

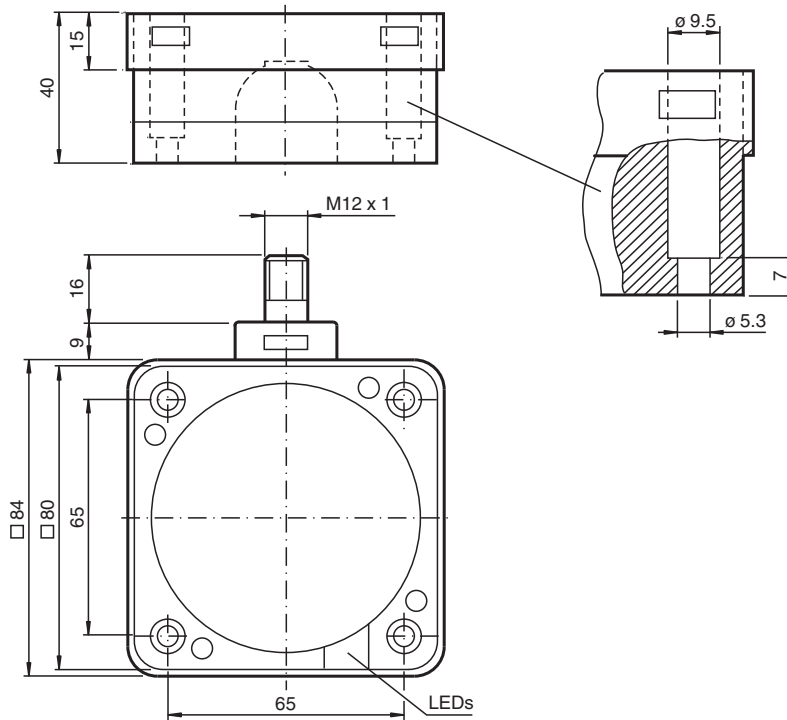
Inductive sensor

NCB50-FP-Z5-V1

- 50 mm flush
- 2-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	s_n	50 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 40.5 mm
Reduction factor r_{AI}		0.4
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.8
Output type		2-wire

Nominal ratings

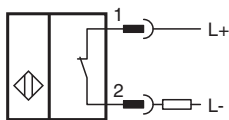
Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 80 Hz
Hysteresis	H	0 ... 20 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant

Release date: 2025-06-05 Date of issue: 2025-06-05 Filename: 182469_eng.pdf

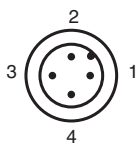
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3.8 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 20 \text{ mA}$, switching element on	U_d	2.7 ... 4.9 V
Operating current	I_L	2 ... 200 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	$\leq 0.6 \text{ mA}$
Time delay before availability	t_v	$\leq 300 \text{ ms}$
Switching state indicator		LED, yellow
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)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		PBT
Sensing face		PBT
Housing base		PBT
Degree of protection		IP68
Connector		
Threading		M12 x 1
Number of pins		4
Mass		524 g
Dimensions		
Height		40 mm
Width		84 mm
Length		84 mm

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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