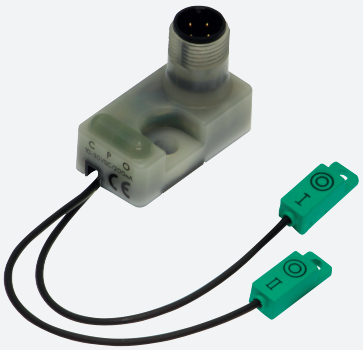
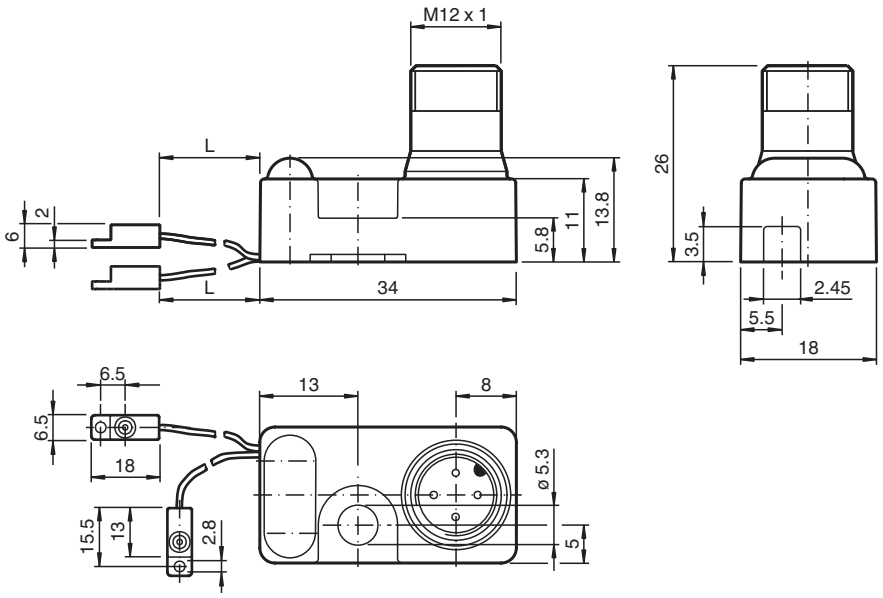


Inductive power clamp sensor

NBN2-F58S-50S3-E8-V1

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

Dimensions



Technical Data

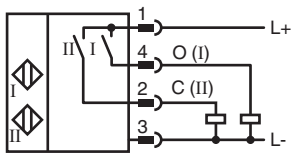
General specifications		
Switching function		2 x normally open (NO)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.75
Reduction factor r_{Brass}		0.45
Output type		4-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V

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Technical Data

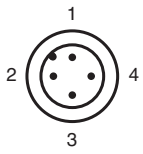
Switching frequency	f	0 ... 1500 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 µA at 25 °C
No-load supply current	I_0	≤ 16 mA
Constant magnetic field	B	300 mT
Alternating magnetic field	B	300 mT
Operating voltage indicator		LED green
Switching state indicator		Switching state "closed" = LED red (S2) switching state "open" = LED yellow (S1)
Safety-relevant product characteristics		
$MTTF_d$		950 a
Mission Time (T_M)		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 Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 100 mA
CCC approval		CCC approval / marking not required for products rated ≤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		50 mm , PUR (halogen-free)
Housing material		Amplifier: PA66 Badamid, Oscillators: PBT
Degree of protection		IP65
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Height		18 mm
Width		18 mm
Length		34 mm

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)

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