



Model Number

NBN3-F31-E8-V18

Features

- Direct mounting on standard actuators
- Fixed setting

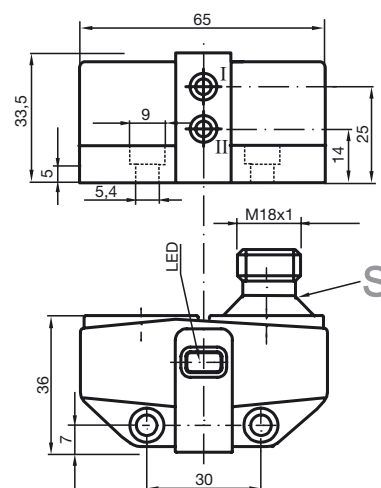
Accessories

- 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
- V18-G**
Cable socket in M18 format, ready for make up
- V18-W**
Cable socket in M18 format, ready for make up

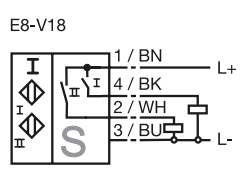
Technical Data

General specifications	
Switching function	2 x normally open (NO)
Output type	PNP
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.
Reduction factor r_{AI}	0.5
Reduction factor r_{Cu}	0.4
Reduction factor r_{304}	1
Reduction factor r_{S137}	1.2
Output type	3-wire
Nominal ratings	
Operating voltage	U_B 10 ... 30 V DC
Switching frequency	f 0 ... 500 Hz
Hysteresis	H typ. 5 %
Reverse polarity protection	all connections
Short-circuit protection	pulsing
Voltage drop	U_d \leq 3 V
Operating current	I_L 0 ... 100 mA
Off-state current	I_r 0 ... 0.1 mA typ. 20 μ A at 25 °C
No-load supply current	I_o \leq 25 mA
Operating voltage indicator	LED, green
Switching state indicator	LED, yellow
Functional safety related parameters	
MTTF _d	780 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	Connector plug M18 x 1, 4-pin
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Compliance with standards and directives	
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
Approvals and certificates	
EAC conformity	TR CU 020/2011
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated \leq 36 V

Dimensions

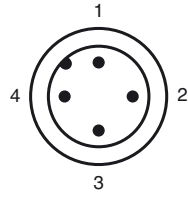


Electrical Connection



Release date: 2019-04-23 08:02 Date of issue: 2019-04-23 048259_eng.xml

Pinout



Wire colors in accordance with EN 60947-5-2

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