## BALLUFF

### For universal applications – even in demanding conditions

# MAGNETIC ENCODER SYSTEM BML SF2

The BML SF2 incremental magnetic encoder system was developed for universal and reliable use in applications where you have to reconcile greater mounting tolerances with high system performance. At mounting distances of up to 1.0 mm you still achieve a system accuracy of  $\pm 12~\mu m$ . The compact form factor and low weight means the measuring system is easy to integrate, even in tight mounting spaces and in high-dynamic applications.

The BML SF2 features analog sin/cos or digital A/B/Z interfaces and can be easily linked to incremental input cards. The integrated LED lets you know the system status at all times. This is helpful for installation, startup and during operation, but also in setup mode, for example when the machine needs to be retooled.

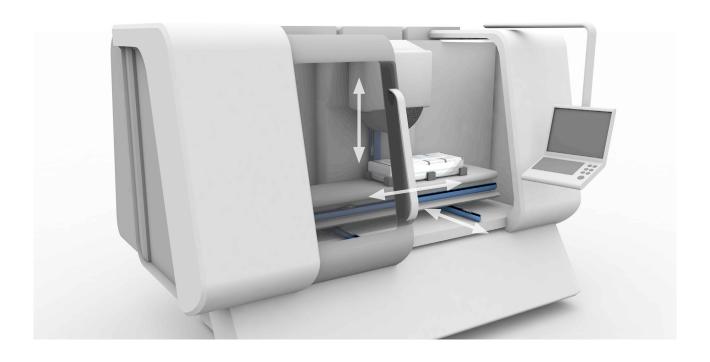
Its great flexibility and ruggedness make the BML SF2 magnetic encoder the ideal partner in demanding applications in special machine building for cutting and forming machines, and in all applications where other distance and angle measurement solutions do not provide the needed accuracy and installation tolerance.

#### **Features**

- Reliable: non-contact and wear-free measuring principle
- Universal: measuring lengths up to 48 m, high system accuracy down to ±12 µm, resolution down to 1 µm
- Time-saving: generous read distance up to 1.8 mm makes installation easier
- Convenient: status LED for situational awareness
- Easy to integrate: extremely compact form factor for small footprint







### MAGNETIC ENCODER SYSTEM BML SF2 FOR LINEAR AND ROTATABLE APPLICATIONS









	BML07RR	BML0870	BML07RT	BML085N
Operating voltage	5 V ±5 %			
Interface	Analog sin/cos 1 V <sub>pp</sub>	Digital A/B/Z TTL	Analog sin/cos 1 V <sub>pp</sub>	Digital A/B/Z TTL
Additional features *			With reference signal	With reference signal
System accuracy	Up to 12 μm (depending on mechanical installation)	Up to 12 µm (depending on mechanical installation)	Up to 12 μm (depending on mechanical installation)	Up to 12 µm (depending on mechanical installation)
Resolution *	Depending on evaluation system	2 μm	Depending on evaluation system	2 μm
Range	Up to 48 m			
Degree of protection per IEC 60529	IP67	IP67	IP67	IP67
Ambient temperature	−20+80 °C	−20+80 °C	−20+80 °C	−20+80 °C
Housing material	Aluminum, stainless steel	Aluminum, stainless steel	Aluminum, stainless steel	Aluminum, stainless steel
Connections *	5 m PUR cabel			

<sup>\*</sup> Configurable during order process









	BML TSC-I2	BAM036N	BAM01N4	BAM01MH
Description	Magnetic tape, rubber ferrite, stainless steel carrier	Mounting accessory	Guide rail, aluminum	Sliding carriage, Aluminum

<sup>\*</sup> Configurable during order process



ACCESSORIES

Length \*



Max. 48 m







	BCC09MY	BCC09MZ	BCC0JCN	BCC0JCP
Description	M12 female straight,	M12 female straight,	M12 female straight,	M12 female straight,
	12 pin with	12 pin with	12 pin with	12 pin with
	5 m PUR cable,	10 m PUR cable,	5 m PUR cable,	10 m PUR cable,
	shielded	shielded	shielded, UL	shielded, UL