CD120L potentiometric output – Measurement range 0 up to 3000 mm

Specifications:

Measurement range	0 up to 3000 mm
Output signal	1k Ω potentiometric output (other values on demand)
	500 Ω gauge bridge output
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminum (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Precision potentiometer
Connection	Male connector M16 – 3 pins DIN
	Male connector M12 – 4 pins
	PVC cable
Standard linearity	+/- 0,15% f.s.
	+/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10m/s
Max. Acceleration	7 m/s ² (before cable deformation)
Weight	≈ 2000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force	
3000	≈ 13,50 N	≈ 18,00 N	

Ordering reference:

	CD120L OP OP
Model	
CD120L	
Measur	ement range
3000	= 0 up to 3000 mm
(Other r	anges available on demand)
Output	signal
R01K	= 1kΩ potentiometric output (Other values on demand)
P05K	= 500 Ω gauge bridge output
Linearity	,
L15	= +/- 0.15% f.s.
L10	= +/- 0.10% f.s. (optional)
Connect	ion
с	= Male connector M16 – DIN 3 pin
L4	= Male connector M12 – 4 pin
К	= PVC cable + ex: 02 for cable 2 meters long
OP Opti	ons
AC	= Complete anodizing

BR= Cleaning brush for the cableBT= Low temperature (down to -30°C without humidity)CP= Fixing of the measuring cable with a clevisIP67= Protection class IP67M4= Fixing of the measuring cable with a M4 threaded rodTEV= Water evacuation holes

Reference example: CD120L-3000-R01K-L15-K02-OP-AC-M4

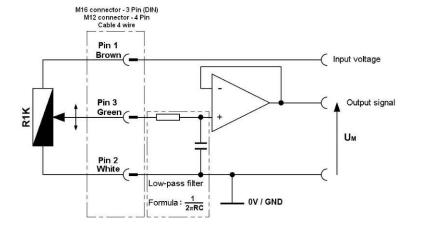


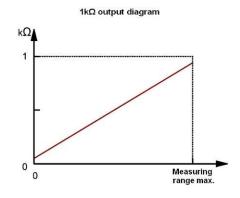
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Potentiometric version 1 K Ω : (other values on demand)

Temperature drift +/-50 ppm/°C

Example of wiring diagram with input stage:

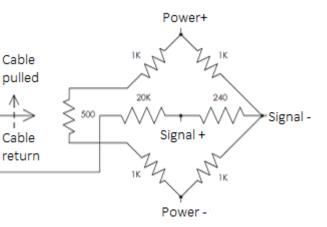




To ensure a good linearity, wire the potentiometer as a voltage divider and never as a rheostat. The input resistance of the operating system must be very high (greater than $10M\Omega$)

Gauge bridge output P05K :

500Ω impedance Full scale output : 2mV/V Zero adjustment not available Consult us for an adjustable version.



Connection:

Male connector M16 3 pin (DIN)	Male connector M12 4 pin (DIN)	Male connector M16 8 pins (DIN) P05K only	PVC cable 4 wire	R01K	РО5К
1	1	1	Brown	Input voltage +	Input voltage +
2	2	2	White	Input voltage GND	Input voltage GND
3	3	3	Green	Signal +	Signal +
4	/	4	/	/	Signal -
Sensor side view	Sensor side view	Sensor side view			

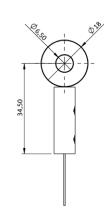


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Cable attachment with a lug :

Standard

The attachment lug is fixed with a M6 screw or a clevis.



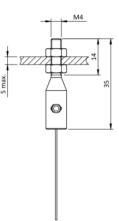
Cable attachment fitted with a M4 threaded rod:

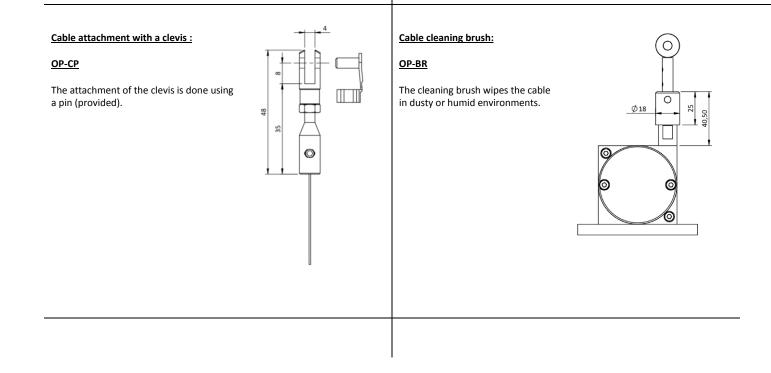
<u>OP-M4</u>

The rod attachment uses a threaded rod with 2 nuts (provided). The required thickness of the plate does not exceed 5 mm.

Caution

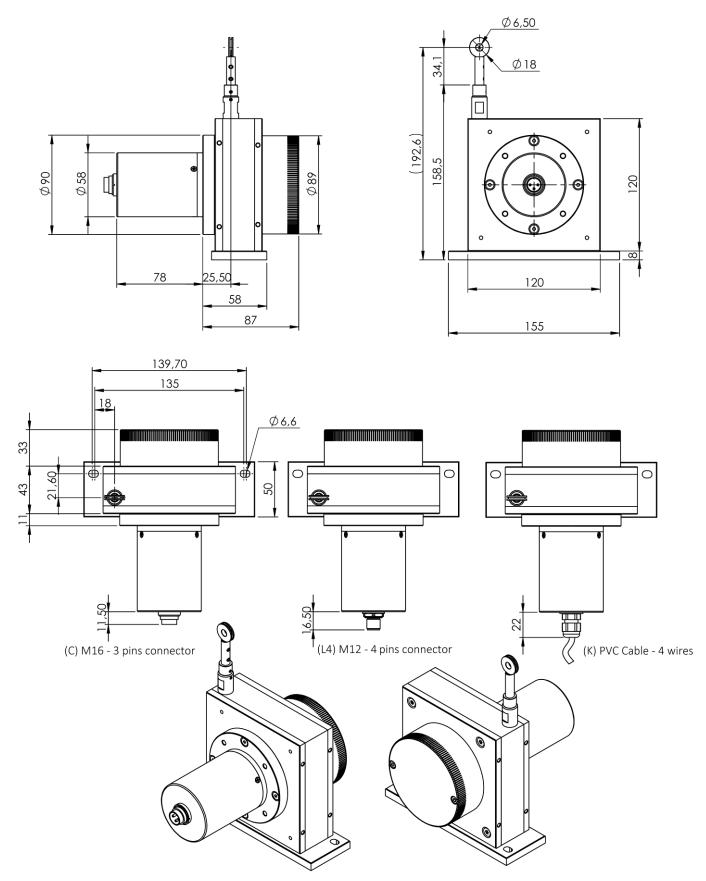
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.







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