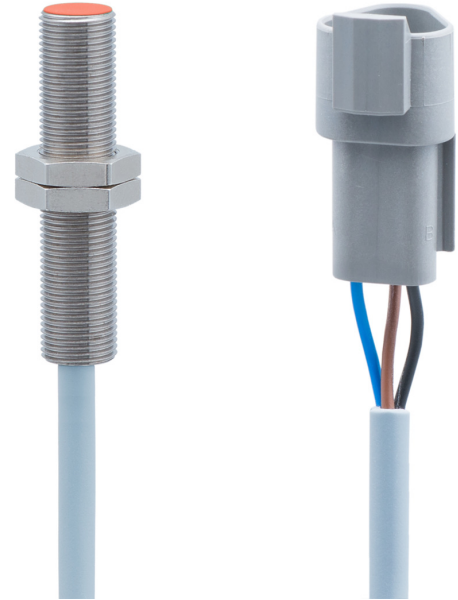


Overview

- 4 mm
- NPN make function (NO)
- flylead connector DT04-3P 3 pin
- -40 ... 85 °C
- Protection class IP68 / IP69K



Picture similar



Technical data

General data

| | |
|-----------------------------|--|
| Mounting type | Flush |
| Special type | Vehicle |
| Nominal sensing distance Sn | 4 mm |
| Hysteresis | 3 ... 10 % of Sr |
| Output indicator | LED red |
| Approvals/certificates | EN 60947-5-2:2007, Sec 8.6 EN 13309:2010 ^{1) 3)} EN ISO 14982:2009 ^{1) 2)} ISO 13766:2006 ¹⁾ |

Electrical data

| | |
|--------------------------------------|--|
| Switching frequency | 2 kHz |
| Voltage supply range +Vs | 7 ... 48 VDC |
| Current consumption max. (no load) | 10 mA |
| Output circuit | NPN make function (NO) |
| Voltage drop Vd | < 2 VDC |
| Output current | < 200 mA |
| Short circuit protection | Yes |
| Reverse polarity protection | Yes |
| Off-Highway Electromagnetic immunity | ISO 11452-4: 200mA ISO 11452-2: 100V/m Based on UN / ECE R10 Rev 5 ch. 6.8 (no ECE type approval available) |

Electrical data

| | |
|------------------------|---|
| Off-Highway Emission | EN 55011 Based on UN / ECE R10 Rev 5 ch. 6.5, 6.6 (no ECE type approval available) |
| Conducted interference | ISO 7637-2, ISO 16750-2, details see section "Test pulses" |

Mechanical data

| | |
|-------------------------|---|
| Type | Cylindrical threaded |
| Material (sensing face) | PBT |
| Housing material | Brass nickel plated |
| Dimension | 12 mm |
| Housing length | 55 mm |
| Connection types | Flylead connector DT04-3P 3 pin, L=350 mm |
| Tightening torque max. | 15 Nm (A: 10,5 Nm, B: 10,5 Nm) |

Ambient conditions

| | |
|-----------------------|---|
| Operating temperature | -40 ... +85 °C |
| Protection class | IP 68 (sensing face/sensor) IP 68 (1,5 m, 24 h) IP 69K (sensing face) |

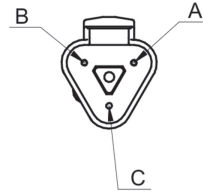
Remarks

- 1) only for use in machines with centralized load dump suppression (58 V DC)
- 2) shall not be used in the direct control and modification of the state of function of the machine
- 3) not for operations during engine start phase in 12 VDC / 24 VDC vehicle power

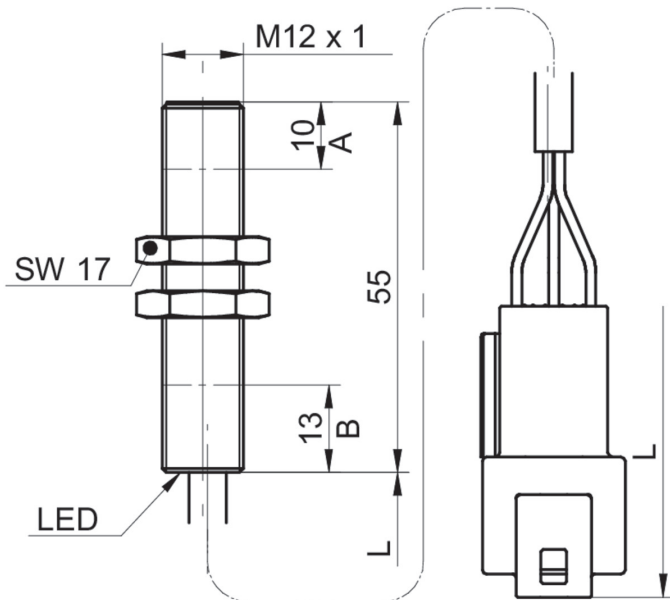
Test pulses

| | | | | | | | |
|--------------------------------------|----|-----|----|-----|-----|-----|----|
| Test pulse (ISO 7637-2, ISO 16750-2) | 1 | 2a | 2b | 3a | 3b | 4 | 5b |
| Severity level | IV | III | IV | III | III | III | |
| Functional status (12V/24V System) | C | A | C | A | A | C/B | A |

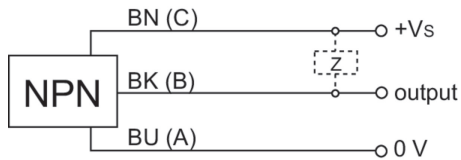
Pin assignment



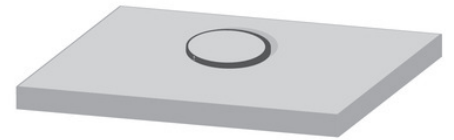
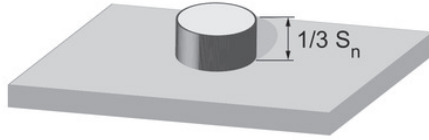
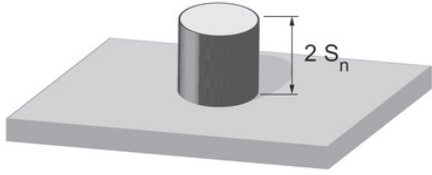
Dimension drawing



Connection diagram



Correction factors for different mounting situation (approx.)



| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel | 100 % |
| Stainless steel | 100 % |
| Aluminum | 100 % |

| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel | 105% |
| Stainless steel | 100 % |
| Aluminum | 95 % |

| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel | 115 % |
| Stainless steel | 95 % |
| Aluminum | 90 % |

Mounting instructions

