

L 7.5 mm Flat Photoelectric Sensors



BPS Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Easy to mount by flat type
- Realization of 3m sensing distance as small size
- IP67 protection rating (IEC standard)

Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

BPS 3M - T D T ① - ②

① Operation mode

No mark: Dark ON

L: Light ON

② Control output

No mark: NPN open collector output

P: PNP open collector output

Product Components

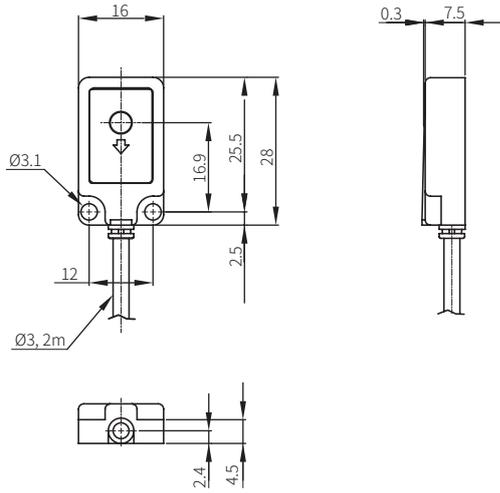
- Product
- Instruction manual
- M3 bolt × 4, M3 nut × 4
- Flat washer × 4

Specifications

Model	BPS3M-TDT□-□
Sensing type	Through-beam
Sensing distance	3 m
Sensing target	Opaque materials
Min. sensing target	≥ Ø5 mm
Response time	≤ 1 ms
Light source	Infrared
Peak emission wavelength	850 nm
Operation mode	Light ON mode / Dark ON mode model
Indicator	Power indicator of emitter (red), operation indicator of receiver (red)
Approval	CE ENEC
Unit weight	≈ 66 g
Power supply	12-24 VDC± ±10% (ripple P-P: ≤ 10%)
Current consumption	Emitter: ≤ 20 mA, receiver: ≤ 20 mA
Control output	NPN open collector output / PNP open collector output model
Load voltage	≤ 30 VDC±
Load current	≤ 100 mA
Residual voltage	NPN: ≤ 1 VDC±, PNP: ≤ 2.5 VDC±
Protection circuit	Reverse power protection circuit, output short overcurrent protection circuit
Insulation resistance	≥ 20 MΩ (500 VDC± megger)
Noise immunity	±240 VDC± the square wave noise (pulse width: 1 μs) by the noise simulator
Dielectric strength	1,000 VAC~ 50/60 Hz for 1 min
Vibration	1.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
Shock	500 m/s ² (≈ 50 G) in each X, Y, Z direction for 3 times
Ambient illuminance (receiver)	Sunlight: ≤ 11,000 lx, incandescent lamp: ≤ 3,000 lx
Ambient temperature	-25 to 65 °C, storage: -25 to 70 °C (no freezing or condensation)
Ambient humidity	35 to 85 %RH, storage: 35 to 90 %RH (no freezing or condensation)
Protection rating	IP67 (IEC standard)
Connection	Cable type
Cable spec.	Ø 3 mm, 3-wire (Emitter: 2-wire), 2 m
Wire spec.	AWG24 (0.08 mm, 40-core), insulator outer diameter: Ø 1 mm
Material	Case: PC, bolt: SCM, nut: SCM

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



Sold Separately

- Cover

Sold Separately: Cover

- Unit: mm, For the detailed drawings, follow the Autonics website.

