

# Inductive sensor

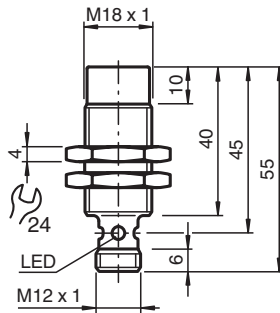
## NBN8-18GM40-Z3-V1



- 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

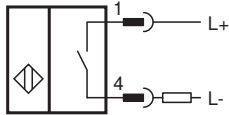
Operating voltage	$U_B$	5 ... 60 V
Switching frequency	$f$	0 ... 450 Hz
Hysteresis	$H$	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 5$ V
Operating current	$I_L$	2 ... 100 mA
Lowest operating current	$I_m$	2 mA
Off-state current	$I_r$	0 ... 0.5 mA typ.

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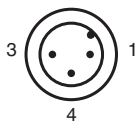
## Technical Data

Switching state indicator	Multihole-LED, yellow
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	1694 a
Mission Time (T <sub>M</sub> )	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	Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>	
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)