

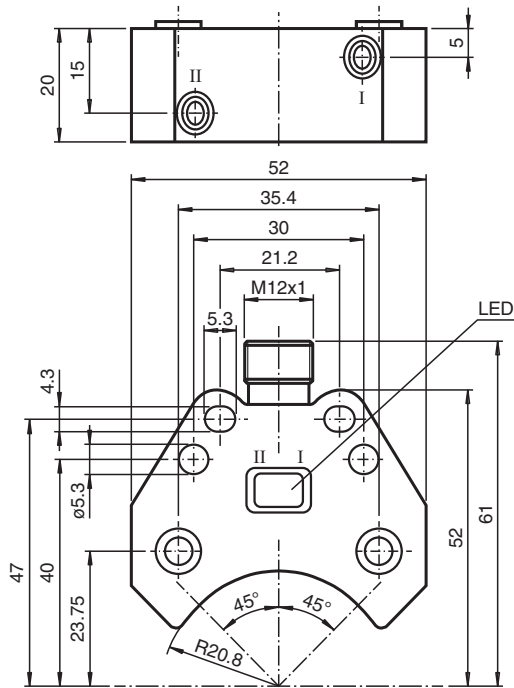


# Inductive sensor NCN3-F25-N4-V1

- 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 $r_{Al}$		0.52
Reduction factor $r_{Cu}$		0.43
Reduction factor $r_{304}$		0.86

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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

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## Technical Data

Reduction factor $r_{S137}$		1
Reduction factor $r_{Brass}$		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 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<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 Gc (ic)		PF13CERT2895 X
Equipment protection level Da		TÜV 99 ATEX 1479 X
FM approval		
Control drawing		116-0165
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0456
CSA approval		
cCSAus Listed, General Purpose		
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>		

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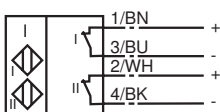
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## Technical Data



Connection type	Connector plug M12 x 1 , 4-pin
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Mass	45 g
Tightening torque, fastening screws	M5 x 25 : 2.7 Nm
Note	Mounted on mechanical drive
<b>General information</b>	
Use in the hazardous area	see instruction manuals

## Connection

N4



## Accessories

	<b>BT32</b>	Activator for F25 series
	<b>BT32XS</b>	Activator for F25 series
	<b>BT32XAS</b>	Activator for F25 series
	<b>BT33</b>	Activator for F25 series
	<b>BT34</b>	Activator for F25 series
	<b>V1-G-N4-5M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable blue, NAMUR