



Tension/Compression Digital Force Gauges

Measure standard and peak tension (pull) or compression (push) of mechanical items and systems.

SHIMPO

- 1000 Hz sampling rate
 - LCD with reversible viewing direction
- Gauges feature standard or peak measurement modes, force direction indication, and reversible keypad. Auto-Off can be disabled for continuous use with included AC adapter/charger. Each includes tension attachment (hook), compression attachments (chisel, flat, notched, and cone), metric/English thread adapter, extension rod, and hanger.

FGE-HXY and FGE-XY—Feature peak hold. Selectable oz., lb., g, or Newton units (8- to 32-oz. range) or lbs., kg, or Newton units (5- to 500-lb. range).

FGV-HXY and FGV-XY—With selectable High/Low comparator, onboard min./max./peak/avg./standard deviation, and continuous and single memory options. Software package, RS-232/USB/analog outputs, and USB cable for data export and analysis.

Selectable oz., lb., g, or Newton units (8- to 32-oz. range) or lb., kg, or Newton units (5- to 1000-lb. range).

EXTECH

- 5-digit LCD with reversible viewing direction

Feature peak hold and zero/tare functions. 0.2 (fast) and 0.6 sec. (slow) response time settings. Each includes AA batteries. Optional data acquisition software with RS-232 cable 1CLF1 and optional USB adapter cable 1CLF2, sold separately on Grainger.com.

Force Gauge/Data Loggers and Gauges with 44-lb. and 176-oz. Capacity—

Feature load cell measurement transducer with tension adapter (hook), compression adapters (flat, cone, and chisel), and 5" extension rod.

Force Gauge with 220-lb. Capacity—

RS-232 interface for data export. Backlit display. Includes tension and compression adapters (hooks), S-type load cell, and 6½-ft. cable.



Description	► CHOOSE: Range	Item No.	
Shimpo Digital Force Gauge			
FGE-HXY Series	0 to 200 lb • 0 to 500 lb	D2978	
FGE-XY Series	0 to 0.5 lb • 0 to 1 lb • 0 to 2 lb • 0 to 5 lb • 0 to 10 lb • 0 to 20 lb • 0 to 50 lb • 0 to 100 lb	D1783	
FGV Series	100N	45AE77	
FGV Series	500N	45AE78	
FGV Series	1000N	45AE79	
FGV-XY Series	0.5 lb, 2 N, 200 g, 8 oz • 1 lb, 16 oz, 5 N, 500 g • 10 N, 1000 g, 2 lb, 32 Oz • 2 kg, 20 N, 5 lb • 10 lb, 5 kg, 50 N • 10 kg, 100 N, 20 lb • 20 kg, 200 N, 50 lb • 100 lb, 50 kg, 500 N • 100 kg, 1000 N, 200 lb	D1773	
Shimpo Digital Torque Meter			
TNP Series	10.00 N-m, 1000 N-cm, 102.0 Kg-cm, 88.5 lb-in	D1786	
Shimpo High Capacity Digital Force Gauge			
FGV-HXY Series	250 kg, 2500 N, 500 lb	23MD82	
FGV-HXY Series	1,000 lb, 4448 N, 453.6kg	23MD81	
Range	Accuracy	Mfr. Model	Item No.
Extech Digital Force Gauge			
196 N, 20 kg, 44 Lb	—	475044-NIST	9M293
Extech Digital Force Gauge			
44 lb/20 kg/196 N	+/-0.5% + 2 Digits	475044	11742
176 oz/5000 gm/49 N	+/-0.4% + 1 Digit	475040	32H93
176 oz/5000 gm/49 N	+/-0.4% + 1 Digit	475040-NIST	6TNH9
220 lb/100 kg/980 N	+/-0.5% + 0.1 Lb, 0.1 Kg or 0.4 N	475055	1LYP5
Extech AC Adapter			
AC Adapter		153117	3ZH65

Tension/Compression Mechanical Force Gauges

- Accuracy: ±0.2%
- Dial indicator

Measure tension (pull) or compression (push) in real time or peak mode for assembly line quality control. 165-lb. overload protection safeguards against

damage. Each includes compression attachments (flat, chisel, notched, and cone), tension attachments (hook, large hook, and large V-hook), extension rod, and carrying case.

►Please choose: To order, specify range in lb. or kg from table.



► CHOOSE: Pounds (lb.)	► CHOOSE: Kilograms (kg.)	Item No.
2 30	1 10	
5 50	2 20	
10 100	3 30	
20 —	5 50	
Measuring Units	Item No.	
lb	D1784	
kg	D1785	



Heavy-Duty Vibration Meters

Batteries and carrying case are included.

EXTECH

Digital Vibration Meter Kits—Measure velocity, acceleration, and displacement. Feature Min./Max. and RMS or peak value measurement. With built-in RS-232 interface and LCD. Each includes remote vibration sensor with 3.9-ft. cable, magnetic mount, and holster. Can store and analyze data with optional software and cable 1CLF1, sold separately on Grainger.com.

Pen Vibration Meter—Measures RMS acceleration and velocity, with zero adjustment and low battery indicator. Housing is IP65 dust-tight and waterproof. Includes pin-tip probe, and magnetic mount.



Vibration Meter/Data Loggers 13X134 and 43Y050—Measure velocity, acceleration, and displacement. Feature Min./Max., RMS/Peak/Max. Hold modes, and selectable sampling rate from 1 to 3600 sec. Retain up to 99 readings, or use included 2G SD card to store datalogs for analysis. Include remote vibration sensor with magnetic mount on 47.2" cable.

MONARCH INSTRUMENT

Vibration Tester—Meter/stethoscope system measures acceleration, velocity, and acceleration enveloping. Features bearing gear check and LCD. Includes accelerometer with cable, headphones, magnetic base, and stinger.



1AEV9

13X135



13X134

6KX53

38NJ28

Item	Accel. Range	Frequency Range (Hz)	Vel.	Display	Auto Power Off	Data Hold	Battery Type	NIST	Mfr. Model	Item No.
Extech										
Digital Vibration Meter Kit	2 to 656 ft/sq sec or 0.5 to 200 m/sq sec	10 to 1 K	0.02 to 7.87 in/sec or 0.5 to 200 mm/sec	LCD	Yes	Yes	9V	No	407860	1AEV9
Pen Vibration Meter	2 to 656 ft/sq sec or 0.5 to 200 m/sq sec	10 To 1 K	0.02 to 7.87 in/sec or 0.5 to 200 mm/sec	LCD	Yes	Yes	9V	Yes	407860-NIST	6RGK2
Vibration Meter/Data logger	20.39g, 200 m/sq sec, 656 ft/sq sec	10 to 1 K	19.99cm/s, 200mm/s, 7.87in/s	Backlit LCD	With Disable	Yes	(6) AA	No	SDL800	13X134
	20.39g, 200 m/sq sec, 656 ft/sq sec	10Hz to 1 KHz	19.99cm/s, 200mm/s, 7.87in/s	Backlit LCD	With Disable	Yes	(6) AA	Yes	SDL800-NIST	43Y050
Monarch										
Vibration Tester	0.01 to 19.99g	10 to 10 K	0.01 to 19.99 in/sec, 0.1 to 199.9 mm/sec	LCD	—	Yes	(2) AA	—	Examiner 1000 Kit	6KX53
Test Products Intl.										
Vibration Meter	0.01 g to 50g	1 KHz to 10kHz Bearings, 2/10 Hz to 1 KHz ISO	0-25 mm/sec	Full Color OLED	Yes	Automatic	(2) AA	No	9070	38NJ28
	0.01 g to 60g	1 KHz to 10kHz Bearings, 2/10 Hz to 1 KHz ISO	0-25 mm/sec	Full Color OLED	Yes	Automatic	(2) AA	No	9080	38NJ29
Vibration Tester	1 to 1000 mV/g	10 Hz to 10 kHz	720mm/sec	Full Color OLED	Yes	No	(2) AA	Yes	9080K2	400R50