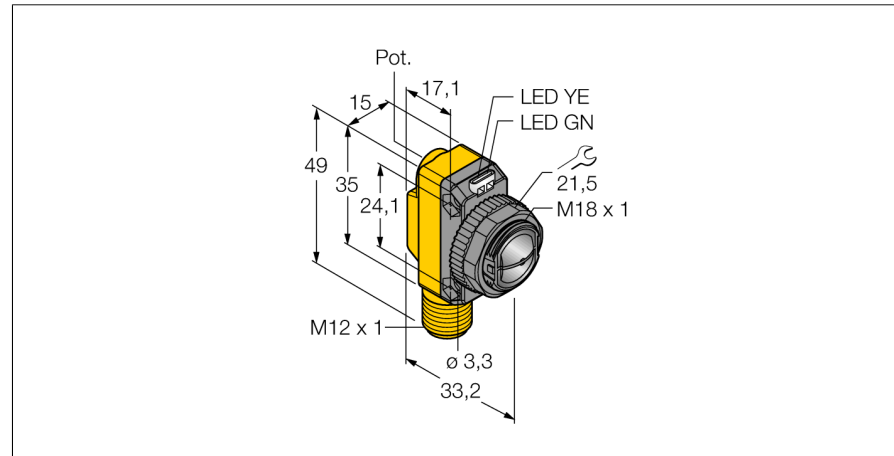


**Photoelectric sensor  
convergent mode sensor  
QS18VP6CV45Q8**

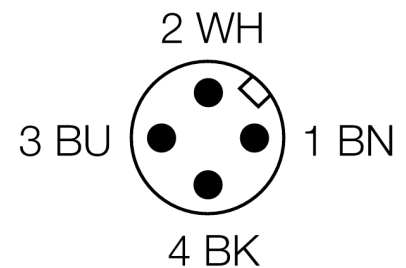


- Male M12 x 1, 4-pin
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer

**Wiring diagram**



<b>Type code</b>	QS18VP6CV45Q8
Ident no.	3066458
<b>Operating mode</b>	convergent mode sensor
Light type	red
Wavelength	660 nm
Focal distance	43 mm
Ambient temperature	-20...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
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
<b>Design</b>	rectangular, QS18
Dimensions	33.2 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	male, M12 x 1
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

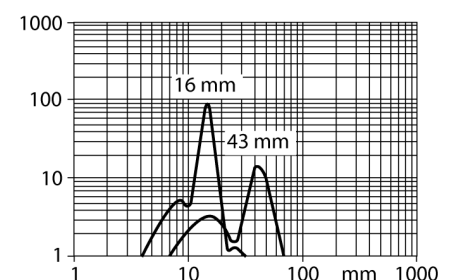


**Functional principle**

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.

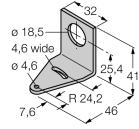
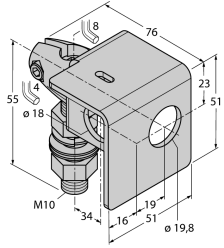
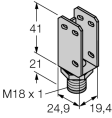
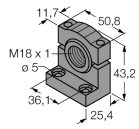
**Excess gain curve**

Excess gain in relation to the distance

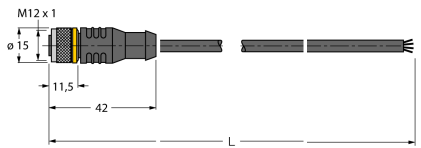


Photoelectric sensor  
convergent mode sensor  
QS18VP6CV45Q8

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, 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, PTB black steel, for sensors with 18 mm thread	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
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 <a href="http://www.turck.com">www.turck.com</a>	

Photoelectric sensor  
convergent mode sensor  
QS18VP6CV45Q8

**TURCK**

Industrial  
Automation

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
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 <a href="http://www.turck.com">www.turck.com</a>	