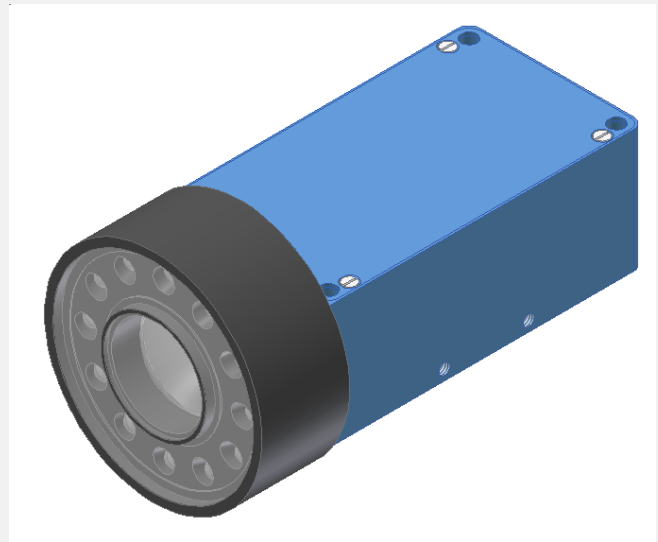


SI-COLO Series

▶ SI-COLO1-80-FCL

With this color sensor type three primary colors (RED, GREEN, BLUE) are made available as analog signals at the output.

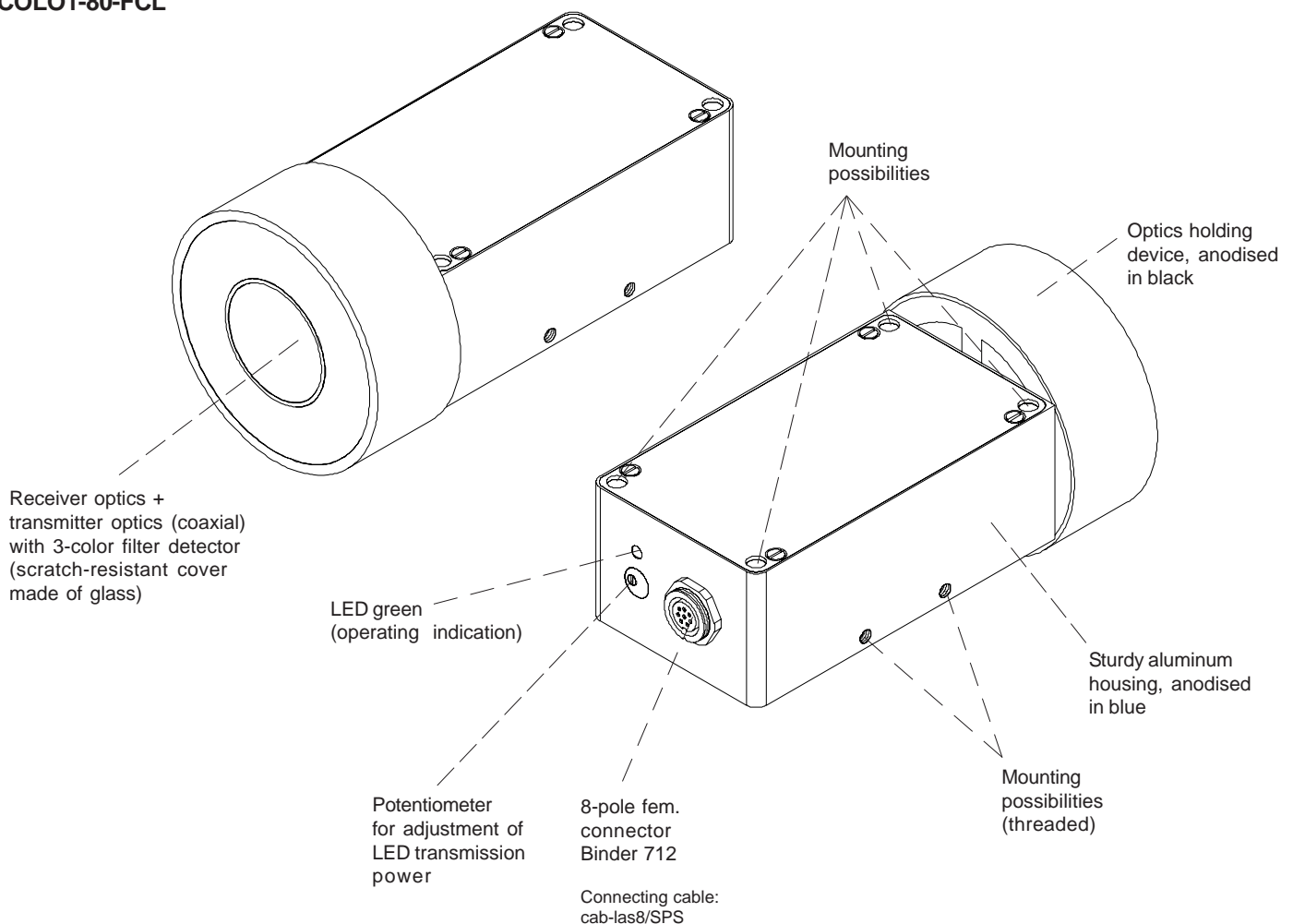
- Measuring range typ. 40 mm ... 200 mm
- 8x white-light LED, 100 kHz modulated, focused
- Adjustment of LED transmission power
- 3 analog outputs 0V ... +10V (red, green, blue)
- Insensitive to outside light
- Scratch-resistant optics cover made of glass
- Sturdy aluminum housing
- Focused white light range (for dark/mat surfaces)



Design

Product name:

SI-COLO1-80-FCL

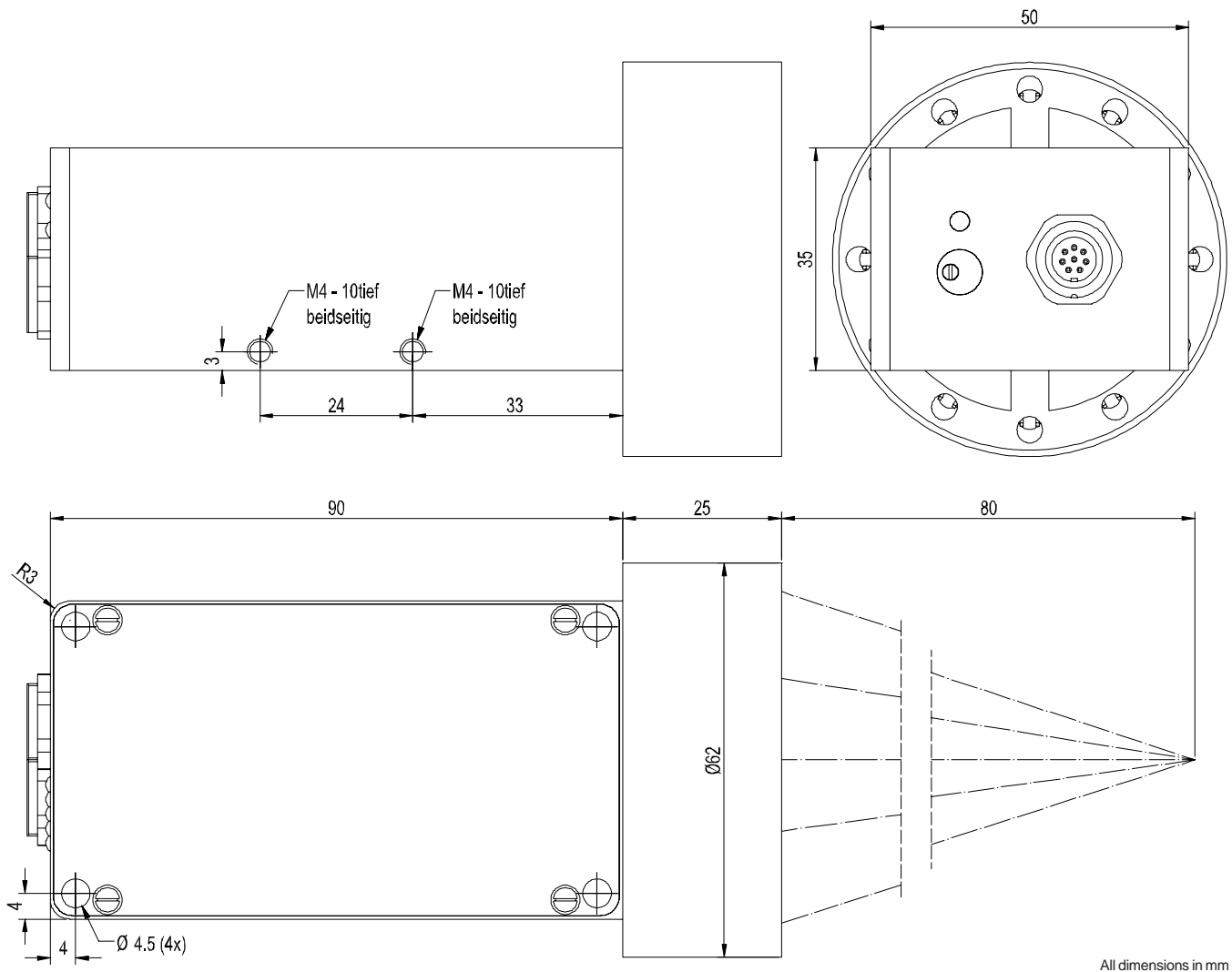




Technical Data

Model	SI-COLO1-80-FCL
Light source	12x white light LED, modulated 100 kHz, focused
Object distance	typ. 40 mm ... 200 mm
Detection range (half intensity width)	typ. 25 mm (at distance 80 mm)
Receiver	3-color filter detector
Pulsating light operation	100 kHz
Ambient light	up to 5000 Lux
Enclosure rating	IP64
Current consumption	typ. 180 mA
Voltage supply	+12VDC ... +30VDC, reverse-polarity protected, overload-protected
Type of connector	Connection to PLC: 8-pole female connector (Binder series 712)
EMC test acc. tol	IEC - 801...
Housing material	Aluminum, anodised in blue (optics holding device: aluminum, anodised in black)
Housing dimensions	LxWxH approx. 115 mm x 50 (Ø62 mm) x 35 mm (without flange connector)
Operating indication	by means of a green LED
Adjustment of transmission power	by means of a 3-revolutions potentiometer
Operating temperature range	-20°C ... +55°C
Storage temperature range	-20°C ... +85°C
Outputs	3x analog 0V ... +10V (red, green, blue)
Analog band width	typ. 2 kHz (-3dB)

Dimensions



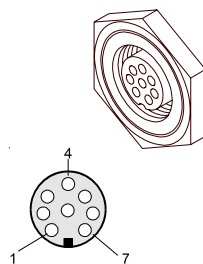
Connector Assignment

Connection of SI-COLO1-80-FCL to PLC:

8-pole female connector Binder 712

Pin: Color: Assignment:

1	white	GND (0V)
2	brown	+12 ... +30VDC
3	green	INO
4	yellow	ANA RED (0 ... +10V)
5	grey	ANA GREEN (0 ... +10V)
6	pink	ANA BLUE (0 ... +10V)
7	blue	not connected
8	red	not connected

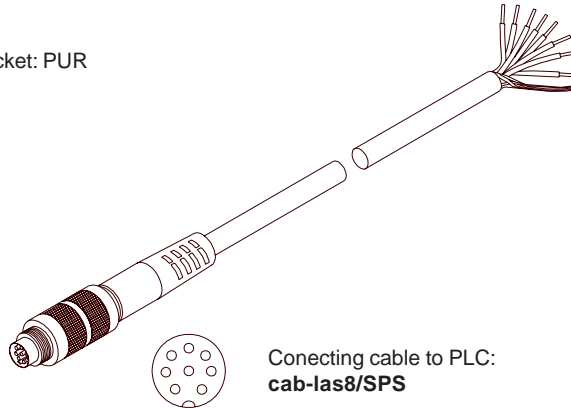




Connecting Cable

Connecting cable for SI-COLO1-80-FCL:

cab-las8/SPS Length: 2m Outer jacket: PUR

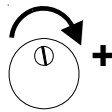


Connecting cable to PLC:
cab-las8/SPS



Setting

Setting of potentiometer:



3-revolutions potentiometer for adjustment of LED transmission power

Revolution clockwise:
Increase of transmission power
(results in an increase of analog signal)