



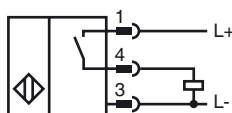
Model Number

NJ10-30GM50-E2-V1-3D

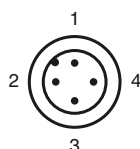
Features

- Comfort series
- 10 mm flush

Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Accessories

BF 30

Mounting flange, 30 mm

EXG-30

Quick mounting bracket with dead stop

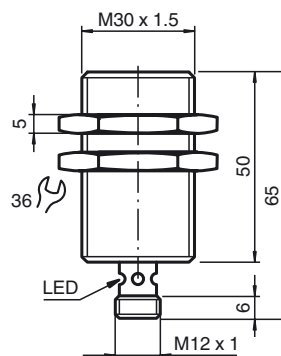
V1-G

4-pin, M12 female field-attachable connector

V1-W

4-pin, M12 female field-attachable connector

Dimensions



Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 8.1 mm
Reduction factor r_{Al}		0.32
Reduction factor r_{Cu}		0.32
Reduction factor r_{304}		0.72
Reduction factor r_{Brass}		0.43

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 650 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.8 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	≤ 9 mA
Indication of the switching state		LED, yellow

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

Mechanical specifications

Connection type	Device connector M12 x 1 , 4-pin
Core cross-section	-
Housing material	Stainless steel
Sensing face	PBT
Protection degree	IP67

General information

Use in the hazardous area	see instruction manuals
Category	3D



Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

CCC approval	Certified by China Compulsory Certification (CCC)
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ATEX 3D

Instruction	Manual electrical apparatus for hazardous areas
Device category 3D	for use in hazardous areas with non-conducting combustible dust
Directive conformity	94/9/EG
Standard conformity	EN 50281-1-1
	Protection via housing
	Use is restricted to the following stated conditions
CE symbol	
Ex-identification	 II 3D IP67 T 87 °C (188.6 °F) X
General	The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The data stated in the data sheet are restricted by this operating instruction! The special conditions must be adhered to!
Installation, Commissioning	Laws and/or regulations and standards governing the use or intended usage goal must be observed.
Maintenance	No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.
Special conditions	
Maximum operating current I_L	The maximum permissible load current must be restricted to the values given in the following list. High load currents and load short-circuits are not permitted.
Maximum operating voltage U_{Bmax}	The maximum permissible operating voltage U_{Bmax} must be restricted to the values given in the following list. Tolerances are not permitted.
Maximum heating (Temperature rise)	dependant of the load current I_L and the max. operating voltage U_{Bmax} . Information can be taken from the following list. The maximum surface temperature at maximum ambient temperature is given in the Ex identification of the apparatus.
at $U_{Bmax}=60$ V, $I_L=200$ mA	17 K
at $U_{Bmax}=60$ V, $I_L=100$ mA	14 K
at $U_{Bmax}=30$ V, $I_L=200$ mA	13 K
at $U_{Bmax}=30$ V, $I_L=100$ mA	11 K
Plug connector	The plug connector must not be disconnected under voltage. The proximity switch is marked as follows: "DO NOT DISCONNECT UNDER VOLTAGE!" When the plug connector is disconnected the ingress of dirt into the inner areas (i.e. the areas, which are not accessible in the plugged-in condition) must be prevented. The plug connection can only be separated using a tool. This is achieved by using the locking protection V1-Clip (Mounting accessory from Pepperl + Fuchs).
Protection from mechanical danger	The sensor must not be mechanically damaged.
Electrostatic charging	Electrostatic charges must be avoided on the mechanical housing components. Dangerous electrostatic charges on the mechanical housing components can be avoided by incorporating these in the equipotential bonding.