Model Number

NBN3-F25F-E8-V1

Features

- **For installation in housing**
- **Direct mounting on standard actuators**

Accessories

BT32
Activator for F25 series

BT32XS
Activator for F25 series

BT32XAS
Activator for F25 series

BT33
Activator for F25 series

BT34
Activator for F25 series

V1-G
Female connector, M12, 4-pin, field attachable

V1-W
Female connector, M12, 4-pin, field attachable

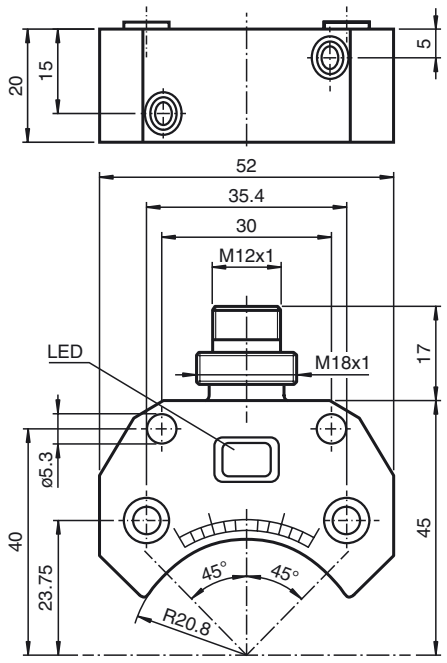
V1-W-2M-PUR
Female cordset, M12, 4-pin, PUR cable

V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

Technical Data

General specifications		
Switching element function		PNP Dual NO
Rated operating distance	s_n	3 mm
Installation		flush mountable
Output polarity		DC
Assured operating distance	s_a	0 ... 2.3 mm
Actual operating distance	s_r	2.6 ... 2.6 mm typ.
Reduction factor r_{Al}		0.5
Reduction factor r_{304}		1
Reduction factor r_{St37}		1.1
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 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 µA at 25 °C
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	≤ 500 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		870 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Tightening torque, fastening screws		M5 x 25 : 2.7 Nm
Note		Installation in housing
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		CCC approval / marking not required for products rated ≤36 V

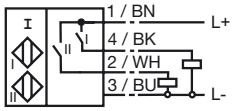
Dimensions



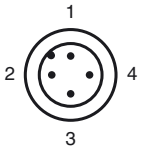
Release date: 2016-02-11 17:19 Date of issue: 2016-02-11 038141_eng.xml

Electrical Connection

E8



Pinout



Wire colors in accordance with EN 60947-5-2

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

Release date: 2016-02-11 17:19 Date of issue: 2016-02-11 038141_eng.xml

Refer to “General Notes Relating to Pepperl+Fuchs Product Information”.
Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776 4411 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
PEPPERL+FUCHS SENSING YOUR NEEDS