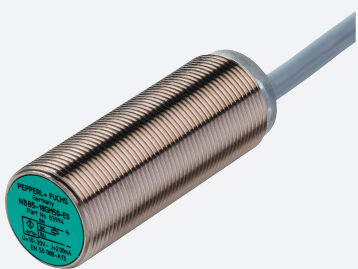


Inductive sensor

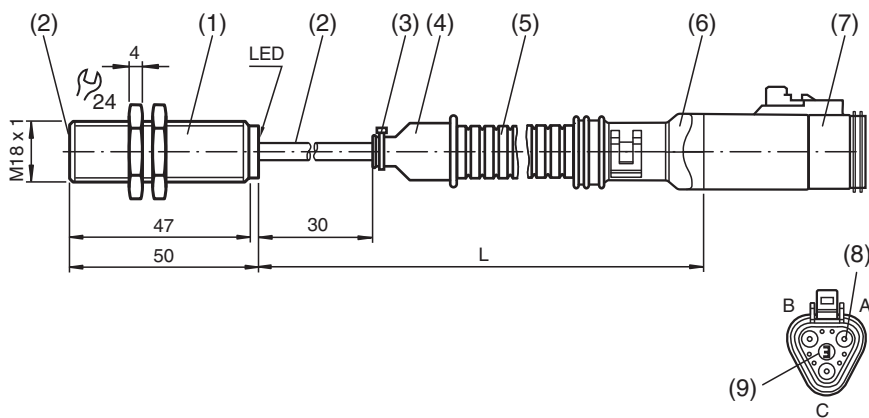
NBB8-18GM50-E2-M-Y257916



- 8 mm flush
- Increased operating distance
- Extended temperature range -40 ... +85 °C
- e1-Type approval
- Increased noise immunity 100 V/m



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 400 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

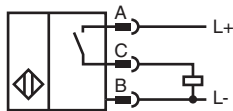
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Voltage drop	U _d	≤ 2.5 V
Operating current	I _L	0 ... 200 mA
Off-state current	I _r	0 ... 0.5 mA typ. 0.1 μA at 25 °C
No-load supply current	I ₀	≤ 10 mA
Time delay before availability	t _v	≤ 20 ms
Switching state indicator	all direction LED, yellow	
Functional safety related parameters		
MTTF _d		1630 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V
e1 Type approval		2006/28/EG
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Cable connector Deutsch with PUR cable L = 635 mm ± 10 mm
Connection assembly		(1) sensor (2) Identification Number (3) cable clip (4) Schlemmer rubber bushing, 8500495 (5) Schlemmer corrugated tube 120010 (6) Deutsch backshell 1011-259-0305 (7) Deutsch housing DT06-3S-C015 (8) Deutsch contact 1062-16-0622 (9) Deutsch wedge W3S
Core cross-section		0.75 mm ²
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP68 / IP69K

Connection



Mounting

Emitted interference and interference immunity in accordance with motor vehicle directive 2006/28/EG (e1 Type approval)
Interference immunity in accordance with DIN ISO 11452-2: 100 V/m
Frequency band 20 MHz up to 2 GHz

Mains-borne interference in accordance with ISO 7637-2: Pulse

	1	2a	2b	3 a	3b	4	5
Severity level	III	III	III	III	III	III	IV
Failure criterion	C	A	C	A	A	A	C

EN 61000-4-2:	CD: 8 kV / AD: 15 kV
Severity level	IV
EN 61000-4-3:	30 V/m (80...2500 MHz)
Severity level	IV
EN 61000-4-4:	2 kV
Severity level	III
EN 61000-4-6:	10 V (0.01...80 MHz)
Severity level	III
EN 55011:	Class A

Accessories

	BF 18	Mounting flange, 18 mm
	EXG-18	Quick mounting bracket with dead stop

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 257916_eng.pdf