

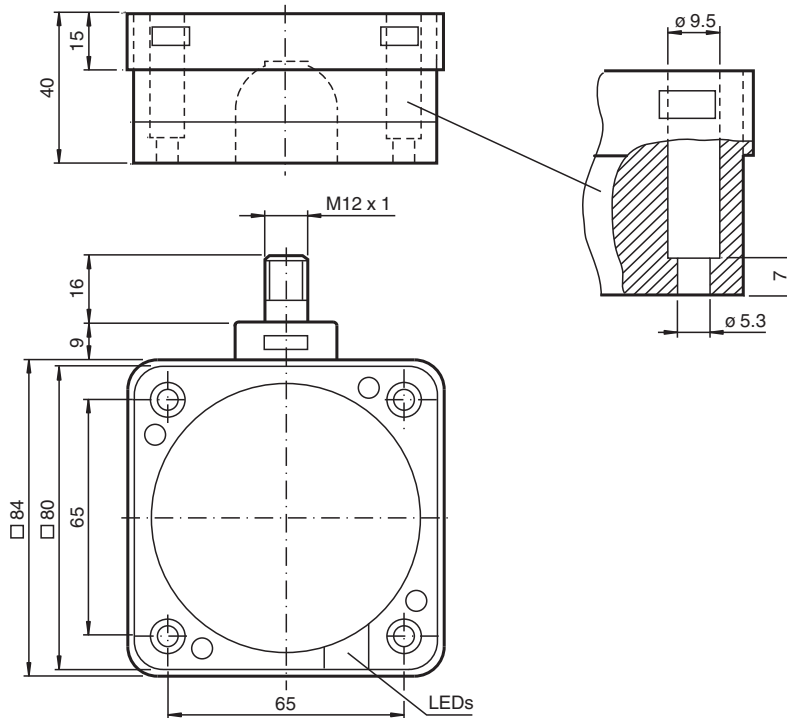
# Inductive sensor

## NCB50-FP-Z4-V1

- 50 mm flush
- 2-wire DC



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
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 $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.35
Reduction factor $r_{304}$		0.8
Output type		2-wire

#### Nominal ratings

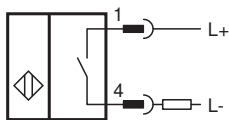
Operating voltage	$U_B$	10 ... 60 V DC
Switching frequency	$f$	0 ... 80 Hz
Hysteresis	$H$	0 ... 20 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant

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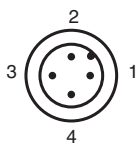
## Technical Data

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
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
<b>Mechanical specifications</b>		
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		530 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)