

Simple, compact and universally useful

## BML SF2 MAGNETIC ENCODER SYSTEM FOR SAFETY

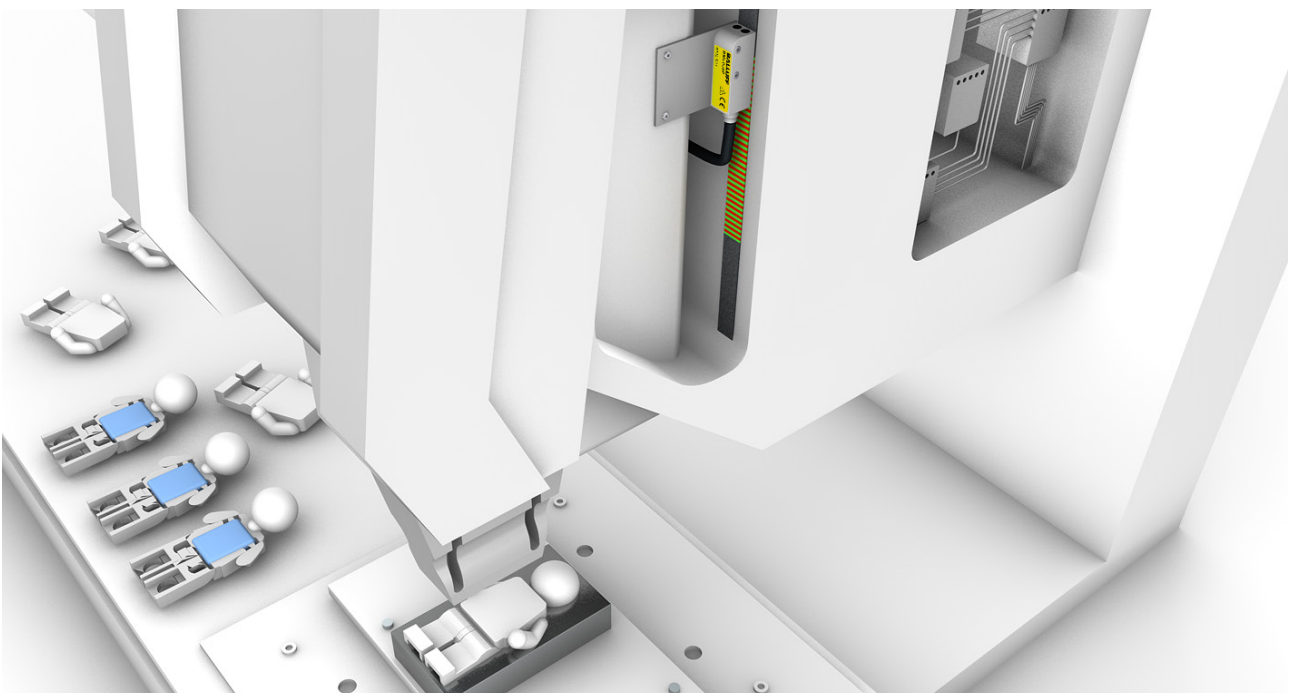
The BML SF2 magnetic safety encoder system with reliable incremental sin/cos interface is ideal for safety applications. The wear-free system supports the "safe incremental value" function. This means you can implement many safety functions per EN IEC 61800-5-2, such as safe slow speed (SLS) or safe stop 1 (SS1).

With their long measuring length up to 48 m and very high repeat accuracy ( $< 1 \mu\text{m}$ ) this compact, easy to integrate measuring system has universal application. It stands out especially when mounting tolerances pose a challenge to high system performance. At a mounted distance of up to 1 mm you still achieve a system accuracy of  $\pm 12 \mu\text{m}$ .

Our BML SF2 magnetic encoder is an ideal partner in demanding applications, like in special machine building for cutting and forming machines, and in all applications where other distance and angle measurement solutions cannot provide the needed accuracy and installation tolerance.

### Features

- Safe: for applications up to Safety Integrity Level 2 (SIL 2) per EN 61800-5-2 / EN 62061 / IEC 61508 and Performance Level d (PL d) per EN ISO 13849-1
- Universal: measuring lengths up to 48 m, high system accuracy down to  $\pm 12 \mu\text{m}$ , resolution to  $1 \mu\text{m}$
- Reliable: non-contact and wear-free
- Time saving: generous read distance up to 1.8 mm makes installation easier
- Ease of integration: extremely compact form factor requires very little space



INCREMENTAL  
ROTARY MAGNETIC  
ENCODER SYSTEM



PROCEDURE DIRECTION: LENGTHWISE TO TAPE	BML095Y
PROCEDURE DIRECTION: TRANSVERSE TO TAPE	BML095Z
Dimension	12 × 13.1 × 35 mm
Connection	5 m cable, PUR
Housing material	Aluminum
Interface	Analog sin/cos (1 V <sub>pp</sub> )
Read distance	0.01...1.5 mm
Reference signal	Individually or fixed-periodic
Operating voltage U <sub>B</sub>	4.75...5.25 V DC
Ambient temperature	-20...80 °C
IP rating	IP67
Approval/conformity	TÜV, CE, cURus, EAC

ACCESSORIES



	BML TSC-I2...	BAM036N	BAM01N4	BAM01MH
Description	Magnetic tape, rubber ferrite, stainless steel carrier	Mounting accessory	Guide rail, aluminum	Sliding carriage, aluminum
Length *	Max. 48 m		3 m	

\* Configurable during order process

CONNECTIVITY



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