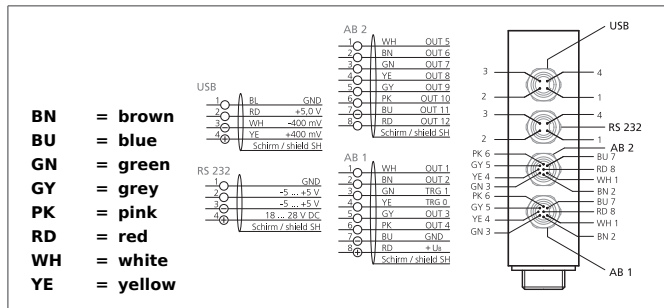


# FS 12-100-1 M G8-B8

## Colour Sensor

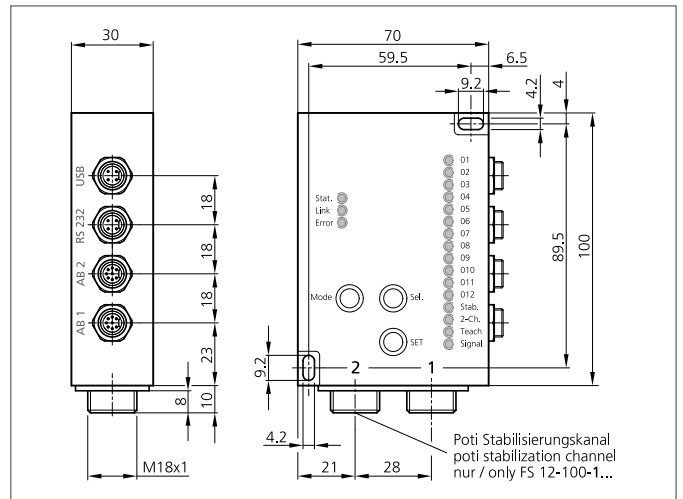
- Up to 350 colour channels
- Integrated long-term stability
- Distinction of smallest shades
- Short response time
- Adjustable colour tolerance
- Parameterization by buttons and software
- Key lock function
- High ambient light compensation
- Exportable measured values for evaluations (.csv)



### 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
Internal power consumption	500 mA
Control buttons	3
Emitting light source	white light LED, to be switched off
Fibre-optic cable connection / Fixed optics	M 18 x 1
Colour memory internal	350
Number of sensing channels	1
Measuring spot	Dependent on focus optic
Colour channels of sensor	12 (Teachable via buttons) 15 (Binary coating) 350 (Using software, with binary coding)
Colour resolution	DE Lab < 1
Trigger input	TRG 0
Teach input	TRG 1
Switching hysteresis	0 ... 255 %
Interface	RS 232, USB
Pulse stretching	0 ... 65.535 ms adjustable
Display	19 LED
Voltage drop	2,0 V
Response time/Scanning frequency	0,2 ms (with 5.000 Hz: up to 350 colours evaluable) 0,1 ms (with 10.000 Hz: up to 30 colours evaluable) 0,05 ms (with 20.000 Hz: 3 colours evaluable)
Ambient temperature	-10 ... +55 °C

# FS 12-100-1 M G8-B8

## Colour Sensor



TECHNICAL INFORMATION (typ.)	+20°C, 24V DC
Switching output coding	12 x (pnp + npn) 350 x (binary coded = 350 output conditions)
Tolerance ranges	5 by button / using software arbitrarily
Ambient light compensation	can be switched off
Protection class	IP 54
Colour space modes	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) - (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