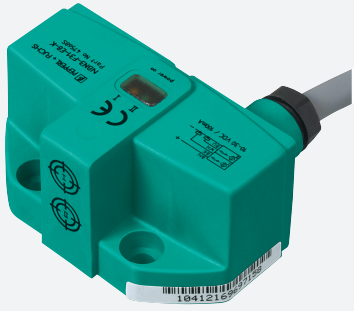


Inductive sensor

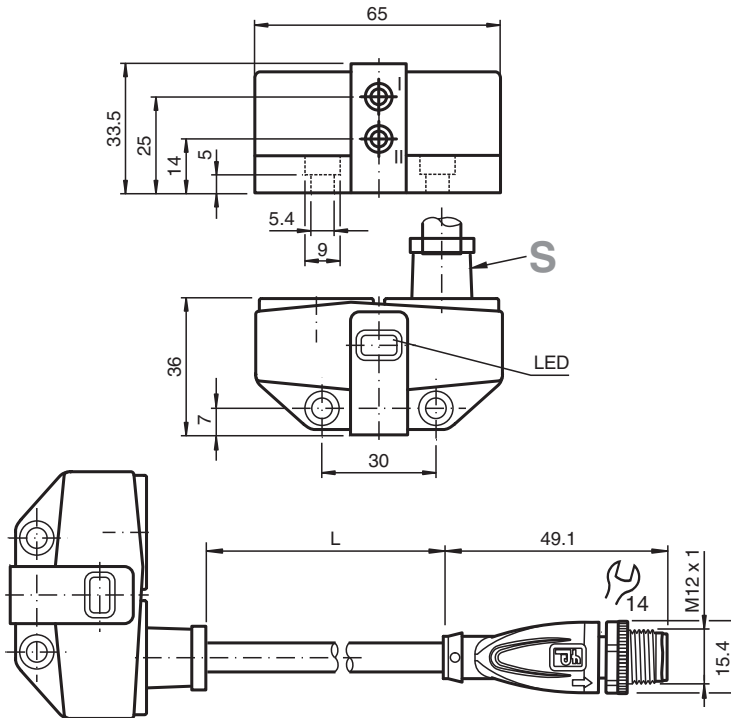
NBN3-F31-E8-K-Y306607



- Direct mounting on standard actuators
- Fixed setting



Dimensions



Technical Data

General specifications

Switching function		2 x normally open (NO)
Output type		PNP
Rated operating distance	s_n	3 mm
Installation		flush mountable
Output polarity		DC
Assured operating distance	s_a	0 ... 2.43 mm
Actual operating distance	s_r	2.7 ... 3.3 mm typ.
Reduction factor r_{AI}		0.5
Reduction factor r_{Cu}		0.4

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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 PEPPERL+FUCHS

Technical Data

Reduction factor r_{304}		1
Reduction factor r_{317}		1.2
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		all connections
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
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	\leq
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		780 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
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		
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Tightening torque		0.6 Nm
Number of pins		4
Material		stainless steel V4A
Cable		
Cable diameter		4.8 mm \pm 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		4
Core cross section		0.34 mm ²
Length	L	1.5 m
Mass		145 g
Tightening torque, fastening screws		4 Nm ... 5 Nm

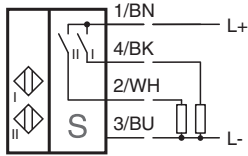
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PEPPERL+FUCHS

Connection



Accessories

	BT65B	Activator for F31 series
	BT115B	Activator for F31 series
	MH V1-SCREWDRIVER	Torque screwdriver (0.6 Nm)
	MH V1-BIT M12	plug-in cap M12

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