

LLOYD INSTRUMENTS™

LR10K *Plus* Series

10 kN Materials Testing Machine

The LR10K *Plus* series advanced, twin column, materials testing machine incorporates an extensive range of features making it ideal for performing complex testing applications up to 10 kN (2200 lbf) at a highly affordable 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, back lit 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 ten programmable test setups, or may be connected via its RS232 output to a personal computer running NEXYGEN™ software, providing almost unlimited testing and results processing capability.

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.

The LR10K can be further complemented with Lloyd Instruments state of the art materials test and data analysis software NEXYGEN™ thanks to a built in RS232 interface, allowing full PC integration. The system is ideal for use in production, quality control, educational and research environments.

Features

- Simple to set up, operate and maintain
- 2 key press operation
- High accuracy load measurement
- Data sampling rate 1000Hz
- 32 bit micro controller
- Saves 600 test results
- 10 programmable test set-ups
- Exceeds national and international standards
- Large crosshead travel (975 mm/38 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
- Flash up gradeable

Specifications

Force Range:	10 kN (2200 lbf)
Crosshead Speed:	0.01 to 510 mm/min 0.0005 to 20 in/min
Speed Accuracy:	Better than 0.2% at steady state
Crosshead Travel:	975mm, 38 in
Travel (Extended Frame):	1475 mm, 58 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
Analysis Software:	7500-1, ASTM E4, DIN 51221. NEXYGEN™ Data Analysis Software (optional)
Supply Voltage:	115/230Vac ± 10% 50 - 60Hz
Weight:	105Kg (231lb)
Operating Temp:	5°C to 35°C (40°F to 95°F)
Warranty:	1 year



SPECIFICATION
SS-MT-6211-0401
April 2001

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

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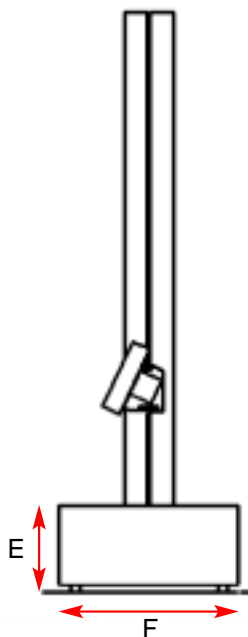
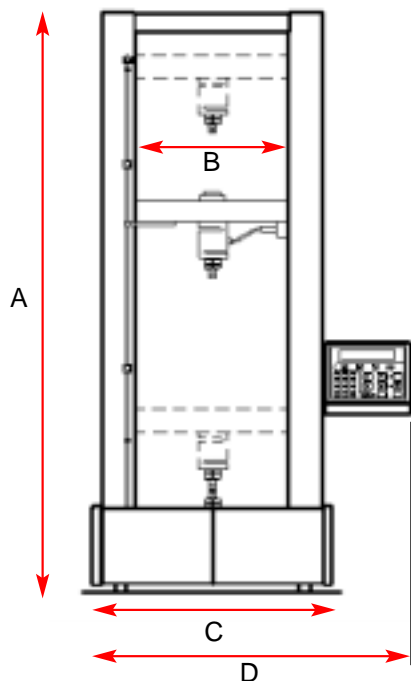
LLOYD **K**
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Ordering Information

Model	Part No.	Description
LR10K <i>Plus</i>	01/3076	LR10K <i>Plus</i> without console
LR10K <i>Plus</i>	01/3052	LR10K <i>Plus</i> with console
LR10K <i>Plus</i>	01/3077	LR10K <i>Plus</i> Extended column without console
LR10K <i>Plus</i>	01/3078	LR10K <i>Plus</i> Extended column with console
LR10K <i>Plus</i>	01/3079	LR10K <i>Plus</i> Pogo design without console
LR10K <i>Plus</i>	01/3080	LR10K <i>Plus</i> 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)
 10 kN (2200lbf)

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 01/3048
 XLC-0500-A1 01/2362
 XLC-1000-A1 01/2419
 XLC-2500-A1 01/2363
 XLC-5000-A1 01/2364
 XLC-10K-A1 01/2365

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% STGA/10/10E 01/2917
 Gauge Length 10mm (0.40 in) max elongation 50% STGA/10/50E 01/2959
 Gauge Length 20mm (0.80 in) max elongation 100% STGA/20/100E 01/2976
 Gauge Length 25mm (0.98 in) max elongation 5% STGA/25/5E 01/2955
 Gauge Length 25mm (0.98 in) max elongation 10% STGA/25/10E 01/2918
 Gauge Length 25mm (0.98 in) max elongation 25% STGA/25/25E 01/2919
 Gauge Length 25mm (0.98 in) max elongation 50% STGA/25/50E 01/2920
 Gauge Length 25mm (0.98 in) max elongation 100% STGA/25/100E 01/2921
 Gauge Length 50mm (1.97 in) max elongation 5% STGA/50/5E 01/2957
 Gauge Length 50mm (1.97 in) max elongation 25% STGA/50/25E 01/2922
 Gauge Length 50mm (1.97 in) max elongation 50% STGA/50/50E 01/2923
 Gauge Length 50mm (1.97 in) max elongation 100% STGA/50/100E 01/2924
 Gauge Length 80mm (3.15 in) max elongation 10% STGA/80/10E 01/2925
 Gauge Length 80mm (3.15 in) max elongation 25% STGA/80/25E 01/2926

SOFTWARE:

NEXYGEN™ 4.0 Software Package 40/0658
 NEXYGEN™ Upgrade to Version 4.0 40/0658/NR
 ONDIO Application Builder (Use With NEXYGEN) 40/0683
 NEXYGEN/ONDIO Software Suite 40/0695
 NEXYGEN/ONDIO Upgrade 40/0695/U

GRIPS & FIXTURES:



TEST AND CALIBRATION INSTRUMENTS

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