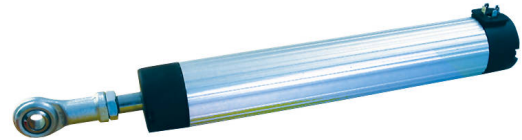
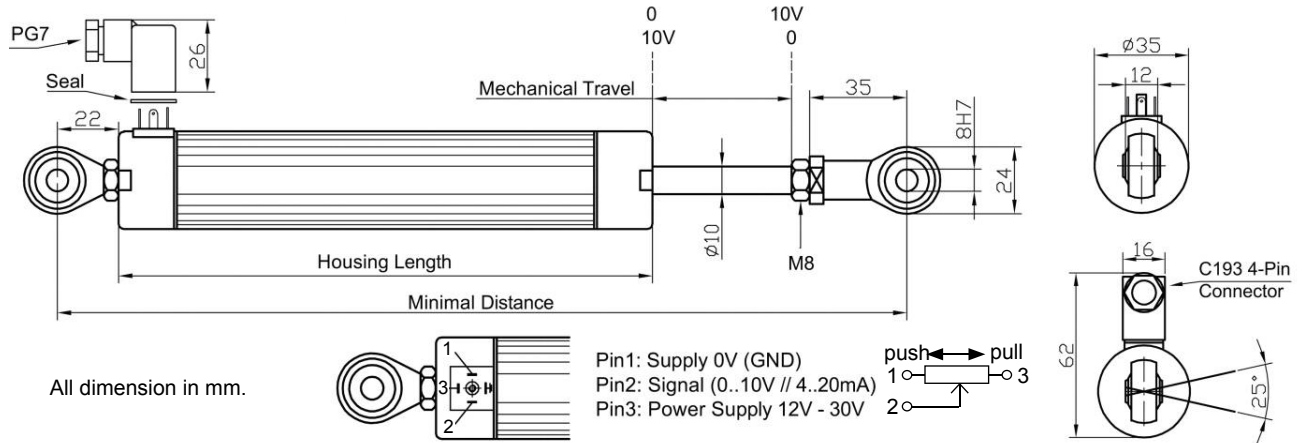


Potentiometric Linear Motion Sensor,  
Full Stroke Ranges 50 - 900mm

- 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.



**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 $\Omega$ )	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	conduktive 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 <sup>6</sup>
Operating Temperature (°C)	-30°C to +85°C
Mechanical Connection	Rod Bearing (RB)

**CONNECT**

Connector Version (ST) plug in male and female

**LSRB**

Version with built in signalconditioner for analog output.  
supply Voltage: 24VDC  $\pm 50\%$   
Current Supply: 10mA  
output: 0-10VDC, 4-20mA  
only factory setting

The signalconditioner enlarges the housing by 80 mm.

**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**

LSRB	100	5k	ST	2442
Typ	Model	$\Omega$	electr. connector	output