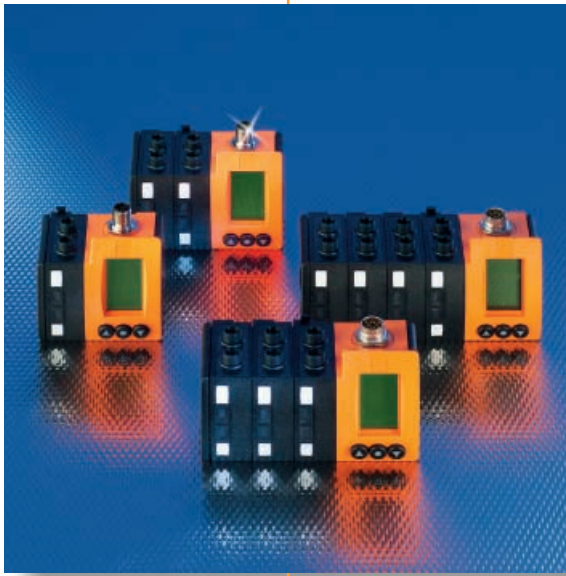


Multi-channel glass fibre-optic sensor with central operating and display unit.

Convenient setup and operation plus high performance.



- Quick and easy mounting.
- Display with graphic capabilities for easy setup.
- Exact setting for high-precision detection of small and smallest objects.
- Available with 2, 4, 6 or 8 channels.
- Operation with high-quality glass fibre optics for harsh industrial applications.

Position sensors

LCD
Display

Easy-to-use

High accuracy

Detection of >minute< objects



Applications

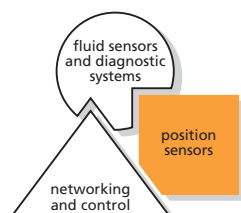
In applications in which several sensors are required for position detection the OO series multi-channel glass fibre-optic sensor represents a low-cost alternative to many individual fibre-optic amplifiers mounted side by side.

Advantages





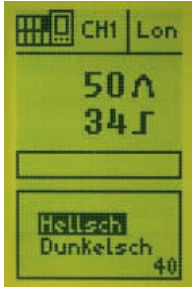



Due to its compact design the OO multi-channel fibre-optic sensor can be used in applications with limited mounting space. Mounting the sensor on a DIN rail and mounting the fibre optics only takes a few steps. Programming is carried out easily for all channels and functions by means of teach buttons on the central operating unit. Here, the uncomplicated user guidance is an outstanding feature. Mutual optical disturbance of the individual channels is excluded.

Product range

The product range consists of compact units for the connection of glass fibre optics with either 2, 4, 6 or 8 channels. The fibre optics are available as through-beam or diffuse reflection versions with different sensing heads.



Multi-channel glass fibre-optic sensor: Operating functions

Display	Function
	<p>Language selection</p> <p>Three languages selectable: German, English or French.</p>
	<p>Rotation of the display</p> <p>Depending on the mounting position the display can be rotated by 180°.</p>
	<p>Operating mode</p> <p>Dynamic bar display of the excess gain for each channel.</p>
	<p>Automatic / manual teach-in</p> <p>Automatic or manual setting of the ranges.</p>
	<p>Light-on / dark-on mode</p> <p>Convenient programming of the switching function.</p>
	<p>Time delay [ms]</p> <p>Adjustable time delay of 0 – 100 ms in steps of 1 ms.</p>
	<p>2 switch points for one channel</p> <p>Two switch points / switching outputs definable for one channel.</p>
	<p>Logical conjunctions</p> <p>Logical "AND" or "OR" conjunctions of all channels programmable.</p>

Applications: Position detection in the packaging and food industries

System	Multi-channel fibre-optic sensor for glass fibre optics			
Number of channels	2	4	6	8
Order no	OO5004	OO5005	OO5006	OO5007
Operating voltage [V]	12...36 DC			
Current rating [mA]	200			
Outputs	PNP			
Short-circuit protection, pulsed	•			
Rev. polarity / overl. protection	•			
Voltage drop [V]	< 2			
Current consumption [mA]	50 at 24 V			
Switching frequency [Hz]	typ. 2700	typ. 1500	typ. 1000	typ. 800
Operating temperature [°C]	-20...60			
Protection	IP 65, III			
Materials	housing: ABS, display window: PMMA			
EMC	EN 60947-5-2; EN 55011			

Diffuse fibre optics 0.6 m long



Sensing head / type of article	Sheathing	Max. range [mm]	Order no.
M6	aluminium -20...290 °C	200	E20055
∅ 3 mm	aluminium -20...290 °C	200	E20056
∅ 1 mm	aluminium -20...290 °C	24	E20057
∅ 4 mm/90°	aluminium -20...290 °C	200	E20058
M6	metal silicone -20...150 °C	200	E20489
∅ 3 mm	metal silicone -20...150 °C	200	E20494
∅ 1 mm	metal silicone -20...150 °C	24	E20507
∅ 4 mm/90°	metal silicone -20...150 °C	200	E20495

Further technical details and scale drawings at www.ifm-electronic.com



Through-beam fibre optics 0.6 m long



Sensing head / type of article	Sheathing	Max. range [mm]	Order no.
M6	aluminium -20...290 °C	400	E20128
∅ 3 mm	aluminium -20...290 °C	400	E20130
∅ 1 mm	aluminium -20...290 °C	160	E20127
∅ 4 mm/90°	aluminium -20...290 °C	400	E20129
M6	metal silicone -20...150 °C	400	E20505
∅ 3 mm	metal silicone -20...150 °C	400	E20492
∅ 1 mm	metal silicone -20...150 °C	160	E20506
∅ 4 mm/90°	metal silicone -20...150 °C	400	E20493

Advantages and customer's benefits

- Silicate glass fibre optics enable tight bending radii
- Over 100 different versions for various applications
- Resistant to a variety of aggressive chemicals
- High temperatures of up to 290 °C

Sockets

M12 socket for 2 - 4 channels Order no. E11231



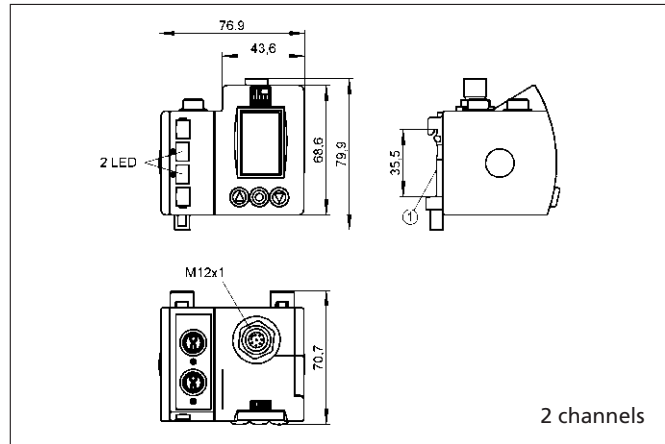
Connection 2-channel version		Connection 4-channel version	
brown	L+	brown	L+
blue	L-	blue	L-
black	out 1	black	out 1
white	out 2	white	out 2
grey		grey	out 3
pink		pink	out 4
lilac	fc	lilac	fc

M16 socket for 6 - 8 channels Order no. E11645

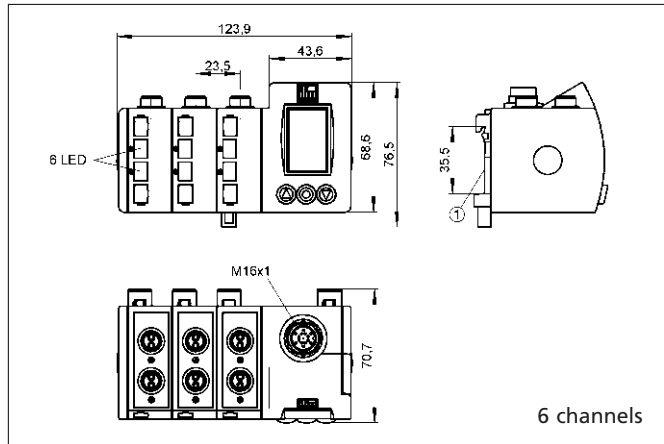


Connection 6-channel version		Connection 8-channel version	
brown	L+	brown	L+
blue	L-	blue	L-
black	out 1	black	out 1
white	out 2	white	out 2
grey	out 3	grey	out 3
pink	out 4	pink	out 4
grey/pink	out 5	grey/pink	out 5
yellow	out 6	yellow	out 6
red/blue		red/blue	out 7
green		green	out 8
lilac	fc	lilac	fc

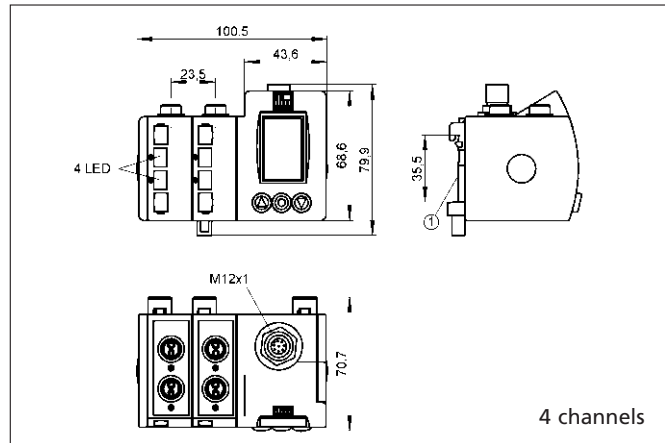
Dimensions



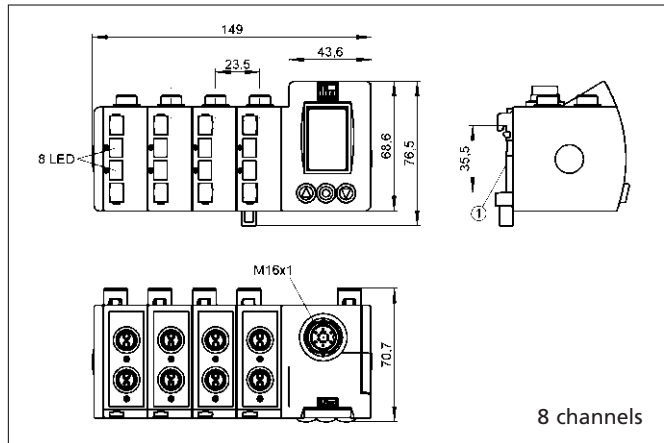
1 = DIN rail mounting



1 = DIN rail mounting



1 = DIN rail mounting



1 = DIN rail mounting