

FLB Series

▶ FLB-CIG-25R-RD (Glue joint detection)

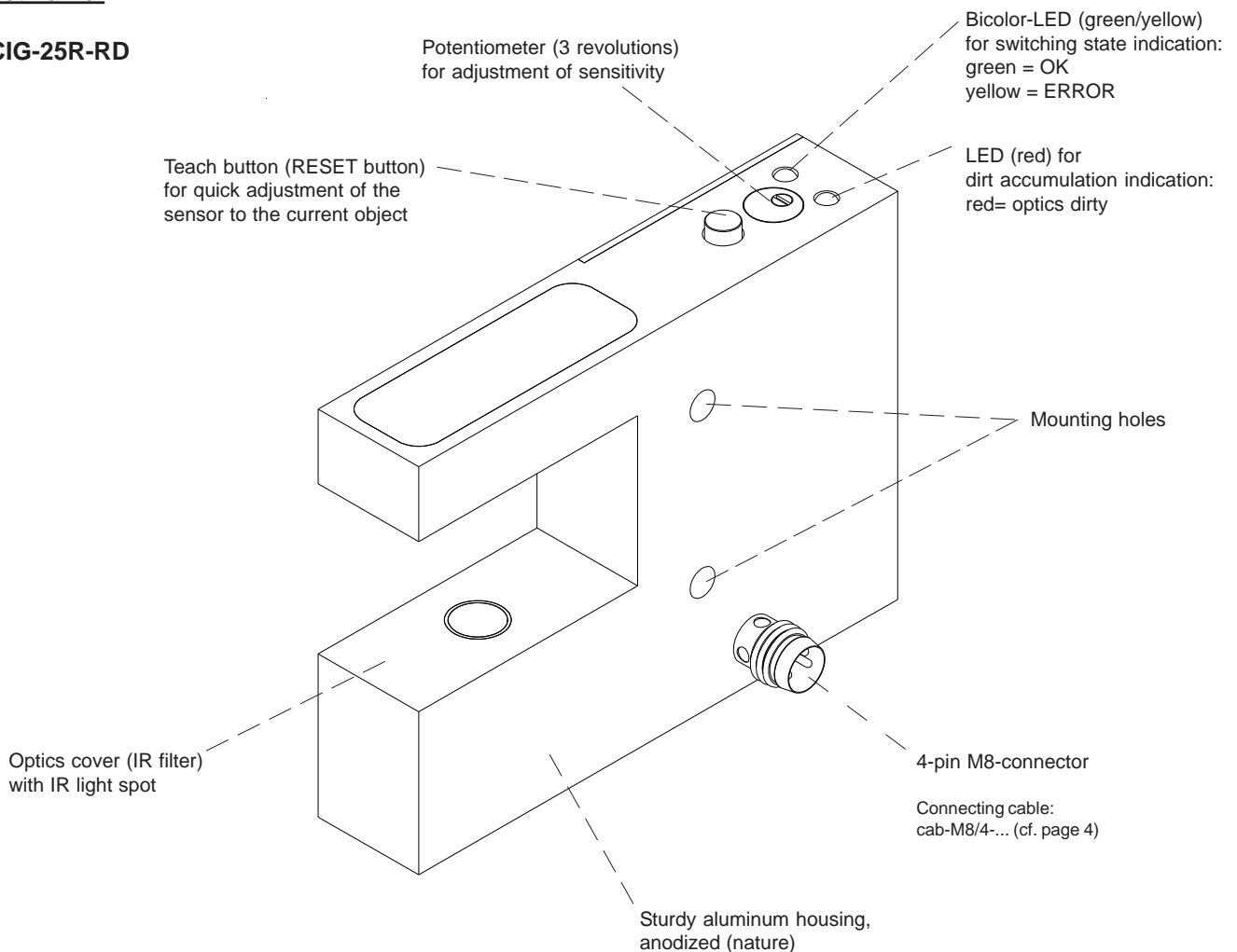
- Detection of glue joints, dark areas, and double sheets, with extremely thin, semi-transparent paper sorts
- IR light spot (Ø typ. 6 mm)
- IR light power adjustment
- RESET input
- Detection of inclusions in the paper, and of dirtying of the paper
- Sensitivity setting by means of a potentiometer
- Automatic adjustment to the respective product by means of automatic light power correction



Design

Product name:

FLB-CIG-25R-RD

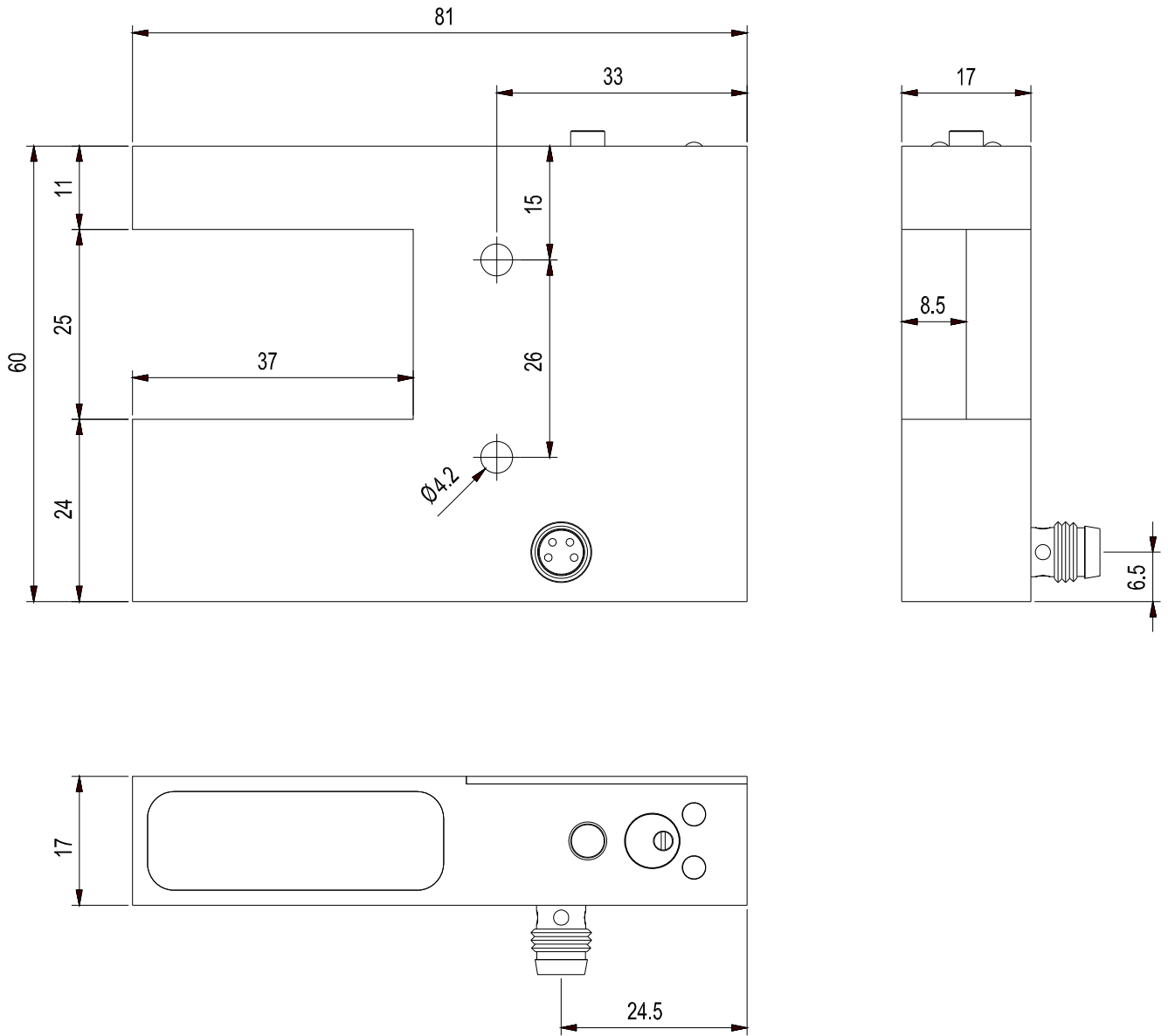




Technical Data

Model	FLB-CIG-25R-RD
Min. detectable error	typ. 3 mm Ø of local defects (holes, dark spots)
Optical filter	Day light block filter
Illuminant	Infrared (905 nm), constant light
Voltage supply	+12VDC ... +32VDC, reversed-polarity protected, overcurrent protected
Light spot	Ø typ. 6 mm
Ambient light	up to 5000 Lux
Enclosure rating	IP67
Current consumption	typ. 200 mA
EMC test acc. to	DIN EN 60947-5-2
Type of connector	4-pole M8-connector
Connecting cable	cab-M8/4-... (cf. page 4)
Dimensions	Total dimensions (without connector): LxWxH approx. 81 mm x 60 mm x 17 mm (cf. page 4)
Operating temperature range	-20°C ... +60°C
Storage temperature range	-20°C ... +85°C
Housing material	Aluminum, anodized (nature)
Max. switching current	100 mA, short-circuit-protected
Switching frequency	typ. 1 kHz
Output	Qinv: pnp dark-switching, npn bright-switching In case of glue joint, dark area, or double sheet: Output dynamic, 100 ms HIGH pulse
Sensitivity setting	by means of a potentiometer (3 revolutions)
Dirt accumulation indication	by means of a red LED
Switching state indication	by means of a bicolor-LED: green: OK yellow: ERROR (glue joint, dark area, double sheet)

Dimensions

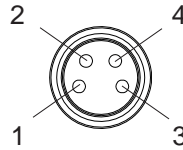


(All dimensions in mm)

Connector Assignment

4-pin M8-connector:

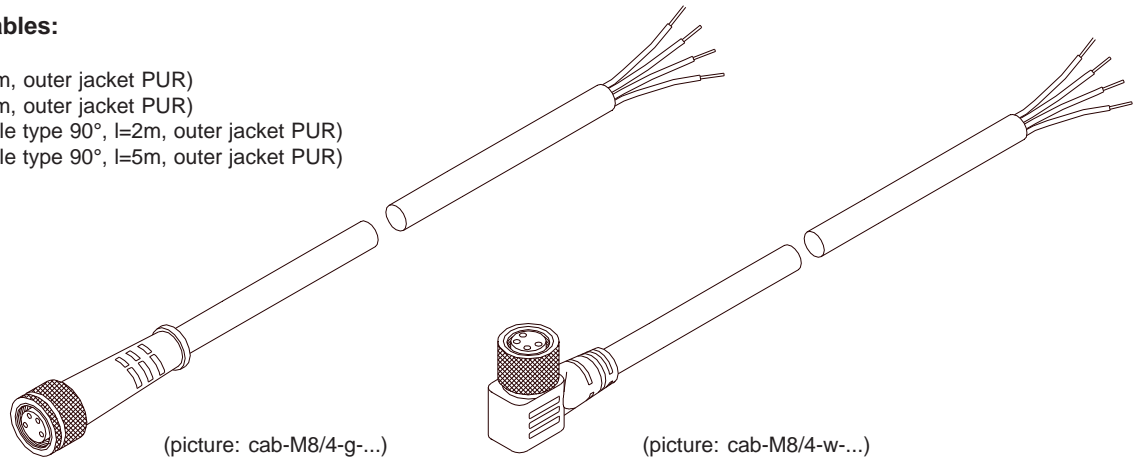
Pin No.:	(Color)	Assignment:
1	(brn)	+Ub (+12VDC ... +32VDC)
2	(wht)	RESET INPUT (+5V ... +24V)
3	(blu)	0V (GND)
4	(blk)	OUTPUT Qinv



Connecting Cables

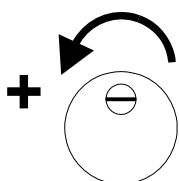
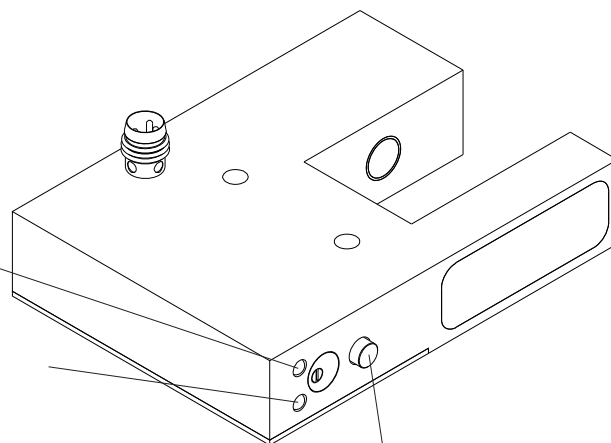
Available connecting cables:

cab-M8/4-g-2	(l=2m, outer jacket PUR)
cab-M8/4-g-5	(l=5m, outer jacket PUR)
cab-M8/4-w-2	(angle type 90°, l=2m, outer jacket PUR)
cab-M8/4-w-5	(angle type 90°, l=5m, outer jacket PUR)



Setting

- **LED (red) for dirt accumulation indication**
red = optics dirty
- **Bicolor-LED (green/yellow) for glue joint detection:**
green = OK
yellow = ERROR (glue joint, dark area, or double sheet)



Potentiometer (3 revolutions) for adjustment of sensitivity
Rotation counter-clockwise:
Increase of sensitivity

Teach button (RESET button)
for quick adjustment of the IR light power to the current object (paper).