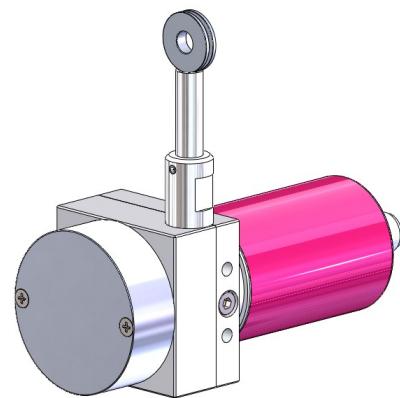


SC50.01 – ANALOG OUTPUT – MEASUREMENT RANGE UP TO 1250 MM

Specifications:

Maximum measuring range	1250 mm
Output signal	0...10V ; 0...5V 4...20mA (2, 3 or 4 wires) 0...20mA (3 or 4 wires)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminum (RohS) Measuring cable – Stainless steel 316L
Cable diameter	0,51 mm
Detection element	Precision potentiometer
Connection	Male connector M16 – 8 pins DIN Male connector M12 – 4 pins (A coding) PVC cable
Linearity	up to +/-0.10% f.s.
Protection class	IP64 (option IP67)
Max. Velocity	10 M/S
Max. Acceleration	40 M/S ² (before cable deformation)
Weight	≈ 700 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
50	≈ 6,40 N	≈ 6,50 N
100	≈ 6,30 N	≈ 6,50 N
250	≈ 6,00 N	≈ 6,50 N
500	≈ 5,50 N	≈ 6,50 N
750	≈ 5,00 N	≈ 6,50 N
1000	≈ 4,50 N	≈ 6,50 N
1200	≈ 4,00 N	≈ 6,50 N
1250	≈ 4,00 N	≈ 6,50 N

Ordering reference:

SC50.01 – 1000 – U010 – L15 – K02 – OP – XX – XX	
Model	SC50.01
Measurement range	1250 = 0 to 1250 mm Or other ranges between 0 and 1250mm
Output signal	U010 = 0...10V (galvanic isolation) U005 = 0...5V (galvanic isolation) I420 = 4...20mA (current loop – 2 wires) I420T = 4...20mA (current generator – 3 wires) I020T = 0...20mA (current generator – 3 wires) I420G = 4...20mA (current generator – 4 wires) I020G = 0...20mA (current generator – 4 wires)
Linearity	L25 = +/- 0.25% f.s.(standard for 50mm ≥ Measuring range ≤ 500 mm) L15 = +/- 0.15% f.s.(standard for 500mm > Measuring range ≤ 1250 mm) (optional for 50mm ≥ Measuring range ≤ 500 mm) L10 = +/- 0.10% f.s.(optional for 500mm > Measuring range ≤ 1250 mm)
Connection	C = Male connector M16 – DIN 8 pins L4 = Male connector M12 – 4 pins (A coding) K = PVC cable - 8 wires - axial + ex: 02 for cable 2 meters long <i>Other connection available on demand</i>
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 (<i>Measurement range limited to 2500 mm</i>) 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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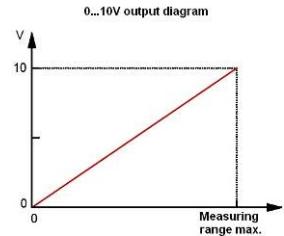
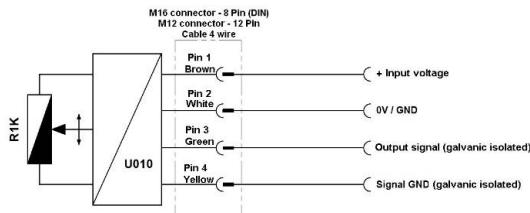
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Electrical characteristics :

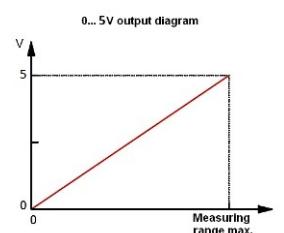
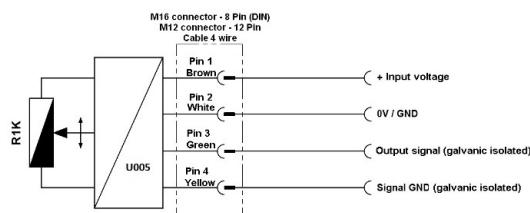
Analog version 0 ... 10V :

Input voltage	11 ... 30Vdc (52mA max)
Output voltage	0 ... 10V
Output current	10mA max
Galvanic isolation	3KV
Protection	- Short circuit - Polarity reversal
Temperature drift	+/-100 ppm/°C



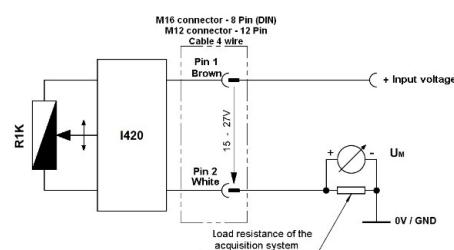
Analog version 0 ... 5V :

Input voltage	6.5 ... 30 Vdc (52mA max)
Output voltage	0 ... 5V
Output current	10mA max
Galvanic isolation	3KV
Protection	- Short circuit - Polarity reversal
Temperature drift	+/-100 ppm/°C

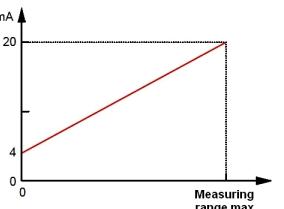


Analog version 4 ... 20mA : (Current loop – 2 wires)

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

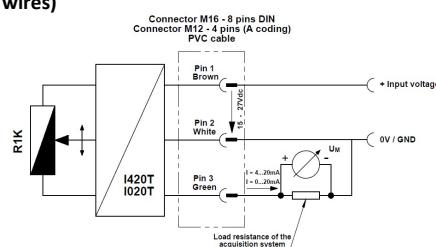


4...20mA output diagram

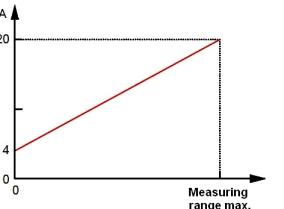


Analog version 4 ... 20mA or 0 ... 20mA : (Current generator – 3 wires)

Input voltage	15 ... 27 Vdc (32mA max)
Output current	4 ... 20mA or 0 ... 20mA
Output current	10mA max
Galvanic isolation	3KV
Protection	- Short circuit - Polarity reversal
Temperature drift	+/-100 ppm/°C

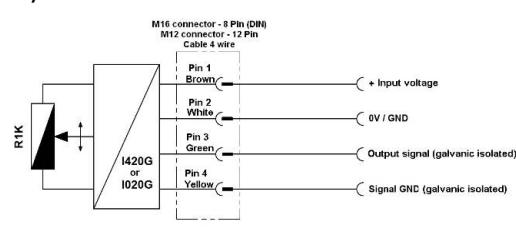


4...20mA output diagram

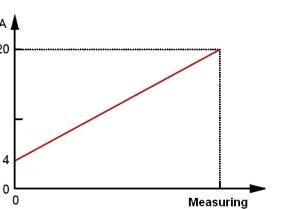


Analog version 4...20mA or 0...20mA : (Current generator – 4 wires)

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



4...20mA output diagram



Connection :

Male connector M16 8 pins (DIN)	Male connector M12 4 pins (A-coding)	PVC cable 4 wire	U010V or U005V (voltage output)	I420 (current loop – 2 wires)	I420T ou I020T (current generator – 3 wires)	I420G or I020G (current generator – 4 wires)
1	1	Brown	Input voltage +	Signal +	Alimentation +	Input voltage +
2	2	White	Input voltage GND	Signal -	Alimentation GND	Input voltage GND
3	3	Green	Signal +		Signal +	Signal +
4	4	Yellow	Signal GND		/	Signal GND
Sensor side view	Sensor side view					



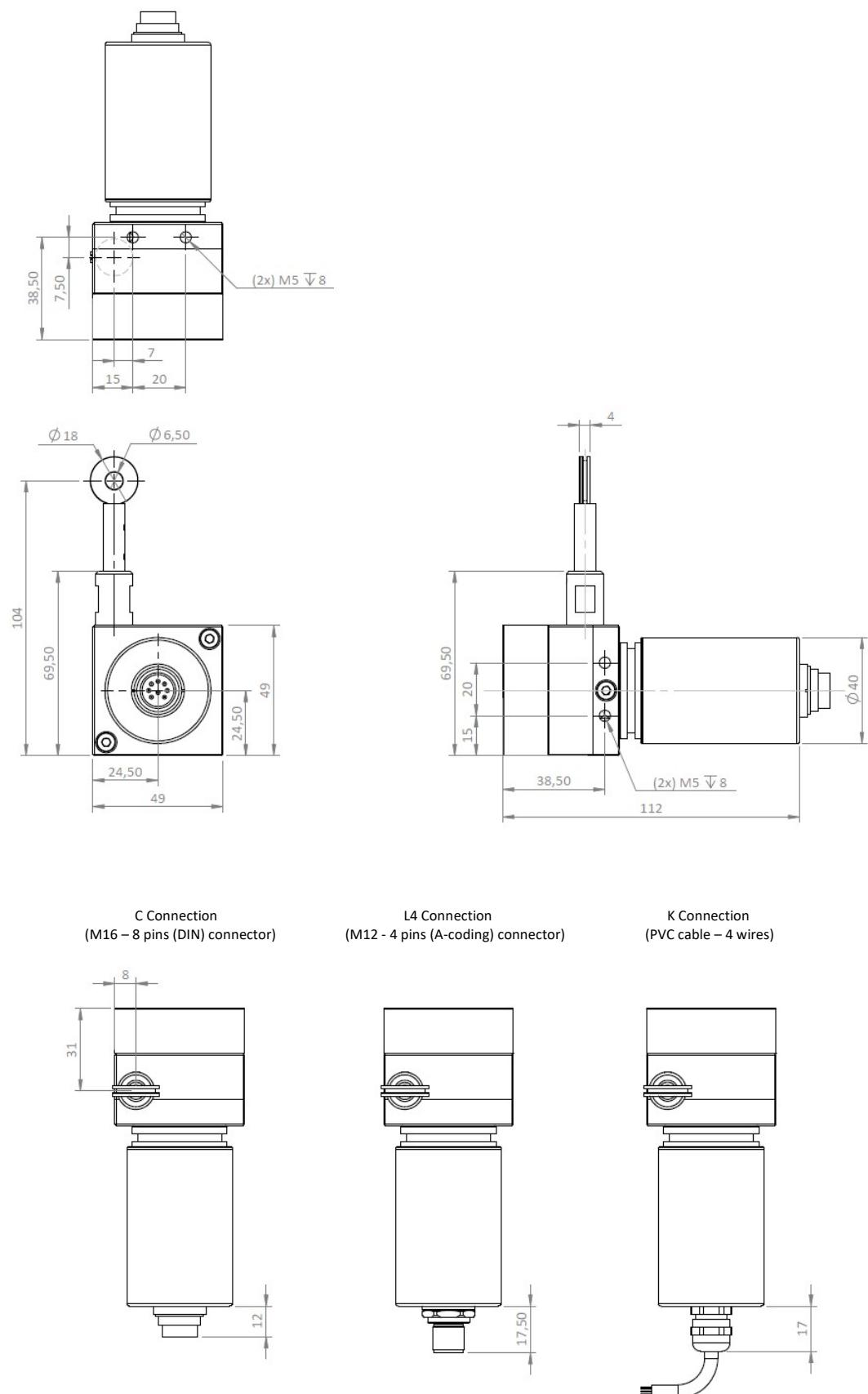
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Dimensional drawing:

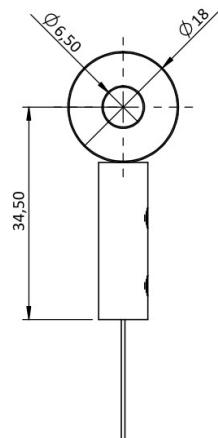


Options :

Cable attachment with a lug :

Standard

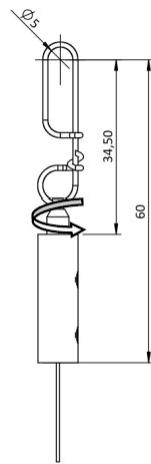
The attachment lug is fixed with a M6 screw or a clevis.



Cable attachment with a clip :

OP-EM

This fastening system allows rotation about its axis.
The clip is fixed with a M4 screw or a clevis.



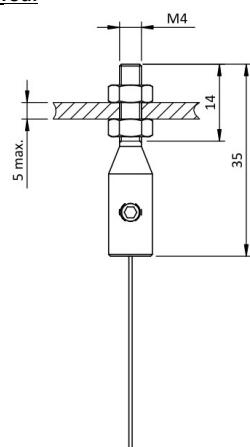
Cable attachment fitted with a M4 threaded rod:

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

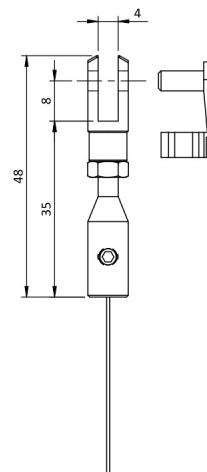
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.



Cable attachment with a clevis :

OP-CP

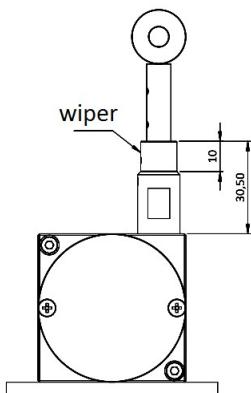
The attachment of the clevis is done using a pin (provided).



Cable dust wiper:

OP-RAC

The dust wiper cleans 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.

