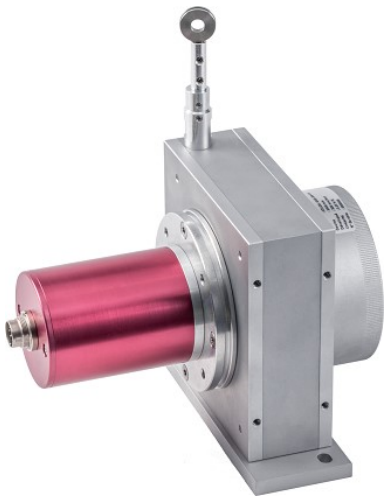
CD120 – POTENTIOMETRIC OR GAUGE BRIDGE OUTPUT
MEASUREMENT RANGE UP TO 3000 MM

Specifications:

Measurement range	0 up to 3000 mm
Output signal	1kΩ potentiometric output (other values on demand) 500Ω gauge bridge output
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminum (RohS) Measuring cable – Stainless steel 316L
Cable diameter	0,60 mm
Detection element	Precision potentiometer
Connection	Male connector M16 – 3 pins DIN Male connector M12 – 4 pins (A coding) PVC cable
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 M/S
Max. Acceleration	7 M/S² (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	≈ 13,00 N	≈ 18,00 N

Ordering reference:

CD120 – 3000 – R01K – L15 – K02 – OP – xx – xx

Model
CD120

Measurement range
3000 = 0 to 3000 mm
Or other ranges between 0 and 3000mm

Output signal
R01K = 1kΩ potentiometric output (other values on demand)
P05K = 500 gauge bridge

Linearity
L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (option)

Connection
C = Male connector M16 – DIN 3 pins **(version R01K)**
C = Male connector M16 – DIN 8 pins **(version P05K)**
L4 = Male connector M12 – 4 pins (A coding)
K = PVC cable - 8 wires - axial + ex: **02** for cable 2 meters long
Other connection available on demand

Options OP
AC = Complete anodizing
BR = Cleaning brush for the measuring cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
EN = Measuring cable coated with polyamide *(Measurement range limited to 2500 mm)*
IP67 = Protection class of electronics IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

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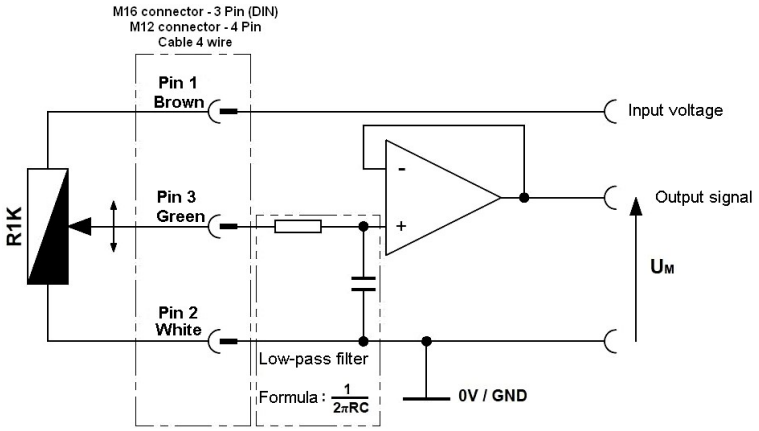
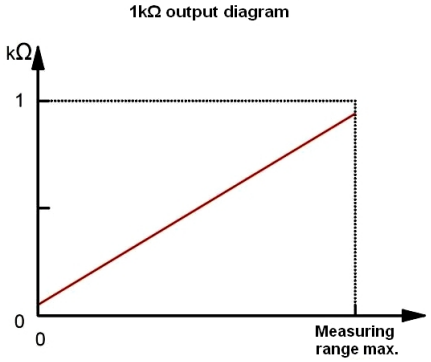
Electrical characteristics

Potentiometric version 1 KΩ : (other values on demand)

Temperature drift +/-50 ppm/°C

Example of wiring diagram with input stage :

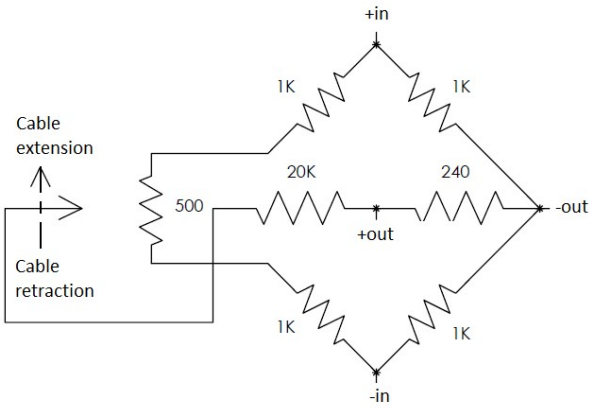




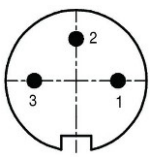
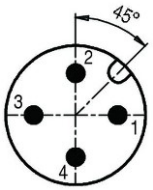
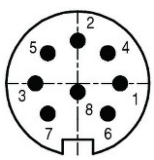
To ensure a good linearity, wire the potentiometer as a voltage divider and never as a rheostat.
The input resistance of the operating system must be very high (greater than 10MΩ)

Bridge output P05K :

Impedance of 500Ω
Full scale output : 2mV/V
Zero offset not available
Please consult us for an adjustable version.



Connection :

Male connector M16 3 pins (DIN) R01K only	Male connector M12 4 pins R01K or P05K	Male connector M16 8 pins (DIN) P05K only	PVC cable 4 wires	R01K	P05K
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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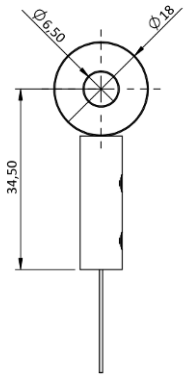
Options:

Cable attachment with a lug :

Standard

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

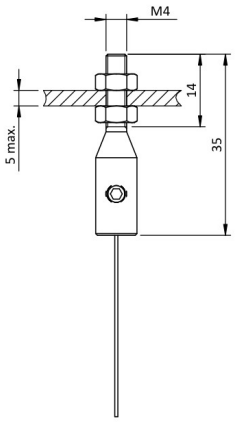


Cable attachment fitted with a M4 threaded rod:

OP-M4

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

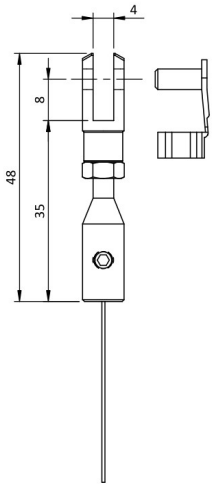
Caution
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.



Cable attachment with a clevis :

OP-CP

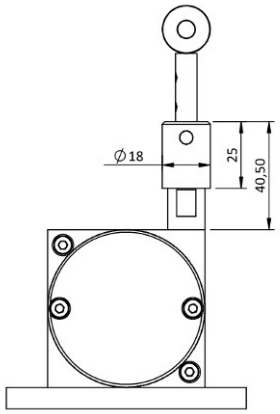
The attachment of the clevis is done using a pin (provided).



Cable cleaning brush:

OP-BR

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



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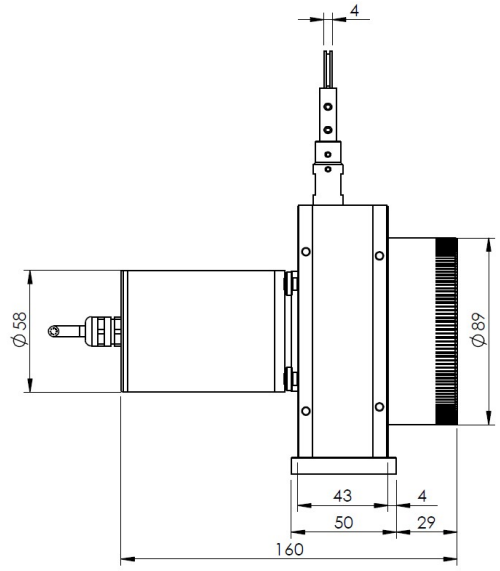
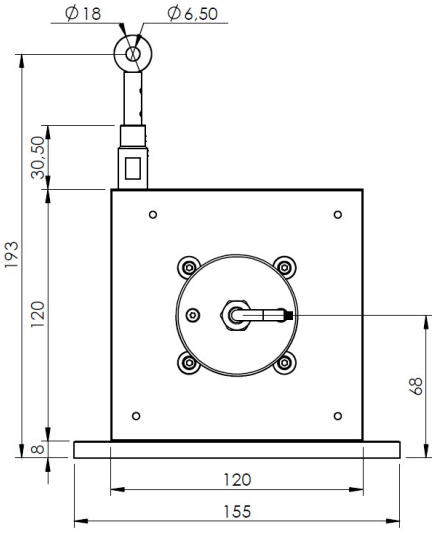
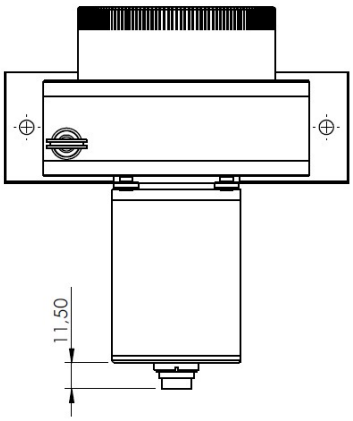
Dimensional drawing:

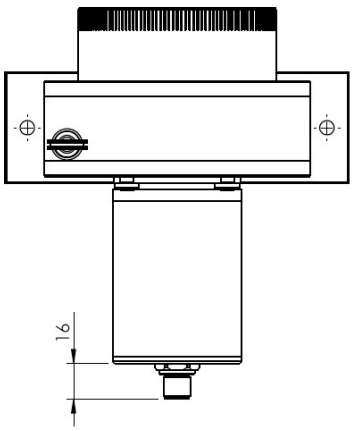




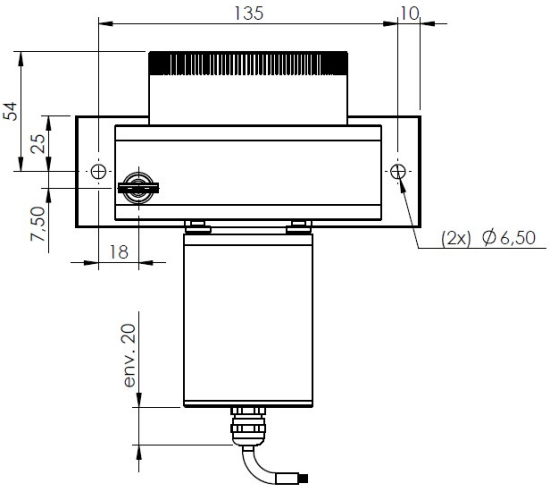
C connection
Connector M16 - 3 pins DIN (R01K version)
Connector M16 - 8 pins DIN (P05K version)



L4 connection
connector M12
4 pins (A coding)



K connection
PVC cable



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