

LFPlus 1kN Universal Materials Testing Machine

The LFPlus universal testing machine is an easy to use solution for force measurement and material testing applications up to 1 kN (225 lbf). The machine uses interchangeable XLC Series loadcells. Tension and compression testing with cycling to load and extension limits are standard features. The machine can be equipped with a variety of accessories including: grips, fixtures, compression frames, thermal cabinets and extensometers.

The LFPlus features an innovative design that maximises working space and simplifies operation and maintenance. The large work area and deep 175 mm (6.89 in) throat accommodates large specimens and is supplied with a standard universal eye end or optional expanded work table, T-slot table or drip tray. An impressive 0.05-1270 mm/min (0.002-50 in/min) crosshead speed makes it ideal for advanced applications such as creep tests and constant load holding tests. The machine includes standard pass/fail capabilities and statistics.

The LFPlus machine displays load and extension information on a high visibility LCD console with integral membrane keypad. The machine's intuitive firmware displays prompts and menus that guide the user through setup, operation and maintenance functions. Passwords may be used to limit functions to authorised users. Information can be displayed in a choice of languages as standard.

Machine performance can be optimised using our NEXYGEN™ MT material test and data analysis software. This Windows® based software with its built in applications library, is easy-to-use and allows detailed test data to be stored and displayed in graphical and tabular formats. The software allows data to be manipulated to produce detailed analytical reports, plus the ability to integrate with popular Windows® software packages such as Excel, and Outlook®. Other features include powerful video capture, advanced security and audit trails to safeguard data integrity, SPC and clear pass/fail indication.

Features

- Large working area
 - 175 mm (6.89 in) Throat for large specimens
- Universal eye end
- Flexible work surfaces
 - Standard base table
 - Expanded work table (Optional)
 - T-Slot table (Optional)
 - Drip tray (Optional)
- XLC Series Loadcells (Accuracy 0.5% of reading)
- Extended machines available
- Speed range
 - 0.05 to 1270 mm/min (0.002 to 50 in/min)
- Intuitive operator interface
 - Menu driven with intelligent prompts
 - Membrane keypad with tactile feedback
 - Multiple language displays
 - High resolution, backlit LCD display
- Flash memory
- RS232 interface
- Extensometer input
- Load rate control

Specifications

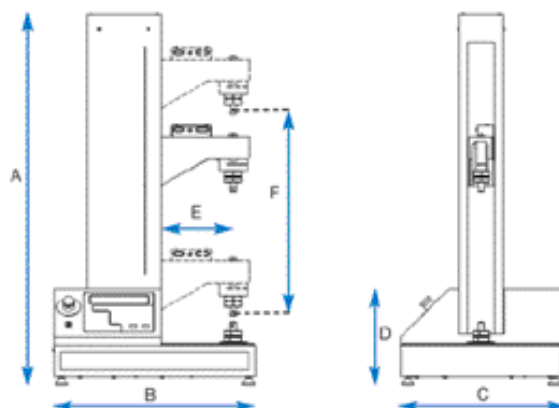
Force Capacity:	1 kN (225 lbf)
Crosshead Speed:	0.05 to 1270 mm/min (0.002 to 50 in/min)
Speed Accuracy:	< 0.2%
Loadcell Accuracy:	± 0.5% of reading
Load Resolution:	<0.005% of loadcell used (max)
Extension Resolution:	< 1.3 microns
Travel: LFPlus	500 mm (19.69 in)
LFPlus-Extended	750 mm (29.53 in)
Data Sampling Rate:	8 kHz
Display:	40 character x 4 line backlit LCD
Extensometer Inputs:	Digital and analogue extensometer
Data Outputs:	RS232 serial data, Analogue 10V dc max (optional)
Supply Voltage:	115/230V ac ±10% 50-60 Hz
Load Measuring System:	Exceeds the requirements of BS EN ISO 7500:1999 Class 0.5 or Class 1, ASTM E4, DIN 51221
Analysis Software:	NEXYGEN MT material test and data analysis software and Ondio application builder software
Weight:	46 Kg (101 lb)
Operating Temperature:	5° to 35° C (40° to 95° F)



Order No. Description

01/LFL	BASE Model Number - 1st to 6th characters LLOYD INSTRUMENTS LFPlus Testing Machine				
S E P X	Travel Length - 7th character Standard, 500 mm (19.69 in) Extended, 750 mm (29.53 in) Pogo Design* Extended Pogo Design*				
	/LX	Measurement Adapter - 8th to 10th characters XLC Load Cell Adapter Kit			
	A B C D E	Work Surface - 11th character Standard Base Expanded Work Table - Metric Threads Expanded Work Table - Imperial Threads T-Slot Table Drip Tray			
	/US /UK /EU	Mains Power - 12th to 14th characters 120V ac Mains Power 230V ac Mains Power 230V ac Mains Power			
01/LFL	S	/LX	C	/US	Sample Order No. (01/LFLS/LXC/US)
Lloyd Instruments LFPlus testing machine, standard 500 mm travel with expanded work table with 10-32 UNF threads and 120V ac power.					
* Note "Pogo Design" denotes machine designed to perform tests mounted above floor standing compression cage.					

Machine Dimensions



		mm	in
A	Machine Height	913	35.9
B	Machine Width	500	19.7
C	Machine Depth	400	15.8
D	Base Height	240	09.5
E	Throat	175	06.9
F	Max Travel (Standard machine)	500	19.7
F	Max Travel (Extended machine)	750	29.5

Accessories

Item	Part No.	Item	Part No.
Loadcells:		Extensometers:	
10 N (2.25 lbf)	01/2360	A comprehensive range of contacting and non contacting extensometers are available. For further information see our extensometer specification sheets	
50 N (11.25 lbf)	01/2361	Application Software:	
250 N (56.25 lbf)	01/3048	NEXYGEN™ MT	40/0658
1000 N (225 lbf)	01/2419	NEXYGEN™ MT/Ondio software suite	40/0695
		Grips & Fixtures:	
		A wide range of grips and fixtures are available. For further information see our grip specification sheets.	
		Work Tables:	
		Expanded Work Table, Metric (350 mm x 400 mm) with M6 tapped holes for custom fixings:	SPK/LFM/0007
		Expanded Work Table, Imperial (350 mm x 400 mm) with 10 - 32 tapped holes for custom fixings:	SPK/LFM/0008
		Aluminium T-Slot Table (180 mm x 340 mm) for adjustable fixings:	SPK/LFM/0009
		DripTray for food and other testing:	SPK/LFM/0010

Expanded Work Table



T-Slot Table



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CERTIFICATE No 0308/1177

www.ametek.com

UK
Lloyd Instruments Ltd
12 Barnes Wallis Road
Segensworth East, Fareham
Hants, PO15 5TT

USA
AMETEK TCI Division
8600 Somerset Drive
Largo
Florida 33773

Far East
AMETEK Singapore Pte Ltd
10 Ang Mo Kio Street 65
#05-12 Techpoint
SINGAPORE 569059

France
Lloyd Instruments SAS
3, Avenue des Coudriers
Zone d'activité de l'observatoire
78180 Montigny Le Bretonneux

Germany
AMETEK GmbH
Rudolf-Diesel-Straße 16
D-40670 Meerbusch

Tel +44 (0)1489 486 399
Fax +44 (0)1489 885 118
E-mail uk-far.general@ametek.co.uk
Web www.lloyd-instruments.co.uk

Tel +1 (727) 536 7831
Fax +1 (727) 539 6882
E-mail chatillon.fl-lar@ametek.com
Web www.lloyd-instruments.co.uk

Tel +65 6484 2388
Fax +65 6481 6588
E-mail aspl@ametek.com.sg
Web www.lloyd-instruments.co.uk

Tel +33 (0)1 30 57 47 74
Fax +33 (0)1 30 57 50 33
E-mail general@lloyd-instruments.com
Web www.lloyd-instruments.fr

Tel +49 (0)2159 9136-70
Fax +49 (0)2159 9136-80
E-mail info@ametek.de
Web www.ametek.de

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