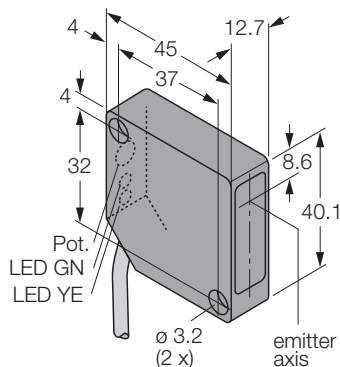
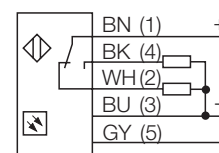


## Photoelectric sensor convergent mode laser sensor PD45VP6C200



- convergent mode sensor
- laser sensor with a high excess gain
- Ø 0.25 mm focal point
- cable, 2 m
- sensitivity adjustable via potentiometer
- light and dark operation

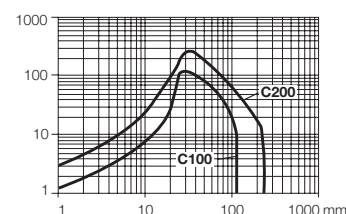
### Wiring diagram



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



|                                                        |                          |
|--------------------------------------------------------|--------------------------|
| <b>Type</b>                                            | PD45VP6C200              |
| Ident-No.                                              | 3048323                  |
| <b>Type of light</b>                                   | red                      |
| Wave length                                            | 670 nm                   |
| Focal distance                                         | 203 mm                   |
| Laser-class                                            | 2 (EN 60825, IEC 60825)  |
| Beam-diameter                                          | 0,25 mm                  |
| Operating temperature                                  | -10 ...+ 45 °C           |
| <b>Rated operational voltage (DC) <math>U_B</math></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, PNP       |
| Max. switching frequency                               | ≤ 2,5 kHz                |
| Time delay before availability                         | ≤ 1 s                    |
| Overload trip point                                    | >220 mA                  |
| <b>Housing style</b>                                   | rectangular; PicoDot     |
| Dimensions                                             | 45,6 x 12,7 x 40,6 mm    |
| Housing material                                       | plastic, ABS             |
| Lens                                                   | Kunststoff, Acryl        |
| Wiring                                                 | cable                    |
| Cable length                                           | 2 m                      |
| Cable cross section                                    | 5 x 0,34 mm <sup>2</sup> |
| Degree of protection                                   | IP54                     |
| <b>Supply voltage indication</b>                       | LED green                |
| Switching status indication                            | LED yellow               |
| Error indication                                       | LED green blinkend       |