



Installation & Technical Guide

Domestic & Commercial

www.anglianpumping.com

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Section 1

1A – This Manual

This manual has been supplied to cover the installation of the DAB ACF1 and ACW1 accumulator booster pumps.

Manual is intended for –

- The plumber/installation engineer
- The electrical engineer
- The home owner/end user
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1B – Principle of the ACF1 and ACW1 systems

The ACF1 and ACW1 accumulator 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 AC range 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 range falls with these limits.

1C - Advantages of the system

Flow rates to hot and cold water taps, showers, baths and services are increase.

Stable pressure due to the digital variable speed pump design with minimal drop in flow when more than one tap is opened.

System is sealed meaning low risk of bacteria contamination compared to storage tanks.

Silent operation

Pressure and flow from small bore pipes is increased.



1D – Retrofit applications







The DAB AC range can be retro fitted to any brand of accumulator.

1E – Copyright

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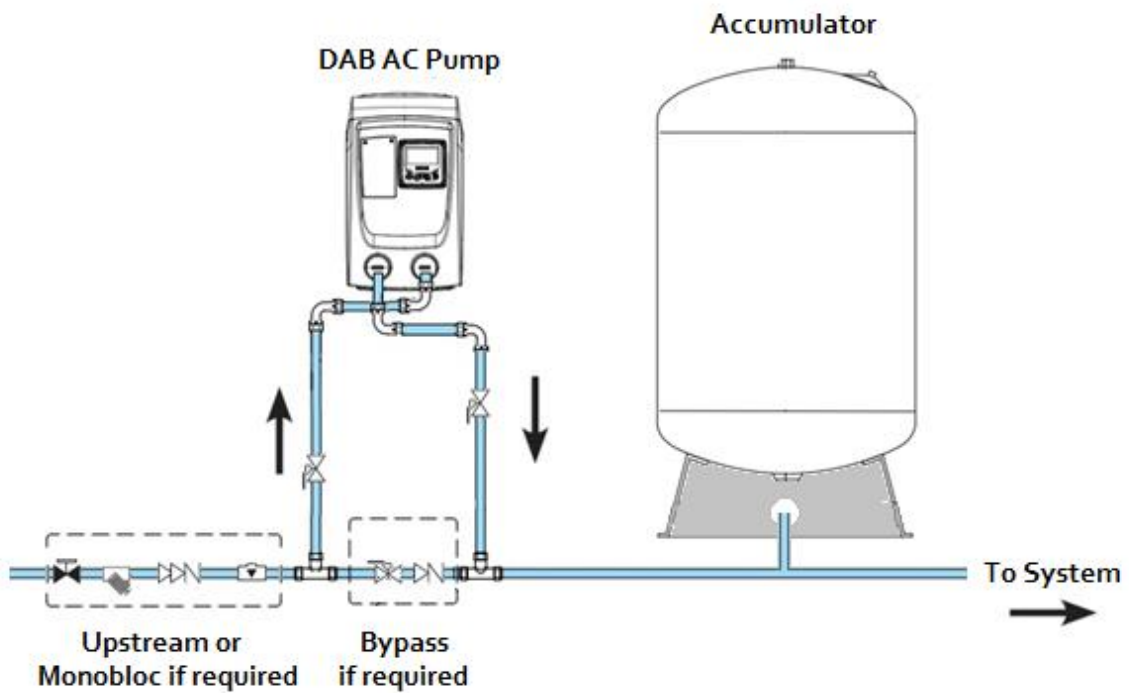
Section 2

2A - Plumbing Symbols

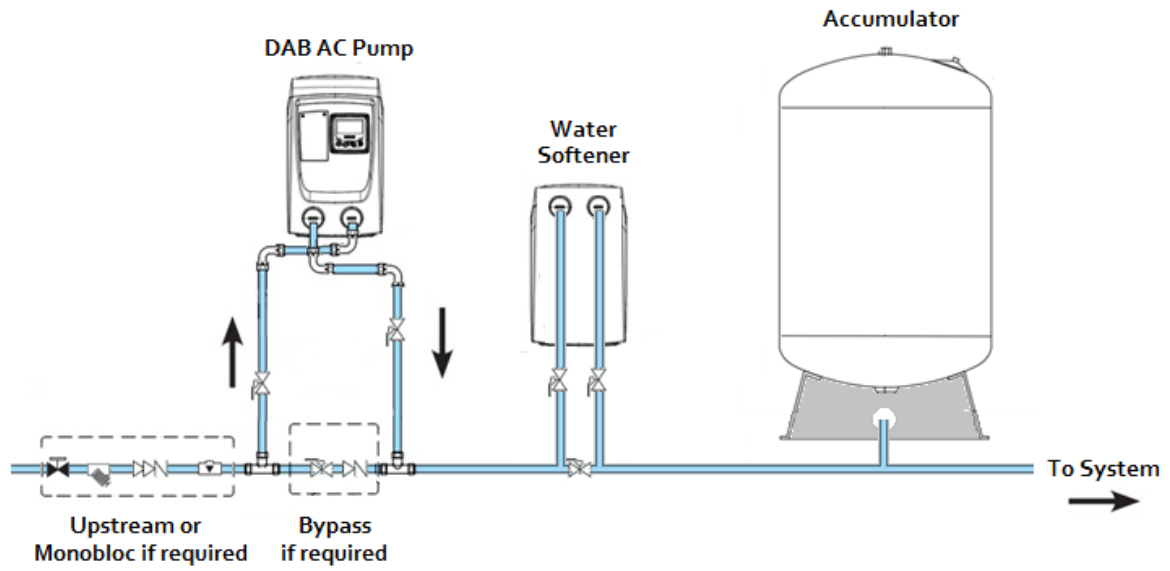
-  Stop Cock
-  Y Strainer
-  Double Check Valve
-  Level Ball Valve
-  Pressure Reducing Valve
-  Single Check Valve

2B - Typical System

Without water softener



With water softener



Section 3

The ACF and ACW Digital charger pump can be used with any accumulator or pressure vessel inc GWS, Lowara, Grundfos and Stuart Turner.

The charger pump increases water pressure to a maximum of 4.5bar, **adjustable via the LCD display**.

The pump is wall or floor mounted and can be mounted away from the accumulator.

Used in conjunction with any vertical or horizontal vessel.

The unit is WRAS approved and silent running due to inverter control.

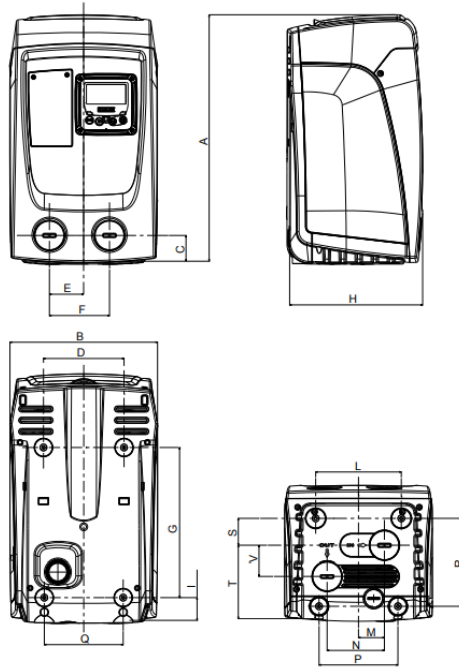
Direct mains water connection is allowed with this unit.



Details –

- 3 Year warranty
 - Digital Display with pressure adjustment
 - Boost mains water pressure by 4.5bar
 - Compatible with all makes of accumulator
 - Wall or floor mounted
 - Quiet water-cooled motor
 - Variable speed design
-

Dimensions –



A	B	C	D	E	F	G	H	I	L	M	N	P	Q	R	S	T	V	DNA	DNM	PACK DIMENSIONS			GROSS Kg
																				L/A	L/B	H	
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

Section 4

4A - Regulations

Always give consideration to any current regulation and guidance covering the installation of pressurised water system in domestic and commercial applications.

To include –

WRAS (water regulations advisory scheme)

BS6700

BS EN806

HSE

Building Regulations

IEE wiring regulations

4B - Scale

When the water supply is hard, suitable scale protection should be installed.

Water softeners or Water conditioners can be used to control scale. When planning the installation of a water softener to following should be considered –

The softener should be connected before the accumulator

Pipe work in out and should be full bore

Installation of a softener bypass kit

Drinking water supply should be taken off prior to the softener

4C - Location of Accumulators

The DAB AC range works on a sealed pressurised system connected direct to the mains water supply.

The pump is normally located early in the buildings plumbing, before any connections or points of use.

The Accumulator can be located anywhere in the building including basements, lofts, garage etc.

When deciding on the location consider the following points –

The floor must be able to withstand the weight of the accumulator

Clearance of at least 100mm above the accumulator

Isolation valve to be installed to enable supply to and from accumulator to be shut off

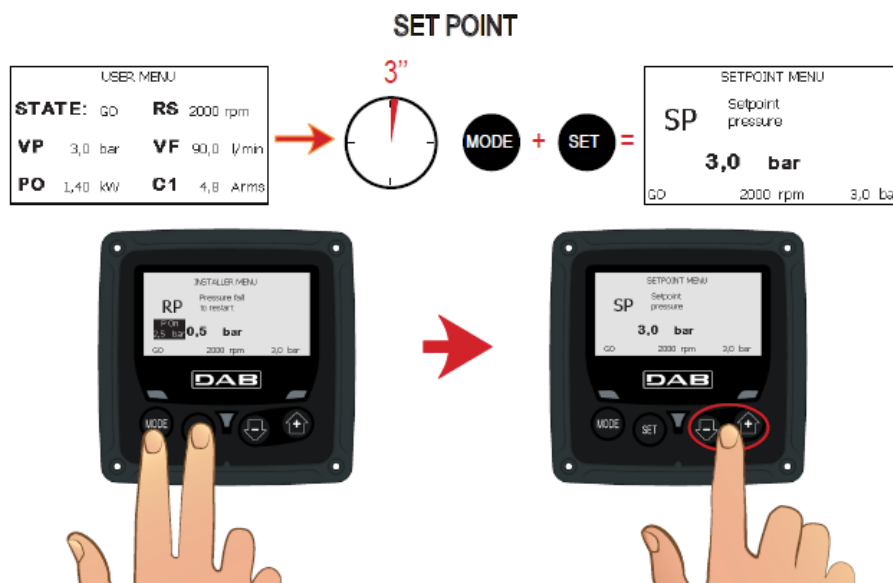
Water pipe leaving the accumulator at least 22mm

4D - Incoming Mains

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

4E - AC Pump Pressure Setting

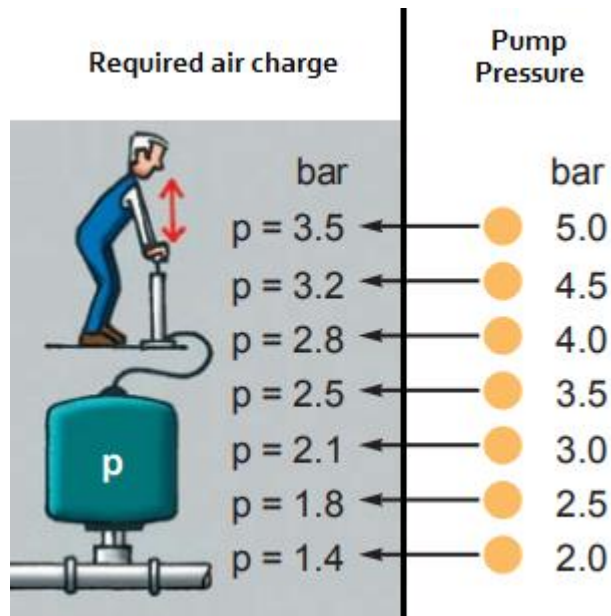
The ACF and ACW pressure setting can be adjusted via the digital display up to 4.5bar.



4F - Accumulator Pre-charge Pressure

Accumulators generally come pre-charge at 1.4bar. Adjust the charge pressure to manufacturers recommend setting depending on the pumps set pressure.

Example below –



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