



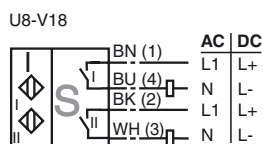
Model Number

NBN3-F31-U8-V18

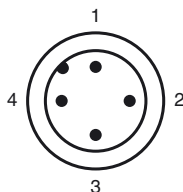
Features

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

Connection



Pinout



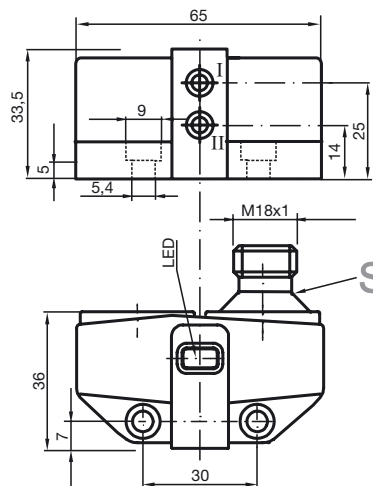
Wire colors in accordance with EN 60947-5-2

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

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

Dimensions



Technical Data

General specifications	
Switching element function	AC/DC binary NO
Rated operating distance	s_n 3 mm
Installation	flush mountable
Output polarity	AC/DC
Assured operating distance	s_a 0 ... 2.43 mm
Reduction factor r_{Al}	0.45
Reduction factor r_{Cu}	0.38
Reduction factor r_{304}	1
Reduction factor r_{Si37}	1.04
Nominal ratings	
Operating voltage	U_B 20 ... 253 V AC/DC
Switching frequency	f 25 Hz
Hysteresis	H typ. 3 %
Reverse polarity protection	yes
Short-circuit protection	yes
Voltage drop	U_d \leq 8 V
Operating current	I_L 4 ... 400 mA
Off-state current	I_r \leq 1.7 mA
Operating voltage display	LED, green
Switching state indication	LED, yellow
Functional safety related parameters	
MTTF _d	529 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	Device connector M18 x 1 , 4-pin
Housing material	PBT
Sensing face	PBT
Protection degree	IP67
Compliance with standards and directives	
Standard conformity	EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates	
Protection class	II
Rated insulation voltage	U_i 253 V
Design-impulse-voltage withstand	U_{imp} 4 kV
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

Release date: 2013-02-12 14:28 Date of issue: 2013-02-12 199144_eng.xml