

# Linear Potentiometer

## Precision Potentiometric Output

Ranges: 0-1 to 0-11.5 inches [0-25 to 0-290 mm]

2.5K – 11.6K ohms • IP65

CLP

### Specification Summary:

#### GENERAL

|                         |  |
|-------------------------|--|
| Full Stroke Ranges..... | 0-1 to 0-11.5 in. (0-25 to 0-290 mm)     |
| Output Signal .....     | voltage divider (potentiometer)          |
| Linearity .....         | ± 0.1 to 0.2% full stroke, see ordercode |
| Repeatability.....      | 0.01 mm                                  |
| Resolution .....        | essentially infinite                     |
| Life Expectancy .....   | > 25 million cycles                      |
| Operating Speed.....    | 400 inches (10 M) per second max.        |
| Enclosure Material..... | aluminum                                 |
| Sensor .....            | conductive plastic linear potentiometer  |
| Weight.....             | 3 - 7 oz. (87 - 197 g.), see ordercode   |

#### ELECTRICAL

|   |  |
|---|--|
| Input Resistance.....                     | 2.5K to 11.6K ohms ( $\pm 20\%$ ), see ordercode |
| Recommended Maximum Input Voltage.....    | 42 VDC   |
| Recommended Operating Wiper Current ..... | < 1 $\mu$ A                                      |

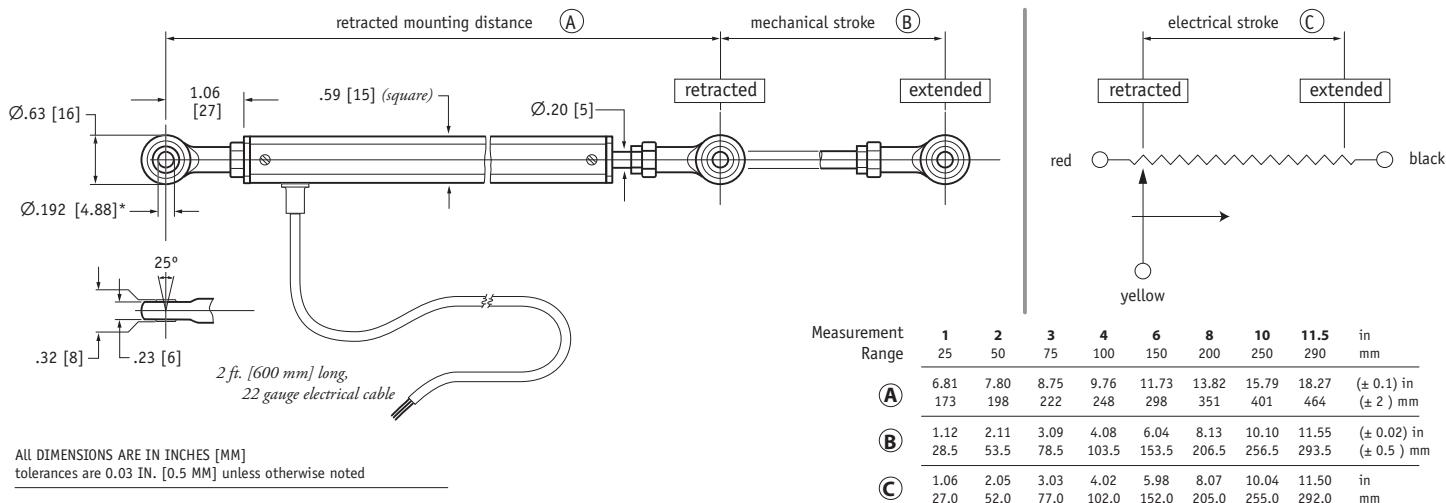
#### ENVIRONMENTAL

|                             |                                 |
|-----------------------------|---------------------------------|
| Enclosure Design.....       | IP65                            |
| Environmental Sealing ..... | O-ring and felt shaft seal      |
| Operating Temperature ..... | -40° to 212°F                   |
| Vibration.....              | up to 10 G's to 2000 Hz maximum |



Developed specifically to meet the needs of the auto racing industry and proven in industrial applications, Celesco's CLP series position transducers offer unrivalled performance in terms of accuracy, repeatability, life expectancy and ease of mounting.

The combination of individually corrected conductive plastic elements and precious metal wipers provide a cost effective measuring system which can operate effectively without being unduly influenced by external environmental conditions.



ALL DIMENSIONS ARE IN INCHES [MM]

tolerances are 0.03 IN. [0.5 MM] unless otherwise noted

\*tolerance = +.030 -.000 [+0.76 -0.00]

### Ordering Information:

| Item Number                  | CLP-25  | CLP-50  | CLP-75   | CLP-100  | CLP-150  | CLP-200  | CLP-250  | CLP-290   |
|------------------------------|---------|---------|----------|----------|----------|----------|----------|-----------|
| measurement range, in. [mm]: | 1[25]   | 2[50]   | 3[75]    | 4[100]   | 6[150]   | 8[200]   | 10[250]  | 11.5[290] |
| resistance, ( $\pm 20\%$ ):  | 2.5K    | 5.0K    | 5.0K     | 5.0K     | 10K      | 10K      | 10K      | 11.6K     |
| linearity, %:                | 0.2%    | 0.2%    | 0.2%     | 0.2%     | 0.1%     | 0.1%     | 0.1%     | 0.1%      |
| weight, oz. [grams]:         | 3.0[87] | 3.4[97] | 3.8[108] | 4.1[117] | 4.8[138] | 5.5[157] | 6.2[177] | 6.9[197]  |

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