

Inductive sensor

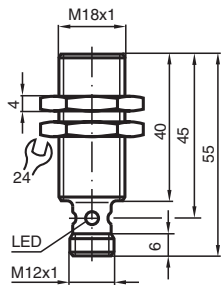
NCB5-18GM40-Z0-V1



- 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}		0.37
Reduction factor r_{Cu}		0.33
Reduction factor r_{304}		0.7
Output type		2-wire

Nominal ratings

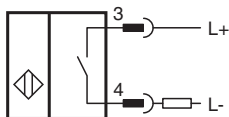
Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 350 Hz
Hysteresis	H	1 ... 15 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		
Voltage drop $I_L = 20$ mA, switching element on	U_d	3.4 ... 5 V typ. 4.3 V
Operating current	I_L	2 ... 100 mA

Release date: 2025-06-04 Date of issue: 2025-06-04 Filename: 126071_eng.pdf

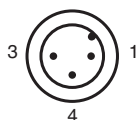
Technical Data

Off-state current	I_r	0 ... 0.5 mA typ.
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		1739 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		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		49 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)