

PRODUCT: cuboid devices, plastic

DESIGN: 14 12x27x16.3

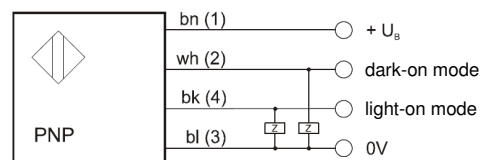
- ✓ robust plastic housing
- ✓ status display by LED
- ✓ short-circuit and reverse polarity protection
- ✓ adjustable sensitivity
- ✓ high repeatability
- ✓ connection with M8-connector



technical data

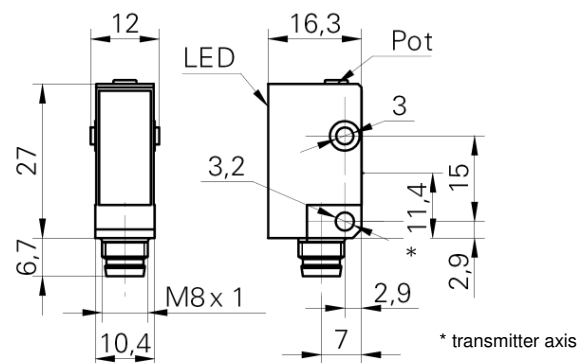
current consumption	< 50mA
voltage drop	< 1.8V DC
operating voltage	10 ... 30V DC
switching output	pnp, no/nc
switching current	< 100mA
sampling frequency	< 10kHz
sensing range	3 ... 150mm
optimum operating range PK140470	20 ... 40mm
optimum operating range PK140475	35 ... 45mm
line width PK140475	at 40mm distance: 3mm / at 80mm distance: 12mm
distance laser focus	40mm
repeat accuracy	< 0.2mm in laser focus
min. recognizable contrast	difference < 8%, diffuse reflection (grey)
light source	laser diode, red (675nm), pulsed
laser class	see article numbers
sensitivity adjustment	potentiometer, 5 revolutions
ambient temperature	-10 ... +50 °C
system of protection (EN 60529)	IP67
electrical connection	M8-connector, 4-pin

electrical connection



bn= brown, wh = white, bk = black, gy = grey, bl = blue
terminal markings of the cable socket in brackets

dimensional drawing



article-no.: laser point: PK 14 04 70 (laser class 2)
laser line: PK 14 04 75 (laser class 1)

operating instructions

- The sensor must always be aimed at the target.
- Best working distance: the receiver is not much sensitive to distance variations, suitable for sensing small objects or color transitions of marks.
- The detection threshold can be adjusted with the 5-turn potentiometer. If the color marks show some color nuances, use the brightest mark for setting sensitivity in case of dark marks on a bright background or the darkest mark in the opposite case. For best results set the threshold in the middle between switching the signal indicator off on the marks and switching it on the background for bright marks on a dark background, or do opposite for dark marks on a bright background.
- The sensor works without excess gain when the alignment-aid / soiled-lens LED indicator is blinking. Either the sensor is not aligned to the object, the front window is soiled or the object doesn't reflect enough light.
- Regular cleaning of the front window is necessary, especially when sensing small differences in reflectivity between target and background. Use a clean (!), soft and dry cloth for cleaning. In case of severe soiling, the use of pure alcohol is recommended.
- Restricted HF immunity: usage is not suited near radio emitters band IV/V.

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

