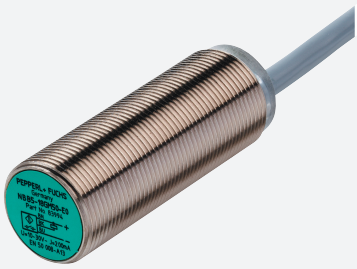


# Inductive sensor

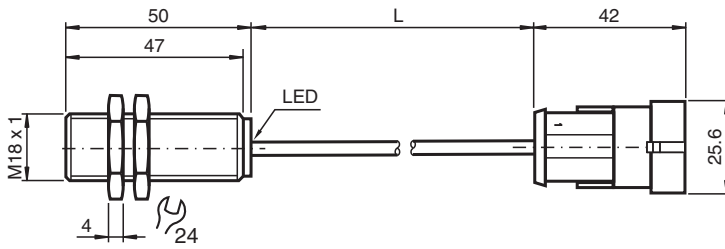
## NBB8-18GM50-E2-M-Y266288



- Basic series
- 8 mm flush
- Increased operating distance
- Extended temperature range  
-40 ... +85 °C
- E1-Type approval
- Raised EMC resistance 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 $r_{AI}$		0.45
Reduction factor $r_{Cu}$		0.4
Reduction factor $r_{304}$		0.7
Output type		3-wire
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

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

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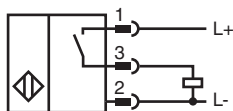
Singapore: +65 6779 9091  
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PEPPERL+FUCHS

## Technical Data

Voltage drop	$U_d$	$\leq 2.5$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 10$ mA
Time delay before availability	$t_v$	$\leq 60$ ms
Switching state indicator		all direction LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2070 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
E1 Type approval		10R-04
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Cable connector PUR , L = 0.6 m
Connection assembly		AMP housing 282105-1 AMP connector type 282109-1 AMP sealing 281934-2
Core cross section		0.75 mm <sup>2</sup>
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 3a 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 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 (0.15...80 MHz)  
 Severity level III  
 EN 55011: Class A

## Accessories

	<b>BF 18</b>	Mounting flange, 18 mm
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