

Hanging scale

ZW 5.0

Product information



Description

This fully electronic scale is suitable for measuring tensile and compression loads. It is available for various load ranges between 50 kg and 500 kg. On request, this scale can be supplied for use as a force gauge; the load ranges are then between 500 N and 5000 N. The hanging scale consists of a miniature sensor and a hand-held terminal which are connected by a spiral 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 sensor, a shear-force load cell, is insensitive to transverse forces. This ensures that the scale provides very accurate measurements. In many applications where space is limited, the miniature version of the shear-force load cell is extremely useful. The two mounting threads on the sensor offer numerous installation possibilities; we offer spherical rod ends and eyebolts as accessories to aid installation.

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

I Low self-weight
I Nominal loads of 50 kg to 500 kg,
or of 500 N to 5000 kN
I Zero positioning and taring
I Measure the top load in positive and
negative direction of force
I 4 x batteries type AA
I Requests/settings via one menu
I Optional with spherical rod ends or eyebolts

Applications

I Dynamometer
I Force gauge
I Tensile and compression applications
I Weighing operations or force measurement in many different fields

Selection table

Туре	Nominal load	Sensitivity / display increments	Mounting threads	Self-weight (without mountings)	Material of sensor
ZW 5.0 / 50	50 kg / 500 N	0.01 kg / 0.1 N	2 x M8	0.5 kg	Al.
ZW 5.0 / 100	100 kg / 1000 N	0.1 kg / 1 N	2 x M8	0.5 kg	Al.
ZW 5.0 / 200	200 kg / 2000 N	0.1 kg / 1 N	2 x M10	0.5 kg	Al.
ZW 5.0 / 300	300 kg / 3000 N	0.1 kg / 1 N	2 x M10	0.6 kg	Steel
ZW 5.0 / 500	500 kg / 5000 N	0.1 kg / 1 N	2 x M10	0.6 kg	Steel

Technical data

Overload 1.2x nominal load Display 12digits, 2 lines

Accuracy $\pm 0.25\%$ f.s. (under tension *or* compression)

(under tension and 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 $0 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ Storage temperature $-20 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$

Protection class

of the hand terminal IP 40 of the sensor IP 67 Housing of the hand terminal ABS

Hand terminal's dimensions 78 mm x 145 mm x 44 mm (w x | x h) Dimensions of sensor 20 mm x 40 mm x 40 mm (w x | x h) Spiral cable Length 0.5 m/extended length 4 mm

Calibration

As scale

Under tension *or* compression: display in kg

As force gauge

Under tension *or* compression: display in N
Under tension *and* compression: display in N
Accuracy on request

Options

Mechanical overload protection for compression

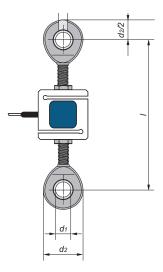
loads

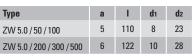
Accessories: spherical rod ends, eyebolts for

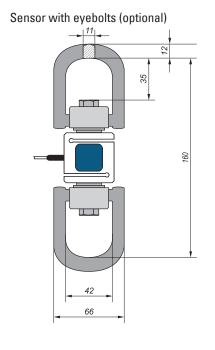
installation



Sensor with spherical rod ends (optional)







Dimensions in mm

HKM-Messtechnik GmbH Ziegelhofstraße 228 79110 Freiburg Germany Phone: +49 761 89 607-0 Fax: +49 761 89 607-66 info@hkm-messtechnik.de www.hkm-messtechnik.com Management: Karsten Herrmann, Heinz Knittel Freiburg Local Court Trade register no 3954 Status 07.2011 /V1

Subject to technical modifications