



## MANUFACTURING SPECIFICATIONS

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*Remarks:*

- Other materials, temperatures and pressures are available on request.
- All products have been designed and manufactured according to 97/23/EC (PED).
- Additional information: [www.spirovent.co.uk](http://www.spirovent.co.uk)

Pos.	Number	Description	Specification
		<p><b>AUTOMATIC AIR VENT</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirotop</b>                      Type: SV5</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      The system can release free air by means of a "Sprung loaded" automatic "Self Closing" valve mechanism. The valve design will also permit the easy entry of air during draining of the system.</p> <p><b>Valve Seat:</b> Viton Rubber  <b>Float:</b> PP  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      Bottom Connection: 1/2" female taper                      Vent valve: 1/2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar</p> <p><b>Mounting:</b>                      At system high points and all main headers. Install in the vertical position</p>	<p><b>Type:</b> Spirotop SV5  <b>Conn:</b> 1/2" female taper</p>

Pos.	Number	Description	Specification
		<p><b>MICROBUBBLE DEAERATOR - BRASS</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air SV1</b>                      Type: SV1-XXX-C/T/V</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Microbubble Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the microbubbles to overcome "mass flow" conditions and rise to the top of the unit. They are then collected in the air chamber and vent to atmosphere through the Spirovent ventcap installed on the top of the unit.</p> <p><b>Casing:</b> Brass  <b>Valve Seat:</b> Viton Rubber  <b>Float:</b> PP  <b>Spirotube:</b> Copper Wire, Solder  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      Available as                      Horizontal: 3/4", 1", 1 1/4" and 1 1/2" female taper                      22mm compression                      Vertical: 3/4" and 1" mm female taper                      22 mm compression                      For all: vent valve 1/2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 1.4 l/s                      Flow rate: 0 - 1 m/s</p> <p><b>Mounting:</b>                      At the Hottest point on the system (i.e Henry's Law compliant)                      Housing in vertical position</p>	<p><b>Type:</b> Spirovent 'Air SV1-XXX-C/T/V  <b>Conn:</b></p>

Pos.	Number	Description	Specification
		<p><b>MICROBUBBLE DEAERATOR - STEEL</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air SV1</b>                      Type: SV1-XXX-F/H</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Microbubble Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the microbubbles to overcome "mass flow" conditions and rise to the top of the unit. They are then collected in the air chamber and vent to atmosphere through the Spirovent ventcap installed on the top of the unit.</p> <p><b>Casing:</b> Steel  <b>AAV:</b> Brass  <b>Valve Seat:</b> Viton Rubber  <b>Float:</b> PP  <b>Spirotube:</b> Copper Wire, Solder  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      DN50 – DN300 Flanged PN16                      DN50 – DN300 Weld End                      Scum Valve: ¾" male taper                      Vent valve: ½" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 225 l/s                      Flow Rate standard unit: 0 - 1.5 m/sec                      Flow Rate High Flow unit: 1.5 - 3 m/sec</p> <p><b>Mounting:</b>                      At the Hottest point on the system (i.e Henry's Law compliant)                      Housing in vertical position</p>	<p><b>Type:</b> Spirovent 'Air SV1-XXX-F/H  <b>Conn:</b></p> <p><b>Flow rate:</b> l/s</p> <p><b>Weight:</b> kg</p>

Pos.	Number	Description	Specification
		<p><b>DIRT SEPARATOR UNIT</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Dirt SV3</b>                      Type: SV3-XXX-C/T/V</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the dirt particles to overcome "mass flow" conditions and settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing:</b> Brass  <b>Spirotube:</b> Copper Wire, Solder  <b>Drain Valve/Cap assembly:</b> Brass  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      Available as                      Horizontal: 3/4", 1", 1 1/4" and 1 1/2" female taper                      22mm compression                      Vertical: 3/4" and 1" mm female taper                      22 mm compression                      Drain valve: 1/2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 1.4 l/s                      Flow rate: 0 - 1 m/s</p> <p><b>Mounting:</b>                      On the main pipework (flow or return)                      Housing in vertical position                      Before the component to be protected</p>	<p><b>Type:</b> Spirovent 'Dirt SV3-XXX-C/T/V  <b>Conn:</b></p>

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		<p><b>DIRT SEPARATOR UNIT</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Dirt SV3</b>                      Type: SV3-XXX-F/H</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the dirt particles to overcome "mass flow" conditions and settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing:</b> Steel  <b>Spirotube:</b> Copper Wire, Solder  <b>Drain Valve:</b> Nickered Brass  <b>Guarantee:</b> 3 years</p> <p><b>Connections:</b>                      DN50 - DN300 Flanged PN16                      DN50 - DN300 Weld End                      Drain Valve: DN50 - DN200 1" male taper                      DN250 - DN300 2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 225 l/s                      Flow Rate standard unit: 0 - 1.5 m/sec                      Flow Rate High Flow unit: 1.5 - 3 m/sec</p> <p><b>Mounting:</b>                      On the main pipework (flow or return)                      Housing in vertical position.                      Before the component to be protected.</p>	<p><b>Type:</b> Spirovent 'Dirt SV3-XXX-F/H  <b>Conn:</b></p> <p><b>Flow rate:</b> l/s  <b>Weight:</b> kg</p>

Pos.	Number	Description	Specification
		<p><b>MICROBUBBLE DEAERATOR &amp; DIRT SEPARATOR - BRASS</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air &amp; Dirt SV2</b>                      Type: SV2-XXX-C/T</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Microbubble &amp; Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the microbubbles and Dirt Particles to overcome "mass flow" conditions. The microbubbles rise to the top of the unit. They are then collected in the air chamber and vent to atmosphere through the Spirovent ventcap installed on the top of the unit. The Dirt Particles settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing:</b> Brass  <b>Valve Seat:</b> Viton Rubber  <b>Float:</b> PP  <b>Spirotube:</b> Copper Wire, Solder  <b>Drain Valve/Cap assembly:</b> Brass  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      Available as 1" female taper and 22mm compression                      Vent valve: 1/2" male taper                      Drain Valve: 1/2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 1.4 l/s                      Flow rate: 0 - 1 m/s</p> <p><b>Mounting:</b>                      At the Hottest point on the system (i.e Henry's Law compliant)                      Housing in vertical position</p>	<p><b>Type:</b> Spirovent                      'Air &amp; Dirt                      SV2-XXX-C/T  <b>Conn:</b></p>

Pos.	Number	Description	Specification
		<p><b>MICROBUBBLE DEAERATOR &amp; DIRT SEPARATOR - STEEL</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air &amp; Dirt SV2</b>                      Type: SV2-XXX-F/H</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Microbubble &amp; Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the microbubbles and Dirt Particles to overcome "mass flow" conditions. The microbubbles rise to the top of the unit. They are then collected in the air chamber and vent to atmosphere through the Spirovent ventcap installed on the top of the unit. The Dirt Particles settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing:</b> Steel  <b>AAV:</b> Brass  <b>Valve Seat:</b> Viton Rubber  <b>Float:</b> PP  <b>Spirotube:</b> Copper Wire, Solder  <b>Drain Valve/Cap assembly:</b> Brass  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      DN50 - DN300 Flanged PN16                      DN50 - DN300 Weld End                      Scum Valve: ¾" male taper                      Vent valve: ½" male taper                      Drain Valve: DN50 - DN200 1" male taper                                        DN250 - DN300 2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 225 l/s                      Flow Rate standard unit: 0 - 1.5 m/sec                      Flow Rate High Flow unit: 1.5 - 3 m/sec</p> <p><b>Mounting:</b>                      At the Hottest point on the system (i.e Henry's Law compliant)                      Housing in vertical position</p>	<p><b>Type:</b> Spirovent                      'Air &amp; Dirt                      SV2-XXX-F/H  <b>Conn:</b></p> <p><b>Flow rate:</b> l/s</p> <p><b>Weight:</b> kg</p>

Pos.	Number	Description	Specification
		<p><b>DEMOUNTABLE DIRT SEPARATOR UNIT</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Dirt</b> SV3 Demountable                      Type: SV3-XXX-F/H/D                      With demountable sections for cleaning "Spirotube bundle"</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the dirt particles to overcome "mass flow" conditions and settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing:</b> Steel  <b>Spirotube:</b> Copper Wire, Solder  <b>Drain Valve:</b> Nickered Brass  <b>Guarantee:</b> 3 years</p> <p><b>Connections:</b>                      DN50 - DN300 Flanged PN16                      DN50 - DN300 Weld End                      Drain Valve: DN50 - DN200 1" male taper                      DN250 - DN300 2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 225 l/s                      Flow Rate standard unit: 0 - 1.5 m/sec                      Flow Rate High Flow unit: 1.5 - 3 m/sec</p> <p><b>Mounting:</b>                      On the main pipework (flow or return)                      Housing in vertical position                      Before the component to be protected.</p>	<p><b>Type:</b> Spirovent 'Air &amp; Dirt Demountable SV3-XXX-F/H/D</p> <p><b>Conn:</b></p> <p><b>Flow rate:</b> l/s</p> <p><b>Weight:</b> kg</p>

Pos.	Number	Description	Specification
		<p><b>DEMOUNTABLE MICROBUBBLE AIR &amp; DIRT SEPARATOR UNIT</b>                      Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air &amp; Dirt SV2 Demountable</b>                      Type: SV2-XXX-F/H/D                      With demountable sections for cleaning "Spirotube bundle"</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel                      0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      Microbubble &amp; Dirt Particle Separation can only occur when the correct environment is created. The unique copper Spirotube element creates a local change of the turbulent water to laminar, providing the opportunity for the microbubbles and Dirt Particles to overcome "mass flow" conditions. The microbubbles rise to the top of the unit. They are then collected in the air chamber and vent to atmosphere through the Spirovent ventcap installed on the top of the unit. The Dirt Particles settle at the base of the unit out of the flow of the water. The pressure drop will not be effected by the dirt collected and remain constant at all times. The unit can be blown down with the system still operational.</p> <p><b>Casing: Steel</b>  <b>AAV: Brass</b>  <b>Valve Seat: Viton Rubber</b>  <b>Float: PP</b>  <b>Spirotube: Copper Wire, Solder</b>  <b>Drain Valve/Cap assembly: Brass</b>  <b>Testing: 100% of all units are tested at works.</b>  <b>Guarantee: 3 years</b></p> <p><b>Connections:</b>                      DN50 - DN300 Flanged PN16                      DN50 - DN300 Weld End                      Scum Valve: ¾" male taper                      Vent valve: ½" male taper                      Drain Valve: DN50 - DN200 1" male taper                                        DN250 - DN300 2" male taper</p> <p><b>Range:</b>                      Medium Temperature: 0 - 110°C                      Medium Pressure: 0 - 10 bar                      Flow: 0 – 225 l/s                      Flow Rate standard unit: 0 - 1.5 m/sec                      Flow Rate High Flow unit: 1.5 - 3 m/sec</p> <p><b>Mounting:</b>                      At the Hottest point on the system (i.e Henry's Law compliant)                      Housing in vertical position</p>	<p><b>Type:</b> Spirovent                      'Air &amp; Dirt                      Demountable                      SV2-XXX-F/H/D</p> <p><b>Conn:</b></p> <p><b>Flow rate:</b> l/s</p> <p><b>Weight:</b> kg</p>



Pos.	Number	Description	Specification
		<p><b>VACUUM DEGASSER</b></p> <p>Manufacturer: Spirotech bv, Helmond, the Netherlands                      Series: <b>Spirovent 'Air Superior</b>                      Type: SV4-10 H/C, SV4-15 H/C</p> <p><b>Contact: Spirotech UK Ltd, 0208 451 3344 Tel</b>  <b>0208 451 3366 Fax</b></p> <p><b>Operation principle:</b>                      In a repeating process a part of the system fluid will be drained through a magnetic valve and collected in a vessel. Then the pressure is reduced by a continuously running pump and microbubbles of air will be separated from the fluid. The air is collected in the air chamber and released to the environment by means of the Spirovent ventcap. The deaerated fluid is returned to the system by the pump.</p> <p><b>Connections:</b>                      Supply and return: 1/2" f.t.</p> <p><b>Dimensions (hxwxh):</b>                      1.460x550x460 mm</p> <p><b>Range:</b>                      Medium temperature: 0 – 90 °C / 10 – 90 °C                      Medium pressure: 5 – 10 / 9 - 15 bar</p> <p><b>Pump / Control:</b>                      Pump: Vertical multi-stage centrifugal pump                      Control: Electronic                      Adjustment of the cycle: by means of a digital timer                      Connection voltage: 3x400 V / 50 Hz                      BMS contacts: potential free</p> <p><b>Mounting:</b>                      As shown in the diagram / drawing.                      According to the instructions of the manufacturer.</p>	<p>Type: SV4-10 H/C...</p> <p>Pressure:.....bar</p> <p>Weight:.....kg</p>