

Inductive sensor

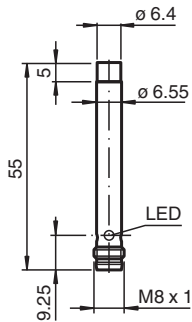
NEN6-6,5M45-E1-V3



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



Dimensions



Technical Data

General specifications

Switching function	Normally closed (NC)	
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}	0.55	
Reduction factor r_{Cu}	0.5	
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%
Reverse polarity protection	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 100 mA

Release date: 2024-05-28 Date of issue: 2024-06-01 Filename: 304615-0177_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

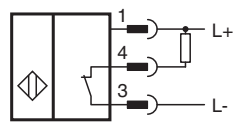
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Off-state current	I _r	0 ... 0.2 mA
No-load supply current	I ₀	≤ 10 mA
Time delay before availability	t _v	≤ 100 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 IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 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		IP65 / IP66 / IP67
Dimensions		
Length		55 mm
Diameter		6.5 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Release date: 2024-05-28 Date of issue: 2024-06-01 Filename: 304615-0177_eng.pdf