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E59-M12A105D01-D1 - Proximity switch, inductive, 1N/O, Sn=4mm, 4L, 6-48VDC, NPN, PNP, M12, metal



136207 E59-M12A105D01-D1

Overview Specifications Resources



136207 E59-M12A105D01-D1

Proximity switch, inductive, 1N/O, Sn=4mm, 4L, 6-48VDC, NPN, PNP, M12, metal Alternate Catalog No. E59-M12A105D01-D1 EL-Nurmer (Norway) 4315381

Proximity switch, Inductive Sensors, Product range: iProx Series, Connection: 3-wire, Design (outer dimensions): M12 x 1 mm, Rated operational voltage: Ue= 6 - 48 V DC, Rated switching distance: Sn=4 mm, Type of mounting: Flush, Switching type: NFN, PNP, Plug-in connection M12 x 1, Contacts N/O = Normally open: 1 N/O, Material: Stainless steel, Degree of Protection: IP67, IP69K, Standards: IEC/EN 60947-5-2

- Delivery program
- Technical data

Design verification as per IEC/EN 61439

- Technical data ETIM 7.0
- Approvals
- Dimensions

Delivery program

Basic function

Inductive Sensors

Product range

iProx Series

Connection

3-wire

Design (outer dimensions)

M12 x 1 mm

Rated operational voltage [Ue]

6 - 48 V DC

Rated switching distance [S_n] 4 mm

Type of mounting

Flush

Switching type

NPN

PNP

For connection of:

Plug-in connection M12 x 1

Contacts

N/O = Normally open

1 NO

Material

Stainless steel

Degree of Protection

IP67, IP69

Technical data

General

Standards

IEC/EN 60947-5-2

Ambient temperature

-40 - +70

Mechanical shock resistance

30

Shock duration 11 ms g

Degree of Protection

IP67, IP69

Characteristics

Rated switching distance Rated switching distance [S_n]

4 mm

Repetition accuracy of S_n

1%

Temperature drift of S_n

10 %

Switching hysteresis of S_n

15 %

Rated operational voltage [Ue]

6 - 48 V DC

Maximum load current [le]

 $< 300 \, \text{mA}$

Operating current in the switched state at 24 V DC [l_b]

15 m∆

Voltage drop at $I_e [U_d]$

2.5 V

Switching Frequency

580 Hz

Mn. load current [le]

 $1 \, \text{mA}$

Residual current through the load in the blocked state at 230 V AC and 24 V DC [I_r]

0.15 mA

Switching state display

Red LED

Operating voltage display

Green LED

Protective functions

Short-circuit protective device

Protection against polarity reversal

Protection against wire breakage

Connection

3-wire

Contacts N/O = Normally open

1 NO

StyleDesign (outer dimensions)

 $M12 \times 1 \text{ mm}$

For connection of:

Plug-in connection M12 x 1

Material

Stainless steel

Design verification as per IEC/EN 61439

Operating ambient temperature min.

-40 °C

Operating ambient temperature max.

+70 °C

Technical data ETIM 7.0

Sensors (EG000026) / Inductive proximity switch (EC002714)

Bectric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss10.0.1-27-27-01-01 [AGZ376015])

Width sensor

 $0 \, \text{mm}$

Height of sensor

 $0 \, \text{mm}$

Length of sensor

69 mm

Diameter sensor

12 mm

Mechanical mounting condition for sensor

Concise

Switching distance

4 mm

Suitable for safety functions

Nh

Type of switch function Normally open contact

Type of switching output

PNP/NPN

Type of electric connection

Connector M12

Number of semiconductor outputs with signalling function

1

Number of contact energized outputs with signalling function

Λ

Number of protected semiconductor outputs

U

Number of protected contact energized outputs

0

Type of actuation

Metallic Target

Type of interface

None

Type of interface for safety communication

None

Construction type housing

Cylinder, screw-thread

Coating housing

Other

Cascadable

No

Category according to EN 954-1

D

SIL according to IEC 61508

None

Performance level acc. EN ISO 13849-1

None

Max. output current at protected output

0 mA

Supply voltage

6 - 48 V

Rated control supply voltage Us at AC 50HZ

0 - 0 V

Rated control supply voltage Us at AC 60HZ

0 - 0 V

Rated control supply voltage Us at DC

6 - 48 V

Voltage type

DC

Switching frequency

580 Hz

With monitoring function downstreamswitching devices

No

Material housing

Metal

Compression-resistant

No

Explosion safety category for gas

None

Explosion safety category for dust

None

Interference resistance to magnetic fields

Approvals

Product Standards

UL 508; CSA-C22.2 No. 14; IEO60947-5-2; CE marking

UL File No.

E166051 UL Category Control No. NRKH, NRKH7 CSA File No. UL report applies to both Canada and US CSA Class No.

North America Certification UL listed, certified by UL for use in Canada Max. Voltage Rating 48 V DC Degree of Protection IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13

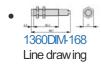
Dimensions



Product photo



Dimensions single product



3D drawing



Instruction Leaflet

• Inductive sensors: iProx Series (IL05301004Z) Asset (PDF, multilingual)

Declaration of Conformity

EU

• Inductive Proximity Sensors Tubular (DA-DC-00003286) Asset (PDF)

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