

EMX-275 Ultra Precision, Force Control, Motorized Test Stand



The EMX-275 Vertical Motorized Test Stand uses a precision stepper motor and ball screw drive that provide precise movement and smooth operation. Rigid construction assures minimum deflection to ensure consistent force and distance test results.

Precise Increment Testing

EMX-275 features a unique jog movement control, for precise increment testing. In jog mode, each click of the program dial moves the cross head exactly .01 mm (may reduce at maximum capacity depending upon material hardness).

Cycle Mode

In cycle mode, automated fatigue tests are easy to setup.

Press the unique program dial and turn, to make selections from the menu screens and set mode, speed, test duration, units and cycles. Separate screens control start and return speeds.

Force Control

Force controlled non-destructive tests are also easy to setup and program. Connect an Imada Z Series force gauge to the EMX-275 test stand to enable the following force controlled tests and Conditional Overload Prevention.

Maintain Force Between High/Low Setpoints

Initial cross head speed is controlled by the start speed setting. Force control activates when applied force exceeds the low setpoint (and below the high setpoint) on the Z Series force gauge. The cross head maintains that force for the programmed interval and then uses return speed to reset for the next cycle.

Increase Force to High Setpoint and Stop

Initial cross head speed is controlled by the start speed setting. When the applied force reaches the low set point of the Z Series force gauge, the test stand engages the measuring speed setting and stops when the applied force reaches the high set point on the Z series force gauge. Ideal for creep or non-destructive testing. The cycle is repeated until the counter limit is reached.

Feature

- Ultra rigid, .25mm deflection at maximum load
- Easy-to-use program dial and menu screens control distance, mode, speed, time and cycles
- Programmable travel distance

- One stand for both compression and tension tests
- Force Controlled operation with Imada Z force gauges
- Conditional Overload Prevention
- Manual, Increment, Single Cycle, Continuous Cycle and Force Control (with Z Series gauges) selectable
- Up to five test configurations saved in memory
- Programmable timer up to 99' 59.9, in 0.1 sec increments
- Wide speed range: .01 – 23.5 in/min
- Optional digital distance meter available
- Max clearance 9" (with extender 14")

MX-1100 Motorized Vertical Test Stand



Capacity: 1100lbs / 500Kg / 5000N

MX-1100 motorized test stands offer advanced force testing. The combination of screw system and state-of-the-art brushless motor provides extremely smooth and powerful operation over the entire speed range.

Connect the MX-1100 test stand with a Z Series force gauge and enable force controlled testing. Force control can automatically stop testing when the force value reaches the high setpoint programmed on the Z Series force gauge, or maintain the force between the Z Series High and Low setpoints. Force control is ideal for fatigue or non-destructive testing.

High/Low Set Point Force Control

Force control is activated when the applied force is at or between the high and low set point(s) of the force gauge and is deactivated by the digital timer. Initial carriage speed is controlled by the variable or fixed speed settings.

One Way Force Control

Initial carriage speed is controlled by the variable or fixed speed settings. When the applied force reaches the low set point of the force gauge, the test stand's carriage speed is adjusted to 20% of maximum and decreases to zero as the applied force reaches the high set point. Ideal for non-destructive testing.

Speed control, The MX-1100 accepts any of the standard range force gauges. Quick switch and Emergency Stop features are also included.

***FORCE GAUGE NOT INCLUDED**

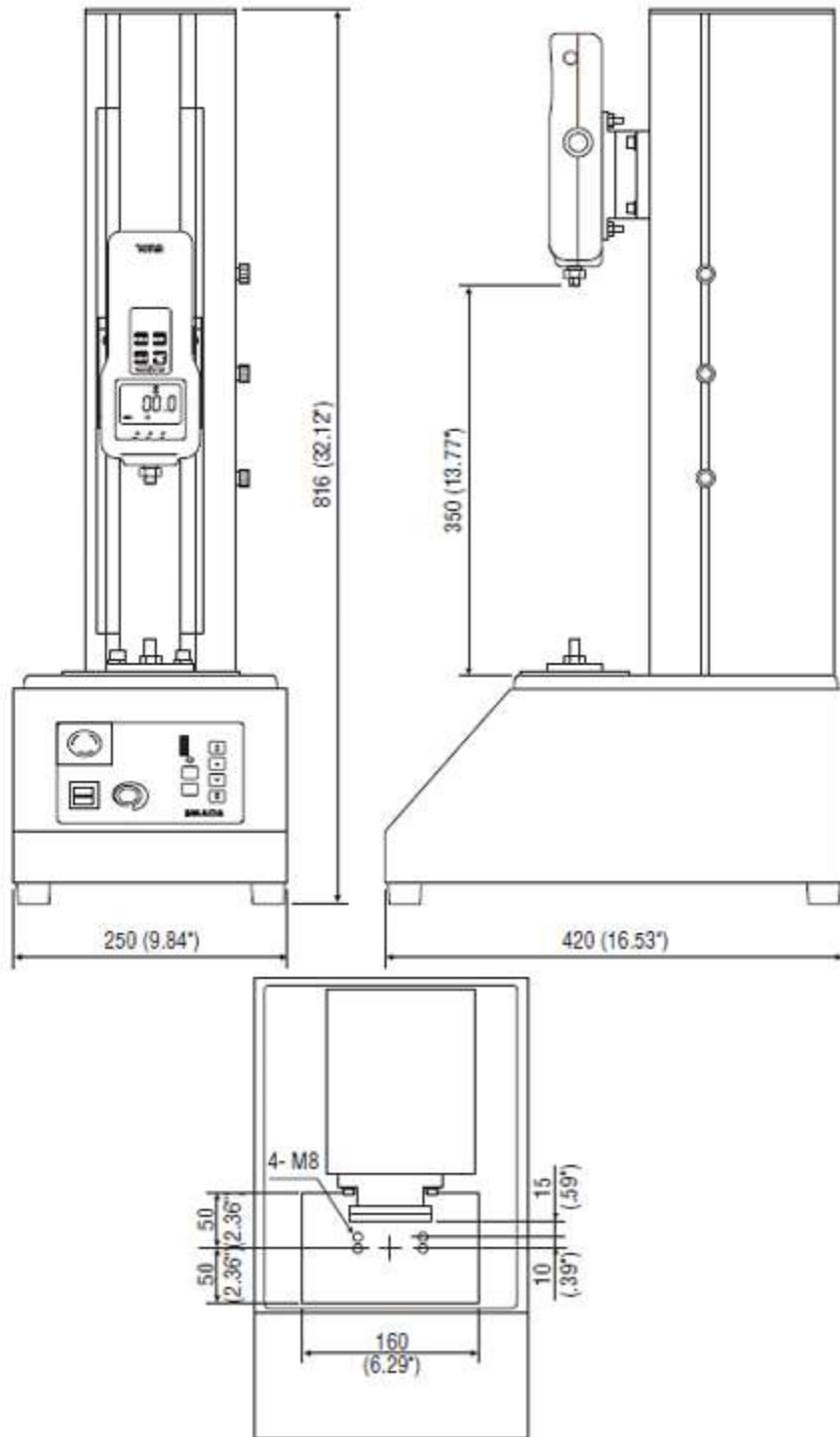
Designed to work with the Z2 & ZP force gauges.

Features

- **One stand for both compression (push) and tension (pull) tests**
- **Combination of ball screw drive system and high performance brushless motor provides extremely smooth and powerful operation over the entire speed range.**
- **Conditional Overload Prevention**

- **Stroke: 13"**
- **Jog, Single Cycle, Continuous Cycle, Force Control**
- **Wide speed range: 0.4 -11.8 in/min (optional speed ranges available)**
- **Optional timer and digital distance meter**
- **Force Controlled operation with Z2 and ZP force gauges**

Dimensions



MX-500 Motorized Vertical Test Stand



MX-500 motorized test stands offer advanced force testing. The combination of screw system and state-of-the-art brushless motor provides extremely smooth and powerful operation over the entire speed range.

Force control is activated when the applied force is at or between the high and low set point(s) of the Z Series force gauge and is deactivated by the digital timer. Initial carriage speed is controlled by the variable or fixed speed settings.

Initial carriage speed is controlled by the variable or fixed speed settings. When the applied force reaches the low set point of the Z Series force gauge, the test stand's carriage speed is adjusted to 20% of maximum and decreases to zero as the applied force reaches the high set point. Ideal for non-destructive testing.

Speed control, quick return and emergency stop are standard features.

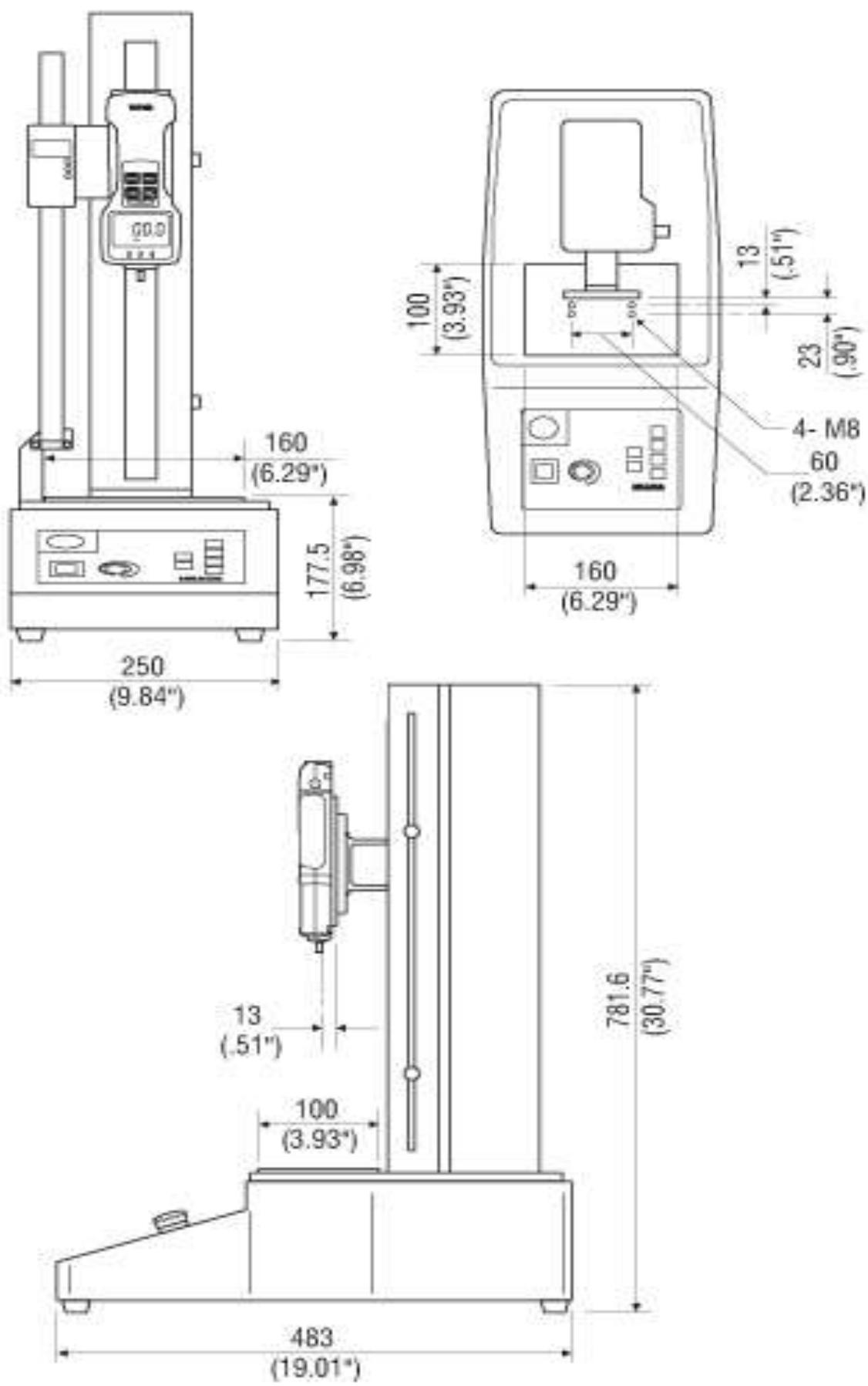
***FORCE GAUGE NOT INCLUDED**

Designed to work with the Z2 & ZP force gauges.

Features

- One stand for both compression (push) and tension (pull) tests
- Stroke: 13"
- Jog, Single Cycle, Continuous Cycle (72 hour max.), Force Control
- Maximum load 500 lb
- Combination of ball screw drive system and high performance brushless motor provides extremely smooth and powerful operation over the entire speed range.
- Wide speed range: 0.2 – 7 in/min (optional speed ranges available)

Dimensions



ML-275 Motorized Horizontal Test Stand



The new ML-275 motorized test stand is designed for tension, compression, and friction testing. Combination of screw system and state-of-the-art brushless motor provides extremely smooth and powerful operation over the entire speed range. Speed control, quick return and emergency stop are standard features.

The ML-275 accepts the DPS, Z2 & ZP force gauges, additional models require the AP-002 adapter plate.

Feature

- One stand for both compression (push) and tension (pull) tests
- No programming required
- Digital Distance Meter Optional

Spesification

Capacity	275 lbs / 125 Kg / 1250 N
Stroke	11.8" / 300 mm
Travel Rate	Refer to Speed Ranges above
Dimensions	Download PDF
Weight	31 lbs / 14 Kg
Compatible Gauges	DS2 , Z2 and ZP
Warranty	2 years



The new MX-275 motorized test stands offer advanced force testing. The combination of screw drive system and state-of-the-art brushless motor provides extremely smooth and powerful operation over the entire speed range.

Connect the MX-275 test stand with a Z2 or ZP Series force gauge and enable force controlled testing.

High/Low Set Point Force Control

Force control is activated when the applied force is at or between the high and low set point(s) of the Z Series force gauge and is deactivated by the digital timer. Initial carriage speed is controlled by the variable or fixed speed settings.

One Way Force Control

Initial carriage speed is controlled by the variable or fixed speed settings. When the applied force reaches the low set point of the Z Series force gauge, the test stand's carriage speed is adjusted to 20% of maximum and decreases to zero as the applied force reaches the high set point. Ideal for non-destructive testing.

Speed control, quick switch and emergency stop are standard features. Optional timer and digital distance meter available.

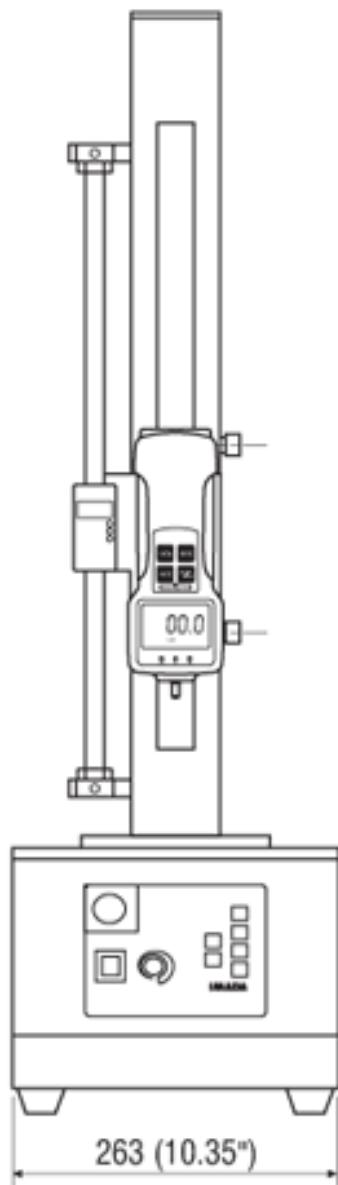
***FORCE GAUGE NOT INCLUDED**

Designed to work with the Z2 & ZP force gauges.

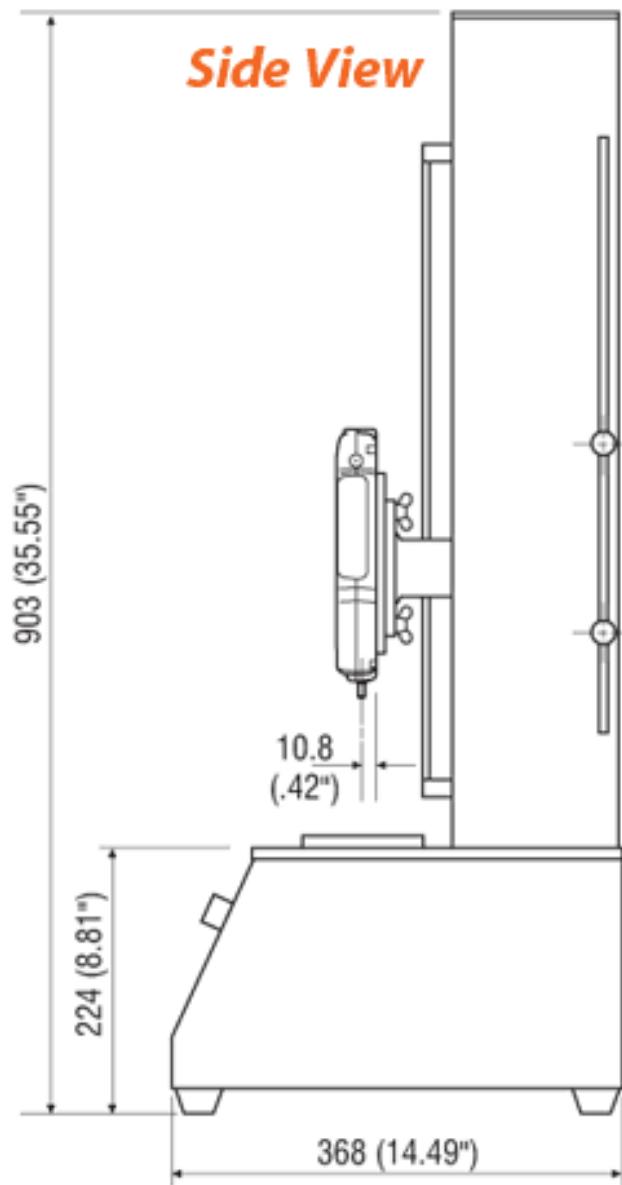
Features

- One stand for both compression (push) and tension (pull) tests
- Jog, Single Cycle, Continuous Cycle (72 hour max.), Force Control
- Clearance 16"
- Force Controlled operation with ZP & Z2 Series force gauges
- Combination of screw drive system and high performance brushless motor provides extremely smooth and powerful operation over the entire speed range.
- Wide speed range: 0.4 – 9.4 in/min (optional speed ranges available)
- Optional timer and digital distance meter

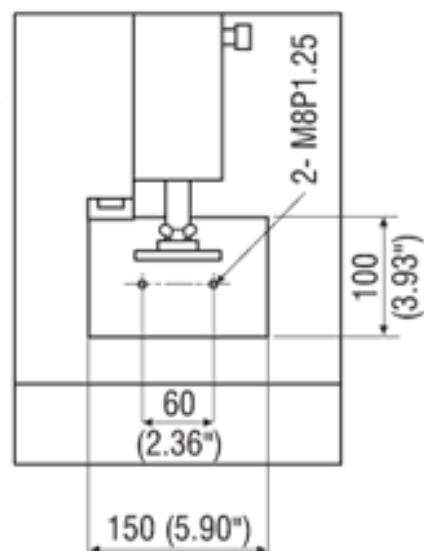
Dimensions



**Front
View**



Side View



**Top
View**

Motorized Test Stands FGS-100PVH



This advanced motorized test stand allow the user to obtain the most accurate, repeatable results available in the market today. The all steel construction makes the FGS-100PVH remarkably rugged, while programming and cycling capabilities enable it to be highly intelligent. All stands have the ability to interface with our top quality force gauges, providing complete force measurement systems for the most precise testing applications.

Because speed, distance, and time are controlled by the user in either a vertical or horizontal model, our motorized stands can be configured for any application. One year warranty.

Feature

- User programmable set points: speed, distance, stop time
- High and low force set points user selectable through RS232C interface or directly through DFS gauge
- Gauge overload protection
- Analog distance outputs
- Single cycle and continuous cycling capabilities
- Compatibility with nearly all manufacturers' gauges
- All gauge functions can be communicated through stand via RS232 interface
- Manually adjustable upper and lower limits

Spesification

Capacity	110 lb (50 kg)
Stroke	5.5" (140 mm)
Vertical Clearance	2.4"- 7.1" (61-181 mm) 5 steps, 1.18"/step (30 mm/step)
Travel	100PVH: Adjustable: 1.57-15.74"/min (40-400 mm/min) 100PVL: Adjustable: 0.39-3.93"/min (10-100 mm/min)
Display	Four digit LED, 0.41" high (10.5 mm). Reads in inches (0.01 resolution) or millimeters (0.1 resolution)
Power	120 VAC, 60 Hz
Weight	42 lb (19 kg)

MX-110 Motorized Vertical Test Stand



Capacity: 110lbs / 50Kg / 490N

The new MX-110 test stand offers consistent and reliable testing. The combination of a screw drive system and state-of-the-art brushless motor provides extremely smooth and powerful operation over the entire speed range.

Connect the MX-110 test stand with a Z Series force gauge and enable force controlled testing. Force control can automatically stop testing when the force value reaches the high setpoint programmed on the Z Series force gauge, or maintain the force between the Z Series High and Low setpoints. Force control is ideal for fatigue or non-destructive testing.

The MX-110 accepts any of the standard range force gauges. Quick switch and Emergency Stop features are also included.

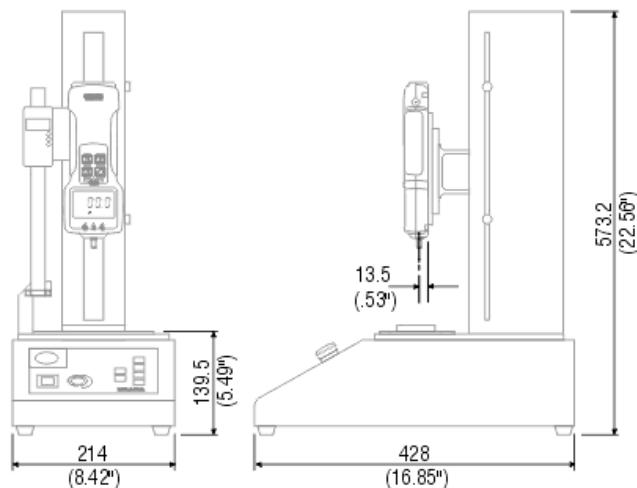
***FORCE GAUGE NOT INCLUDED**

Designed to work with the Z2 & ZP force gauges.

Features

- One stand for both compression (push) and tension (pull) tests
- Force Controlled operation with Z2 and ZP force gauges
- 3 speed ranges:
0.4 – 11.5 in/min
0.7 - 23.0 in/min (MS)
1.5 - 47.0 in/min (HS)
- Jog, Single Cycle, Continuous Cycle, Force Control
- Maximum clearance 9" (with extender 14")

Dimensions





3 Capacities Available

MX2-110 - 110 lbs / 50 Kg / 500 N

MX2-275 - 275 lbs / 125 Kg / 1250 N

MX2-550 - 550 lbs / 250 Kg / 2500 N

High Performance, Force Control, Motorized Test Stand with Speed Control, Timer & Cycle Counter

MX2 Vertical Motorized Test Stands use maintenance-free, brushless, DC motors that provide smooth and powerful operation to ensure consistent force testing results.

FA High Precision Distance Measuring Option records distance traveled directly on the [ZTA force gauge](#) for high speed Force VS Distance measuring.

Precise Increment Mode

MX2 features a unique jog movement control, for precise increment testing. In jog mode, each click of the program dial moves the cross head approximately .015mm for MX2-110, .01mm for MX2-275 and .05mm for MX2-550 (standard speed, under no load).

Cycle Mode

MX2 Program dial and LCD interface In cycle mode, automated fatigue tests are easy to setup. Press the unique program dial and turn, to make selections from the menu screens and set mode, speed, test duration, units and cycles. Control start and return speeds independently.

Force Control

Force controlled non-destructive tests are also easy to setup and program. Connect a Z Series force gauge to the MX2 test stand to enable the following force controlled tests and Conditional Overload Prevention.

Maintain Force Between High/Low Setpoints

Initial cross head speed is controlled by the start speed setting. Force control activates when applied force exceeds the low setpoint (and below the high setpoint) on the Z Series force gauge. The cross head maintains that force for the programmed interval and then uses return speed to reset for the next cycle.

Increase Force to High Setpoint and Stop

Initial cross head speed is controlled by the start speed setting. When the applied force reaches the low set point of the Z Series force gauge, the test stand engages the measuring speed setting and stops when the applied force reaches the high set point on

the Z series force gauge. Ideal for non-destructive or creep testing. The cycle is repeated until the counter limit is reached.

Features

- Ultra rigid, .5mm deflection at maximum load
- Manual, Increment, Single Cycle, Continuous Cycle and Force Control (with Z Series gauges) selectable
- Easy-to-use program dial and menu screens control mode, speed, timer and cycles
- Programmable timer up to 99' 59.9 sec in 0.1 sec increments
- One stand for both compression (push) and tension (pull) tests
- Wide speed range: 0.4 – 11.8 in/min (optional speed ranges available)
- Force Controlled operation with Imada Z Series force gauges
- Optional digital distance meter available
- Conditional Overload Prevention
- Max clearance 9" (with extender 14")