



Inductive sensor

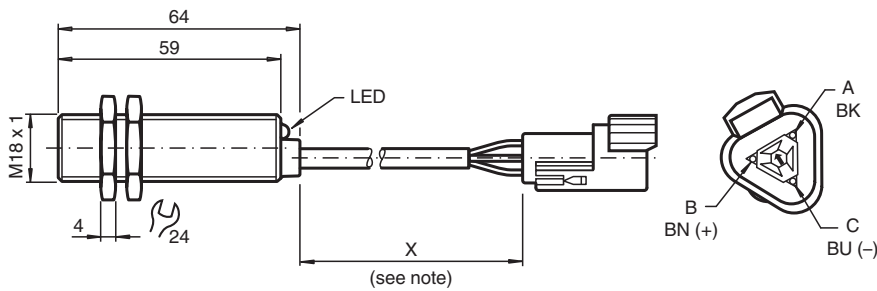
NBB8-18GM60-E2-M-340MM-3DT04-Y

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

Mobile Equipment Series



Dimensions



Technical Data

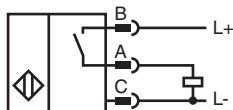
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Output type		3-wire
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

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Technical Data

Voltage drop	U_d	$\leq 3 \text{ V}$
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	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 20 \text{ ms}$
Switching state indicator		LED : yellow Output
Functional safety related parameters		
MTTF _d		1630 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP68 / IP69K
Connector		
Number of pins		3
Connection assembly		Deutsch connector DT04-3P-CE02 Deutsch wedge W3P Deutsch contact 1060-16-0622
Cable		
Cable diameter		6 mm \pm 0.2 mm
Bending radius		> 6 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.75 mm ²
Length	L	340 mm
Dimensions		
Length		65 mm
Diameter		18 mm
Note		X = 340 mm

Connection



Safety Information

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	3 a	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