

design 13.4 x 48.2 x 40mm
 product diffuse reflection laser 50 ... 550mm

- ✓ robust aluminium housing
- ✓ laser protection class 2
- ✓ 4-pin M8-connector



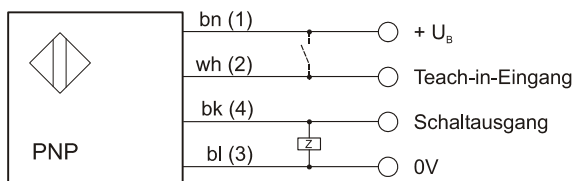
**background suppression
teach-in**

technical data

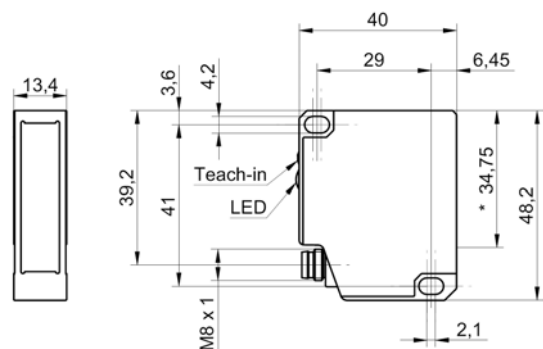
current consumption	≤ 80mA
voltage drop	≤ 2.8V
operating voltage U _B	12 ... 28V DC, reverse polarity protected
output current	< 100mA
switching output	pnp, no/nc teach-in, short circuit protected
sensing range	50 ... 550mm (via teach button or external teach input)
light indicator	LED red
power on indication	LED green
light source	red laser diode, 675nm, pulsed
light beam	Ø 1mm, point
response time	< 5ms
release time	< 15ms
housing material	aluminium
optics	glass
system of protection	IP 67 (EN 60529)
ambiente temperature	0°C ... +50°C
electrical connection	M8-connector 4pin

electrical connection

dim. drawing



bn=braun, wh=weiß, bk=schwarz, bl=blau
 Klemmenbezeichnung der Kabeldose in Klammern



Static Teach-in procedure, for non moving parts

1. Set the sensor into static teach-in mode: press the button approx. 2 sec until LED (red) is flashing
2. Set the object to the desired ON-position and press the button shortly
3. Set the object to the desired OFF-position and press the button shortly
4. The sensor is set to dark operate by interchanging the order of items 2 and 3, otherwise it is set to light-on mode.
5. Shortly press the teach-in button! On successful teach-in, the red LED light up for about 2 seconds. The red LED flashes quickly for 2 seconds if the difference between the teaching positions is too low. The switching point is nevertheless set in this case to the center position.

Dynamic Teach-in procedure, for moving and small objects

1. Set the sensor into dynamic teach-in mode: press the button approx. 5 sec until LED (red) flashing changes from slow to fast. After releasing the button, the sensor starts immediately to sense the max. and min. values.
2. Stop the teach-in procedure: press the button shortly
3. To change the output function from dark-on mode (standard) to dark operate: press the button within 5 sec after "stop the teach-in procedure" shortly
4. The switching output now works as a normally open (light-on mode). If the unit is to operate as normally closed (dark-on mode), press the teach-in button within 5 seconds after the teach-in process shortly!

Notes: It is possible to use the external teach-in input (white wire, pin 2) instead of the teach-in button. Connect instead of the button press the teach-in input to + UB!

Within 5 minutes after power-on, the sensors can be taught via the button or the teach-in wire. After 5 minutes the teach-in button will be locked prevent accidental adjustment. The teach-in wire is active all the time.

article-no. **PT490370**

suitable universal mounting **AY000096**

To connector devices, we like to supply the matching cable socket, eg VK200371. Please refer to the catalog in chapter 14, data sheet "cable sockets **ipf** -*SENSORFLEX*[®]".

Warning: Never use these devices in applications where the safety of a person depends on their functionality.