

## Fail-safe position measurement with digital interfaces

# MULTIPLE MEASURING SYSTEMS OPERATE IN SINGLE SENSOR HOUSING

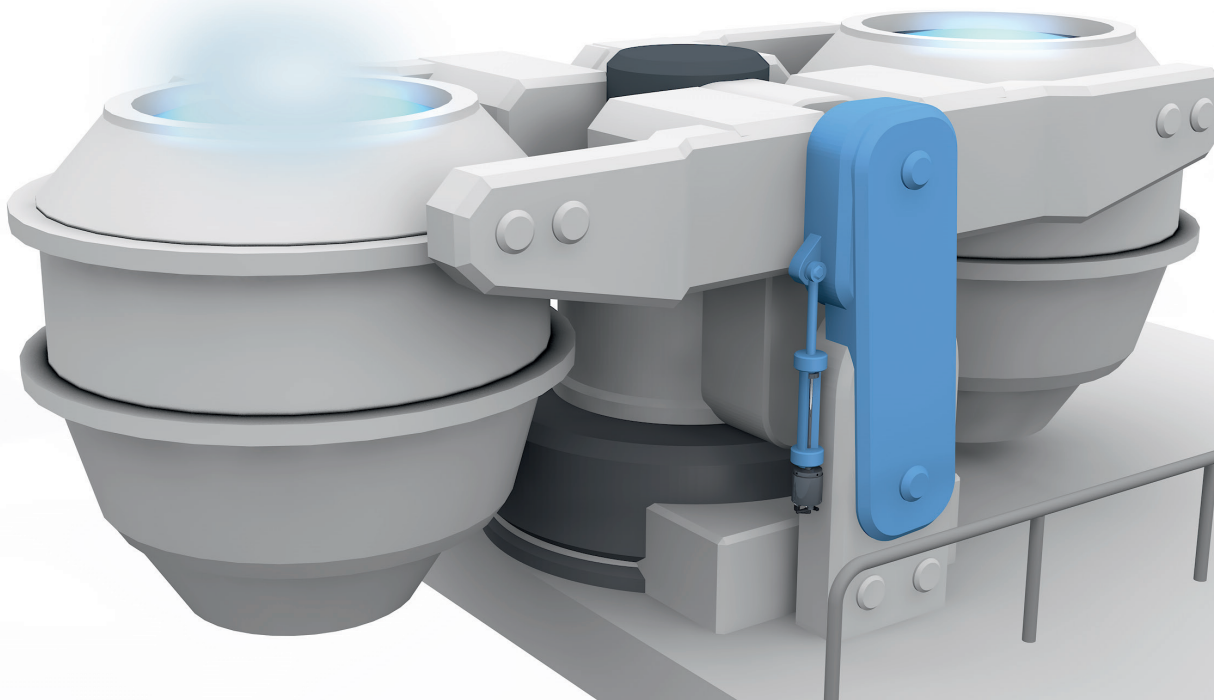
Our redundant magnetostrictive linear position sensors are now available with two digital interfaces: SSI and Start/Stop. This meets the highest requirements for safety and availability. They are less noise susceptible than traditional analog interfaces while offering greater resolution. Moreover, they deliver up to 1000 Hz sampling frequency for fast data acquisition.

With up to three independent measuring systems operating concurrently in one housing, they ensure uninterrupted processing. Pressure rated to 600 bar, they are well suited for use in valves and hydraulic cylinders where safety is an issue. An IP67 rating means they are insensitive to contamination and can stand up to harsh environments. To meet your individual requirements, you can choose from various form factors and measuring ranges between 25 and 7620 mm.

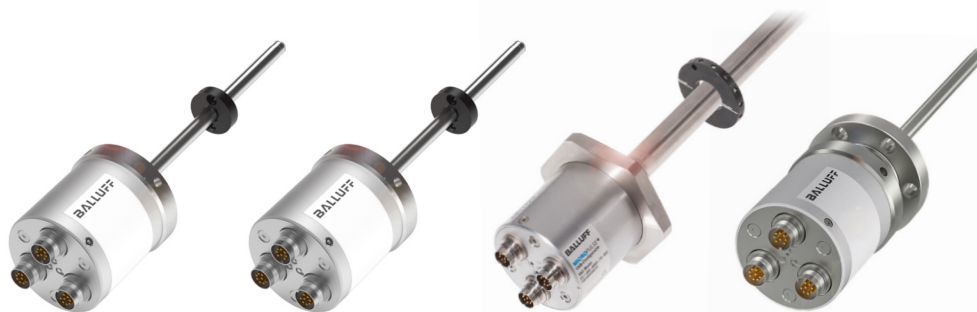
Like all our magnetostrictive linear position sensors, these feature high repeatability and are wear free thanks to non-contact measurement.

### Features

- Redundant position measurement
- Broad product range: four different form factors with two digital interfaces each (SSI and Start/Stop)
- Maximum resolution down to 0.5  $\mu\text{m}$
- Insensitive to contamination (IP67)
- Selectable output signals via software tool



REDUNDANT  
MAGNETOSTRICTIVE  
LINEAR POSITION  
SENSORS BTL



	SERIES TB	SERIES TZ	SERIES TT	SERIES TK
Style	Rod series	Rod series	Rod series	Rod series
Interface	SSI, P511	SSI, P511	SSI, P511	SSI, P511
Redundancy	2 times, 3 times	2 times, 3 times	2 times, 3 times	2 times, 3 times
Measuring range	25...7620 mm	25...7620 mm	25...3250 mm	25...7620 mm
Sampling frequency max.	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Non-linearity max.	±60 µm	±60 µm	±60 µm	±60 µm
Repeat accuracy	≤ ±5 µm, typical ±2.5 µm	≤ ±5 µm, typical ±2.5 µm	≤ ±5 µm, typical ±2.5 µm	≤ ±5 µm, typical ±2.5 µm
Mounting	Threaded flange M18 × 1.5	Threaded flange 3/4"-16UNF	Threaded flange M30 × 1.5	Flange Ø 18h6 with 6 holes
Housing material	Aluminum	Aluminum	Aluminum	Aluminum
No. of magnets max.	SSI: 2 DPI: 16	SSI: 2 DPI: 16	SSI: 2 DPI: 16	SSI: 2 DPI: 16
Connection options	M16 connector, 8-pin, PUR cable, PTFE cable	M16 connector, 8-pin, PUR cable, PTFE cable	M16 connector, 8-pin, PUR cable, PTFE cable	M16 connector, 8-pin, PUR cable, PTFE cable
Output signal adjustable	With software tool	With software tool	With software tool	With software tool
Operating voltage	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
Ambient temperature	-40...85 °C	-40...85 °C	-40...85 °C	-40...85 °C
Protection degree	IP67	IP67	IP67	IP67
Approval/conformity	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC

ACCESSORIES



	BAM013L	BAM013Y	BAE0040	BAE0043
Description	Magnet, rod, Ø 32 × 8 mm	Magnet, rod, Ø 65 × 8 mm	USB communication box for cable versions	USB communication box for M16 connector versions

CONNECTIVITY



	BCC0CFH	BCC0FTA	BCC0103	BCC010F
Connection	M16 female, straight, 8-pole	M16 female, angled, 8-pole	M16 female, straight, 8-pole	M16 female, angled, 8-pole
Cable	5 m PTFE shielded, black, self-extinguishing	5 m PTFE shielded, black, self-extinguishing	5 m PUR shielded, black, drag chain compatible	5 m PUR shielded, black, drag chain compatible