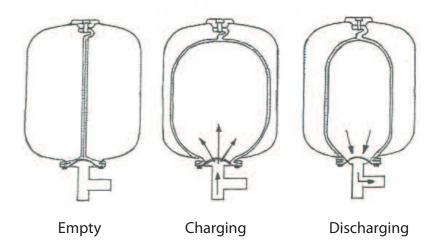
## **Useful Information**



## **AQUABOXES**

To enable a pressure system to operate, the aquabox must be set up correctly. The pre-charge air pressure must

be less than the cut-in pressure of the pump. For normal domestic type installation, the pre-charge should be approximately 3 psi, less than the cut-in pressure. When working with systems at higher pressures or with the larger horizontal aquaboxes, this difference may need to be 5, 10 or even 15 psi. The pre-charge must always be measured with the aquabox drained of water and should be check every six months.



## **PRESSURE SYSTEMS**

When installing any pump in an automatic pressure system it is essential to fit a check valve (non return valve) on the suction. In addition it is always advisable to include the following in the system.

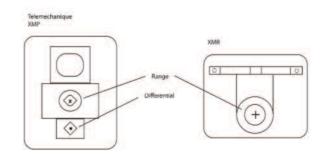
- 1. Isolation valve on suction. (Only necessary for flooded suction installations).
- 2. Isolation valve on discharge.
- **3.** Drain cock on discharge.

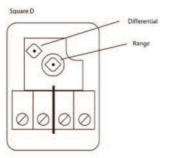
These valves allow maintenance to be done on the pump without the need to drain the whole system. Also during commissioning or adjusting the pressure switches, the valves allow the running of the pump to be controlled at the pump.

## **PRESSURE SWITCHES**

Whilst there are several different pressure switches used on INTERDAB equipment their operation is essentially the same. All have a range or main adjustment and some also have a differential adjustment. On switches with the two adjustments the range is set by the screw with the heavier or longer spring and the differential by the lighter or shorter spring.

When setting a pressure switch, the range should always be set first. Turning the nut or screw clockwise will increase the pressure setting, anti-clockwise will decrease. Altering this setting will not normally change the difference between the cut-in and cut-out pressures. On some of the higher range switches the differential does increase as the pressure is set higher.





The differential, as the name implies, affects the difference between the cut-in and cut-out pressures. On some switches this alters the cut-in without affecting the cut-out (eg Telemechanique XMP2) whilst on others it affects the cut-out without affecting the cut-in. In either case turning the screw or nut clockwise will increase the differential whilst anti-clockwise will reduce.