

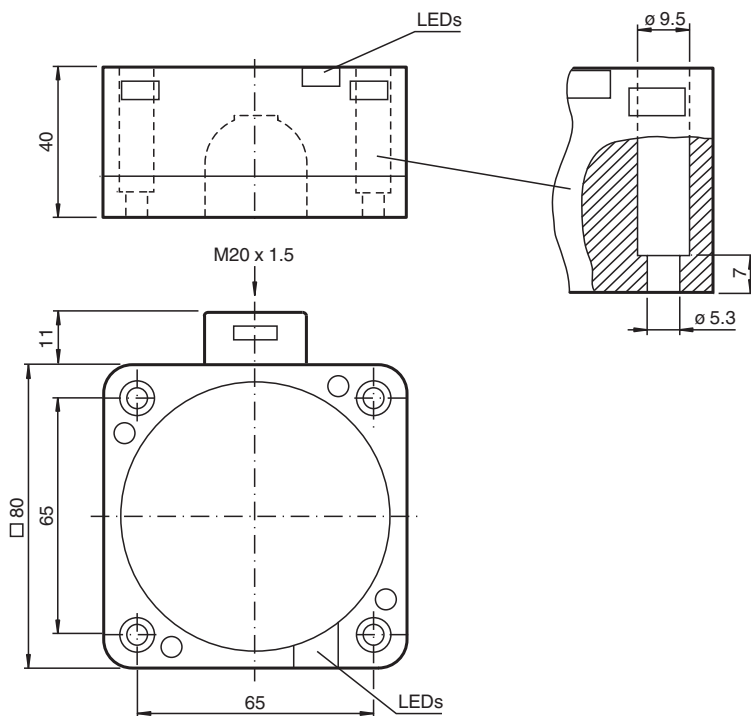


Inductive sensor NCN50-FP-A2-P1-3G-3D

- 50 mm non-flush
- 4-wire DC
- ATEX/IECEX Zone 2/22



Dimensions



Technical Data

General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	s_n	50 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 40.5 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.85

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Technical Data

Output type		4-wire
Nominal ratings		
Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 80 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protection		reverse polarity protected
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	≤ 300 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		671 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 21.0019X
Equipment protection level Dc (tc)		IECEX TUR 21.0020X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8525 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8526 X
UL approval		cULus Listed, General Purpose
CCC approval		
Hazardous Location		2024322315005962 2024322315005982
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		screw terminals
Information for connection		A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 %
Core cross section		up to 2.5 mm ² , stripped insulation length: 7 mm
Minimum core cross-section		min. 0.5 mm ² (incl. wire-end ferrules when using flexible conductors)
Maximum core cross-section		max. 2.5 mm ² (incl. wire-end ferrules when using flexible conductors)
Connection (system side)		screw terminals, M20 x 1.5 cable gland, usable thread length 10 mm, screw-in depth max. 10 mm
Housing material		PBT
Sensing face		PBT
Housing base		PBT
Degree of protection		IP67
Mass		440 g
Tightening torque, housing screws		1 Nm
Dimensions		
Height		40 mm
Width		80 mm
Length		80 mm
General information		

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Use in the hazardous area

see instruction manuals

Connection Assignment

