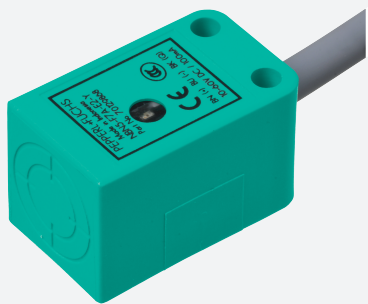




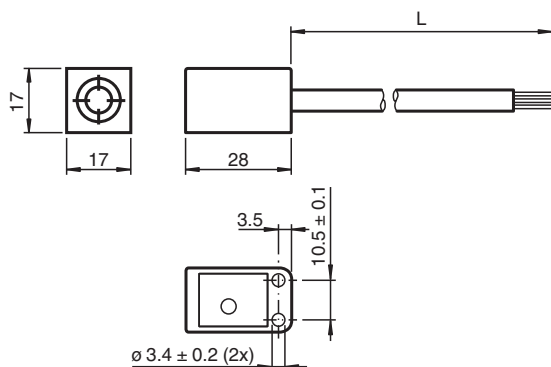
Inductive sensor

NBN5-F7A-E1

- Extended operating voltage range
- Operating distance 5 mm



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NPN
Rated operating distance	s_n	5 mm
Installation		single-sided flush mountable
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm
Reduction factor r_{AI}		0.4
Reduction factor r_{Cu}		0.37
Reduction factor r_{304}		0.89
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C

Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 70163730_eng.pdf

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

PEPPERL+FUCHS

Technical Data

No-load supply current	I_0	$\leq 9 \text{ mA}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1396 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		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) -30 ... 70 °C (-22 ... 158 °F) , fixed
Storage temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3.5 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm ²
Length	L	2 m
Dimensions		
Height		17 mm
Width		17 mm
Length		28 mm

Connection

