

# EFORCE

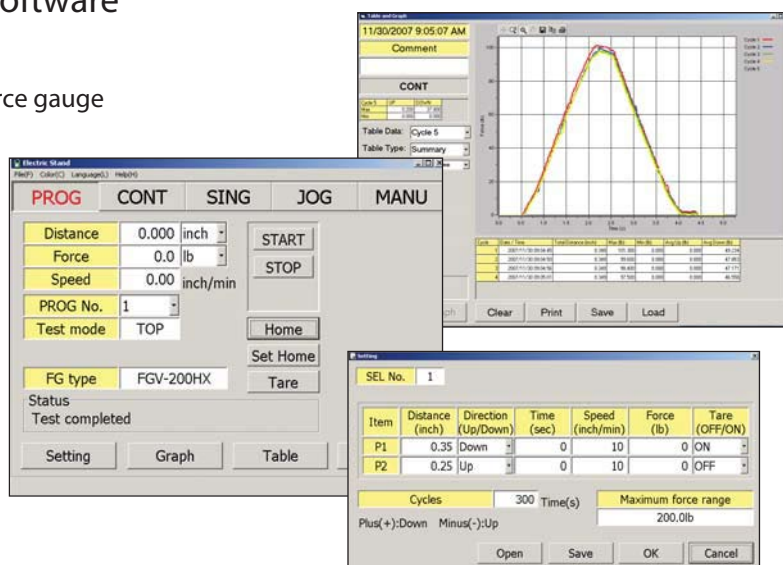
## TEST STAND

Designed for Force testing in many industries, E-Force provides accurate and repeatable results for Tension Compression and Break Test. New features include free test software, intuitive control panel and retrievable test memory.



## 5 Modes of Operation - Pre-Loaded Test Software

1. Manual – push button up and down control
2. Jog – press and release for positioning of parts and force gauge
3. Single – allows one cycle operation (up/down)
4. Continuous – Ideal for fatigue or repetitive testing
5. Programmable:
  - PC controlled and Test Stand controlled
  - Save and recall test parameters
  - Top Load Testing
  - Tensile Break
  - Compression Break



### Features

User friendly controls and software  
 Auto reverse for test modes  
 Single model with wide speed range  
 Easy force gauge (load range) changing  
 Intuitive and easy to use front panel controls

### Benefits

Hands off operation, reduces errors, speeds tests  
 High Speed return to "home" saves time in multi parts testing  
 Meets many testing needs  
 Provides for multiple test ranges(0.5 - 200 lbs, 0.2 – 100Kg, 2 – 1000N)  
 Reduces operator training time



The E- Force test stand features a USB output, which speeds data communications with almost any PC or laptop computer. The E-Force firmware displays prompts and menus that guide the user through all programs, setups and final tests. Windows® like software permits users to perform standard tests, plus Pull or Push to break, Pull or Push to specified load and cycling. E-Force software provides force vs displacement and force vs time to be displayed and the results collected in tabular and graphical format. This information can then be exported to Microsoft® Office products like Excel®.

The E-Force features a Shimpo exclusive: a precision made servo gear head and ball screw for precise control of the test stand.

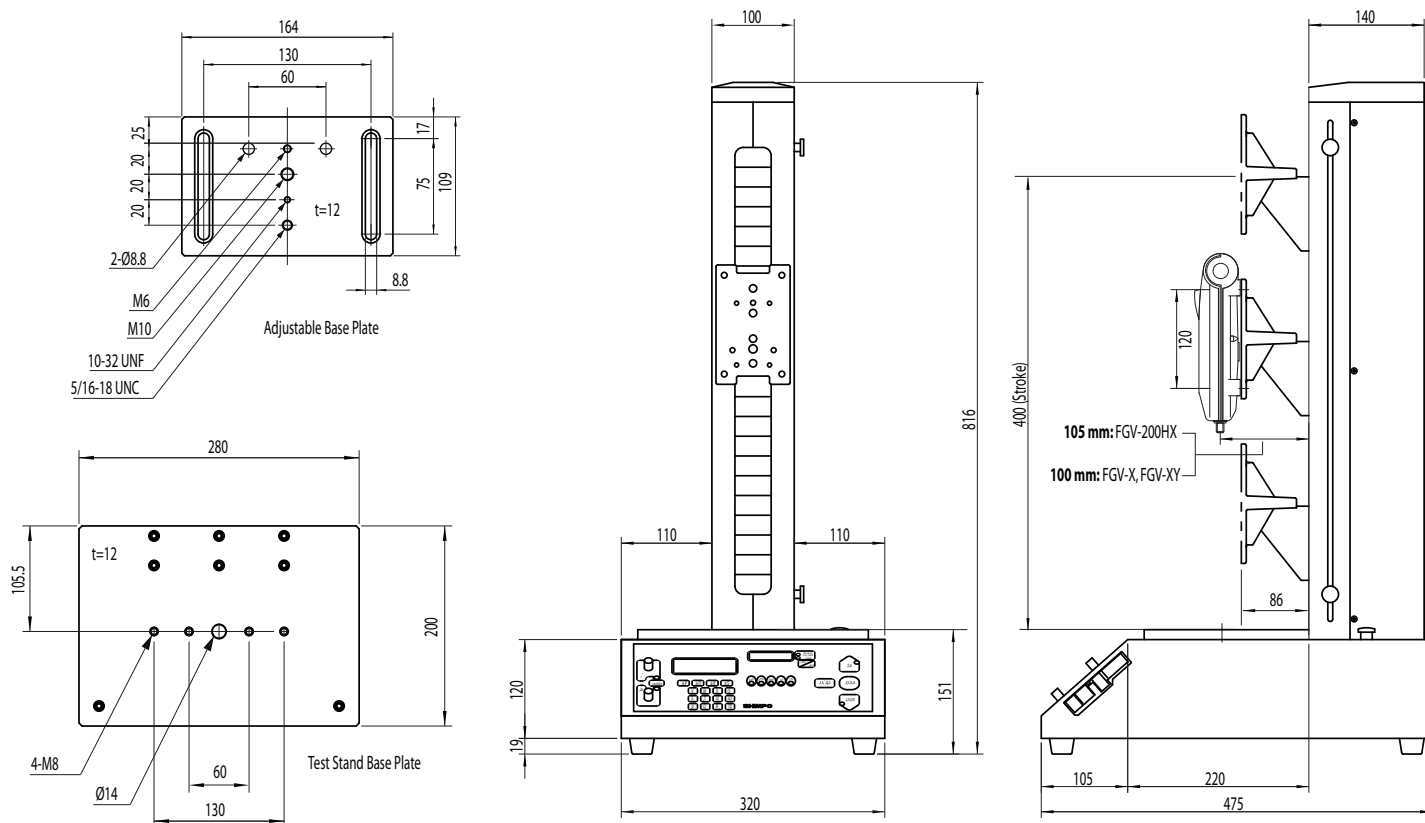
All programming of return speed, test speed, distance/deflection set points, cycles, force setpoints, is performed using software included with each E-Force, or through the front control panel keypad. (Push and Pull to break tests are controlled through software only)

The large and easy to read back lit digital display indicates tests, all programmed setpoints, program setup status, force loads and overload alarm warnings.

The E-Force can be equipped with various gripping and compression fixtures and accessories.

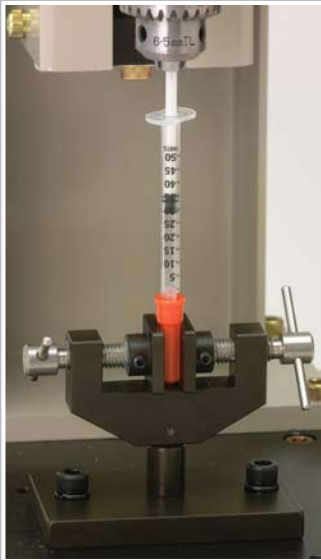
The large sample area and 3.38" inch (86mm) throat depth provides for unique and large parts to be tested on its metric and English threaded - adjustable base plate. A precise and consistent 0.02 to 15.7 in/min (0.06 to 400 mm/min) cross head speed provides for ultra slow creep tests and constant load testing.

## Dimensions (mm)



FGS-200PV SPECIFICATIONS	
Capacity	100 kgf (200 lbs.)
Reduction Ratio	1:20
Precision Ball Screw Pitch	4mm / 1 Rotation
Stroke	400 mm (15.7 inch)
Travel Speed	0.6 mm/min (0.02 inch/min) - 400 mm/min (15.7 inch/min)
Drive System	Servo Motor (Trapezoidal thread (pitch 4mm / 1 rotation)
Speed Setting	Selectable Speed Knobs (Speed A and Speed B)
Display	5 digit LED
Cycle (max)	1 - 9,999 times
Analog Signal Output	5 mV/ mm max +/- 2 V (400 mm)
Emergency Switch	Push/Twist and release emergency stop button
Operating Modes	
MANU	MANUAL - Operates to selectable force limits
JOG	JOG - Operates while direction key is pressed
SING	SINGLE - Operates one cycle between upper and lower force limits
CONT	CONTINUOUS - Cycles test between upper and lower force limits.
PROG	PROGRAM - Specific Program Tests (each can store 5 programs on each type)
	TOP: Top Load test with threshold option
	STD: Standard test with preload option
	BREAK: Break point test with force drop detection
Communication Feature	USB 1.1 communication from Test stand to PC
Force Gauge Compatibility	FGV-X, FGV-200HX and FGV-XY models
Communication Software	Windows based program, virtual front panel compatible with Windows XP/2000
Alarm	Overload protection for test stand motor (stops motor when overload condition occurs).
Work Space	200 mm (7.87 inch) X 280 mm (11.02 inch)
Operating Temperature	0 - 45 degrees Celsius (Non-condensing)
Power Supply	120 V AC/ 60 hz
Weight	23 Kg (50 lbs)

## FGS-200PV Motorized, Programmable Test Stand Applications



Syringe Test



Pill Crush



Surgical Tubing  
Catheter Test



Automotive Hood  
Piston Test



Electrical Wire &  
Terminal Crimp Test



Spring Test



Commercial QA/QC  
Test



*The Right Source For Your Test & Measurement Needs*

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