



Description

These fully electronic dynamometers are suited to the measurement of tensile and compression loads. They are available in different load ranges between 5000 kg and 10000 kg. These dynamometers can also be calibrated as force gauges if desired. The load ranges are then between 50 kN and 100 kN. The dynamometers 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 dynamometers 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 dynamometers 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/ Display steps	Mounting thread	Self-weight (without adaptation)	Dimensions of the transducer [mm]
ZW 7.0 / 5000	5000 kg 50 kN	1 kg 0.01 kN	2x M24x2	3.5 kg	54 x 108 x 108
ZW 7.0 / 8000	8000 kg 80 kN	10 kg 0.1 kN	2x M24x2	3.5 kg	54 x 108 x 108
ZW 8.0 / 10000	10000 kg 100 kN	10 kg 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) (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 ² , length 5 m

Calibration

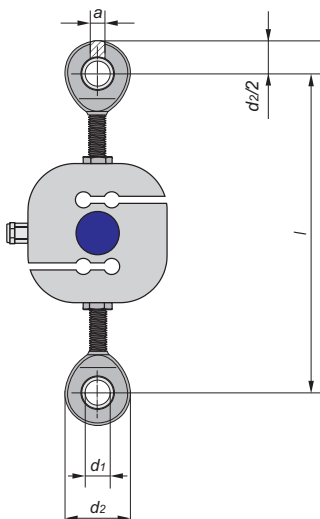
As dynamometer	
under tension <i>or</i> compression:	Display in kg
As force gauge	
under tension <i>or</i> compression:	Display in kN
under tension <i>and</i> compression:	Display in kN
	Accuracy available on request

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

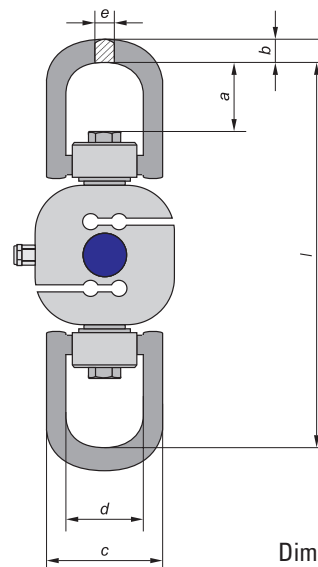
Dimensions

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