

Inductive sensor

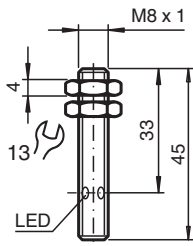
NBB1,5-8GS40-E2-T-V3



- 1.5 mm flush
- Stainless steel housing
- Extended temperature range



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	1.5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.215 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 8 mm x 8 mm x 1 mm
Reduction factor r_{Al}		0.38
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.45
Output type		3-wire

Nominal ratings

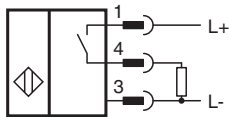
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	0.01 ... 0.33 mm
Reverse polarity protection		yes
Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes

Release date: 2024-05-28 Date of issue: 2024-06-07 Filename: 236476_eng.pdf

Technical Data

Ripple		10 %
Voltage drop	U_d	$\leq 2.5 \text{ V}$
Repeat accuracy	R	0.05 mm
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0.01 mA
No-load supply current	I_0	$\leq 7 \text{ mA}$
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		2090 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		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug M8 x 1 , 3-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Mass		7 g
Dimensions		
Length		45 mm
Diameter		8 mm

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

1		BN	(brown)
3		BU	(blue)
4		BK	(black)