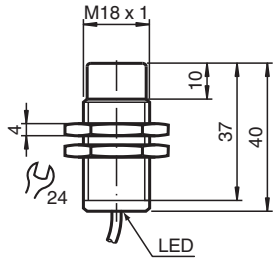


Inductive sensor

NBN8-18GM40-Z0-Y241320

- Basic series
- 8 mm non-flush
- 2-wire DC

Dimensions



Technical Data

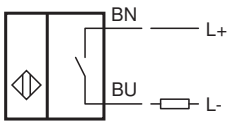
General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.5 mm
Actual operating distance	s_r	7.2 ... 8.8 mm typ. 8 mm
Reduction factor r_{Al}		0.43
Reduction factor r_{Cu}		0.42
Reduction factor r_{304}		0.73
Output type		2-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant

Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 241320_eng.pdf

Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Operating current	I_L	2 ... 100 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Switching state indicator		all direction LED, yellow
Functional safety related parameters		
$MTTF_d$		1694 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		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cable
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		2
Core cross section		0.34 mm^2
Length	L	2 m
Dimensions		
Length		40 mm
Diameter		18 mm
General information		
Scope of delivery		2 toothed lock washers

Connection



Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 241320_eng.pdf