

## IB98F008

### Inductive sensors • Distance measurement

Inductive sensor, analog, 16 x 4.7 x 8 mm, flush, Sn: 0–2, 12–30 V DC, 0–10 V, 3-pin M8 cable connector, 0.2 m PUR, IP67, nickel-plated zinc diecast



**analog output 0...10V**  
**resolution 5µm**

Inductive proximity switches are contactless sensors. They detect all conductive metals, regardless of whether they are moving or not. The achievable switching distance of the devices depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or from the front. Inductive proximity switches are used for presence detection (e.g., product carriers), positioning (e.g., furnace doors), counting (e.g., nuts/screws), speed detection (e.g., on gears), on conveyor systems (e.g., hose feeders), or distance measurements (e.g., press-fit inspection) of metallic objects.

#### Electrical features

Response/decay time	1 ms
Resolution	0.005 mm
Type of analog output	0 - 10V
Type of electrical connection	Cable connector M8
Load resistance (voltage output)	4 kOhm
No-load current	8 mA
Number of pins	3
Temperature drift	±5 % Performance stability over the entire temperature range
Absolute repeat accuracy	0.02 mm
Operating voltage (DC)	12 - 30 V
Measuring range	0 - 2 mm
Electrical connection	Cable connector M8 3-pin 3-wire 0.2m
Operating voltage	12-30VDC
ardTEEL_RelativeLinearitaetsabweichungDesAnalogausgangs	1 6 %
ardTEEL_Schutzfunktionen	Short circuit protection   Reverse polarity protection

**Mechanical features**

Number of cores	3
Conductor cross-section	0.08 mm <sup>2</sup>
Tightening torque	0.8 Nm
Design	Cuboid
Width	8 mm
Housing coating	nickel-plated
Height	16 mm
Cable length	0.2 m
Cable infeed	axial
Length	4.7 mm
Mechanical mounting condition for sensor	flush
Surface	nickel-plated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PBT)
Housing material	Zinc die-cast
Material of cable sheath	Kunststoff (PUR)
Ambient temperature	10 - 60 °C
dimensions	4.7x8x16mm
Line diameter	3 mm

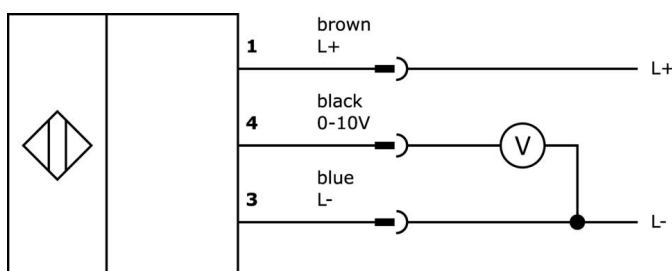
**Classification**

ETIM 8
--------

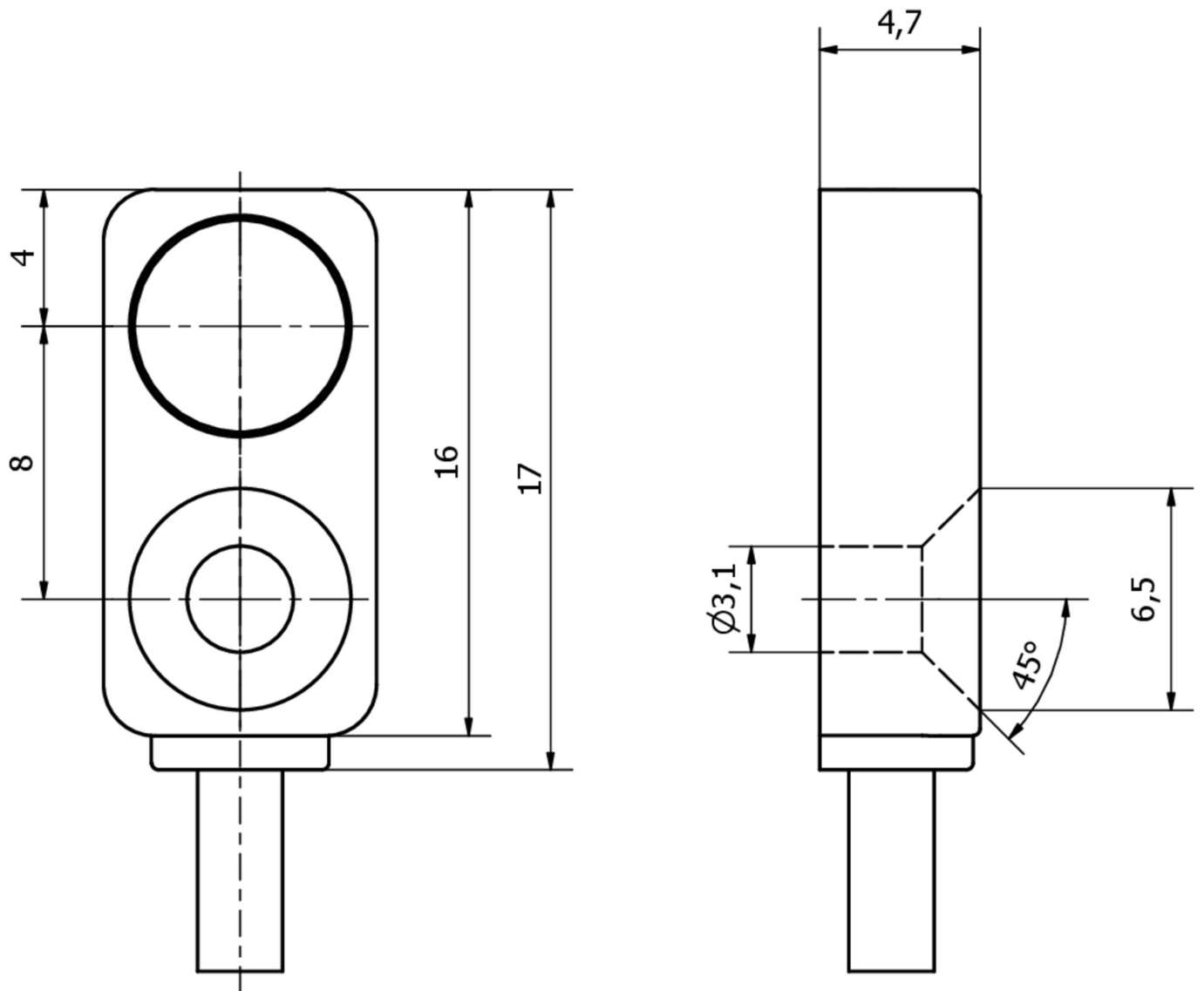
**More**

IPF Product Group	209 inductive sensors (analog)
packaging dimensions	120 x 100 x 9 mm
gross weight	7 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



Dimensional drawing



**Extract accessories program**

**AV000142**



accessories cable socket,  
Mounting clip, 8.5mm, PPO,  
Packaging unit 5, Accessories for  
Cable socket/connector M8

**VK000038**



Adaption, M8 Female (socket)  
3pin Straight, M8 Male  
(connector) 4pin Straight, 24V, -  
25-85°C, IP67, Oil and cooling  
lubricants, Welding area

**VK000036**



Adaption, M8 Female (socket)  
3pin Straight, M12 Male  
(connector) 3pin Straight, 24V, -  
25-85°C, IP67, Oil and cooling  
lubricants, Welding area

**VK003170**



Cable socket, Angular, Suitable for  
self-assembly, Screw connection,  
Ø5mm, 4A, 60V, -40-85°C, M8  
Female (socket) 3pin, IP67,  
Polyamide PA

**VK003174**



Cable socket, Straight, Suitable for  
self-assembly, Screw connection,  
Ø3.5-5mm, 4A, 60V, -40-85°C, M8  
Female (socket) 3pin, IP67, Brass

**VK030F80**



Connection cable, 0.3m, M8  
socket 3-pin angular, M12  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

**VK030F84**



Connection cable, 0.3m, M8  
socket 3-pin straight, M12  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

**VK030F70**



Connection cable, 0.3m, M8  
socket 3-pin angular, M8  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

**VK030F74**



Connection cable, 0.3m, M8  
socket 3-pin straight, M8  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

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.