



## Hydraulic Groups - HB-117

Fully brass hydraulic group with front pump connection, designed for combi type heatin devices.

By-pass function is carried out via external copper pipe.

Compatible with all circulation pump make and models, and suitable to be used with on off and stepper type 3WV actuators.

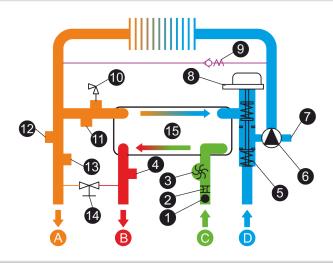
Standard content of delivery includes flow and return blocks with DHW filter, flow regulator as per customer request, radial type turbine flow meter with Hall effect senso manual filling tap, 3WV cartridge, brass or plastic 3 bar ½" pressure relief valve, ½" and ¾" brass connection nipples.

The hydraulic set could be customized and provided with a plate heat exchanger, 3WV motor, pressure switch or sensor and NTC sensor upon customer request.

Constructive Properties	
Flow Detection	· Turbine Type Flowmeter with Hall Effect Sensor
Pump Connection	· Front
By-Pass Type	· External – Through copper tube
Material	· CuZn40Pb2 (CW617N)
Flow Regulator	· 6 to 22 (lt/min)
Pressure Relief Valve	· 3 bar ½"



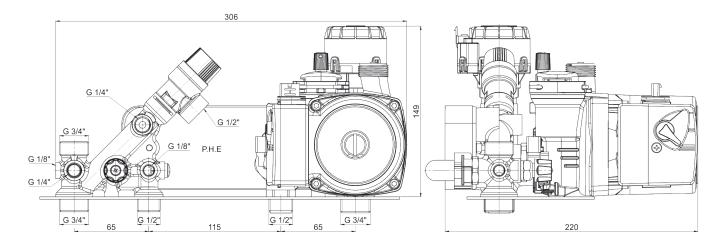
## **Technical Drawings - HB-117**



- 1 DHW Filter
- 2 Flow Regulator
- 3 Flow Sensor
- 4 NTC Sensor Connection
- 5 3 Way Valve
- 6 Circulation Pump
- Expansion Vessel Connection
- 8 3 Way Valve Motor
- A Heating Delivery CH
- **B** Sanitary Water Outlet DW

- 9 External Bypass
- 10 Safety Valve
- 11 Pressure Switch Sensor Connection
- 12 Heating Temp. Sensor Con.
- 13 Drain Valve
- 14 Filling Tap
- 15 Plate Heat Exchanger
- C Sanitary Water Inlet DW
- D Heating Return CH

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