CD150 potentiometric output - Measurement range 0 up to 6000 mm

Specifications:

Measurement range Output signal	0 up to 6000 mm 1k Ω potentiometer (other values on demand)	
Resolution	Quasi infinite (depends on the operating system)	
Material	Body and cover - Aluminium (RohS)	
	Measuring cable – Stainless steel	
Cable diameter	0,60 mm	
Detection element	Multi-turn Hybrid potentiometer	
Connection	Male connector M16 – DIN 3 pin	
	Male connector M12 – 4 pin	
	PVC cable – 4 wires	
Standard linearity	+/- 0,15% f.s.	
	+/- 0,10% f.s. (optional)	
Protection class	IP54 (option IP67)	
Max. Velocity	10 m/s	
Max. Acceleration	5 m/s ² (before cable deformation)	
Weight	≈ 3000 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
4000	≈ 11,00 N	≈ 13,50 N
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:



AC	= Complete anodizing
BR	= Cleaning brush for the cable
вт	= Low temperature (down to -30°C)
СР	= Fixing of the measuring cable with a
IP67	= Protection class IP67
M4	= Fixing of the measuring cable with a
TEV	= Water evacuation holes

Reference example: CD150-4000-R01K-L15-K02-OP-AC-M4

clevis

M4 threaded rod



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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 $10 M \Omega$)

Connection :

Male connector M16 3 pin (DIN)	Male connector M12 4 pin (DIN)	PVC cable 4 wire	R01K
1	1	Brown	Input voltage +
2	2	White	Input voltage GND
3	3	Green	Signal +
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.



max.

Cable attachment with a clevis :

OP-CP

The attachment of the clevis is done using a pin (provided).



Cable cleaning brush:

OP-BR

The cleaning brush wipes the cable in dusty or humid environments.



Water evacuation holes:

OP-TEV

The holes allow the natural flow of fluids out of the sensor in order to avoid their accumulation in the system.





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Dimensional Drawing

Measurement range up to 4000 mm











82

Ø18

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50

34,1

148

(221) 186,50 Ø6,50

Measuring range greater than 4000 mm up to 6000 mm



















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