

Plastic square shape photoelectric sensors PTF series



Features

- ◆Through beam reflection working principle;
- ◆Excellent anti-interference performance
- ◆High detection accuracy

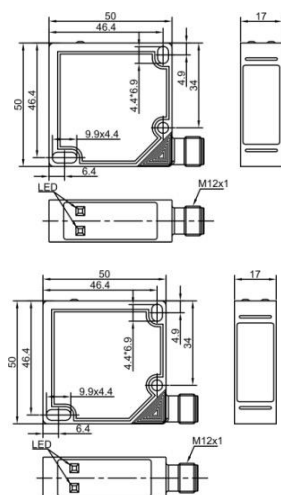
Part number

		Emitter	Receiver			Emitter	Receiver
NPN	NO	PTF-TM20D-E2	PTF-TM20DNO-E2	PNP	NO	PTF-TM20D-E2	PTF-TM20DPO-E2
NPN	NC	PTF-TM20D-E2	PTF-TM20DNC-E2	PNP	NC	PTF-TM20D-E2	PTF-TM20DPC-E2
NPN	NO+NC	PTF-TM20D-E2	PTF-TM20DNR-E2	PNP	NO/NC	PTF-TM20D-E2	PTF-TM20DPR-E2

Technical specifications

Detection type	Through beam	Consumption current	≤25mA
Rated distance [Sn]	20m (non-adjustable)	Circuit protection	Short-circuit and reverse polarity
Standard target	>φ15mm opaque object	Response time	< 8.2ms
Light source	Infrared LED (880nm)	Output indicator	Emitter: Green LED Receiver: Yellow LED
Dimensions	50 mm *50 mm *17mm	Ambient temperature	-15°C...+55°C
Output	NO/NC (depends on part No.)	Ambient humidity	35-85%RH (non-condensing)
Supply voltage	10...30 VDC	Voltage withstand	1000V/AC 50/60Hz 60s
Min target		Insulation resistance	≥50MΩ(500VDC)
Hysteresis range [%/Sr]		Vibration resistance	10...50Hz (0.5mm)
Repeat accuracy [R]	≤5%	Degree of protection	IP64
Load current	≤200mA (receiver)	Housing material	PC/ABS
Residual voltage	≤2.5V (receiver)	Connection type	M12 Connector

Dimensions



Emitter

Receiver

Wiring diagram

