

L1 FORCE MEASUREMENT

DFG DIGITAL FORCE GAGE



FORCE MEASUREMENT SOLUTIONS

The DFG is our basic force gage. The gage measures force at an accuracy of better than 0.2% full scale. Additionally, the DFG can be used to measure force with Starrett FMM digital force tester or MTL lever-actuated manual force tester or an MTH hand-wheel-operated manual force tester. Unlike the Starrett DFC Force Controller, the DFG cannot be used to control the FMM digital force tester.

SIMPLE, EASY-TO-USE BASIC FORCE MEASUREMENT

The DFG is ideal for basic tensile and compression testing. Test setup and operation is fast, efficient and easy for anyone. The DFG can be used for load limit testing, peak load testing, and break testing. The DFG display shows the test direction and dynamic load during testing. Results are displayed at the completion of testing, including "Pass-Fail" when tolerance is applied. The gage will display statistics when results are saved to the gage's internal memory. Store up to 50 test results in local memory. You can also export results and raw data via USB communications to a network device. Internal data sampling at 10kHz helps capture peak events.

FORCE MEASUREMENT ACCURACY AND REPEATABILITY

The DFG ensures a repeatable measurement using ozf, gf, kgf, lbf or N units with an accuracy of better than 0.2% FS. The load cell sensor can be adjusted so that your gage can limit the full scale measurement capability helping to protect from accidental overloading. The safe overload rating is 200% FS. The integral load cell sensor complies with IEEE 1451-4.



Shown: Starrett DFG force gage

ORDERING

Model	ozf	lbf	gf	kgf	N	FS Deflection (mm)	Thread Size	Accessory Kit
DFG-10	160 x 0.05	10 x 0.02	5000 x 1	5 x 0.001	50 x 0.01	0.15	M6 x 1-6g	SPK-FG-S
DFG-20	320 x 0.05	20 x 0.05	10,000 x 2	10 x 0.02	100 x 0.2	0.2	M6 x 1-6g	SPK-FG-S
DFG-50	800 x 0.2	50 x 0.01	25,000 x 5	25 x 0.05	250 x 0.05	0.39	M6 x 1-6g	SPK-FG-S
DFG-100	1600 x 0.5	100 x 0.2	50,000 x 10	50 x 0.01	500 x 0.1	0.6	M6 x 1-6g	SPK-FG-S
DFG-200	-	200 x 0.5	-	100 x 0.2	1000 x 0.2	0.54	M6 x 1-6g	SPK-FG-M
DFG-500	-	500 x 0.1	-	250 x 0.05	2500 x 0.5	0.7	M10 x 1.5-6g	SPK-FG-L

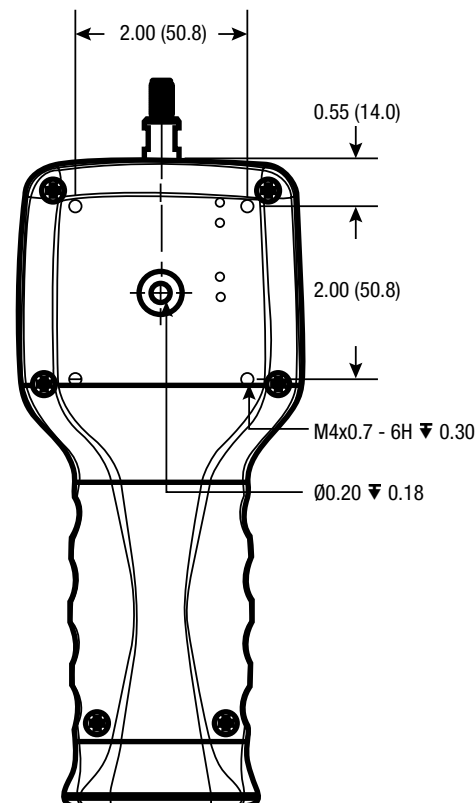
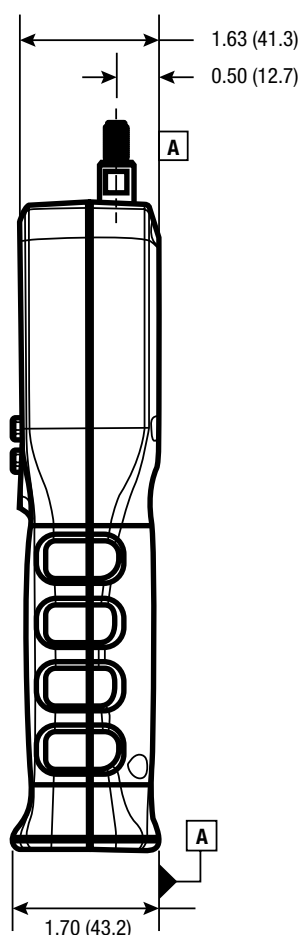
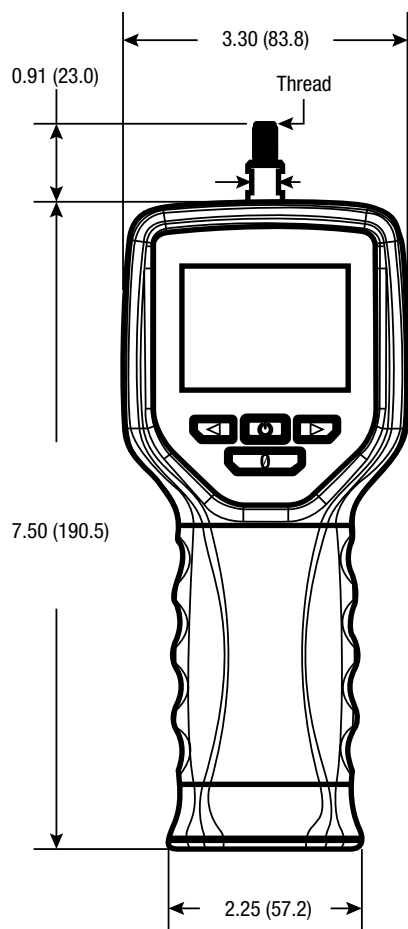
Note: Display resolution is 5000:1

L1 FORCE MEASUREMENT

DFG DIGITAL FORCE GAGE



FORCE MEASUREMENT SOLUTIONS



Starrett Digital Force Gages

Specification	DFG Series
Accuracy, Full Scale	0.20%
Data Sampling (Hz)	10,000
Display Resolution	5,000:1
Safe Overload, Full Scale	200%
Maximum Tare	10%
Communications	
USB 2.0	Yes
RS-232	Yes
I/O Digital, Configurable	2 channels
Memory, maximum results saved	Yes
Operating Mode	
Real Time	Yes
Peak Compression	Yes
Peak Tension	Yes
Load Limit	Yes
Power, Environmental	
Battery Type	Lithium Ion
Battery Life, typical @ 20% brightness	>30 hours
Charge Time, using 110/240V Mains	<3 hours
Display	OLED High Resolution
Operating Temperature	40°F to 110°F (4°C to 43°C)
Thread, for adapters	Metric M6, M10
Instrument Weight (approx.)	3 lbs (1.36 kgs)

