

## IB18E343

### Inductive sensors • Increased ambient temperature

Sensor inductive, M18x1 83long, flush, Sn: 5, 10-35V DC, -25-180°C, PNP NO, cable tail 5m PTFE, IP67, stainl. steel, ATEX

including Nut



Inductive proximity switches are contact-free sensors. They detect all conductive metals, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or frontally. Inductive proximity switches are used for presence detection (e.g. goods carriers), positioning (e.g. dampers), counting (e.g. nuts /bolts), speed detection (e.g. for cog wheels), on conveyor systems (e.g. hose feedings) or distance measurements (e.g. press-in checking) of metallic objects.

#### Electrical features

Response/decay time	1.2 ms
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	150 mA
Readiness delay	5 ms
Relative hysteresis	15 %
Short-circuit protection	Yes
No-load current	15 mA
Relative repeat accuracy	3 %
Residual ripple	10 %
Switching distance	5 mm
Switching frequency	400 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35 V

**Mechanical features**

Number of cores	3
Conductor cross-section	0.22 mm <sup>2</sup>
Alignment of cable entry	axial
Design	Cylinder, screw-thread
Thread length	60 mm
Thread pitch	1 mm
Cable length	5 m
Cable infeed	axial
Length	83 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (Vectra®)
Housing material	Stainless steel 1.4305
Material of cable sheath	Plastic (PTFE)
Thread dimension	M18
Ambient temperature	-25 - 180 °C

**Other features**

Explosion safety category for dust	ATEX dust-ex-protection, Cat. 3D
Reference medium / object	Standard measuring plate FE360 18x18x1mm

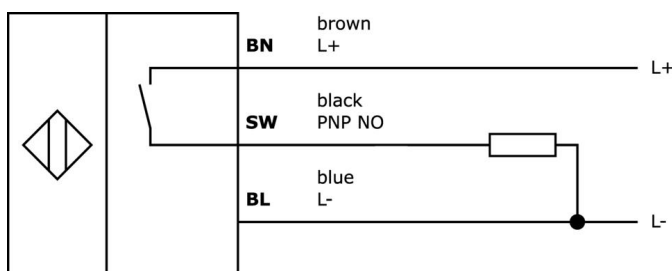
**Classification**

ETIM 8	EC002714 Inductive proximity switch
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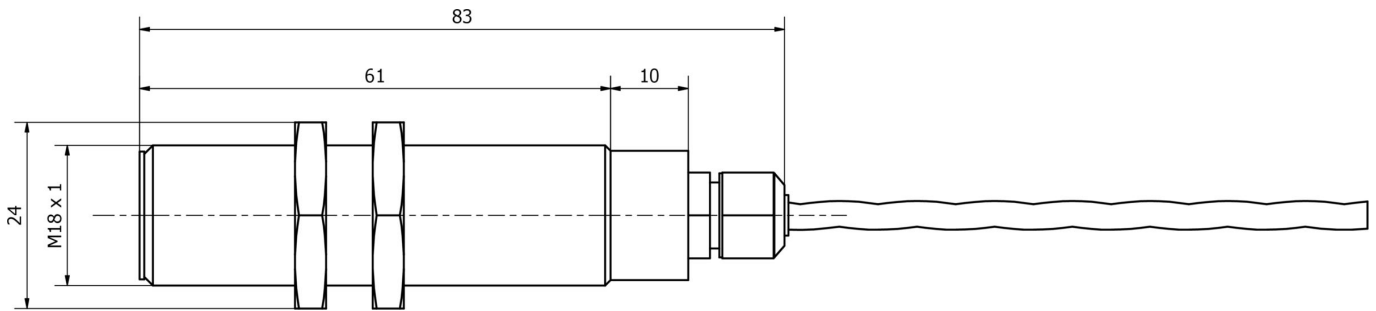
**More**

IPF Product Group	202 inductive sensors (high temperature)
packaging dimensions	149 x 124 x 35 mm
gross weight	195 g
Customs tariff number	85365019
WEEE number	40951076
ATEX-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**AY000129**



Accessories, magnetic, Ø66mm, neodymium-iron-boron, inside thread M6, rubber

**AY000144**



accessories sensor, Adapter plate, 3x30x85mm, Stainless steel 1.4305

**AY000026**



accessories, Hexagon nut, M18x1, Wrench size 24mm, Brass Nickel-plated

**AY000038**



accessories, Hexagon nut, M18x1, Wrench size 24mm, Stainless steel

**AY000162**



Accessories, magnetic, Ø43mm, neodymium-iron-boron, inside thread M5, rubber

**AY000159**



accessories sensor, Mounting pipe, Ø12mm 200long, Aluminum Anodised

**AY000117**



accessories sensor, Fixture kit, Metal, ball joint

**AY000141**



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

You can find further accessories on our homepage



**Installation**

Mounting / installation may only be carried out by a qualified electrician!



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

**Safety warnings**

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.