



Position sensors and object recognition

# High light intensity, low profile.



## Backlights for contour and orientation verification.

- Ultra-flat design, as cable or connection version (pigtail).
- Permanent light or pulse operation.
- Additional operating mode for 4 times more light.
- Three illuminated field sizes.
- Infrared or red light.



Extra flat	IP 65	Cable and connector types	Low housing depth
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### Ultra-flat design

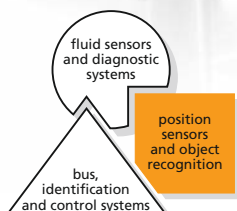
The new generation of ifm's backlights can be screwed onto a wall or fixture requiring only little space due to the extremely flat design of only 9.2 mm.

### Various operating modes

The backlights allow operation with two different light intensities due to the microprocessor technology: In the "normal" mode the element can work in the permanent or pulsed mode, in the "high" mode pulse operation with 4 times more light is possible. The exposure time is thus reduced by 75 to 80 %, which is an advantage especially for fast processes.

### Numerous variants

The backlights generate a homogeneous light field with visible red or invisible infrared light. They can be obtained in three different sizes.



**Applications:**  
Contour and orientation verification

Dimensions [mm]	Active illuminated area [mm]	I <sub>0</sub> normal light intensity [mA]	I <sub>0</sub> high light intensity * [mA]	Cable, 2 m	Pigtail, 0,15 m	Order no.
<b>Transmitter red light 660 nm</b>						
66.5 x 33.4 x 9.2	25 x 25	50	25	•	–	O2D900
103 x 81 x 9.8	50 x 50	200	100	•	–	O2D902
156 x 133 x 9.8	100 x 100	450	250	•	–	O2D904
66.5 x 33.4 x 9.2	25 x 25	50	25	–	•	O2D910
103 x 81 x 9.8	50 x 50	200	100	–	•	O2D911
156 x 133 x 9.8	100 x 100	450	250	–	•	O2D912
<b>Transmitter infrared 880 nm</b>						
66.5 x 33.4 x 9.2	25 x 25	50	25	•	–	O2D901
103 x 81 x 9.8	50 x 50	200	100	•	–	O2D903
156 x 133 x 9.8	100 x 100	450	250	•	–	O2D905
66.5 x 33.4 x 9.2	25 x 25	50	25	–	•	O2D906
103 x 81 x 9.8	50 x 50	200	100	–	•	O2D907
156 x 133 x 9.8	100 x 100	450	250	–	•	O2D908

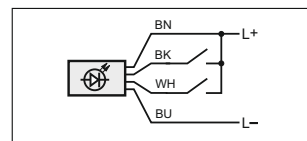
\*High light intensity: max. pulse length 50 ms, max. mark-to-space ratio: 1:10

**Accessories**

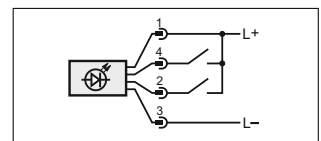
Type	Description	Order no.
	Mounting set for backlights 25 x 25 mm	<b>E2D107</b>
	Mounting set for backlights 50 x 50 mm	<b>E2D108</b>
	Mounting set for backlights 100 x 100 mm	<b>E2D109</b>
	Clamp linking ring, high-grade stainless steel	<b>E21076</b>
	Clamp, high-grade stainless steel, Ø 12 mm	<b>E21110</b>
	Rod, straight, 100 mm long, Ø 12 mm, M10 thread, stainless steel	<b>E20938</b>
	Cube for mounting on an aluminium profile, M10 thread, diecast zinc	<b>E20951</b>
	Stainless steel rod, 150 mm, Ø 12 mm	<b>E21111</b>
	Stainless steel rod, 200 mm, Ø 12 mm	<b>E21112</b>
	Stainless steel rod, 300 mm, Ø 12 mm	<b>E21113</b>

Common technical data	
Operating voltage [V]	24 DC ± 10 %
Operating temperature [°C]	0...50
Operating state indications	
Illuminated state	LED yellow
Operation	LED green
Excess temperature / overload	LED red
Material housing / lens	aluminium / PMMA
Trigger	external, 24 V PNP
Protection	IP 65, III

**Wiring diagrams of the units**



BK trigger  
WH type of operation  
"high intensity"



Pigtail 4: trigger  
2: type of operation  
"high intensity"