

SHIMPO INSTRUMENTS

Measuring Quality

FGE-XY Digital Force Gauges

Digital Force Gauges with 180° reversible display & dual labeled keypad for both push, pull applications

The Series FGE-XY Digital Force Gauges combine a rugged, ergonomic and compact design with exceptional accuracy to provide a solid force testing instrument. These instruments are utilized in a variety of applications such as, incoming quality inspection, finished goods testing, R&D or almost any portable or force stand testing requirement.

Simple one button adjustment alters units, while pressing the peak button quickly produces the highest recorded value during the test. The 180° reversible display combined with the adjustable force direction and dual labeled keypad enable the FGE-XY to excel in both compression and tension applications in any direction. Models are available from 0.5 lbs to 200 lb ranges providing a large offering for various testing requirements.

Typical applications include wallboard, wire pull, wire crimps, trigger pull, brake pedal, aerospace ceramic, springs, food ripeness, corrugated paper strength, blister pack, medical component, muscle strength, ergonomic testing, adhesives, syringe plunger, needle sharpness and many more.



Features

- 1000 Hz Sample Rate provides faster sampling producing better resolution and more accurate results
- Ideal for strict tolerances with its high accuracy $\pm 0.2\%$ F.S.
- Measure and record compression and tension tests- permits true "push-pull" testing
- Real time or Peak Hold mode easily selectable with a single button push
- 180° Reversible display and dual printed keypad allows usage as a portable gauge or mounted upside down on a test stand.
- 1 million operation load cell with superior overload protection provides a long-life, damage free product
- Rugged, ergonomic die cast aluminum construction allows usage on production floor
- Variable display response rate aids viewing readings
- Flexible user preference with one button selection of engineering units
- Dual power capable with rechargeable battery or AC line voltage
- CE Mark & RoHS Approval



FGE-XY Specifications

FGE-XY Model	FGE-0.5XY	FGE-1XY	FGE-2XY	FGE-5XY	FGE-10XY	FGE-20XY	FGE-50XY	FGE-100XY	FGE-200XY
Capacity	8 oz 0.5 lb 200.0 g 2.000 N	16 oz 1 lb 500.0 g 5.000 N	32 oz 2 lb 1,000 g 10.00 N	5 lb 2.000 Kg 20.00 N	10 lb 5.000 Kg 50.00 N	20 lb 10.00 Kg 100.0 N	50 lb 20.00 Kg 200.0 N	100 lb 50.00 Kg 500.0 N	200 lb 100 Kg 1000N
Resolution	0.01 oz 0.001 lb 0.1 g 0.001 N	0.01 oz 0.001 lb 0.1 g 0.001 N	0.01 oz 0.001 lb 1 g 0.01 N	0.001 lb 0.001 Kg 0.01 N	0.01 lb 0.001 Kg 0.01 N	0.01 lb 0.01 Kg 0.1 N	0.01 lb 0.01 Kg 0.1 N	0.1 lb 0.01 Kg 0.1 N	0.1 lb 0.1 Kg 1N
Accuracy	±0.2% F.S. @ 73°F (23°C)								
Display	4-Digit LCD, 0.5" (12 mm) high, Units 0.29" (7 mm). Reversible. Minus sign for tension								
Display Update	0.05, 0.1, 0.2, 0.3, 0.5, 1 sec								
Sampling Rate	1000 Hz								
Overload Capacity	200% of F.S. (200 lb.: 150% F.S.)								
Power	Rechargeable Ni-MH battery or universal AC adapter/charger (100 - 240 VAC, 50/60 Hz)								
Auto Power Shut-Off	Yes (not active if adapter/charge is in use)								
Battery Charge	12 hours (when fully charged)								
Recharge Time	Approximately 18 hours (when fully discharged)								
Temperature Limits	32 - 104°F (0 - 40°C)								
Dimensions	5.8 x 3 x 1.5" (147 x 75 x 38 mm)								
Product Weight	Approx. 1 lb (450 g); FGE-200XY Approx. 1.1 lb (500 g)								
Package Weight	Approx. 2.25 lb (1.02 kg) for 0.5 lb and 1 lb ranges; 2.4 lb (1.09 kg) for 2 to 100 lb ranges; 2.75 lb (1.25 kg) for 200 lb range.								
Certification	CE, RoHS								
Included Accessories	AC adapter/charger, carrying case, hook, chisel, flat head, notched head, hanger, cone head, metric to inch thread adapter, extension rod								

Ordering Details

FGE-0.5XY	0.5 lb capacity digital force gauge
FGE-1XY	1 lb capacity digital force gauge
FGE-2XY	2 lb capacity digital force gauge
FGE-5XY	5 lb capacity digital force gauge
FGE-10XY	10 lb capacity digital force gauge
FGE-20XY	20 lb capacity digital force gauge
FGE-50XY	50 lb capacity digital force gauge
FGE-100XY	100 lb capacity digital force gauge
FGE-200XY	200 lb capacity digital force gauge
NIST-FG	NIST traceable certificate of calibration for ranges from 0.5 to 100 lbs
NIST-FG-HX	NIST traceable certificate of calibration for ranges from 200 to 1000 lbs
FGE-PT100	100 lb capacity FGE-XY in ergonomic testing kit. Kit includes all of the standard FGE-XY accessories but comes with larger, heavy duty case and adds padded ERGO accessories, handle, and NIST traceable certificate
FGE-PT200	200 lb capacity FGE-XY in ergonomic testing kit. Kit includes all of the standard FGE-XY accessories but comes with larger, heavy duty case and adds padded ERGO accessories, handle, and NIST traceable certificate

Accessories

FG-M4ADP	Standard adapter set with M4 threads for ranges 0.5 lb and 1 lb. Includes: chisel, cone, flat head, notched head, hook, extension rod
FG-M4CL	Chisel adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M4CN	Cone head adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M4FL	Flat head adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M4GV	Notched head adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M4HK	Hook adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M4RD	Extension rod adapter with M4 thread for ranges 0.5 lb and 1 lb.
FG-M6ADP	Standard adapter set with M6 threads for ranges 2 lb to 200 lb. Includes: chisel, cone, flat head, notched head, hook, extension rod
FG-M6CL	Chisel adapter with M6 thread for ranges 2 lb to 200 lb.
FG-M6CN	Cone head adapter with M6 thread for ranges 2 lb to 200 lb.
FG-M6FL	Flat head adapter with M6 thread for ranges 2 lb to 200 lb.
FG-M6GV	Notched head adapter with M6 thread for ranges 2 lb to 200 lb.
FG-M6HK	Hook adapter with M6 thread for ranges 2 lb to 200 lb.
FG-M6RD	Extension rod adapter with M6 thread for ranges 2 lb to 200 lb.
FG-09V120UC	Universal charger adapter for 120/240V AC
ERGO-KIT	Padded accessory kit for ergonomic testing
FG-HANDLE	Handle adapter for larger loads