



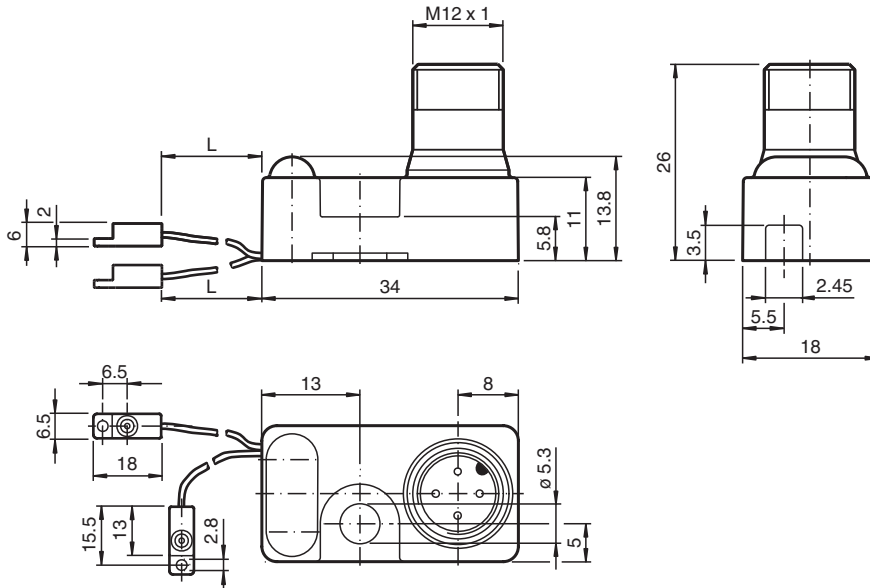
Inductive power clamp sensor

NBN2-F58S-100S3-E8-V1

- Completely halogen and silicon free
- For use in direct- and alternating-field welding systems



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}		0.45
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.75
Output type		4-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 100 Hz

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

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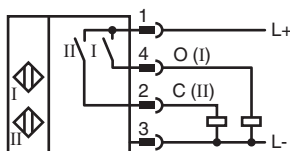
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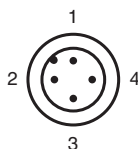
Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3\text{ V}$
Operating current	I_L	0 ... 100 mA
No-load supply current	I_0	$\leq 15\text{ mA}$
Constant magnetic field	B	100 mT
Alternating magnetic field	B	100 mT
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 _d		1402 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
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
Ambient conditions		
Ambient temperature		0 ... 50 °C (32 ... 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		100 mm , PUR (halogen-free)
Housing material		Amplifier: PA66 Badamid, Oscillators: PBT
Degree of protection		IP65
Dimensions		
Height		13.8 mm
Width		18 mm
Length		34 mm

Connection



Connection Assignment



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Connection Assignment

Wire colors in accordance with EN 60947-5-2

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