

BML S2C Magnetic Linear Encoder System

With extended sensor-to-tape gap distance up to 5 mm

- High tolerance for misalignment eliminates painstaking adjustment procedures and simplifies installation
- Extended gap distance up to 5 mm reliably handles loose application tolerances, increasing system reliability
- Status LED and error output signal aid troubleshooting and diagnostics





The extended sensor-to-tape gap distance of the BML S2C incremental encoder system makes it ideal for installation situations where large mechanical tolerances can occur. The benefits are especially evident in applications with long measuring lengths, such as position determination in warehousing and conveying. The compact design enables the BML S2C to be integrated flexibly into space-limited applications. A status LED and error output signal make in-process diagnostics easier, thereby reducing troubleshooting time and effort.



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Series	BML-S2C Basic	BML-S2C Premium
Output signal	Digital RS422 and HTL	Digital RS422 and HTL
Additional signal	Without	Status-LED and Error-Signal
	BML-S2C0-QM6000-KF	BML-S2E0-QM6240-KA
Max. measuring length	48 m	48 m
Resolution	10, 50, 100, 500 or 2500 μm	10, 50, 100, 500 or 2500 µm
Repeat accuracy	±1 increment	±1 increment
Overall system accuracy	±400 μm	±400 μm
Supply voltage	5 V ±5 % or 1030 V DC	5 V ±5 % or 1030 V DC
Current consumption at	< 100 mA	< 100 mA
5 V supply voltage		
Current consumption at	< 80 mA	< 80 mA
1030 V supply voltage		
Max. read distance sensor/tape	15 mm (without cover)	15 mm (without cover)
Max. travel speed	10 m/s	10 m/s
Operating temperature	−20+80 °C	−20+80 °C
Storage temperature	−30+85 °C	−30+85 °C
Housing material	PBT	PBT
Degree of protection	IP67	IP67

^{*}All specifications in conjunction with tape BML-M07-I68-A_-M_____

Ordering example: sensor head

BML-S2C0-Q53G-M624-K0-KA05

Interface/Power supply/output Q51 digital square wave signals 10...30 V DC, differential voltage signal (RS422) Q53 digital square wave signals 10...30 V DC, level as operating voltage TTL Q61 digital square wave signals, 5VDC, differential voltage signal (RS422)

Resolution (edge separation A/B)

G 10 µm K 50 µm L 100 µm

T 2500 µm N 500 µm

Pole width

6 10 mm

Reference signal

0 None

2 Pole-periodic

Error signal

0 No error signal

4 Error signal (not together with cable KF__)

Min. edge separation/max. traversing

K 4 µs L 8 µs M 10 μs P 24 µs R 100 us N 16 µs

T 2 ms S 1 ms

Connection

5 m cable, PUR, 12-pin, possible cable lengths 2, 5, 10, 15, 20 m KA05 5 m cable, PUR, 8-pin, possible cable lengths 2, 5, 10, 15, 20 m

KA00,3-S284 0.3 m cable with M12 connector, 12-pin

Many other products are included in our total product line "Linear Position Sensing and Measurement"

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