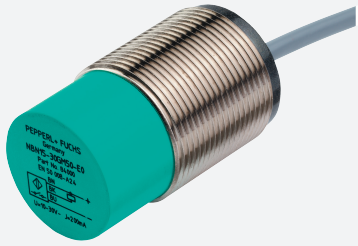


Inductive sensor

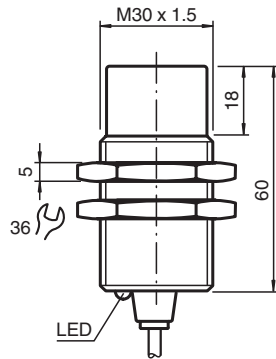
NRN20-30GS60-E0-7M



- Reduction factor = 1
- Stainless steel housing
- Customer-specific cable length



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s_n	20 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{St37}		1
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected

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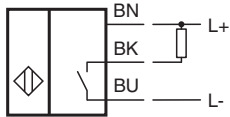
Singapore: +65 6779 9091
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 PEPPERL+FUCHS

Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2 \text{ V}$
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μA at 25 °C
No-load supply current	I_0	$\leq 14 \text{ mA}$
Time delay before availability	t_v	max. 15 ms
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Switching state indicator		all direction LED, yellow
Functional safety related parameters		
MTTF _d		1140.2 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		
Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
UL approval		cULus Listed, Type 1 enclosure Class 2 power source
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		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT , green
Degree of protection		IP67
Cable		
Cable diameter		4.8 mm \pm 0.1 mm
Bending radius		> 15 x cable diameter
Material		PVC
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	7 m
Mass		307 g
Mounting		with nuts, M30
Tightening torque		0 ... 30 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



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