



## Indukcyjne czujniki zbliżeniowe Cylindrical threaded housing, IM12

IM12-10NNS-NC1



Nazwa modelu > **IM12-10NNS-NC1**

Numer części > **6027576**



#### At a glance

- Stainless steel housing (316L/1.4404)
- Extremely watertight (IP 68/IP 69K)
- Triple sensing distance
- High resistance to mechanical stress
- Watertight housing suitable for use in hygienic and wash down areas
- Resistant to aggressive cleaning agents
- Visual adjustment indicator via output LED

#### Your benefits

- Less machine downtime due to rugged sensor design
- Cost reduction due to long service life even under the most extreme ambient conditions
- Quick and easy installation due to adjustment indicator via LEDs
- Large operating reserve due to triple operating distance
- High resistance to shock and impact due to stainless steel sensing face
- No restrictions on cleaning agents or processes, ensuring reliable operation



#### Cechy

|                             |                               |
|-----------------------------|-------------------------------|
| Budowa:                     | Cylindryczna                  |
| Wymiar gwintu:              | M12 x 1                       |
| Sensing range Sn:           | 10 mm                         |
| Assured sensing range Sa:   | 8,1 mm                        |
| Instalacja w metalu:        | Niezabudowany                 |
| Częstotliwość przełączania: | 400 Hz                        |
| Wyjście przełączające:      | NPN                           |
| Output function:            | NO                            |
| Electrical wiring:          | DC 3-wire                     |
| Rodzaj zabezpieczenia:      | IP 68<br>IP 69K <sup>1)</sup> |
| Sposób przyłączenia:        | Connector M12, 4-pin          |

<sup>1)</sup> According to EN 60529

#### Mechanika/elektronika

|                      |                      |
|----------------------|----------------------|
| Napięcie zasilania:  | 10 V DC ... 30 V DC  |
| Tętnienia resztkowe: | ≤ 20 % <sup>1)</sup> |

|                                           |                                                     |
|-------------------------------------------|-----------------------------------------------------|
| Spadek napięcia:                          | $\leq 2 \text{ V}$ <sup>2)</sup>                    |
| Current consumption:                      | $\leq 10 \text{ mA}$ <sup>3)</sup>                  |
| Czas osiągnięcia dostępności:             | $\leq 40 \text{ ms}$                                |
| Histeresa:                                | 1 % ... 15 %                                        |
| Odtwarzalność:::                          | $\leq 5 \%$ <sup>4)</sup> <sup>5)</sup>             |
| Przesunięcie cieplne (Sr):                | $\leq 10 \%$                                        |
| Kompatybilność elektromagnetyczna::       | Zgodna z EN 60947-5-2                               |
| Output current Ia:                        | $\leq 200 \text{ mA}$                               |
| Zabezpieczenie przed zwarciami:           | ✓                                                   |
| Zabezpieczenie przed zmianą biegunowości: | ✓                                                   |
| Power-up pulse protection:                | ✓                                                   |
| Shock/vibration:                          | 30 g, 11 ms/10 ... 55 Hz, 1 mm                      |
| Ambient operating temperature:            | -25 °C ... +85 °C                                   |
| Tworzywo, obudowa:                        | Stainless steel, Stainless steel V4A (1.4435, 316L) |
| Tworzywo, obudowa:                        | Metal                                               |
| Długość obudowy:                          | 60 mm                                               |
| Thread length:                            | 36 mm                                               |
| Moment dokręcania:                        | $\leq 20 \text{ Nm}$                                |

1) Of  $V_S$  2) At  $I_a$  max 3) Bez obciążenia 4) Of Sr 5)  $U_B = 20 \text{ V DC} \dots 30 \text{ V DC}$ ,  $T_A = 23 \text{ °C} \pm 5 \text{ °C}$

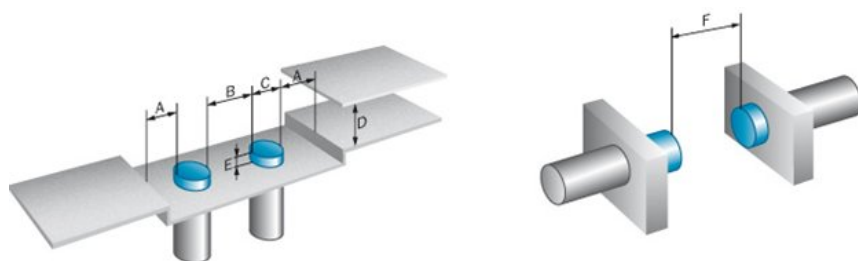
### Współczynniki redukcyjne

|                              |                                                |
|------------------------------|------------------------------------------------|
| Uwaga:                       | The values are reference values which may vary |
| Carbon steel St37 (Fe):      | Ca. 1                                          |
| Copper (Cu):                 | Ca. 0,8                                        |
| Aluminum (Al):               | Ca. 1                                          |
| Brass (Br):                  | Ca. 1,3                                        |
| Stainless steel (V4A, 316L): | Ca. 0,5                                        |

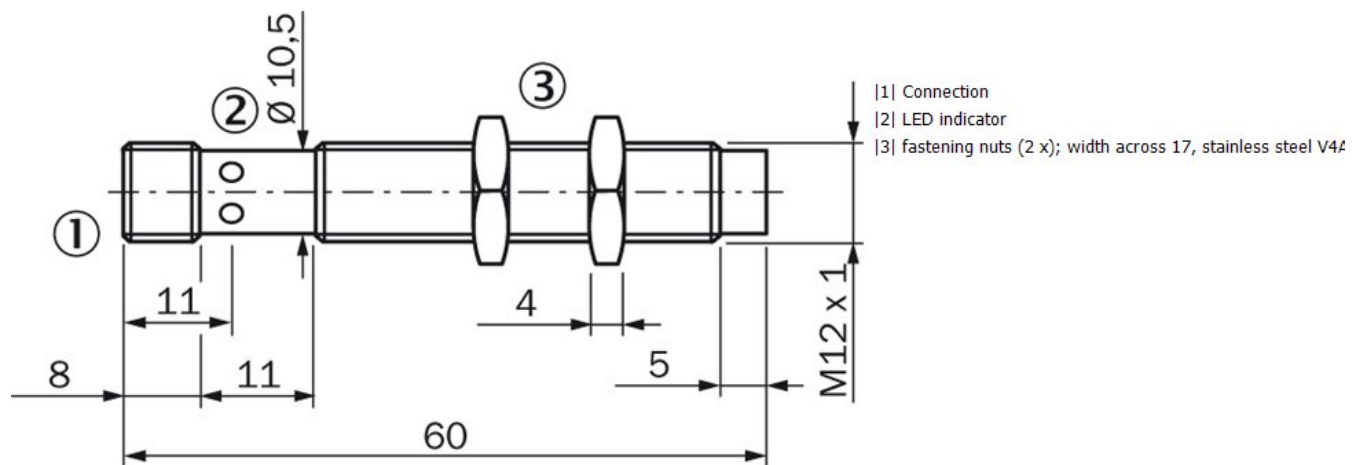
### Instrukcje określające

|        |                                                              |
|--------|--------------------------------------------------------------|
| A:     | 24 mm                                                        |
| B:     | 108 mm                                                       |
| C:     | 12 mm                                                        |
| D:     | 30 mm                                                        |
| E:     | Aluminium: 13 mm, Stainless steel: 21 mm, MgF2, Steel: 22 mm |
| F:     | 100 mm                                                       |
| Uwaga: | Associated graphic see "Installation"                        |

## Installation note



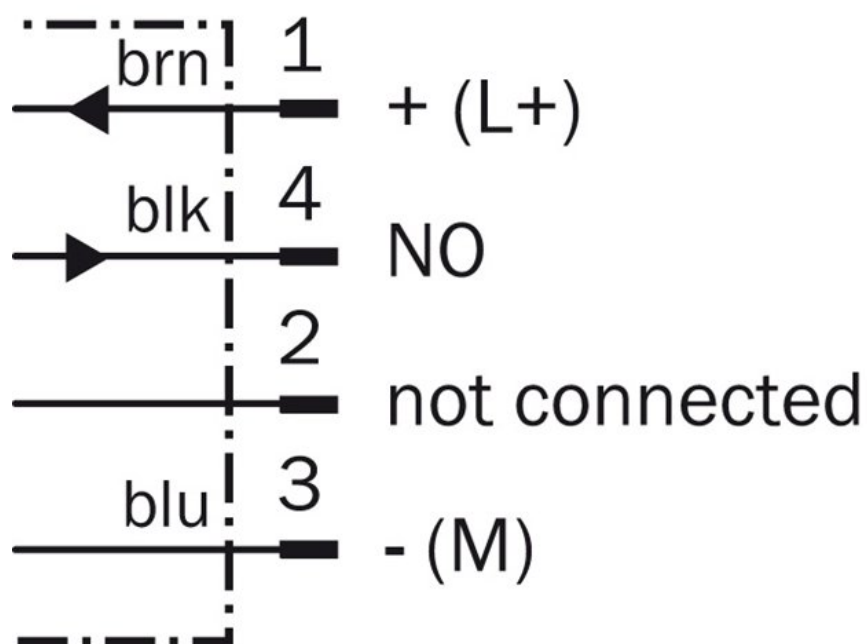
## Rysunek techniczny



Alle Maße in mm

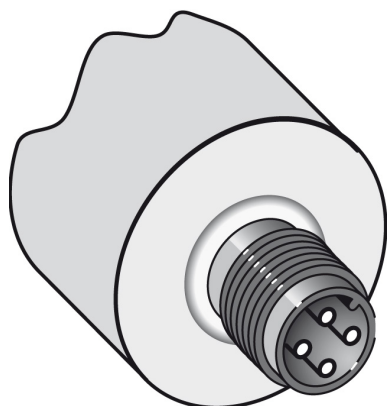
## Connection diagram

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## Connection type

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