

## **DAB MAINS BOOSTER**

# INSTALLATION AND TECHNICAL GUIDE





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### Who is this manual for?

- The plumber/installation engineer
- The electrical engineer
- The home owner/end user

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## DAB MAINS BOOSTER PRINCIPLE AND ADVANTAGES



## Principle of the ACM Mains Booster Pump

The DAB ACM mains booster pump reacts when the water mains pressure is below the pump pre-set value. The result is higher pressure to the buildings water supply, up to **4.5bar**.

A full-bore bypass can be fitted to enable use during pump maintenance. Fitting the ACM pump will enhance the water performance to unvented hot water cylinders, combination boilers, electric showers, and mixer showers.

Water authorities restrict the amount of water permitted to be pumped from the water main to 12 litres/minute. The AC pump falls with these limits.

## Advantages of this system

- Improves flow rates to hot and cold water taps, showers, baths, and services, up to a maximum of 12 litres/minute
- Pressure and flow from small bore pipes can be increased
- Stable pressure due to the digital variable speed pump design
- Minimal drop flow when more than one tap is opened
- Silent operation

## FURTHER DETAILS ON THE ACCUMULATOR CHARGER PUMP



### Overview

The Digital Charger Pump can be used with any accumulator or pressure vessel, including GWS, Lowara, Grundfos, and Stuart Turner products. Using this charger pump, water pressure can be increased to a maximum of **4.5bar**, and is adjustable via the **LCD display**.

This pump has **wall or floor mounted** options, and can be mounted away from the accumulator itself. It works well in conjunction with any vertical or horizontal vessel, and allows for **direct mains water connection** too.

### **Details**

- Three year warranty
- · Silent running due to inverter control
- Water-cooled motor
- Variable speed design
- · Digital display with pressure adjustment
- Wifi enabled to allow for remote control from your phone
- Boosts mains water pressure by 4.5bar
- · Compatible with a variety of accumulators
- Wall and floor mounted options
- WRAS approved

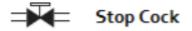








## Plumbing Symbols



Y Strainer

Double Check Valve

= Level Ball Valve

⇒ Single Check Valve

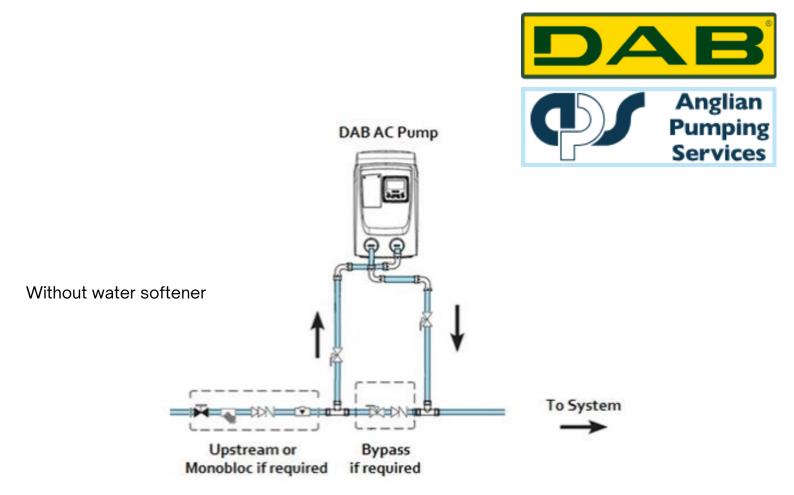
## TYPICAL SYSTEM - Do's and Don'ts

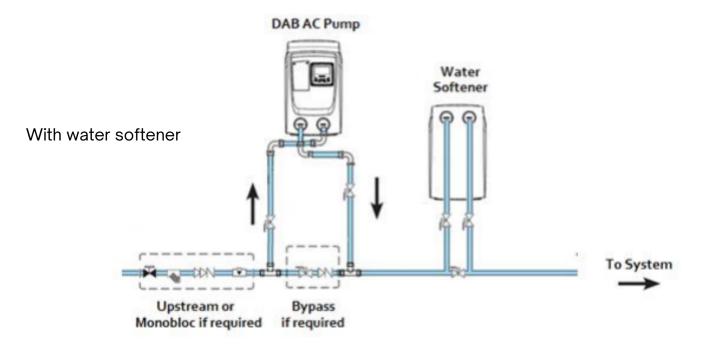
#### Do's:

- Install the ACM directly on the mains supply
- Fit flexible hoses on the inlet and outlet
- Note that only 1 ACM can be fitted per mains supply
- Ensure the installation complies with IET wiring regulations
- Ensure the pump is protected from frost
- Remember that it is considered good practice to install full bore isolating valves on the inlet and outlet pipe work

#### Don'ts:

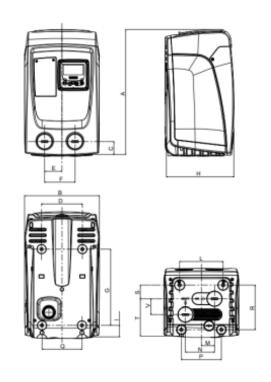
- Never fit the pump to communal risers
- Never fit the pump after a water softener
- Never fit to hot water piping
- Never fit in a damp environment







## **Dimensions**



A		D		D	E	F	G	Н	1	L	М	N	P	Q	R	S	T	V	DNA	DNM	PACK DIMENSIONS			GROSS
	М		0																		L/A	L/B	Н	Kg
	439	263	46	143	60,7	106,7	279,5	236	40,5	152	46	101,7	140	140	155,5	47,8	133	54,5	1"	1*	300	500	320	14,6

## **Incoming Mains**

The incoming mains should be fitted with an upstream kit, Monobloc upstream kit, or a double check valve.



## Regulations

Remember to always give consideration to any current regulation and guidance covering the installation of pressurised water systems in domestic and commercial applications.

#### Include:

- WRAS (water regulations advisory scheme)
- BS6700
- BS EN806
- HSE
- Building Regulations
- IEE wiring regulations

## Scale

When the water supply is hard, suitable scale protection should be installed. Water softeners and water conditions can both be used to control scale. When planning the installation of a water softener, the following considerations will need to be remembered:

- The softener should be connected after the pump
- Pipe work in and out should be full bore
- The drinking water supply should be taken off prior to the softener
- Remember the installation of a softener bypass kit must be considered

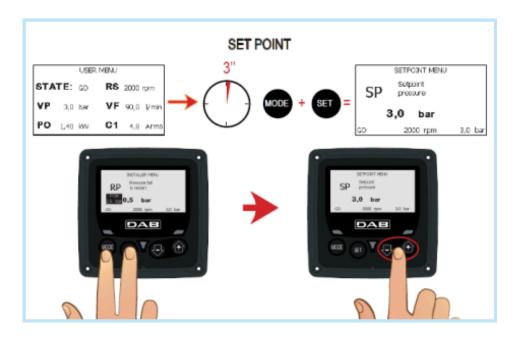


## Location

The DAB ACM pump works on a sealed pressurised system connected directly to the mains water supply. The pump is normally located early in the building's plumbing, before any connections or points of use. When deciding on the location of this pump, consider the following points:

- The floor must be able to withstand the weight of the pump
- The isolation valve has to be installed to enable supply to and from the pump to be shut off

## **ACM Pump Pressure Setting**





## Any questions?

Here at Anglian Pumping Services, we are always happy to help. If you need more guidance on your DAB Booster, don't hesitate to get in touch with us!

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