

With SSI or BiSS-C interface and condition monitoring

BML SL1 MAGNETIC ENCODER SYSTEM – COMPACT AND ABSOLUTE

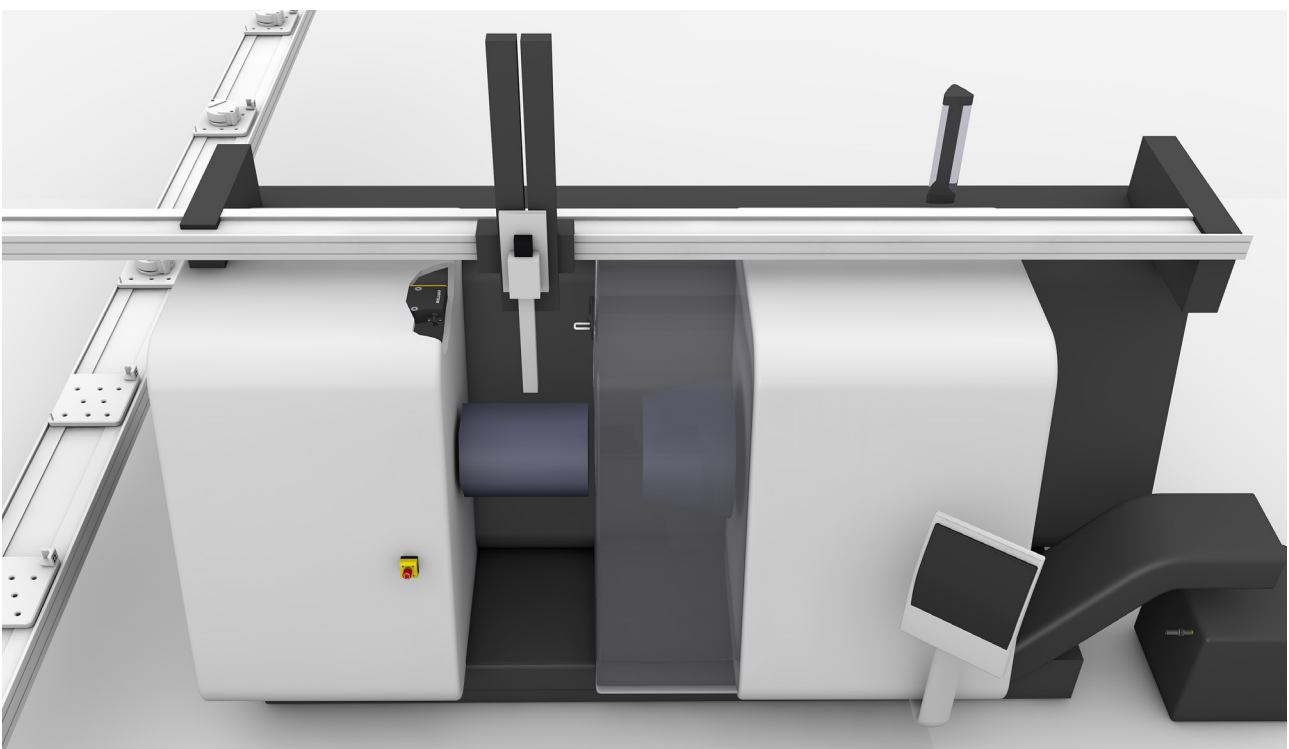
The BML SL1 absolute magnetic encoder system stands out in any application where absolute accuracy of position and end-of-travel is required. Additionally, it provides a simple and economical solution, whether you are monitoring linear or rotary movements, changing formats, or measuring travel distances or angles.

The BML SL1 features an absolute SSI or BiSS-C interface, with the option for an analog sin/cos interface. This makes the encoder system ideal for many positioning and control applications. For example, it can be used as the primary feedback solution in linear drives or as secondary feedback when special accuracy is required. The compact form factor and low weight allow for easy retrofitting.

The signal quality and system status can be continually evaluated over SSI and BiSS-C or conveniently read from the built-in LED. This aids in installation, startup, ongoing operation as well as setup, when the machine needs to be changed over. The separately available BML configuration tool provides additional configuration and diagnostics functions.

Features

- Reliable: non-contact and wear-free measuring principle
- Universal: measuring lengths up to 8.19 m with high system accuracy to $\pm 15 \mu\text{m}$
- Time-saving: read distance up to 1.3 mm which makes installation easier
- Convenient: status LED and diagnostics functions for reliable operation and quicker maintenance
- Easy to integrate: space-saving, compact form factor



ABSOLUTE LINEAR MAGNETIC ENCODER SYSTEM



OPERATING VOLTAGE 5 V DC $\pm 10\%$	BML08F0	BML08F1	
OPERATING VOLTAGE 10...30 V DC	BML08F2	BML08F3	BML08F4
Absolute interface	BiSS-C: 32 bit, RS422 with differential and error signal	SSI: 25 bit, RS422 with differential and error signal	SSI: 25 bit, RS422 with differential and error signal
Incremental interface	Analog sin/cos (1 V _{pp})	Analog sin/cos (1 V _{pp})	Analog sin/cos (1 V _{pp})
System accuracy	Up to 15 μm (depends on mechanical installation)	Up to 15 μm (depends on mechanical installation)	Up to 15 μm (depends on mechanical installation)
Resolution	$\sim 0.98\ \mu\text{m}$	$\sim 0.98\ \mu\text{m}$	$\sim 0.98\ \mu\text{m}$
Measuring range max.	8.19 m	8.19 m	8.19 m
Protection type IEC 60529	IP67	IP67	IP67
Ambient temperature	$-20...+70\ ^\circ\text{C}$	$-20...+70\ ^\circ\text{C}$	$-20...+70\ ^\circ\text{C}$
Approval/conformity	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC
Housing material	Die-cast zinc, stainless steel	Die-cast zinc, stainless steel	Die-cast zinc, stainless steel
Connection	Connector, M12 male, 12-pole	Connector, M12 male, 12-pole	Cable, 5 m, PUR

ACCESSORIES



	BML074F	BAM02YC	BAM01N4	BAM021H
Description	Magnetic tape for magnetic encoder BML SL1	Mounting kit	Guide rail	Sliding carriage
Length	1 m*		3 m*	

* Configurable during order process

CONNECTIVITY



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