



**Model Number**

**NBN2-F58D-140S6-E8-V1**

**Features**

- Extremely bright triple luminous band indication
- For use in direct- and alternating-field welding systems
- Completely halogen and silicon free

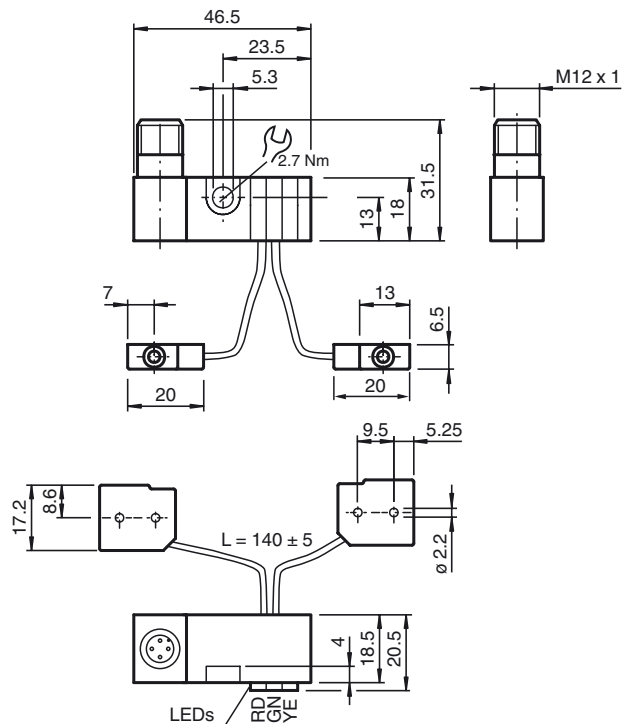
**Accessories**

- 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

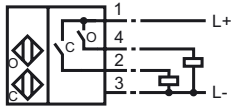
**Technical Data**

<b>General specifications</b>	
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 $r_{Al}$	0.35
Reduction factor $r_{Cu}$	0.35
Reduction factor $r_{304}$	0.7
Reduction factor $r_{Brass}$	0.45
Output type	4-wire
<b>Nominal ratings</b>	
Operating voltage	$U_B$ 10 ... 30 V DC
Switching frequency	$f$ 0 ... 100 Hz
Reverse polarity protection	reverse polarity protected
Short-circuit protection	pulsing
Voltage drop	$U_d$ $\leq$ 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 $\mu$ A at 25 °C
No-load supply current	$I_0$ $\leq$ 15 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)
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	1445 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 50 °C (-13 ... 122 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>	
Connection type	Connector plug M12 x 1, 4-pin
Flexible lead, housing-sensor	PUR (halogen-free)
Housing material	amplifier: PBT, PA6 + GD-ZN AL4 oscillators: PBT
Degree of protection	IP65
<b>Compliance with standards and directives</b>	
Standard conformity	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>	
UL approval	UL Recognized
CCC approval	CCC approval / marking not required for products rated $\leq$ 36 V

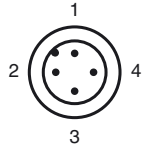
**Dimensions**



**Electrical Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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