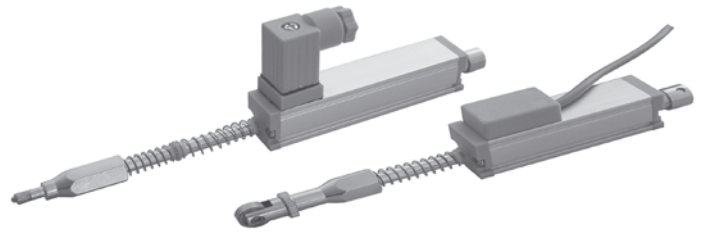
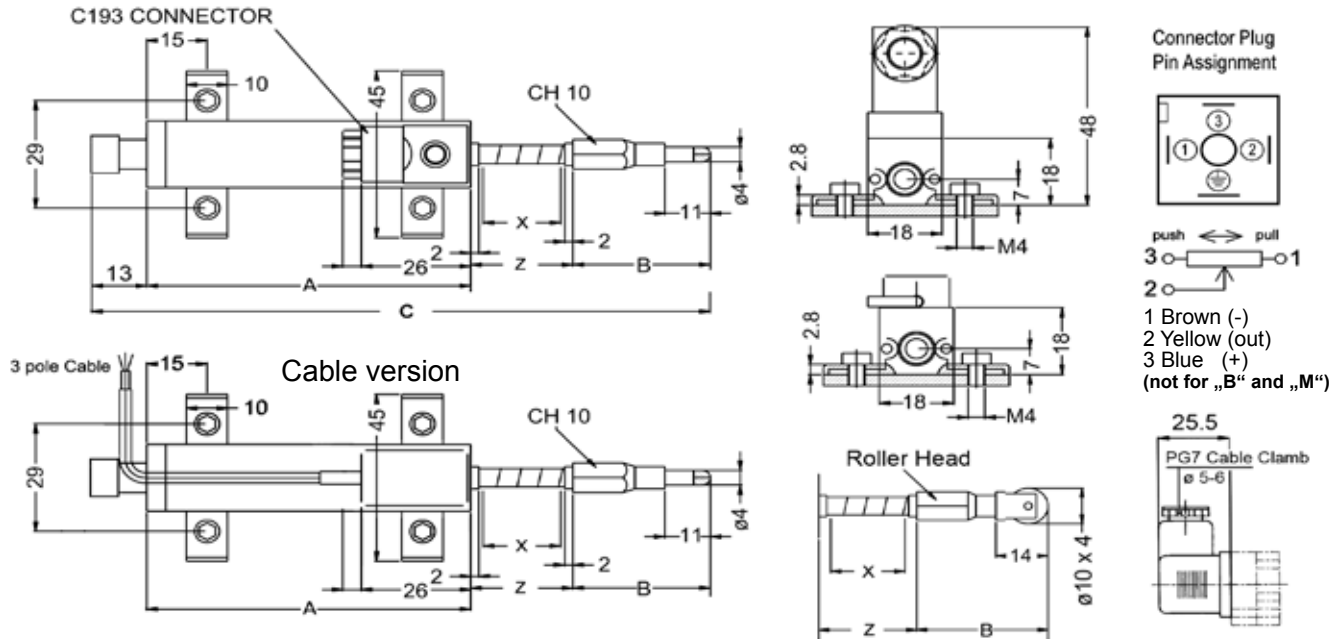


## Potentiometric Linear Motion Sensor, Various Stroke Ranges 10 - 50mm

- Compact Design for Limited Space
- Double Slide and Bearing
- Excellent Repeatability  $\pm 50\mu\text{m}$
- Spring loaded, no mechanical coupling



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.



### ELECTRICAL CHARACTERISTICS

Resistance Element	Conductive Plastic
Standard Resistance Values	1k/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	1 $\mu\text{A}$ (max. 10mA)
Sealing	IP45
Power Dissipation	3W - 10W
Dielectric Strength	500 VAC

### MECHANICAL CHARACTERISTICS

Operating force	>5N
Operating speed	5m/s (max.)
Life (movements)	(typ. IEC60393) $20 \times 10^6$
Operating temperature (°C)	-30°C to +85°C

### MATERIAL

Housing	Anodized aluminium
Link ball/roller head	stainless steel

**Application:** Spring return linear motion sensors are widely used in quality control systems. Code B or Code M electronics are fixed outside in metal case on the standard aluminium profile. Favourite applications are for instance camera following devices.

### DIMENSIONS / RESISTANCES

(Dimensions in mm)	Roller Head			Ball Head				
Model*	10	25	50	10	25	50	75	100
Housing -A-	48	63	88	48	63	88	115	140
Dimension -B-	43	43	51	32	32	40		
Dimension -C-	114	149	207	108	138	196		
Electr. Travel -X-	11	28	51	11	26	51	76	101
Mech. Travel -Z-	15	30	55	15	30	55	96	120
Resist. $\pm 20\%$ (k $\Omega$ )	1	1	5	1	1	5	5	5

\* All mounting parts are included (clamps).

### OPTIONS

- Roller head (RL), ball head (BA)
- Connector version (ST) or cable version (K)
- Fuse protected (F)
- Anti rotation shaft (AS)

**MTRB** (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

**MTRM** (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

### ORDERING INFORMATIONS

Detailed information for all electronics: [www.megauto.de/linosense](http://www.megauto.de/linosense)

MTR18	RL	25	1k	K	RS232
Typ	Head	Model	$\Omega$	electr. connector	output