

Developed specifically for a wide range of demanding applications, our 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.

CLWG

Linear Potentiometer

Absolute Linear Position to 30 inches (750 mm)

3K - 10K ohms • High Cycle Applications

Industrial Automation, Test and Robotics Applications

IP65 Protection • M12 Connector

General

Full Stroke Ranges 0-3 to 0-30 in. (0-75 to 0-750 mm)

Output Signal voltage divider (potentiometer)

Linearity .04% to .1%, see ordering information

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 Resistance 5K to 10K ohms ($\pm 20\%$), see order code

Recommended Maximum Input Voltage 25-30 V(AC or DC)

Recommended Operating Wiper Current $\leq 1 \mu\text{A}$

Environmental

Enclosure Design IP65

Operating Temperature -22° to 212°F

Vibration up to 10 g to 2000 Hz maximum

CLWG

Linear Potentiometer

Ordering Information

Model Number:

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

Sample Model Number:

CLWG - 75 - NC4

R range: 3 inches [75 mm]

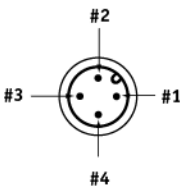
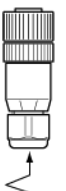

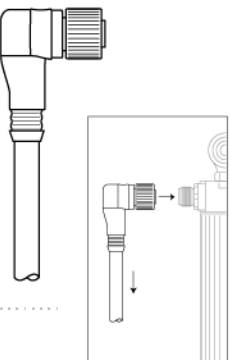
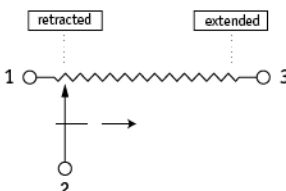
A electrical connection: 4-pin, 90° M12 cordset

Full Stroke Range:

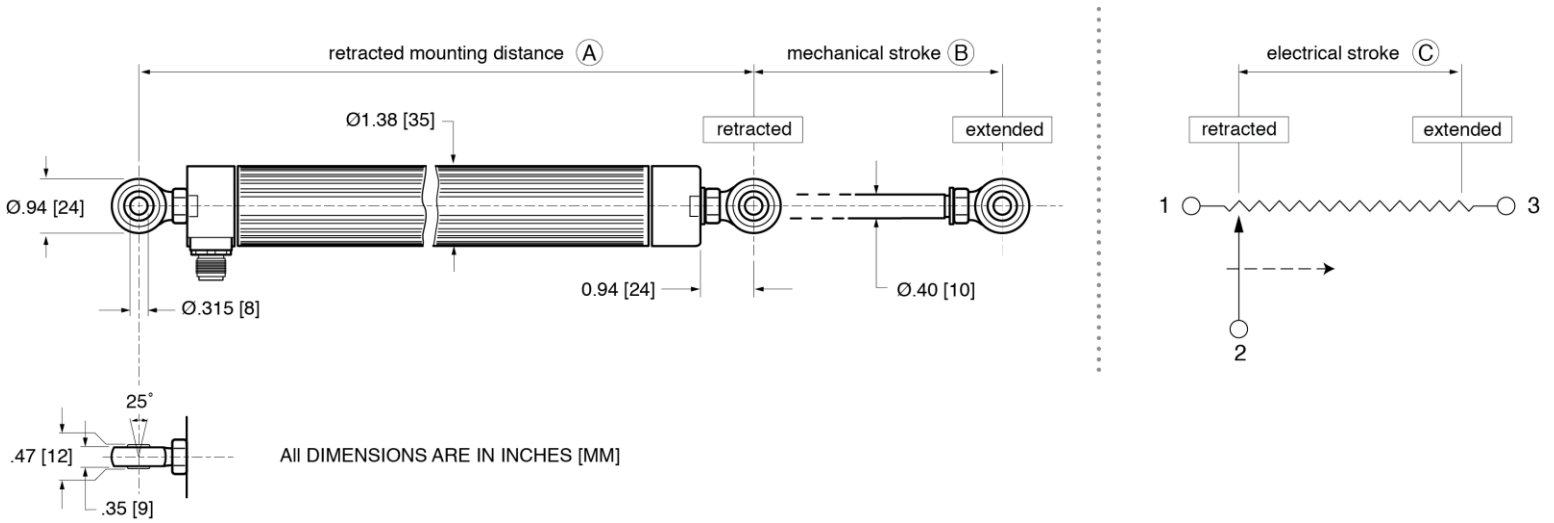
R order code:	75	100	150	225	300	360	450	500	600	750
measurement range, in. [mm]:	3[75]	4[100]	6[150]	9[225]	12[300]	14[360]	18[450]	20[500]	24[600]	30[750]
resistance, (±20%):	3K	3K	5K	5K	5K	5K	5K	5K	5K	10K
linearity, %:	0.1%	0.1%	0.08%	0.07%	0.06%	0.05%	0.05%	0.05%	0.05%	0.04%

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										
 <p>male receptacle (contact view)</p>	 <p>0.13" - 0.20" OD Cable (4mm - 6mm)</p>	 <p>4-conductor 22 AWG</p>											
													
<table border="0"> <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												

Outline Drawing



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

NORTH AMERICA

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CLWG 12/01/2015

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