



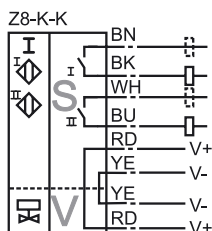
Model Number

NBN3-F31-Z8-K-K

Features

- Direct mounting on standard actuators
- Compact and stable housing
- Fixed setting
- Satisfies machinery directive

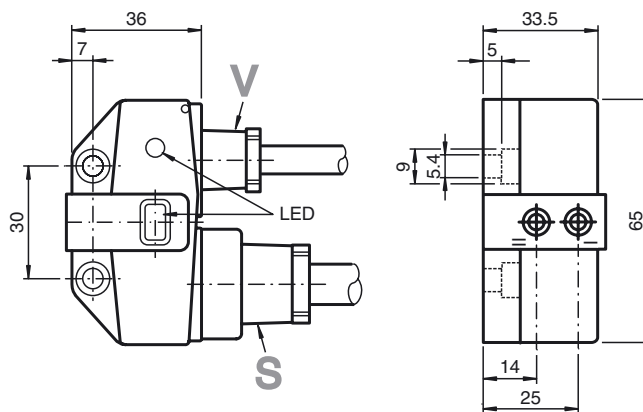
Connection



Accessories

- BT65A**
Activator for F31 series
- BT65X**
Activator for F31 series
- BT115A**
Activator for F31 series
- BT115X**
Activator for F31 series
- BT65B**
Activator for F31 series
- BT115B**
Activator for F31 series

Dimensions



Technical Data

General specifications

Switching element function	Dual (NO)
Rated operating distance	s_n 3 mm
Installation	embeddable mountable
Output polarity	DC
Assured operating distance	s_a 0 ... 2.43 mm
Reduction factor r_{AI}	0.5
Reduction factor r_{Cu}	0.4
Reduction factor r_{304}	1
Reduction factor r_{Si37}	1.1

Nominal ratings

Operating voltage	U_B 6 ... 60 V DC
Switching frequency	f 0 ... 500 Hz
Hysteresis	H typ. 5 %
Reverse polarity protected	tolerant
Short-circuit protection	no
Voltage drop	U_d \leq 6 V
Operating current	I_L 4 ... 100 mA
Lowest operating current	I_m 4 mA
Off-state current	I_r 0 ... 1 mA typ. 0.7 mA
Indication of the switching state	LED, yellow

Limit data

Tightening torque, fastening screws	0.4 Nm
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Functional safety related parameters

MTTF _d	590 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection (system side)	PVC cable 5 m
Core cross-section (system side)	0.75 mm ²
Connection (valve side)	PVC cable 0.5 m
Core cross-section (valve side)	0.75 mm ²
Housing material	PBT
Sensing face	PBT
Protection degree	IP67

Compliance with standards and directives

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

Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

Release date: 2012-02-27 13:53 Date of issue: 2012-02-27 086530_eng.xml