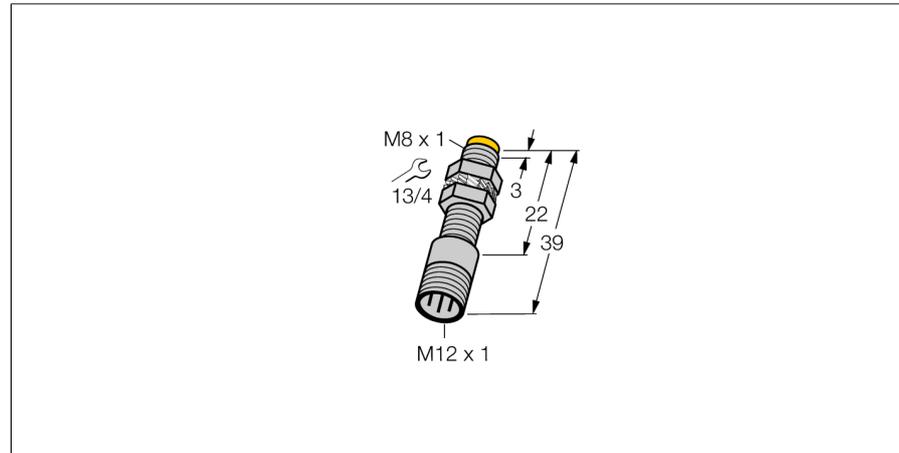
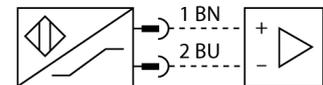


Inductive sensor
NI3-EG08K-Y1-H1341



- ATEX category II 1 G, Ex zone 0
- ATEX category II 1 D, Ex zone 20
- SIL2 as per IEC 61508
- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- DC 2-wire, nom. 8.2 VDC
- Output acc. to DIN EN 60947-5-6 (NAMUR)
- M12 x 1 male connector

Wiring Diagram



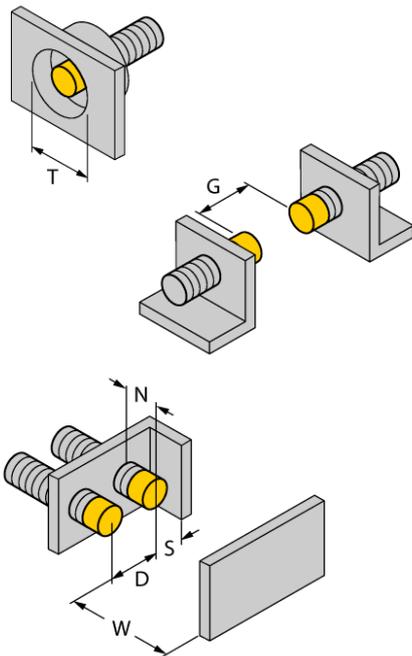
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

| | |
|------------------------------------|---|
| Type designation | NI3-EG08K-Y1-H1341 |
| Ident no. | 1003720 |
| Rated switching distance Sn | 3 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | ≤ (0,81 x Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 1...10 % |
| Ambient temperature | -25...+70 °C |
| Output function | 2-wire, NAMUR |
| Switching frequency | 5 kHz |
| Voltage | Nom. 8.2 VDC |
| Non-actuated current consumption | ≥ 2.1 mA |
| Actuated current consumption | ≤ 1.2 mA |
| Approval acc. to | KEMA 02 ATEX 1090X |
| Design | Threaded barrel, M8 x 1 |
| Dimensions | 39 mm |
| Housing material | Stainless steel, 1.4427 SO |
| Active area material | Plastic, PA12-GF20 |
| Max. tightening torque housing nut | 5 Nm |
| Electrical connection | Connector, M12 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 6198 years acc. to SN 29500 (Ed. 99) 40 °C |

**Inductive sensor
NI3-EG08K-Y1-H1341**

| | |
|------------------------|---------|
| Distance D | 3 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 2 x Sn |
| <hr/> | |
| Diameter active area B | Ø 8 mm |

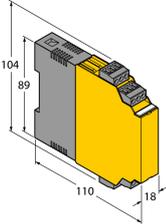
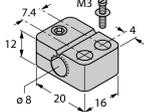
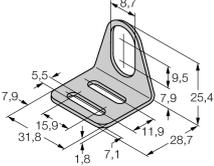
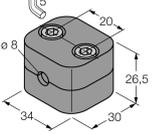


**Inductive sensor
NI3-EG08K-Y1-H1341**

TURCK

Industrial
Automation

Accessories

| Type code | Ident no. | Description | |
|------------|-----------|--|---|
| IM1-22EX-T | 7541232 | Isolating switching amplifier, 2-channel; 2 transistor outputs; input NAMUR signal; selectable ON/OFF mode for wire-break and short-circuit monitoring; switchable between NO / NC mode; removable terminal blocks; width 18 mm; universal voltage supply unit |  |
| BST-08B | 6947210 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 |  |
| QM-08 | 6945100 | Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets. |  |
| MW-08 | 6945008 | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304) |  |
| BSS-08 | 6901322 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene |  |

Inductive sensor NI3-EG08K-Y1-H1341

TURCK

Industrial
Automation

Accessories

| Type code | Ident no. | Description | |
|--------------------------|-----------|--|--|
| MBS80 | 69479 | Mounting bracket for threaded barrel devices; material mounting block: Anodized aluminium | |
| IMC-DI-22EX-PNO/24VDC | 7560003 | 2-channel isolating switching amplifier with M12x1 males, for peripheral use, IP67, zones 2/22, input circuits II(1) Ex ia, PNP transistor output NO | |
| IMX12-DI01-2S-2T-0/24VDC | 7580020 | Isolating switching amplifier, 2-channel; SIL2 acc. to IEC 61508; Ex-proof version; 2 transistor outputs; input Namur signal; ON/OFF switchable monitoring of wire-break and short-circuit; toggle between NO/NC mode; signal doubling; removable screw terminals; 12.5 mm wide; 24 VDC power supply | |

Wiring accessories

| Type code | Ident no. | Description | |
|-----------------|-----------|--|--|
| RKC4.221T-2/TEB | 6628420 | Connection cable, female M12, straight, 2-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |

Inductive sensor

NI3-EG08K-Y1-H1341

TURCK

Industrial
Automation

Operating manual

Intended use

This device fulfills the directive 2014/34/EC and is suited for use in explosion hazardous areas according to EN 60079-0:2012 + A11 and EN 60079-11:2012.

Further it is suited for use in safety-related systems, including SIL2 as per IEC 61508.

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 1 D (Group II, Category 1 G, electrical equipment for gaseous atmospheres and category 1 D, electrical equipment for dust atmospheres).

Marking (see device or technical data sheet)

⊕ II 1 G and Ex ia IIC T6 Ga and ⊕ II 1 D Ex ia IIIC T95 °C Da acc. to EN 60079-0, -11

Local admissible ambient temperature

-25...+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.

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.

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).

Attention! When used in safety systems, all content of the security manual must be observed.

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.