



GT2(S)-WS

Water detection sensors








- Light wavelength absorbed in water molecules
 - Transparent water reliably detected
- Protective structure: IP 67
 - Resin-molded for protection

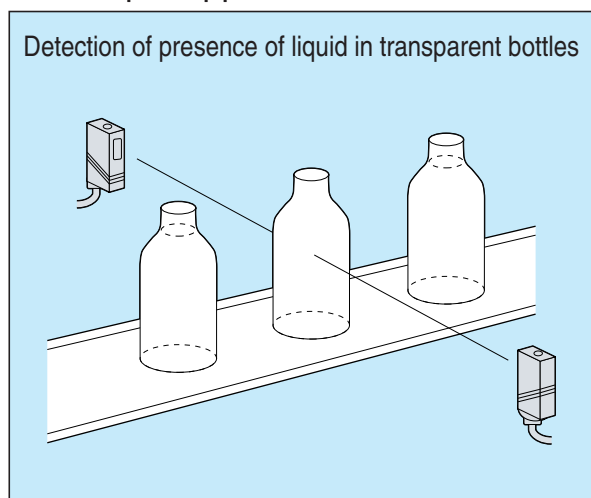
Type

Detection method	Detecting distance	Shape	Model	Operation mode	Output mode
 Through-beam type	 2m	Head-on	GT2-WS	Light-ON/ Dark-ON selectable	NPN open collector
		Side-on	GT2S-WS		

- Detecting distances for different pinhole sheets

Hole diameter	ø1	ø3	ø5	5 x 1	1 x 5
					
Detecting distance	5cm	30cm	1m	30cm	30cm

Sample Application

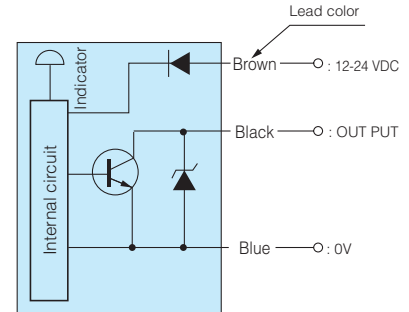


LED light absorption type sensors for water detection

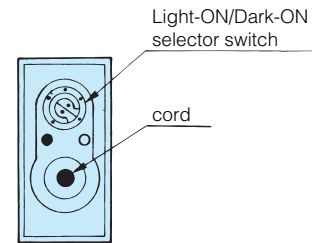
Rating/Performance/Specification

Rating/performance	Model	Head-on	GT2-WS
		Side-on	GT2S-WS
	Detection method	Through-beam type	
	Detecting distance	2m	
	Detection object	Liquid or opaque object of $\phi 20$ mm or larger	
	Power supply	12-24 VDC $\pm 10\%$, ripple 10% max.	
	Current consumption	Transmitter: 25 mA max.; receiver: 10 mA max.	
	Output mode	NPN open collector / Rating: sink current 100 mA (30 VDC) max.	
	Operation mode	Light-ON/Dark-ON selectable (with switch)	
	Response time	1ms max.	
Operating angle	15° (at receiver)		
Specification	Light source (light wavelength)	Infrared LED (1450nm)	
	Indicator	Transmitter: power indicator (red LED) / Receiver: light reception indicator (red LED) / stability indicator (green LED)	
	Volume (VR)	Sensitivity adjustment	
	Switch (SW)	Light-ON/Dark-ON selector switch	
	Short circuit protection	Provided	
	Material	Case/lens: polycarbonate	
	Connection	Permanently attached cord (Outer dimension: dia. 4.2) / Transmitter: 0.3 mm ² x 2cores 3m, gray / Receiver: 0.3 mm ² 3cores 3m, black	
	Mass	About 100 g (transmitter/receiver)	
	Accessory	Mounting bracket, 2 pinhole sheets	

Input/Output Circuit and Connection



Light-ON/Dark-ON Switching



Turning all the way to the left end enables the Light-ON mode.
Turning all the way to the right end enables the Dark-ON mode.

Environmental Specification

Environment	Ambient temperature	-25 - +55 °C (non-freezing)
	Ambient humidity	35-85%RH (non-condensing)
	Protective structure	IP67
	Vibration	10-55 Hz / 1.5 mm amplitude / 2 hours each in 3 directions
	Shock	500 m/s ² / 3 times each in 3 directions
	Dielectric withstanding	1,000 VAC for 1 minute
	Insulation resistance	500 VDC, 20 M Ω or higher

Applicable power supply unit

PS Series

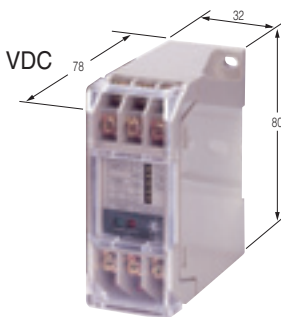
High capacity of 200 mA at 12 VDC

(General-purpose type) PS3N

PS3N-SR

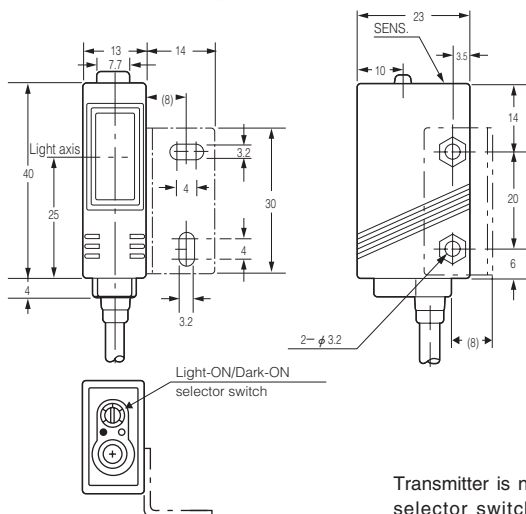
(Multifunctional type) PS3F

PS3F-SR

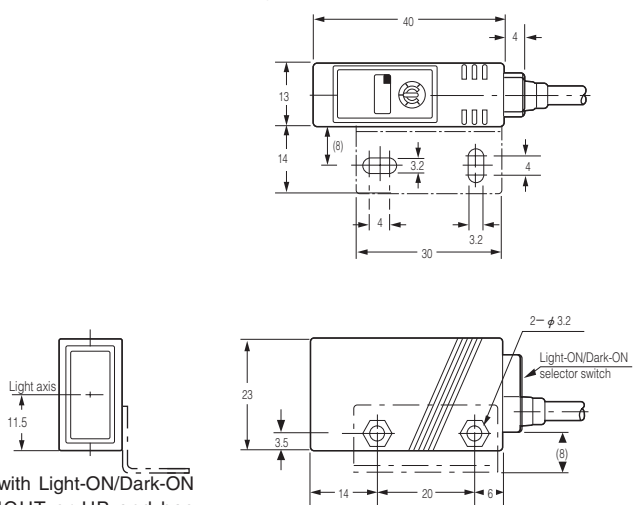


Dimensions (in mm)

GT2S-WS (side-on type)



GT2-WS (head-on type)



Transmitter is not provided with Light-ON/Dark-ON selector switch, SENS, LIGHT or UP and has different panel appearance.