SC150 analog output – Measurement range 0 up to 6000 mm

Specifications:

Measurement range	0 up to 6000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
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 8 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:

SC150					OP	

Model

SC150

Measurement range

4000 = 0 up to 4000 mm
6000 = 0 up to 6000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

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

Connection

C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

OP Options

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

Reference example: SC150-4000-U010-L15-K02-OP-AC-M4

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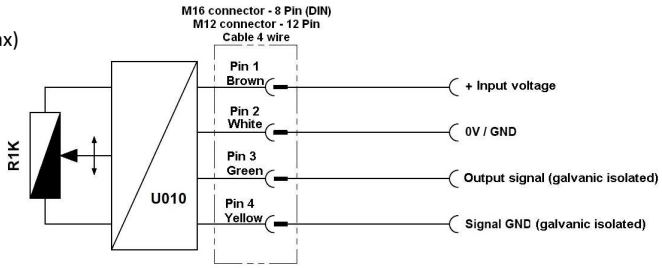
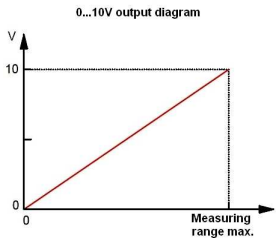
Electrical characteristics :

Analog version 0 … 10V :

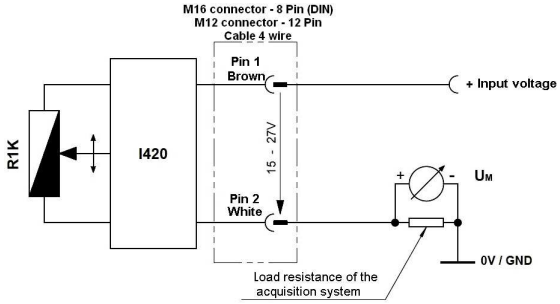
Input voltage	15 to +27 Vdc (52mA max)
Output voltage	0 to 10 Vdc
Output current	10mA max
Galvanic isolation	3KV
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C

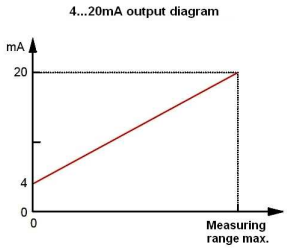




Analog version 4 … 20mA : **(Current loop)**

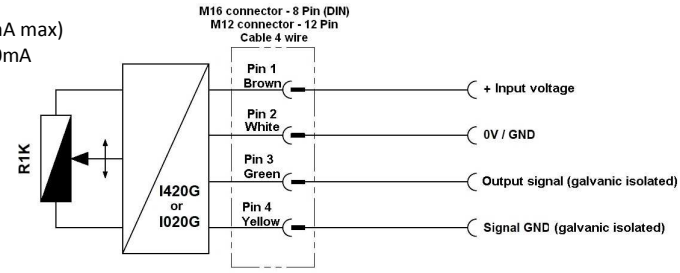
Input voltage	+15 to +27 Vdc (32mA max)
Output current	4 to 20mA
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C

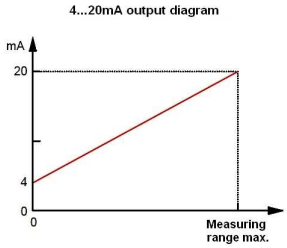




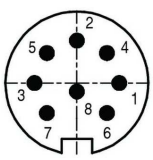
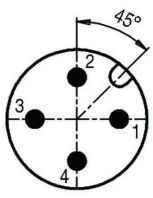
Analog version 4…20mA or 0…20mA : **(Current generator)**

Input voltage	+15 to +27 Vdc (75mA max)
Output current	4 to 20mA or 0 to 20mA
Output current	22 mA max.
Galvanic isolation	3KV
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C





Connection :

Male connector M16 8 pin (DIN)	Male connector M12 4 pin (DIN)	PVC cable 4 wire	010V	I420 (current loop)	I420G or I020G (current generator)
1	1	Brown	Input voltage +	Signal +	Input voltage +
2	2	White	Input voltage GND	Signal -	Input voltage GND
3	3	Green	Signal +		Signal +
4	4	Yellow	Signal GND		Signal GND
 Sensor side view	 Sensor side view				

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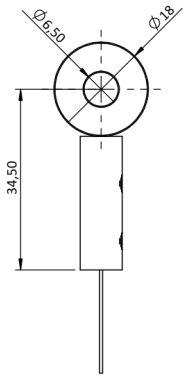
Options :

Cable attachment with a lug :

Standard

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

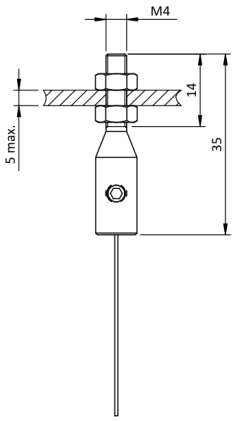


Cable attachment fitted with a M4 threaded rod:

OP-M4

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

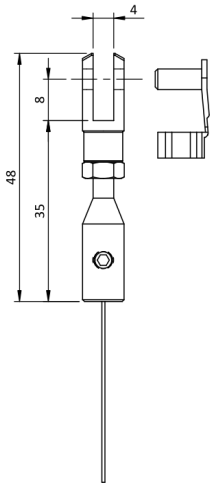
Caution
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.



Cable attachment with a clevis :

OP-CP

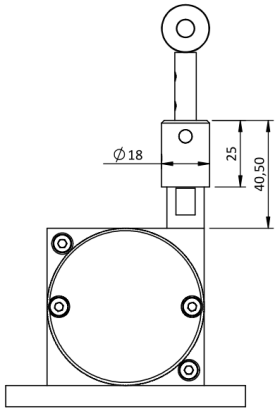
The attachment of the clevis is done using a pin (provided).



Cable cleaning brush:

OP-BR

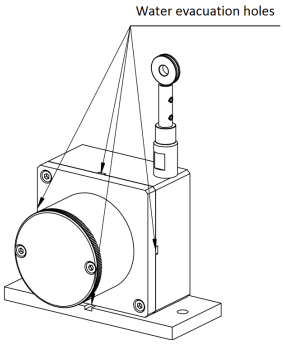
The cleaning brush wipes the cable in dusty or humid environments.



Water evacuation holes:

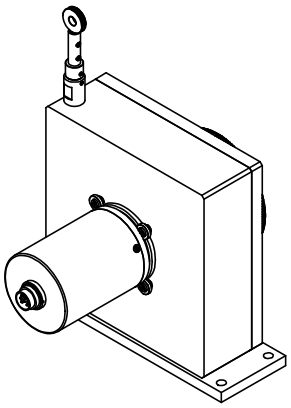
OP-TEV

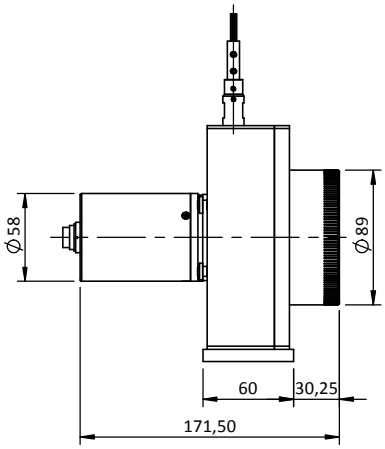
The holes allow the natural flow of fluids out of the sensor in order to avoid their accumulation in the system.

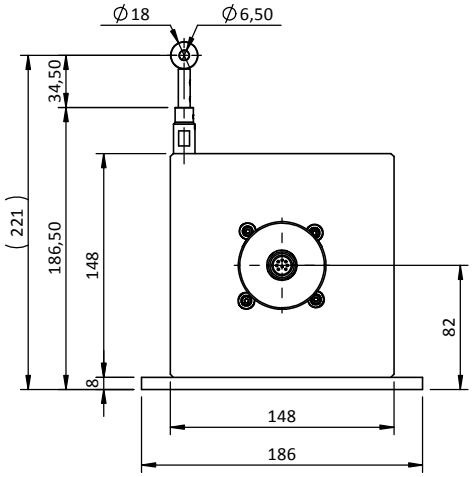


Dimensional Drawing

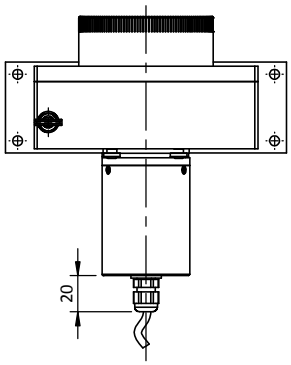
Measurement range up to 4000 mm



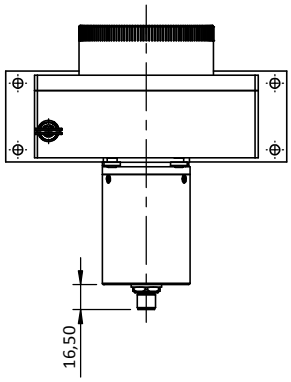




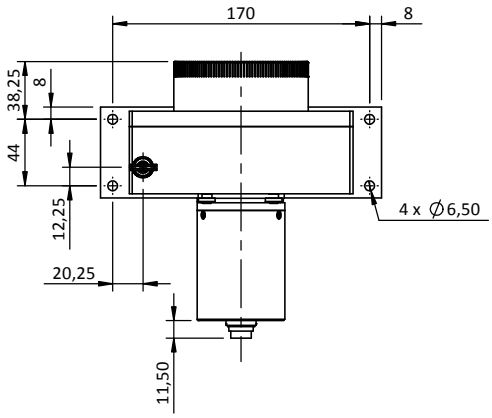
K connection
(PVC cable - 4 wires)



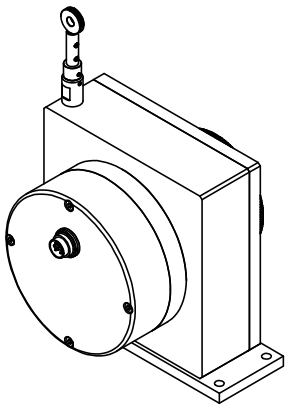
L4 connection
(connector M12 - 4 pin)

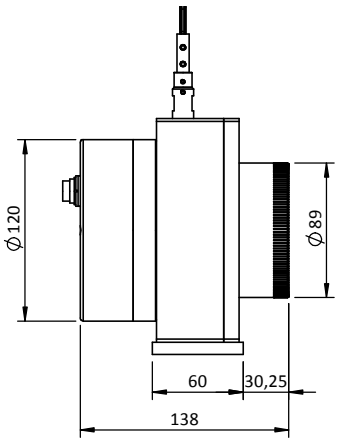


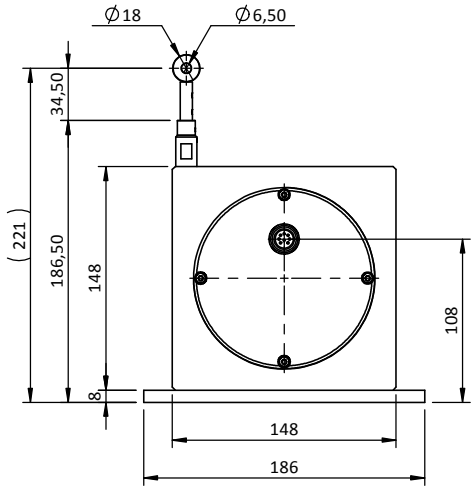
C connection
(Connector M16 - DIN 8 pin)



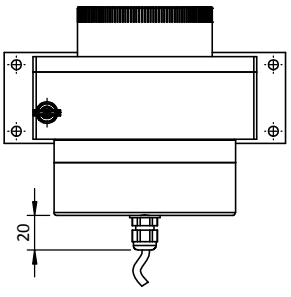
Measuring range greater than 4000 mm up to 6000 mm



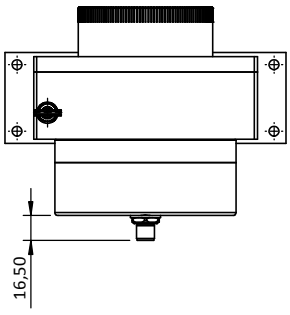




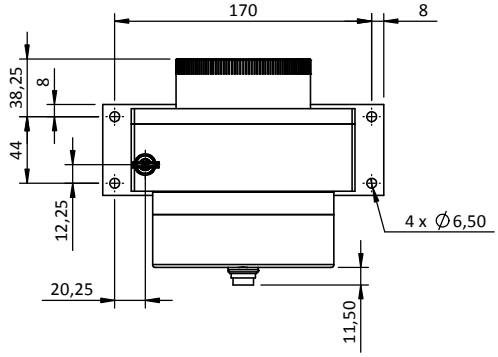
K connection
(PVC cable - 4 wires)



L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 8 pin)



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