

# NC-15 / NC-25 SERIES

## Non-Intrusive Flow / Level Switch

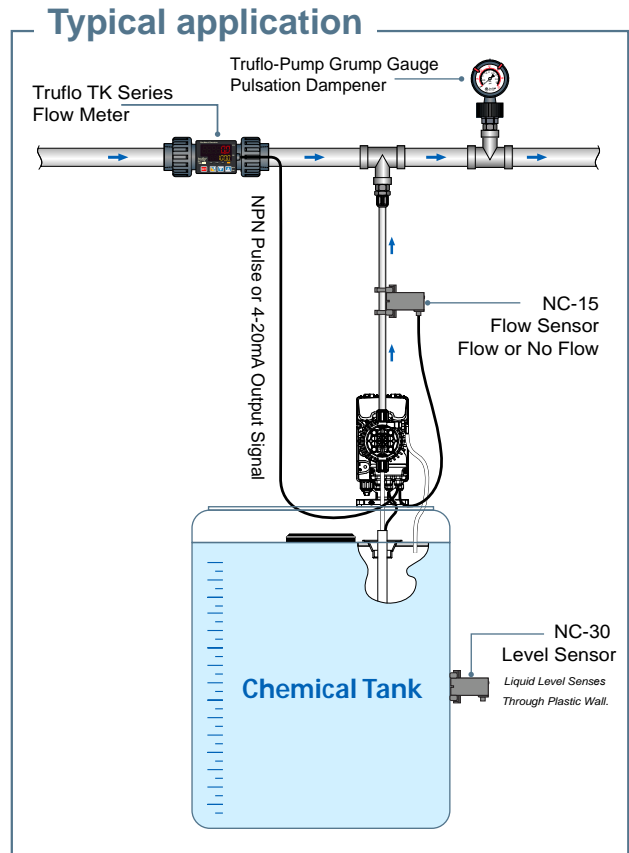
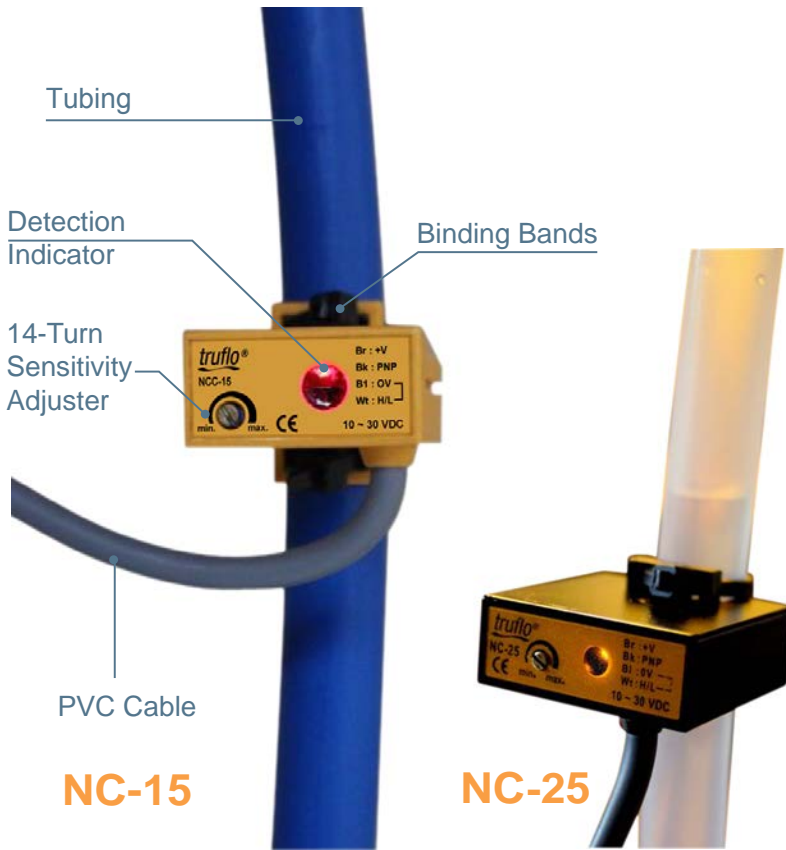
Order from:  
**C A Briggs Company**  
 622 Mary Street; Suite 101  
 Warminster, PA 18974  
 Phone: 267-673-8117 - 800-352-6265  
 Fax: 267-673-8118  
 Sales@cabriggs.com - www.cabriggs.com



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



SERIES : NC-15  
 SERIES : NC-25



### FEATURES

- Senses Liquid through Tubing
- Tubing Size- 1/4" to 1/2"
- Flow - No Flow
- Non - Intrusive
- Air Bubble Detection
- All Plastic Design
- Simple to Install
- Heavy Walled Tubing 0.062"
- Light Weight
- Very Accurate- Sensitivity Adjustment
- Perfect for Dosing or Metering Pumps

### ORDERING INFORMATION

Sensing Method	Applicable Pipe Diameters	Appearance	Output Configuration
Electrostatic Capacity Method	3/8"-1/2" 7 to 13 mm	 NC-15	NPN / PNP Output
Photoelectric Method	3/8"-1/2" 7 to 13 mm	 NC-25	NPN / PNP Output

### Ratings and Specifications

Applicable Pipes Size	Materials	PolyCarbonate
	Diameter	3/8-1/2" (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 24 VDC, 10% max. ripple (10.8 to 30 VDC)
Current Consumption		12 mA max.
Relay Output	Load current	NPN/PNP (100 mA 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 MΩ min. (at 500 VDC) between current-carrying parts and case
Dielectric Strength		500 VAC, 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/s <sup>2</sup> 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

\* 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