



Description

This fully electronic scales are suitable for measuring tensile and compressive loads. They are available for various load ranges between 5000 kg and 10000 kg. On request, these scales can be supplied for use as force sensors; the load ranges are then between 50 kN and 100 kN. The dynamometers consist of a sensor and a hand display which are connected by a cable.

The sensor, a shear-force load cell is insensitive to transverse forces. This ensures that the scales provide very accurate measurements. The two mounting threads on the sensor offer numerous installation possibilities; we offer spherical rod ends and eyebolts as accessories to assist you.

A 9V block battery, which can be quickly and easily changed by the user, supplies power to these dynamometers. To conserve the battery, the scale switches off automatically after 8 min if the load does not change.

Features

- | Nominal loads between 5000 kg and 10000 kg, or between 50 kN and 100 kN
- | Taring
- | Call up for maximum reading
- | 9V block battery
- | Spherical rod ends and eyebolts as optional accessories

Applications

- | Dynamometer
- | Force sensor
- | Tensile and compressive applications
- | Weighing operations or force measurement in many different fields

Selection table

Type	Nominal load	Sensitivity/ display increments	Mounting threads	Weight of scale (without mountings)	Dimensions of sensor [mm]
ZW 7.0 / 5000	5000 kg 50 kN	1 kg 0.01 kN	2 x M22x2	3.8 kg	54 x 108 x 108
ZW 7.0 / 8000	8000 kg 80 kN	10 kg 0.1 kN	2 x M22x2	3.8 kg	54 x 108 x 108
ZW 8.0 / 10000	10000 kg 100 kN	10 kg (display up to max. 9990 kg) 0.1 kN	2 x M30x2	7.1 kg	80 x 120 x 120

Technical data

Overload	1.2x nominal load
Measurement rate	10 measurements / sec
Display	4-figures
Accuracy	±0.25 % f.s.
Power supply	9V block battery
Operating period	8 h continuous
Auto off time	8 min
Operating temperature range	0 °C to +50 °C
Storage temperature range	-20 °C to +70 °C
Degree of protection	
of hand display	IP 40
of sensor	IP 67
Housing of hand display	ABS
Dimensions of hand display	83 mm x 156 mm x 30 mm (b x l x h)
Material of sensor	steel
Cable	Length 5 m

Calibration

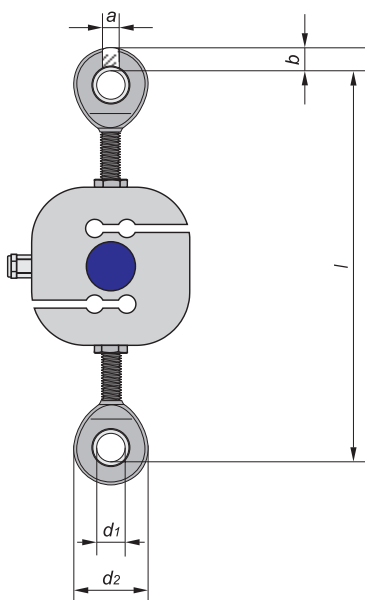
As a scale	
For tension <i>or</i> compression:	display in kg
As a force sensor	
For tension <i>or</i> compression:	display in kN
For tension <i>and</i> compression:	display in kN accuracy on request

Options

Mechanical overload protection for compression loads
 Accessories:
 spherical rod ends for all types ZW 7.0 and ZW 8.0
 eyebolts for the types ZW 7.0 / 5000 and ZW 8.0

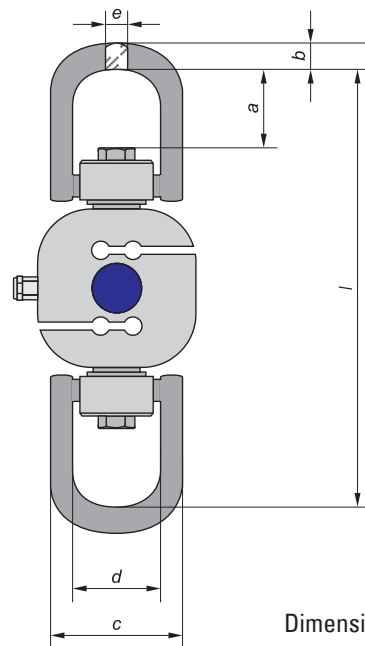
Dimensions

Sensor with spherical rod ends (optional)



Type	a	b	l	d ₁	d ₂
ZW 7.0	22	17,5	253	25	60
ZW 8.0	25	20	290	30	70

Sensor 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