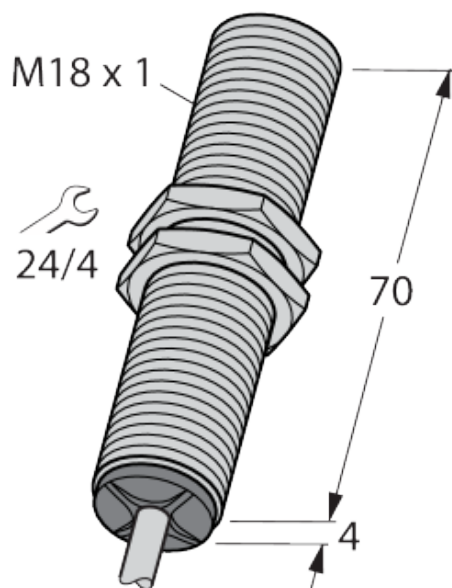


BIM-G18-Y1/S926

Magnetic Field Sensor

Magnetic inductive sensor for rotation speed monitoring



Typ	BIM-G18-Y1/S926
Ident-No.	1070026

Technical data

General data	
Sensor shape fitting to cylindrical housing	magnet-inductive sensor for rotary speed monitoring
Electrical data	
Actuated current consumption	$\geq 2,1 \text{ mA}$
Output function	2-wire, NAMUR
Current consumption non-actuated	$\leq 1,2 \text{ mA}$
Internal capacitance (C_i)/inductance (L_i)	240 nF/2 μH

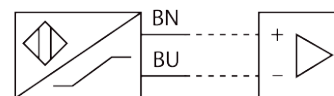
Features

- M18 $\times$ 1 threaded barrel
- Chrome-plated brass
- For temperatures as low as $-40 \text{ }^\circ\text{C}$
- DC 2-wire, nom. 8.2 VDC
- Output acc. to EN 60947-5-6 (NAMUR)
- Cable connection
- ATEX category II 1 G, Ex zone 0
- ATEX category II 2 D, Ex zone 21

Technical data

Switching frequency	0,2 kHz
Voltage	nom. 8,2 VDC
Mechanical data	
Design	Threaded barrel, M18 x 1
Construction type designation	G18
	ø 18 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque of housing nut	25 Nm
Electrical connection	Cable
Thread length	70 mm
Thread size	M18 × 1
Cable	
Cable length	2 m
Cable jacket	Red brown
Core cross-section	2 x 0,5 mm ²
Cable type	SiHSi-O
External Diameter of the Cable	Ø 5,2 mm
Cable Jacket Material	Silicone
Ambient conditions	
Ambient temperature	-40...+70 °C
Pollution degree	3
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Tests/approvals	
Approval acc. to	KEMA 03 ATEX 1122 X, Output no. 5
Device marking	Ex II 1 G Ex ia IIB/IIC T6 Ga / II 2 D Ex ia IIIC T85 °C Db
	max. U _i = 16 V, I _i = 20 mA, P _i = 200 mW
MTTF	751 Years acc. to SN 29500 (Ed. 99) 40 °C
Comments	
Special version	S926 = Signal receiver
Remark to product	Only for Flender GmbH

Wiring Diagram



Functional principle

Magnetic field sensors are actuated by magnetic fields. The BIM-G18-Y1/S926 / BIM-G18-Y1/S926 10M sensors are especially designed for speed detection of gears and work in combination with the GEF 27 magnet. These magnets are screwed into the rotating part of the gear. For magnet speeds of 15 to 75 meters per second.

Assembly instructions

Diameter active area B: 18 mm

Mounting accessories

GEF 27	10954	BSS-18	6901320
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M18 x 1,5
ø 27
27
14
7
32

Magnetic target for BIM-G18-Y1/S926 magnetic inductive sensor for rotation speed monitoring; switching temperature typically 125 °C

5
26
ø 18
32
40,5
30

Mounting bracket for smooth and threaded barrel sensors; material: Polypropylene

MW18	6945004
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19,7
15,9
50,8
19,1
5,5
9,5
25,4
44,5
1,8
7,9
14,3
34,8

Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

Functional accessories

IMX12-FI01-1SF-1R-0/24VDC	7580201
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117
110
120
12,5

Operating instructions

Intended use	This device fulfills the directive 2014/34/EC and is suited for use in explosion hazardous areas according to EN 60079-0:2018 + A11 and EN 60079-11:2012.
	In order to ensure correct operation to the intended purpose it is required to observe the national regulations and directives.
For use in explosion hazardous areas conform to classification	II 1 G and II 2 D (Group II, Category 1 G, electrical equipment for gas-atmospheres and category 2 D, electrical equipment for dust atmospheres)
Marking (see device or technical data sheet)	Ex II 1 G Ex ia IIB/IIC T6 Ga and Ex II 2 D Ex ia IIIC T85°C Db acc. to EN 60079-0, -11
Local admissible ambient temperature	-40...+70 °C
Installation/Commissioning	These devices may only be installed, connected and operated by trained and qualified staff. Qualified staff must have knowledge of protection classes, directives and regulations concerning electrical equipment designed for use in explosion hazardous areas.
	Please verify that the classification and the marking on the device comply with the actual application conditions.
BA intrinsically safe text 1 GBS	This device is only suited for connection to approved Exi circuits according to EN 60079-0 and EN 60079-11. Please observe the maximum admissible electrical values.
BA intrinsically safe text 2 GBS	After connection to other circuits the sensor may no longer be used in Exi installations. When interconnected to (associated) electrical equipment, it is required to perform the "Proof of intrinsic safety" (EN60079-14).
Installation and mounting instructions	Avoid static charging of cables and plastic devices. Please only clean the device with a damp cloth. Do not install the device in a dust flow and avoid build-up of dust deposits on the device.
	If the devices and the cable could be subject to mechanical damage, they must be protected accordingly. They must also be shielded against strong electro-magnetic fields.
	The pin configuration and the electrical specifications can be taken from the device marking or the technical data sheet.
	In order to avoid contamination of the device, please remove possible blanking plugs of the cable glands or connectors only shortly before inserting the cable or opening the cable socket.
Service/maintenance	Repairs are not possible. The approval expires if the device is repaired or modified by a person other than the manufacturer. The most important data from the approval are listed.