

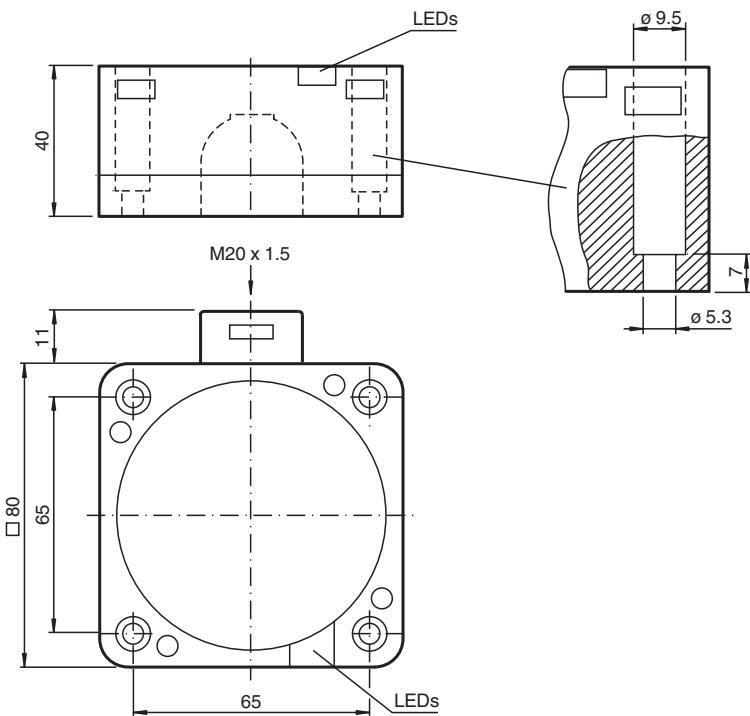
# Inductive sensor

## NCB40-FP-A2-T-P1

■ Comfort series



### Dimensions



### Technical Data

Release date: 2024-05-28 Date of issue: 2024-06-02 Filename: 129428\_eng.pdf

#### General specifications

Switching function	complementary	
Output type		PNP
Rated operating distance	$s_n$	40 mm
Installation		flush
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 32.4 mm
Actual operating distance	$s_r$	36 ... 44 mm
Reduction factor $r_{AI}$		0.25
Reduction factor $r_{Cu}$		0.23

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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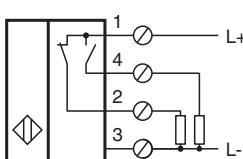
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 PEPPERL+FUCHS

## Technical Data

Reduction factor $r_{304}$	0.85	
Output type	4-wire	
<b>Nominal ratings</b>		
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 80 Hz
Hysteresis	$H$	typ. 3 %
Reverse polarity protection		reverse polarity protected
Voltage drop	$U_d$	$\leq 3$ V
Temperature drift		-10 ... 15 % at $< -25$ °C
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA
No-load supply current	$I_0$	$\leq 20$ mA
Time delay before availability	$t_v$	$\leq 300$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		554 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<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	CCC approval / marking not required for products rated $\leq 36$ V	
<b>Ambient conditions</b>		
Ambient temperature	-40 ... 100 °C (-40 ... 212 °F)	
<b>Mechanical specifications</b>		
Connection type	screw terminals	
Information for connection	A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 %	
Core cross section	up to 2.5 mm <sup>2</sup>	
Minimum core cross-section	without wire end ferrules 0.5 mm <sup>2</sup> , with connector sleeves 0.34 mm <sup>2</sup>	
Maximum core cross-section	without wire end ferrules 2.5 mm <sup>2</sup> , with connector sleeves 1.5 mm <sup>2</sup>	
Housing material	PBT	
Sensing face	PBT	
Housing base	PBT	
Degree of protection	IP68	
Dimensions		
Height	40 mm	
Width	80 mm	
Length	80 mm	

## Connection



## Installation Conditions

These sensors are especially designed for embeddable mounting in conveyor floors. Due to its precise location in metal base plates the sensor is afforded a high degree of mechanical protection. No clearance is required between the sensor and the base plate, avoiding the need for protective guarding to prevent possible foot injury.

The large sensing range ensures positive detection, and thus provides consistent control and monitoring of the conveyor.

