

Hot Water “Midi-Break” Break Tank & Booster Set – Model BTMIDI-HS – Datasheet

Description

Wall mounted break tank and pump assembly delivers a constant supply of hot water with Fluid Category 5 backflow protection by virtue of the integral Type AB air gap. The set utilises the existing hot water supply, preventing the need for a secondary water heater.

Hot water has long since caused problems when it comes to Fluid Category 5 protection, due to the requirement of an air gap and thus a storage cistern. The hot water cannot be maintained in the cistern, as it would be at the optimum temperature for encouraging the growth of Legionella bacteria. The BTMIDI-HS unit overcomes this issue by purging the contents of the cistern via a bypass solenoid valve once the demand has been met, therefore no water is stored while the unit is not in use.

Eliminating the necessity for an additional water heater is advantageous as it results in lower power and space requirements. The set is housed in a compact stainless steel cabinet ready for wall mounting.

The unit automatically switches on when a pressure drop is detected and uses a PLC (Programmable Logic Controller) to manage the filling solenoid, pump and bypass solenoid. A BMS fault alarm is fitted as standard, which activates the fault lamp if the tank water level is too low. The pump has a “soft start” feature, which avoids water and electrical surges. The unit is quiet since the pump is mounted on anti vibration mounts with flexible stainless braided internal hoses.

An upstream thermostatic mixing valve is recommended to regulate the temperature – e.g. Arrow Valves model TMV5213.

For cold water Fluid Category 5 risks use “Midi-Break” model BTMIDI-1 / 2A / 3A.

Specification

Pressure Supply	10 bar max.
Pressure Supply	1.0 bar dynamic min.
Min. Flow rate	0.04 Lt/s continuous or 0.01 Lt/s for max 5 mins.
Pressure Outlet	See pressure / flow graph
Temperature	60° - 70° C max.

Materials

Cabinet / Cistern	Stainless steel 304
Pump (wetted parts)	Brass (regenerative)
Pipes / fittings	Copper / Brass / Stainless

Electrical Specification

Volts/Phase/Frequency	230/1/50
Motor type	Induction (brushless)
IP Rating EN60529	IP15 (cabinet) IP65 (controls)
Power Consumption	550 W
Full Load Current	2.3 A
Rating	Continuous

Applications

The following are Fluid Category 5 examples see *Water Regulations (Table 6.1e)* -

- Birthing pools
- Dog grooming showers
- Assisted baths
- High flow rate showers
- Butchery & meat equipment
- Applications deemed to be Category 5 by water company

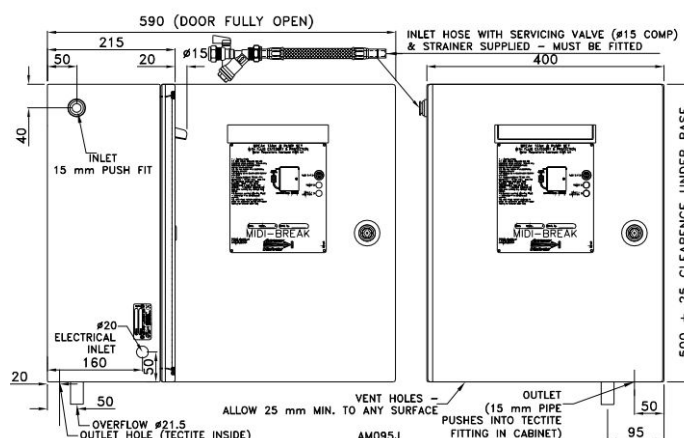


BTMIDI-HS
Stainless steel cabinet
provides neat &
tamperproof installation

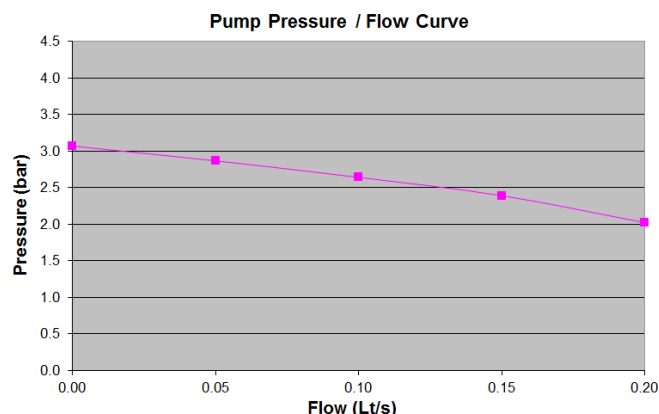
Water Regulations

The assembly complies with the requirements of the Water Regulations when installed and used correctly. A cistern with a Type AB air gap provides protection against Fluid Category 5 risks – these risks are the highest level.

Dimensions



Pump Performance



Codes and Descriptions

Code	Description
BTMIDI-HS	Hot Water Break Tank & Pump MIDI-HS 230 V
MIDIBRA	Wall Mounting Bracket for Midi range
BTBMS3	BTMD/BTHW Alarm BMS – Volt Free
BTFPS2	BTMIDI Frost Protection System
BTBAB4	Wall Cover for Midi-Break
BTDT3	Drip Tray for Midi range Stainless

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Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.
All unit-less dimensions in mm.
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