



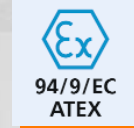
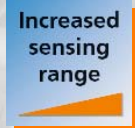
Position sensors and object recognition

# Maximum protection in hazardous areas.



## Inductive sensors for ATEX 3D (zone 22) and 3G (zone 2).

- The 4 joules impact test guarantees high mechanical stability of the housing.
- Full metal sensors as threaded M12, M18 and M30 types.
- M12 connector ecolink for ATEX categories 2D / 3D / 3G.
- High vibration and shock resistance.



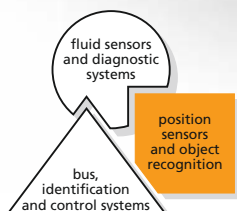
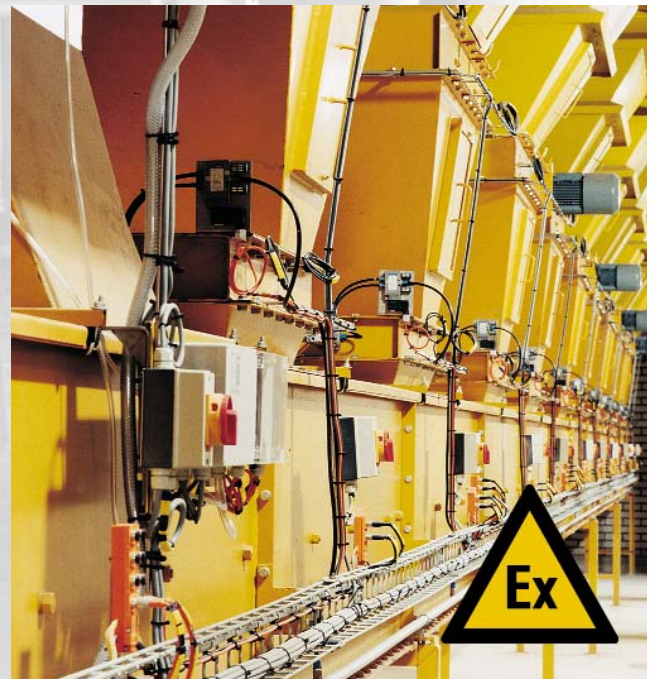
### EU-wide explosion protection

The ATEX directive 94/9/EC (ATEX) sets out detailed rules for explosion prevention.

This sensor family passed a very demanding test series of artificial ageing, 4 joules impact test and subsequent protection rating test. The result: the sensor housings are designed to ensure that, even in the toughest conditions they will not become an ignition source in explosive dusts or gaseous atmospheres. This guarantees maximum protection in hazardous areas.

### Only safe with the matching connection

ifm ecolink series connectors also comply with the strict requirements of the standard and are therefore allowed for use in hazardous areas of the categories 2D, 3D and 3G.



**Threaded housings**

Type	Dimensions Length [mm]	Sensing range [mm]	f [Hz]	Ambient temperature [°C]	Housing material	Category	Order no.
<b>M12 connector · output function NO · 3-wire DC PNP</b>							
M12	L = 60	3 f	100	-40...60	high-grade stainless steel	3D / 3G	<b>IF503A</b>
M12	L = 70	6 nf	500	-40...60	high-grade stainless steel	3D / 3G	<b>IF505A</b>
M18	L = 70	5 f	100	-40...60	high-grade stainless steel	3D / 3G	<b>IG510A</b>
M18	L = 70	12 nf	500	-40...60	high-grade stainless steel	3D / 3G	<b>IG511A</b>
M30	L = 70	10 f	50	-40...60	high-grade stainless steel	3D / 3G	<b>I1502A</b>
M30	L = 70	25 nf	250	-40...60	high-grade stainless steel	3D / 3G	<b>I1503A</b>
M30	L = 70	10 f	50	-40...60	high-grade stainless steel	2D / 3G	<b>I1504A</b>
<b>M12 connector · output function NC · 3-wire DC PNP</b>							
M12	L = 60	3 f	100	-40...60	high-grade stainless steel	3D / 3G	<b>IF504A</b>
M18	L = 70	5 f	100	-40...60	high-grade stainless steel	3D / 3G	<b>IG512A</b>

**ecolink M12 – the safe connection in ATEX applications.**


This series of ecolink connectors meets the strict requirements of the standard and is therefore allowed for use in ATEX areas of the categories 2D, 3D and 3G. It is a simple matter to tighten the connector so far that it complies with the ATEX requirements but cannot be loosened by hand.

Observe the recommended tightening torques of 1.2...1.5 Nm!



Type	Description	Order no.
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**Sockets M12, 4-pole**

	2 m black, PUR cable	<b>EVC04A</b>
	5 m black, PUR cable	<b>EVC05A</b>
	10 m black, PUR cable	<b>EVC06A</b>




**Technical data:**

- Operating voltage: 60 V AC / 60 V DC
- Nominal current: 2 A
- Protection rating: IP 67  
in locked condition with the matching counterpart.
- Tightening torque of the nut: 1.2...1.5 Nm
- Ambient temperature: -20...60 °C
- Vibration / shock: 750 g, 1 million cycles
- Cable characteristics: drag chain: > 5 million cycles

**Common technical data**

Full-metal inductive sensors M12, M18, M30		
Operating voltage	[V DC]	10...36
Current rating	[mA]	100
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Switching status	LED	yellow (4 x 90°)
Protection in hazardous areas		IP 67
Protection outside the hazardous area		IP 65, IP 67, IP 68, IP 69K

**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>