



Model Number

NJ8-18GK-SN-50M

Features

- 8 mm non-flush
- ATEX approval Ex-i and Ex-nA/tc for zone 0-2 and zone 20-22
- Degree of protection IP68

Application



Danger!

In safety-related applications the sensor must be operated with a qualified fail safe interface from Pepperl+Fuchs, such as KFD2-SH-EX1. Consider the "exida Functional Safety Assessment" document which is available on www.pepperl-fuchs.com as an integral part of this product's documentation.

Accessories

BF 18

Mounting flange, 18 mm

Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR with safety function
Rated operating distance	s_n	8 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{AI}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.85
Output type		2-wire

Nominal ratings

Nominal voltage	U_o	8.2 V
Switching frequency	f	0 ... 200 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA

Functional safety related parameters

MTTF _d		11850 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Ambient conditions

Ambient temperature		-40 ... 100 °C (-40 ... 212 °F)
---------------------	--	---------------------------------

Mechanical specifications

Connection type		cable
Housing material		Crastin (PBT), black
Sensing face		Crastin (PBT), black
Degree of protection		IP68
Cable		
Wire end ferrules		yes
Cable diameter		6 mm \pm 0.2 mm
Bending radius		> 10 x cable diameter
Material		silicone
Number of cores		2
Core cross-section		0.75 mm ²
Length	L	50 m

General information

Use in the hazardous area		see instruction manuals
---------------------------	--	-------------------------

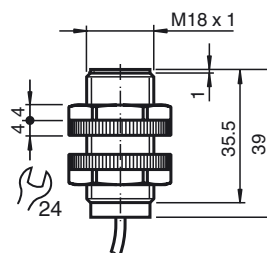
Compliance with standards and directives

Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		
		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

Approvals and certificates

IECEX approval		
Equipment protection level Ga		IECEX PTB 11.0092X
Equipment protection level Gb		IECEX PTB 11.0092X
Equipment protection level Da		IECEX PTB 11.0092X
Equipment protection level Mb		IECEX PTB 11.0092X
ATEX approval		
Equipment protection level Ga		PTB 00 ATEX 2049 X
Equipment protection level Gb		PTB 00 ATEX 2049 X
Equipment protection level Gc (ic)		PF13CERT2895 X
Equipment protection level Gc (nA)		PF15CERT3754X
Equipment protection level Da		PTB 00 ATEX 2049 X
Equipment protection level Dc (tc)		PF15CERT3774X
EAC conformity		TR CU 012/2011
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0454
CCC approval		CCC approval / marking not required for products rated ≤ 36 V

Dimensions



Electrical Connection

