

Compact Multipurpose Dynamic and Fatigue System LFV up to 10 kN

Available Models from the showroom Version ME: upper crosshead mechanically clamped with electrical height position



These LFV Compact Series represents ergonomically and space saving test systems ideal for characterizing the static and dynamic properties of materials and components at force capacities up to 10 kN.

The hydraulic power supply of the machine is integrated in the base of the testing machine making this series extremely compact, space saving and easy to install.

The fatigue rated actuator is conveniently mounted in the upper crosshead. The system incorporates an extremely versatile lower integral T-slot platen. The corrosion resistant T-slot platen is well suited to mount grips & fixtures, specimens and any kind of engineering components or finished goods.

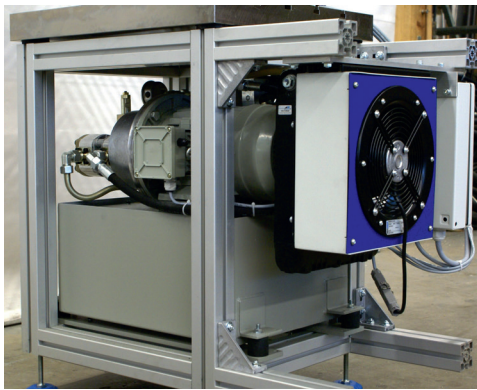
Typical applications includes monotonic (static) tension, compression, bend, shear and other tests, durability and fatigue tests including fatigue crack growth testing, testing of components and manufacturing assemblies for the biomedical, automotive, aircraft, electronic, plastic injection moulding and other industries.

Key Features

- Versatile design for testing components and a variety of materials
- Compact and space saving due to on integrated hydraulic power pack
- Latest digital control electronics with closed loop control and data acquisition rate, and with self-identification transducer coding
- Rigid machine frame of high stiffness, provides superior axial and lateral stiffness and guarantees robust, durable and long-term operation
- Test space adjustment available from mechanical lift to automatic system
- Hydraulic passive clamping (Version HH) system assures that the upper crosshead is clamped to the column without any hydraulic pressure applied.
- Double acting, double ended, and equal area Servo Actuator with Hydrostatic 4-Pocket Bearings for the best friction free static and dynamic performance with nearly service-free operation.
- Highly accurate load cell and digital piston stroke transducer
- High performance Servo valve(s)

Hydraulic Power Pack integrated in the System Table with Oil-Air Cooler or Oil-Walter Cooler

To furnish the pressurized oil for servo-hydraulic testing machine.



The unit includes:

- Oil tank with low noise pump with constant oil delivery
- Tank with cleaning cover for easy servicing
- Air fan on the rear side of the power pack to avoid high air temperature inside the power pack
- Oil filter with clogged filter indication
- Electric pressure indicator for safety mode in case of failure of a hose, pipe etc.
- Max. oil temp. protection (shut down of the system)
- Including oil filling
- Oil level indication with electrical safety mode in case of low oil level
- Remote turn on/off control of hydraulic through testing software

Type LFB-2.5-ME	Technical Data
Max. dynamic test load	±2 kN, ±3 kN, ±5 kN or ±10 kN
Test frequency	up to 15 Hz
Machine accuracy according to from 20 N to 2 kN from 10 N to 20 N	ISO 7500-1, ASTM E4 Grade 0.5 Grade 1
Piston Stroke	50 (±25) mm, other on request
Piston stroke measurement accuracy according to ISO 9513	±0.5 %
Max. allowable piston speed	2 m/second
Clear distance between columns	440 mm
Column Diameter	2 x 50 mm
Width of T-Slot	545 mm
Depth of T-Slot	600 mm
Number of T-Slots	4
T-Slot Platen surface	Nickel-plated
Height of T-Slot platen from Floor	~800 mm
Test space between upperconnecting detail and base platen	up to 750 mm
Max. test space between upper crosshead and lower T-Slot platen	960 mm
Stiffness of load frame	100 kN/mm
Colour	RAL 7015 / RAL 7035
Electrical connection	3x400V, 50 Hz, 3 kW

Hydraulic Power Pack	Technical Data
Pump delivery at operating pressure	4 L/min constant or other available
Power supply	400V, 3PH+N+ E
Tank capacity	~40 litres
Sound with Oil-Air Cooler	69 dBA (1m)