

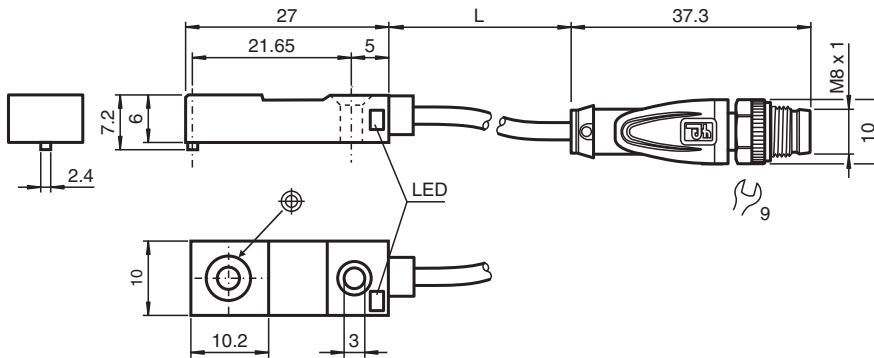


Inductive sensor NBN4-F29-E3-0,5M-V3

■ Basic series



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Output type		3-wire

Nominal ratings

Operating voltage	U_B	4.75 ... 30 V DC
Switching frequency	f	0 ... 1000 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: 2025-02-24 Date of issue: 2025-02-24 Filename: 299012_eng.pdf

Technical Data

No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 5 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		2133 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
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PPS
Sensing face		PPS
Degree of protection		IP67
Connector		
Threading		M8 x 1
Tightening torque		$\leq 0.4 \text{ Nm}$
Number of pins		3
Cable		
Cable diameter		$3.5 \text{ mm} \pm 0.2 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm^2
Length	L	0.5 m
Dimensions		
Height		6 mm
Width		10 mm
Length		27 mm

Connection

