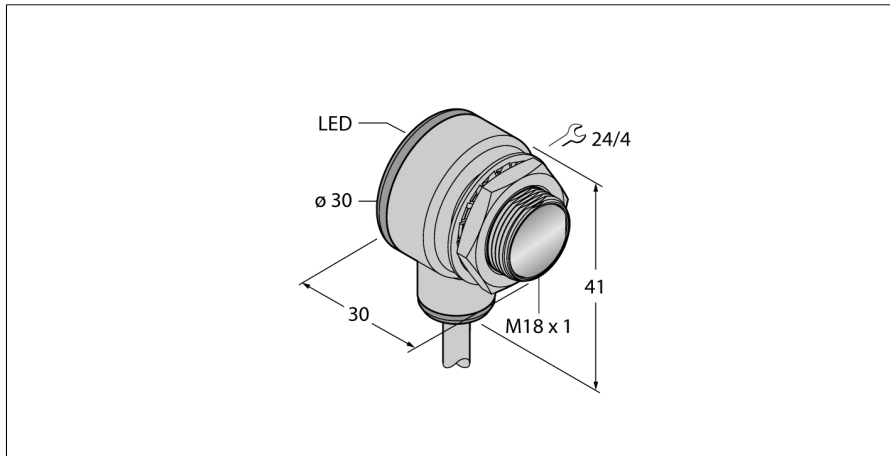
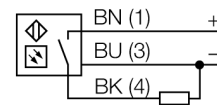


**Photoelectric sensor
retroreflective sensor with polarizing filter
TM18AP6LP**



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Metal housing
- Operating voltage: 10...30 VDC
- PNP switching output, light operation

Wiring diagram

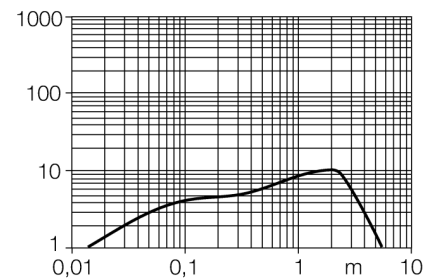


Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and good contrast performance. Further it is merely required to install and wire a single device.

Excess gain curve

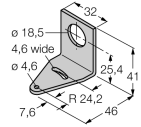
Excess gain in relation to the distance



Type code	TM18AP6LP
Ident no.	3042000
Operating mode	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	624 nm
Range	0...5500 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 25 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	NO, light operation, PNP
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Design	cylindrical/threaded, TM18
Dimensions	30 x 30 x 41 mm
Housing material	metal/plastic, CuZn
Lens	plastic, acrylic
Connection	cable
Cable length	2 m
Cable cross section	3 x 0.5 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

**Photoelectric sensor
retroreflective sensor with polarizing filter
TM18AP6LP**

Accessories

Type code	Ident no.	Description	Dimension drawing
SMBT18Y	3069554	mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male	
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread	

Function accessories

Type code	Ident no.	Description	Dimension drawing
BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C	