



### Model Number

**NBN3-F25F-E8-V1-3D**

## 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 ... 2.3 mm
Actual operating distance	$s_r$	2.6 ... 2.6 mm typ.
Reduction factor $r_{A1}$		0.5
Reduction factor $r_{304}$		1
Reduction factor $r_{Si37}$		1.1
Output type		3-wire

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
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
<b>Design data</b>		
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 25$ mA
Time delay before availability	$t_v$	$\leq 500$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	Connector plug M12 x 1, 4-pin
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Note	Installation in housing

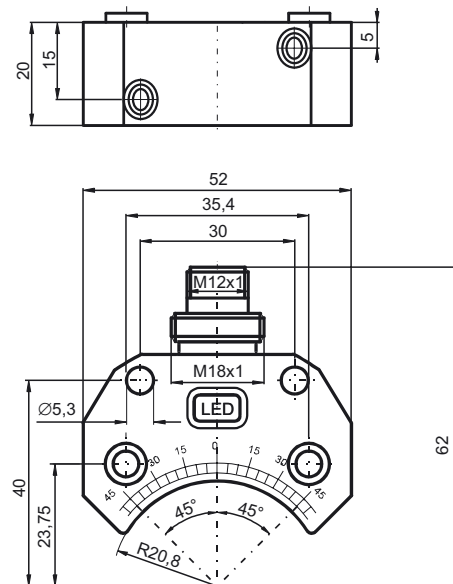
### General information

Use in the hazardous area	see instruction manuals
Category	3D

### Compliance with standards and directives

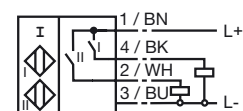
Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

## Dimensions



## Electrical Connection

E8



### Equipment protection level Dc

CE marking	CE
ATEX marking	II 3D IP67 T 124 °C (255.2 °F) X
Directive conformity	94/9/EG
Standards	EN 50281-1-1 Protection via housing Use is restricted to the following stated conditions
<b>Special conditions</b>	
Maximum heating (Temperature rise)	dependant of the load current $I_L$ and the max. operating voltage $U_{Bmax}$ Information can be taken from the following list. The maximum surface temperature at maximum ambient temperature is given in the Ex identification of the apparatus.
at $U_{Bmax}=30$ V, $I_L=200$ mA	54 K
at $U_{Bmax}=30$ V, $I_L=100$ mA	41 K
at $U_{Bmax}=30$ V, $I_L=50$ mA	37 K
at $U_{Bmax}=30$ V, $I_L=25$ mA	34 K

Release date: 2018-02-18 14:25 Date of issue: 2018-02-28 129859\_eng.xml