

## Inductive sensor

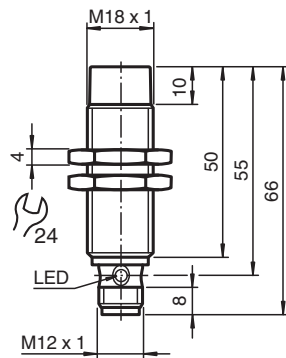
### NBN8-18GS50-Z4L-V1-3G-3D



- 8 mm non-flush
- 2-wire DC sensor with minimum off-state current
- Switching status indicator, yellow LED
- Stainless steel housing



## Dimensions



## Technical Data

### General specifications

Switching function		Normally open (NO)
Output type		Two-wire with minimum off-state current
Rated operating distance	$s_n$	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 6.48 mm
Actual operating distance	$s_r$	7.2 ... 8.8 mm
Reduction factor $r_{AI}$		0.4
Reduction factor $r_{CU}$		0.35
Reduction factor $r_{304}$		0.7
Output type		2-wire

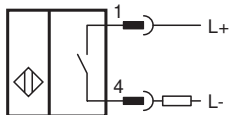
### Nominal ratings

Operating voltage	$U_B$	4 ... 30 V
Switching frequency	$f$	0 ... 500 Hz
Hysteresis	$H$	1 ... 10 typ. 5 %
Reverse polarity protection		yes

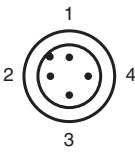
## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 4 \text{ V}$
Operating current	$I_L$	2 ... 30 mA
Lowest operating current	$I_m$	2 mA
Off-state current	$I_r$	$\leq 200 \mu\text{A}$
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1581 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>		
IECEX approval		
Equipment protection level Gc (ec)		IECEX TUR 21.0017X
Equipment protection level Dc (tc)		IECEX TUR 21.0018X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8523 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8524 X
UL approval		cULus Listed, General Purpose, Class 2 Power Source
KCC approval		
Hazardous Location		23-AV4BO-0237X
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Mass		57 g
<b>General information</b>		
Scope of delivery		2 self locking nuts in scope of delivery

## Connection



Connection Assignment

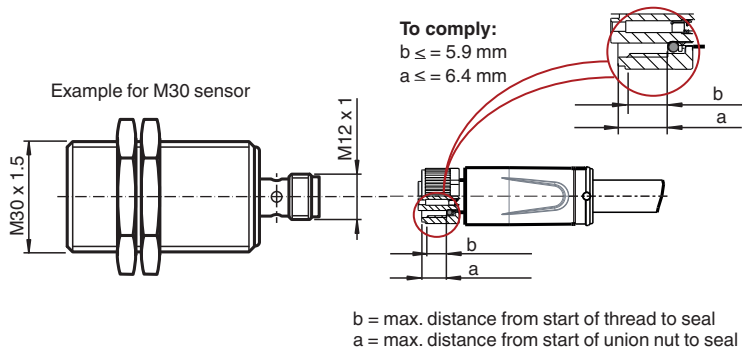


Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Installation

Requirement for male cordset to achieve IP degree of protection



Accessories

	<b>BF 18</b>	Mounting flange, 18 mm
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