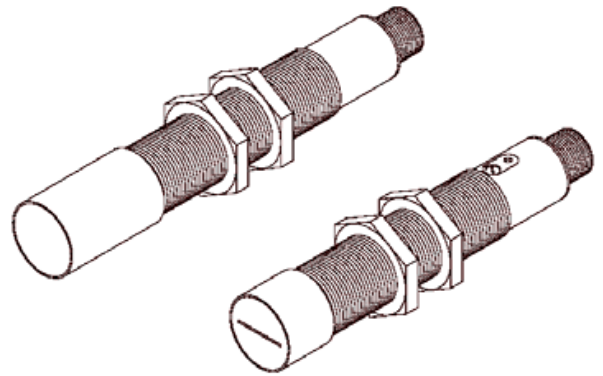


design M18x1, 16x1mm aperture
through-beam sensor 10m

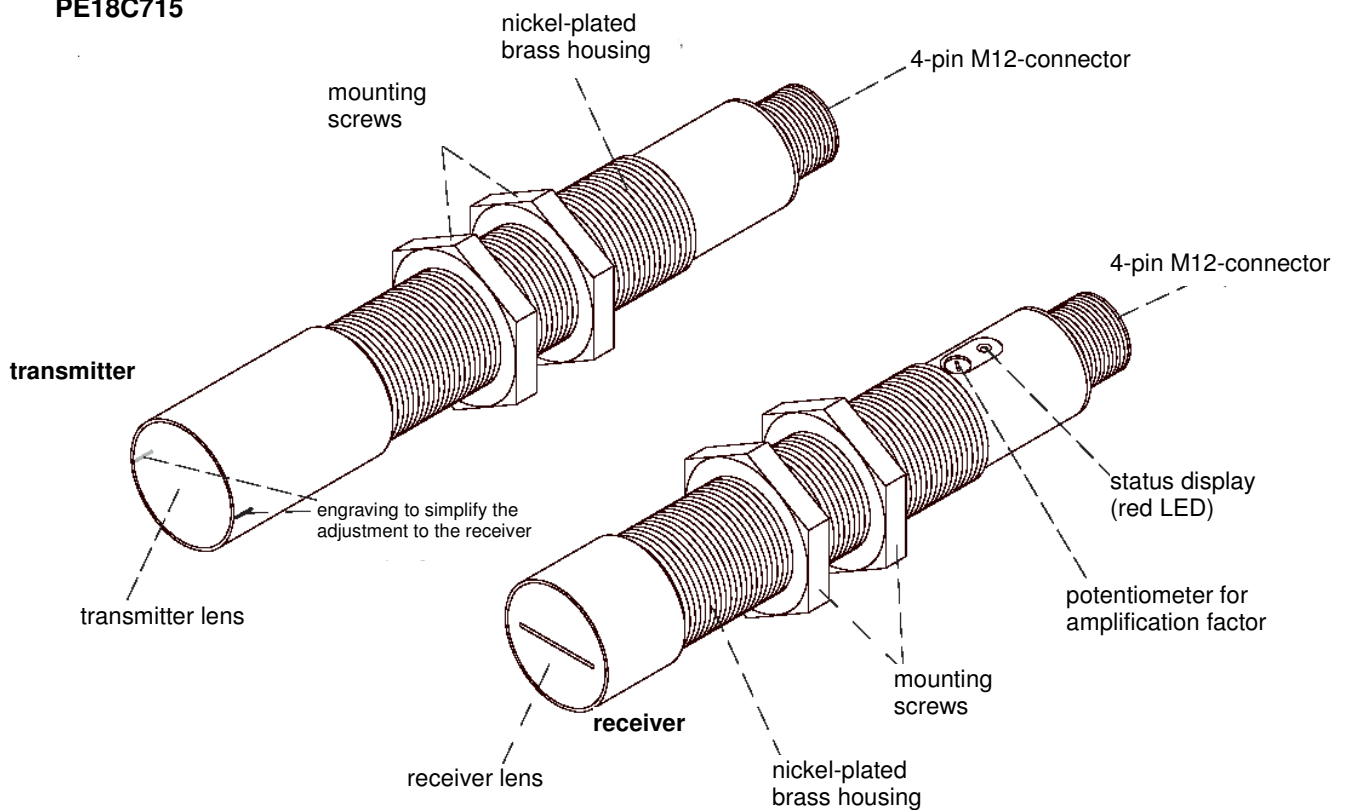
- ✓ robust metal housing
- ✓ adjustable amplification via potentiometer
- ✓ status display by red LED
- ✓ 1kHz sampling frequency
- ✓ compact M18 design



lens coverage made of glass
analog output 0 ... +10V DC

assembly

PS18C714
PE18C715



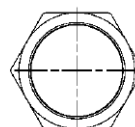
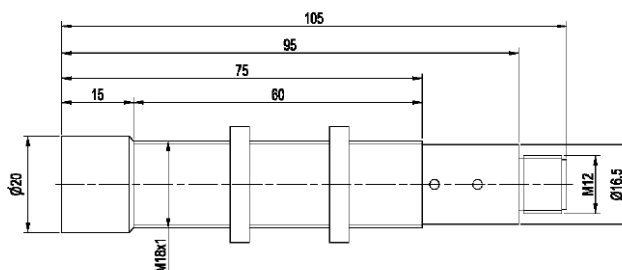
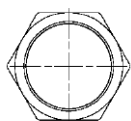
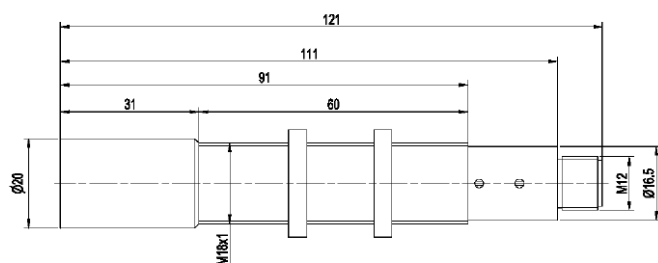
technical data

article-no.	PS18C714 / PE18C715
laser	semiconductor, 670nm, 1mW max., laser class 2 (DIN EN60825-1)
max. operating distance	10m
transmitter spot size	approx. Ø26mm for 8m operating distance approx. Ø29mm for 10m operating distance
smallest detectable object	analog: typical 0.5% of the aperture size digital: typical 0.2% of the aperture size
repeatability	analog: typical 0.5% of the aperture size digital: typical 0.2% of the aperture size
optical filters	red light filter OG 630
operating voltage	+12 ... 32V DC, reverse polarity protected, overload protected
alternating / constant light operation	alternating light 100kHz
ambient light	up to 5000Lux
current consumption	transmitter: typical 50mA / receiver: typical 50mA
aperture	receiver: 16x1mm (transmitter without aperture)
current control input I-CONTROL	0 ... +5V: laser power decreases linear with voltage increase +5 ... 24V: laser off
monitor output	analog output 0 ... +10V
system of protection (EN 60529)	IP67
operating temperature	-20 ... +50 °C
storage temperature	-20 ... +85 °C
housing material	nickel-plated brass
design	transmitter: M18x1, length 121mm (including connector) receiver: M18x1, length 105mm (including connector)
connector	M12, 4-pin
max. switching current	100mA, short-circuit protected
EMC	to DIN EN 60947-5-2
sampling frequency	typical 1kHz

dimensional drawing

transmitter: PS18C714

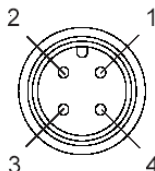
receiver: PE18C715



wiring diagram

transmitter: PS18C714

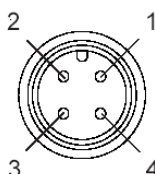
Pin:	color:	assignment:
1	brown	+12VDC...+32VDC
2	white	I-Control (0...+24V)
3	blue	GND (0V)
4	black	shield-housing



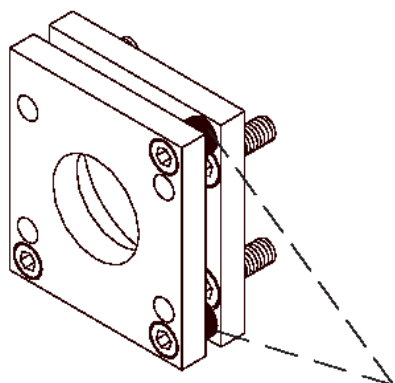
receiver: PE18C715

1	brown	+12VDC...+32VDC
2	white	ANALOG (0V...+10V)
3	blue	GND (0V) / shield-housing
4	black	OUTPUT INV

(pnp dark-on mode / npn light-on mode)

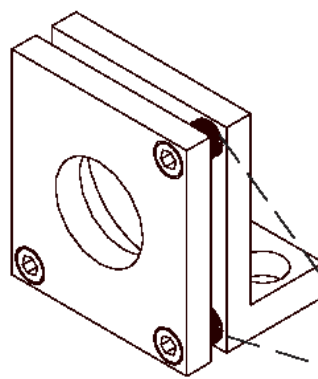


mounting



cup spring for exact alignment of the laser beam

flange bracket **AP000016**

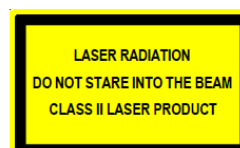


cup spring for exact alignment of the laser beam

angle bracket **AP000015**

The transmitters of the laser one-way light barriers of this series comply with laser class 2 according to EN 60825-1. The use of these laser transmitters therefore requires no additional protective measures.

The transmitters of this series are supplied with a laser warning label.



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