

S30AW3LP

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter

Technical data

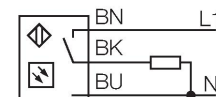
Type	S30AW3LP
ID	3032328
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	680 nm
Range	50...6000 mm
Electrical data	
Operating voltage	20...250 VAC
AC rated operational current	≤ 200 mA
Output function	Light operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Tube, S30
Dimensions	Ø 30 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Encapsulated
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA



Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C

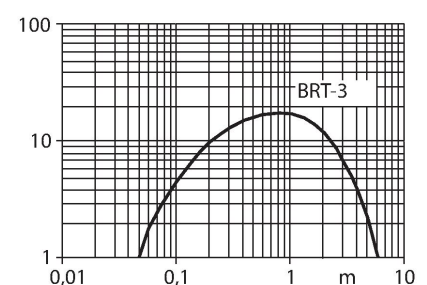
Wiring diagram



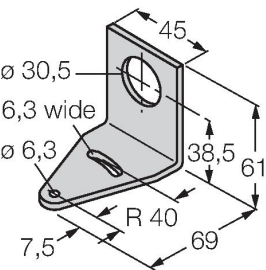
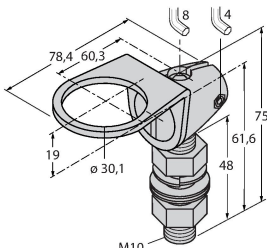
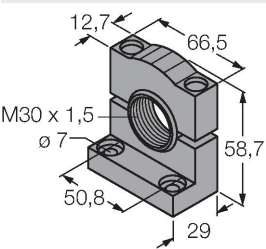
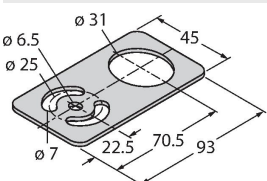
Functional principle

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.

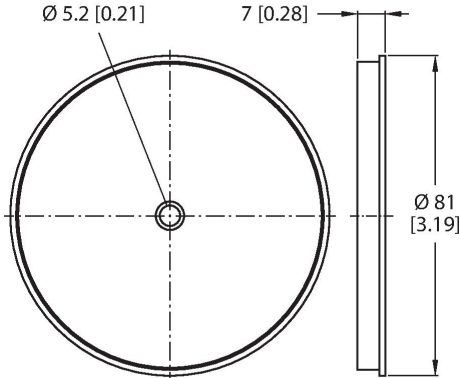
Excess gain curve
Excess gain in relation to the distance



Accessories

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
		
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable
		
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