



Model Number

NCN20-F35-A2-250-20M-V1

Features

- **Comfort series**
- **20 mm flush mountable**
- **Extended temperature range of sensor component**
0 ... 250 °C (0 ... 482 °F)
- **20 m cable between sensor and amplifier with metal case**
- **Suitable for drag chains**
- **Minimum bending radius of 30 cm for movable laying**

Technical Data

General specifications

Switching element function		PNP	NO/NC
Rated operating distance	s_n	20 mm	
Installation		flush mountable	
Output polarity		DC	
Assured operating distance	s_a	0 ... 16.2 mm	
Reduction factor r_{Al}		0.5	
Reduction factor r_{Cu}		0.5	
Reduction factor r_{304}		0.6 ... 1	
Mounting angle		Al	
Amplifier housing		Stainless steel	

Nominal ratings

Operating voltage	U_B	10 ... 30 V	
Switching frequency	f	0 ... 20 Hz	
Hysteresis	H	0.3 ... 5 typ. 2 %	
Reverse polarity protection		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	U_d	≤ 3 V	
Operating current	I_L	0 ... 200 mA	
No-load supply current	I_0	≤ 25 mA	
Time delay before availability	t_v	≤ 20 ms	
Switching state indicator		Multihole-LED, yellow	

Functional safety related parameters

MTTF _d	7515 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	0 ... 250 °C (32 ... 482 °F)
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Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Cable version	PFA cable, with armour of stainless steel
Core cross-section	3 x 0.34, screened
Housing material	PTFE / Al / 1.4305 / AISI 303
Sensing face	PTFE
Degree of protection	amplifier IP67 sensor IP40
Cable length	L = 20 m
Note	- amplifier 0 °C ... 70 °C - $r_{1.4305}$ dep. on thickness of measurement plate d: $r_{1.4305} = 1$ for $d < 1$ mm Additional accessory: Protective cover SH-F35 is available for use in areas where there is moisture and as a means of mechanical protection.

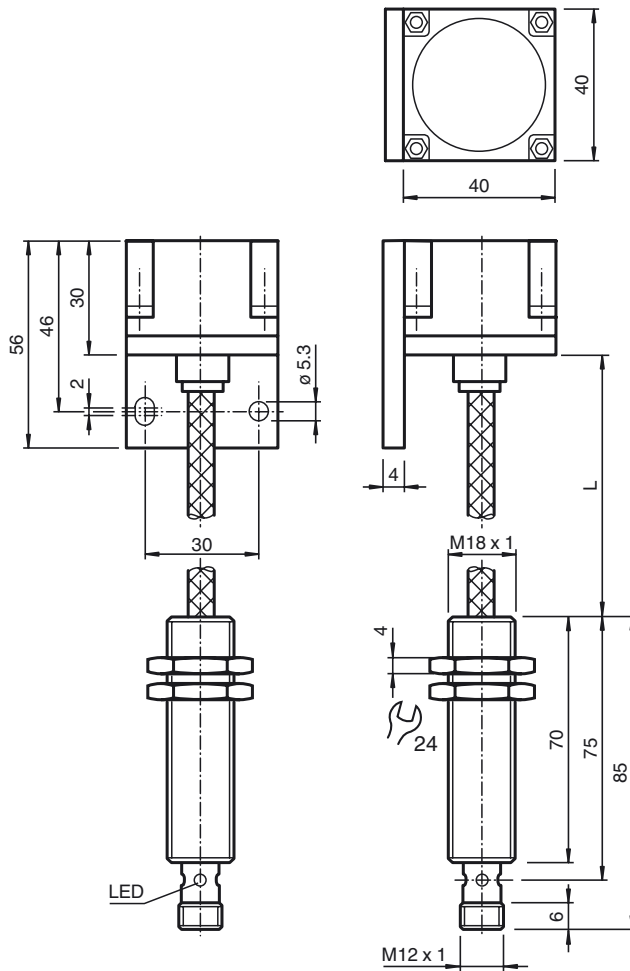
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

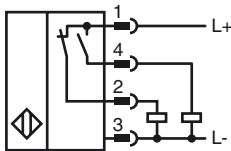
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

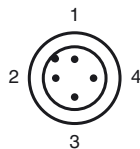
Dimensions



Electrical Connection



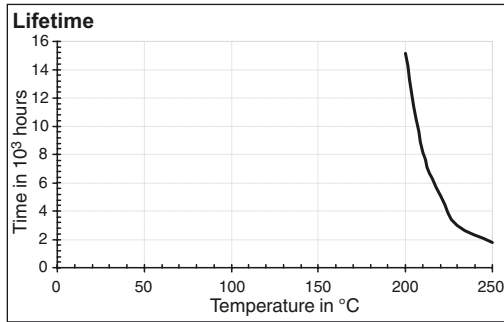
Pinout



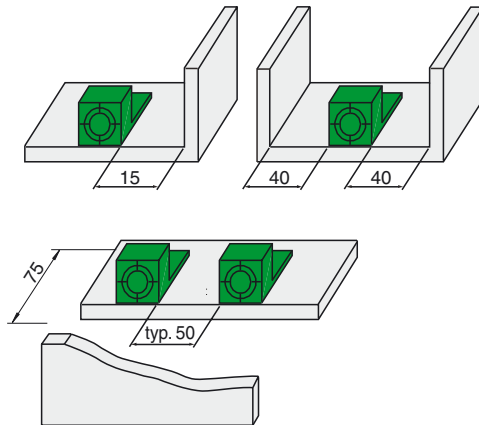
Wire colors in accordance with EN 60947-5-2

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

Additional Information



Installation:



Accessories:

Protective Cover SH-F35

