

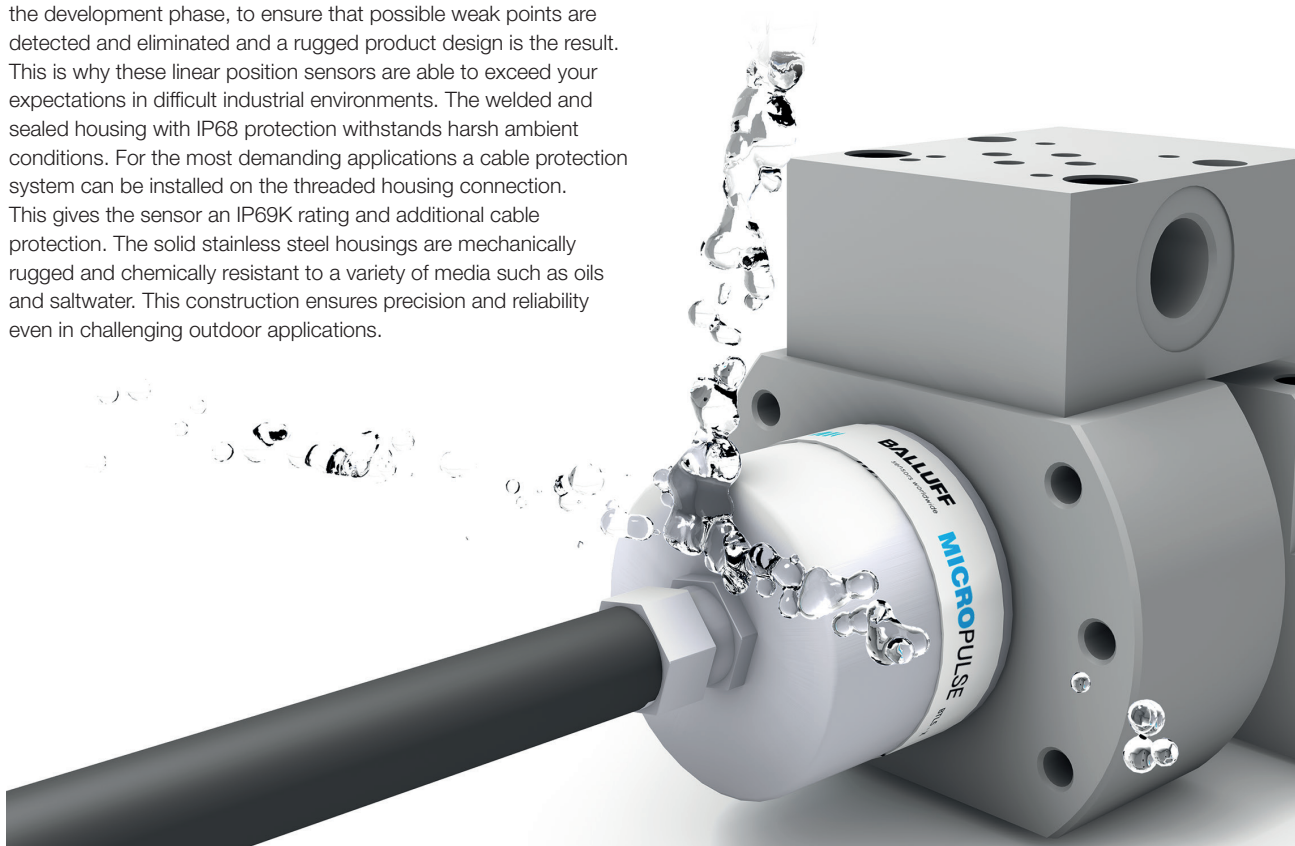
Rugged Linear Position Sensors for the harshest ambient conditions

Achieve precise positioning in extremely harsh environments

- Extremely waterproof with IP69k enclosure rating due to the welded housing and the optional cable protection system
- High chemical and mechanical robustness due to stainless steel housing
- Non-contact and wear-free, insensitive to contamination
- Fast and easy installation and set-up due to thread-in design and teach-in functionality



High mechanical loads, moisture and water often cause sensors located outdoors, or in other demanding environments, to fail. To provide continuous operation in highly demanding applications, quality, performance and reliability are needed. Position sensors from Balluff are subjected to extreme load conditions even during the development phase, to ensure that possible weak points are detected and eliminated and a rugged product design is the result. This is why these linear position sensors are able to exceed your expectations in difficult industrial environments. The welded and sealed housing with IP68 protection withstands harsh ambient conditions. For the most demanding applications a cable protection system can be installed on the threaded housing connection. This gives the sensor an IP69K rating and additional cable protection. The solid stainless steel housings are mechanically rugged and chemically resistant to a variety of media such as oils and saltwater. This construction ensures precision and reliability even in challenging outdoor applications.





Series	BTL7 HB/WB
Interface	Analog Current, Voltage
	BTL7-E500-M0500-HB-F05
Stroke length max.	7620 mm
Repeat accuracy	±10 µm
Sampling rate max.	4 KHz
Supply voltage	18...30 V DC
Ambient temperature	-40...+85 °C
Shock	100 g
Vibration	12 g
Enclosure rating per IEC 60529	IP68, IP69k with cable protection system
Housing material	Stainless steel
Connection	PTFE-cable, PUR-cable

Ordering example:

BTL7-E500-M0500-HB-F05

Interface

- A Analog interface, voltage output 0...10 V
- G Analog interface, voltage output -10...10 V
- C Analog interface, current output 0...20 mA
- E Analog interface, current output 4...20 mA

Output gradient

- 00 Rising (z. B. C_00 = 0...20 mA): nur bei BTL7-C/E
- 10 Rising and falling (z. B. A_10 = 10...0 V and 0...10 V): nur bei BTL7-A/G
- 70 Falling (z. B. C_70 = 20...0 mA): only with BTL7-C/E

Nominal length [4-digit]

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

Connection

- KA05 PUR cable 5 m, axial
- K05 PUR cable 5 m, radial
- FA05 PFTE cable 5 m, axial
- F05 PFTE cable 5 m, radial

Rod version, fastening

- HB Metric mounting thread M18×1.5
O-ring, rod diameter 10.2 mm
- WB 3/4"-16UNF thread, O-ring,
rod diameter 10.2 mm

Accessories



Description	Position encoder	Position encoder	Position encoder
Series	Rod BTL	Rod BTL	Rod BTL
	BAM013L	BAM013P	BAM013J
Material	Aluminum	Aluminum	Aluminum
Weight	approx. 12 g	approx. 12 g	approx. 12 g
Position encoder travel speed	any	any	any
Operating temperature/Storage temperature	-40...+100 °C	-40...+100 °C	-40...+100 °C

Cable protection system consisting of adapter BAM01JY and protection cable BAM PT-XA-001-095-0-XXX has to be ordered separately.