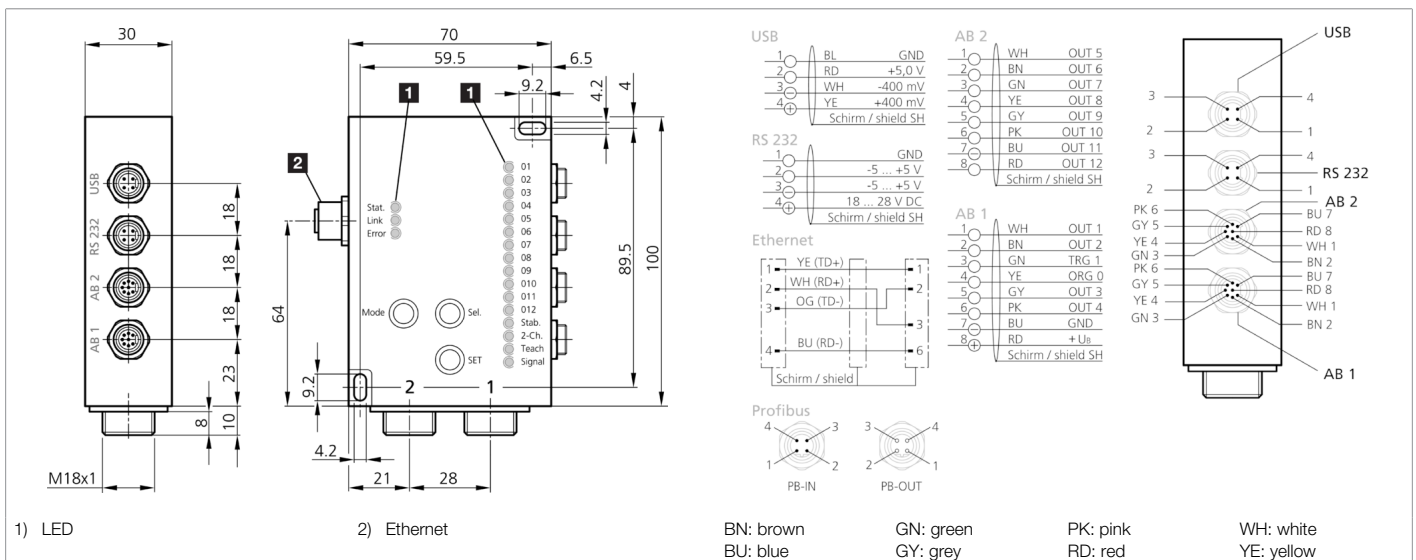




**209684**  
**FS 12-100-1 M G8-B8-E**  
**Color sensor**

- Up to 100 color channels
- Integrated long-term stability
- Distinction of smallest shade nuances
- Very short response time
- Adjustable color tolerance
- Parameterization by keys and software
- Key lock function
- High ambient light compensation
- Exportable measured values for evaluations (.csv)
- For Ethernet connection



Function										

Technical data (typ.)		+20°C, 24 V DC	
Service voltage		18 ... 28 V DC	
No-load current (max.)		500 mA	
Housing dimensions		70 x 100 x 30 mm	
Housing length		70 mm	
Housing height		100 mm	
Housing width		30 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"> <li>■ Continuous</li> <li>■ Externally triggered color sequence detection</li> <li>■ External teaching</li> <li>■ Self-luminous objects</li> <li>■ Body colors</li> <li>■ Each color can be assigned to any output</li> </ul>	
Color memory internal		100	
Number of measuring channels		1	
Color channels of sensor		<ul style="list-style-type: none"> <li>■ 12 (Teachable via keys)</li> <li>■ 15 (Binary coding)</li> <li>■ 350 (Evaluation using software, with binary coding)</li> </ul>	



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Color sensor

Technical data (typ.)	+20°C, 24 V DC
Color space mode	<ul style="list-style-type: none"> <li>■ XYZ / xyY / u'v'L* / L*a*b* / xyl (Body colors)</li> <li>■ XYZ / xyY / u'v'L / xyl (Self-luminous objects)</li> </ul>
Detection modes	<ul style="list-style-type: none"> <li>■ Minimum spacing (Assignment of the measured color to the stored color with the smallest color difference)</li> <li>■ Check sphere (Check whether the measured color is within a specified tolerance)</li> <li>■ Check cylinder (Check whether the measured color is within a specified tolerance)</li> </ul>
Trigger input	TRG 0
Teach input	TRG 1
Switching output	Push-pull (12x)
Voltage drop (max.)	2 V
Interface	<ul style="list-style-type: none"> <li>■ Ethernet</li> <li>■ RS232</li> <li>■ USB</li> </ul>
Pulse stretching	0 ... 65535 ms adjustable
Switching output coding	<ul style="list-style-type: none"> <li>■ pnp + npn (12x)</li> <li>■ binary coded = 350 switching conditions (350x)</li> </ul>
Light source	LED (can be switched off)
Color	White
Light spot size	Dependent on focus optics
Color resolution	DE Lab < 1
Ambient light compensation	can be switched off
Switching hysteresis (max.)	0 ... 255 %
Tolerance ranges	5 selectable by keys / using software
Operating elements	3
Display	LED (19x)
Response time / scanning frequency	<ul style="list-style-type: none"> <li>■ 0.2 ms (bei 5.000 Hz: bis zu 100 Farben auswertbar)</li> <li>■ 0.1 ms (bei 10.000 Hz: bis zu 30 Farben auswertbar)</li> <li>■ 0.05 ms (bei 20.000 Hz: 3 Farben auswählbar)</li> </ul>
Ambient temperature during operation	-10 ... +55 °C
Protection type	IP 54
Connection	Connector, M9, 8-pin
<b>More information / accessories</b>	<a href="https://www.di-soric.com/209684">https://www.di-soric.com/209684</a>