



Model Number

NBN2-F581-120S6-E8-V1

Features

- Extremely bright triple luminous band indication
- M12 plug can be rotated 0°, 45°, or 90°
- 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 element function	PNP	Dual NO
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

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 μ A
No-load supply current	I_0	≤ 15 mA
Constant magnetic field	B	100 mT
Alternating magnetic field	B	100 mT

Functional safety related parameters

MTTF _d	1445 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED POWER	LED, green
Switching state	"Closed" = LED red (S02)/C "Open" = LED yellow (S01)/O

Standard conformity

EMC in accordance with Standards	IEC / EN 60947-5-2:2004 IEC / EN 60947-5-2:2004
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Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Flexible lead, housing-sensor	(120 ± 5) mm, PUR (halogen-free)
Housing material	amplifier; PBT, PA6 + GD-ZN AL4 oscillators; PBT

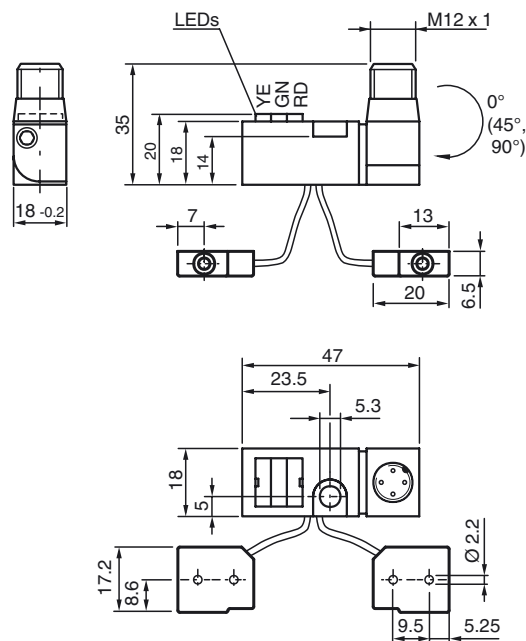
Protection degree

Protection degree	IP65
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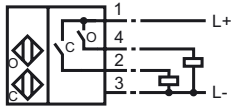
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus 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)