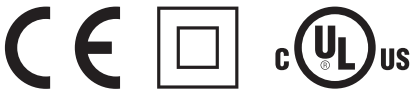
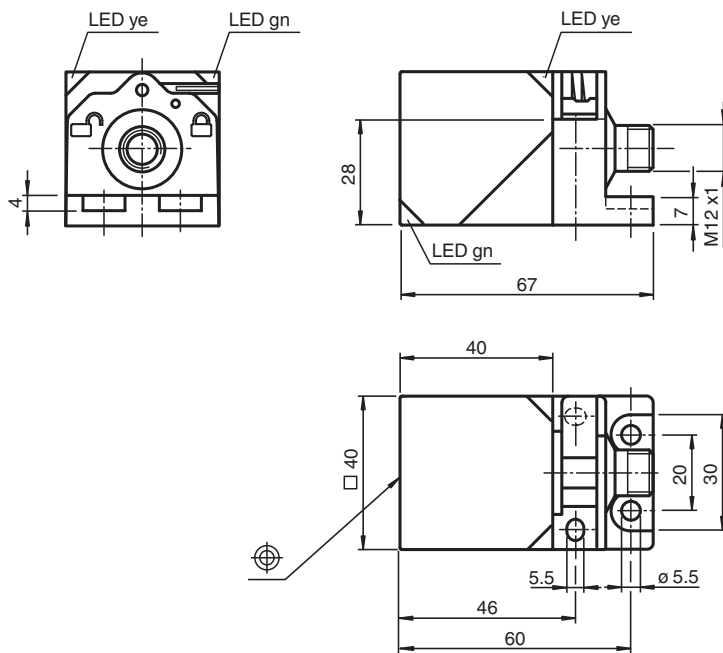


# Inductive sensor NRN35-L3-A2-C-V1

- 35 mm non-flush
- Reduction factor = 1
- Weld Immune
- Quick mounting bracket
- 4-way LED indicator



## Dimensions



## Technical Data

### General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	$s_n$	35 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 28.35 mm
Actual operating distance	$s_r$	31.5 ... 38.5 mm
Reduction factor $r_{AI}$		1
Reduction factor $r_{Cu}$		1

Release date: 2023-06-14 Date of issue: 2023-06-14 Filename: 306534-0102\_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

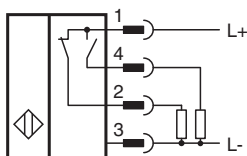
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PF** PEPPERL+FUCHS

## Technical Data

Reduction factor $r_{304}$		1
Reduction factor $r_{S137}$		1
Output type		4-wire
<b>Nominal ratings</b>		
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 180 Hz
Hysteresis	$H$	3 ... 15 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	$I_0$	$\leq 25$ mA
Time delay before availability	$t_v$	15 ms
Constant magnetic field	$B$	200 mT
Alternating magnetic field	$B$	200 mT
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1123 a
Mission Time ( $T_M$ )		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>		
Protection class		II
Rated insulation voltage	$U_i$	60 V
Rated impulse withstand voltage	$U_{imp}$	800 V
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<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		GD-ZnAl4Cu1, coated mounting flange PA6-GF35
Sensing face		PA 6 Grivory GVN-35H
Degree of protection		IP67
Mass		180 g

## Connection









## Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

## Accessories

	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	<b>MHW 01</b>	Modular mounting bracket
	<b>MH 02-L</b>	Mounting aid for VariKont-L
	<b>MH 04-2681F</b>	Mounting aid for VariKont, +U1+ and +U9*
	<b>V1-G-OR2M-POC</b>	Female cordset single-ended M12 straight A-coded, 4-pin, POC cable welding-bead resistant orange, suitable for robotic applications, torsion resistant, oil resistant, molecularly cross-linked