



Model Number

NBB4-12GM40-E0

Features

- 4 mm flush
- Increased operating distance
- Extended temperature range

Accessories

EXG-12

Quick mounting bracket with dead stop

Technical Data

General specifications

Switching element function		NPN	NO
Rated operating distance	s_n	4 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 3.24 mm	
Reduction factor r_{Al}		0.39	
Reduction factor r_{Cu}		0.35	
Reduction factor r_{304}		0.75	
Reduction factor r_{Brass}		0.49	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
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 μ A at 25 °C
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 5 ms
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	3220 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

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

Mechanical specifications

Connection type	cable PVC, 2 m
Core cross-section	0.34 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

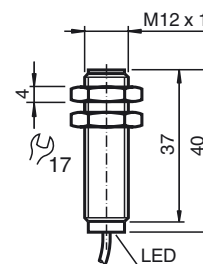
Compliance with standards and directives

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



Electrical Connection

