

Absolute measuring system with IO-Link Smart Sensor Profile 2.0 and condition monitoring

MAGNETIC ENCODER SYSTEM BML SL1

The BML SL1 absolute measuring system stands out in any application where high absolute accuracy of current and limit positions is required. It was developed for measuring and positioning applications in any industry, and combines the advantages of a magnetic encoder system with the most innovative interface in the automation world.

The Smart Sensor Profile 2.0 Basic version provides additional process information such as programmable switchpoints and internal device temperature. The 2.0 Enhanced version adds condition monitoring functions such as signal quality and low signal threshold.

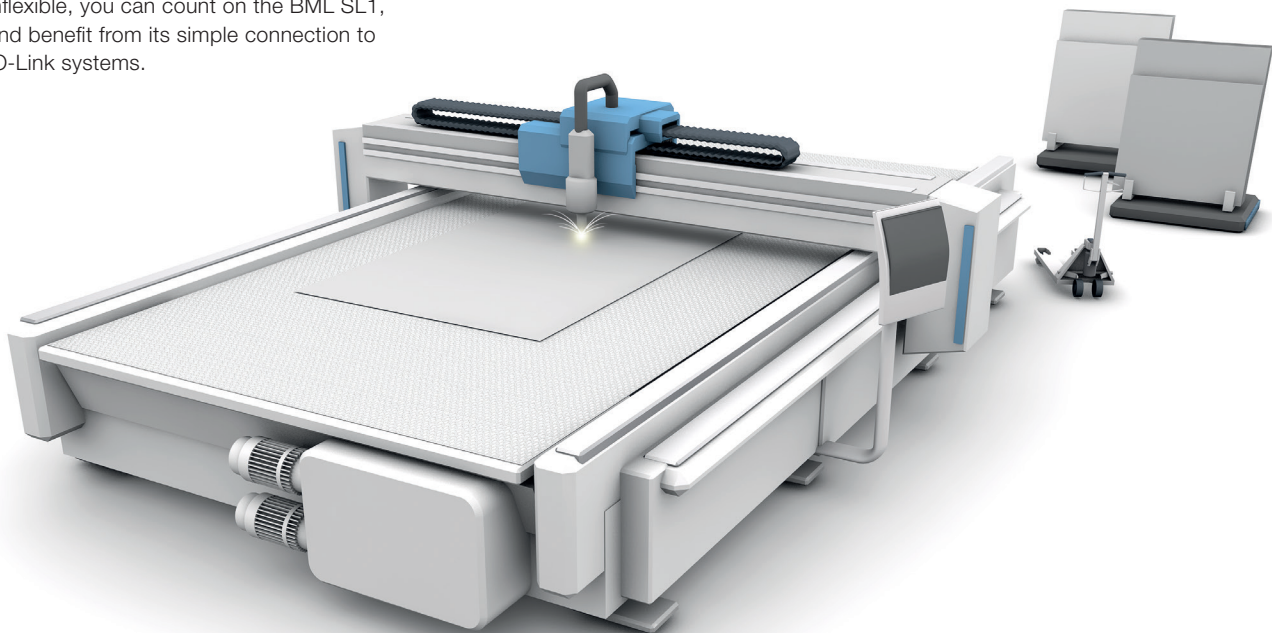
The position information is conveniently output through the integrated IO-Link interface. An optional analog interface is available for control applications.

When other measuring systems are too large, too slow, too imprecise or too inflexible, you can count on the BML SL1, and benefit from its simple connection to IO-Link systems.

Whether for linear or rotary motion, position or angle measurement, format changes, or short or long distances – this system is a simple and economical solution for countless applications.

Features

- Simple connection via IO-Link
- Up to 8 m travel sensing with high accuracy
- High flexibility thanks to comprehensive parameterizing functions as well as diagnostics and condition information via IO-Link
- Easy to install, reliable operation thanks to generous read distance of up to 1.3 mm
- Optional analog measurement output for control applications



ABSOLUTE
LINEAR MAGNETIC
ENCODER SYSTEM



	BML SL1-ALZ0-...	BML SL1-ALZ1-UM...	BML SL1-ALZ1-UE...
Series	BML SL1...		
Output signal	IO-Link, optional analog real time signal (Sin/Cos)		
IO-Link revision	1.1	1.1	1.1
IO-Link profile	Smart sensor profile	Smart sensor profile 2.0 (basic functionality)	Smart sensor profile 2.0 (enhanced functionality)
Available process data	Position	Position, switchpoint status	Position, switchpoint status, signal quality, signal threshold (condition monitoring)
Resolution	1 µm		
Max. measuring length	8.19 m		
Overall system accuracy	±15...100 µm (depending on mechanical installation)		
Supply voltage	18...30 V DC		
Operating temperature	-10...+70 °C	-20...+70 °C	
Housing material	Zinc diecasting , stainless steel		
Housing material	IP67		

ACCESSORIES



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

* Configurable during order process

CONNECTIVITY



	BCC09MY	BCC09MZ	BCC039P	BCC06WR
Description	5 m cable PUR (black) with M12 female, 12-pin	10 m cable PUR (black) with M12 female, 12-pin	5 m cable PUR (black) with M12 female and M12 male, 4-pin (straight)	10 m cable PUR (black) with M12 female and M12 male, 4-pin (straight)