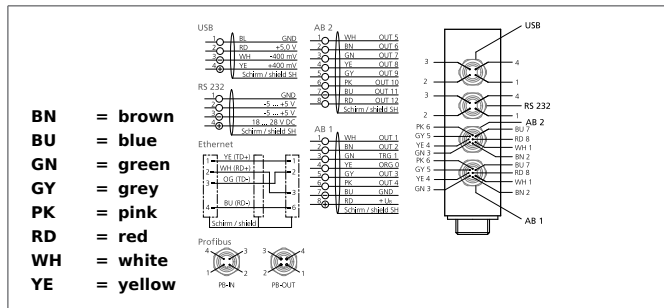


# FS 12-100-2 M G8-B8-PB

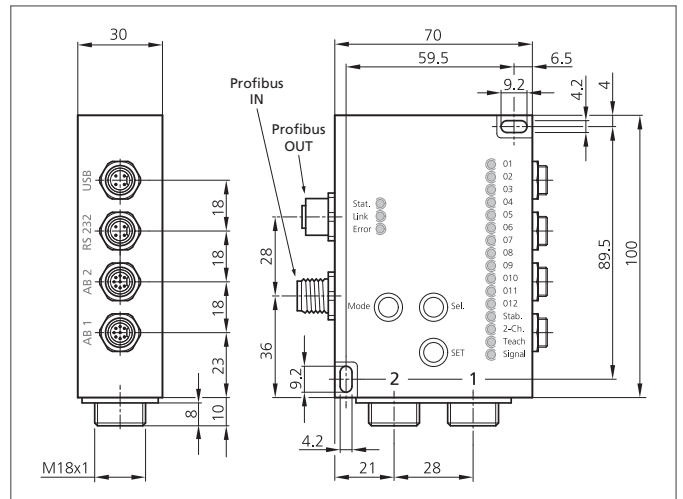
## Colour Sensor

- Up to 100 colour channels
- Integrated long-term stability
- Distinction of smallest shades
- Short response time
- Adjustable colour tolerance
- Parameterization by buttons and software
- Key lock function
- High ambient light compensation
- Exportable measured values for evaluations (.csv)
- For Profibus connection



### 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                  | Dependent on focus optic   |
| Emitting light source            | white light LED, to be switched off  |
| Fiber-optic connection           | M18 x 1  |
| Colour memory internal           | 100  |
| Number of sensing channels       | 1  |
| Colour channels of sensor        | 12 (Teachable via buttons)<br>15 (Binary coating)<br>100 (Using software, with binary coding)  |
| Colour resolution                | DE Lab < 1   |
| Trigger input                    | TRG 0  |
| Teach input                      | TRG 1  |
| Switching hysteresis             | 0 ... 255 %  |
| Interface                        | Profibus, RS 232, USB  |
| Shock-/vibration load            | 10 ... 55 Hz / 1,0 mm / 30 g   |
| Pulse stretching                 | 0 ... 65535 ms adjustable  |
| Display                          | 19 LED   |
| Voltage drop                     | < 2,0 V  |
| Response time/Scanning frequency | 0,2 ms (with 5000 Hz: up to 100 colours evaluable)<br>0,1 ms (with 10000 Hz: up to 30 colours evaluable)<br>0,05 ms (with 20000 Hz: 3 colours evaluable) |
| Ambient temperature, operation   | -10 ... +55 °C   |

# FS 12-100-2 M G8-B8-PB

## Colour Sensor



| TECHNICAL INFORMATION (typ.) | +20°C, 24V DC   |
|------------------------------|---|
| Switching output coding      | 12 x (pnp + npn)<br>100 x (binary coded = 100 output conditions)  |
| Tolerance ranges             | 5 by button / using software arbitrarily  |
| Ambient light compensation   | can be switched off   |
| Protection class             | IP 54   |
| Colour space mode            | XYZ / xyY / u'v'L* / L*a*b* / xyl (Non-self-shining objects)<br>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)<br>Check sphere (Check whether the measured colour is within a defined tolerance)<br>Check cylinder (Check whether the measured colour is within a defined tolerance) |
| Operating mode               | - (Continuous)<br>- (Externally triggered colour sequence detection)<br>- (External teaching)<br>- (Self-shining objects)<br>- (Non-self-shining objects)<br>- (Each colour can be assigned to any output)  |
| Casing material              | Aluminium anodized  |