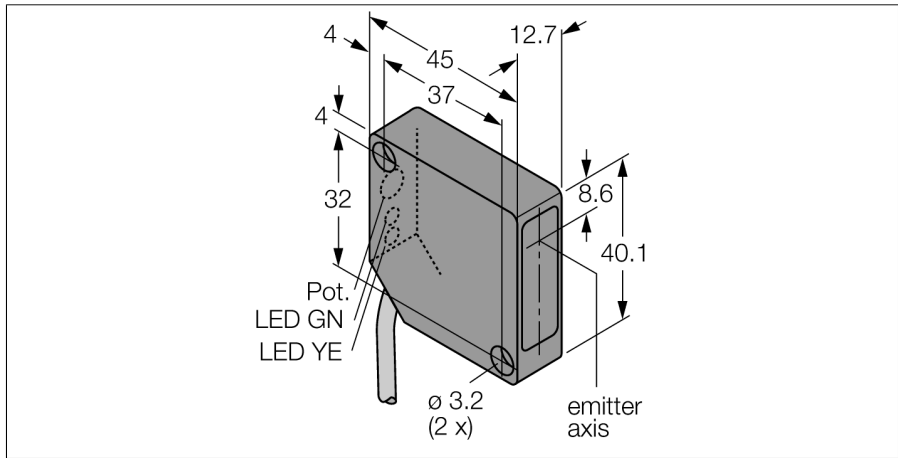
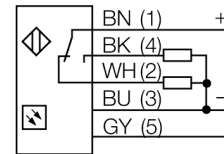


**Photoelectric sensor
retroreflective laser sensor
PD45VP6LLP**



- Laser sensors with high excess gain
- Range 10.6 m
- BRT-36X40BM reflector included in delivery
- connection cable, 2 m
- Sensitivity adjustable via potentiometer
- Light and dark operation

Wiring diagram



Type code	PD45VP6LLP
Ident no.	3058620
Operating mode	Retroreflective laser sensor (triangulation) with polarizing filter
Light type	red
Wavelength	670 nm
Laser class	△ 2
Range	200...10600 mm
Ambient temperature	-10...+45 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 20 mA
Output function	changover contact, PNP
Switching frequency	2.5 kHz
Readiness delay	≤ 1 s
Overcurrent release	> 220 mA
Design	rectangular, PicoDot
Dimensions	45.6 x 12.7 x 40.6 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable
Cable length	2 m
Cable cross section	5 x 0.34 mm ²
Protection class	IP54
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing

Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

Excess gain curve

Excess gain in relation to the distance

