**Chilled Water Buffer Tank Specifications**

**General**

Supply and install a MASTERFLOW AQUAZONE Chilled Water Buffer Tank as supplied by Masterflow (Phone: 02 9748 2022) and where indicated on the drawings. Tank shall be designed and manufactured to AS1210, be constructed from mild steel, and have a pressure rating suitable for the system’s operating pressure.

Tank must be fully insulated and vapour-sealed with closed-cell, cross-linked polyethylene insulation of 60mm thickness compliant with minimum R1.8 as stipulated in the NCC Section J, and encased in metallic cladding. Jacket vinyl cladding or similar will not be accepted.

Drain connection shall be extended beyond the tank diameter with isolation valve in readily accessible location.

For dual connection buffer tank, an internal baffle is necessary for serpentine flow. The internal vertical baffle shall be minimum 75% of the tank height.

The following features shall be incorporated:

* Nozzles for pressure gauges, relief valve, vent, and drain.
* Inspection opening as detailed in AS1210.
* Flanged inlet and outlet connections.
* Certified Lifting lugs.
* Insulation and metallic cladding.
* Ball valve at drain.
* Safety Relief valve – preset to suit the operating pressure.

The following instrumentation is to be fitted with the buffer tank:

* One (1) only Optivent Automatic Air Vent (must be extra-large throat type).
* One (1) only 100mm dial faced liquid filled ½” Pressure Gauge.
* One (1) only Thermometer Probe and suitable thermowell.

*Suggested Schedule Example*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VOLUME** | **MODEL** | **FLANGE SIZE** | **MAX. WORKING PRESSURE** | **SYSTEM** | **LOCATION** |
| *1,000L* | *Aquazone AVBT1000-C1* | *100mm* | *500kPa* | *Chilled* | *Indoors* |

**Heating Water Buffer Tank Specifications**

**General**

Supply and install a MASTERFLOW AQUAZONE Heating Water Buffer Tank as supplied by Masterflow (Phone: 02 9748 2022) and where indicated on the drawings. Tank shall be designed and manufactured to AS1210, be constructed from mild steel, and have a pressure rating suitable for the system’s operating pressure.

Tank must be fully insulated with Glasswool insulation of 100mm thickness compliant with minimum R3.0 as stipulated in the NCC Section J, and encased in metallic cladding. Jacket vinyl cladding or similar will not be accepted.

Drain connection shall be extended beyond the tank diameter with isolation valve in readily accessible location.

For dual connection buffer tank, an internal baffle is necessary for serpentine flow. The internal vertical baffle shall be minimum 75% of the tank height.

The following features shall be incorporated:

* Nozzles for pressure gauges, relief valve, vent, and drain.
* Inspection opening as detailed in AS1210.
* Flanged inlet and outlet connections.
* Certified Lifting lugs.
* Insulation and metallic cladding.
* Ball valve at drain.
* Safety Relief valve – preset to suit the operating pressure.

The following instrumentation is to be fitted with the buffer tank:

* One (1) only Optivent Automatic Air Vent (must be extra-large throat type).
* One (1) only 100mm dial faced liquid filled ½” Pressure Gauge.
* One (1) only Thermometer Probe and suitable thermowell.

*Suggested Schedule Example*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VOLUME** | **MODEL** | **FLANGE SIZE** | **MAX. WORKING PRESSURE** | **SYSTEM** | **LOCATION** |
| *1,000L* | *Aquazone AVBT1000-H1* | *100mm* | *500kPa* | *Heating* | *Indoors* |