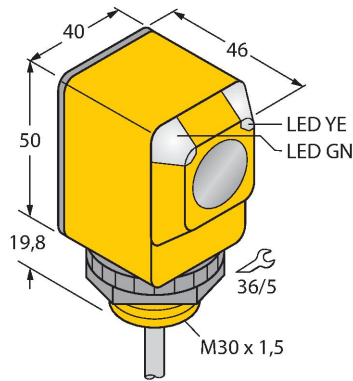


Q40SN6LP W/30

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



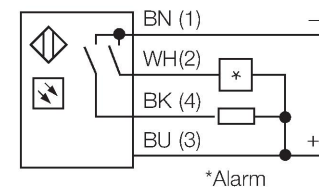
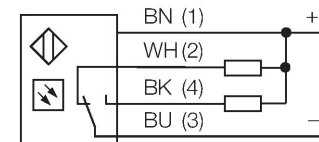
Technical data

Type	Q40SN6LP W/30
ID	3033898
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	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular, Q40
Dimensions	Ø 30 x 46 x 40.1 x 69.8 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 9 m, PVC
Number of cores	4

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram

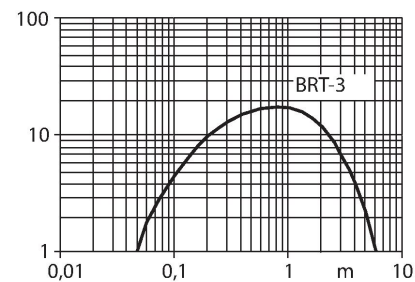


Functional principle

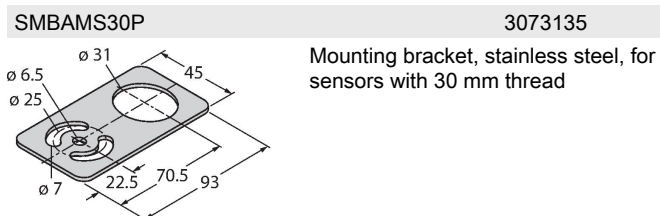
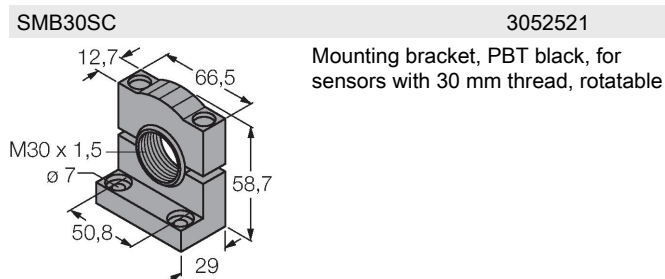
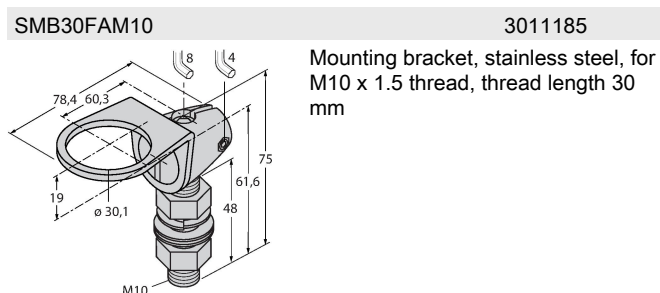
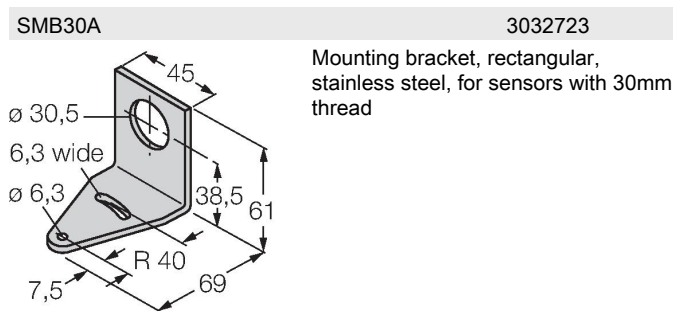
Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and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

Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Encapsulated
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA



Accessories



Accessories

Dimension drawing	Type	ID	
Technical drawing of a round reflector (BRT-3). The drawing includes a front view (left) and a side view (right). The front view shows a circular reflector with a central mounting hole. Dimensions are given as: Ø 5.2 [0.21] for the central hole, 7 [0.28] for the thickness of the central part, and Ø 81 [3.19] for the outer diameter. The side view shows the profile of the reflector, which is a thin disc.	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C