

LLOYD INSTRUMENTS™

SH-B Series

Servo Hydraulic Dynamic Testing Machine

The SH-B series Servo Hydraulic Testing machine offers highly efficient, rapid and reliable testing. The system is capable of performing rigorous fatigue tests at up to 70 Hz at full load. The machine is bench mounted and consists of a sliding, fully adjustable crosshead which is clamped by pinch bolts to twin chromed solid steel columns. The crosshead is set prior to testing and can accommodate samples of varying dimensions. A dynamically rated actuator is mounted to the cross head, available in various force capacities and stroke for optimum dynamic response. A specially designed loadcell is fixed to either the base or the crosshead for added testing versatility. The sample is secured between the solid base and actuator rod by a comprehensive range of grips, jigs and fixtures. The system is controlled by a personal computer (not included), using specialist MICROSOFT WINDOWS® compatible testing software, and also contains its own embedded RISC processor and digital controller ensuring tests run smoothly even in the event of computer failure or disconnection. Integral safety features include an adjustable safety collar to prevent the crosshead from slipping when adjusted, large base mounted emergency cut-off switch and an optional splinter shield is available.

Features

- Efficient, responsive servo grade hydraulic actuator, specified for optimum dynamic response
- 100kN Frame with twin solid steel, chromed columns designed for tension, compression and flexure tests
- High speed testing, up to 70 Hz as standard
- Fatigue rated loadcell with sideload and torque resistance
- Integral loadcell amplifier with high signal to noise ratio
- Integral displacement transducer working directly on rear end of actuator rod
- Digital controller with an embedded RISC processor providing operational stability
- Safety features including crosshead stopping collar, optional splinter shield and emergency isolator switch
- Extensive range of grips and fixtures
- Full Computer integration with WINDOWS® compatible control and data acquisition software

Specifications

Standard Force Range	SH-B 5 - 5 kN (1100 lbf) SH-B 10 - 10 kN (2248 lbf) SH-B 25 - 25 kN (5620 lbf)
Stroke	25 mm (1.0 in) 50 mm (2.0 in) 100 mm (4.0 in)
Hydraulic Supply	210 bar
Standard Column Length	1200 mm (47 in)
Maximum Working Width	412 mm (16 in)
Maximum Working Length	650 mm (26 in)
Dynamic Frequency	From static up to 70 Hz (standard)
Data Outputs	Digital - RS232
Standards	Meets all common fatigue testing standards within constraints of machine capacity
Software	NEXYGEN™ Data Analysis Software Dynamic Testing Software
Supply Voltage	115/230 V ac ± 10% 50 - 60 Hz
Weight:	235 Kg (518 lbs)
Operating Temp	5° to 35°C (40°F to 95°F)
Warranty:	1 Year



SPECIFICATION
SS-MT-6263-0301
March 2001

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

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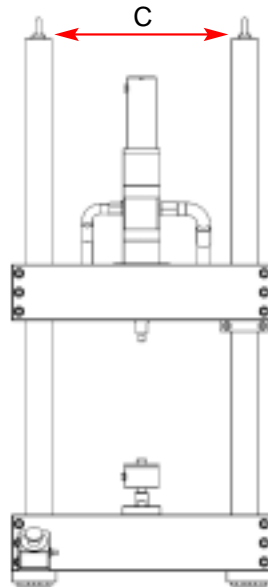
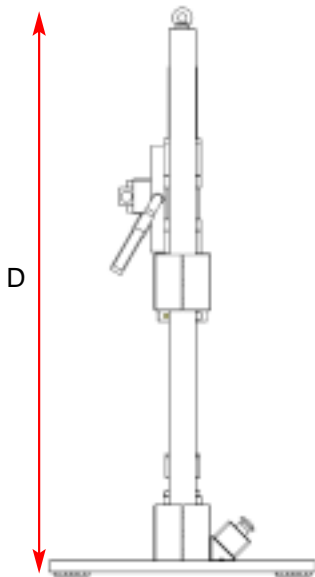
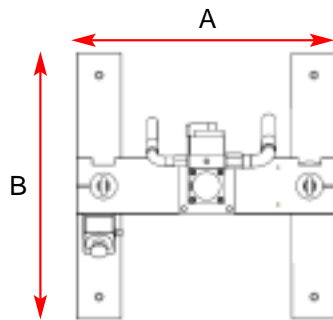
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INSTRUMENTS™
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Ordering Information

Model	Part No.	Description
SH-B 5	01/3013	5 kN (1124 lbf) 25mm (1.0 in) stroke Servo Pneumatic Bench Top System
SH-B 5	01/3014	5 kN (1124 lbf) 50mm (2.0 in) stroke Servo Pneumatic Bench Top System
SH-B 5	01/3015	5 kN (1124 lbf) 100mm (4.0 in) stroke Servo Pneumatic Bench Top System
SH-B 10	01/3016	10 kN (2248 lbf) 25mm (1.0 in)stroke Servo Pneumatic Bench Top System
SH-B 10	01/3017	10 kN (2248 lbf) 50mm (2.0 in)stroke Servo Pneumatic Bench Top System
SH-B 10	01/3018	10 kN (2248 lbf) 100mm (4.0 in)stroke Servo Pneumatic Bench Top System
SH-B 25	01/3019	25 kN (5620 lbf) 25mm (1.0 in) stroke Servo Pneumatic Bench Top System
SH-B 25	01/3020	25 kN (5620 lbf) 50mm (2.0 in) stroke Servo Pneumatic Bench Top System
SH-B 25	01/3021	25 kN (5620 lbf) 100mm (4.0 in) stroke Servo Pneumatic Bench Top System

Product Dimensions

	mm	in
A	585	23
B	600	24
C	405	16
D	1272	50



Standard Accessories

Item	Part No.
SOFTWARE:	
WINDOWS® Compatible Dynamic test software (supplied)	
NEXYGEN™ Software Package	40/0658
ONDIO Application Builder (Use With NEXYGEN)	40/0683
NEXYGEN/ONDIO Software Suite	40/0695
GRIPS & FIXTURES:	
All grips up to a capacity of 100 kN (22480 lbf) can be fitted.	
5/8 in adaptor (supplied)	
1 1/4 in adaptor (supplied)	
Safety Shield	01/3013
Woods Melt Pot	01/3070

AMETEK
TEST AND CALIBRATION INSTRUMENTS

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ISO 9001
Manufacturer