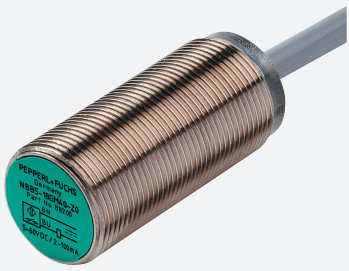


Inductive sensor

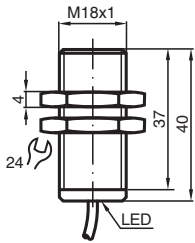
NCB8-18GM40-N0-OG



- 8 mm flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output
- Polarity reversal protected
- Stainless steel housing



Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	8 mm
Installation		flush
Assured operating distance	s_a	0 ... 6.48 mm
Actual operating distance	s_r	7.2 ... 8.8 mm typ. 8 mm
Reduction factor r_{Al}		0.39
Reduction factor r_{Cu}		0.36
Reduction factor r_{304}		0.71
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 15 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes

Release date: 2025-04-03 Date of issue: 2025-04-03 Filename: 70133265_eng.pdf

Technical Data

Suitable for 2:1 technology	yes , Reverse polarity protection diode not required
Current consumption	
Measuring plate not detected	min. 2.2 mA
Measuring plate detected	≤ 1 mA
Switching state indicator	all direction LED, yellow
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 2
MTTF _d	2660 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Compliance with standards and directives	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2007
Standards	EN IEC 60947-5-2
Approvals and certificates	
IECEX approval	
Equipment protection level Ga	IECEX PTB 11.0037X
Equipment protection level Gb	IECEX PTB 11.0037X
Equipment protection level Da	IECEX PTB 11.0037X
Equipment protection level Mb	IECEX PTB 11.0037X
ATEX approval	
Equipment protection level Ga	PTB 00 ATEX 2048 X
Equipment protection level Gb	PTB 00 ATEX 2048 X
Equipment protection level Da	PTB 00 ATEX 2048 X
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0452
CML approval	on request
ANZEx	18.3018X
Ambient conditions	
Ambient temperature	-25 ... 80 °C (-13 ... 176 °F)
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)
Mechanical specifications	
Connection type	cable PUR (halogen-free) , 2 m blue , Oil resistant , Flame-retardant as per IEC 60332-1 Mud-resistant according to IEC61892-4, appendix D Flexible at temperatures as low as -40 °C
Core cross section	2x 1 mm ² , black
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP66 / IP67
Cable	
Wire end ferrules	yes
Bending radius	> 5 x cable diameter
Material	PUR
Length	L 2 m
Dimensions	
Length	40 mm
Diameter	18 mm
General information	
Scope of delivery	2 self locking nuts in scope of delivery

Technical Data

Use in the hazardous area

see instruction manuals

Connection

