



Model Number

NBN3-F31-E8-V16-V15

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

V16-G

Female connector, dia. 24, 6-pin+PE, field attachable

V16-W

Female connector, dia. 24, 6-pin+PE, field attachable

V15S-G

Cable connector, M12, 5-pin, ready for assembly

V15S-W

Cable connector, M12, 5-pin, ready for assembly

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
Reduction factor r_{AI}	0.5
Reduction factor r_{304}	1
Reduction factor r_{St37}	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 ≤ 3 V
Operating current	I_L 0 ... 100 mA
Off-state current	I_r 0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0 ≤ 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 %

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

Ambient conditions

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

Connection (system side)	Connector plug Rd24 x 1/8, 4-pin
Connection (valve side)	5-pin, M12 x 1 socket
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67

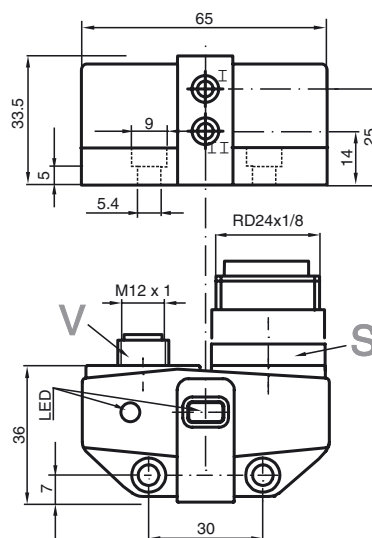
Compliance with standards and directives

Standard conformity	EN 60947-5-2:2007
Standards	EN 60947-5-2/A1:2012
	IEC 60947-5-2:2007
	IEC 60947-5-2 AMD 1:2012

Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

Dimensions





Electrical Connection

