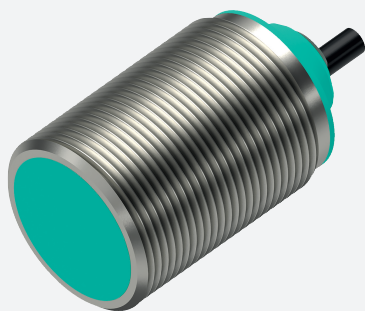




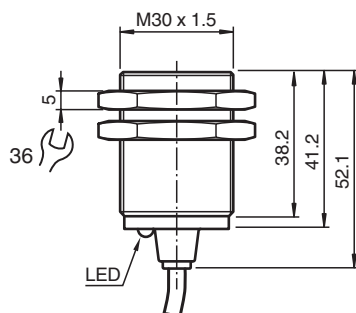
Inductive sensor

NBB15-30GM40-EU-M1

- 15 mm flush
- 0.5 / 4.5 VDC switching output for mobile equipment controls
- Raised EMC resistance 30 V/m
- Extended temperature range
-40 ... +85 °C
- Highly shock and vibration resistant
- With increased sealing, protection class
IP68 / IP69K



Dimensions



Technical Data

General specifications

Output type		Digital voltage output
Rated operating distance	S_n	15 mm
Installation		flush
Output polarity		DC
Assured operating distance	S_a	0 ... 12.15 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 45 mm x 45 mm x 1 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.5
Output type		3-wire

Nominal ratings

Operating voltage	U_B	7 ... 30 V DC
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	2 ... 15 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Temperature drift		≤ 10 %
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 100 ms

Release date: 2024-05-27 Date of issue: 2024-05-28 Filename: 70128600_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

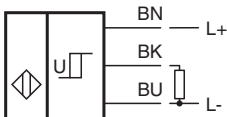
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

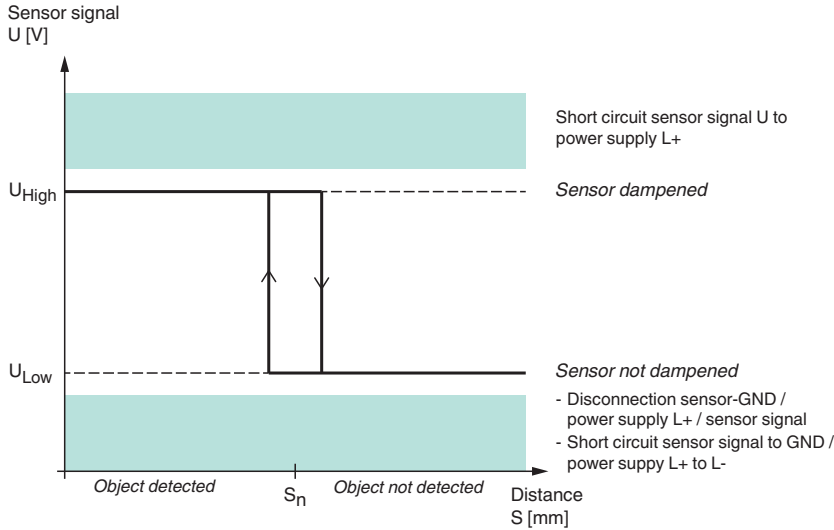
Load resistor	min. 20 kΩ
Switching state indicator	LED, yellow
Digital output	
Output value	object detected: 4.5 V ± 0.2 V object not detected: 0.5 V ± 0.2 V
Compliance with standards and directives	
Standard conformity	
Standards	EN IEC 60947-5-2
Ambient conditions	
Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Connection type	cable
Housing material	brass , white bronze coated
Sensing face	PBT , green
Degree of protection	IP68 / IP69K
Cable	
Cable diameter	6 mm ± 0.2 mm
Bending radius	> 10 x cable diameter
Material	TPE
Color	black
Number of cores	3
Core cross section	0.75 mm²
Length	L 2 m
Dimensions	
Length	50 mm
Diameter	30 mm
General information	
Scope of delivery	2 self locking nuts in scope of delivery

Connection



Release date: 2024-05-27 Date of issue: 2024-05-28 Filename: 70128600_eng.pdf

Operation



Technical Features

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

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

EN 61000-4-2:	CD: 8 kV / AD: 15 kV
Severity level	IV
EN 61000-4-3:	36 V/m (80...2500 MHz)
Severity level	IV
EN 61000-4-4:	2 kV
Severity level	III
EN 61000-4-6:	30 V (0.01...80 MHz)
Severity level	III
EN 55011:	Class A