



Model Number

NBB8-18GM50-E2-M-150MM-3DT04

Mobile Equipment Series

Features

- 8 mm flush
- Increased operating distance
- Extended temperature range - 40 ... +85 °C
- 3-pin Deutsch connector (DT04)
- 100 V/m radiated field immunity
- E1-Type approval

Technical Data

General specifications

Switching element function		PNP	NO
Rated operating distance	s_n	8 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 6.48 mm	
Reduction factor r_{Al}		0.45	
Reduction factor r_{Cu}		0.4	
Reduction factor r_{304}		0.7	

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 400 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		yes
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 μ A at 25 °C
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		LED : yellow output

Functional safety related parameters

MTTF _d	1630 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)
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Mechanical specifications

Connection type	Cable connector Deutsch DT04 , 3-pin with PUR cable 150 mm
Core cross-section	0.75 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP68 / IP69K
Note	X = 150 mm

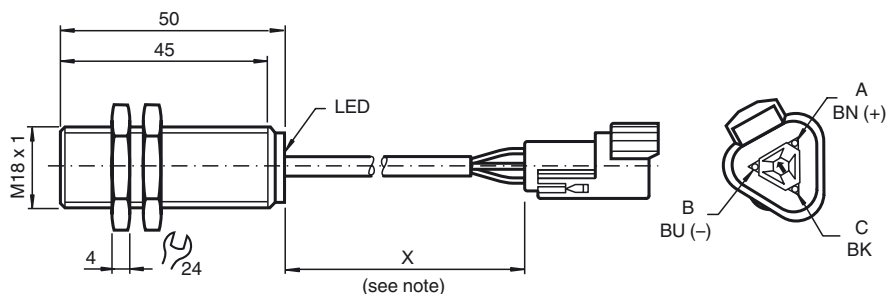
Compliance with standards and directives

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

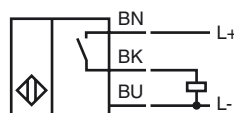
Approvals and certificates

UL approval	cULus Listed, General Purpose
E1 Type approval	10R-04

Dimensions



Electrical Connection



Wire colors

A	BN
B	BU
C	BK

Installation Hint

Emitted interference and interference immunity in accordance with motor vehicle directive 2006/28/EG (e1 Type approval)
 Interference immunity in accordance with DIN ISO 11452-2: 100 V/m
 Frequency band 20 MHz up to 2 GHz

Mains-borne interference in accordance with ISO 7637-2: Pulse

	1	2a	2b	3a	3b	4	5
Severity level	III	III	III	III	III	III	IV
Failure criterion	C	A	C	A	A	A	C

EN 61000-4-2:	CD: 4 kV / AD: 8 kV
Severity level	II III
EN 61000-4-3:	30 V/m (80...2500 MHz)
Severity level	IV
EN 61000-4-4:	2 kV
Severity level	III
EN 61000-4-6:	10 V (0.01...80 MHz)
Severity level	III
EN 55011:	Class A