

## Compact, rod-style position measuring system

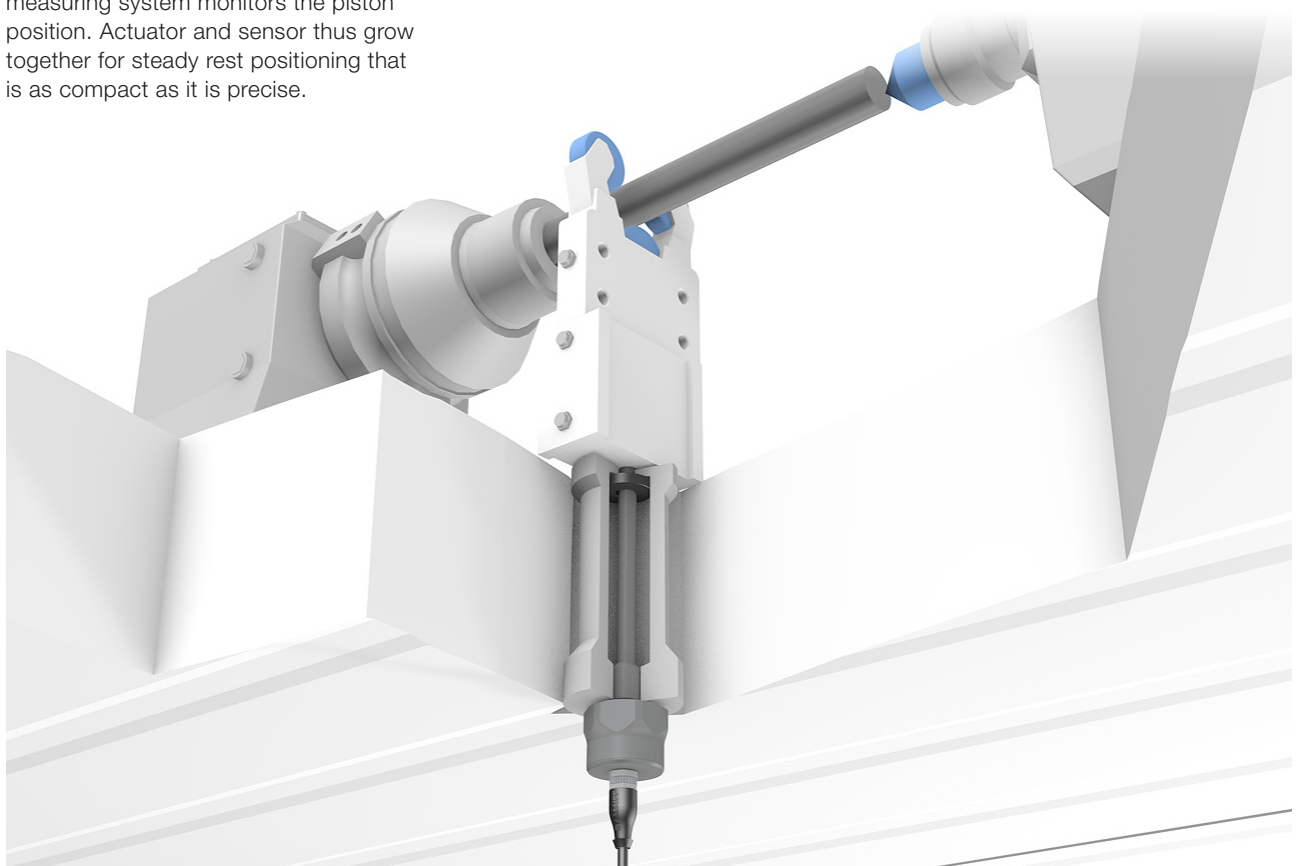
# NEW GENERATION OF MAGNETOSTRICTIVE SENSORS FOR POSITION MEASUREMENT

For applications where extreme precision is required for position measurement in tight spaces, Balluff offers a new generation of rod-style magnetostrictive sensors with analog and IO-Link interfaces. The innovative and space-saving housing design of the electronic head enables easy integration directly in the hydraulic cylinder. The IO-Link interface allows for recording of conditions such as temperature, humidity and service life, which can be used for intelligent condition monitoring and predictive maintenance.

Steady rests support the machining process of long or heavy turned parts. A rod-style magnetostrictive position measuring system monitors the piston position. Actuator and sensor thus grow together for steady rest positioning that is as compact as it is precise.

### Features

- Easy cylinder integration due to compact design
- Analog and IO-Link interfaces available
- Simple parameterization via IO-Link
- Continuous monitoring of conditions such as temperature, humidity, and service life for IO-Link-capable devices
- Simultaneous measurement of several positions and speeds
- Long service life thanks to contactless operating principle



Piston position monitoring during steady rest alignment

BTL MAGNETOSTRICTIVE  
LINEAR POSITION SENSORS  
IN ROD-STYLE HOUSING



Ordering example	BTL_NC_00-____-1_____
Fastening	Rod with metric mounting thread M18 x 1.5 (BN) Rod with inch thread 3/4"-16UNF (ZN)
Housing details	Zero point at 30 mm and rod end with thread, Zero point at 50.8 mm and rod end with thread
Measuring length	0025...4000 mm
Performance class	B1, C1
Power supply	10...30 V DC, 18...30 V DC
Interface	Analog: 0...10 V, 10...0 V, 4...20 mA, 20...4 mA, IO-Link: V1.1 COM2/COM3
Approval/conformity	CE, UKCA, cULus
Connection	PUR cable, M12 connector, 4-pin, M12 connector, 5-pin, M12 connector, 8-pin, M16 connector, 6-pin, M16 connector, 8-pin

Configure your magnetostriuctive sensor  
using the online configurator on our [website](#).

ACCESSORIES



	BAM013L	BAM013P	BAM013J	BAM013R
Description	Magnet, Ø 32 x 8 mm	Magnet, Ø 32 x 8 mm	Magnet, Ø 25 x 8 mm	Magnet, Ø 21.9 x 8 mm

CONNECTIVITY



	BCC0LMZ	BCC0LPT	BCC0L20	BCC0372
Connection 1	M12 female, straight, 5-pin, A-coded	M12 female, straight, 8-pin, A-coded	M16 female, straight, 8-pin	M12 female, straight, 5-pin, A-coded
Connection 2				M12 male, straight, 3-pin, A-coded
Cable	5 m PUR shielded, black, drag chain compatible	2 m PUR shielded, black, drag chain compatible	2 m PUR shielded, black, drag chain compatible	2 m PUR, black, drag chain compatible