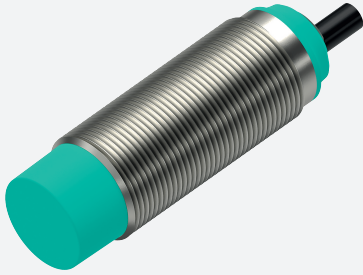


Inductive sensor

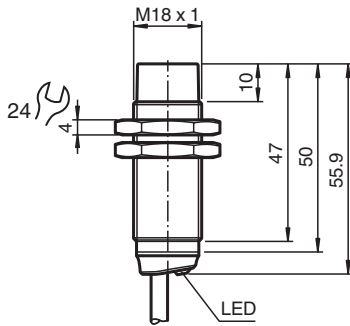
NBN12-18GM50-E0-3M



- 12 mm non-flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- Extended operating voltage range
- Flexible use with versatile mounting opportunities



Dimensions



Technical Data

General specifications			
Switching function			Normally open (NO)
Output type			NPN
Rated operating distance	s_n		12 mm
Installation			non-flush
Output polarity			DC
Assured operating distance	s_a		0 ... 9.72 mm
Actuating element			mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 36 mm x 36 mm x 1 mm
Reduction factor r_{Al}			0.49
Reduction factor r_{Cu}			0.46
Reduction factor r_{304}			0.75
Reduction factor r_{Brass}			0.55
Output type			3-wire
Nominal ratings			
Operating voltage	U_B		5 ... 36 V
Switching frequency	f		0 ... 1300 Hz
Hysteresis	H		typ. 5 %
Reverse polarity protection			reverse polarity protected
Short-circuit protection			pulsing
Voltage drop	U_d		≤ 1 V
Operating current	I_L		0 ... 200 mA

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Technical Data

Off-state current	I_r	max. 20 μ A
No-load supply current	I_0	\leq 10 mA
Time delay before availability	t_v	\leq 10 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1708 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Conformity		
PWIS conformity		VDMA 24364-C1/T100°C-W
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		
Protection class		II
Rated insulation voltage	U_i	36 V
Rated impulse withstand voltage	U_{imp}	500 V
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated \leq 36 V
Marine approval		DNVGL TAA00003AK
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65 / IP66 / IP67 / IP68
Cable		
Wire end ferrules		yes
Cable diameter		4.3 mm \pm 0.15 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	3 m
Mass		137 g
Dimensions		
Length		56 mm
Diameter		18 mm
Mounting		with nuts, M18
Tightening torque		0 ... 30 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

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Connection



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