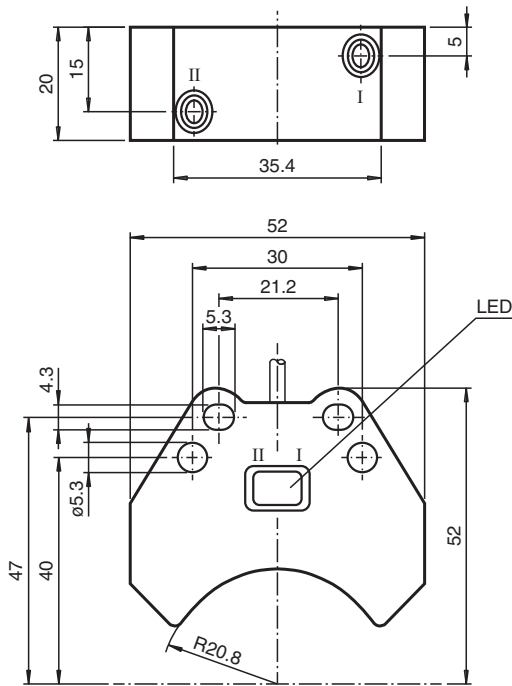


# Inductive sensor NCN3-F25-N4-5M

- Direct mounting on standard actuators
- ATEX & IECEx certifications



## Dimensions



## Technical Data

### General specifications

Switching function		2 x normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	3 mm
Installation		flush mountable
Assured operating distance	$s_a$	0 ... 2.43 mm
Actual operating distance	$s_r$	2.7 ... 3.3 mm typ.
Reduction factor $r_{AI}$		0.52
Reduction factor $r_{Cu}$		0.43
Reduction factor $r_{304}$		0.86
Reduction factor $r_{S137}$		1

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## Technical Data

Reduction factor $r_{\text{Brass}}$		0.54
Output type		2-wire
<b>Nominal ratings</b>		
Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	$f$	0 ... 1500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		$\geq 3$ mA
Measuring plate detected		$\leq 1$ mA
Time delay before availability	$t_v$	$\leq 1$ ms
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1010 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility		NE 21:2007
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
IECEX approval		
Equipment protection level Ga		IECEX TUN 17.0021X
Equipment protection level Gb		IECEX TUN 17.0021X
Equipment protection level Da		IECEX TUN 17.0021X
Equipment protection level Mb		IECEX TUN 17.0021X
ATEX approval		
Equipment protection level Ga		TÜV 99 ATEX 1479 X
Equipment protection level Gb		TÜV 99 ATEX 1479 X
Equipment protection level Da		TÜV 99 ATEX 1479 X
UL approval		
		cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 8.2 V DC
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0456
CCC approval		
Hazardous Location		2020322315002262
NEPSI approval		
NEPSI certificate		GYJ19.1410X
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		

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Cable diameter		6.9 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross section		0.75 mm <sup>2</sup>
Length	L	5 m
Mass		42 g
Tightening torque, fastening screws		M5 x 25 : ≤ 2.7 Nm
Dimensions		
Height		20 mm
Width		52 mm
Length		52 mm
Note		Mounted on mechanical drive
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection Assignment

