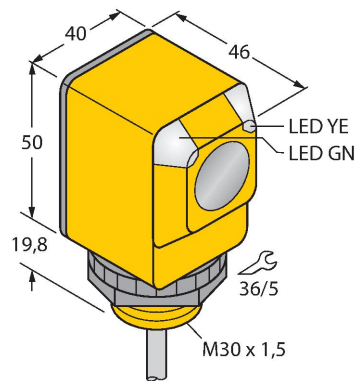


Q40AW3LP

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



Technical data

Type	Q40AW3LP
ID	3032362
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	IR
Wavelength	950 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	Rectangular, Q40
Dimensions	Ø 30 x 50 x 46 x 40 mm
Housing material	Plastic, Thermoplastic material
Lens	Lexan, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67

Features

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

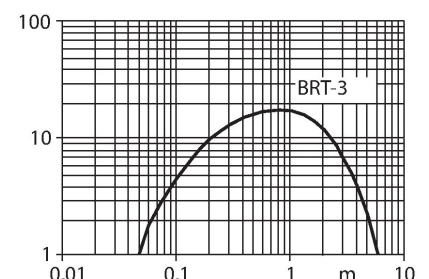
Wiring diagram



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

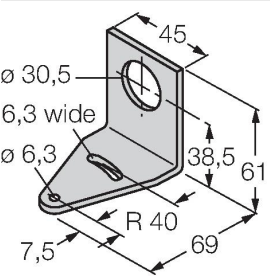


Technical data

Special features	Encapsulated
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

Accessories

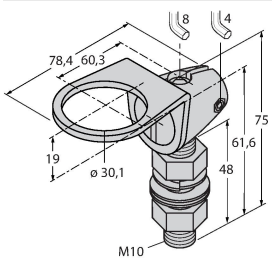
SMB30A 3032723



Technical drawing of the SMB30A mounting bracket. It is a rectangular stainless steel bracket for sensors with a 30mm thread. Dimensions include: top width 45, hole diameter $\varnothing 30,5$, bracket width 6,3, mounting hole diameter $\varnothing 6,3$, hole offset 38,5, total height 61, bottom width 69, and a 7,5 offset from the bottom edge. A radius R 40 is indicated at the bottom corner.

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

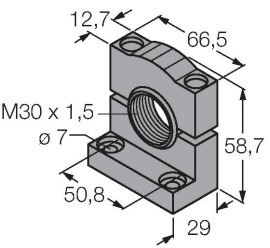
SMB30FAM10 3011185



Technical drawing of the SMB30FAM10 mounting bracket. It is a stainless steel bracket for M10 x 1.5 thread sensors. Dimensions include: top width 78,4, hole diameter $\varnothing 30,1$, bracket width 6,3, mounting hole diameter $\varnothing 6,3$, hole offset 38,5, total height 61,6, bottom width 69, and a 7,5 offset from the bottom edge. A radius R 40 is indicated at the bottom corner.

Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

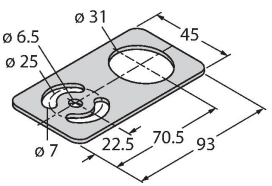
SMB30SC 3052521



Technical drawing of the SMB30SC mounting bracket. It is a PBT black bracket for sensors with a 30 mm thread, rotatable. Dimensions include: top width 12,7, hole diameter $\varnothing 6,5$, bracket width 6,5, mounting hole diameter $\varnothing 7$, hole offset 38,5, total height 58,7, bottom width 50,8, and a 29 offset from the bottom edge.

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

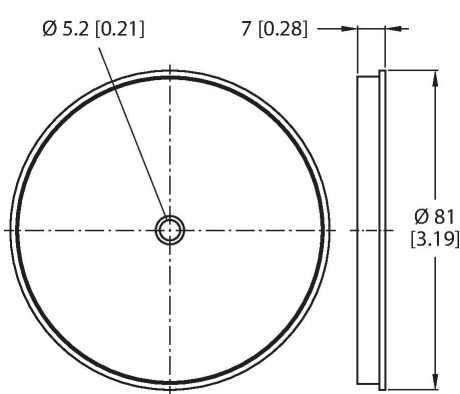
SMBAMS30P 3073135



Technical drawing of the SMBAMS30P mounting bracket. It is a stainless steel bracket for sensors with a 30 mm thread. Dimensions include: top width 45, hole diameter $\varnothing 31$, bracket width 6,5, mounting hole diameter $\varnothing 25$, hole offset 38,5, total height 61,6, bottom width 69, and a 7,5 offset from the bottom edge.

Mounting bracket, stainless steel, for sensors with 30 mm thread

Accessories

Dimension drawing	Type	ID	
 Technical drawing of the BRT-3 round reflector. It shows a top view with a diameter of $\varnothing 5,2$ [0.21] and a side view with a height of 7 [0.28]. The outer diameter is $\varnothing 81$ [3.19].	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C