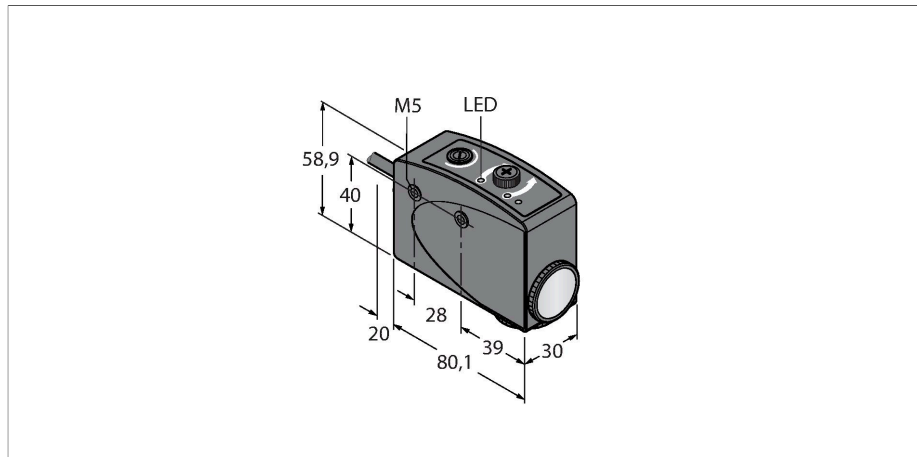# R58ACR1
Photoelectric Sensor –   Convergent Mode Sensor
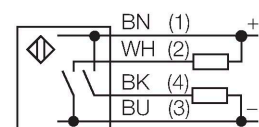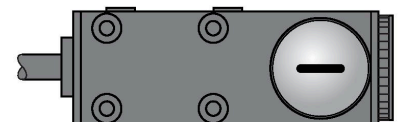# Color Mark Sensor

Features

- ■ Cable, PVC, 2 m, 4-wire
- ■ Protection class IP67
- ■ Threshold adjusted via 15-turn potentiometer
- ■ Light/dark operate adjusted via rotary switch
- ■ Emits red light for detection
- ■ Parallel scan field relative to the housing axis
- ■ Optics rotatable by 90°
- ■ Operating voltage: 10…30 VDC
- ■ PNP/NPN switching output
- ■ Switching behavior adjustable (NO/NC)

Wiring diagram

Functional principle

The color mark sensor differentiates between all conventional color contrasts occuring in product and material registration. For this purpose it uses red light. The very short response time of 50 µs is ideally suited for high speed applications. The sensor's switchpoint is adjusted in 15 steps via potentiometer. Via rotary switch, the sensor can also be taught to differentiate between ON and OFF state.

Technical data

Type	R58ACR1
ID	3010225
Optical data	
Function	Inspection sensor
Operating mode	Contrast sensor
Light type	Red
Focal distance	10 mm
Range	10 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operational current	≤ 100 mA
No-load current	≤ 75 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	10 kHz
Readiness delay	≤ 100 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, R58
Dimensions	80.1 x 30 x 58.9 mm
Housing material	Metal, Zinc Alloy Die-Cast, Black-finished
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4

Technical data

Core cross-section	0.34 mm^2
Ambient temperature	-10…+50 °C
Relative humidity	0…90 %
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE

Accessories

SMB55A	3053259

Mounting bracket, stainless steel, for R58A/R58E and QL56/QL51

SMB55RA	3053261

Mounting bracket, rectangular, stainless steel, for R58A/R58E and QL56/QL51

SMB55F	3053260

Mounting panel, stainless steel, for R58A/R58E and QL56/QL51

SMB55S	3053265

Mounting bracket, stainless steel, for R58A/R58E and QL56/QL51