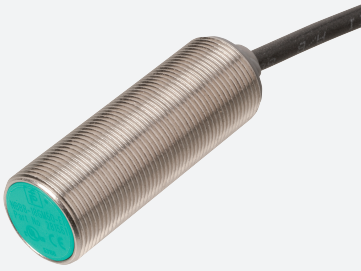


Inductive sensor

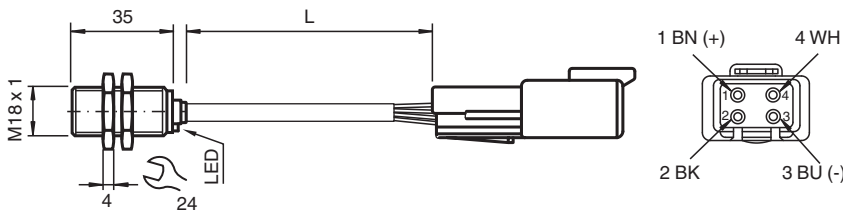
NBB8-18GM35-A0-M1-965MM-4DT-M04



- 8 mm flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- E1-Type approval



Dimensions



Technical Data

General specifications

Switching function		complementary
Output type		NPN
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 24 mm x 24 mm x 1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45
Output type		4-wire

Nominal ratings

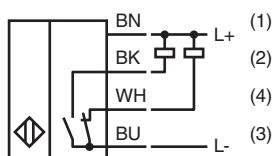
Operating voltage	U_B	7 ... 30 V
Switching frequency	f	0 ... 1600 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected

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Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2 \text{ V}$
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 4 μA at 25 °C
No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1484 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		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
E1 Type approval		10R-04
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Cable connector L = 0.965 m Deutsch Connector Assembly Connector DTM04-4P Contact 1060-20-0244 Wedge WM-4P
Core cross section		0.34 mm ²
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67 / IP68
Mass		80 g
Dimensions		
Length		35 mm
Diameter		18 mm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Technical Features

Mains-borne interference in accordance with ISO 7637-2:

Pulse	1	2a	2b	3a	3b	4
Severity level	III	III	III	III	III	III
Failure criterion	A	A	C	A	A	C

EN 61000-4-2: CD: 8 kV / AD: 15 kV
Severity level IV IV

EN 61000-4-3: 36 V/m (80...2500 MHz)
Severity level IV

EN 61000-4-4: 2 kV
Severity level III

EN 61000-4-6: 30 V (0.01...80 MHz)
Severity level III

EN 55011: Class A