**Pressurisation Package c/w Expansion Vessel Specification**

**General**

Pressurisation Package shall comprise of the following equipment:

Closed system bladder-type pressurised expansion vessels equal to the Aquaflex 10bar, 10AF series as supplied by Masterflow [phone: (02) 9748 2022] shall be provided for each closed circuit to allow for expansion and contraction, and each shall be supplied complete with a safety relief valve that is rated to a pressure as confirmed by the Contractor and within the design pressure of the vessel.

Automatic refill unit equal to the Mikrofill series as supplied by Masterflow, to prevent backflow to mains water supply and automatically make-up minor system losses. As a minimum the automatic refill unit shall incorporate 12 Litre break tank, pressure pump, pressure switches, 1 x volt-free contact for sending an alarm signal to the BMS, overflow to drain connection and regulating valve, all housed inside a steel cabinet.

Pumps shall be 240V and hard-wired onsite.

Quick fill kit including pressure reducing valve and gauge, for initial/major system fill.

A detachable stainless braided hose piece shall be provided by others for a temporary connection to the Quick Fill valve kit for initial system filling and for future use in the event of system drainage/ closure.

**Tank Selection**

Vessel size shall be based on the calculated total system volume to ascertain expansion volume of the system for the working pressure & temperature range.

**Tank Construction**

Tank body: Dished-ended pressure tank constructed from carbon steel.

Air/water interface: Flexible bladder of EPDM material and designed to ensure complete separation of water from tank walls.

Bladder must be replaceable type on vessels larger than 200L.

Support: Multiple legs for sizes over 30L.

Connections: Schrader valve for pressure charge, and stainless steel water connection.