

# Inductive sensor

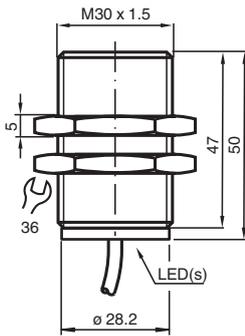
## NBB10-30GM50-WS



- 10 mm flush
- 2-wire AC



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	10 mm
Installation		flush
Output polarity		AC
Assured operating distance	$s_a$	0 ... 8.1 mm
Actual operating distance	$s_r$	9 ... 11 mm
Reduction factor $r_{Al}$		0.33
Reduction factor $r_{Cu}$		0.28
Reduction factor $r_{304}$		0.81
Output type		2-wire
Nominal ratings		
Operating voltage	$U_B$	20 ... 253 V
Switching frequency	$f$	0 ... 20 Hz
Hysteresis	$H$	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant

Release date: 2025-11-20 Date of issue: 2025-11-20 Filename: 801648\_eng.pdf

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

**PF** PEPPERL+FUCHS

## Technical Data

Voltage drop	$U_d$	< 5 V ( $I_L > 50$ mA); < 8 V ( $I_L < 50$ mA)
Momentary current (20 ms, 0.1 Hz)		0 ... 1600 mA
Operating current	$I_L$	5 ... 200 mA
Off-state current	$I_r$	0 ... 1.7 mA
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed Load Type: General Purpose Enclosure Type Rating: Type 1
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
<b>Cable</b>		
Wire end ferrules		yes
Cable diameter		6.4 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.75 mm <sup>2</sup>
Length	L	2 m
<b>Dimensions</b>		
Length		50 mm
Diameter		30 mm
Note		1) In the temperature range below 0 °C, permissible operating voltage $U_b$ 80...253 V Safety fuse ≤ 0.3 A (quick-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

## Connection Assignment

