

General Information:

- Digital force gauge with external load cell for measurements of tensile and compressive forces.
- Small and handy unit for mobile use and stationary use with test stands.
- Ergonomic and rigid metal housing protects the accurate load cell and electronics when used in rugged environments.
- High measuring accuracy, resolution and repeatability.
- Easy handling.
- Easy to read LCD Display with LED backlight and automatic 180° switching.
- Operation by 5 capacitive touch keys.
- Peak Point Mode with indication of the highest measured force value (Peak and Auto Peak mode selectable).
- Tracking Mode with continuous indication of current force values.
- Graphical presentation of measured values (force/time).
- Tare compensation.
- Programmable low and high set points.
- Measured value memory for 1000 measured values.
- Switchable units: N, gf, kgf, ozf, lbf.
- Set-up menu for general parameter selection.
- Serial and USB Interface.
- Mechanical overload protection and overload display.
- Rechargeable battery and mains operation.
- Auto-Power-Off with user-selectable timing.
- Automatic load cell identification.
- Different load cells with varying load ranges can be connected to an DFGS Force Gauge and operated alternately. The DFGS Force Gauge recognizes the connected load cell and loads the programmed individual load cell parameters from the internal memory automatically.



Technical Specifications:

Model Designation: DFGS

Force Ranges: 0 –1000/2000/5000/10000/20000 N
Resolution: 10000/4000 increments, see overview.
Accuracy error: $\leq \pm 0.2\%$ F.S. \pm LSD.
Overload capacity: up to 150% of nominal load

Housing Force Gauge:

Dimensions: ca. 160x73x34 mm (HxWxD).
Weight: ca. 700 g.
Material/Finish: metal / white.
Mounting: 6 fixing holes M4

Display:

LCD-Display with LED backlight and with automatic 180° switching

Sampling rate:

1000 Hz.

Units:

switchable N, gf, kgf, ozf, lbf.

Memory:

1000 measured values.

Operation:

5 capacitive touch keys.

Interfaces:

RS232C, USB

Power supply:

external 3.6 V DC 800 mAh (AC adapter /charger) or Ni-MH rechargeable batteries.
Universal USB/BM charger

Load Cells:

Dimensions:
1/2/5 kN: 51x76.2x19 mm (WxHxD),
10 kN: 51x76.2x25.4 mm (WxHxD),
connection thread M12
20 kN: 76.2x108x25.4 mm (WxHxD)
connection thread M18

Standard Accessories:

DFGS Force Gauge, load cell, power adapter, USB cable.

Model Overview DFGS Load Cells:

Type	Indication Range	Resolution
1KN	0- 1000 N	0.1 N
2KN	0- 2000 N	0.5 N
5KN	0- 5000 N	1 N
10KN	0-10000 N	1 N
20KN	0- 20 kN	0.005 kN



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180° Display-switching



DFG with Test Stand TSHL

Model Overview DFG:

Type	Indication Range [N]		Resolution [N]
2	0-	2	0.0005
5	0-	5	0.0005
10	0-	10	0.001
20	0-	20	0.005
50	0-	50	0.005
100	0-	100	0.01
200	0-	200	0.05
500	0-	500	0.05
1000	0-	1000	0.1

Technical Specifications:

Model Designation: DFG

Indication Ranges: 0 – 2/5/10/20/50/100/200/500/1000 N
 Resolution: 10000/4000 increments, see overview.
 Accuracy error: $\leq \pm 0.2\%$ F.S. \pm LSD.
 Overload capacity: indication range \leq 5 N: 150% F.S.
 indication range \geq 10 N: 200% F.S.

Housing:

Dimensions: ca. 160x73x34 mm (HxWxD).
 Weight: ca. 700 g.
 Material/Finish: metal / black.
 Mounting: 6 fixing holes M4

Sensing Head:

threaded load shaft M6.

Display:

LCD-Display with LED backlight and with automatic 180° switching

Sampling rate:

2000 Hz.

Units:

switchable N, gf, kgf, ozf, lbf.

Memory:

1000 measured values.

Operation:

5 capacitive touch keys.

Interfaces:

RS232C, USB

Power supply:

external 3.6 V DC 800 mAh (AC adapter /charger) or Ni-MH rechargeable batteries.
 Universal USB/BM charger

Standard Accessories:

DFG Force Gauge, power adapter, USB cable, cushioned carrying case. Following accessories are included for performing a variety of measurements: hook, conical tip, flat tip (\varnothing 12 mm), chisel tip, notched tip, extension rod 80 mm.