



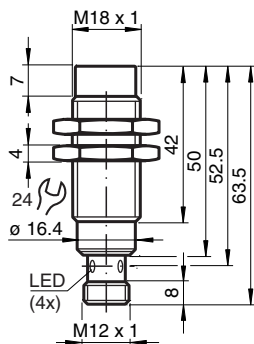
Inductive sensor

NMN20-18GH50-E2-V1

- 20 mm non-flush
- Active surface metal
- One-piece housing with stainless steel (V4A; 1.4435)



Dimensions



Technical Data

General specifications

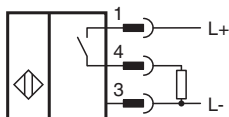
Switching function	Normally open (NO)	
Output type	PNP	
Rated operating distance	s_n	20 mm
Installation	non-flush	
Output polarity	DC	
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}	1	
Reduction factor r_{Cu}	0.9	
Reduction factor r_{304}	0.3 (0.6 of material thickness 2 mm)	
Reduction factor r_{Si37}	1	
Output type	3-wire	

Nominal ratings

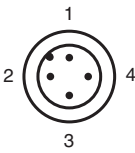
Technical Data

Installation conditions		
A		34 mm (mild steel) 36 mm (stainless steel) 20 mm (aluminum) 22 mm (brass)
B		41 mm
C		60 mm
F		200 mm
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 200 Hz
Hysteresis	H	3 ... 15 typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		yes
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.1 mA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 40 ms
Switching state indicator		LED, yellow
Limit data		
Operating pressure statically		60 bar (870.2 psi) max.
Functional safety related parameters		
MTTF _d		655 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		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1, 4-pin
Housing material		Stainless steel 1.4435 / AISI 316L
Sensing face		Stainless steel 1.4435 / AISI 316L
Degree of protection		IP68 / IP69K
Mass		24 g

Connection



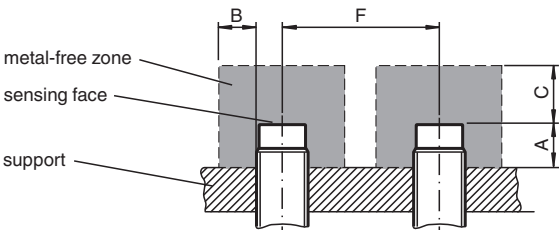
Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Installation



Accessories

	BF 18	Mounting flange, 18 mm
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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