

T30AW3LPQ1

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



Technical data

Type	T30AW3LPQ1
ID	3033440
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	680 nm
Range	50...6000 mm
Electrical data	
Operating voltage	20...250 VAC
AC rated operational current	≤ 200 mA
Output function	Light operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Tube, T30
Dimensions	Ø 30 x 45 x 40 x 64 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, 1/2", PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP69
Special features	Encapsulated

Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C

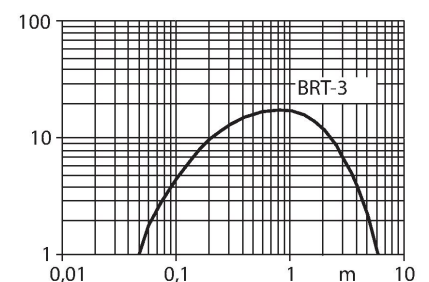
Wiring diagram



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.

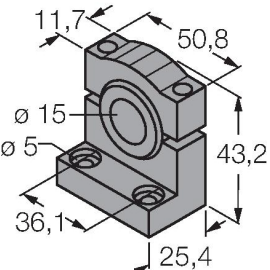
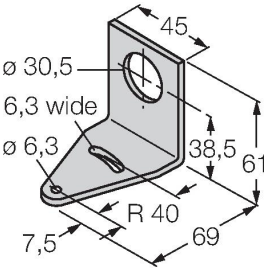
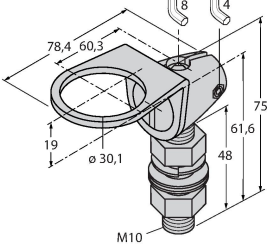
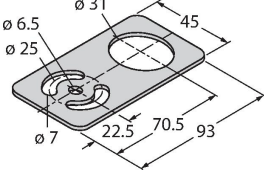
Excess gain curve
Excess gain in relation to the distance



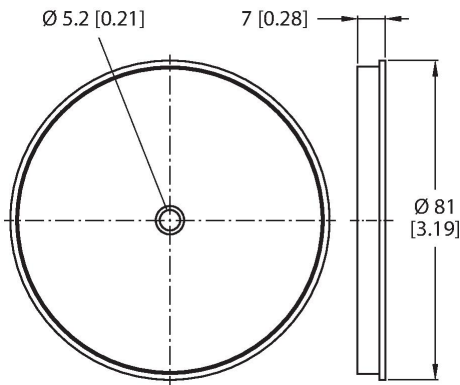
Technical data

	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

Accessories

SMB1815SF 	3053279 Mounting bracket, PBT black, for PICO-GUARD points	SMB30A 	3032723 Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread
SMB30FAM10 	3011185 Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	SMBAMS30P 	3073135 Mounting bracket, stainless steel, for sensors with 30 mm thread

Accessories

Dimension drawing	Type	ID	
	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C