



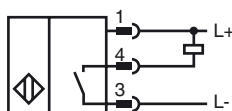
Model Number

NBB4-12GM30-E0-V1

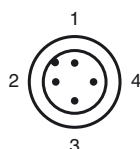
Features

- 4 mm embeddable
- Increased operating distance

Connection



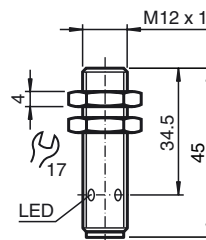
Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Dimensions



Technical Data

General specifications

Switching element function		NPN normally open
Rated operating distance	s_n	4 mm
Installation		embeddable
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Actuating element		structural steel, e. g. 1.0037, SR235JR (formerly St37-2) 12 mm x 12 mm x 1 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.6

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 400 Hz
Hysteresis	H	typ. 5%
Reverse polarity protected		yes
Short-circuit protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Voltage drop	U_d	≤ 2.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0.01 mA
No-load supply current	I_0	≤ 7 mA
Indication of the switching state		LED, yellow

Ambient conditions

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

Mechanical specifications

Connection type	Device connector M12 x 1, 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67
Mass	13 g

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	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.