

# X-Y Inclination Sensor VTI 30 (Inclinometer)

The VEW inclination sensor VTI 30 was designed specifically for extreme operating conditions encountered in shipbuilding, mining, tracked vehicles, etc.

It is characterized by high resolution (0.01°), high precision (<0.10°), measuring rate 10Hz (opt. 1Hz), high shock loading (20,000g), high long-term stability, high reliability MTBF > 100,000h and a wide temperature range -25 to +80° C.

The robust IP67 aluminium casing has an EMC shielded cable gland or plug connection and a plain-milled base plate with two location holes for positioning purposes as well as 4 x M6 fasteners.

In addition, a plain-milled foundation plate is also available with fixedly mounted locating bolts for the purpose of holding and connecting the inclinometer. The foundation plate can be adjusted by means of three locking adjustment screws, thus enabling a calibrated inclinometer to be replaced in exactly the same position.

The construction of the electronics for both axes is completely monolithic.

The axes are arranged orthogonal to each other.

A micro-system comprising sensor elements, signal conditioning, temperature compensation, filtering and A/D converter is located on a substrate in a hermetically sealed casing.

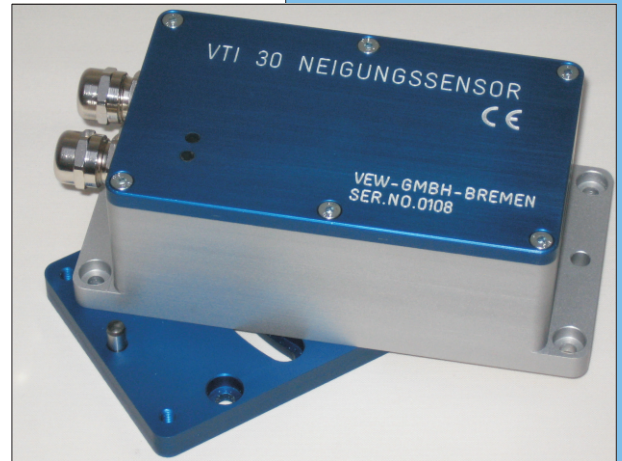
Therefore, the outstanding technical features are determined by the specific components, and are not negatively influenced by other peripheral component parameters.

The devices are operated with nom. DC 24V (18..36V) and are available with a Ethernet interface.

Parameterization is carried out via the interface.

The devices have a self-testing routine, by means of which a defined electrostatic force deflects the sensor elements, as well as a test of the internal connections and a memory parity test.

**Delivery includes calibration and test protocols, base plate.**



## Technical data:

|                |  |
|----------------|--|
| Supply voltage | : DC 24V (18..36V), others optional  |
| Range          | : + - 30°  |
| Resolution     | : 0.01°  |
| Accuracy       | : measuring range + - 30° X-Y dir.; < 0.1°   |
| Temp Range     | : -25... +80°C   |
| Shock loading  | : up to 20,000g  |
| Dimensions     | : 165 x 80 x 55, foundation plate 165 x 80 x 10 mm   |
| Casing         | : Anodized aluminium; natural, blue; IP67  |
| Interface      | : Ethernet   |
| Connection     | : 2 PG screw connections, terminal 6 x 0.5 <sup>2</sup><br>alternatively: MIL connector VG96912D12, Rj45 |



**DIE ENTWICKLER**

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