

PSQ80076 – PEQ80376

Laser-Through-beam sensor transmitter

- ✓ Plastic housing, compact design
- ✓ Setting by teach-in
- ✓ LED display with setting guide
- ✓ M8-connector 4-pole



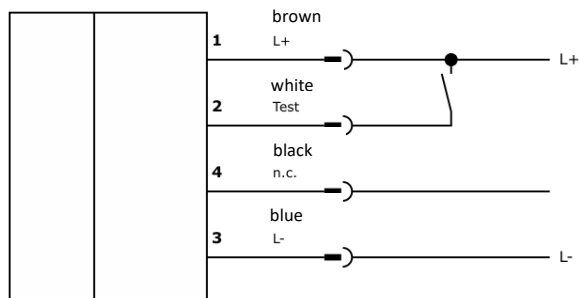
Laser protection class 1



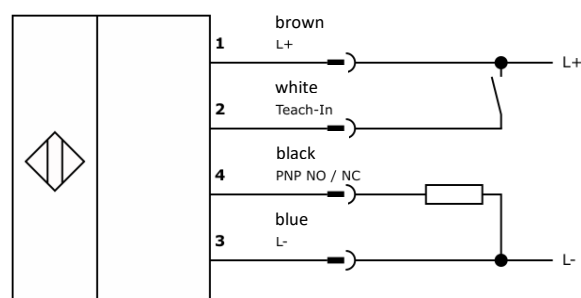
Technical data

Range	4,000mm
Operating voltage	10 ... 30V DC
Current consumption (Transmitter)	≤ 12mA
Current consumption (without load, receiver)	≤ 12mA
Output current (max. load)	≤ 50mA
Output signal	PNP, no/nc
Response / release time	≤ 0.125 ms
Switching frequency	4kHz
Transmitting element (clocked)	Laser diode, red light, pulsed
Light spot size	see diagram
Wavelength	655nm
short-circuit proof	+
reverse polarity protected	+
Display (operation)	LED green (LED 1)
Display (signal)	LED yellow (LED 2)
Material (housing)	Plastic (PUR)
Material (front panel)	PMMA
Protection class (EN60529)	IP 67
Ambient temperature	-20 ... +50°C
Connection	M8-connector 4 pin
Connection accessories	e.g. VK200375
Mounting accessories (universal holder)	AY000116

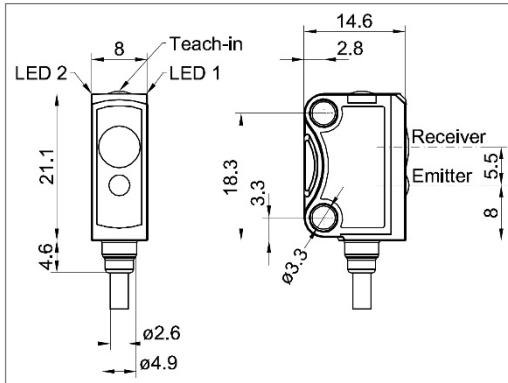
Electrical connection transmitter



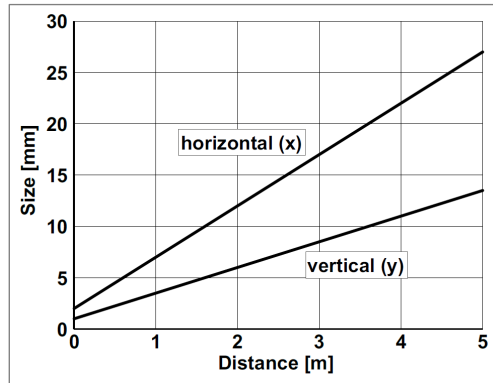
Electrical connection receiver



Dimensional drawing



Light spot size



Safety instructions

Read the operating instructions before commissioning.

Connection, installation, adjustment and commissioning may only be performed by qualified personnel.

The device must not be used outdoors. Laserschutzklasse 1; Wellenlänge: 655nm; Frequenz: 5kHz; Pulsbreite: 3,2µs; Grenzwert Puls: $\leq 2,3\text{mW}$ (IEC 60825-1)

Complies with 21 CFR 1040.10 and 1040.11 except for deviations as specified in Laser Notice No. 56, May 2019.

Attention! Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

Before commissioning, please make sure that all safety instructions in the product documentation, if applicable, have been observed!

Not a safety component according to the EU Machinery Directive. The use of these products is prohibited if they have a direct impact on personal safety.

Intended use

The sensor is used for optical non-contact detection.

Connection

Plug the connector onto a suitable cable socket in a voltage-free manner and screw it tight.

Connect the cable according to the connection diagram on page 1.

As soon as the operating voltage is applied, the green LED (LED 1) lights up.

Information on the connection of the white line (PIN 2):

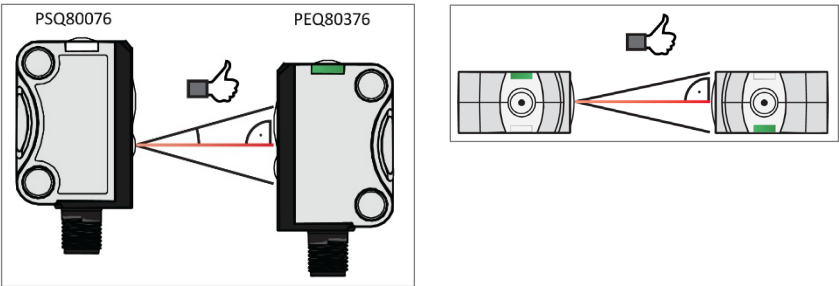
1. Receiver: Connection with L+: Teach in analog to the respective specifications for the keystroke
 Connection with L-: Teach button locked
 No connection: Normal operation - it is recommended to connect the line to a free terminal during normal operation.
2. Transmitter: Connection with L+: Laser diode off
 Connection with L- / no connection: Normal operation - it is recommended to connect the line to a free terminal during normal operation.

Mounting

Mount the sensor on a suitable holder (e.g. universal holder AY000116).

Adjustment

Align the transmitter and receiver so that the transmitter beam hits the receiver element straight on.



Switching mode

PNP					
N.O.	+ U _B				LED yellow
	- U _B				
N.C.	+ U _B				LED yellow
	- U _B				

N.O. = normally open
N.C. = normally closed

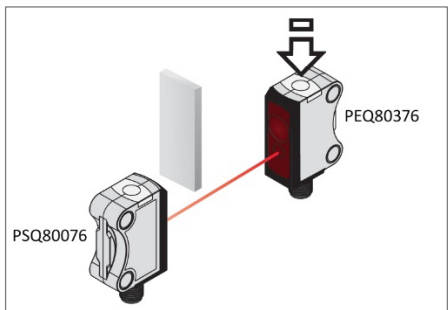
Setting

The light barrier is set via teach-in on the receiver. You can teach-in via the key or by connecting the white line to L+ instead of pressing the key.

Standard teach in:

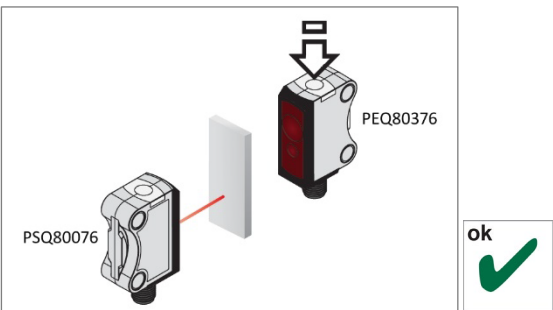
Is suitable for almost any application. The adjustment is made to the free light beam and the object.

Step 1: Teach in the light barrier.



Press the **key > 3s** on the receiver, until the green and the yellow LED simultaneously flashing. Release the key, the LEDs flash alternately.

Step 2: Teach in object.

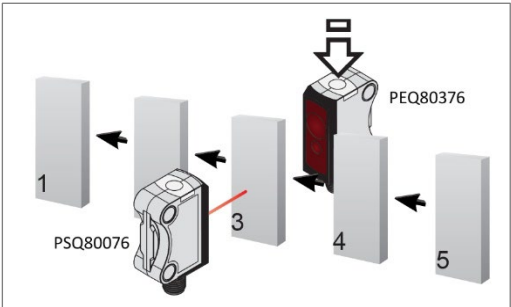


Press the **key > 1s** on the receiver.

Dynamic teach in:

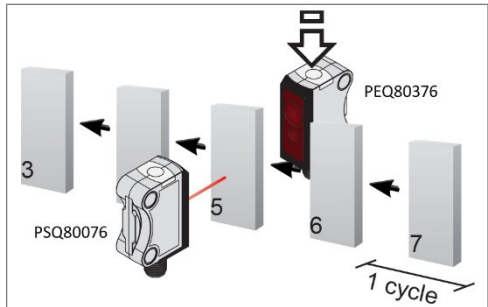
Is suitable to adjust the sensor in the running process, especially for small objects.

Step 1:



Press the **key > 3s** on the receiver, until the green and the yellow LED simultaneously flashing. Release the key, the LEDs flash alternately.

Step 2:



On the receiver, press **the key for the duration of a cycle**.

Switching N.O. / N.C. (on the receiver)

