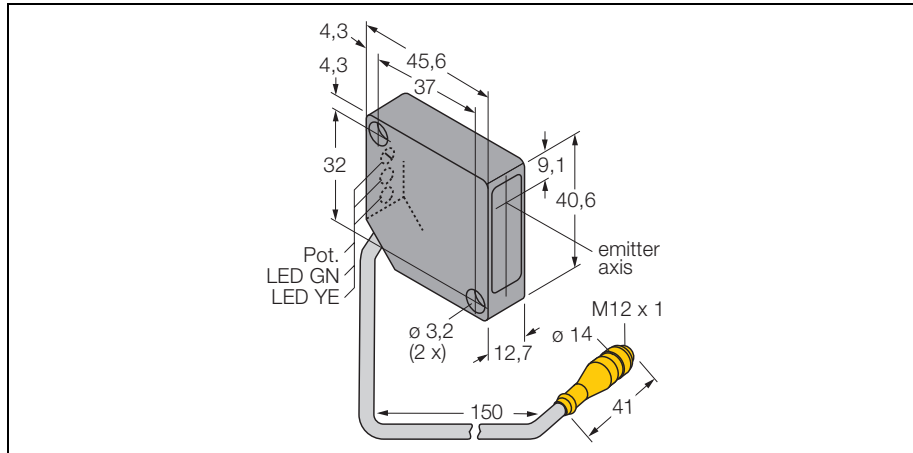
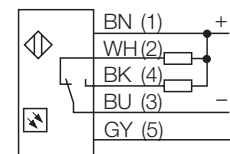


Photoelectric sensor convergent mode laser sensor PD45VN6C100Q



- convergent mode sensor
- laser sensor with a high excess gain
- Ø 0.25 mm focal point
- M12 x 1 connector
- sensitivity adjustable via potentiometer
- light and dark operation

Wiring diagram



Type	PD45VN6C100Q
Ident-No.	3046287
Type of light	red
Wave length	670 nm
Focal distance	102 mm
Laser-class	2 (EN 60825, IEC 60825)
Beam-diameter	0,25 mm
Operating temperature	-10 ...+ 45 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Rated operational current (DC) I_B	≤ 150 mA
No-load current I_0	≤ 20 mA
Short-circuit protection	yes, cyclic
Reverse polarity protection	yes
Output function	complementary, NPN
Max. switching frequency	≤ 2,5 kHz
Time delay before availability	≤ 1 s
Overload trip point	>220 mA
Housing style	rectangular; PicoDot
Dimensions	45,6 x 12,7 x 40,6 mm
Housing material	plastic, ABS
Lens	Kunststoff, Acryl
Wiring	pigtail, M12 x 1
Degree of protection	IP54
Supply voltage indication	LED green
Switching status indication	LED yellow
Error indication	LED green blinkend

Convergent mode sensors are equipped with a lens before 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

