

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
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
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

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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

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

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Displays / operating elements

Display	Display operation	1 x LED, green
	Switching status	1 x LED, yellow

Remarks

Pack quantity	1 pcs.
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Electrical connection

Cable: 2 m, PUR, Ø 4.9 mm; flame-retardant (IEC 60332-2, UL: FT2); 3 x 0.34 mm²

Connection

