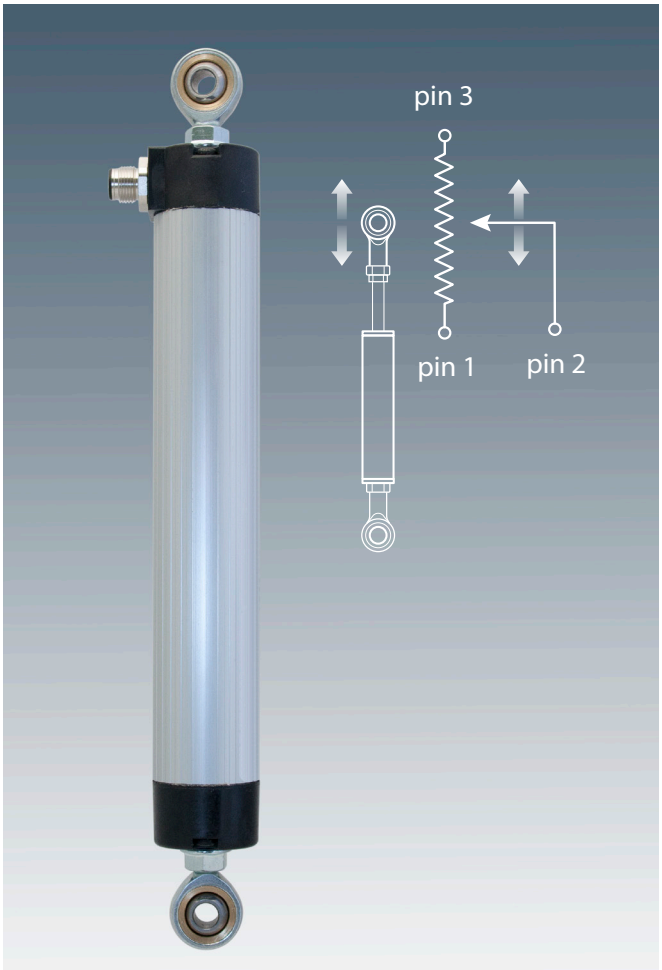
CLWG

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	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 (±20%), see ordercode
Recommended Maximum Input Voltage	25-30 V(AC or DC)
Recommended Operating Wiper Current	≤ 1 µA

ENVIRONMENTAL

Enclosure Design	IP65
Operating Temperature	-22° to 212°F
Vibration	up to 10 g to 2000 Hz maximum

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.

Ordering Information:

Model Number:

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

Sample Model Number:
CLWG - 75 - NC4
Ⓡ range: 3 inches [75 mm]
Ⓐ electrical connection: 4-pin, 90° M12 cordset

Full Stroke Range:

Ⓡ *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%

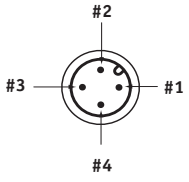
20630 Plummer Street • Chatsworth, CA 91311
tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

Ordering Information (cont.):

Electrical Connection:

Ⓐ *order code:*

blank	MC4	SC4	NC4
4-pin M12 connector *(no mating plug supplied)*	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



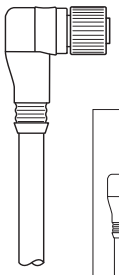
male receptacle
(contact view)

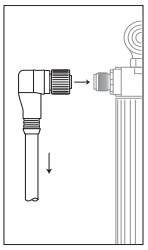


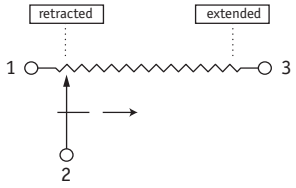
0.13" - 0.20" OD Cable
(4mm - 6mm)



4-conductor
22 AWG

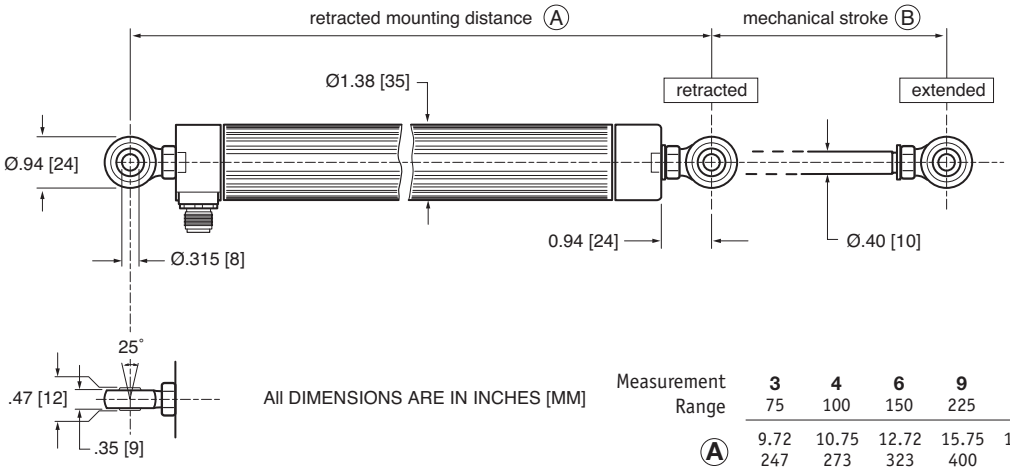


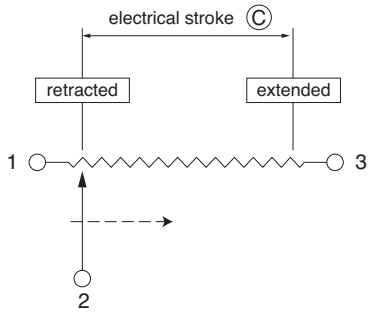




Pin#	Cordset Wire Color
1	BROWN
2	WHITE
3	BLUE
4	BLACK

Outline Drawing





All DIMENSIONS ARE IN INCHES [MM]

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