

# **Pressure Step Deaerator (PSD)**

The Flamco PSD is used to remove dissolved air from sealed chilled and heating water systems. The equipment utilises a multifunction digital controller with a simple user interface. The equipment is an advanced product that combines a pressure step principle with side system configuration to minimize the effects on the sealed system. The real-time display show the status of the equipment while monitoring the system pressure and health of its own components.

### **Product Features**

- Password protection for parameter entry
- · Pressure settings in 1 PSI increments
- Service reminder option (12 months)
- Pump exercising option (2 second pulse if inactive for 60 days)
- · Event logging for pump start, pump run hours counter, electrical
- Interruption and common alarm
- Auxiliary contacts for common fault
- · Pump fault, pressure transducer
- · Vacuum deaerating, turbo and normal interval modes
- · Pump inlet strainer and pump check valve
- Glycol mixture up to 50%
- Vacuum cylinder
- Adjustable differential
- MODBUS and RS485 connectivity
- · Will deaerate system volumes up to 39,625 gallons
- Two year warranty



### **Application of Use:**

- Commercial
- Industrial
- Residential

### **Material of Construction:**

Cabinet: Mild Steel AISI 1010Cylinder: Stainless Steel 304

Valves: Brass Connection: Brass Pipework: Copper

| Noise Output                               | <75 dBA              |  |  |
|--|----------------------|--|--|
| Design Pressure                            | 145 PSI @ 212°F      |  |  |
| System Temperature Range                   | 32 – 194°F           |  |  |
| Maximum Temperature at Point of Connection | 158°F                |  |  |
| Ambient Temperature Range                  | 32 – 113°F           |  |  |
| Fuse Rating                                | 10 Amps              |  |  |
| Safety Rating                              | IP 54                |  |  |
| <b>Auxilary Contacts</b>                   | Common Fault Contact |  |  |
| Voltage                                    | 110v 60Hz 1PH        |  |  |

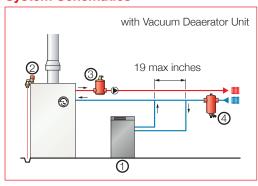


# advanced solutions

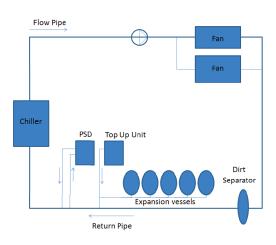
### **Installation and Placement**

The vacuum deaerator should be installed in the return header of the system, on the suction side of the circulating pump, in a frost-free and humidity free area. The point of connection will be the same as the system expansion vessel to provide a neutral pressure reading. The two system connections must be installed on the return pipe approximately 19.5 inches apart.

## **System Schematics**



| Number | Description                       |
|--------|-----------------------------------|
| 1      | PSD Pressure Step Deaerator       |
| 2      | Safety Valve                      |
| 3      | Flamcovent Smart Deaerator        |
| 4      | Flamco Clean Smart Dirt Separator |
|        | ·                                 |





### **FPSD 250D**

| A    | B    | C    | D     | E    | F     | H     | K    |
|------|------|------|-------|------|-------|-------|------|
| [in] | [in] | [in] | [in]  | [in] | [in]  | [in]  | [in] |
| 12.2 | 18.3 | 31.1 | 19.68 | 5.9  | 31.49 | 17.51 |      |

| Pump<br>Quantity | Mounting | Connections   | Pressure<br>Rating | Operating<br>Pressure | Power<br>Consumption | Full Load<br>Current | Nom.<br>Weight | Order<br>Code |
|------------------|----------|---|--------------------|-----------------------|----------------------|----------------------|----------------|---------------|
| 2                | Floor    | 1/2" NPT (ISO THREADS)<br>SHIPPED WITH<br>ISOLATION VALVE KIT | 150 PSI            | 14 - 87 PSI           | 1430 W               | 3.4 Amps             | 40             | FPSD-250D     |

