

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 $< 1\mu A$

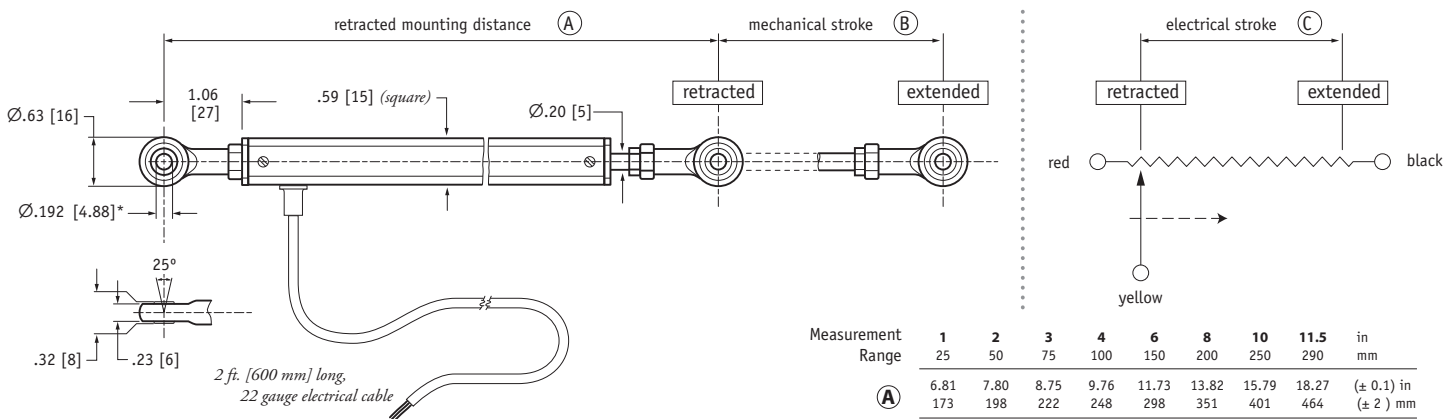
ENVIRONMENTAL

Enclosure Design IP65
 Environmental Sealing O-ring and felt shaft seal
 Operating Temperature -40° to $212^\circ F$
 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.



Measurement Range	1	2	3	4	6	8	10	11.5	in
	25	50	75	100	150	200	250	290	mm
(A)	6.81 173	7.80 198	8.75 222	9.76 248	11.73 298	13.82 351	15.79 401	18.27 464	(± 0.1) in (± 2) mm
(B)	1.12 28.5	2.11 53.5	3.09 78.5	4.08 103.5	6.04 153.5	8.13 206.5	10.10 256.5	11.55 293.5	(± 0.02) in (± 0.5) mm
(C)	1.06 27.0	2.05 52.0	3.03 77.0	4.02 102.0	5.98 152.0	8.07 205.0	10.04 255.0	11.50 292.0	in mm

All DIMENSIONS ARE IN INCHES [MM]
 tolerances are 0.03 IN. [0.5 MM] unless otherwise noted

*tolerance = $+0.030 -0.000$ [$+0.76 -0.00$]

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]

version: 4.0 last updated: December 12, 2006

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