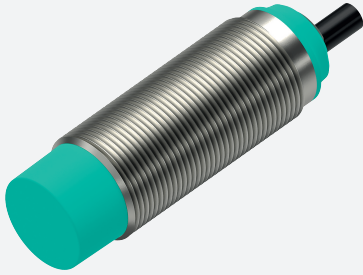


Inductive sensor

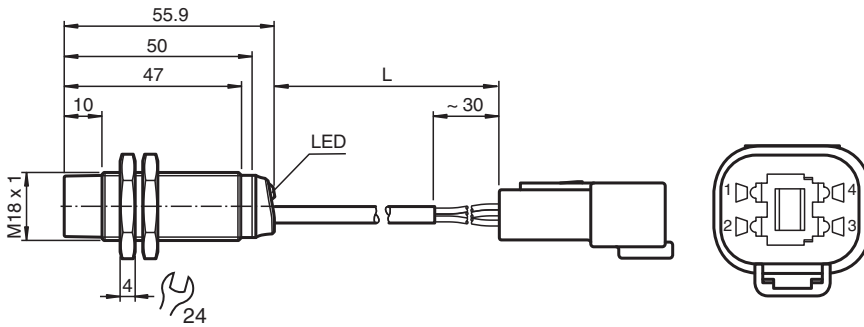
NBN12-18GM50-A2-450MM-4DT04



- 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	complementary	
Output type	PNP	
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	4-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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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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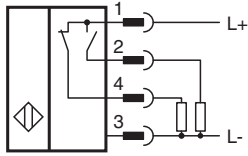
PF PEPPERL+FUCHS

Technical Data

Off-state current	I_r	max. 20 μ A
No-load supply current	I_0	\leq 15 mA
Time delay before availability	t_v	\leq 10 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1248 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		UL Recognized , General purpose , Class 2 power source
CCC approval		CCC approval / marking not required for products rated \leq 36 V
Ambient conditions		
Ambient temperature		sensor: -40 ... 85 °C (-40 ... 185 °F) Cable: -25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65 / IP66 / IP67 / IP68
Connector		
Number of pins		4
Connection assembly		Deutsch housing DT04-4P-C015 Deutsch contact 1060-16-0622 Deutsch wedge W4P
Cable		
Cable diameter		6.2 mm \pm 0.2 mm
Bending radius		$>$ 10 x cable diameter
Material		PVC
Color		black
Number of cores		4
Core cross section		0.5 mm ²
Length	L	450 mm \pm 10 mm
Dimensions		
Length		51 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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