

**Model Number**

**NBN2-F58E-100S3-E8-V1**

**Features**

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

**Accessories**

- V1-G-OR2M-POC**  
Female cordset, M12, 4-pin, TPE cable, welding-bead resistant
- V1-G-2M-PUR-H/S**  
Female cordset, M12, 4-pin, irradiated PUR cable
- V1-W-2M-PUR-H/S**  
Female cordset, M12, 4-pin, irradiated PUR cable

**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 $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.35
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.45
Output type		4-wire

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 100 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	$I_0$	$\leq 15$ mA
Constant magnetic field	$B$	100 mT
Alternating magnetic field	$B$	100 mT
Tuning-out		typically 1 s
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>	1445 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

Ambient temperature	-25 ... 50 °C (-13 ... 122 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

**Mechanical specifications**

Connection type	Connector plug M12 x 1, 4-pin
Flexible lead, housing-sensor	PUR (halogen-free)
Housing material	amplifier: PBT, PA6 + GD-ZN AL4 oscillators: PBT
Degree of protection	IP65
Protection class	II

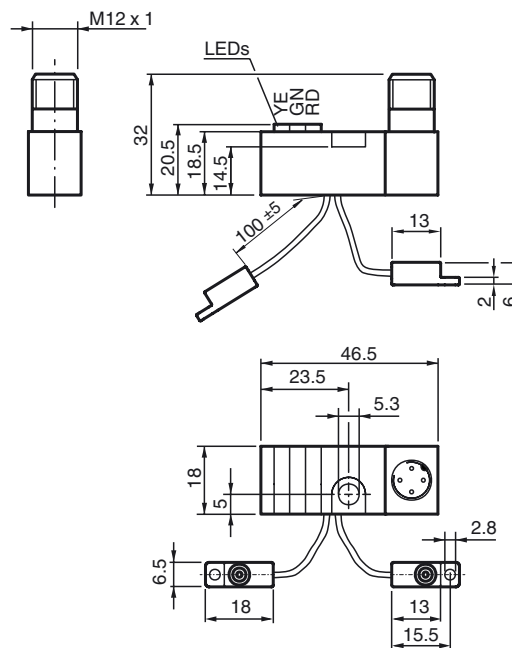
**Compliance with standards and directives**

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

**Approvals and certificates**

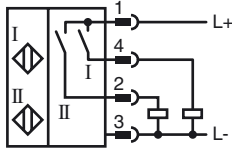
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

**Dimensions**



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**Electrical Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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

**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.

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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