

LLOYD INSTRUMENTS™

LR5K Plus Series

Materials Testing Machine

The LR5K Plus series advanced, twin column, materials testing machine incorporates an extensive range of features making it ideal for performing complex testing applications up to 5 kN (1100 lbf), at a highly economic price.

The machine is microprocessor controlled and incorporates world proven 32 bit technology for highly accurate load measurement and rapid data acquisition. The integral user interface consists of a side mounted control console with large, positive action membrane switches, allowing complex tests to be performed at the touch of a button. A large Liquid Crystal Display shows the test and set-up information in an extensive choice of user selectable languages and units. The stand alone system is capable of storing up to 600 test results from a choice of 10 programmable test set-ups, or may be connected via its RS232 output to a personal computer running NEXYGEN™ software, providing almost unlimited testing capability, and results processing features

The high stiffness frame incorporates a crosshead guidance system to prevent side loading of the sample under test. The crosshead is driven by twin lead screws and a high precision servo motor and DC servo system to achieve a wide range of speeds throughout the full load range. A range of highly accurate, interchangeable loadcells are available for tension, compression and cycling through zero force measurements. An extensive range of grips and fixtures are also available to support virtually any type of test.

Features

- Simple to set up, operate and maintain
- 2 key press operation
- High accuracy load measurement
- Data sampling rate 1000 Hz
- 32 bit micro controller
- Saves 600 test results
- 10 programmable test set-ups
- Exceeds national and international standards
- Large crosshead travel (1000 mm/40 in) for ductile samples
- Multi-lingual, Multi-unit, 4 line, back-lit display
- Full PC integration with NEXYGEN™ software
- Wide selection of load cells, grips, jigs and accessories

Specifications

Force Range:	5 kN (1100 lbf)
Crosshead Speed:	0.01 to 1020 mm/min 0.0005 to 40 inches/min
Speed Accuracy:	Better than 0.2% at steady state
Crosshead Travel:	1000 mm, 40 in
(Extended Frame):	1500 mm, 60 in
Load Resolution:	< 0.005% of load cell used (max)
Extension Resolution:	Better than 0.001 mm 0.04 thou
Data Sampling Rate:	1000 Hz
Extensometer Inputs:	+10V dc analogue input Strain gauge input optional
Data Outputs:	Digital - RS232 Analogue - 10Vdc max
Measuring System:	Exceeds the requirements of BS EN ISO 7500-1, ASTM E4, DIN 51221.
Analysis Software:	NEXYGEN™ Data Analysis Software (optional)
Supply Voltage:	115/230V ac ± 10% 50 - 60 Hz
Weight:	105 Kg (231 lb)
Operating Temp:	5°C to 35°C (40°F to 95°F)
Warranty:	1 year



SPECIFICATION
SS-MT-6251-0401
April 2001

www.ametek.com
www.chatillon.com
www.lloyd-instruments.co.uk

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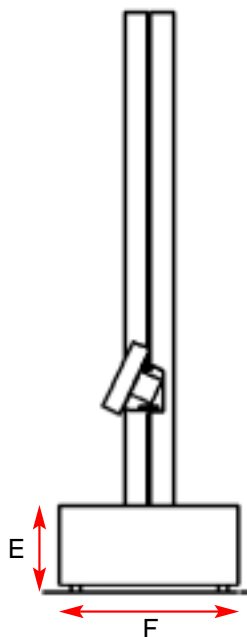
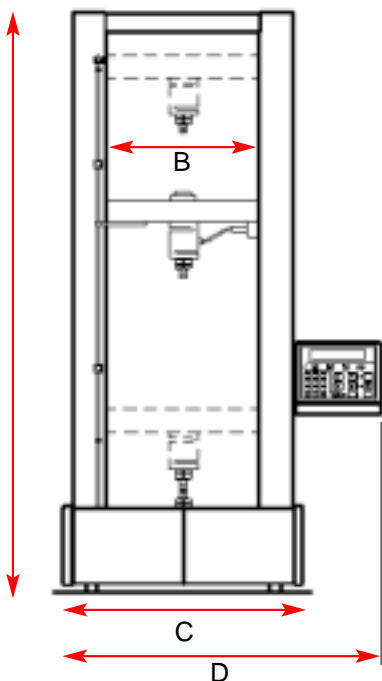
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Ordering Information

Model	Part No.	Description
LR5K Plus	01/3071	LR5K Plus without console
LR5K Plus	01/3051	LR5K Plus with console
LR5K Plus	01/3072	LR5K Plus Extended column without console
LR5K Plus	01/3073	LR5K Plus Extended column with console
LR5K Plus	01/3074	LR5K Plus Pogo design without console
LR5K Plus	01/3075	LR5K Plus Pogo design with console

Product Dimensions

	mm	in
A	1555	61
B	404	16
C	638	25
D	845	33
E	230	9.0
F	480	19



Standard Accessories

LOADCELLS:

5 N (1 lbf)
 10 N (2 lbf)
 20 N (4 lbf)
 50 N (11 lbf)
 100 N (22 lbf)
 250 N (55 lbf)
 500 N (110 lbf)
 1000 N (220 lbf)
 2500 N (550 lbf)
 5000 N (1100 lbf)

ITEM

XLC-0005-A1 01/2946
 XLC-0010-A1 01/2360
 XLC-0020-A1 01/2950
 XLC-0050-A1 01/2361
 XLC-0100-A1 01/2480
 XLC-0250-A1 01/2992
 XLC-0500-A1 01/2362
 XLC-1000-A1 01/2419
 XLC-2500-A1 01/2363
 XLC-5000-A1 01/2364

MODEL

EXTENSOMETERS:

Non Contacting Extensometer (115V) with stand
 Non Contacting Extensometer (230V) with stand
 Extensometer Punch (applies 2 mm, 0.08 in) targets
 Extensometer Punch (applies 4 mm, 0.16 in) targets
 Longtravel Extensometer without stand
 Extensometer Stand for EXL750
 High Res' Longtravel Extensometer with stand

LASERSCAN E1 01/2939
 LASERSCAN EZ 01/2913
 TTOXP/2 01/1159
 TTOXP/4 01/1156
 EXL750 EZ 01/2914
 EXT STAND B 01/2313
 EXH750/EZ 01/2915

High Res' Strain Gauge Extensometers:

Gauge Length 10mm (0.40 in) max elongation 10%
 Gauge Length 10mm (0.40 in) max elongation 50%
 Gauge Length 20mm (0.80 in) max elongation 100%
 Gauge Length 25mm (0.98 in) max elongation 5%
 Gauge Length 25mm (0.98 in) max elongation 10%
 Gauge Length 25mm (0.98 in) max elongation 25%
 Gauge Length 25mm (0.98 in) max elongation 50%
 Gauge Length 25mm (0.98 in) max elongation 100%
 Gauge Length 50mm (1.97 in) max elongation 5%
 Gauge Length 50mm (1.97 in) max elongation 25%
 Gauge Length 50mm (1.97 in) max elongation 50%
 Gauge Length 50mm (1.97 in) max elongation 100%
 Gauge Length 80mm (3.15 in) max elongation 10%
 Gauge Length 80mm (3.15 in) max elongation 25%

STGA/10/10E 01/2917
 STGA/10/50E 01/2959
 STGA/20/100E 01/2976
 STGA/25/5E 01/2955
 STGA/25/10E 01/2918
 STGA/25/25E 01/2919
 STGA/25/50E 01/2920
 STGA/25/100E 01/2921
 STGA/50/5E 01/2957
 STGA/50/25E 01/2922
 STGA/50/50E 01/2923
 STGA/50/100E 01/2924
 STGA/80/10E 01/2925
 STGA/80/25E 01/2926

SOFTWARE:

NEXYGEN™ 4.0 Software Package
 NEXYGEN™ Upgrade to Version 4.0
 Ondio™ Application Builder (Use With NEXYGEN™)
 NEXYGEN™/Ondio™ Software Suite
 NEXYGEN™/Ondio™ Upgrade

40/0658
 40/0658/NR
 40/0683
 40/0695
 40/0695/U

GRIPS & FIXTURES:

All grips up to a capacity of 10 kN (2200 lbf) can be fitted.



TEST AND CALIBRATION INSTRUMENTS

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ISO 9001
 Manufacturer