

Model Number

NBN2-F581-100S6-E8-V1

Features

- 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

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_{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 DC
Switching frequency	f	0 ... 25 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	≤ 10 μA
No-load supply current	I_0	≤ 15 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	1445 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °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 ± 5) mm, PUR (halogen-free)
Housing material	amplifier; PBT, PA6 + GD-ZN AL4 oscillators; PBT
Degree of protection	IP65

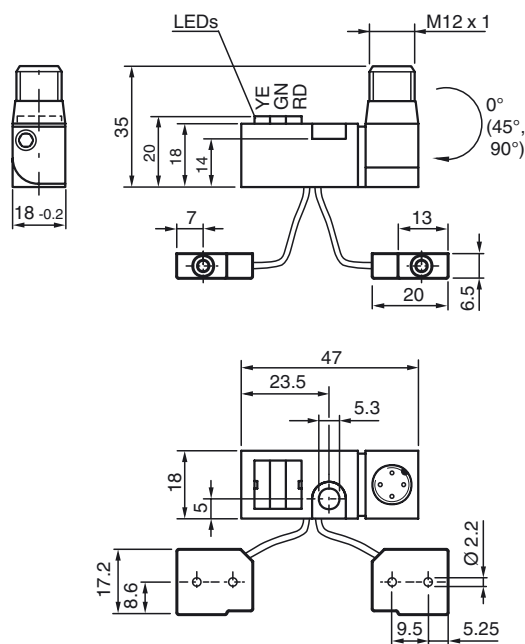
Compliance with standards and directives

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

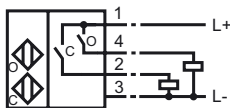
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V

Dimensions

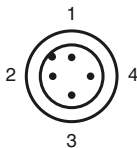




Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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