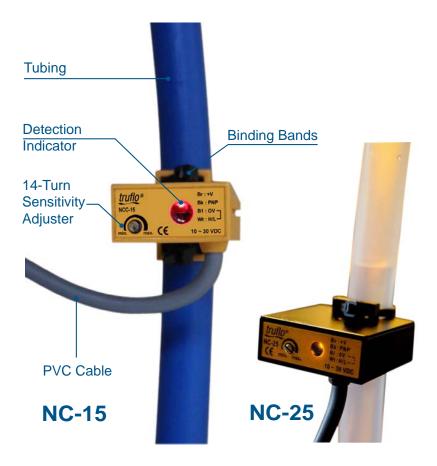
## **Non-Intrusive Flow | Level Switch**



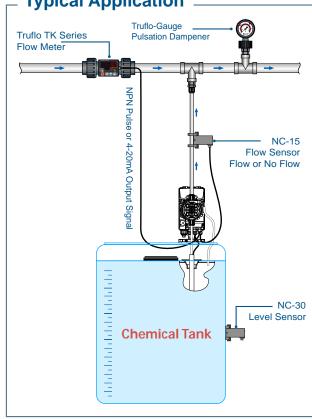


- All Plastic Design
- Excellent Chemical Resistance
- No Pressure Drop





**Typical Application** 



#### **FEATURES**

- Senses Liquid through Tubing
- Tubing Size ¼" to ½"
- Flow | No Flow
- Non-Intrusive
- Air Bubble Detection
- All Plastic Design
- Simple to Install
- Heavy Walled Tubing | Up to 0.062"
- Lightweight
- Very Accurate | Sensitivity Adjustment
- Perfect for Dosing or Metering Pumps

ORDERING INFORMATION			
Sensing Method	Applicable Tube Diameters Appearance		Output Configuration
Electrostatic Capacitive Method	1⁄4" - 1⁄2"	NC-15	NPN   PNP Output
Photoelectric Method	1⁄4" - 1⁄2"	NC-25	NPN   PNP Output

# NC-15 | NC-25 SERIES

## **Non-Intrusive Flow | Level Switch**



#### **Ratings and Specifications**

Applicable Pipes Size	Materials	PolyCarbonate	
	Diameter	3/8 - ½"   (7 to 13 mm)	
	Wall thickness	0.62"	
Sensing Object		Liquid	
Repeat Accuracy		±0.2 mm max.	
Power Supply Voltage (operating voltage range)		12 to 24VDC  10% max. ripple   (10.8 to 30VDC)	
Current Consumption		12mA max.	
Relay Output	Load current	NPN   PNP (100mA max)	
	Residual voltage	1 V max. (Load current: 100 mA, Cable length: 2 m)	
Sensing Liquid Position		Indented mark position	
Indicators		Detection indicator (orange)	
Ambient Temperature Range		Operating: 0 to 55°C (with no icing or condensation), Storage: -10 to 65°C (with no icing or condensation)	
Ambient Humidity Range		Operating   Storage: 25% to 85% (with no condensation)	
Temperature Influence		±4 mm of detection level at 23°C in the temperature Range of 0 to 55°C (with pure water or 20% saline solution)	
Voltage Influence		±0.5 mm of detection level at the rated voltage in rated voltage ±10% range	
Insulation Resistance		50 M $\Omega$ min. (at 500VDC) between current-carrying parts and case	
Dielectric Strength		500VAC, 50/60 Hz for 1 min between current-carrying parts and case	
Vibration Resistance		Destruction: 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions	
Shock Resistance		Destruction: 500 m/s2 3 times each in X, Y, and Z directions	
Degree of Protection		IP66 (IEC)	
Connection Method		Pre-wired Models (Standard cable length: 2 m)	
Weight (packed state)		Approx. 70 g	
Materials	Case, Cover	Heat-resistant PC	
	Cable clamp	Nylon	
Accessories		Two bands	

<sup>\*</sup> Stable detection will not be possible in the following cases. Confirm detection capability with the Sensor installed before actual application.

#### Note:

- 1. If the specific inductive capacity or the specific electric conductivity of the liquid is too low, the liquid position may not be detected since this sensor is a capacitive sensor.
- 2. If the quantity of liquid is too low or the change in quantity is too low in comparison to the change in liquid level because the pipe is too thin or the walls of the pipe are too thick.
- 3. If there is a viscous film on the inner pipe wall, large quantities of foam or air bubbles, or excessive buildup of dirt on the inner pipe wall