

1) not included in scope of delivery, 2) Distance to tape, 3) Tape, 4) LED function indicator



Basic features

Additional features 01	Function indicator: LED red/green
Application	rotary motion
Approval/Conformity	WEEE
Measuring principle	absolute measuring system
Series	BM1

Display/Operation

Function indicator	Green LED LED red
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Electrical connection

Connection	Connector, JST BM12B-ZPDSS-TF-Male, 12-pin
Connection version	axial
Polarity reversal protected	no
Protection against device mix-ups	no

Electrical data

BISS-C data	19x position 1x error bit 1x warning bit 6x CRC
Current consumption max. at 5 V DC	100 mA
Hysteresis H max.	150 °
Operating voltage U_b	4.75...5.25 VDC
Overvoltage protection	no

Environmental conditions

Ambient temperature	-25...85 °C
Ext. magnetic fields max., in operation	1 mT (no effect)
Storage temperature	-25...85 °C

Functional safety

MTTF (40 °C)	256 a
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Interface

BiSS-C clock frequency	0.1...5 MHz
Bits, number	27 Bit
Clock	RS422 differential signal
Count direction	rising
Differential signals	yes
Error signal	yes
Interface	BiSS-C Digital A/B (RS422)
Interface coding	Binary
Real-time signals	Digital A/B, RS422
Signal sequence	A before B = rising

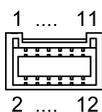
Mechanical data

Dimension	52 x 8 x 26 mm (ODxDxH)
Lateral offset (Y)	±0.5 mm
Mounting part	Through-hole 3.4 mm
Pitch max.	±1.0 °
Pole width	1.50 mm
Roll max.	±1.0 °
Tangential offset (X) max.	±0.5 mm
Weight	5 g
Yaw max. ±	1.0 °

Range/Distance

Edge separation min.	0.04 µs
Interpolation factor	512
Non-linearity of sensor head, max.	±150"
Optimal read distance	0.1 mm
Read distance	0.01...0.6 mm
Repeat accuracy	≤ 1 LSB
Resolution	≤ 15 bits
Traverse speed max.	12000 1/min

Connector Drawings

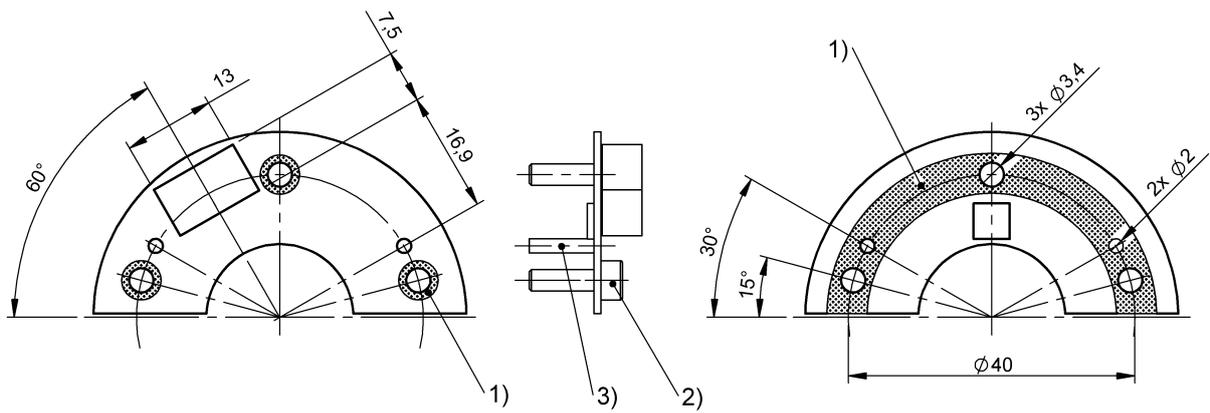
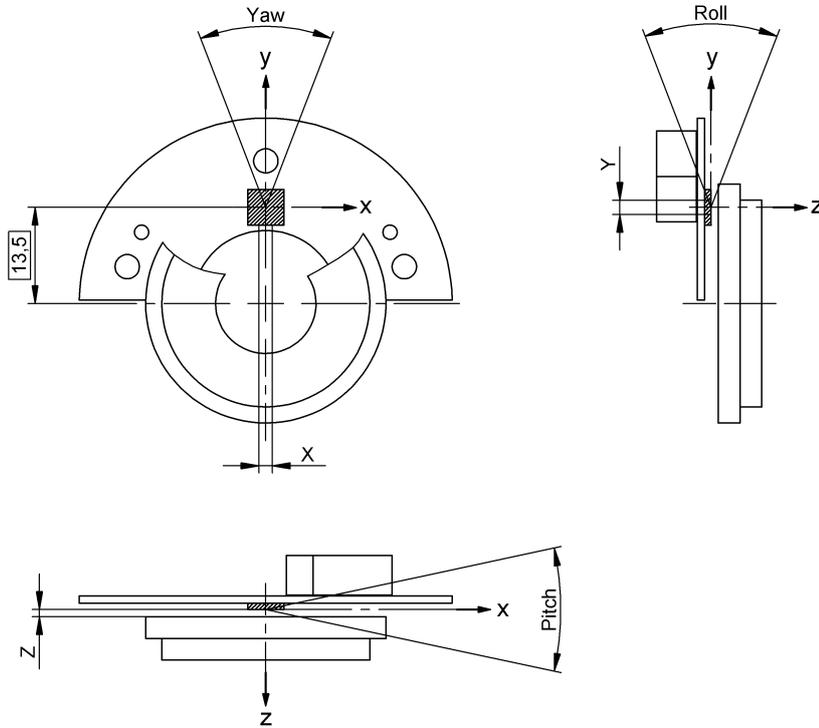


Wiring Diagrams (Schematic)

Pin	Signal
1	-DATA
2	-Z
3	+DATA
4	+Z
5	-CLOCK
6	-B

Pin	Signal
7	+CLOCK
8	+B
9	GND
10	-A
11	+5 V DC
12	+A

Help Views



- 1) Section free of parts
- 2) Mounting screw
- 3) Positioning Pin