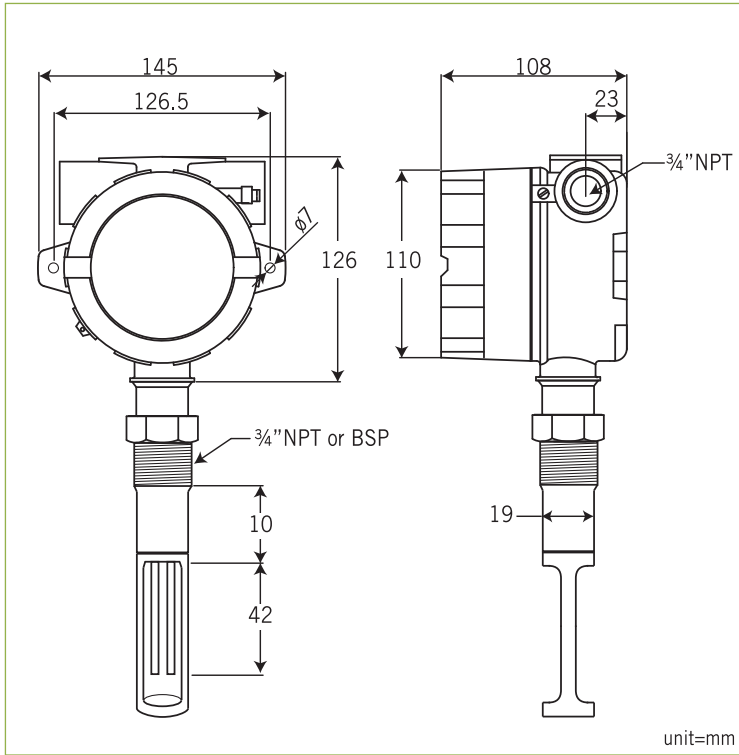
**Approvals:**



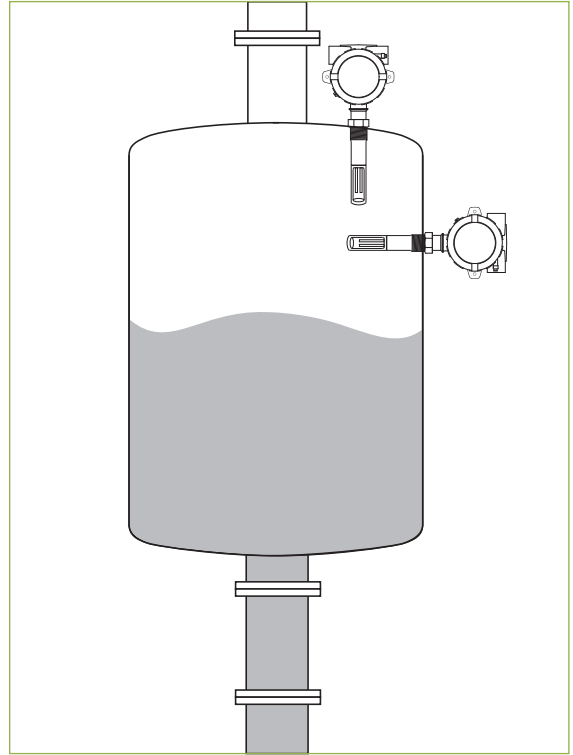
### Process Connection



## Housing Dimensions



## Application and Installation



## Ordering Information

TLS	Code	Process Connection Type
↓	↓	(1) Thread Type (2) Flange Type (3) Clamp Type (4) Coupling Type
		<b>Code</b> <b>Connection Size</b>
		(A) 3/4" (B) 1" (C) 1 1/2" (D) 2" (E) 3" (O) option available
		<b>Code</b> <b>Connection Rating</b>
		<b>T</b> Thread: (1) NPT (2) BSP
		<b>F</b> Flange: (3) JIS 10K (4) JIS 20K (5) ANSI 150# (6) ANSI 300# (7) PN10 (8) PN16 (9) PN25 (O) option: fill in the requested rating _____
		<b>N</b> For Clamp Type (ISO 2852)
		<b>P</b> For Coupling Type (DIN 11851)
		<b>Code</b> <b>Electronic Connection</b>
		(E) 3/4" NPT Female, Standard (F) 1/2" NPT Female
↓	↓	<b>Code</b> <b>Insertion Length</b>
		<b>S</b> Standard, L=60mm
↓	↓	<b>L</b> Fill in the requested length, ie: L=300mm
		<b>Code</b> <b>Power Supply</b>
↓	↓	(A) 110VAC (B) 220VAC (C) 24VDC
		<b>Complete Ordering Code</b>