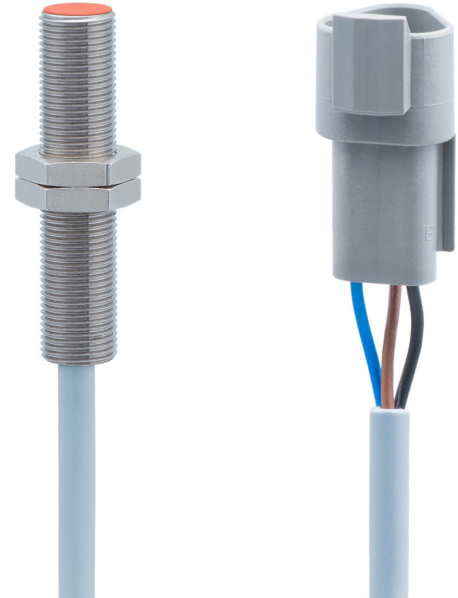


Overview

- 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 S _n	4 mm
Hysteresis	3 ... 10 % of S _r
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 V _d	< 2 VDC
Output current	< 200 mA
Short circuit protection	Yes
Reverse polarity protection	Yes
Off-Highway Electromag- netic 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)

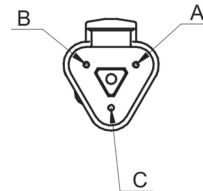
Remarks

- 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

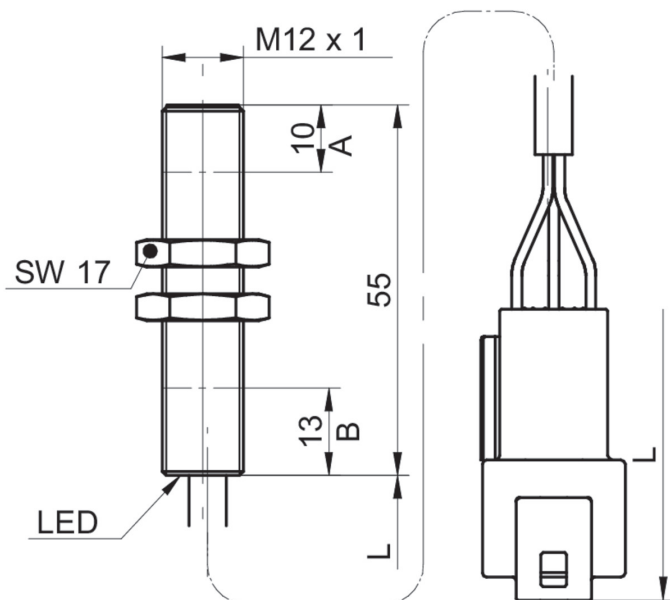
Test pulses

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

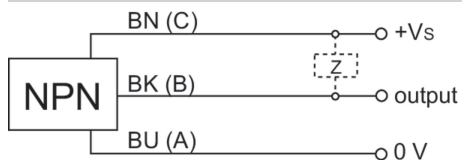
Pin assignment



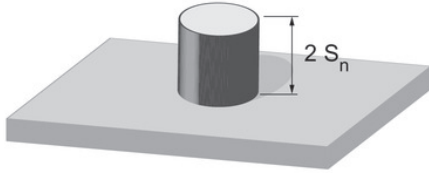
Dimension drawing



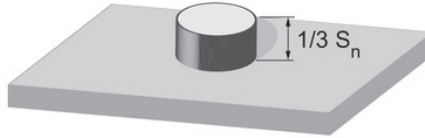
Connection diagram



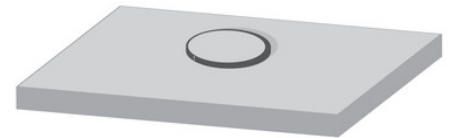
Correction factors for different mounting situation (approx.)



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

