

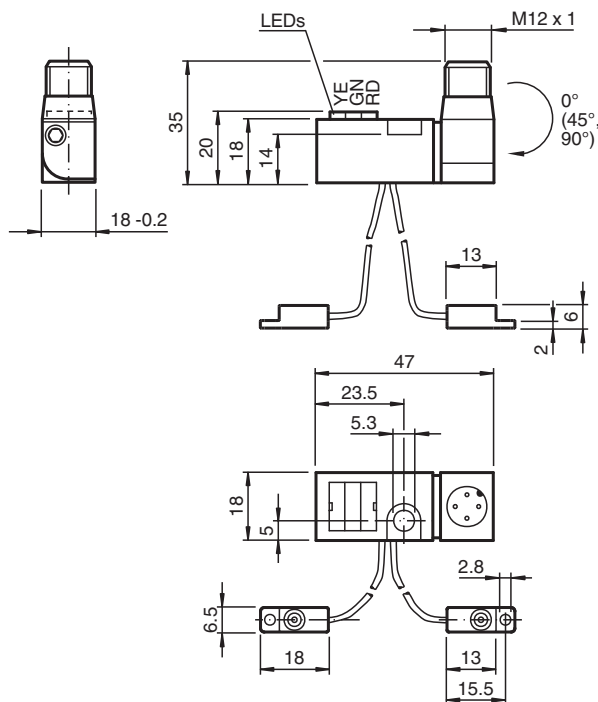
Inductive power clamp sensor

NBN2-F581-80S3-E8-V1

- Extremely bright triple luminous band indication
- M12 plug with safety screw assembly adjustable in 45° grid
- 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_{AI}	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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PEPPERL+FUCHS

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
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 _d	1445 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, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36\text{ V}$

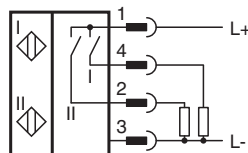
Ambient conditions

Ambient temperature	0 ... 50 °C (32 ... 122 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

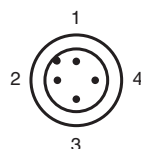
Mechanical specifications

Connection type	Connector plug M12 x 1 , 4-pin
Flexible lead, housing-sensor	80 mm , PUR (halogen-free) ; Outlet position - 1
Housing material	amplifier; PBT, PA6 + GD-ZN AL4 oscillators; PBT
Degree of protection	IP65
Dimensions	
Height	18 mm
Width	18 mm
Length	47 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)

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