



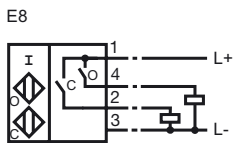
Model Number

NBN2-F581-80S3-E8-V1

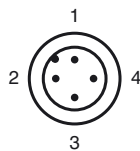
Features

- 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

Connection



Pinout



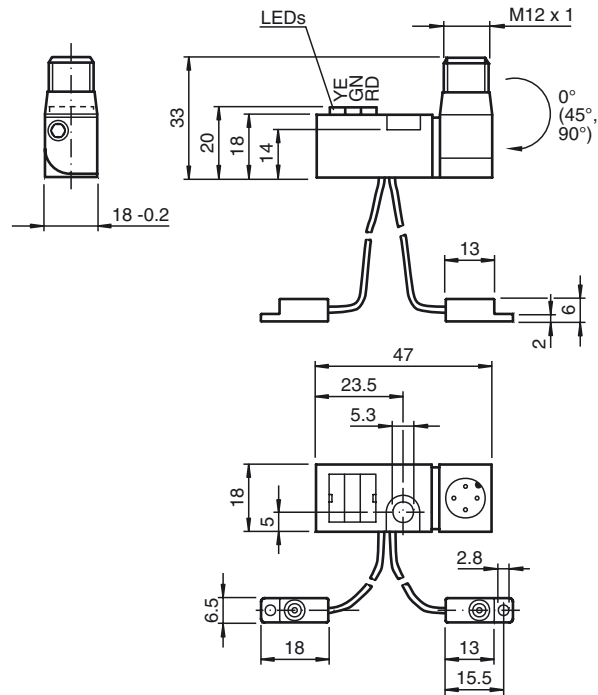
Wire colors in accordance with EN 60947-5-2

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

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

Dimensions



Technical Data

General specifications			
Switching element function		PNP	Dual NO
Rated operating distance	s_n	2 mm	
Installation		not embeddable	
Output polarity		switched high	
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	
Nominal ratings			
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 100 Hz	
Reverse polarity protected		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	U_d	≤ 3 V	
Operating current	I_L	0 ... 100 mA	
No-load supply current	I_o	≤ 15 mA	
Constant magnetic field	B	100 mT	
Alternating magnetic field	B	100 mT	
Tuning-out		typically 1 s	
Operating voltage display		LED green	
Indication of the switching state		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		0 ... 50 °C (32 ... 122 °F)	
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)	
Mechanical specifications			
Connection type		Device connector 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	
Protection degree		IP65	
Compliance with standards and directives			
Standard conformity			
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007	
Approvals and certificates			
UL approval		cULus Listed, General Purpose	
CSA approval		cCSAus Listed, General Purpose	
CCC approval		Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.	

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