

Linear Potentiometer

Precision Potentiometric Output

Ranges: 0-3 to 0-30 inches [0-75 to 0-750 mm]

5K – 10K ohms • IP65



CLWG



Specification Summary:

GENERAL

Full Stroke Ranges..... 0-3 to 0-30 in. (0-75 to 0-750 mm)
 Output Signal voltage divider (potentiometer)
 Linearity..... ± 0.04 to 0.1% full stroke, see ordercode
 Repeatability < 0.01 mm
 Resolution essentially infinite
 Life Expectancy..... 50 million cycles
 Enclosure Material aluminum
 Sensor conductive plastic linear potentiometer
 Max. Operating Speed 200 inches per second

ELECTRICAL

Input Resistance 5K to 10K ohms ($\pm 20\%$), see ordercode
 Recommended Maximum Input Voltage..... 25-30 V(AC or DC)
 Recommended Operating Wiper Current $\leq 1 \mu A$

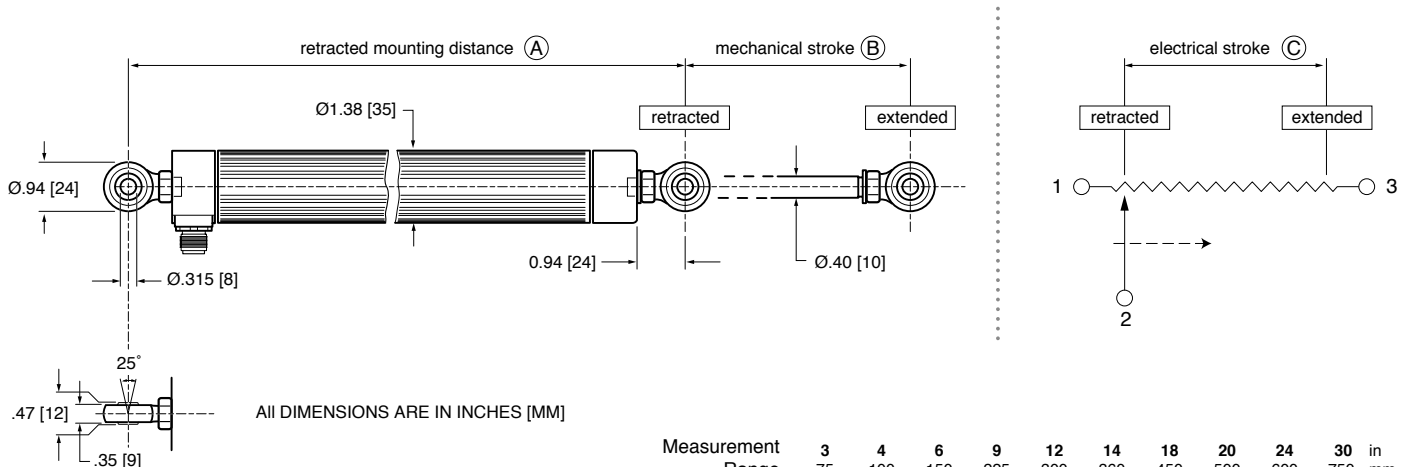
ENVIRONMENTAL

Enclosure Design IP65
 Operating Temperature -22° to $212^\circ F$
 Vibration up to 10 G's to 2000 Hz maximum

Developed specifically for a wide range of demanding applications, Celesco's CL series position transducers offer unrivalled performance in terms of accuracy, repeatability, life expectancy and ease of mounting. Such applications include industrial automation, automotive and robotics.

The CLWG uses a twin-bearing actuating rod, backlash-free pivot heads and a superior wiper system to provide outstanding linearity and performance.

Outline Drawing



All DIMENSIONS ARE IN INCHES [MM]

Measurement Range	3	4	6	9	12	14	18	20	24	30	in
	75	100	150	225	300	360	450	500	600	750	mm
(A)	9.72	10.75	12.72	15.75	18.74	21.69	26.18	28.74	33.70	40.94	in
	247	273	323	400	476	551	665	730	856	1040	mm
(B)	3.11	4.13	6.10	9.09	12.09	14.49	18.11	20.08	24.09	30.07	0.02 in
	79	105	155	231	307	368	460	510	612	764	2 mm
(C)	2.99	4.01	5.98	8.98	11.97	14.41	17.99	20.00	24.02	30.00	in
	76	102	152	228	304	366	457	508	610	762	mm

Ordering Information:

Model Number:

CLWG - _____ **-** _____
order code: **R** **A**

Sample Model Number:

CLWG - 75 - NC4

R range: 3 inches [75 mm]

A electrical connection: 4-pin, 90° microconnector w/ cordset

Full Stroke Range:

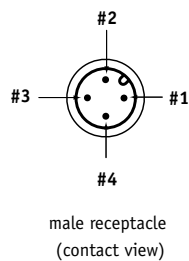
R <i>order code:</i>	75	100	150	225	300	360	450	500	600	750
measurement range, in. [mm]:	3[75]	4[100]	6[150]	9[225]	12[300]	14[360]	18[450]	20[500]	24[600]	30[750]
resistance, (±20%):	3K	3K	5K	5K	5K	5K	5K	5K	5K	10K
linearity, %:	0.1%	0.1%	0.08%	0.07%	0.06%	0.05%	0.05%	0.05%	0.05%	0.04%

Electrical Connection:

A *order code:*

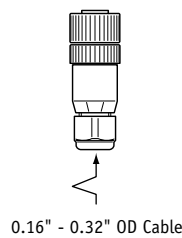
blank

4-pin micro-connector
(no mating plug supplied)



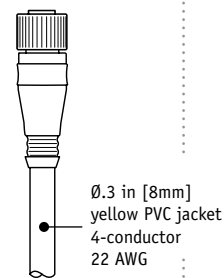
MC4

4-pin micro-connector
 w/ mating plug



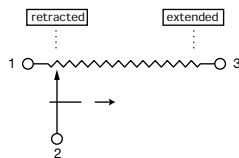
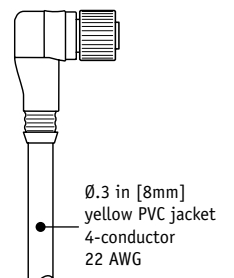
SC4

4-pin micro-connector
 and 4 meter length cordset
 w/straight mating plug



NC4

4-pin micro-connector
 and 4 meter length cordset
 w/90° mating plug



Pin#	Cordset Wire Color
1	BROWN
2	WHITE
3	BLUE
4	BLACK