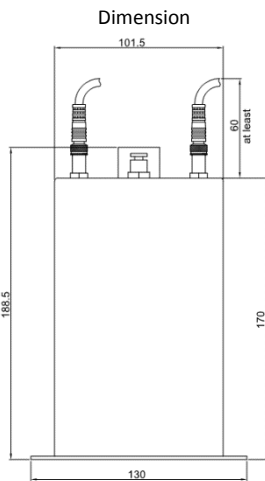


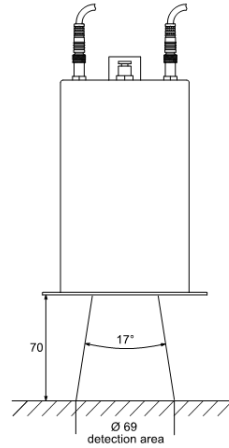
# Data sheet CIELab Color Checker PR0086-S

Data sheet PR0086-S V2-2 • Edition V2-2 replaces edition V2-1 - State 03/2019 - Subject to change.

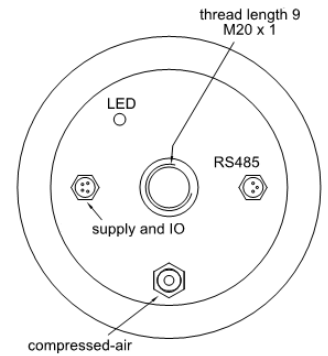
**PR0086-S Article-No.: 50157**  
**PR0086-S-70 Article-No.: 50151**  
**PR0086-S-70-15 Article-No.: 50152**



**Working distance and detection area**

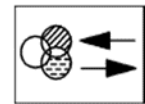


**Connections**



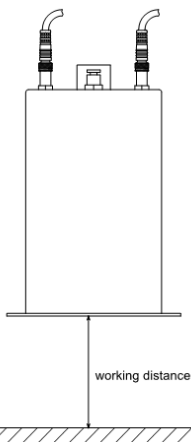
## Safety and Warning Instructions

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.

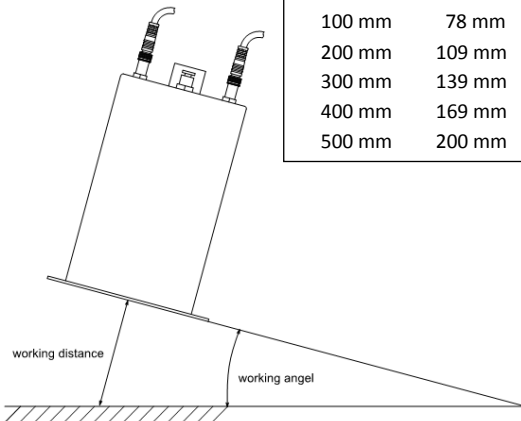


LED light - Do not look into the beam!  
 Free Group according to IEC 62471-2006-07

**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)
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
Result	CIELab, Chromaticity
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

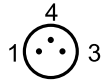


Colors depending on the cable used.

## 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