

## Absolute magnetostrictive linear position sensor with analog output

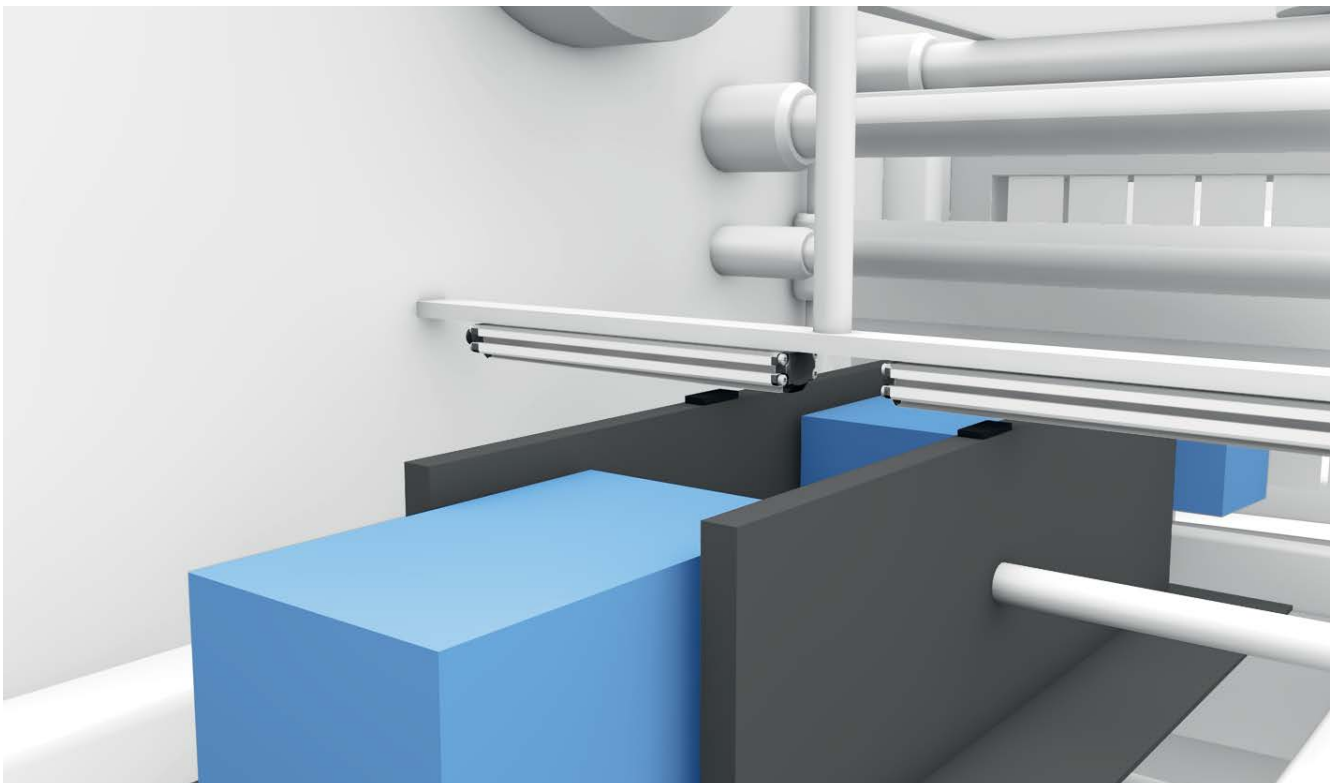
# PRECISE, NON-CONTACT, RUGGED AND EASY TO INTEGRATE

The magnetostrictive linear position sensor can operate in Flexible Magnet Mode (FMM) with one or two magnets and automatically responds to them. The system determines both position values at the same time and independently of each other and outputs them through two separate analog outputs.

The Software Configuration Tool allows you to change the measurands: select both position values, their differential value or the velocity. Use one system to easily adapt to a variety of requirements. The diverse functions offer you great flexibility for handling the widest range of applications, for example, position measurement in format changes or stroke monitoring on presses and punches as well as many other tasks.

### Features

- High-precision machine positioning
- Multi-magnet mode for flexible use
- Set parameters using PC software
- Capture measurement values fast with up to 4 kHz sampling frequency
- Wear-free and insensitive to contamination thanks to non-contact operating principle



LINEAR POSITION SENSOR  
WITH ANALOG OUTPUT



	BTL7 Profile P
Interface	4...20 mA, 0...20 mA, 0...10 V, -10...10 V
Stroke length max.	7620 mm
Non-linearity	Stroke length ≤ 500 mm = ±50 µm Stroke length > 500 ... ≤ 5500 mm = ±0,01 % FS Stroke length > 5500 mm = ±0,02 % FS
Sampling rate dependent on nominal length, max.	4 kHz
Max. number of position encoders	2
Supply voltage	18...30 V DC
Ambient temperature	-40...+85 °C
Shock	150 g
Vibration	20 g
Enclosure rating per IEC 60529	IP67, IP68
Housing material	Aluminum

Ordering example: **BTL7 - A501 - M0500 - P - S32**

Interface

- A Analog interface, voltage, 0...10 V/10...0 V (factory setting)
- G Analog interface, voltage, -10...10 V/10...-10 V (factory setting)
- C Analog interface, current, 0...20 mA/20...0 mA (factory setting)
- E Analog interface, current, 4...20 mA/20...4 mA (factory setting)

Electric connection

- S32 M16 connector, 8-pin
- S115 M12 connector, 8-pin
- KA05 5 m cable PUR

Nominal stroke [4-digit]

- M0500 Metric specification in mm, nominal length 500 mm (M0025...M7620)

ACCESSORIES



	BAM014M	BAM014Z	BAM014H	
Description	Position encoder, floating distance 0.1...4 mm	Position encoder, floating distance 4...8 mm	Position encoder, captive	

CONNECTIVITY



	BCC00YF	BCC00YW	BCC0103	BCC010F
Description	M12 female, 8-pin (straight) with 5 m cable PUR (black)	M12 female, 8-pin (right-angle) with 5 m cable PUR (black)	M16 female, 8-pin (straight) with 5 m cable PUR (black)	M16 female, 8-pin (right-angle) with 5 m cable PUR (black)