

MQ2000

Magnetic sensor

MQ23005BBPKG/B/AM/ZH



- 1 LED green
- 2 LED yellow



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	5
Housing	rectangular
Dimensions [mm]	20 x 8 x 32

Application

Media	Ferrous only
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Electrical data

Operating voltage [V]	10...30 DC
Rated insulation voltage [V]	60
Current consumption [mA]	< 30
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	< 0.3

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Outputs		
Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC [V]		2.5
Max. leakage current [mA]		0.1
Permanent current rating of switching output DC [mA]		100
Short-time current rating of switching output [mA]		100
Switching frequency DC [Hz]		300
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Monitoring range		
Sensing range [mm]		5
Real sensing range Sr [mm]		5 ± 10 %
Operating distance [mm]		0...4.05
Accuracy / deviations		
Correction factor		steel: 1
Hysteresis [% of Sr]		< 10
Switch-point drift [% of Sr]		10
Repeatability [% of Sr]		10
Operating conditions		
Ambient temperature [°C]		-25...80
Storage temperature [°C]		-30...85
Protection		IP 65; IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
MTTF [years]	1647	
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	C011
	File number UL	E174191

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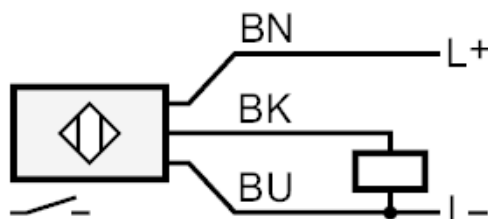
Mechanical data		
Weight	[g]	81.2
Housing		rectangular
Mounting		flush mountable
Dimensions	[mm]	20 x 8 x 32
Material		diecast zinc; LED window: TPU (urethane); potting: PUR

Displays / operating elements		
Display	Display operation	1 x LED, green
	Switching status	1 x LED, yellow

Remarks	
Pack quantity	1 pcs.

Electrical connection
Cable: 2 m, PUR, Ø 4.9 mm; flame-retardant (IEC 60332-2, UL: FT2); 3 x 0.34 mm ²

Connection



	Core colors
BK	black
BN	brown
BU	blue