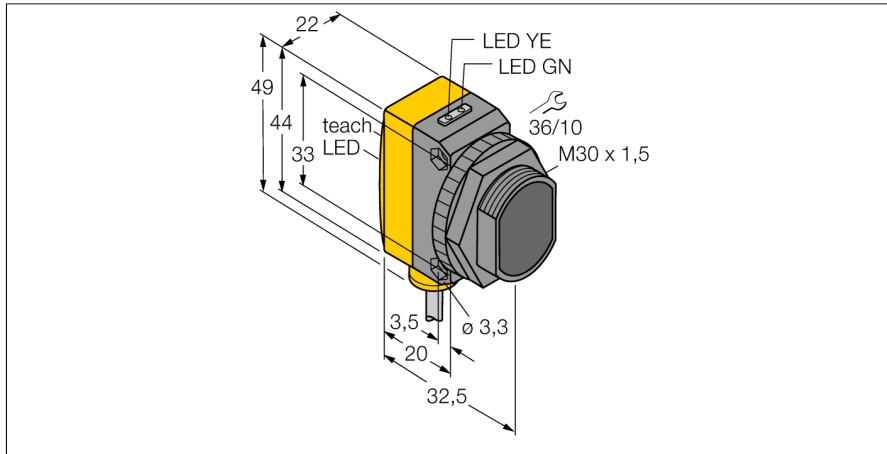


Photoelectric Sensor

Retroreflective Sensor with Polarizing Filter

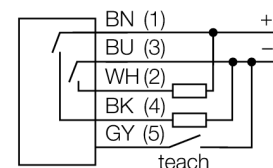
QS30LLPC W/30



Type	QS30LLPC W/30
ID	3071379
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	650 nm
Laser class	▲ 1
Beam diameter	3 mm
Range	200...18000 mm
Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 150 mA
No-load current I_0	≤ 35 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	≤ 1000 Hz
Readiness delay	≤ 1 s
Readiness delay	≤ 1000 ms
Response time typical	< 0.5 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 35 x 22 x 49 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-10...+50 °C
Protection class	IP67

- Cable, PVC, 9 m
- Protection class IP67
- Compact design
- Rectangular profile
- LED all-round visible
- Reflector BRT-36X40BM included in delivery
- Self-adhesive reflector foil BRT-THVG-2X2 included in delivery
- Excess gain, max. setting for long range
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

Wiring Diagram



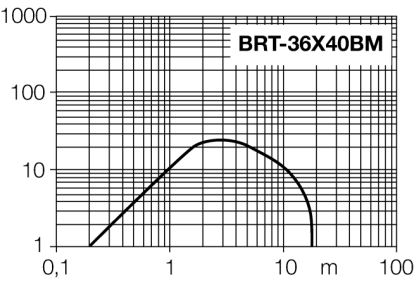
Functional principle

Retro-reflective sensors incorporate emitter and receiver in the same 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 incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device.

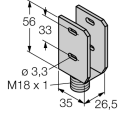
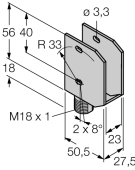
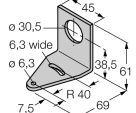
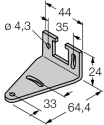
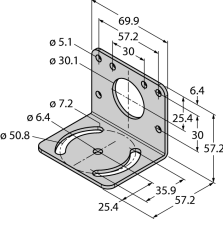
Excess gain curve

Excess gain in relation to the distance

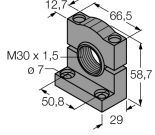
Special features	Laser Pushbutton Teach input
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	Bargraph, red, flashing
Tests/approvals	
MTTF	28 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



Accessories

Type code	Ident no.		Dimension drawing
SMBQS30Y	3002811	Protective housing, stainless steel, for QS30 series	
SMBQS30YL	3072741	Protective housing with safety glass panel, stainless steel, for QS30 series	
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	
SMBQS30L	3002809	Mounting bracket, stainless steel, for QS30 series	
SMB30MM	3027162	Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment	

Accessories

Type code	Ident no.		Dimension drawing
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	

Function accessories

Type code	Ident no.		Dimension drawing
BRT-TVHG-2X2	3057260	Rectangular reflective foil, reflection coefficient 0.8, ambient temperature -20 ... +60 °C, 4 sheets	