

Standalone pressure volume controller, Hydromatic

MAIN FEATURES

- Multi-positioning, ergonomic and removable 6" colour Touch screen controller
- Powers up to two hydraulic pressure lines and measures the associated volume changes
- Generates water pressure regulated under closed-loop control up to 3500 kPa or 1700 kPa
- USB pen drive for local data storage
- Connectable to the GEODATALOG 8 via LAN port allowing data transmission to PC by the DATACOMM 2 software
- High resolution measurement of pressure (0.1 kPa) and volume change (0.001 cc)
- High volume capacity, 250 cc
- Lightweight with a small footprint
- No air compressor required

GENERAL DESCRIPTION

Hydromatic standalone is a general-purpose water pressure source and volume change controller. It is driven by a stepper motor, which enables the unit to measure the volume change. The unit consists of a hydraulic piston, driven by a low friction screw and gearbox, mounted on a ball-slide, and is managed under closed-loop control by the built in data acquisition and 6" touch-screen colour control panel.

The user-friendly touch screen colour panel allows the local control of pressure showing in real time the pressures readings and the volume changes.

The control panel is mounted on an ergonomic and versatile support adjustable according the user's preferences:

- fixed on the Hydromatic's body
- positioned on the triaxial bench close to the testing frame
- ergonomically mounted on the loading frame column by the dedicated support (to be ordered separately).

Volume and pressure data for each line can be saved on the USB pen drive or, as alternative, the Hydromatic can be connected to a GEODATALOG 8 via LAN port and readings will be transmitted to PC with DATACOMM 2 software thus all readings will be synchronized: load cell, displacement and pore pressure transducers, volume change, etc...

Four models are available depending on:

- Maximum pressure capacity: 3500 kPa or 1700 kPa
- Number of pressure lines: one or two.

For a standard effective stress system, a double line *Hydromatic* is required - one for cell pressure and one for back pressure.

A typical use for a single line Hydromatic is as additional line for permeability test in soil and rock triaxial cells. Pressure transducer(s) and de airing block(s) are included. Over-travel is prevented by built-in micro-switches.

TECHNICAL SPECIFICATIONS

Code	28-WF43SG	28-WF43DG	28-WF45SG	28-WF45DG
N of pressure line	One	Two	One	Two
Max pressure [kPa]	1700		3500	

DATA SHEET

Pressure res. [kPa]	0.1			
Volume capacity [cc]	250			
Volume res. [cc]	0.001			
Dimension (l x h x w) [mm]	860x300x250	860x300x300	860x300x250	860x300x300
Weight [kg]	12	20	12	20

ORDERING INFO

28-WF45SG

HYDROMATIC standalone closed loop pressure/volume controller.

Powers one hydraulic pressure line and measures the associated volume change.

- removable 6" touch-screen colour display
- max pressure: 3500 kPa
- pressure resolution: 0.1 kPa
- volume capacity: 250cc
- volume resolution: 0.001cc
- LAN connection

Supplied with pressure transducer and de-airing block.

110-240V, 50-60Hz, 1 ph

28-WF45DG

HYDROMATIC standalone closed loop pressure/volume controller.

Powers two hydraulic pressure line and measures the associated volume change.

- removable 6" touch-screen colour display
- max pressure: 3500 kPa
- pressure resolution: 0.1 kPa
- volume capacity: 250cc each
- volume resolution: 0.001cc
- LAN connection

Supplied with pressure transducer and de-airing block.

110-240V, 50-60Hz, 1 ph

28-WF43SG

HYDROMATIC standalone closed loop pressure/volume controller.

Powers one hydraulic pressure line and measures the associated volume change.

- removable 6" touch-screen colour display
- max pressure: 1700 kPa
- pressure resolution: 0.1 kPa
- volume capacity: 250cc
- volume resolution: 0.001cc
- LAN connection

Supplied with pressure transducer and de-airing block.

110-240V, 50-60Hz, 1 ph

28-WF43DG

HYDROMATIC standalone closed loop pressure/volume controller.

Powers two hydraulic pressure line and measures the associated volume change.

- removable 6" touch-screen colour display
- max pressure: 1700 kPa

DATA SHEET

- pressure resolution: 0.1 kPa
- volume capacity: 250cc each
- volume resolution: 0.001 cc
- LAN connection

Supplied with pressure transducer and de-airing block.
 110-240V, 50-60Hz, 1 ph

ACCESSORIES

28-WF4191

Nylon tubing 6 mm bore x 8 mm outside diameter, 10 m long.



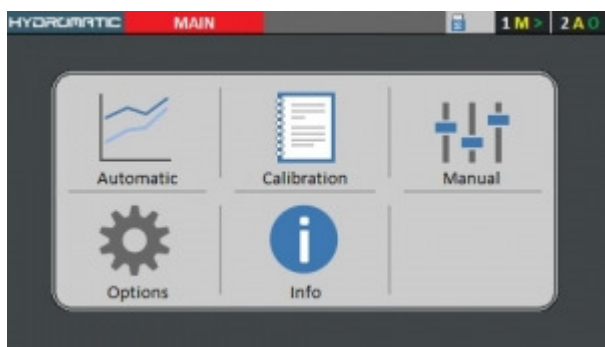
Pressure/volume controller HYDROMATIC standalone two Hydraulic pressure

lines



The control panel is removable and can be located according to the user's

preferences and needs



Main menu

DATA SHEET



Calibration (screenshot) , for display, editing and saving the calibration numbers



Auto Control (screenshot) Automatic execution of pre-programmed steps of pressure and/or volume change

DATA SHEET



Pressure transducer and de-airing block included



components

The Hydromatic body can be positioned vertically, for a compact arrangement of testing