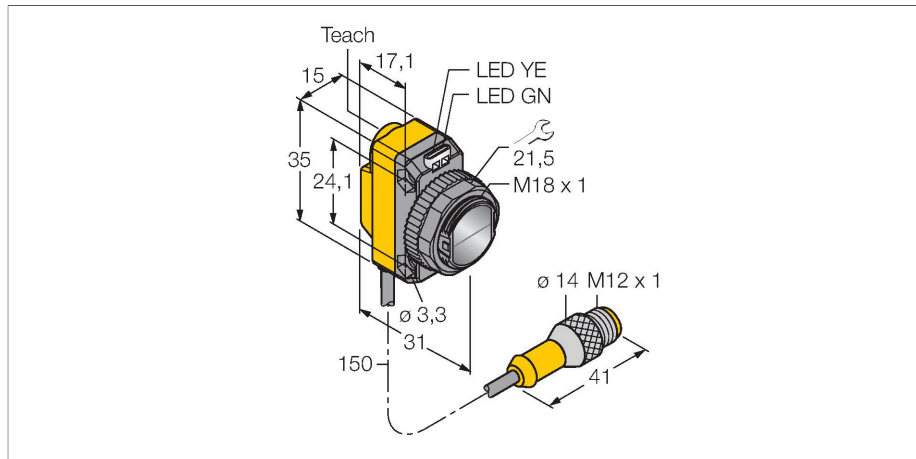


QS18EK6XLPCQ5

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter for Clear Object Detection



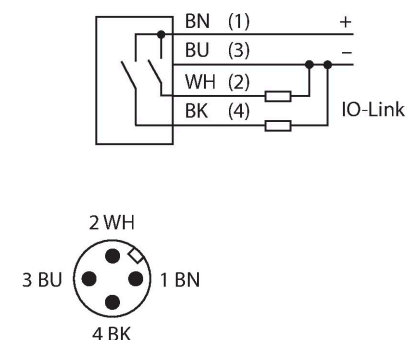
Technical data

Type	QS18EK6XLPCQ5
ID	3801743
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized (coaxial)
Reflector included in delivery	no
Light type	Red polarized
Wavelength	625 nm
Range	50...3000 mm
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 100 mA
No-load current	≤ 35 mA
Reverse polarity protection	yes
Communication protocol	IO-Link
Output function	NO/NC, PNP/NPN
Switching frequency	≤ 833 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.4 ms
Setting option	Push Button Remote Teach
IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit

Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED, all-round visible
- Coaxial optics
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- 1 × PNP/NPN switching output with IO-Link communication
- 1 × PNP/NPN switching output
- Transmission of process value and parametrization via IO-link

Wiring diagram



Functional principle

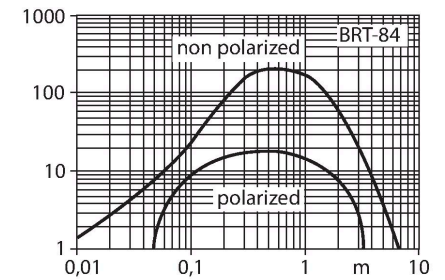
Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. This device is sensitive enough to detect clear film, glass bottles and other transparent objects. The blind zone

Technical data

Frame type	Type_2_2
Minimum cycle time	2 ms
Function Pin 4	IO-Link
Function Pin 2	DI
Maximum cable length	20 m
Profile support	Smart Sensor Profil
Included in the SIDI GSDML	Yes
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA
Electrical connection	Cable with connector, M12 x 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Clear object detection keep/defer
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, cURus

is reduced through the coaxial optics. The built-in polarizing filter also provides for the detection of high-gloss objects. With the help of three different limit values it is possible it can react to objects that differ in their transparency. The devices are self-regulating to reduce influences by dirt and dust.

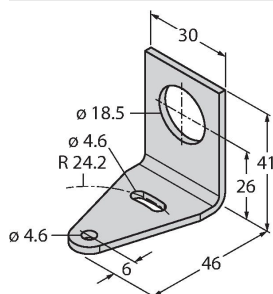
Excess gain curve
Excess gain in relation to the distance (LP-type)



Accessories

SMB18A

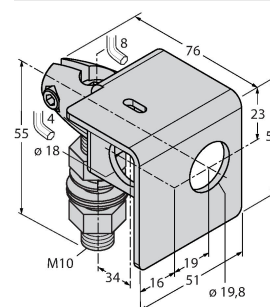
3033200



Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10

3012558

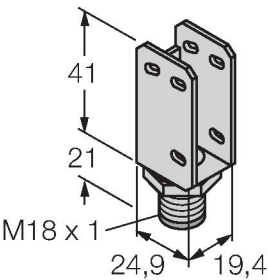


Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMBQS18A

3069721

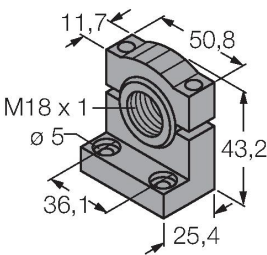
Mounting bracket, stainless steel, for 18 mm thread



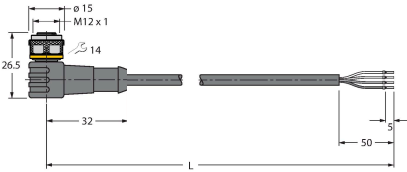
SMB18SF

3052519

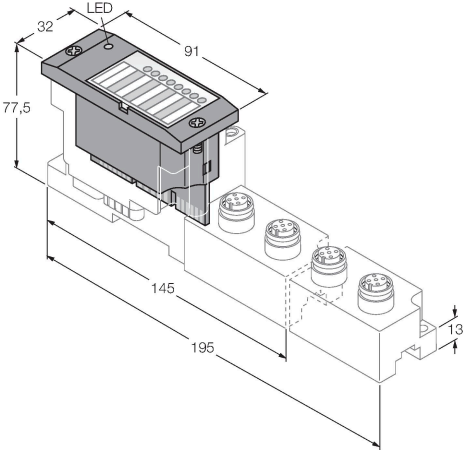
Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable



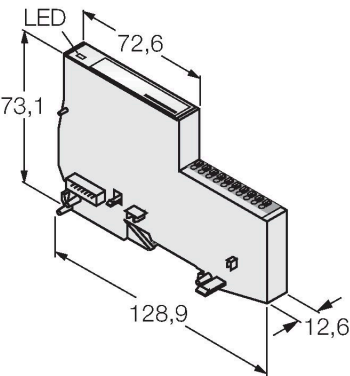
Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

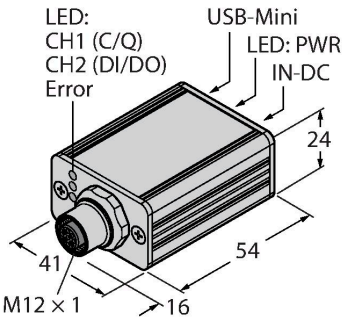
Accessories

Dimension drawing	Type	ID	
	BL67-4IOL	6827386	4-channel IO-Link Master module for the modular BL67 I/O-system

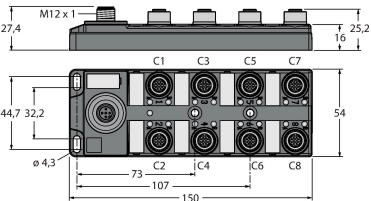
Dimension drawing	Type	ID	
	BL20-E-4IOL	6827385	IO-Link master module for the modular BL20 I/O system, 4-channel



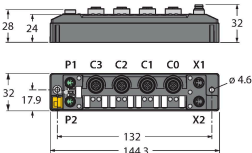
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port
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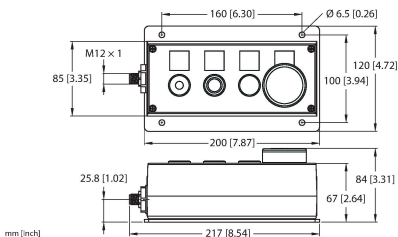
TBIL-M1-16DXP	6814102	16-channel I/O-hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
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TBEN-S2-4IOL	6814024	Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A
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OPIL-E4-IO2-FE01(DE)	100029326	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
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Dimension drawing	Type	ID	
mm [inch]	OPIL-E4-IO2-FE02	100029327	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
	OPIL-E4-IO2-FE03	100029328	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
	OPIL-E4-IO3-FE04	100036394	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
	OPIL-E4-IO3-FE01	100036505	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
	OPIL-E4-IO3-FE02	100036506	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)
mm [inch]	OPIL-E4-IO3-FE03	100036507	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)

Dimension drawing	Type	ID	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C

