Hydro-Pneumatic Booster System

Solution to your water pressure needs





Calgon Hydro-Pneumatic Booster System consists of two or more automatic controlled centrifugal pumps, control cabinet and one or more pressure vessels. Each pump has isolating valves and check valve connected to common manifolds. Pumps, pressure vessel and control cabinet are mounted on common baseplate. The material of manifolds and the brand of valves can be selected according to the client's requirement.

Applications

Domestic:

Multi-storey buildings, condominiums, apartment

Commercial:

Hotels, office blocks, shopping complex

Social:

Hospitals, schools, universities

Industrial:

Water supply, cleaning applications

Agriculture & irrigation

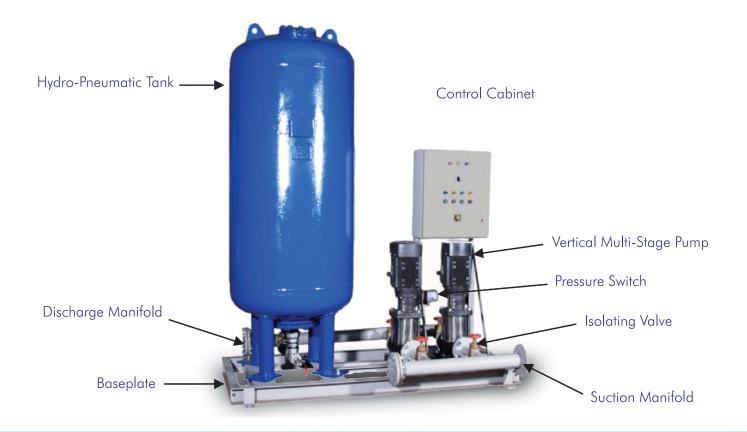
Irrigation for park, golf course etc.

Features & Benefits

- Provides comfortable water pressure at fitting outlets
- Provides consistent pressure at respective floor levels
- Operates in automatic mode requiring no intervention
- Wide performance range

- Easy installation
- Quality pumps with low noise level and minimal maintenance
- Fully factory assembled
- Single supplier warranty from CALGON





Mode of Operation

- The Calgon Hydro-Pneumatic Booster System is designed for automatic operation
- The system pressure is controlled by the setting of pressure switches as supplied
- All the pumps are designed for alternate operation.
- The numbers of pump to be activated is subjected to actual water demand
- The selected pressure vessel is acting as holding unit to minimize pump frequent start/stop
- All pumps shall be shut off in sequence in the event system pressure reached the cut-out pressure setting

Operating Condition

Liquid temperature $: 0^{\circ}\text{C} \text{ to } 75^{\circ}\text{C}$ Ambient temperature $: 0^{\circ}\text{C} \text{ to } 40^{\circ}\text{C}$

Standard Protection

- Thermal overload relay for each electric motor
- Dry run protection
- Other protective device is available upon request

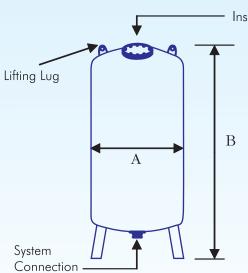
Type of Pump Selected

Calgon Vertical Multi-Stage pump is selected for the system. The pump is of compact design with hydraulic parts made of stainless steel material for better corrosion-resistant. Its unique design ensuring the pump is quiet in operation, easy to service with no compromise on quality and reliability. The split coupling design needs no alignment. As standard, the pump is fitted with uncooled, maintenance free mechanical seal.

^{*} Calgon horizontal close-coupled pump can be selected for the same application.

Designation	Quantity
Control Cabinet	1
Hydro-Pneumatic Tank	1 or more
Pressure Switch	1 per pump
Discharge Manifold	1
Suction Manifold	1
Non return Valve	1 per pump
Isolating Valve	2 per pump
Base Frame	1
Pressure Gauge	1
Calgon Vertical Multi-Stage Pump	2 or more

Hydro-Pneumatic Tank Specifications (with JKKP approval)



Inspection Chamber

Technical Details

Maximum working pressure : 150 psig (10 bar)

Maximum operating pressure : 100°C Pre-loading pressure : 30 psig

Construction material : JIS G 3101 SS 400 (Steel Shell)

Butyl Rubber bladder

Design standard : ASME code, Pressure Vessel Selection
Design approval : Jabatan Keselamatan dan Kesihatan

Approval Stamp (JKKP)

* Imported tank is available upon request

Tank Model	Tank Capacity		Shipping Weight	System Connection	Dimensions	
Idilk Model	Litre	Gallon	Kg	inches	A: Diameter (mm)	B: Height (mm)
VE 300	300	79.2	270	1 ½	622	1387
VE 500	500	132	360	1 1/2	772	1670
VE 1000	1000	264	490	2 ½	772	2051
VE 1500	1500	396	610	2 ½	1015	2053
VE 2000	2000	528	700	2 1/2	1115	2284

