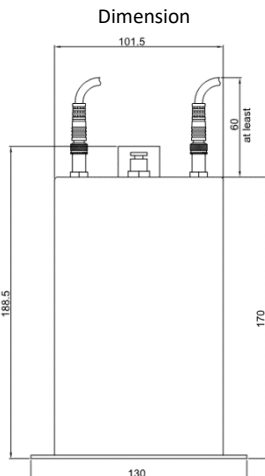
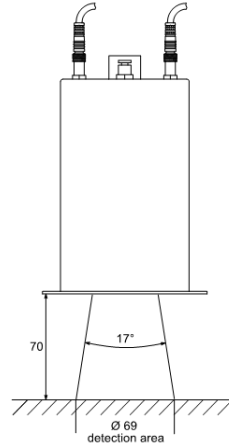


Data sheet CIE Lab Color Checker PR0086-S

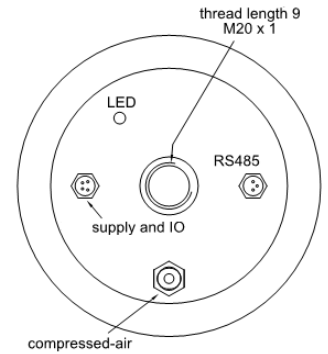
PR0086-S Article-No.: 50157
PR0086-S-70 Article-No.: 50151
PR0086-S-70-15 Article-No.: 50152



Working distance and detection area

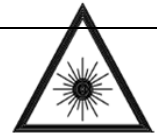
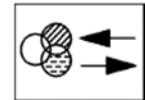


Connections



Safety and Warning Instructions

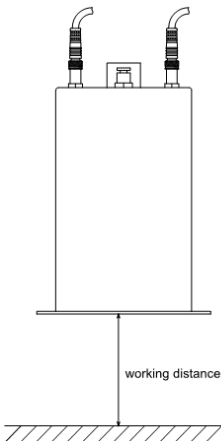
These photoelectric sensors may not be used in applications where personal safety depends on proper function of the devices (not safety designed per EU machine guideline). Read these operating instructions carefully before putting the device into service. The module may only be installed or replaced by skilled staff.



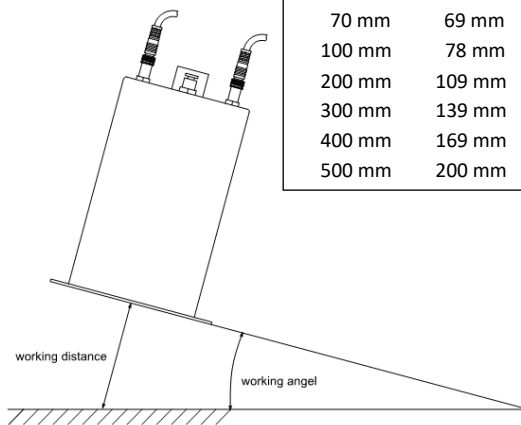
LED light - Do not look into the beam!
 Free Group according to IEC 62471-2006-07

Datasheet PR0086-S - Version 2.5 • 2020-10 - Subject to change.

Right angle mounting



15° mounting



Working distance	Detection Area
70 mm	69 mm
100 mm	78 mm
200 mm	109 mm
300 mm	139 mm
400 mm	169 mm
500 mm	200 mm

Technical Data

Power	24 V DC ± 10 %, 0.1 A
Input	
Signal voltage ON	≥ 15 V
Signal voltage OFF	≤ 5 V
Input current at 24 V	9 mA
Output	PNP, 0.2 A max., saturation < 1.6 V
Absolute accuracy	~ 1.6 dE (average value)
Relative accuracy	< ± 0.5 dE (inter instrument)
Repeat accuracy	< 0.05 dE (sample related)
Optimum working distance	70 mm (from bottom)
Detection area	70 mm at 70 mm working distance
Sample rate	~ 10 Hz
Lighting	Integrated LEDs
Measuring method	Differential measurement
Results	CIE 1976 L*a*b*, CIE 1931 (x,y), Tristimulus (X, Y, Z), Yellowness Index (YI E313; YI D1925), Whiteness Index (CIE whiteness, W; tint, T _w)
Interface	RS485, 2 wire
Operating temperature	10 °C to 60 °C
Storage temperature	10 °C to 40 °C
Operating humidity	35 % to 85 % relative humidity
Material	Stainless steel, coated
Mounting	Thread M20x1
Protection	IP 24
Dust protection	Compressed-air connector 4 mm
Weight	Approx. 1100 g

Pin Assignment M8 Plug

Power and IO

1	Brown	+ 24 V DC
2	White	Input
3	Blue	0 V
4	Black	Output



Colors depending on the cable used.

Pin Assignment M8 Plug

RS485

1	Brown	RS485 (-)
3	Blue	0 V
4	Black	RS485 (+)



Colors depending on the cable used.

LED Indicator

State	Description
Green	Ready for operation
Green/Red flashing	Serial communication active