

Magnetostrictive Linear Motion Sensor,
Full Stroke Ranges 70 - 250mm

- Linearity Tolerances up to $\pm 0,1\%$
- Contactless Measurement without mech. wear
- No Recalibration Required
- Directly Signal Output 0,1VDC - 4,9VDC



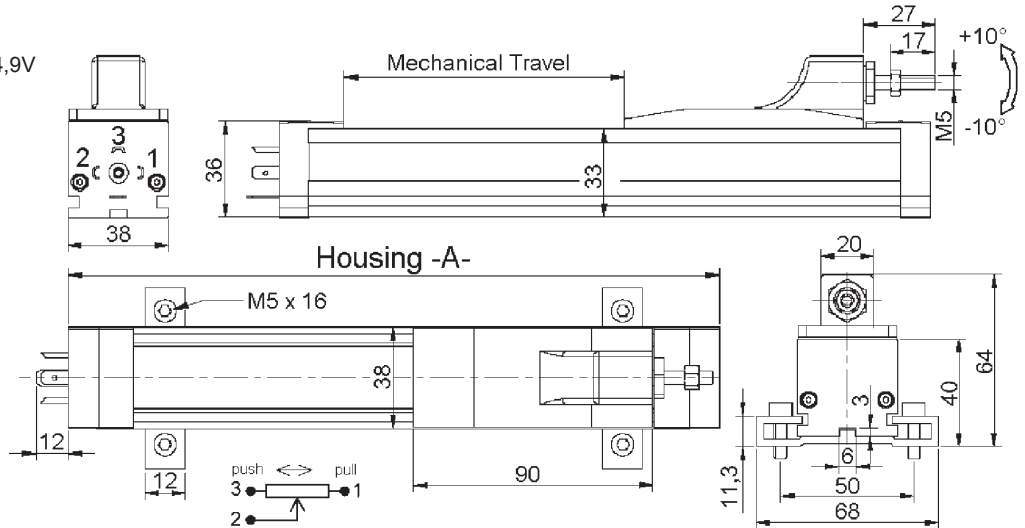
Please note: The specification and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product. Megauto does not assume any responsibility for damages due to improper application of our products. The user has to ensure by its own, that the products used are suitable for his application. Megauto does not warrant the reproducibility or published applications.

pin assignment output signal 0,1..4,9V

- 1 Brown (-)
- 2 Yellow (out)
- 3 Blue (+)

wire configuration PWM

- Brown: (-)
- Yellow: (out)
- Blue: supply voltage (+)
- Green: PWM



DIMENSIONS / RESISTANCES

Model	70	100	150	200	250
Housing -A- (mm)	225	225	305	250	405
Mech. Travel (mm)	82,3	112,3	162,3	212,3	262,3
Electr. Travel (mm)	70	100	150	200	250

ELECTRICAL CHARACTERISTICS

Travel (mm)	0 - 250
Frequency	2,6 kHz
Hysteresis	$\pm 25\mu\text{m}$
Repeatability	$\pm 25\mu\text{m}$
Output (analog)	0,1VDC - 4,9 VDC -5%/+10% (0149)
	PWM (PWM)
Supply voltage	12VDC $\pm 25\%$
Current consumption	40mA
Dielectric strength	500 VAC

Application: The SSO/SSOM is a very stable contactless sensor type for different industrial applications, suitable for stringent conditions of use. SSO/SSOM is a solution to wear known problems associated with linear potentiometers. The magnetostrictive principle makes these linear displacement transducers to an ideal and cost effective replacement part instead of linear potentiometers. The ruggedly designed aluminium profile allows an easy installation and flexible mounting.

MECHANICAL CHARACTERISTICS

Vibration (IEC 68-2-6:1982)	12G
Shock (IEC 68-2-29:1968)	95G
Operating friction	>10N
Life	(typ. IEC60393) 30 x 10 ⁶
Operating temperature (°C)	-35°C to +75°C
Mechanical connection	Link ball (LB)

OPTIONS

- Connector version (ST)
- Cable version (K) only for SSOM and PWM

MATERIAL

Housing	Anodized aluminium
Link ball	Stainless steel

PWM pulse-with modulation: High level > 60%, low level <30% of supply voltage, position = pulse-width x signal velocity (appr. 2749 m/s), the signal velocity is printed on each sensor.

SSOM (MegAsic S4CA-X02, see datasheet „M-electronic“) with integrated or separate (box) electronics for analog and digital signal generating, Supply: 6VDC-36VDC
Sensor Supply from System: 5VDC or 10VDC
Analog Output: (processed) 0-5VDC, 0-10VDC, 4-20mA (2 channels) Digital Output: RS232, 5V TTL

ORDERING INFORMATION

Detailed information for all electronics: www.megauto.de/linosense

