

## Type JP603M Air and Dirt Separator Flanged with Magnet Rod

**Specification** Micro Bubble Air and Dirt Separator consisting of carbon steel body with stainless steel diffuser screen and Supermagnet with 11,500 Gaussian Power. RAL 9006 white aluminium paint finish. Flanges drilled to BS4504 NP16.

**Application** Stourflex air and dirt separators are designed to remove both air and dirt from circulating heating and chilled water systems. Air is vented automatically from the top of the unit. Dirt, sludge and solid particles are drained manually from the valve fitted on the base.

Maximum working temperature 110°C.  
Maximum working pressure 10 Bar.  
Maximum test pressure = 1.5 x working pressure.

For efficient air and dirt removal separators should be line size.

**Lagging** Stourflex are now able to offer a tailor made flexible lagging jacket to help reduce heat losses on LTHW systems and heat gains & condensation on CHW systems. Please ask for more information.



Part Number	N.B. (mm)	Body Diameter (mm)	Total Height with AAV & Magnet Rod (mm)	Pipe Centre To Magnet Rod (mm)	Installed Length Face to Face (mm)	Dry Weight (kg)	Volume (l)
JP603-50	50	168	760	355	426	25	8.25
JP603-65	65	168	760	355	420	28	10
JP603-80	80	219	870	385	500	38	18
JP603-100	100	219	870	385	504	40	18
JP603-125	125	324	1090	495	635	85	54
JP603-150	150	324	1090	495	635	90	55.5

All lengths have a tolerance of up to +/- 5%

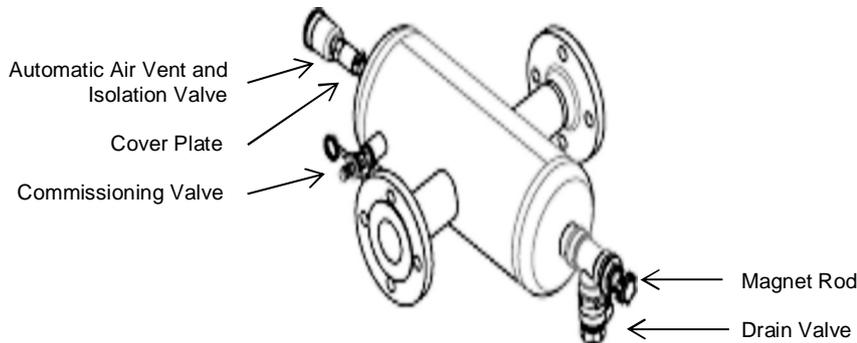
½" bsp brass automatic air vent, isolation and commissioning valves supplied as standard along with 1" bsp drain valve and the Supermagnet with 11,500 Gaussian Power.

Please refer to installation instructions for the correct location, installation and operation of Stourflex Separators.

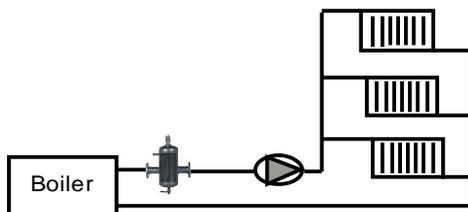
Weld and grooved ends, alternative flange drillings and materials available upon request.

**Stourflex JP601, JP602, JP602M, JP603 & JP603M are also available with floor and wall mounting kits, please see the JP600 for further information.**

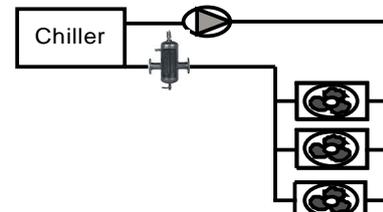
## Installation, Operation and Maintenance Instructions For JP603 Air and Dirt Separators



- Selection** Stourflex offer a complete range of air and dirt separators. Check that the correct separator has been selected for the operating conditions that exist.
- Location** To enable efficient air and dirt removal the separator should be line size. Micro Bubbles are easily released from circulating water where the highest temperature and lowest pressure conditions occur in the system, for this reason the separators should normally be fitted where water is at the highest temperature and the lowest pressure available. The examples shown below are typical installation layouts, but other acceptable and efficient locations for the separator exist. When selecting the position for the separator please be aware that pressure also has a major effect on the release of micro bubbles. For temperatures normally found within heating systems a one meter drop in head pressure is equivalent to a rise in temperature of four degrees centigrade. Where lower temperatures are involved in cooling applications system pressure becomes the determining factor of the position of the separator. Stourflex JP603 Micro Bubble air and dirt separators should be installed in horizontal pipework, the direction of flow is optional.



Heating System



Cooling System

- Installation** Automatic air vent and isolation valve should be fitted to the top of the separator, commissioning valve on the side and drain valve on the base, as shown in the illustration at the top of this page. To protect the automatic air vent the isolation valve should be closed prior to flushing the system. The commissioning valve is used to quickly remove air when filling the system. Flexible hose or fixed pipework should be installed to enable dirty water to be drained to a convenient safe place.
- Maintenance** Automatic air vent should be checked periodically to ensure it is functioning correctly. To prevent sediment build up and maintain efficiency the separator should be flushed at regular intervals. Dirt sludge and solid particles can be removed by opening the drain valve on the base of the separator until the water runs clear.  
**WARNING** To prevent scalding safe practice must be observed when venting hot water at pressure.
- Magnet Rod** As with standard magnetic systems, there is no need for magnet cleaning and cleaning of the sediment filter. Since there is continuous flow in the system, the risk of sedimentation is minimal. In case of demand, a servo motor and timer that can be added and the discharge and cleaning can be done at the desired time without going to the head of the product. Thanks to a patented non-stick bottom surface, dirt and metal dusts are completely removed from the system and the problem of adhering to the surface at the bottom is eliminated.