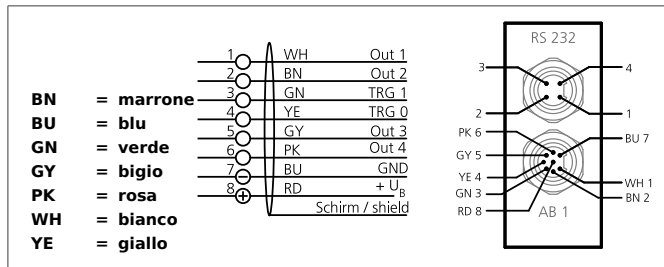


FS 50 M 60 G3-B8

Colour Sensor

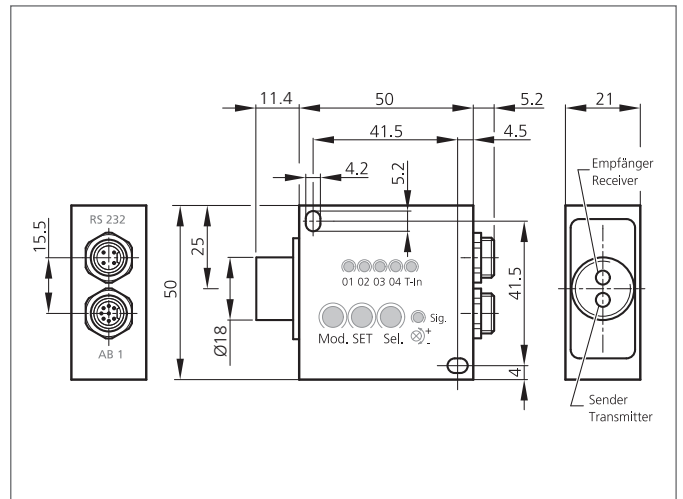


- Fixed optic
- 4 channel, teach-in for many standard applications
- 15 channels with binary coding
- Short response time
- Adjustable colour tolerance
- Status indication via LEDs
- High ambient light compensation
- Exportable measured values for evaluations (.csv)
- Integrated long-term stability
- Distinction of smallest shades
- Parameterization by buttons and software
- Key lock function



Safety instructions

The Instruments are not to be used for safety applications, in particular applications in which safety of persons depends on proper operation of the instruments. These instruments shall exclusively be used by qualified personnel.



TECHNICAL INFORMATION (typ.)	+20°C, 24V DC
Service voltage	18 ... 28 V DC
No-load current	500 mA
Control elements	3
Light spot size	5 ... 10 mm
Emitting light source	white light LED, to be switched off
Operating distance	30 ... 60 mm
Fiber-optic connection	Fixed optics
Colour memory internal	350
Number of sensing channels	1
Colour channels of sensor	4 (Teachable via buttons) 15 (Binary coding)
Colour resolution	DE Lab < 1
Trigger input	TRG 0
Teach input	TRG 1
Switching output	Push pull (4x), NO/NC
Switching hysteresis	0 ... 255 % (10 % preset)
Shock-/vibration load	10 ... 55 Hz / 1,0 mm / 30 g
Pulse stretching	0 ... 65535 ms adjustable
Display	4 LEDs (Output state) 5 LEDs (programming)
Voltage drop	< 2,0 V
Response time/Scanning frequency	0,2 ms (with 5000 Hz: up to 350 colours evaluable) 0,1 ms (with 10000 Hz: up to 30 colours evaluable) 0,05 ms (with 20000 Hz: 3 colours evaluable)

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Colour Sensor



TECHNICAL INFORMATION (typ.)	+20°C, 24V DC
Response-/release time	0,05 ms < 20.000 Hz
Ambient temperature, operation	-10 ... +55 °C
Switching output coding	4 x (binary coded = 15 output conditions) 4 x (pnp + npn)
Tolerance ranges	5 by button / using software arbitrarily
Ambient light compensation	dynamic, can be switched off
Protection class	IP 54
Protection degree	III, operation on protective low voltage
Colour space mode	XYZ / xyY / u'v'L* / L*a*b* / xyl (Non-self-shining objects) XYZ / xyY / u'v'L / xyl (Self-shining objects)
Detection modes	Minimum spacing (Assignment of measured colour to the stored colour with the smallest colour spacing) Check sphere (Check whether the measured colour is within a defined tolerance) Check cylinder (Check whether the measured colour is within a defined tolerance)
Operating mode	- (Continuous) - (External triggering) - (Externally triggered colour sequence detection) - (External teaching) - (Self-shining objects) - (Non-self-shining objects) - (Each colour can be assigned to any output)
Casing material	Aluminium anodized