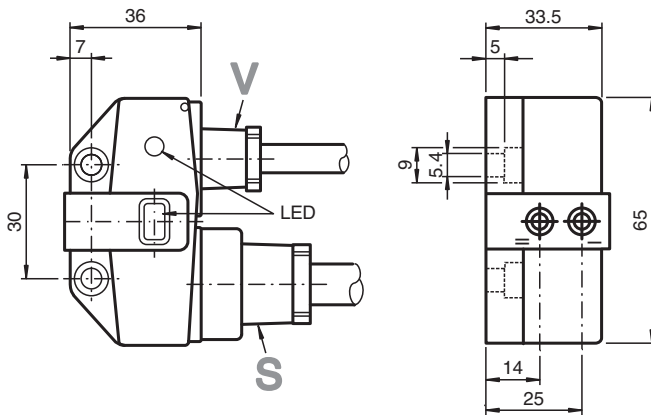


Inductive sensor NBN3-F31-Z8-K-K

- Direct mounting on standard actuators
- Fixed setting
- LEDs for switching state of sensor and solenoid valve



Dimensions



Technical Data

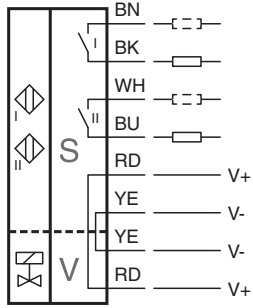
General specifications		
Switching function		2 x normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	3 mm
Installation		flush mountable
Output polarity		DC
Assured operating distance	s_a	0 ... 2.43 mm
Actual operating distance	s_r	2.7 ... 3.3 mm typ. 3 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		1
Reduction factor r_{St37}		1.1
Output type		4-wire
Nominal ratings		
Operating voltage	U_B	6 ... 60 V DC
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %

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Technical Data

Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5.5 V
Operating current	I_L	4 ... 100 mA
Lowest operating current	I_m	4 mA
Off-state current	I_r	0.5 ... 0.9 mA typ. 0.65 mA
Time delay before availability	t_v	≤ 40 ms
Switching state indicator		LED, yellow
Limit data		
Tightening torque, fastening screws		0.4 Nm
Functional safety related parameters		
MTTF _d		570 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Valve circuit		
Voltage		max. 32 V DC
Current		max. 240 mA
Short-circuit protection		no
Reverse polarity protection		yes, with reversed output LED is out of function, therefore more power for solenoid valve
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 60 V DC Output Switching Current: 100 mA
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection (system side)		PVC cable 5 m
Core cross section (system side)		0.75 mm ²
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Mass		642 g
Tightening torque, fastening screws		≤ 5 Nm
Dimensions		
Height		33.5 mm
Width		65 mm
Length		36 mm

Connection



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