

Inductive sensor

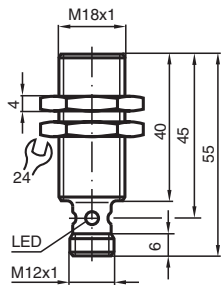
NBB5-18GM40-Z3-V1



- 5 mm flush
- 2-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm
Actual operating distance	s_r	4.5 ... 5.5 mm typ. 5 mm
Reduction factor r_{Al}		0.34
Reduction factor r_{Cu}		0.31
Reduction factor r_{304}		0.72
Output type		2-wire

Nominal ratings

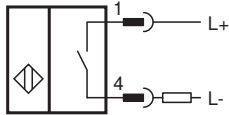
Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Operating current	I_L	2 ... 100 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	0 ... 0.5 mA typ.

Release date: 2025-06-06 Date of issue: 2025-06-06 Filename: 089214_eng.pdf

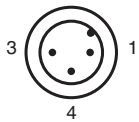
Technical Data

Switching state indicator	Multihole-LED, yellow
Functional safety related parameters	
MTTF _d	1870 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	
UL approval	cULus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	Connector plug
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Connector	
Threading	M12 x 1
Number of pins	3
Mass	55 g
Dimensions	
Length	40 mm
Diameter	18 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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