

Inductive sensors for hazardous gas areas Ex II 3G.

Threaded M 12, M 18 and M 30 designs (for use in zone 2).



- In accordance with 94/9/EC annex VIII (ATEX).
- Increased sensing range for more operational reliability.
- High-grade stainless steel housing (316L) with IP 67 protection rating.
- Robust M 12 connector with gold-plated contacts.

Position sensors

II 3G
ATEX

Increased sensing range

IP 67

High-grade stainless steel

Applications

These units are suitable for use in zone 2 hazardous areas according to the category 3G. The design of the proximity switches complies, among others, with the standards EN 50014 and EN 50021.

Increased sensing range

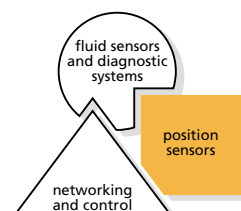
The increased sensing range is ensured over the whole temperature range thus giving better protection against failure due to mechanical damage. Compared to standard switches it corresponds to a value which in practice is up to 2 times higher.

Materials

The design of the tried-and-tested **efector_m** series and the use of high-quality materials such as high-grade stainless steel and PEEK as well as gold-plated contacts ensure a long life of the sensors in demanding applications. Due to laser labelling the unit can still be identified after years.

M 12 connector

Connection is made via a robust, easy-to-mount and maintenance-friendly M 12 connector. Inadvertent loosening of the connector can be prevented by using the locking device (order separately, part no. E 11532).



Inductive, capacitive and magnetic proximity switches

Applications:
Developed for the high demands of the equipment category 3G in hazardous gas areas (zone 2)

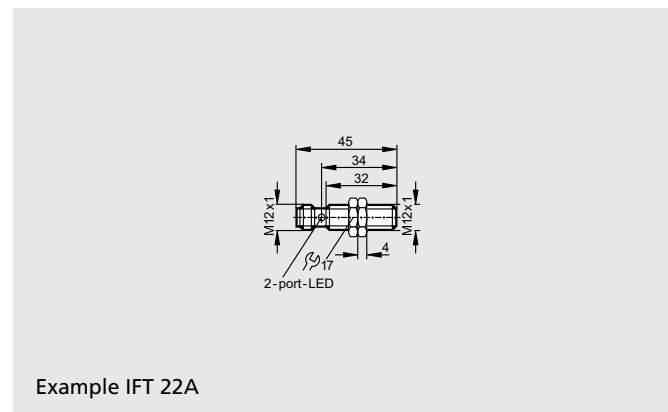
Position sensors

Electrical design	DC PNP		
Connection	3-wire		
Design	M12	M18	M30
Nominal sensing range s_n [mm]	3.5 f	8 f	14 f
Output			
Order no.	IFT 22A	IGT 20A	IIT 22A
Marking	⊕ II 3G EEx nA II T6 X		
Operating voltage [V]	10...36 DC		
Current rating [mA]	100		
Short-circuit protection, pulsed	•		
Reverse pol./overload protection	•		
Voltage drop [V]	≤2.5		
Current consumption [mA]	<10 (24 V)		
Switching status indication LED	yellow (2 x 180°)	yellow (4 x 90°)	
Switching frequency [Hz]	700	500	100
Operating temperature [°C]	0...60		
Protection	IP 67; II		
Housing materials	high-grade stainless steel (316L), PEEK		
Length [mm]	45	46	50
Connection	M12 connector		
EMC	IEC 1000-4-2 / EN 61000-4-2: 4 kV / CD / 8 kV AD IEC 1000-4-3 / EN 61000-4-3: 10 V/m, 80...1000 MHz IEC 1000-4-4 / EN 61000-4-4: 2 kV IEC 1000-4-6 / EN 61000-4-6: 10 V / 0.15...80 MHz EN 55011: class B		

Sockets

Socket type	Description	Order no.
ifm	Locking device M12, 10-off	E 11532
ifm	5m (PVC), M12 straight, without LED	E 10662
ifm	10m (PVC), M12 straight, without LED	E 10663
ifm	5m (PVC), M12 angled, without LED	E 10700
ifm	10m (PVC), M12 angled, without LED	E 10701
ifm	5m (PVC), M12 angled, with LED	E 10702
ifm	10m (PVC), M12 angled, with LED	E 10703

Dimensions



Accessories

Description	Order no.
Angle bracket for type M12, stainless steel	E 10735
Angle bracket for type M18, stainless steel	E 10736
Angle bracket for type M30, stainless steel	E 10737
Mounting clip for type M12, stainless steel	E 11533
Mounting clip for type M18, stainless steel	E 11534
Mounting clip for type M30, stainless steel	E 11535