

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
 Operating Speed 200 inches (5 M) per second, max.

ELECTRICAL

Input Resistance5K 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

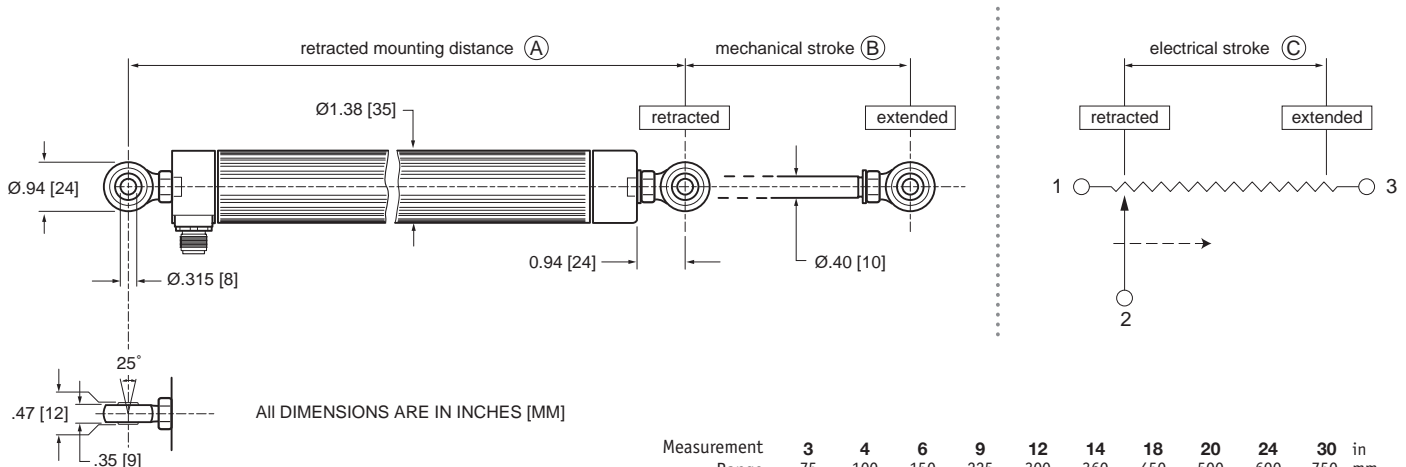
Enclosure Design IP65
 Operating Temperature -22° to $212^\circ F$
 Vibration up to 10 G's to 2000 Hz maximum



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



Measurement Range	3	4	6	9	12	14	18	20	24	30	in	mm
	75	100	150	225	300	360	450	500	600	750		
(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

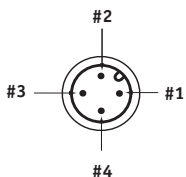


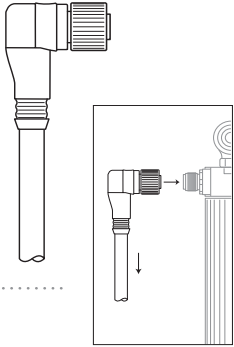
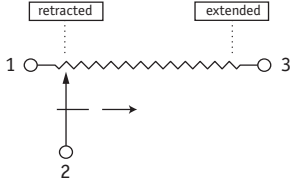
R range: 3 inches [75 mm]
A electrical connection: 4-pin, 90° M12 cordset

Full Stroke Range:

R order code:	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	MC4	SC4	NC4										
4-pin M12 connector <i>(no mating plug supplied)</i>	4-pin M12 connector w/ mating plug	4-pin M12 connector and 4 meter length cordset w/straight mating plug	4-pin M12 connector and 4 meter length cordset w/90° mating plug										
													
male receptacle (contact view)	0.13" - 0.20" OD Cable (4mm - 6mm)	4-conductor 22 AWG											
		<table border="1"> <thead> <tr> <th>Pin#</th> <th>Cordset Wire Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BROWN</td> </tr> <tr> <td>2</td> <td>WHITE</td> </tr> <tr> <td>3</td> <td>BLUE</td> </tr> <tr> <td>4</td> <td>BLACK</td> </tr> </tbody> </table>		Pin#	Cordset Wire Color	1	BROWN	2	WHITE	3	BLUE	4	BLACK
Pin#	Cordset Wire Color												
1	BROWN												
2	WHITE												
3	BLUE												
4	BLACK												