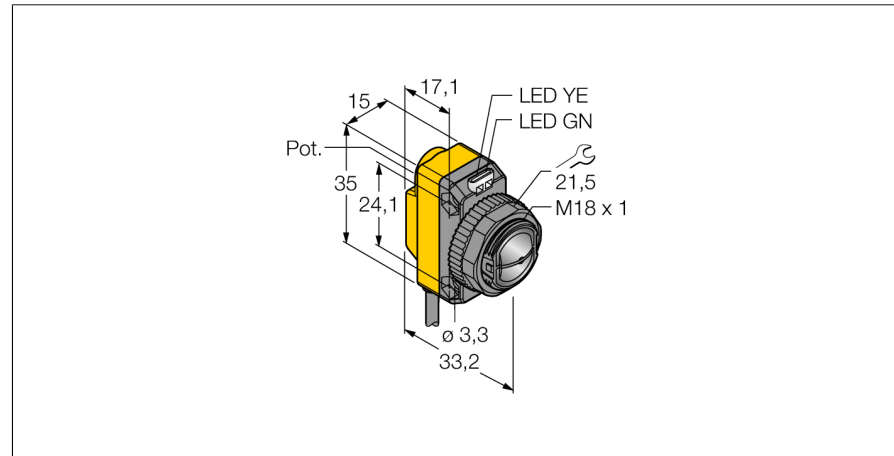
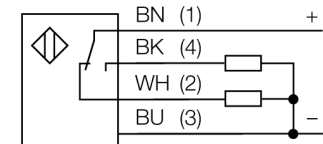


**Photoelectric sensor
convergent mode sensor
QS18VP6CV15**



- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer

Wiring diagram

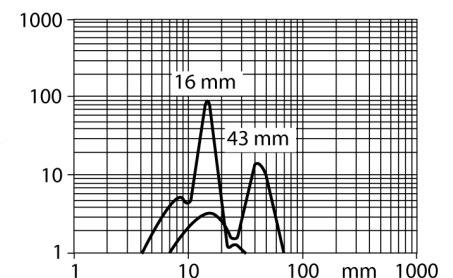


Functional principle

Convergent mode sensors are equipped with a lens in front of the emitter diode that produces a small and intense focal point at a defined distance from the sensor. Similar to diffuse mode sensors, the light reflected by the target is evaluated. Convergent mode sensors are ideal for detection of small targets or colour marks and edge guiding or positioning control of transparent materials. The targets must always be within the focal depth of the sensors. The focal depth is defined as the area in front of or behind the focal point within which the object can be detected. Based on the intense light concentration in the focal point, convergent mode sensors are capable of detecting targets with a low reflectivity.

Excess gain curve

Excess gain in relation to the distance



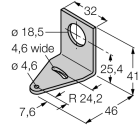
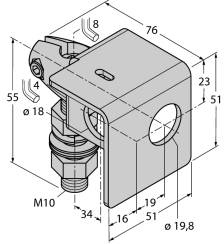
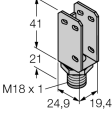
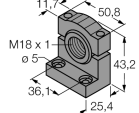
Type code	QS18VP6CV15
Ident no.	3061642
Operating mode	convergent mode sensor
Light type	red
Wavelength	660 nm
Focal distance	16 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC , PNP
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Design	rectangular, QS18
Dimensions	33.2 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	4 x 0.35 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

Photoelectric sensor
convergent mode sensor
QS18VP6CV15

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMB18A mounting bracket. Dimensions include: top width 32, hole diameter $\phi 18.5$, hole offset 4.6, hole diameter $\phi 4.6$, hole offset 25.4, hole diameter $\phi 4.6$, hole offset 7.6, radius R 24.2, and total width 46.</p>
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	 <p>Technical drawing of the SMB18AFAM10 mounting bracket. Dimensions include: top width 76, hole diameter $\phi 18$, hole offset 55, hole diameter $\phi 5$, hole offset 8, hole diameter $\phi 19.8$, hole offset 23, hole diameter $\phi 19.8$, hole offset 19, hole diameter $\phi 19.8$, hole offset 16, hole diameter $\phi 19.8$, hole offset 34, and thread M10.</p>
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	 <p>Technical drawing of the SMBQS18A mounting bracket. Dimensions include: top width 41, hole diameter $\phi 18$, hole offset 21, hole diameter $\phi 18$, hole offset 24.9, and thread M18 x 1.</p>
SMB18SF	3052519	Mounting bracket, PTB black steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMB18SF mounting bracket. Dimensions include: top width 50.8, hole diameter $\phi 18$, hole offset 11.7, hole diameter $\phi 5$, hole offset 36.1, hole diameter $\phi 18$, hole offset 43.2, hole diameter $\phi 18$, hole offset 25.4, and thread M18 x 1.</p>