



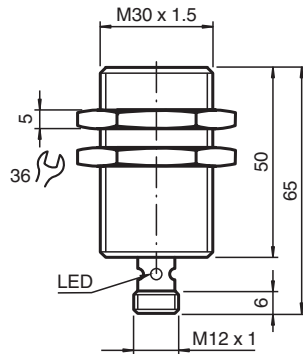
# Inductive sensor

## NBB10-30GM50-E2-C-V1

- 10 mm flush
- Weld Immune
- Slag repellent coatings



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 8.1 mm
Reduction factor $r_{Al}$		0.3
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.6
Output type		3-wire

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 10 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ 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	$I_0$	$\leq 17$ mA

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

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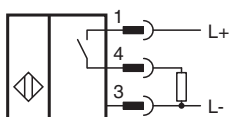
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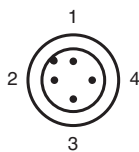
## Technical Data

Constant magnetic field	B	100 mT
Alternating magnetic field	B	100 mT
Switching state indicator	Multihole-LED, yellow	
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>	1835 a	
Mission Time (T <sub>M</sub> )	20 a	
Diagnostic Coverage (DC)	0 %	
<b>Indicators/operating means</b>		
Operation indicator	4-way dual LED Green: power Yellow: output	
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012	
<b>Approvals and certificates</b>		
UL approval	cULus Listed, General Purpose	
CCC approval	CCC approval / marking not required for products rated ≤36 V	
<b>Ambient conditions</b>		
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	
<b>Mechanical specifications</b>		
Connection type	Connector plug M12 x 1 , 4-pin	
Core cross section	-	
Housing material	Brass, PTFE coated	
Sensing face	PPS	
Degree of protection	IP67	
Dimensions		
Length	50 mm	
Diameter	30 mm	

## Connection



## Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-2

1		BN	(brown)
2		WH	(white)
3		BU	(blue)
4		BK	(black)