



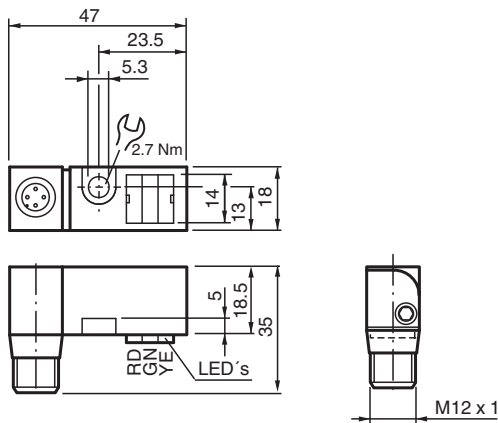
## Inductive power clamp sensor NBxx-F58A1x3-E8-V1

- Technical data are only valid if satellite unit is connected
- Completely halogen and silicon free
- M12 plug with safety screw assembly adjustable in 45° grid
- Orientation of the coding of the connector plug to position 1
- Extremely bright triple luminous band indication
- For use in direct- and alternating-field welding systems

Amplifier unit



### Dimensions



### Technical Data

#### General specifications

Switching function	2 x normally open (NO)	
Output type	PNP	
Output polarity	DC	
Output type	4-wire	

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 1500 Hz
Reverse polarity protection	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 3$ V
Rated insulation voltage	$U_{BIS}$	60 V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_o$	$\leq 16$ mA
Constant magnetic field	$B$	300 mT
Alternating magnetic field	$B$	300 mT
Tuning-out	yes	

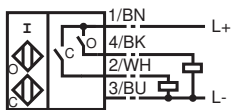
Release date: 2025-05-21 Date of issue: 2025-05-21 Filename: 70164253\_eng.pdf

## Technical Data

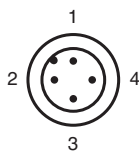
Operating voltage indicator	LED green
Switching state indicator	Switching state "closed" = LED red (S2) switching state "open" = LED yellow (S1)
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	950 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Compliance with standards and directives</b>	
Standard conformity	
Standards	EN IEC 60947-5-2
<b>Approvals and certificates</b>	
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>	
Ambient temperature	0 ... 50 °C (32 ... 122 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Pollution degree	2
<b>Mechanical specifications</b>	
Connection type	Connector plug
Housing material	PA66
Degree of protection	IP65
Connector	
Threading	M12 x 1
Number of pins	4
Mass	35 g
Dimensions	
Height	18.5 mm
Width	18 mm
Length	47 mm
<b>Note</b>	only for use with satellite unit NBN2-F58xx... family

## Connection

E8



## Connection Assignment



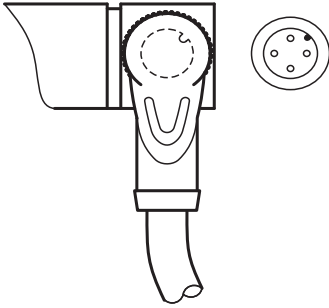
## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Assembly

### Orientation of the female cordset in angled design



## Additional Information

### Safety instructions

Laws and/or regulations and standards governing the use or intended usage goal must be observed.

No changes can be made to the device.  
Repairs are not possible.

Protection class II (protective isolation) is only reached under the stated mounting conditions.