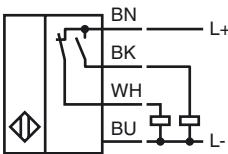
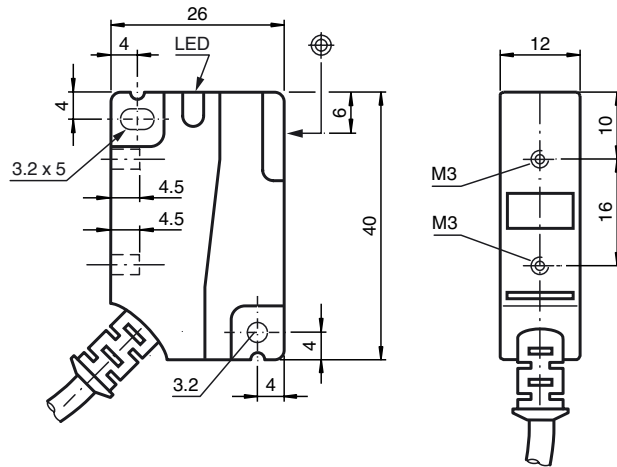


**Model Number**

NBB4-F1-A2 5M

Features

- 4 mm flush
- 4-wire DC

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

Switching element function	PNP	NO/NC
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}	0.3	
Reduction factor r_{Cu}	0.2	
Reduction factor r_{304}	0.7	
Reduction factor r_{Brass}	0.55	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1400 Hz
Hysteresis	H	typ. 5%
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	U_d	≤ 2.5 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 250 mA
Off-state current	I_r	< 0.5 mA
No-load supply current	I_0	≤ 15 mA
Indication of the switching state	LED, yellow	

Functional safety related parameters

MTTF _d	1640 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Standard conformity

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

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type	cable PVC , 5 m
Core cross-section	0.5 mm ²
Housing material	PA, green
Sensing face	PA
Protection degree	IP67
Tightening torque, fastening screws	Threading M3 max: 1.1 Nm

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.