



Model Number

NBB5-18GM80-WO-V93

Features

- 5 mm flush
- 2-wire AC

Accessories

BF 18

Mounting flange, 18 mm

EXG-18

Quick mounting bracket with dead stop

Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		AC
Assured operating distance	s_a	0 ... 4.05 mm
Actual operating distance	s_r	4.5 ... 5.5 mm typ. 5 mm
Reduction factor r_{AI}		0.2
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.6
Output type		2-wire

Nominal ratings

Operating voltage	U_B	20 ... 253 V
Switching frequency	f	0 ... 20 Hz
Hysteresis	H	typ. 6 %
Reverse polarity protection		reverse polarity tolerant
Voltage drop	U_d	< 5 V ($I_L > 50$ mA); < 8 V ($I_L < 50$ mA)
Momentary current (20 ms, 0.1 Hz)		0 ... 1600 mA
Operating current	I_L	5 ... 200 mA
Off-state current	I_r	0 ... 1.7 mA typ.
Time delay before availability	t_v	≤ 30 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	1135 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 7/8 inch-16 UN , 3-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Note	¹⁾ In the temperature range below 0 °C, permissible operating voltage U_b 80...253 V Safety fuse ≤ 0.8 A (quick-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

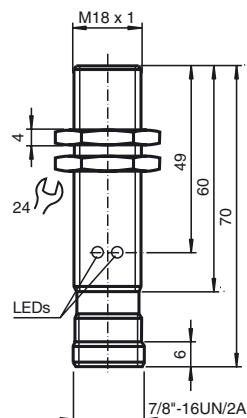
Compliance with standards and directives

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

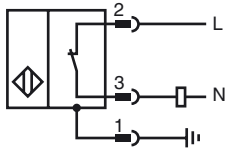
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

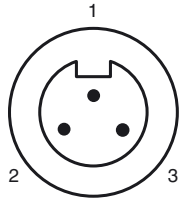
Dimensions



Electrical Connection



Pinout



Wire colors

1	GN	(green)
2	BK	(black)
3	WH	(white)