

diffuse reflection sensor with background suppression

dimensions **M18 x 1**
 sensing range adjustable **30 ... 150mm**



- ✓ **robust metal housing**
- ✓ **high immunity to external light**
- ✓ **high sampling frequency**
- ✓ **LED-display**
- ✓ **connection with M12-connector, 4-pin**

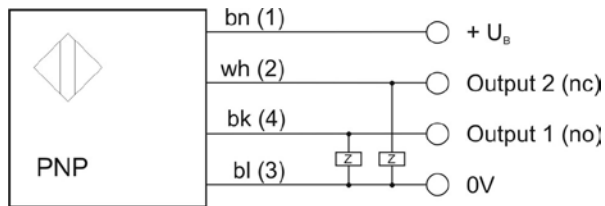
adjustable sensing range
laser protection class 1


Technical Data
PT180426

sensing range (adjustable)	30 ... 150mm
adjustment	10-turn-potentiometer
transmitting element	laser diode red light
wave length	650 ... 670nm
light spot size	2.4 x 1.5mm at distance 150mm
laser class	1
operating voltage	10 ... 30V DC
current consumption (without load)	≤ 30mA
output current (max. load)	100mA
voltage drop (max. load)	< 2.5V
output signal	pnp
output function	light-on / dark-on mode
reverse polarity protection	+
short-circuit protection	+
sampling frequency	≤ 500Hz
permissible capacitance	≤ 100nF
display (power on indicator)	LED green
display (short-circuit indicator)	LED green flashing
display (signal indicator)	LED yellow
display (error indicator)	LED yellow flashing
operating temperature	-5 ... +55°C
degree of protection (EN 60529)	IP67
external light shielding max.	10.000Lux
design	M18 x 1
length (thread/complete)	48mm /B 75mm
housing material	nickel-plated brass
front screen material	PMMA
tightening torque	area B1: 15Nm, area B2: 30Nm (see dimensional drawing)
connection	M12-connector, 4-pin
connection accessories	e.g. VK200325
universal mounting	e.g. AY000117

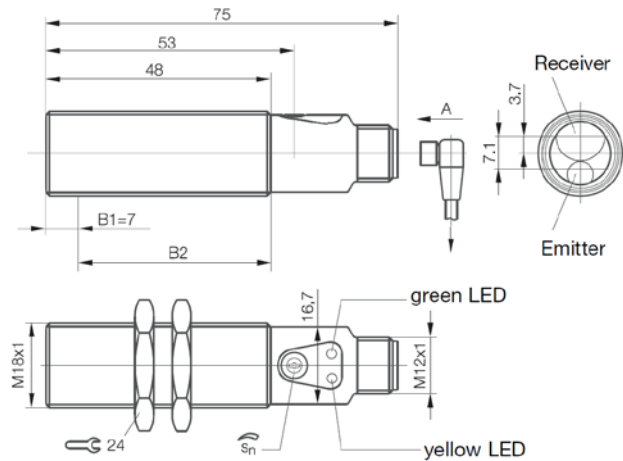
Warning: Never use these devices in applications where the safety of a person depends on their functionality.

connection

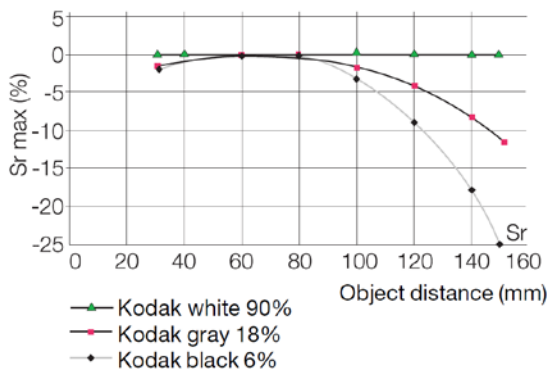


wire colors:
bn=brown (1), wh=white (2), bk=black (4), bl=blue (3)

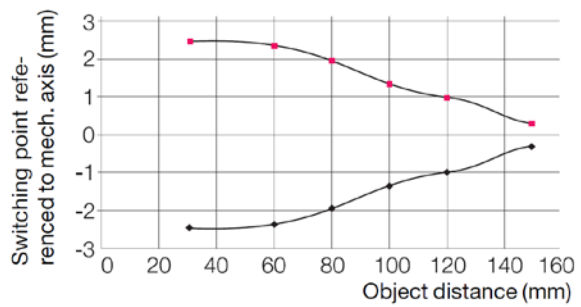
dimensional drawing



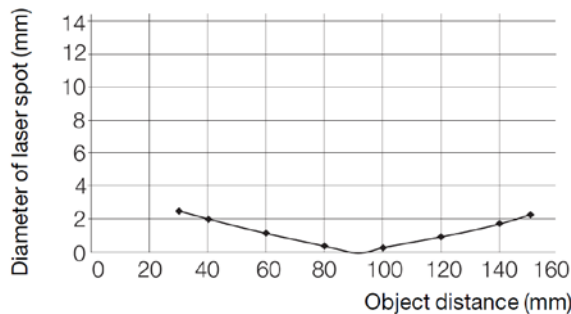
deviation in switching distances at different luminosity coefficients



approach curve with switch-on point from left or right side



light spot diameter depending on the object distance



smallest detectable part depending on the object distance

