



### Description

These fully electronic scales are suited to the measurement of tensile and compression loads. They are available in different load ranges between 5000 kg and 10000 kg. These scales can also be calibrated as force gauges if desired. The load ranges are then between 50 kN and 100 kN. The hanging scales consist of a transducer and a hand-held terminal. These are firmly connected to each other with a cable. The display of the hand-held terminal can show the current measured values as well as the peak values of both load directions.

The transducer, a shear-force load cell, is insensitive to transverse forces. So, the scales provide you with highly accurate measuring results. The transducer can be adapted in various ways with the two mounting threads. Furthermore, spherical rod ends and eyebolts are available as accessories.

You can request the firmware version, the date of the last calibration and the serial number of your device via an easy-to-use menu. In this menu, you can also set the auto-off time for saving the batteries, the desired measuring rate and the display contrast.

Four batteries of type AA which can be easily replaced by the user supply the scales with power.

### Features

- | Nominal loads of 5000 kg to 10000 kg, or of 50 kN to 100 kN
- | Zero positioning and taring
- | Measure the top load in positive and negative direction of force
- | 4 x batteries type AA
- | Requests/settings via one menu
- | Optional with spherical rod ends or eyebolts

### Applications

- | Dynamometer
- | Force gauge
- | Tensile or compression applications
- | Weighings or force measurements in the most diverse areas of application

## Selection table

| Type           | Nominal load       | Sensitivity/<br>display increments | Mounting thread | Self-weight<br>(without mountings) | Dimensions of the<br>transducer [mm] |
|----------------|--------------------|------------------------------------|-----------------|------------------------------------|--------------------------------------|
| ZW 7.0 / 5000  | 5000 kg<br>50 kN   | 1 kg<br>0.01 kN                    | 2x M24x2        | 3.5 kg                             | 54 x 108 x 108                       |
| ZW 7.0 / 8000  | 8000 kg<br>80 kN   | 10 kg<br>0.1 kN                    | 2x M24x2        | 3.5 kg                             | 54 x 108 x 108                       |
| ZW 8.0 / 10000 | 10000 kg<br>100 kN | 10 kg<br>0.1 kN                    | 2x M30x2        | 7.1 kg                             | 80 x 120 x 120                       |

## Technical data

|                              |   |
|------------------------------|---|
| Overload                     | 1.2-fold nominal load   |
| Display                      | 12 digits, 2 lines  |
| Accuracy                     | ±0.25 % f.s. (under tension <i>or</i> compression)<br>(under tension <i>and</i> compression available on request) |
| Measuring rate               | configurable: 10, 20 or 100 Hz  |
| Power supply                 | 4 x battery type AA   |
| Operating time               | >8 h continuous operation   |
| Auto-off time                | configurable: 8, 30, 60 min / off   |
| Operating temperature        | 0 °C to +50 °C  |
| Storage temperature          | -20 °C to +70 °C  |
| Protection class             |   |
| of the hand terminal         | IP 40   |
| of the transducer            | IP 67   |
| Housing of the hand terminal | ABS   |
| Hand terminal's dimensions   | 78 mm x 145 mm x 44 mm (w x l x h)  |
| Material of the transducer   | Steel, electropolished  |
| Cable                        | FDCP plus 4 x 0.25 mm <sup>2</sup> , length 5 m   |

## Calibration

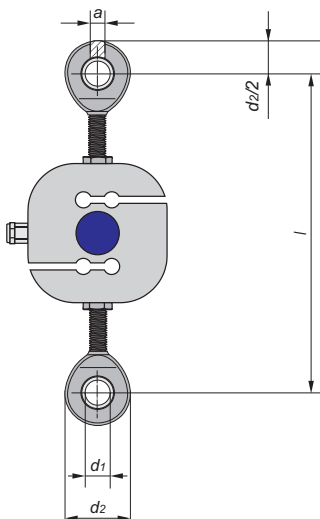
|                                       |                               |
|---------------------------------------|-------------------------------|
| As scale                              |                               |
| under tension <i>or</i> compression:  | Display in kg                 |
| As force gauge                        |                               |
| under tension <i>or</i> compression:  | Display in kN                 |
| under tension <i>and</i> compression: | Display in kN                 |
|                                       | Accuracy available on request |

## Options

|   |
|---|
| Mechanical overload protection for compression forces |
| Accessories:  |
| Spherical rod ends for all types ZW 7.0 and 8.0       |
| Eyebolts for ZW 7.0/5000 and ZW 8.0                   |

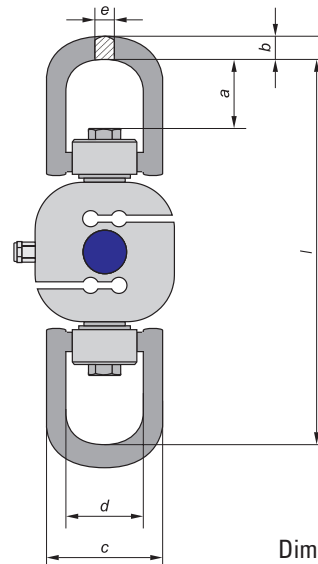
## Dimensions

Transducer with spherical rod ends (optional)



| Type   | a  | l   | d1 | d2 |
|--------|----|-----|----|----|
| ZW 7.0 | 22 | 241 | 25 | 60 |
| ZW 8.0 | 25 | 285 | 30 | 70 |

Transducer with eyebolts (optional)



Dimensions in mm

| Type        | a    | b  | c   | d   | e  | l   |
|-------------|------|----|-----|-----|----|-----|
| ZW 7.0/5000 | 53   | 28 | 139 | 83  | 24 | 330 |
| ZW 8.0      | 69.5 | 34 | 182 | 114 | 30 | 408 |