

DTHA

Analog Output Tension Sensor

The DTHA type sensor can be used for measuring tension of fibers or sheet materials. The unit provides an analog tension output signal.



[1] FEATURES

* Low Cost, High Accuracy

Each unit is equipped with a micro-chip to correct any deviations between units, thus providing a low cost means of accurate tension measurement.

The units have an high accuracy of +/- 2% to 4% F.S.

* Pulley Type, 1 Piece Construction

The unit is of one piece construction, and it can be mounted and put to use with no need to adjust or calibrate.

* Maintenance Free

The unit has a high overload rating, and also has no need for adjustment, making it an ideal choice for production line tension monitoring. There is no initial adjustment at start-up.

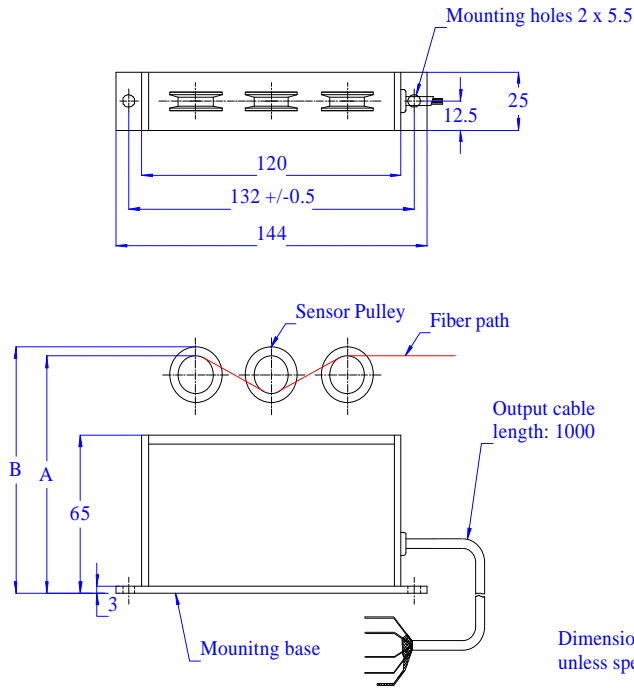
* Analog Output

The analog output convenient to use with existing monitoring equipment or digital displays.

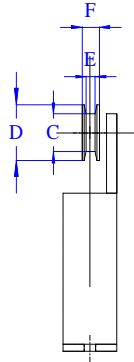
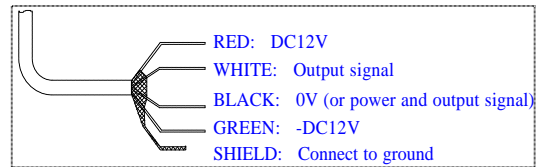
[2] SPECIFICATIONS

	DTHA2100	DTHA3100	DTHA4100	DTHA5100	DTHA6100	DTHA7100
Tension Rating (N)	0.5	1	2	5	10	20
(grams)	50	100	200	500	1000	2000
Output at Rated Tension (V)	DC4V					
Accuracy	+/- 4% of full scale			+/- 2% of full scale		
Power Requirements	+/- DC12V +/-0.2V					
Line Speed	0 - 500 m/min					
Sensing Pulley Deflection	Max 1.3mm					
Mounting Direction	Upright on flat surface					
Weight	370 g	380g		420g		440g
Operating Conditions	0 - 40 degC / 25 - 85% relative humidity					
Storage Conditions	-10 - 85 degC / 25 - 90% relative humidity					

[3] DIMENSIONS



Wire description



Dimensional tolerances: +/- 1mm unless specified otherwise

[Units: mm]

	A	B	C	D	E	F
DTHA2100	88	90	10	14	2.5	4.5
DTHA3100	100	102	16	20	3.4	6
DTHA4100	100	102	16	20	3.4	6
DTHA5100	102	106	16	24	4	8
DTHA6100	102	106	16	24	4	8
DTHA7100	102	106	16	24	4	8

[4] NOTES

1. This sensor requires both plus and minus power source.
2. If high voltage cables or power cables may be in close vicinity to the sensor cable, please provide protective measures (cable piping, etc.) for the sensor cable.
3. Connect the shield to ground.
4. The sensor may be extended to 5 meters. Please use shielded cabling for extension purpose.
5. The sensor accuracy will change if the mounting surface is not flat.
6. Use of this sensor in the vicinity of motors or magnetic fields may cause malfunctions or decrease accuracy of the sensor.
7. The sensor must not be subject to vibrations or shock.
8. Do not use in environments where the sensor may be subject to water, oil, or other chemicals.



Izumi International, Inc.

1 Pelham Davis Circle, Greenville, SC 29615 USA

Tel: 864-288-8001 Fax: 864-288-7272

E-mail: us-sales@izumiinternational.com

Web: www.izumiinternational.com