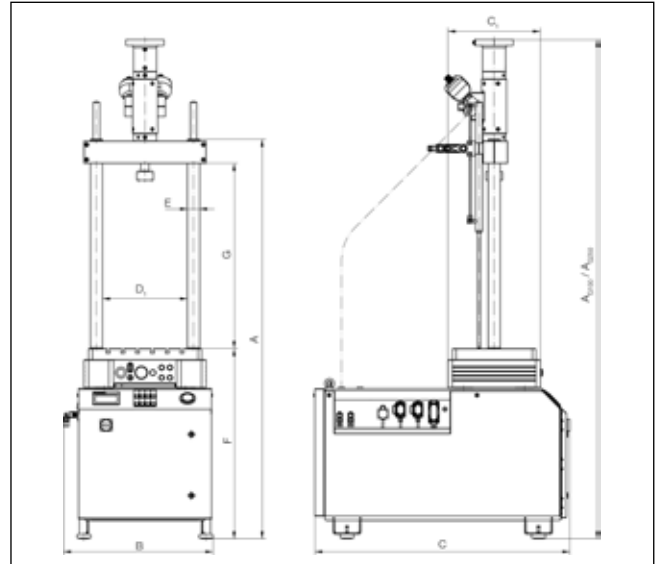


Product Information

Amsler HC Compact servo-hydraulic testing machine



HC Compact



Drawing HC compact

Application

The HC Compact is a complete and extremely space-saving testing system, as the low-noise power pack forms the base support for the test frame. With the testing actuator mounted in the upper crosshead and a hard-chromed T-slotted platform, this testing machine is suitable for all types of static and dynamic tests up to 25 kN, including flexure and component tests and biomedical tests.

Description of operation

The 2-column load frame is bolted directly to the hydraulic power-pack and is so designed that no additional sound insulation measures of any sort are required, making the HC Compact suitable for installation in almost any laboratory.

As the electricity and water connections are located at the side and the power pack controls at the front, the rear of the testing system can be positioned directly against the wall, saving a great deal of valuable space. For maintenance operations the hydraulic power-pack can simply be moved out sideways on guide rails.

The entire testing system, including the hydraulic power-pack, is carried on anti-vibration leveling units. With a total weight of approximately 1,200 kg, it can be erected on almost any industrial floor.

The load cell can be attached to the table top or the piston rod, depending on the type of test. If standard

specimen grips are used, it is advisable to mount the load cell on the fixed lower crosshead. The frame features high-precision alignment. Following installation of the testing actuator and load cell the alignment accuracy is $+0.1$ mm per meter separation; at a separation below 350 mm the offset is a constant 0.05 mm. Plane parallelism is equal to or better than 0.03 mm per 100 mm, while all test fixtures are mounted via flanges with centering spigot.

Features

- space-saving testing system with integrated hydraulic power-pack
- especially quiet low-noise power pack
- all controls located in a user-friendly position at the front
- 2-column frame for dynamic tests up to 25 kN with testing actuator installed in upper crosshead
- suitable for 10 kN and 25 kN actuators
- gasketless actuator with hydrostatic bearings for virtually frictionless, maintenance-free operation
- hard-chromed T-slotted platform and columns for tests in corrosive media
- wide range of accessories: temperature chamber, compression platens, flexure test kit etc.
- option: hydraulic adjustment for easy positioning of upper crosshead
- safety housing as required by EC Machinery Directive, regardless of application.

Product Information

Amsler HC Compact servo-hydraulic testing machine

Test area height		Standard	Extended by 250 mm ¹
A – Max. height to end of column	[mm]	2160	2410
A _{G100} – Max. height with 100 mm testing actuator	[mm]	2700	2950
A _{G250} – Max. height with 250 mm testing actuator	[mm]	3000	3250
B – Max. width	[mm]	805	805
C – Max. depth	[mm]	1380	1380
F – Height of top edge of lower crosshead	[mm]	1030	1030
K – Total weight ²	[kg]	1085	1100
Dynamic nominal force	[kN]	25	25
C1 – Max. depth of test frame	[mm]	500	500
D1 – Column spacing	[mm]	460	460
E – Column diameter	[mm]	65	65
G – Max. test area height ³	[mm]	1000	1250
Frame stiffness at 1000 mm crosshead separation	[kN/mm]	300	300
T-slots		as per DIN 650 12H12, spacing 80 mm	
Connection size		Ø 70 mm, 6 x M8 and Ø 115 mm, 4 x M8	
Clamping/adjustment: manual/manual		• 935276	• 935450
Clamping/adjustment: manual/hydraulic		• 935275	• 936110

¹ Required for use with temperature chamber

² With oil and 100mm testing actuator, no grips

³ Distance between upper and lower crossheads

Testing actuator

Double-rod cylinder with hydrostatic bearings, gasketless, system pressure 210 bar, integrated piston transducer

Nominal force [kN]	Piston stroke [mm]	Connection size	Item No.
10	100	Ø 70 mm, 6 x M8	• 000152
10	250	Ø 70 mm, 6 x M8	• 935415
25	100	Ø 70 mm, 6 x M8	• 924829
25	250	Ø 70 mm, 6 x M8	• 935414

Description	Item No.
Piston rod extension for LH 10/25 kN actuator	• 003953
Piston rod anti-rotation lock	• 644085

Hydraulic power-pack – low-noise

Description		
Noise level	[db(A)]	<58
System pressure	[bar]	210
Nominal output	[l/min]	12
Volume, oil reservoir	[l]	160
Coolant supply flow rate at 32 °C	[l/min]	5
Electrical supply	[V]	400, 3 PH/N/PE, 50 Hz
Motor nominal rating	[kW]	5
Weight plus oil	[kg]	670
Item No.		• 069151

Load cell

Nominal force [kN]	Accuracy Class 0.5 ⁴ [N]	Item No.
10	≥ 200	• 924870
25	≥ 400	• 924792

⁴to ISO 75001

Safety device

Aluminium profile construction with Makrolon panels, front safety door with electrical monitoring and interlocking.

Frame height	Standard	Extended by 250 mm
Safety device, 4-sided	• 936251	• 048741
Safety device, 3-sided, in conjunction with a temperature chamber		• 016514