

Inductive sensor

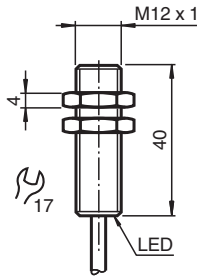
NBB2-12GS40-Z4L-3G-3D



- 2 mm flush
- 2-wire DC sensor with minimum off-state current
- Switching status indicator, yellow LED
- ATEX-/IECEx-approvals for zone 2/22 (Ex ec/tc)
- Stainless steel housing



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire with minimum off-state current
Rated operating distance	s _n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 1.62 mm
Actual operating distance	s _r	1.8 ... 2.2 mm typ.
Reduction factor r _{Al}		0.3
Reduction factor r _{Cu}		0.17
Reduction factor r ₃₀₄		0.7
Output type		2-wire
Nominal ratings		
Operating voltage	U _B	4 ... 30 V
Switching frequency	f	0 ... 700 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 4 V
Operating current	I _L	2 ... 30 mA
Lowest operating current	I _m	2 mA
Off-state current	I _r	≤ 200 µA
Switching state indicator		all direction LED, yellow

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

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Technical Data

Functional safety related parameters

MTTF _d		1558 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %

Compliance with standards and directives

Standard conformity		
Standards		EN IEC 60947-5-2

Approvals and certificates

IECEx approval		
Equipment protection level Gc (ec)		IECEx TUR 21.0017X
Equipment protection level Dc (tc)		IECEx TUR 21.0018X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8523 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8524 X
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		
Hazardous Location		2024322315005977 2024322315005859
KCC approval		
Hazardous Location		23-AV4BO-0236X

Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		2
Core cross section		0.14 mm ²
Length	L	2 m
Mass		55 g
Dimensions		
Length		40 mm
Diameter		12 mm

General information

Scope of delivery		2 self locking nuts in scope of delivery
Use in the hazardous area		see instruction manuals

Connection Assignment

