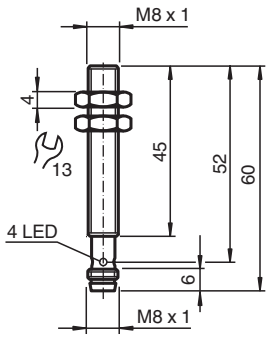
Magnetic field sensor
MB60-8GM50-E2-V3

- Sensing range 60 mm based on DM60-31-15 magnet

Dimensions



Technical Data

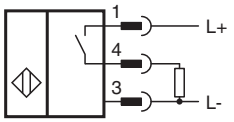
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	60 mm
Installation		flush in non-magnetic metal
Output polarity		DC
Assured operating distance	s_a	10 ... 48.6 mm
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	1 ... 10 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.5 V
Operating current	I_L	0 ... 200 mA
No-load supply current	I_0	≤ 10 mA
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
$MTTF_d$		3909 a

Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 218379_eng.pdf

Technical Data

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		
Protection class		III
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 75 °C (-13 ... 167 °F)
Mechanical specifications		
Connection type		Connector plug M8 x 1 , 3-pin
Housing material		Stainless steel 1.4404 / AISI 316L
Sensing face		PBT
Degree of protection		IP67
Dimensions		
Length		60 mm
Diameter		8 mm

Connection



Connection Assignment

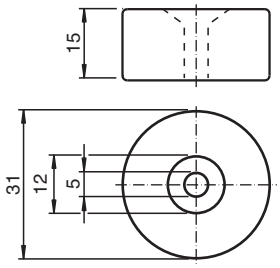
Wire colors in accordance with EN 60947-5-2

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

Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 218379_eng.pdf

Additional Information

Magnet DM 60-31-15



Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 218379_eng.pdf