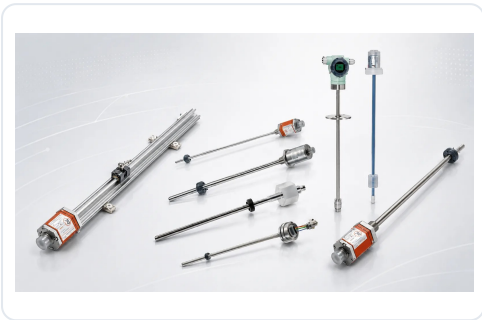


Magnetostrictive Linear Position Sensor

R-Series rod / profile · Hydraulic cylinder built-in · Magnetostrictive level transmitter



SEGMENT sensor magnetostrictive position sensors provide absolute, non-contact linear position feedback from 25 mm to 8000 mm stroke with 1 μm resolution and ±0.05 mm accuracy. Available as external rod/profile sensors, 350 bar hydraulic-cylinder built-in sensors and 316L magnetostrictive level transmitters, with SSI, 4-20 mA, 0-10 V, CANopen and RS485 Modbus outputs.

- 25-8000 mm stroke
- 1 μm resolution
- ±0.05 mm accuracy
- SSI · 4-20 mA · CANopen · RS485
- IP67 / IP68
- 350 bar cylinder built-in

TECHNICAL SPECIFICATIONS

Parameter	R-Series (external rod / profile)	Hydraulic cylinder built-in	Liquid level series
Stroke range	50-2500 mm std. (to 4000 mm long)	50-4000 mm	200-8000 mm
Resolution	0.001 mm (1 μm)	0.001 mm (1 μm)	0.1 mm
Accuracy / linearity	±0.05 mm FS / ±0.02 % FS	±0.05 mm FS / ±0.02 % FS	±0.5 mm FS / ±0.1 % FS
Repeatability	±0.001 mm	±0.001 mm	±0.1 mm
Output signals	SSI Gray, 4-20 mA, 0-10 V, RS485 Modbus	SSI Gray, CANopen, Start/Stop, 4-20 mA	4-20 mA, RS485 Modbus, HART (option)
Supply voltage	18-30 V DC	18-30 V DC	24 V DC
Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Pressure rating	—	350 bar (50 MPa)	10 bar standard
Protection rating	IP67	IP68	IP67
Housing / wetted material	Aluminium alloy profile	316L stainless steel	316L SS / PFA-coated
Electrical connection	M12×1 connector or cable	M12×1 connector or cable	M20 cable gland
Certifications	CE, RoHS, ISO 9001	CE, RoHS, ISO 9001	CE, ATEX (option)

TYPICAL APPLICATIONS

- Hydraulic cylinders & presses
 - Injection moulding machines
 - Machine-tool axes
- Mobile cranes & excavators
 - Process tank level
 - Hydraulic test benches
 - Semiconductor automation
 - Ex / ATEX zones

OEM OPTIONS

Custom stroke 25-8000 mm · output selection · connector variants · ATEX Ex ia / Ex d versions · private label · CE declaration and calibration certificate included

SELECTION FAQ

- How is the stroke specified?**

Order the exact electrical stroke in mm; the null zone and dead zone are added by the factory. Any length between 25 mm and 8000 mm can be built.
- Which output should I choose for a PLC?**

SSI (25-bit Gray) for motion controllers, 4-20 mA for long cable runs, RS485 Modbus for multi-sensor networks.

Request a quote or samples — we reply within 24 hours

- Emailinfo@segmensensor.com
- Online formwww.segmensensor.com/contact.html
- Product pagewww.segmensensor.com/products/magnetostrictive-sensor.html
- OrderingMOQ 10 pcs · samples 1-5 pcs in 5-7 days · production 3-5 weeks



Scan for full specifications