

# Inductive sensor

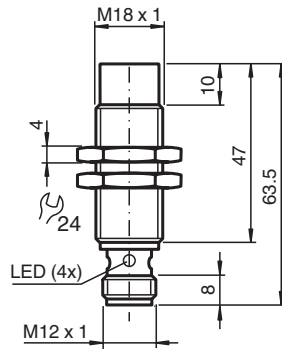
## NEN20-18GM50-E2-V1



- Increased operating distance
- 20 mm non-flush



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	20 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 16.2 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 60 mm x 60 mm x 1 mm
Reduction factor $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.45
Output type		3-wire
Nominal ratings		
Installation conditions		
A		in steel 1.0037 (St37): 20 mm

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

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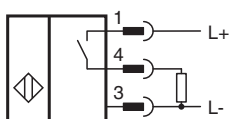
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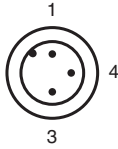
 PEPPERL+FUCHS

## Technical Data

B		30 mm
C		60 mm
F		78 mm
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	f	0 ... 200 Hz
Hysteresis	H	0.1 ... 2 mm
Reverse polarity protection		yes
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	$U_d$	$\leq 2$ V
Repeat accuracy	R	1 mm
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	$\leq 10$ $\mu$ A
No-load supply current	$I_0$	$\leq 11$ mA
Time delay before availability	$t_v$	$\leq 50$ ms
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1940 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>		
EAC conformity		TR CU 020/2011
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug M12 x 1 , 3-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Mass		30 g
Tightening torque, fastening screws		max. 20 Nm

## Connection

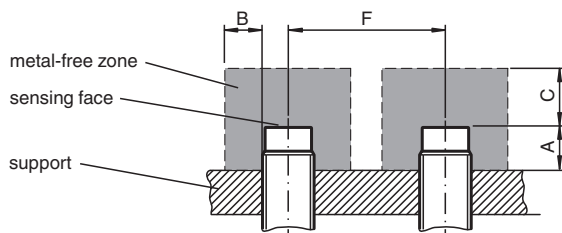




Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

## Installation



## Accessories

	<b>BF 18</b>	Mounting flange, 18 mm
	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey