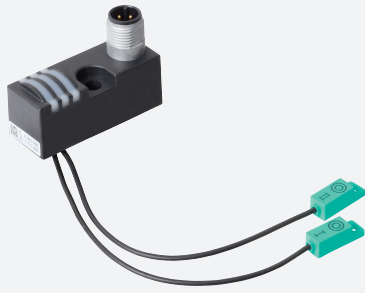


# Inductive power clamp sensor

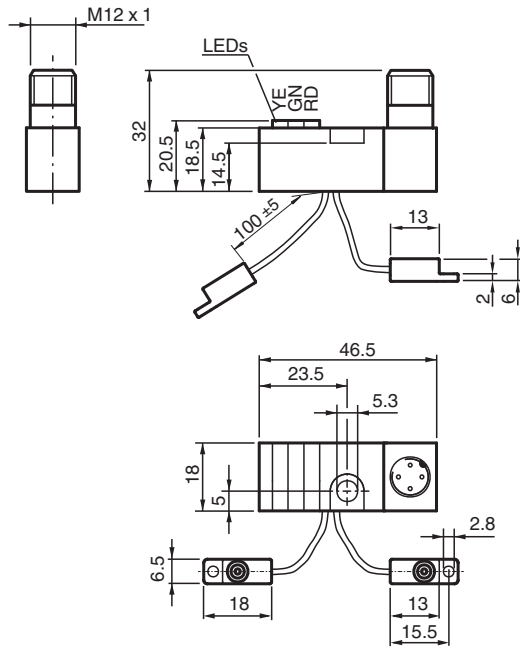
## NBN2-F58E-100S3-E8-V1



- Extremely bright triple luminous band indication
- For use in direct- and alternating-field welding systems
- Completely halogen and silicon free



### Dimensions



### Technical Data

#### General specifications

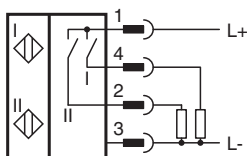
Switching function		2 x normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	2 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.35
Reduction factor $r_{304}$		0.75
Reduction factor $r_{Brass}$		0.45
Output type		4-wire

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## Technical Data

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	$I_0$	$\leq 26$ mA
Constant magnetic field	B	300 mT
Alternating magnetic field	B	300 mT
Tuning-out		yes
Operating voltage indicator		LED green
Switching state indicator		Switching state "closed" = LED red (S2) switching state "open" = LED yellow (S1)
Functional safety related parameters		
MTTF <sub>d</sub>		950 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
Ambient conditions		
Ambient temperature		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Pollution degree		2
Mechanical specifications		
Connection type		Connector plug
Flexible lead, housing-sensor		PUR (halogen-free)
Housing material		amplifier; PBT, PA6 + GD-ZN AL4 oscillators; PBT
Degree of protection		IP65
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Height		18 mm
Width		18 mm
Length		47 mm

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

## 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.