# USER INSTRUCTIONS

# ENGLISH, V1.2



# **STATIC LINE TENSIOMETER**

# WT1-B / WT2-B / WT3-B



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### 1. Thank you for purchasing Vetec's Static Line Tensiometer

The Static Line Tensiometer from Vetec is constructed to operate in harsh and humid environments. The development focused on optimizing features that make it easy for the operator to handle the tensiometer and still achieve stable and accurate measurements. Achieving an IP67 class has been especially important to accommodate customers working in wet and humid environments.

© Nordtech-Vetec Teknikvej 69 DK-5260 Odense S Tlf.: +45 65919802 post@nordtech.dk www.vetec.dk

#### **1.1 Important information**

READ ALL INSTRUCTIONS AND WARNINGS CAREFULLY BEFORE INSTALLATION AND USE. These instructions have been published by Vetec and are not subject to any guarantee. The instructions may be withdrawn or revised by Vetec at any time and without further notice. Corrections and additions will be added to the latest version of the instructions. Carefully read through the safety instructions in this user manual and follow the installation and operating procedures and requirements. Failure to follow these warnings could result in serious injury and property damage. Every use should be carried out according to current regulations in the country of use. Vetec is not responsible for local regulations not being followed.

## **1.2 YouTube video tutorials**



Visit Vetec's YouTube channel to watch tutorials demonstrating the installation, daily use and menu setup.

# 2. Product information

Specifications				
Item No.	WT1-B	WT2-B	WT-3-B	
Capacity	5 T per reeving	10T per reeving	15T per reeving	
Wire diameter	6-14 mm	14-24 mm	24-34 mm	
Accuracy	± 1% FS			
Output	2.0 Nom mV/V balanced signal			
Material	High strength Aluminium housing. Anodised blue surface treatment			
Temperature	0.0011 mV/°C			
Input		EXC. 5-10 v DC		
Cable length		3 meters		

# 2.1 Dimensions

Item No.	Capacity (T)	A (mm)	B (mm)	C (mm)	Weight (kg)
WT1-B	5T	100.00	55.00	42.00	0.8 kg.
WT2-B	10T	136.00	74.00	55.00	1.5 kg.
WT3-B	15T	230.00	95.00	70.00	3.3 kg.



#### 3. Installation and usage



Product adjustment must only be performed by a qualified technician. The user shall ensure that the operator has taken note of this instruction, usage and maintenance manual before using the Static Line Tensiometer.

# **3.1. Mechanical Installation**

1. The tensiometer should be mounted to the steelwire with the cable gland downwards, as illustrated in figure 1.

(Make sure that the electrical cable is not damaged during the wire installation - and later use of the crane)



Figure 1

2. Tighten the Bolts (Steel Wire) untill the Steel Wire touches the Wire Plate, as illustrated in figure 2.



Figure 2

3. Tighten the Bolts (Wire Plate) untill the Wire Plate has a firm grib on the steel wire, as illustrated in figure 3

(The Wire Plate will be deformed to fit the Steel Wire)



### **3.2. Electrical Installation**

1. Connect the Tensiometer to a suitable control unit according to table 1.

Cable connections		
Red	- EXC +	
Green	- SIGNAL +	
Yellow	- SIGNAL -	
Blue	- EXC-	
Table 1		

- Load the crane with a weight as close to the maximum load as possible. The output signal should be as close to 1.6 mV/V as possible. (<u>At a supply voltage of 10 V, it will be 16 mV. It must not exceed this).</u> If bolts are fully tightened and 16 mV is not obtained, this is acceptable.
- 3. If the output signal is higher than 1.6 mV/V, the bolts (Steel Wire) can be loosened untill maximum of 1,6 mV/V is obtained and the bolts (Wire Plate) can be retightened.
- 4. The crane load is released and loaded 3 times and the weighing verified.

The load cell is now calibrated. Further adjustments can be made in the receiving signal processor.

#### 4. Service, repairs and maintenance

To prevent damage to the Tensiometer, make sure that repairs and recalibrations are carried out by qualified personnel. It is recommended that recalibration and repairs are done at Vetec's service department located in Denmark or by authorized partners.

Contact Vetec's service department for further information.

#### 5. Maintenance

The Tensiometer requires no maintenance except regular cleaning. Wipe off moisture or dust using a slightly damp, clean cloth.

- Cover the exterior with a thin layer of oil, e.g. WD 40. This will prevent corrosion.
- Keep the Tensiometer in a dry, clean place.
- Never use cleaning solutions or high-pressure water.

### 6. Waste electrical and electronic equipment (WEEE)



A Static Line Tensiometer must not be thrown away with general rubbish. Any disposal of the device must be carried out in accordance with the regulations in force in the country of use. Contact your local government's recycling or solid waste department for more information regarding the proper disposal of electronics in your region.



# **STATIC LINE TENSIOMETER**

Do you have any questions about your product?

Nordtech-Vetec A/S Teknikvej 69 DK-5260 Odense S - Denmark SE/CVR-no. 18175509 Mail: post@nordtech.dk Phone: +(00)45 6591 9802