

Force gauge ZW 7.0 / 8.0



Factory calibrated
Measurement ranges of 50 kN to 100 kN
Measure the top load in positive
and negative direction of force

Tensile or compression applications
Weighing operations in many different fields

Designed,
developed and
made in Germany

These fully electronic force gauges are suited to the measurement of tensile and compression forces. They are available in different measurement ranges between 50 kN and 100 kN. The force gauges 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 force gauges 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 force gauges with power.

Technical data

Type	ZW7.0 / 50 kN	ZW7.0 / 80 kN	ZW8.0 / 100 kN
Nominal load [kN]	50	80	100
Overload	1.2 x nominal load		
Display	12 digits, 2 lines		
Sensitivity/display increments* [kN]	0,01	0,1	0,1
Accuracy	±0.25 % f.s. ** (under tension <i>or</i> compression)		
Operating temperature	0°C to +50°C		
Storage temperature	-20°C to +70°C		
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		
Dimensions of the transducer [mm]	L 108 x W 54 x H 108	L 108 x W 54 x H 108	L 120 x W 80 x H 120
Mounting thread	2 x M24x2	2 x M24x2	2 x M30x2
Hand terminal's dimensions [mm]	L 145 x W 78 x H 44		
Material of the transducer	Steel, electropolished		
Housing of the hand terminal	ABS		
Total weight (without accessoires) [kg]	3.5	3.5	7.1
Cable	FDCP plus 4 x 0.25 mm ² , length 5 m	FDCP plus 4 x 0.25 mm ² , length 10 m	FDCP plus 4 x 0.25 mm ² , length 5 m
Protection class of the transducer	IP 67		
Protection class of the hand terminal	IP 40		

* other sensitivities on request

** f.s. = full scale value

Calibration

- » Factory calibrated
- » Under tension and/or compression
- » Display in kN
- » Optional: ISO or DAkkS calibration

Options

- » Mechanical overload protection for compression loads

Accessories for ZW 7.0 / 8.0

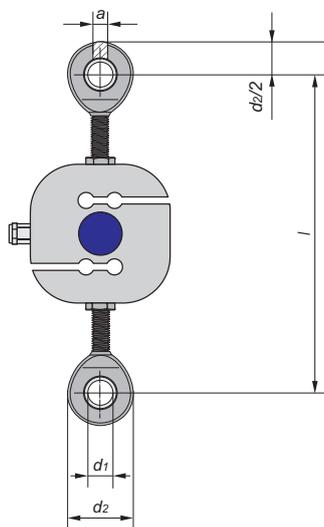
Product	Description	Figure	
Spherical rod ends (for adaption)	BEM 25 for ZW 7.0 / 50 kN / 80 kN BEM 30 for ZW 8.0		○
Eyebolts (for adaption)	Thread M24x2 for ZW 7.0 / 50 kN Thread M30x2 for ZW 8.0		○
Carrying case	Plastic material, for one force gauge		○
Extension connection cable	Length 5 m, including connection socket hand-held terminal		○

● requirement | ● requirement / selection | ○ optionally available

Dimensions ZW 7.0 / 8.0 with accessories

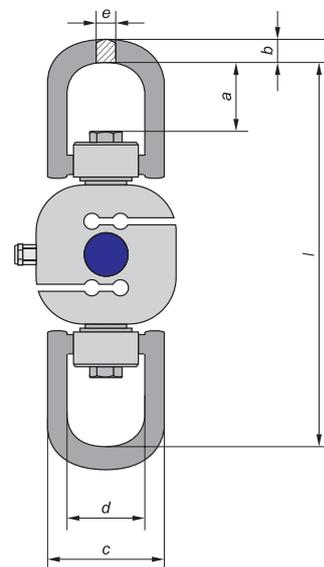
Dimensions in mm

Transducer with spherical rod ends (optional)



Type	ZW 7.0	ZW 8.0
a [mm]	22	25
l [mm]	241	285
d1 [mm]	25	30
d2 [mm]	60	70

Transducer with eyebolts (optional)



Type	ZW 7.0 / 50 kN	ZW 8.0
a [mm]	53	69.5
b [mm]	28	34
c [mm]	139	182
d [mm]	83	114
e [mm]	24	30
l [mm]	330	408