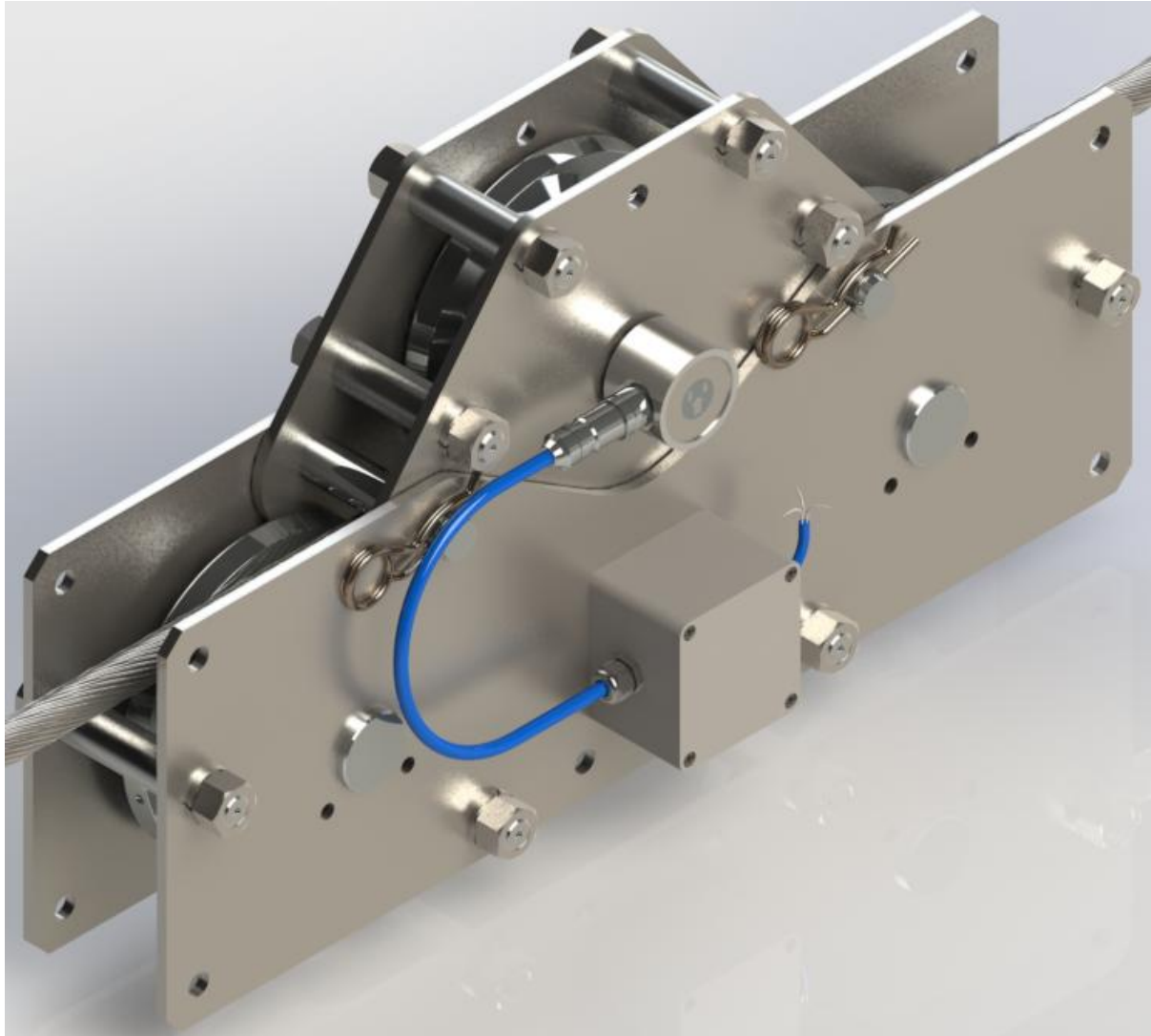


MODEL 5580 (stainless steel) MODEL 5585 (alloy steel) RUNNING LINE TENSIO METER



1. GENERAL	2
2. PRINCIPLE OF OPERATION.....	2
3. SENSOR INSTALLATION	2
4. RECOMMANDATION FOR USE.....	5
5. PERIODIC INSPECTIONS.....	5
6. USE FEATURES	6
7. GUARANTIES	6
8. PART LIST	7

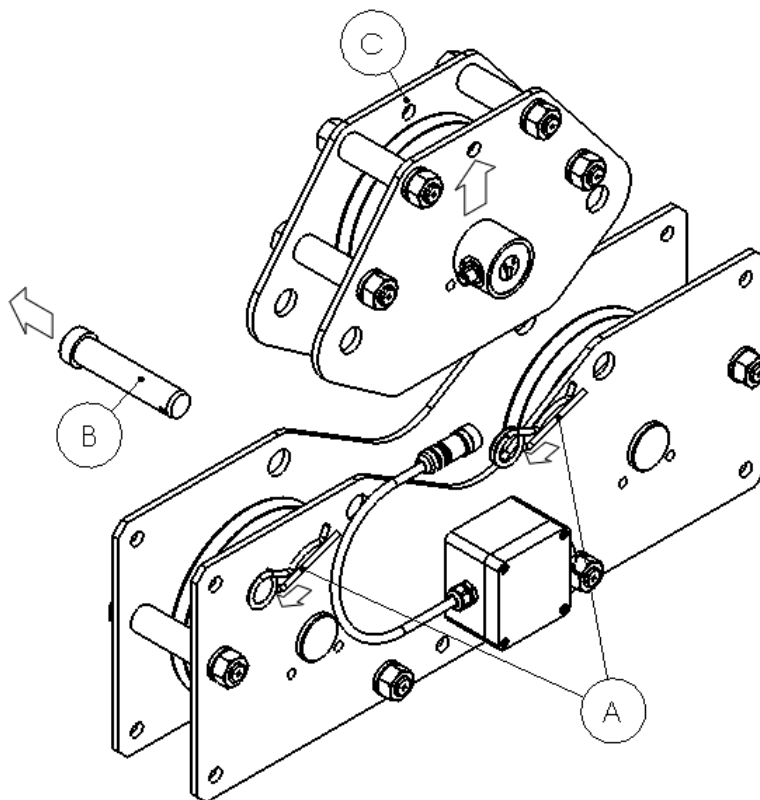
1. GENERAL

The sensor model 5580 is meant for the measurement of tension of running line. It can be used in all applications where the traction force in the cable must be known without having to modify neither the mechanics of the unit nor the tension existing on this cable.

2. PRINCIPLE OF OPERATION

Constraints of deformations of the sensor generated by the light deflection of the cable are measured and after electronic treatment, provide an electric signal proportional to the traction in the cable. By its design and its principle of operation, the sensor allows the measurement of the effort on the whole utilisation range, without any modification of component and with a precision better than 4% FS (full scale). The utilisation range is defined by the maximum capacity.

3. SENSOR INSTALLATION

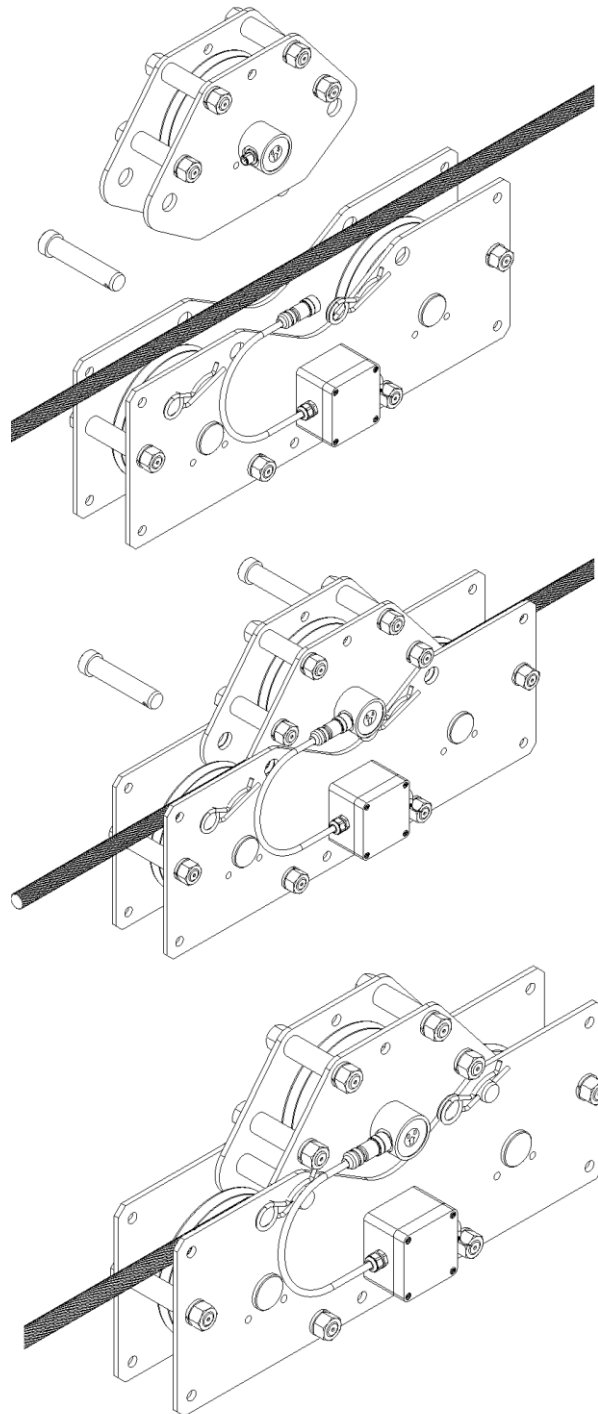


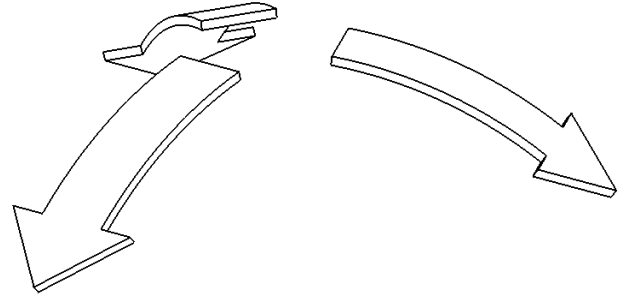
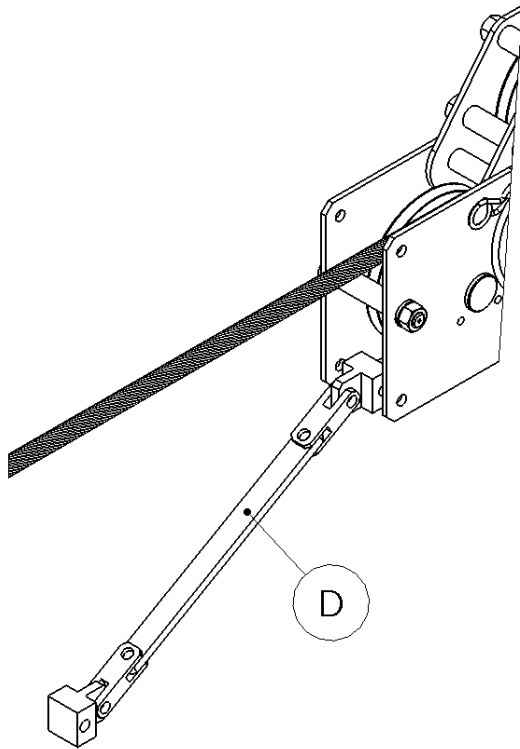
STEP 1

- After removing the connector, remove the pins (A).
- Pull out the axles (B) and remove the top frame(C).

STEP 2

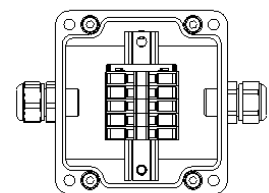
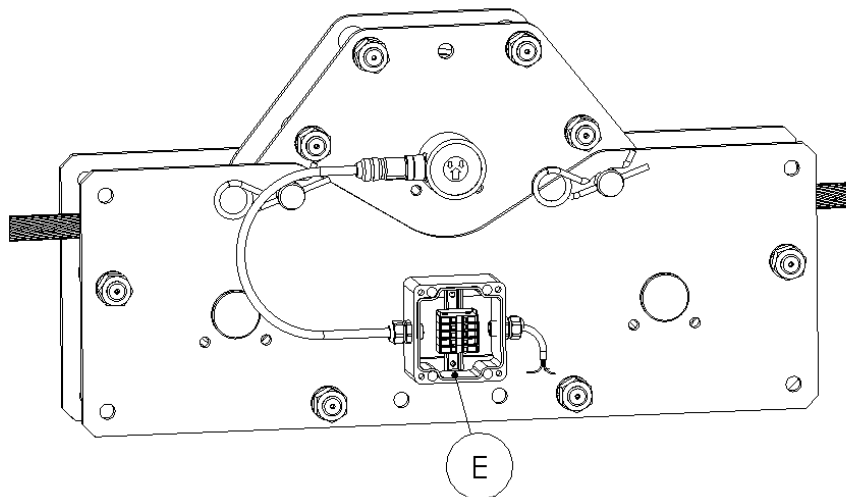
- Place the rope between the two frames of the running line tensiometer, and then insert the axles back (B) lock with their pins (C).





STEP 3

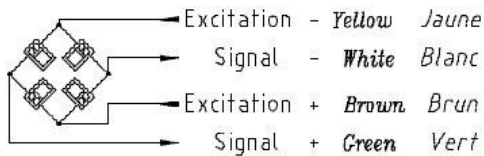
- Attach the running line tensiometer with an attachment arm (D) NOT SUPPLIED, flexible to allow the sensor following the rope during the unwinding.



STEP 4

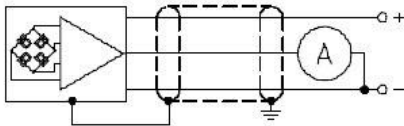
- Cabling the junction box (E), according to the ordered option, here below.

STANDARD 4



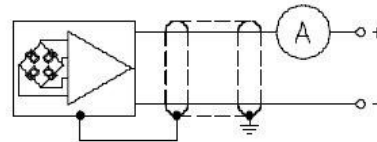
OPTION J

Common-Commun - *Yellow Jaune*
Signal + *Green Vert*
Excitation + *Brown Brun*



OPTION C-BLEU

Common-Commun - *White Blanc*
Excitation + *Brown Brun*



4. RECOMMANDATION FOR USE

The moving parts and parts on contact with the cable are made of hard steel, which decreases wear and increases longevity. To ensure that your installation is working correctly, lubricate regularly pulleys to prevent seizing of these. For handling, storage and wiring, all precautions applicable to the strain gauge sensors are also applicable to the tensiometer: avoid particularly shocks, overloads, as well as all other use than measurement of traction on fixed cable. For fixed installations on cable of the tensiometer where there is risk of electric shocks (lightning, welding ...), it is recommend to bridge the sensor with a copper braid. (See drawing)

5. PERIODIC INSPECTIONS

- 1) Make sure by suitable means that the sensor and its mechanism are not subject to jamming. (At least an annual control)
- 2) Check the signal for a zero load. (Annually)
Acceptable max.: ± 0.15 mV/V for the model 5580
 ± 6 mA for models 5580-C, 5580-J (output 4-20mA)
 ± 0.8 V for the model 5580-t (output 0-10V)
- 3) Make sure that the sensor was not victim of shocks (markings) or chemical attack (certain corrosive greases). If items 1 and 2 are not affected, preventive measures are sufficient. (Annually)
- 4) In case of doubt, fill in the diagnostic questionnaire provided in enclosure to the individual record sheet of the sensor and consult the manufacturer.
- 5) Check the integrity of the cable.
- 6) After any serious incident of operation, repeat operations 1 to 3.

6. USE FEATURES

	5580	5580 option C	5580 option J	5580 option t	
Type	Resistive	4-20 mA 2 wires	4-20 mA 3 wires	0-10 V 3 wires	
Compensated temperature range	De - 10° to + 45° C				
Operating temperature range	De - 30° to + 80° C				
Storage temperature range	De - 40° to + 85° C				
Power supply (VDC)	5... <u>10</u> ...12	9 - 28 not regulated	13- 28 not regulated	13- 30 not regulated	
Bridge impedance (Ω)	350 \pm 30	(5000)	(350)	(350)	
Load impedance (Ω)	NA	0,1 - 1k	0,1...0.3k	> 10k	
Nominal signal range	Min.	0 - 0,5 mV/V	9 mA	4 - 9 mA	0-10 V
	Max.	0 - 1,7 mV/V	22 mA	4 - 22 mA	0.2-11 V
Electrical saturation	> 2 mV/V	> 24 mA	> 24 mA	> 11 V	
Normal drift (zero) %/°C	< 0.1	< 0.1	< 0.1	< 0.1	
Normal drift (span) %/°C	< 0,2	< 0,2	< 0,2	< 0,2	

7. GUARANTEE

The manufacturer's guarantee is applicable as far as mounting recommendations and general use principle, like above described, are respected.

For any particular use, not described in this document, it is mandatory to obtain a prior written agreement from Sensy S.A. for the validity of the guarantee.

8. PART LIST

