

## **Installation, Operation & Maintenance of Dutypoint CX Separators:**

This guide applies to all Dutypoint CX separators. This product meets the requirements of the pressure equipment directive (97/23/EC art.3.3)

Some parts of this document only apply to parts of the CX range.

The end user must be issued with a copy of these instructions. All local regulations relating to installation and operation of this equipment must be taken into account.

### **Installation:**

Installation should only be carried out by competent engineers. Always ensure that at the point of the installation, the system is not under pressure or at greater than ambient temperature.

### **Handling:**

Take care when lifting a separator from its packaging.

- Only use approved lifting gear, securely attached to the separator
- Do not stand under the load and ensure the route to the destination is clear.

### **Installing a Separator:**

For optimum deaeration, CX air and dirt separators should be installed where the circulated fluid is at its highest temperature in the circuit. In heating systems, this is near the boiler in the flow main and on chilled systems near the chiller unit on the return main.

- Units must be installed without causing, or being subject to pipework stress
- Units must not be used to support pipework
- There is no specified direction of flow, so either port can be used for inlet or outlet
- Lifting lugs (where fitted) must only be used for handling during installation and should not be used to support the unit when installed
- The air vent (where fitted) only operates effectively if upright (maximum deviation 2°)
- Maximum allowable testing pressure 15 Bar
- The manual valve (fitted to CX deaeration products only) near the top of the product is used for purging large quantities of air during filling of the system.

**WARNING:** High temperature water or steam may be present; connect suitable pipework to a safe discharge point prior to opening this valve. When most of the air has been removed the separator will then remove air automatically through the automatic air vent.

- Never use this manual valve as a filling valve.

## Operation and Maintenance of Dutypoint CX Separators

CX separators are designed to automatically remove air and/or dirt from water and water/glycol mixtures ( $\leq 40\%$ ) in heating, chilled and cooling systems. Not suitable for demineralised water, potable water, dangerous or aggressive substances.

### Operating Range:

- Pressure: 0 - 10 Bar
- Temperature: 0 to 110°C
- The unit should not be modified in any way other than with written permission from Dutypoint.
- Ensure that all valves are always accessible.
- **WARNING:** In operation separator casings could be HOT and could cause burns if touched without adequate hand protection.
- Dirt removal should be regularly carried out by competent engineers.
- **WARNING:** when draining the unit, hot water or steam may escape: Ensure that suitable pipework is connected to a safe discharge point prior to opening this valve.
- Open the drain valve only for the shortest possible period to effectively remove the dirt.
- Shut off the drain valve as soon once dirt is removed to only remove the minimum amount of water possible. The valve should not be opened for long enough to reduce the pressure in the system below the minimum allowable pressure.
- Check the system pressure after this process and refill the system if necessary.

### Warranty

- Valves and casings are warrantied for 12 months following date of purchase.
- The stainless steel internal element is guaranteed for life.

#### **Incorrect installation, modifications or repairs to the unit invalidate this warranty.**

- Proof of purchase and a copy of the service log is necessary to claim warranty. Unit should be serviced every 4 weeks during first 3 months following installation. Every 6 months thereafter.
- Consequential damage or losses resulting from product failure are not included in the warranty.
- Dutypoint reserves the right to amend these terms.

