

## EQFevo

### Simplified installation for rope tensioning equalization system

#### **PRELIMINARY NOTES**

- a) **DO NOT** connect USB port of a notebook or a USB battery charger to the sensor ports on the HUB (from 1 to 12).
- b) **DO NOT** turn on the HUB, until at least one sensor is connected.
- c) **DO NOT** install 2 sensors with the same ID on a single HUB.
- d) Download and install EQF12A\_Multilang software from website <u>https://www.s2tech.it/en/products-</u> catalog/load-cells/tension-meter-for-wire-ropes/eqfevo-rope-tensioning-equalization-system/

#### **INSTALLATION and USE:**

1) Power on the HUB through PWR USB port to charge internal battery.



2) Connect EQF-18 sensors to the HUB, matching ID code (present on each sensor) to the corresponding port.





#### 3) Through USB connect the HUB to the notebok (1) and power it on with button I/O (2).



4) Run the EQF12A\_Multilang program.



#### 5) Select serial port created for the HUB.

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Tension Measurement Time Chart Brake Test HS Report	Tensioning Results	English	*COM1 • \$1000 S2Tec	h Srl www.s2tech.it V2r2a		912
1	0	Meas. un t	COM3 Refresh	Tolerance %		
2	0					
3	0	Kilograms	1:1	5		
4	0					
5	0					
6	0	Operating Mode	Rope Tension			
7	0		Load > HI			
8	0	Calibrated		In range		
9	0	Calibrated		LO Limit 0		
10	0		Load < LO			
11	0			msec 0		
12	0	Max Tension	EQF # with Max Tension	Mean Std. Dev %		
60 75 100 125 150 175 200 2252	Reference Scan %	0	0	O		
EQF Evo Rope Diameter & Type		Min Tension	EQF # with min Tension Stand	L Dev.		
6 mm 6x195-NFC-DX	Rope Type	0	0,0	0		
Activity InstallEQF OFF	PIN POSITION Suggested Pin Po	sition				
OFF Scan for EQF sensors Get info EQF	sensors HUB Status	Battery				
Verify that EQF sensors are connected to the HUB, power it ON and he	ave it connected to the tabled, before pressing "Get info E	QF sensors" button to activ	ate communication.	Exit		



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Tension Measurement	Time Chart Brake Test HS Report	Tensioning Results	1	English	Комз 1000 S2	2Tech srl www.s2tech.it	V2r2a	
1		0	Cal.: 00/	Meas. units	Suspension Ratio	Tolerance %		
2		0	Cal.: 00/					
3		0	Cal.: 00/	Kilograms	1:1	5		
4		0	Cal.: 00/					
5		0	Cal.: 00/					
6		0	Cal.: 00/	Operating Mode	Rope Tension			
7		0	Cal.: 03/05/2021		Load > HI	HI Limit 0		
8		0	Cal.: 00/	Calibrated		In range		
9		0	Cal.: 00/		Load < LO	LO Limit 0		
10		0	Cal.: 00/		,,	meet 0		
"		0	Cal: 00/	·		msec jo		
12		0	Cal.: 00/	Max Tension	EQF # with Max Tension	Mean Std. De	ev %	
65 100 125 150	175 200 225 250 275 300 325 350 375 4	Reference	Scan %	0	0	0 0 Total	Load	
EQF Evo Rop	e Diameter & Type	Rope	ype A Metal		EQF # with min Tension	0,00 0		
	InstallEOF	PIN POS						
Activity	Installe Contraction		Sugges	ted Pin Position				
OFF	Scan for EQF sensors Get info EQ	F sensors	B Status READY	Battery Monitor	ing = battery OK (330) 99%			
EQF info updated						Exit		

#### 6) Click on "Get info EQF sensors" to detect sensors connected to the HUB (about 60 sec.)

7) Click on "Install EQF" before installing sensors on the ropes. Wait until led (associated to the sensors) become green.

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Tension Measurement Time Chart Brake Test HS Report	Tensioning Results	English	%сомз • \$1000 <mark>S2T</mark>	ech sri www.s2tech.it	V2r2a		
1	0	Meas. units	Suspension Ratio	Tolerance %			
3	0	%	1:1	5			
5							
7	0 EQF detected	Operating Mode	Rope Tension	HI Limit 0			
9	0	Adaptive		In range			
10	0			msec 1067			
12	0	Max Tension	EQF # with Max Tension	Mean Std. Dev	*		
5 6	Reference Scan %	Min Tension	EQF # with min Tension S	Stand. Dev.			
6 mm 6x19S-NFC-DX		0	0	0,00			
Activity	PIN POSITION Suggested Pin Po	psition					
Sensor scan completed	HUB Status READY	Battery Monitorin	ig = battery OK (330) 99%	Exit			



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8) Without disconnecting sensors from the HUB, install the sensors on each rope of the lift. Place deflection mobile pin as near as possible to pin A (indicated on the sensor), according to ropes diameter. All the installed sensors <u>MUST have deflection mobile pin on the same position</u>.



9) Uncheck "InstallEQF" mode (1) and select "ADAPTIVE" mode (2).

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Tension Measurement Time Chart Brake Test HS	Report Tensioning Resu	Its	English S2Tech srl www.s2tech.it V222a	
1	0	Cal.: 00/	Meas. units Suspension Ratio Tolerance %	
2	0	Cal.: 00/		
3	0	Cal.: 00/	% 1:1 5	
4	0	Cal.: 00/		
5	0	Cal.: 00/		
6	0	Cal.: 00/	Diversition Mode 2 Rope Tension	
7	0	Cal.: 03/05/2021	Load > HI	
8	0	Cal.: 00/		
9	0	Cal.: 00/	LO Limit 0	
10	0	Cal.: 00/		
11	0	Cal.: 00/	msec 0	
12	0	Cal.: 00/	Max Tension EQF # with Max Tension Mean Std. Dev %	
,	Reference	Scan %	0 0 0	
65 100 125 150 175 200 225 250 275 300 32	25 350 375 400		Min Tension EQF # with min Tension Stand. Dev.	
6 mm 6x195-NFC-DX	Rop	e Type - Metal	0 0,00 <b>0</b>	
Activity 1 InstallEQF	OFF PIN PC	SITION Suggested P	in Position	
OFF Scan for EQF sensors	Get info EQF sensors	HUB Status READY	Battery Monitoring = battery OK (330) 99%	
EQF info updated			Exit	



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Tension Measurement	Time Chart Brake Test HS Report Tensioning Res	ults	English	боомз • • 1000 <mark>S2T</mark>	ech srl www.s2tech.it	V2r2a		
1	0	*	Meas. units	Suspension Ratio	Tolerance %			
2	0							
3	0		%	1:1	5			
4	0							
5	0							
6	0	· · · ·	Operating Mode	Rope Tension				
7	<mark>0</mark>	NO EQF		Load > HI	HI Limit NaN			
8	0	EQF detected	Adaptive		In range			
9	0			load < 10	LO Limit NaN			
10	0			))	1052			
11	0	*			msec   1002			
12	0		Max Tension E	QF # with Max Tension	Mean Std. Dev %			
5	Reference	Scan %	0	1	NaN NaN Total Load			
EQF Evo Rop	e Diameter & Type		Min Tension E	QF # with min Tension S	tand. Dev.			
6 mm 6x195-NF	C-DX Roj	e Type	0	1	-0,00			
	InstallEQF OFF PIN P	OSITION Suggested Pin	Position					
	Scan for EQF sensors Get info EQF sensors	HUB Status READY	Battery Monitoring	= battery OK (330) 96%				
Measure ACTIVE.					Exit			

#### 10) Click "ON" button to start tensioning measurements.

11) For each installed sensor a dynamic bar will be displayed. It changes according to different tension of the rope. When all bars are green-coloured, it means that ropes are aligned ( $\pm$ 5% of the measured value). If one or more ropes overcome the limit of  $\pm$ 5%, bars can be yellow (tensioning lower than tolerance) or red coloured (tensioning higher than tolerance).

EQF 1	228	In Range
OF 2	224	In Range
OF 3	220	In Range
ar 4	225	In Range
2F5	227	In Range
of 6	222	In Range
QF 7.	0	NO EQF connected
ars (	0	NO EQF connected
af 9	0	NO EQF connected
QF 10	0	NO EQF connected
QF 11	0	NO EQF connected
QF 12	0	NO EQF connected



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Tension Measurement	Time Chart	Brake Test HS R	eport Tensi	ioning Results			English	√ КСОМЗ	• \$1000 S	2Tech si	www.s2tech.it	V2r	2a			
1			0	)			Meas. units		Suspension Ratio		Tolerance %					
2			0			•	$\square$		$(\Delta)$		$\Delta$					
3			0				%		1:1		5					
4			0					/								
5			0													
6			0	1			Operating Mod	ie	Rope Tension							
7			0	•	EQF detected				Load > H		HI Limit NaN					
8			0			_	Adaptive				In range					
9			0			_	Í	1	Load < L	0	LO Limit NaN					
10			0		ļ						msec 1783303					
"			0					FOF # with	Max Tension							
12			0				Max Tension	1		NaN	St C	d. Dev %				
				eference	Scan %			•	U	INdiv		Nain				
FOE Evo Ron	e Diameter	& Type	/				Min Tension	EQF # with	min Tension	Stand. Dev		fotal Load				
6 mm 6x19S-NF	C-DX	с. турс		Rope Ty	/pe () Metal		0	1		-0,00	0					
Activity	lr.	stallEQF	FF	PIN POSIT		gested Pin Positi	ion									
						<u></u>										
OFF	Scan for EQF sen	sors Get	t info EQF sen	HUB	Status READY		Battery Moni	itoring = battery	OK (330) 96%							
Measure ACTIVE											Exit					

#### 12) Click "OFF" to stop measurements when all the ropes are equally tensioned / aligned.

# 13) Click on "Report" (1) and fill in the module with lift data. Then click on "PDF Report Generate" (2), to download test report document as PDF file.

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