

**Precise cylinder position measurement  
and relevant process data with radial mounting**

## THE NEW BTL K-ROD MAGNETO- STRICTIVE SENSORS FROM BALLUFF

Magnetostrictive sensors are precise and reliable position measurement systems and are therefore essential for modern industrial applications. The BTL K in rod design for continuous position measurement in hydraulic cylinders completes the Balluff portfolio in this area.

Thanks to its compact housing and radial mounting points, the new BTL K can be conveniently integrated into a wide range of applications in various industries. In addition to the precision typical of the sensors in this portfolio, it also scores points for its great robustness and durability thanks to its use of corrosion-free stainless steel.

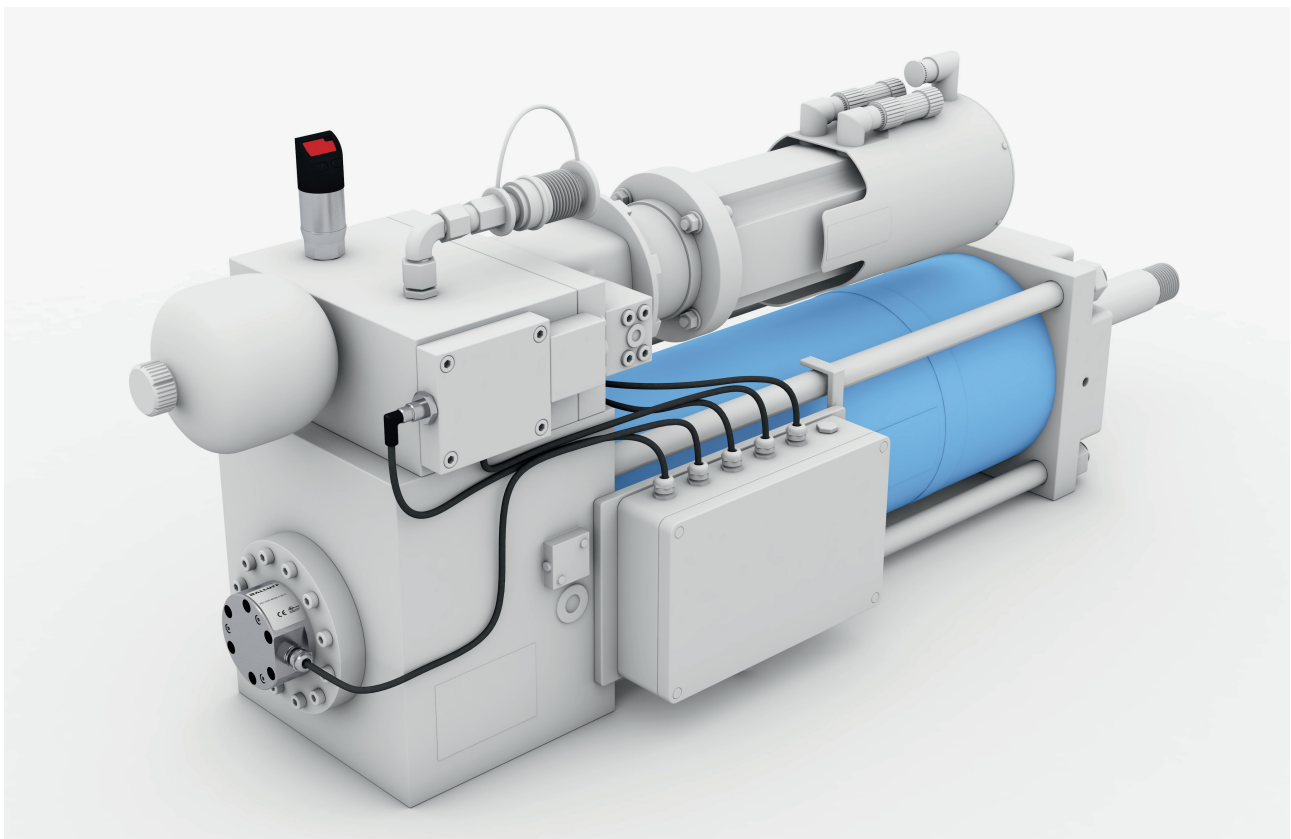
### **IO-Link and SAMS for efficient processes**

Small but powerful: The BTL K in rod design has an IO-Link interface. This simplifies sensor parameterization and makes its use more flexible. The BTL K also supports cross-machine process monitoring and optimization with the smart, expanded IO-Link features of Balluff's SAMS (Smart Automation and Monitoring System) portfolio.

With these added features, you not only achieve your daily goals but can also reduce machine downtimes in the long term. In short, these magnetostrictive sensors use a proven measuring principle with high precision, now with more powerful and smarter IO-Link features.

### **Features**

- Simple parameterization and use thanks to IO-Link interface
- Additional, smart IO-Link functionalities and measured values from SAMS
- Compact, corrosion-resistant stainless steel housing
- Contactless and wear-free



Cylinder feedback for compact drives

BTL MAGNETOSTRICTIVE  
LINEAR POSITION SENSORS  
IN ROD-STYLE HOUSING



Order code	BTL49TF	BTL49TE	BTL49TC
Rod version, fastening	Plug-in flange with 6 holes, O-ring, rod diameter 10.2 mm	Plug-in flange with 6 holes, O-ring, rod diameter 10.2 mm	Plug-in flange with 6 holes, O-ring, rod diameter 10.2 mm
Measuring range	500 mm	500 mm	500 mm
Performance class	C1	C1	C1
Power supply	10...30 V DC	10...30 V DC	18...30 V DC
Interface details	Analog output 1: ■ Voltage output 0...10 V  Analog output 2: ■ Voltage output 10...0 V	Analog output 1: ■ Current output 4...20 mA  Analog output 2: ■ Current output 20...4 mA	IO-Link output: ■ V1.1 COM3  IO-Link version: ■ Position with one position magnet
Output configuration	Configurable with IO-Link and BET software tool	Configurable with IO-Link and BET software tool	Configurable with IO-Link and BET software tool
Approval/conformity	CE, UKCA	CE, UKCA	CE, UKCA
Connection	M16 connector, 8 pin	M16 connector, 8 pin	M12 connector, 4 pin

ACCESSORIES



	BAM013L	BAM013P	BAM0146	BNI005H
Description	Magnet, Aluminium	Magnet, Aluminium	Float, 1.4404 stainless steel	Network module for Profinet

CONNECTIVITY



	BCC037K	BCC0372	BCC0L21	BCC0FTA
Connection 1	M12 female, angled, 5-pin, A-coded	M12 female, straight, 5-pin, A-coded	M16 female, straight, 8-pin	M16 female, angled, 8-pin
Connection 2	M12 male, straight, 3-pin, A-coded	M12 male, straight, 3-pin, A-coded		
Cable	2 m, PUR, black, drag chain compatible	2 m, PUR, black, drag chain compatible	5 m, PUR shielded, black, drag chain compatible	5 m, PTFE shielded, black, self-extinguishing,