

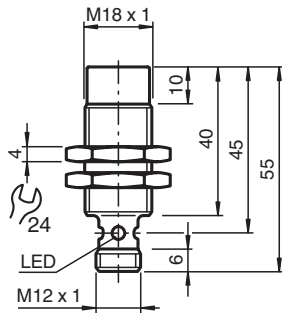
Inductive sensor NBN8-18GM40-Z3-V1



- 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	5 ... 60 V
Switching frequency	f	0 ... 450 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant
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.

Release date: 2024-12-10 Date of issue: 2024-12-10 Filename: 089215_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

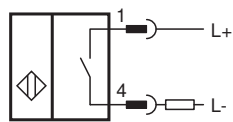
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

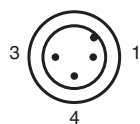
Technical Data

Switching state indicator	Multihole-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	Certified by China Compulsory Certification (CCC)
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	Connector plug
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Connector	
Threading	M12 x 1
Number of pins	3
Mass	52 g
Dimensions	
Length	40 mm
Diameter	18 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)