

東横化学

TOYOKO KAGAKU CO., LTD.

Kawasaki, Kanagawa, Japan

Detecting Liquid in the Tubings
No physical contact with liquid
Easy to install on the Tubings
Excellent Cost Performance

CE Mark Compliance 
UL Recognized Products 
EU-RoHS Compliance 

Level Sensor

TK-010N2 TK-015N2 Series

Non-contact Liquid Detection

Installed easily with no tools

Free from color or dielectric factor

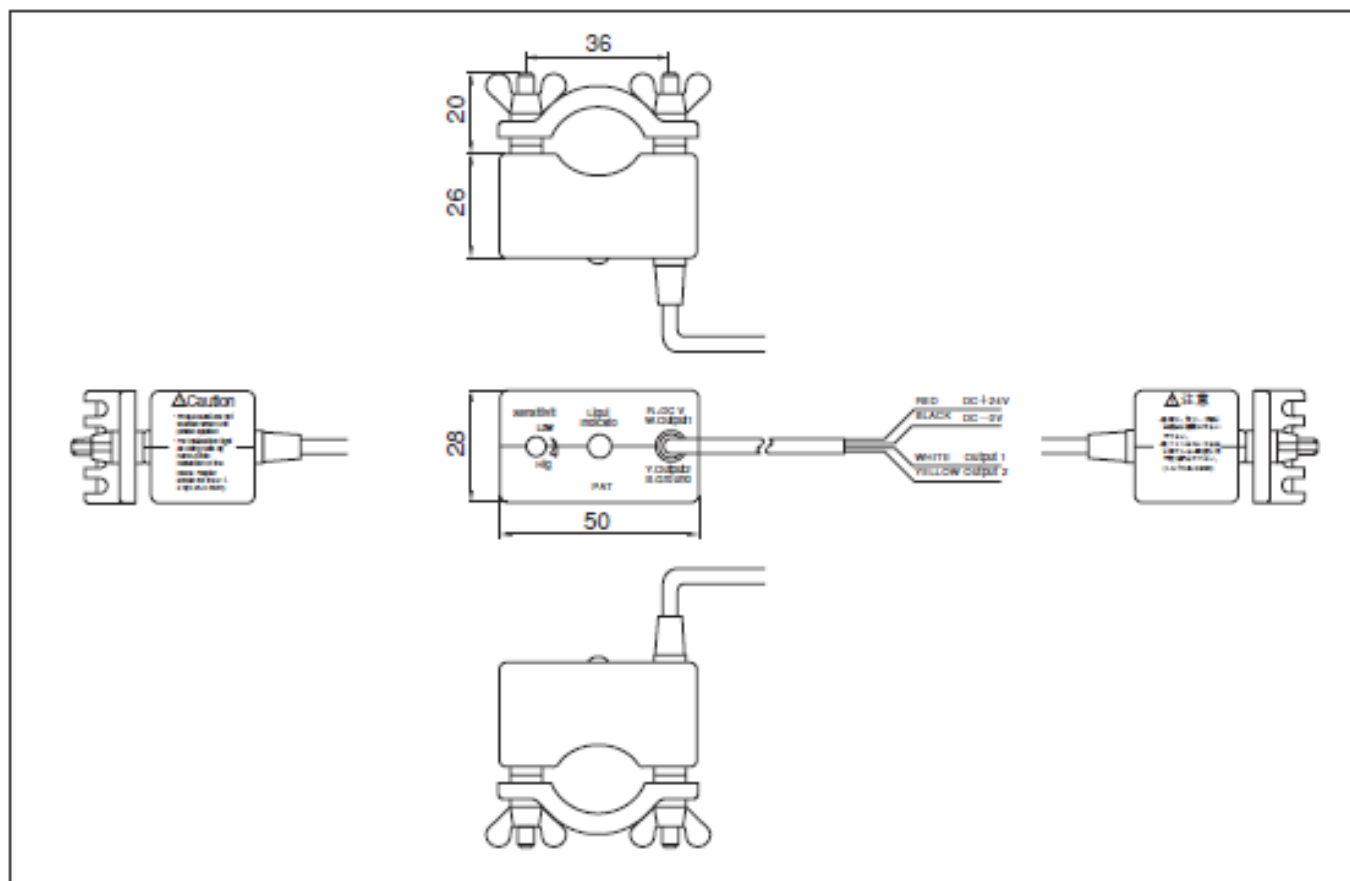
TK-010/015N2 Series Sensor is an optical-electric device to detect the liquid in transparent or semi-transparent tubings, being installed at the outer wall of tubing. The installation job is very simple using the attached bracket and nuts, anywhere place you can fix the sensor to detect if the liquid exists, or not. Namely this versatile device can be used for liquid level sensor as shown at a left photo.

Because non-contact detecting method is the principle of optical physics, almost every liquid can be detected without influence of complex adjustment procedure for dielectric factor nor color, density, etc. Free from contamination by contact with media liquid is also a strong point of the design of TK-010/015N2 sensor.

For highly reflecting solution, such as slurry mixture, -S1 model is provided in this optical-electric sensor family for the properly expanded application.



Dimensions (unit: millimeter)



Specifications

| Model | TK-010N2 | TK-015N2 | TK-010N2-S1 | TK-015N2-S1 |
|----------------------------|--|----------------|---------------------------|----------------|
| Media Liquid | for General Liquid | | for Sullury solution, etc | |
| Voltage | DC24V \pm 10% | | | |
| Current | 45 mA or below | | | |
| Applicable Dia. of Tubings | ϕ 6 - 25.4 mm OD | | ϕ 10 - 25.4 mm OD | |
| Detection Method | Infrared optical electric device | | | |
| Output | Open Collector Output, 50 mA max, dual lines | | | |
| | NPN Transistor | PNP Transistor | NPN Transistor | PNP Transistor |
| Ambient Temperature | -10 deg C to 60 deg C | | | |
| Water Protect | Silicon Stuffed | | | |
| Material of Body Case | Poly carbonate resin | | | |
| Material of Bracket | Poly carbonate resin | | | |
| Cable | ϕ 3.8mm, 4-wire, 2 m | | ϕ 3.8mm, 4-wire, 3 m | |
| Weight | approx 100g | | | |



TOYOKO KAGAKU CO., LTD.

370 Ichinotsubo, Nakahara-Ku, Kawasaki City, Kanagawa Pref. 211-8502 Japan

TEL: +81-44-435-5860 FAX: +81-44-434-9091

URL: <http://www.toyokokagaku.co.jp>

Cat TK-1015N2-1 ENG 2012 04 pdf