



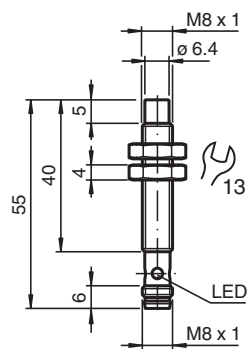
Inductive sensor

NEN6-8GM40-E0-V3

- 6 mm non-flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C



Dimensions



Technical Data

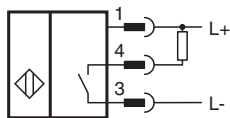
General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s _n	6 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s _a	0 ... 4.86 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 18 mm x 18 mm x 1 mm
Reduction factor r _{Al}		0.5
Reduction factor r _{Cu}		0.45
Reduction factor r ₃₀₄		0.75
Reduction factor r _{Brass}		0.55
Output type		3-wire
Nominal ratings		
Operating voltage	U _B	5 ... 30 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5%

Release date: 2020-07-08 Date of issue: 2020-07-08 Filename: 304615-0182_eng.pdf

Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 1.5 \text{ V}$
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.2 mA
No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		960 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
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, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M8 x 1 , 3-pin
Housing material		brass, nickel-plated
Sensing face		LCP
Degree of protection		IP67
General information		
Scope of delivery		2 hex nuts included

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Accessories

	BF 8	Mounting flange, 8 mm
	V3-WM-2M-PUR	Female cordset single-ended, M8, 3-pin, PUR cable

Release date: 2020-07-08 Date of issue: 2020-07-08 Filename: 304615-0182_eng.pdf