



Inductive proximity sensors
Cylindrical threaded housing, IMF12

IMF12-08NPSVC0S



Model Name > IMF12-08NPSVC0S
Part No. > 6035464



At a glance

- Size M12
- Extremely watertight (IP 68/IP 69K)
- Extended temperature range (-40 to +80 °C). Tolerates short-term temperature increases up to 100 °C
- Stainless steel housing (316L/1.4404)
- Front cap made of PPS (FDA-certified material)
- Resistant to industrial cleaning agents, ECOLAB and JohnsonDiversey certified

Your benefits

- Reduced machine downtime
- Hygienic process due to FDA approved material and hygienic design
- Reduced maintenance costs due to sensor's resistance to aggressive cleaning cycles
- No restrictions on cleaning agents or processes, ensuring reliable operation



Features

| | |
|---------------------------|------------------------------------|
| Design: | Cylindrical |
| Thread size: | M12 x 1 |
| Sensing range Sn: | 8 mm |
| Assured sensing range Sa: | 6.48 mm |
| Installation type: | Non-flush |
| Switching frequency: | 2,000 Hz |
| Output type: | PNP |
| Output function: | NO |
| Electrical wiring: | DC 3-wire |
| Enclosure rating:: | IP 68, IP 69K ^{1) 2)} |
| Electrical connection: | Connector M12, 4-pin ³⁾ |

¹⁾ According to EN 60529 ²⁾ According to EN40050 ³⁾ With gold plated contact pins

Mechanics/electronics

| | |
|---------------------------------|-----------------------|
| Supply voltage: | 10 V ... 30 V |
| Residual ripple: | ≤ 10 % |
| Voltage drop: | ≤ 2 V |
| Power consumption: | ≤ 15 mA ¹⁾ |
| Time delay before availability: | Ca. 50 ms |

| | |
|---------------------------------|---|
| Hysteresis: | 1 % ... 20 % |
| Repeatability: | 5 % ^{2) 3)} |
| Temperature drift (of Sr): | ± 10 % |
| EMC: | According to EN 60947-5-2 |
| Output current I _a : | ≤ 200 mA |
| Short-circuit protection: | ✓ |
| Reverse polarity protection: | ✓ |
| Power-up pulse protection: | ✓ |
| Shock and vibration resistance: | 30 g, 11 ms/10 Hz ... 55 Hz, 1 mm |
| Ambient temperature operation: | -40 °C ... 80 °C ⁴⁾ |
| Housing material: | Stainless steel, Stainless steel V4A (1.4404, 316L) |
| Housing cap material: | PPS |
| Housing length: | 65 mm |
| Thread length: | 33 mm |
| Tightening torque, max.: | 20 Nm |

1) Without load 2) U_b and T_a constant 3) Of Sr 4) +100 °C for 15 minutes

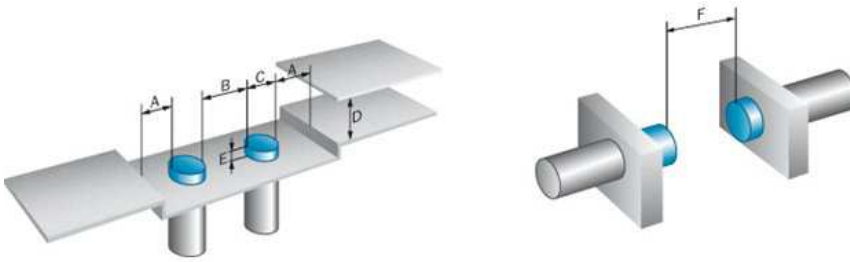
Reduction factors

| | |
|-----------------------------|--|
| Note: | The values are reference values which may vary |
| Stainless steel (V2A, 304): | Ca. 0.75 |
| Copper (Cu): | Ca. 0.33 |
| Aluminum (Al): | Ca. 0.4 |
| Brass (Br): | Ca. 0.45 |

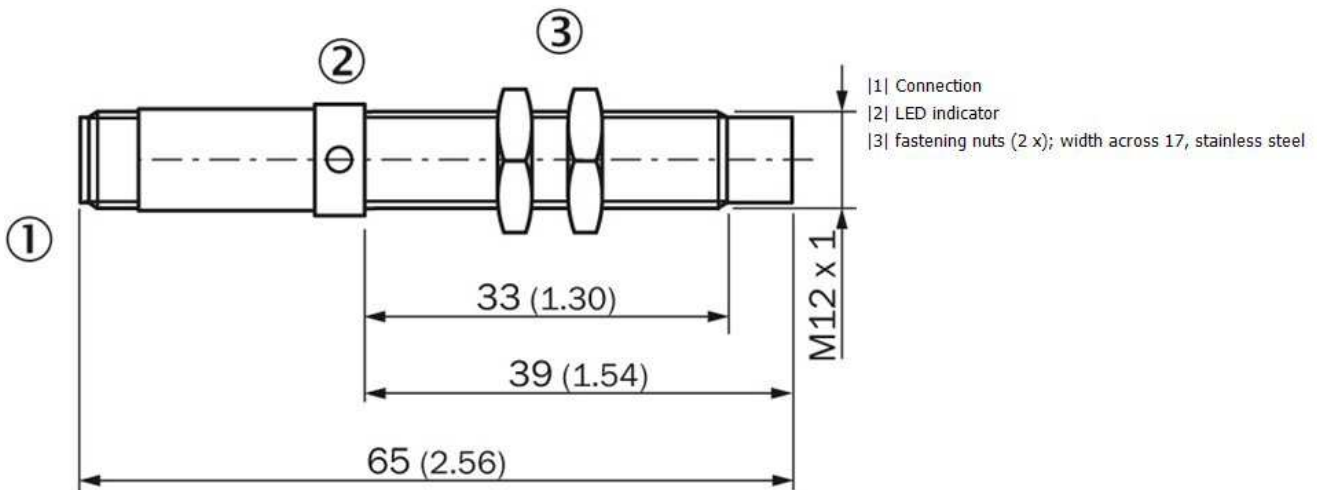
Installation note

| | |
|---------|---------------------------------------|
| A: | 12 mm |
| B: | 24 mm |
| C: | 12 mm |
| D: | 24 mm |
| E: | 12 mm |
| F: | 64 mm |
| Remark: | Associated graphic see "Installation" |

Installation note

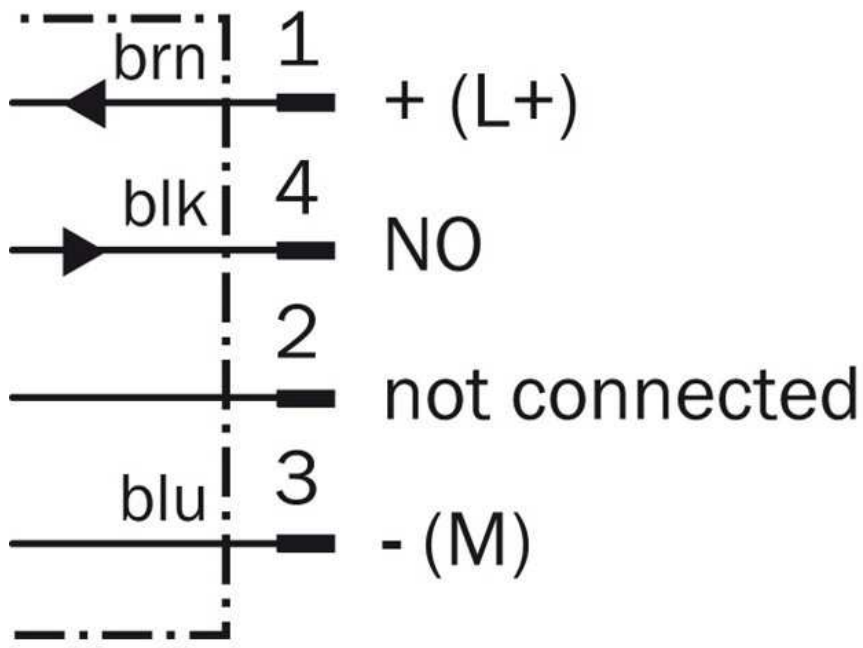


Dimensional drawing

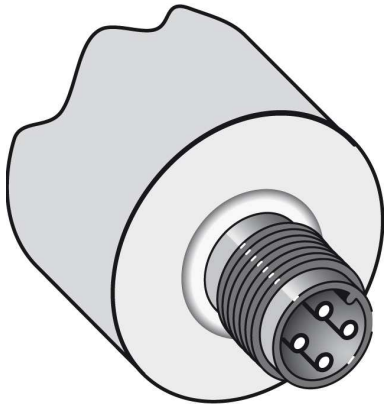


All dimensions in mm (inch)

Connection diagram



Connection type



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