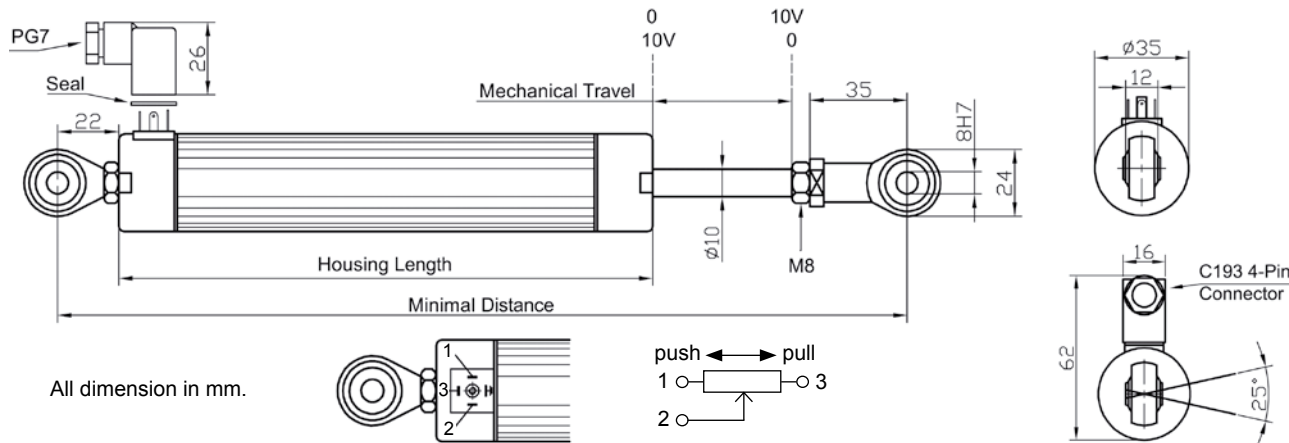


Potentiometric Linear Motion Sensor,
Full Stroke Ranges 50 - 900mm

- Linearity Tolerances up to $\pm 0,1\%$
- Twin-bearing Actuating Rod
- Low Noise Output
- Excellent Repeatability $\pm 50\mu\text{m}$



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 of published applications.



All dimension in mm.

DIMENSIONS / RESISTANCES

Model	50	75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	550	600	650	700	750	800	900
Housing (mm)	166	191	216	246	266	291	318	343	368	393	419	484	509	534	561	609	673	723	799	849	899	983	1054	1174
Min. Dist. (mm)	223	248	273	303	323	348	375	400	425	450	476	541	566	591	618	666	730	780	856	906	956	1040	1110	1231
Mech. Travel (mm)	59	84	109	139	159	184	210	235	260	285	310	360	386	412	437	463	518	568	619	669	720	772	822	924
Electr. Travel (mm)	51	76	101	131	151	176	202	227	252	277	302	352	378	404	430	455	506	556	607	657	708	760	810	912
Resist. $\pm 20\%$ (k Ω)	5	5	5*	5	5	5	5*	5	5	5	5*	5	5	5*	5	5	5*	5	5*	10	10	10	10	10

*stock item

ELECTRICAL CHARACTERISTICS

Resistance element	konduktive plastic
Standard resistance values	5kOhms $\pm 20\%$
Independent linearity tolerance	(typ. IEC60393) $\pm 0,1\%$
Resolution	quasi infinite
Repeatability	(typ. IEC60393) $\pm 50\mu\text{m}$
Input voltage	60VDC (max.)
Recommended wiper current	<1mA
Sealing	IP50
Power dissipation at 40°C	3W - 10W
Dielectric strength	500 VAC

MECHANICAL CHARACTERISTICS

Vibration (IEC 68-2-6:1982)	10G
Shock (IEC 68-2-29:1968)	40G
Operating Force	>10N
Operating Speed	4m/s (max.)
Life (movements)	30 x 10 ⁶
Operating Temperature (°C)	-30°C to +85°C
Mechanical Connection	Rod Bearing (RB)

OPTIONS

Connector Version (ST) or Cable Version B/M (K)

LSRB (see datasheet „B-electronic“) with integrated or separate (box) electronics for analog signal generating, supply Voltage: 24VDC $\pm 50\%$, sensor supply: 5VDC (fix), sensor supply: (adjustable) 1-5VDC Current Supply: 1-10mA (adj), output: 0-5VDC, 0-10VDC, 4-20mA factory adjustable

LSRM (see datasheet „M-electronic“) with integrated or separate (box) electronics for analog and digital signal generating and programming of functions Voltage supply: 6VDC-36VDC, Sensor supply: 5VDC or 10VDC Analog output: (processed) 0-5VDC, 0-10VDC, 4-20mA (2 channels) Digital output: RS232, 5VTTL

MATERIAL

Housing	Anodized aluminium
Rod bearing	Stainless steel

Application: The main characteristic of the LSR series is their extremely robust design. A 10mm shaft with shielded bearing and the robust rod end bearings on both sides makes the sensor suitable for extremely heavy duty application. This sensors are suitable for a wide range of applications in automation and robotic industries. A advantage of this series is the combination of robustness and high accuracy.

ORDERING INFORMATIONS

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

LSRB	100	5k	K	RS232
Typ	Model	Ω	electr. connector	output

