

totflex

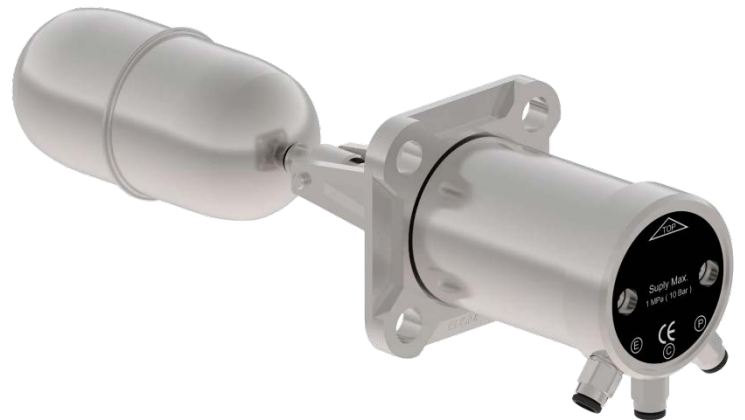


Switch to Precision:

The Smart Choice For Level Control

## Level Switch

The Totflex TFX-PLS Level Switch is engineered for precise and dependable monitoring of liquid levels in a diverse array of industrial environments, including food processing facilities, marine machinery, boilers, and storage tanks. Its robust design features high-quality 316 stainless steel components for the float and flange, offering exceptional resistance to corrosion and wear in harsh conditions.



## Working Principle:

- **Magnetic Float System:** The switch operates using a float that moves vertically on a guide rod as the liquid level in the tank changes. This float is equipped with a magnet.
- **Microswitch Mechanism:** The proximity of the float's magnet to a microswitch within the switch housing alters as the float rises or falls, thereby actuating the microswitch.
- **Responsive Output Signal:** The activation of the microswitch generates an electrical signal that can be used to operate various control systems, such as turning pumps on or off, activating alarms, or providing real-time level indicators to monitoring equipment. This direct and responsive signaling ensures efficient process control and rapid adjustment to changing liquid levels.

## Advantages:

**Enhanced Durability:** Built to last in demanding settings, the TFX-PLS maintains performance integrity over long operational periods.

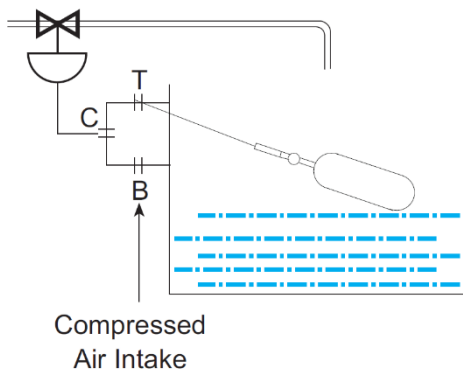
**Broad Application Range:** Its high resilience and adaptable design make it an excellent choice for critical level monitoring across multiple industrial sectors.

**Accurate Level Measurement:** Delivers precise and reliable level readings, crucial for the effective management of industrial processes and safety protocols.

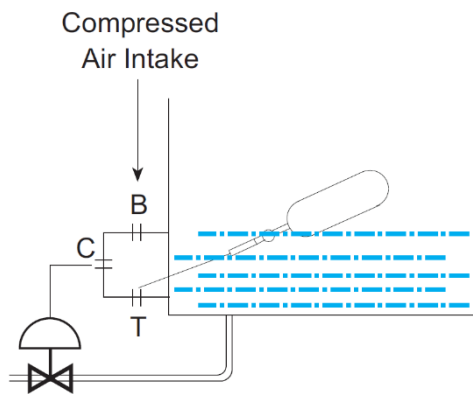
MODEL	TFX Pneumatic Proportional Output
Mounting Type	Vertical
Flange Material	316 Stainless Steel
Float Material	316 Stainless Steel
Min. Density	0.7 g / cm <sup>3</sup>
Case Material	Aluminum Injection, Painted
Flange Dimension	92 mm x 92 mm
Max. Pressure/Temp.	25 bar / 250 °C
Ambient Temperature	(-) 20 °C / (+) 80 °C
Protection Class	IP 65
Weight	1.75 kg
Float Test Pressure	40 bar
I/O Connection	1/8" BSP



### Electrical and Pneumatic Connection:



### Filling

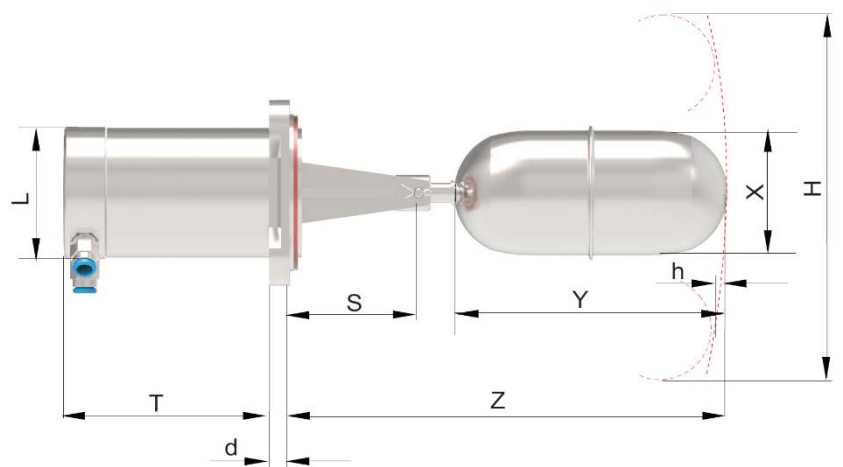


Air Input (bar)	Control Output (bar)	
	Min.	Max.
2	0,25	1,5
4	0,6	3,1
6	1,1	4,8
8	1,8	6,5
10	2,5	8,3

**B** | Air Input  
**T** | Discharge Output  
**C** | Control Output

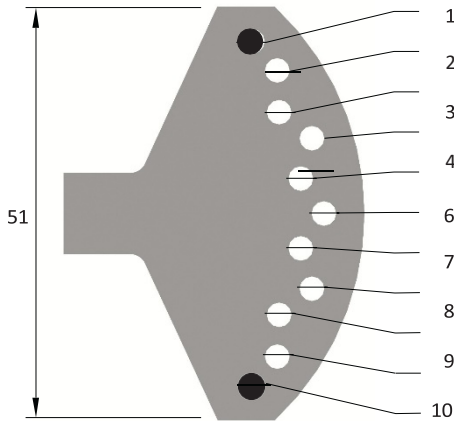
### Discharge

TFX-PLS	
Z	205
T	100
L	65
Y	140
X	n64
H	127
h	4
d	10



### Adjusting Apparatus

**Material:** Stainless Steel 1.4571 11 Holes



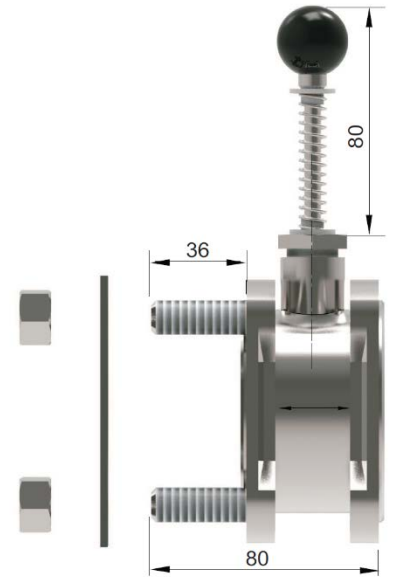
### Test Apparatus

**Material:** Stainless Steel 1.4408

**Max. Working Temperature:** 80 °C

**Bolt:** M12 x 1.5 mm<sup>2</sup>, 4 pcs.

It is used in order to understand whether level switch makes its function or not, without discharging tank.



### Counter Flange

**Material:**

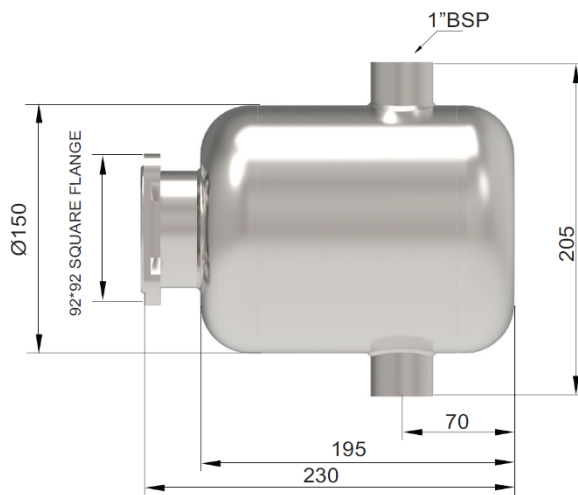
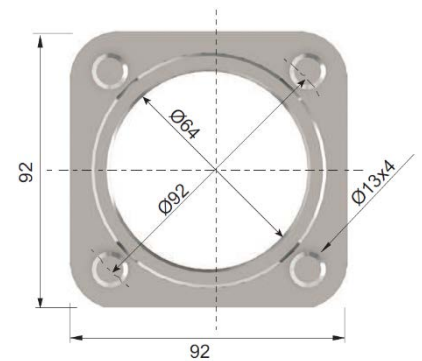
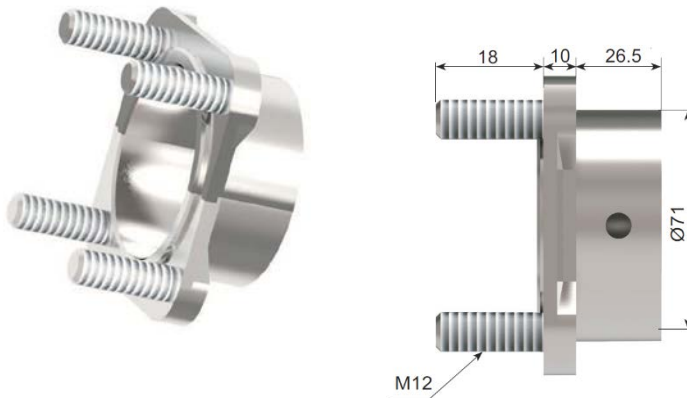
Stainless Steel 1.4408 Bolt: M12 x 1.5 mm<sup>2</sup> 4 pcs.

### Flange

**Material:** Stainless Steel 1.4571

**Measurement:** 92 mm x 92 mm Square Type

**Holes Diameter:** Ø13 mm 4 Holes



### External Tank

**Material:** Stainless Steel 1.4571

**Connection:** 92 mm x 92 mm. Square Flange

**Process Connection:** 1" BSP Opt.

**Flange Weight:** 2.6 kg

It can be used as feeding device. With bolt, nut and washers.

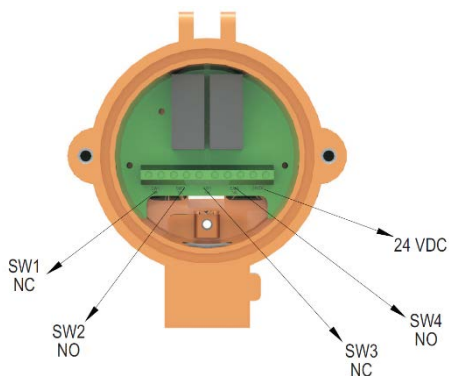
### Contact Apparatus

TLB level switch has four contacts and one electronic card in it, that you can take signals freely from each other. The contact can be manufactured as NC or NO according to customer needs.

**Power Supply:** 24 VDC

**Output:** 2 x NO + 2 x NC Relay

**Product Working Temperature:** Max. 100 °C



### Protective Bellows Apparatus

The apparatus are used in order to enable operation of level switch in the tanks, which contains particles inside.

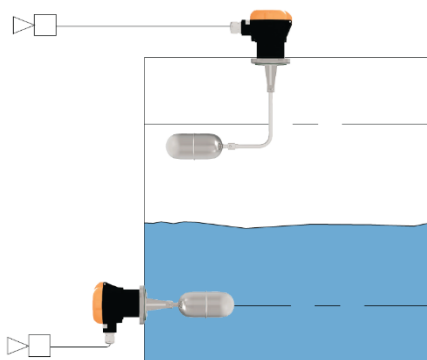
**Metal Part:** Stainless Steel 1.4571

**Rubber Part:** Viton 200 °C

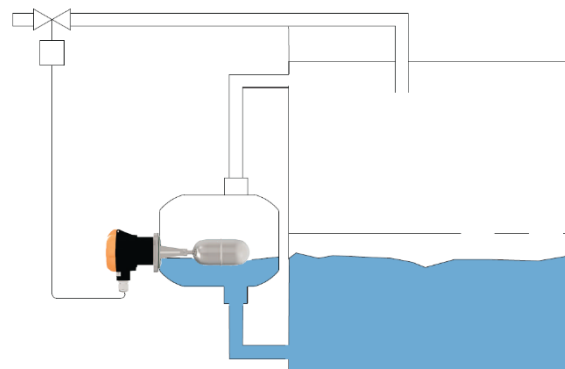


### Area of Usage - Examples

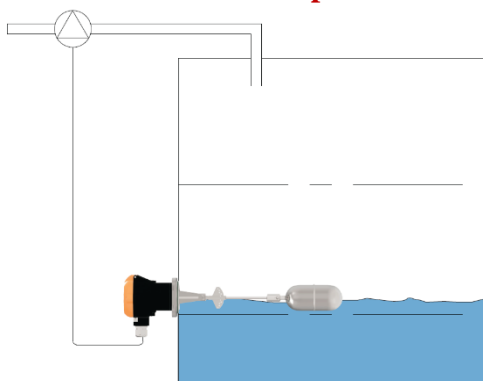
#### Min or Max Control



#### with External Apparatus



#### Valve & Pump Control



#### Pump Control

