



Position sensors and object recognition

# Full metal housing inductive sensors for heavy duty.



**Tough: extremely resistant in M8 to M30 housings.**

- Ideal for metalworking applications.
- Non-stick coating against weld spatter.
- Mechanically resistant to impacts on the sensing face.
- Vibration and shock resistant.
- Lasered type label: permanently legible.

High-grade stainless steel

Resistant to weld slag

IP 67

Vibration and shock resistant

## Materials

The threaded body and the sensing face of the housing are made of stainless steel.

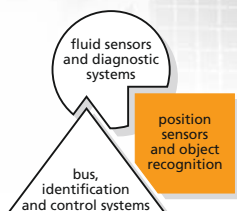
## Use in welding applications

The non-stick coating allows weld spatter to roll off the sensor. The high temperature range of up to 85 °C means it can handle critical applications.


## Application tests

A series of tests qualified the sensors for tough applications:

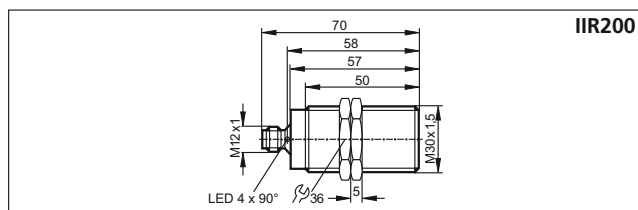
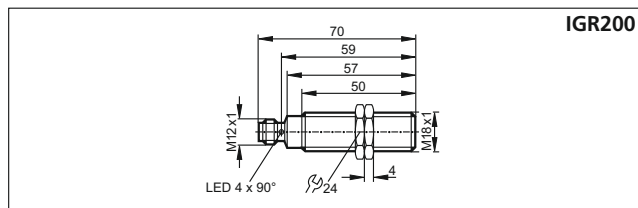
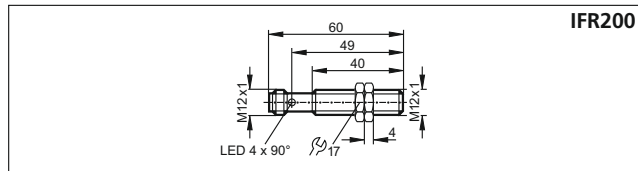
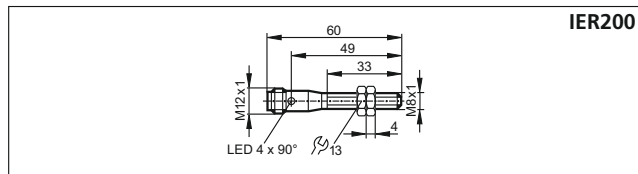
- vibration test
- shock test
- impact test
- wire brush test







**Applications:**  
Metalworking and welding applications

Type	Dimensions Length [mm]	Sensing range [mm]	f [Hz]	Operating temperature [°C]	Housing material	I <sub>load</sub> [mA]	Order no.
<b>M12 connector · output function  · 3-wire DC PNP</b>							
M8	L = 60	2 f	100	0...85	high-grade stainless steel	100	<b>IER200</b>
M12	L = 60	4 f	2	0...85	high-grade stainless steel	100	<b>IFR200</b>
M18	L = 70	6 f	2	0...85	high-grade stainless steel	100	<b>IGR200</b>
M30	L = 70	12 f	2	0...85	high-grade stainless steel	100	<b>IIR200</b>

**Dimensions**



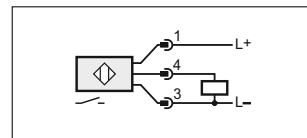
**Connectors and splitter boxes**

Type	Description	Order no.
	M12 socket, 2 m grey, PUR cable	<b>EVW001</b>
	M12 socket, 5 m grey, PUR cable	<b>EVW002</b>
	M12 socket, 2 m grey, PUR cable	<b>EVW004</b>
	M12 socket, 5 m grey, PUR cable	<b>EVW005</b>




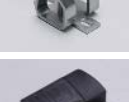




**Common technical data**

Type IFR, IGR, IIR		
Operating voltage	[V DC]	10...36
Current consumption	[mA]	< 20
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Voltage drop	[V]	< 2.5
Protection rating		IP 67
Function display		
Switching status	LED	yellow (4 x 90°)
Operating status	LED	green

**Wiring diagram**



**Accessories**

Type	Description	Order no.
	Angle bracket for type M12, stainless steel	<b>E10735</b>
	Angle bracket for type M18, stainless steel	<b>E10736</b>
	Angle bracket for type M30, stainless steel	<b>E10737</b>
	Mounting clip for type M12, stainless steel	<b>E11533</b>
	Mounting clip for type M18, stainless steel	<b>E11534</b>
	Mounting clamp M12, PC	<b>E11047</b>
	Mounting clamp M18, PC	<b>E11048</b>
	Mounting clamp M30, PC	<b>E11049</b>

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