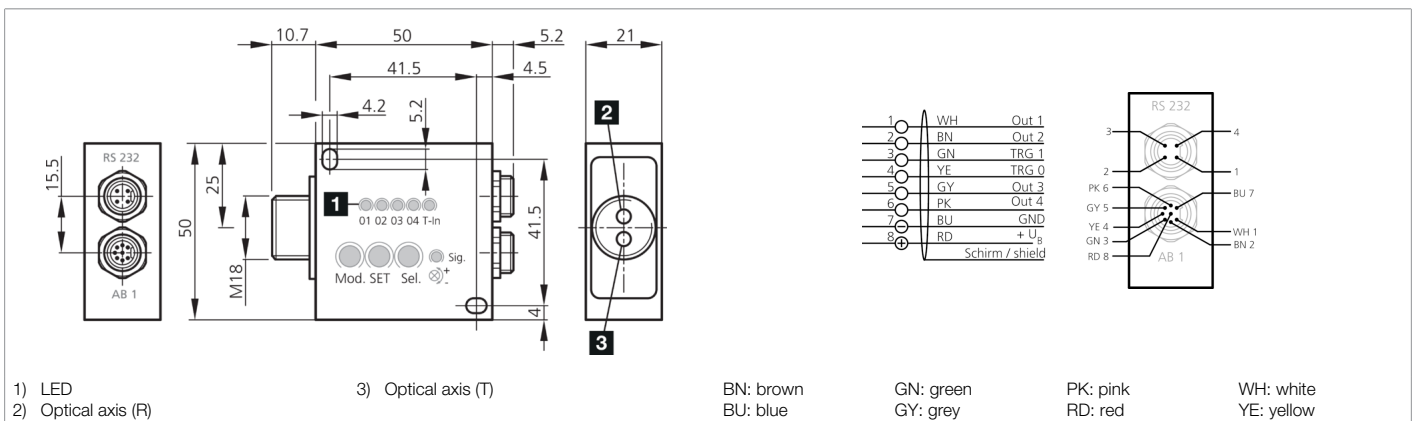




205450
FS 12-50 M G3-B8
Color sensor

- 4-channel, teach-in for many standard applications
- 15 channels with binary coding
- Very short response time
- Adjustable color tolerance
- High ambient light compensation
- Further settings possible via interface
- Integrated long-term stability
- Distinction of smallest shade nuances
- Parameterization by keys and software



| Function | | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | |

| Technical data (typ.) | | +20°C, 24 V DC |
|---|--|---|
| Service voltage | | 18 ... 28 V DC |
| No-load current (max.) | | 500 mA |
| Housing dimensions | | 50 x 50 x 21 mm |
| Housing length | | 21 mm |
| Housing height | | 50 mm |
| Housing width | | 50 mm |
| Fiber-optic cable connection / fixed optics | | M18 x 1 |
| Housing material | | Aluminum (Anodized) |
| Protection class | | III, operation on protective low voltage |
| Operating mode | | <ul style="list-style-type: none"> ■ Continuous ■ External triggering ■ Externally triggered color sequence detection ■ External teaching ■ Self-luminous objects ■ Body colors ■ Each color can be assigned to any output |
| Color memory internal | | 100 |
| Number of measuring channels | | 1 |
| Color channels of sensor | | <ul style="list-style-type: none"> ■ 4 (Teachable via keys) ■ 15 (Evaluation using software, with binary coding) |
| Color space mode | | <ul style="list-style-type: none"> ■ XYZ / xyY / u'v'L* / L*a*b* / xyl (Body colors) ■ XYZ / xyY / u'v'L / xyl (Self-luminous objects) |



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Color sensor

| Technical data (typ.) | | +20°C, 24 V DC |
|--------------------------------------|--|---|
| Detection modes | | <ul style="list-style-type: none"> ■ Minimum spacing (Assignment of the measured color to the stored color with the smallest color difference) ■ Check sphere (Check whether the measured color is within a specified tolerance) ■ Check cylinder (Check whether the measured color is within a specified tolerance) |
| Trigger input | | TRG 0 |
| Teach input | | TRG 1 |
| Switching output | | pnp+npn (4x), NO/NC |
| Voltage drop (max.) | | 2 V |
| Interface | | RS232 |
| Pulse stretching | | 0 ... 65535 ms adjustable |
| Switching output coding | | <ul style="list-style-type: none"> ■ binary coded = 15 switching conditions (4x) ■ pnp + npn (4x) |
| Light source | | LED (can be switched off) |
| Color | | White |
| Light spot size | | Dependent on focus optics |
| Color resolution | | DE Lab < 1 |
| Ambient light compensation | | dynamic, can be switched off |
| Range | | Dependent on fiber-optic cable |
| Switching hysteresis (max.) | | 0 ... 255 % (10 % default) |
| Tolerance ranges | | 5 selectable by keys / using software |
| Operating elements | | 3 |
| Display | | LED (Channel state (4x), programming (5x)) |
| Response time / scanning frequency | | <ul style="list-style-type: none"> ■ 0.2 ms (bei 5.000 Hz: bis zu 100 Farben auswertbar) ■ 0.1 ms (bei 10.000 Hz: bis zu 30 Farben auswertbar) ■ 0.05 ms (bei 20.000 Hz: 3 Farben auswählbar) |
| Response time | | 0.05 ms |
| Release time | | < 20 000 Hz |
| Ambient temperature during operation | | -10 ... +55 °C |
| Protection type | | IP 54 |
| Connection | | Connector, M9, 8-pin |
| More information / accessories | | https://www.di-soric.com/205450 |