

IP69K High Protection

Proximity



NEW!



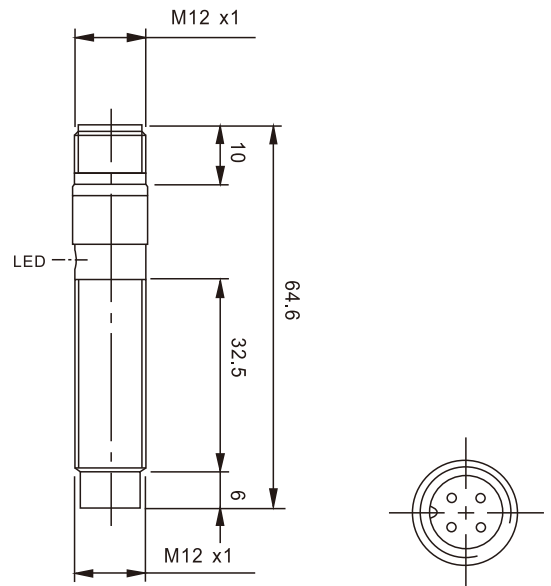
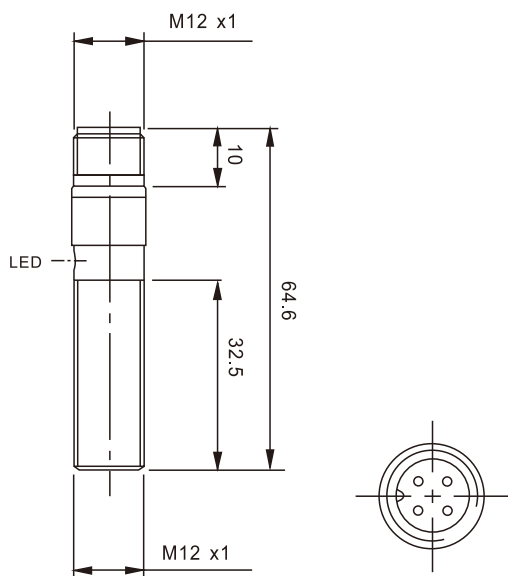
NEW!

Appearance					
Mounting	Shielded		Unshielded		
Sensing distance	2mm	4mm	4mm	8mm	
Working distance	0~1.62mm		0~3.24mm	0~6.5mm	
Hysteresis	1~20%				
Standard target	12 x 12mm FE360		24 x 24mm FE360		
Repeatability	5%				
Operating Voltage	10~30V DC				
Output type	NPNorPNP-NO+NCorNO				
Maximum ripple content	≤10%				
Output current	≤200mA				
Output voltage drop	≤2V				
No-load current	≤15mA				
Leakage current	≤15uA				
operating frequency	2kHz				
Start delay	50ms				
Ambient temperature range	-40°C~+80°C in a short time (within 15 seconds) up to 100°C 10%				
Thermal drift	10%				
Shock and vibration	IEC 60947-5-5/7.4				
Weight	30g				
LEDs	NO output status/without led-25°C~+110°C				
Protection level	IP67,IP68(1m,7days);IP69K (in line with DIN 40050-9 standard)				
Electromagnetic compatibility/EMC	Comply with EMC directive requirements and comply with IEC 60947-5-2 specification				
Housing material	Stainless steel				
Sensor head material	PPS (FDA certification)				
Connection method	M12 connector with gold-plated pins				
Tightening torque	25Nm				
Model No	NPN	TPF12-02NR-E2	TPF12-04NR-E2	TPN12-04NR-E2	TPN12-08NR-E2
	PNP	TPF12-02PR-E2	TPF12-04PR-E2	TPN12-04PR-E2	TPN12-08PR-E2

Dimensions (Unit:mm)

TPF12-02NR-E2(PR)
TPF12-04NR-E2(PR)

TPN12-04NR-E2(PR)
TPN12-08NR-E2(PR)





NEW!



NEW!

Appearance	Shielded		Unshielded		
Mounting	5mm		8mm		
Sensing distance	0~4mm		0~6.5mm		
Working distance			0~9.72mm		
Hysteresis	1~20%				
Standard target	18 × 18mm FE360		36 × 36mm FE360		
Repeatability	5%				
Operating Voltage	10~30V DC				
Output type	NPNorPNP-NO+NOorNO				
Maximum ripple content	≤ 10%				
Output current	≤ 200mA				
Output voltage drop	≤ 2V				
No-load current	≤ 15mA				
Leakage current	≤ 10uA				
operating frequency	15kHz				
Start delay	50ms				
Ambient temperature range	-40°C~+80°C in a short time (within 15 seconds) up to 100°C				
Thermal drift	10%				
Shock and vibration	IEC 60947-5-5/7.4				
Weight	30g				
LEDs	NO output status / without led-25°C~+110°C				
Protection level	IP67, IP68 (1m, 7 days); IP69K (in accordance with DIN 40050-9 standard)				
Electromagnetic compatibility/EMC	Comply with EMC directive requirements and comply with IEC 60947-5-2 specification				
Housing material	Stainless steel				
Sensor head material	PPS (FDA certification)				
Connection method	M12 connector with gold-plated pins				
Tightening torque	25Nm				
Model No	NPN	TPF18-05NR-E2	TPF18-08NR-E2	TPN18-08NR-E2	TPN18-12NR-E2
	PNP	TPF18-05PR-E2	TPF18-08PR-E2	TPN18-08PR-E2	TPN18-12PR-E2

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity**
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Vibration
- Temperature
- Annexes

Guidance

Inductive sensors

- Standard distance
- Extended distance
- Long distance
- Square
- Mini square
- Mini-cylindrical
- Short-body
- Ring-type
- Metal face
- Temperature
- Analog output
- DC 2 wires

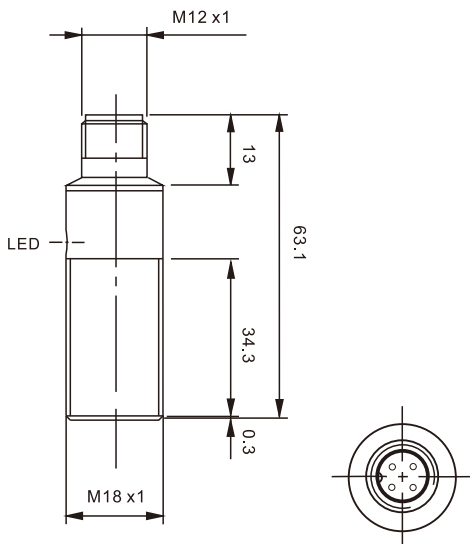
IP69K high protection

Capacitive sensors

- Cylindrical
- Correction resistanc type
- Flat type
- Level detection

Dimensions (Unit:mm)

TPF18-05NR-E2(PR)
TPF18-08NR-E2(PR)



TPN18-08NR-E2(PR)
TPN18-12NR-E2(PR)

