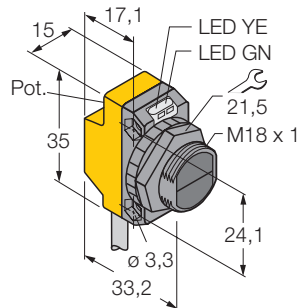


photoelectric sensor
convergent mode sensor
QS18VP6CV45

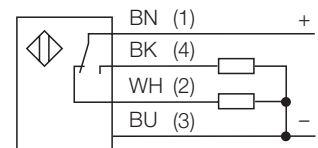
TURCK

Industrial
Automation



- Operating voltage 10...30 VDC
- indication of insufficient excess gain
- LED visible from all sides
- sensitivity adjustable via potentiometer
- light/dark operation
- cable, 2m

Wiring diagram

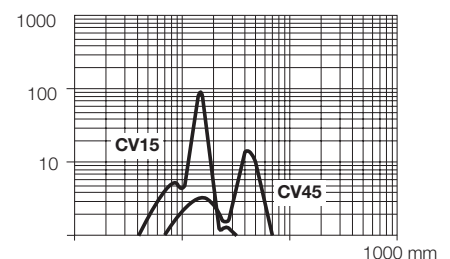


Functional principle

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	QS18VP6CV45
Ident-No.	3061648
Operating mode	convergent mode sensor
Light type	red
Wavelength	660 nm
Focal distance	43 mm
Ambient temperature	-20...+ 70 °C
Operating voltage	10... 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 32 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	normally open / normally closed, pnp
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Housing	rectangular, QS18
Dimensions	33.2 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cables
Cable length	2 m
Cable cross section:	4 x 0.35mm ²
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing