



LTP

SPHERICAL BEARING MOUNTED LINEAR POTENTIOMETER



For absolute linear position measurement

Long Life upto 100 million movements

Optional 4-20mA or 0-10V output

Mounted by spherical bearings

50 to 750mm stroke

0.1% non linearity

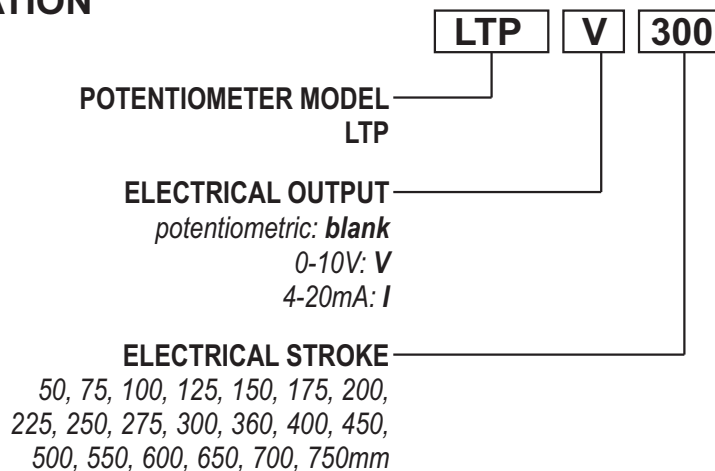
The LTP is a precision potentiometric linear position transducer with a long life conductive plastic track. It has a 3 wire analog resistive output which is absolute so the reading is maintained after loss of power.

These potentiometers are available with optional analog current or voltage outputs for direct interfacing to displays, controllers and PLCs. The electronics is incorporated inside the potentiometer.

The LTP is designed to be easily mounted by spherical bearings on each end. These bearings accept 8mm diameter pins. This easy installation enables the potentiometer to be mounted without proper alignment or where motion is not perfectly linear.

It is an economical solution to linear position measurement on hydraulic systems, press brakes, injection moulding machines, bending machines, materials handling systems and sheet metal machines.

ORDERING INFORMATION



Mating connector, mounting brackets and screws are included with potentiometer.

MECHANICAL SPECIFICATIONS

FIXING

2 ball joints (8mm holes)

MAXIMUM ANGULAR MOVEMENT (ball joints)

$\pm 30^\circ$

ROD MATERIAL

stainless steel

BODY MATERIAL

aluminium

MECHANICAL LIFE

100 million movements

TOP SPEED

5m/sec

PROTECTION

IP54

VIBRATION

10G

OPERATING TEMPERATURE

-30° to $+85^\circ$ C (potentiometric output)

$0-60^\circ$ C (current/voltage output)

DISPLACEMENT FORCE

2N max

ELECTRICAL SPECIFICATIONS

RESISTIVE ELEMENT

conductive plastic

MEASURING RANGES

50 to 750mm

RESOLUTION

0.01mm

INDEPENDANT LINEARITY

$\pm 0.1\%$

MAXIMUM INPUT VOLTAGE

42V (potentiometric output)

RESISTANCE

between $5k\Omega$ and $10k\Omega$

POWER SUPPLY

24 VDC $\pm 1.2V$ (current/voltage outputs only)

MAXIMUM LOAD RESISTANCE

500Ω (current output)

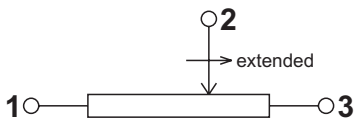
MINIMUM LOAD RESISTANCE

$1M\Omega$ (voltage output)

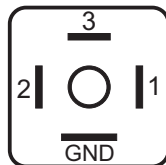
POWER DISSIPATION

3W @ 40° C, 0W @ 120° C

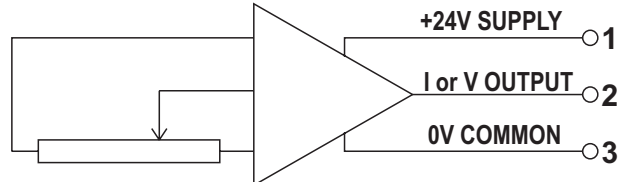
CONNECTIONS



POTENTIOMETER OUTPUT



POTENTIOMETER VIEW



CURRENT/VOLTAGE OUTPUT

DIMENSIONS



ELECTRICAL STROKE	50	75	100	125	150	175	200	225	250	275	300	360	400	450	500	550	600	650	700	750
MECHANICAL STROKE	54	79	104	129	154	179	204	229	254	279	304	364	404	454	504	554	604	654	704	754
TOTAL LENGTH (A)	193	218	243	268	293	318	343	368	393	418	443	493	543	593	643	693	743	793	843	893
BODY LENGTH (B)	121	146	171	196	221	246	271	296	321	346	371	421	471	521	571	621	671	721	771	821

AUTOMATED MOTION SYSTEMS PTY.LTD.

MAILING ADDRESS:

P.O.BOX 1240
WANGARA DC
W.A. 6947

PHONE: (08) 9309 1896

FAX: (08) 9309 5671

EMAIL: sales@automotsys.com.au

INTERNET: <http://www.automotsys.com.au>

OFFICE ADDRESS:

UNIT 2, 7 BARETTA RD.
WANGARA, PERTH
WESTERN AUSTRALIA