



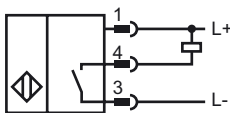
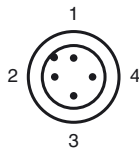
CE

**Model Number**

NBB20-L1-E0-V1

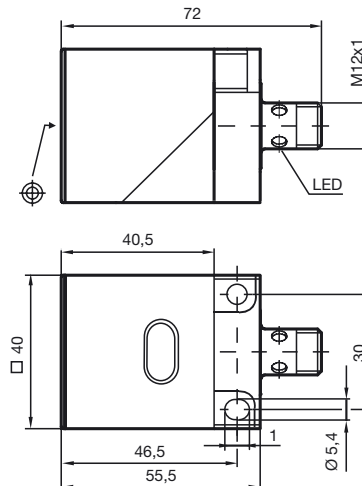
**Features**

- Basic series
- 20 mm embeddable

**Connection****Pinout**

Wire colors in accordance with EN 60947-5-2

1	BN
2	WH
3	BU
4	BK

**Dimensions****Technical Data****General specifications**

Switching element function	NPN Make function	
Rated operating distance	$s_n$	20 mm
Installation	embeddable	
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 16.2 mm
Reduction factor $r_{Al}$	0.4	
Reduction factor $r_{Cu}$	0.35	
Reduction factor $r_{V2A}$	0.85	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 150 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection	protected against reverse polarity	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 20$ mA
Indication of the switching state	Multihole-LED, yellow	

**Standard conformity**

Standards	IEC / EN 60947-5-2:2004
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**Ambient conditions**

Ambient temperature	-25 ... 70 °C (248 ... 343 K)
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**Mechanical specifications**

Connection type	V1-connector
Housing material	PBT
Sensing face	PBT
Protection degree	IP67