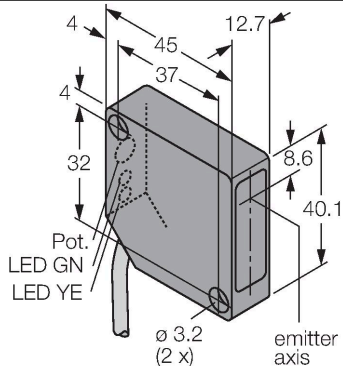


PD45VP6C100

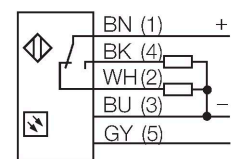
Photoelectric Sensor – Convergent Mode Laser Sensor



Features

- High excess gain
- Focal point, Ø 0.25 mm
- Connection cable, 2 m
- Sensitivity adjusted via potentiometer
- Light and dark operation

Wiring diagram



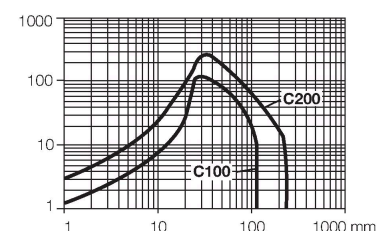
Technical data

Type	PD45VP6C100
ID	3046288
Optical data	
Function	Proximity switch
Operating mode	Convergent
Light type	Red
Wavelength	650 nm
Focal distance	102 mm
Laser class	▲ 2
Beam diameter	0,25 mm
Range	102 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 20 mA
Output function	Complementary contact, PNP
Switching frequency	2.5 kHz
Readiness delay	≤ 1 s
Readiness delay	≤ 1000 ms
Response time typical	< 0.2 ms
Overcurrent release	> 220 mA
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, PicoDot
Dimensions	45.6 x 12.7 x 40.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.34 mm ²

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 particularly suited for detection of small targets or edges. 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



Technical data

Ambient temperature	-10...+45 °C
Protection class	IP54
Special features	Laser
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Tests/approvals	
Approvals	CE