

Inductive sensor

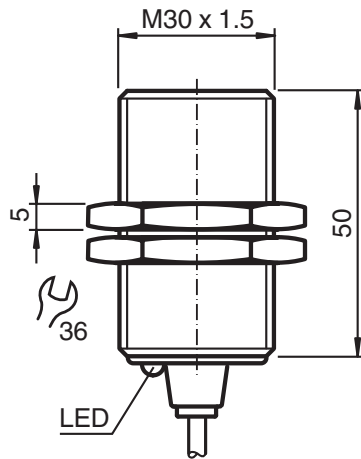
NRB15-30GH50-E2



- Reduction factor = 1
- Magnetic field resistant
- Stainless steel housing
- Front face FDA conform



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s _n	15 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 12.15 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 DC
Switching frequency	f	0 ... 750 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected

Release date: 2025-06-10 Date of issue: 2025-06-10 Filename: 292543_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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 IEC 60947-5-2
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 Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA
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 1.4404 / AISI 316L
Sensing face		LCP, (conforms with FDA)
Degree of protection		IP68 / IP69K
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	2 m
Mass		180 g
Dimensions		
Length		50 mm
Diameter		30 mm
General information		
Scope of delivery		Supplied with 2 nuts

Connection Assignment

