



forceSENSOR FSS-25 / FSS-50 / FSS-100 Thread Tension Sensor

- to measure yarns and wires
- high Sensitivity
- Voltage Output
- mechanical overload Protection



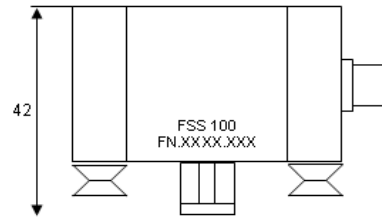
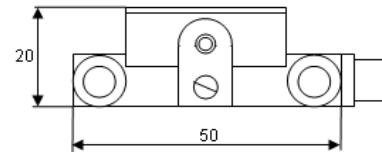
Physical Parameters	min	max
Type	FSS-25, FSS-50, FSS-100	
Range	25cN, 50cN, 100cN	
Zero Offset		
Sensitivity Error	0.1cN	
Temperature Sensitivity Error	0.1%	
Temperature Zero Error	0.1%	

Electrical Parameters		
Excitation Voltage	12VDC	30VDC
Quiescent Current		5mA
Output Voltage	0.5V	4.5V
resonance Frequency	1150Hz	1250Hz
Load	50kΩ	

Enviromental		
Operating Temperature Range	+20°C (+68°F)	+60°C (+140°F)
Temperature Range without Temperature Compensation	+5°C (+41°F)	+70°C (+158°F)
Case Material	Aluminium (anodized) / Ceramics	
Material of Detector Stick	Ceramics	
Seal	IP54	
Plug	M8 Cod. A male	

All Specifications at +25°C (+77°F), unless other defined.

We reserve to make technical alterations without prior notice.



Designation and Ordering Information

FSS-[] []
 [B] bidirectional (± (Range / 2))
 [25] / [50] / [100]

Output:

$$F = \text{Range} * ((U_{out} - 0.5V) / 4V)$$

Output bidirectional:

$$F = \text{Range} * ((U_{out} - 2.5V) / 4V)$$

Options

Plug []
 [straight] / [90°] with 1m cable

Hints:

- mechanical Protection is designed for a maximum Load of five Times of Range for Measuring of Wires please ask for three roll version

Pin	Connection	Cable Set Color
1	Power	brown
2	n.c.	n.c.
3	GND	blue
4	Output	black

