SERVO-HYDRAULIC UNIVERSAL TESTING MACHINE UTM, 30 KN CAP

Universal Testing Machines (UTMs), Servo-hydraulic, equipped with high performances environmental chambers and extensive suite of accessories offer the greatest flexibility to perform all advanced pavement materials tests, ideal for Research purposes, featuring higher loads from 30 to 250 kN, lower temperatures -25°C, -50°C. Compatible and in compliant with larger range of accessories and Standards.

The heart of all these products is the IMACS2, 3rd Generation Multi-Axis Digital Controller and Data Acquisition System which delivers leading edge performance, unparalled real time computer computer control an flexible data acquisition, together with the powerful and professional UTS Neutron suite draws upon over 30 years of advanced materials testing experience. Used and relied upin by hundreds of researchers, you can buy with confidence knowing your test results having immediate credibility.

IPC Global's Hydraulic Power Supply (HPS), part of the machine, has been designed with integrated VFD (variable speed) technology assuring energy saving and noise reduction. HPS features return line filtration, remote starting and control via virtual pendant, air cooling and indication for low oil, over temperature and dirty filter. The system provides electronically adjustable oil pressure allowing greater control and safety. Oil accumulators further improve control accuracy while the high performance filters ensure long life system protection and reduced maintenance costs.

The UTM-30 is available in two versions: Standard, with tie-rod actuator and High Performance, fitted with Servo-Hydraulic Labirynth bearing actuator.

The **UTM-30 Servo-pneumatic testing systems** can be used as part of your **Superpave performance based testing** program.

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SPECIFICATION

	Advanced	Standard

Models	79-PV70B12	79-PV70B02
Load Capacity:	+/- 30 kN Dynamic +/- 30 kN Static	+/- 25 kN Dynamic +/- 30 kN Static
Frequency:	Up to 100 Hz	
Load cell:	Low profile, Pancake type	
Actuator type (double acting)	Labyrinth Bearing seal less	Tie-rod sealed
Stroke	50 mm (+/- 25 mm)	
Inbuilt displacement transducer	50 mm	
Adjustable crosshead	Motorized	
Crosshead clamping	Hydraulic	
Maximum vertical daylight	795 mm	
Space between columns	450 mm	
Max. working pressure	210 bar	
HYDRAULIC POWER PACK		
Low pressure adjustable	50 to 210 bar	
Max flow rate	5 L/min	
Mains power	2.2 kW	
Cooling system	Air cooling	
Oil tank cap. -Complete with pre-filtered oil	45 L	
DIMENSIONS AND WEIGHTS		
Frame (hxwxd) mm	1900x680x600	
Hydraulic power pack (hxwxd) mm	1000x470x765	
Approximate total weight	195 kg	

FEATURES

- Rigid two column load frame
- Precision engineered for high stiffness and alignment
- Standard tie-rod sealed actuator
- Available with double acting, through-rod high precision labyrinth bearing actuator providing superior performance
- High performance servo valve allows sinusoidal loading frequencies up to 100 Hz
- Motorized crosshead positioning
- Hydraulic crosshead clamping
- Fully customizable to suit a large range of testing applications
- Quick and easy adjustment of the test space without the need for extension rods
- Modular design for easy support and upgrade
- Provides improved alignment regarding concentricity and axiality
- Supplied complete with high quality pre-filtered oil for longer life

Advantages of the Labyrinth bearing actuator:

- Excellent through zero waveform fidelity, i.e. for tests such as uniaxial fatigue SVECD

- Lower oil flow and therefore lower power consumption compared to sealless cylinders
- Wave shape fidelity guaranteed even at highest frequencies
- Longer life compared to standard tie-rod cylinders
- Improved side load resistance for tests such as Two-Point Bend

ACCESSORIES

79-PV70E12

Environmental chamber for UTM-30 servo-hydraulic machine, -25°C to +70°C, 110-230V/50-60Hz/1Ph

79-PV70E22

High performance environmental chamber for UTM-30 servo-hydraulic machine, -50°C to +80°C. 400V/50Hz/3ph, 208-240V/60Hz/3ph

79-PV70116

Temperature measuring kit (-50 +100°C), including two probes

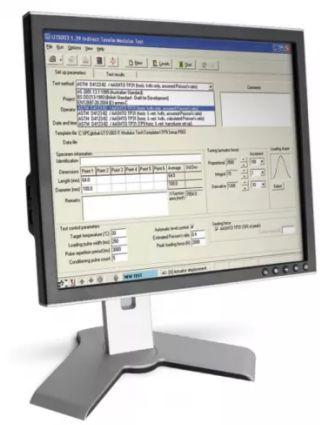
ORDERING CODE

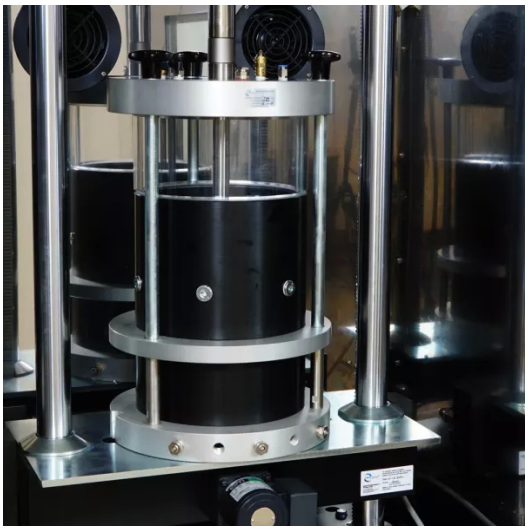
79-PV70B02/I2

IPC Global UTM-30 30kN Standard Actuator Servo-hydraulic dynamic testing system, complete with IMACS2 Controller. 208-230V/50-60Hz/1ph

79-PV70B12/I2

IPC Global UTM-30 30kN Labyrinth Actuator Servo-hydraulic dynamic testing system, complete with IMACS2 Controller. 208-230V/50-60Hz/1ph





IMACS