

Congratulations! With this SpiroCross you have bought a product that will definitely improve the quality of your complete installation.

This instruction applies to product types starting with X, except for X'S (fig. 1A, ①).
 Manufacturer: Spirotech bv, Helmond - The Netherlands

This SpiroCross is designed and manufactured according to the Sound Engineering Practice as stated in the Pressure Equipment Directive (97/23/EC)

⚠ CAUTION

- This instruction must be given to the end user, who should keep it.
- Take into account local regulations.

Application

Hydraulically balance / separate the primary and secondary flow in the installation, in combination with the (fully) automatic removal of air, gasses and dirt from water and water/glycol mixtures (max. 40%). Not suitable for demineralised water, drinking water, and dangerous or inflammable substances. Can be used in combination with chemicals / inhibitors approved according to local directives. Please check that it is compatible with the materials used to construct your installation. For more information contact your supplier.

Pressure and temperature range (fig. 1A, ①)

Working pressure: 0 – 10 bar-g,
 Working temperature: 0 – 110 °C.
 Unless indicated otherwise on the product.

Quality control

Leaktest:

Test pressure	7 +/- 1 bar-g
Test medium	Air
Test time	60 s
Approval criterion	No leakage

Functional test of the de-aerating valve:

Valve opening test	Full bore venting
Valve closure test	Positive valve closure

Quality, safety and environmental aspects are managed within certified Management systems acc. to:
 - NEN-EN-ISO 9001
 - NEN-EN-ISO 14001
 - OHSAS 18001

⚠ CAUTION

- Installation and maintenance may only be carried out by a qualified installer.
- When working on the SpiroCross always ensure there is no pressure in the installation and let it cool down.
- Touching the product "in operation" may cause burns.
- Never use the drain valve for (re)filling.

Handling the SpiroCross (fig. 1B)

Pay particular attention to the following safety procedures when lifting the SpiroCross from its packaging:

- Use approved lifting chains / straps with safety hooks.
- Make sure that the lifting chains / straps are tight before lifting the SpiroCross
- Do not stand under the load
- Make sure the SpiroCross can move freely.

Installing the SpiroCross

The SpiroCross should be installed vertically, with the air vent on top, between the primary side (boiler/chiller side) and the secondary side (system side) of the installation. For heating installations the upper connections should be mounted to the system flow line, the lower connections to the return line. For cooling installations the lower connections should be mounted to the system flow line and the upper ones to the return line.

- The SpiroCross should be installed stress free and with the body vertical.
- The SpiroCross should not be used to support pipework.
- The SpiroCross should not be modified in any way, nor should it be welded to, other than necessary for mounting the SpiroCross into the installation.
- The lifting lugs ⑤ may only be used for handling during installation.
- Apply the separately supplied product labels if the labels on the product are not visible, e.g. after the unit has been insulated.
- The unit operates independent of the flow direction ②.
- Fit the supplied drain valve ③ at the bottom of the SpiroCross, shut off the valve and mount the safety plug ④. (for XC050 - XC080: temporarily remove the handle from the drain valve before fitting it)
- Don't obstruct the vent valve ⑥ and keep valve ③ accessible.
- A tube can be fitted to the air vent ⑦ to lead away the released (smelly) air. Excessive dirt particles or foam forming might cause a temporary leakage of the vent valve ⑥.
- Maximum allowable hydraulic test pressure: 1,5 x maximum working pressure (①).
- If the installation is tested with compressed air, the SpiroCross should be shut off temporarily with a cap R½ (not supplied) ⑧. Take care: cap R½ must be removed before commissioning the installation.

Draining dirt from the SpiroCross

After commissioning the SpiroCross must be drained off frequently by a qualified installer, to remove the collected dirt, according to the procedure below. Proper and regular draining will ensure correct functioning of the separator and maximize the life time expectancy as well as a trouble free operation of the unit and system. Regular analyses of the system fluid will help to take the right measures to maintain the correct fluid quality and consequently system performance.

⚠ CAUTION

- Water may be hot!
- Try to restrict the amount of water drained off as much as possible.
- Check the installation pressure after draining and refill if necessary.

- Remove the safety plug ④.
- Fit a hose or a permanent connection resistant to the pressure and temperature concerned, to discharge the installation water into a suitable place.
- Open the drain valve ③ gradually for a short period.
- As soon as no dirt is drained off anymore, close the drain valve ③.
- Fit the safety plug ④.

Failures

- At initial use the vent valve ⑥ might drip a little. This will stop after a short period of time.
- Always contact your installer in case of malfunction.
- In case of leakage of the vent valve ⑥, the complete deaeration cap must be replaced.

Guarantee

- 5 years after the date of purchase.
- Incorrect installation or incompetent use or repairs may render the guarantee invalid.
- Damage or losses resulting from failures are not included in the guarantee.
- Normal tear and wear are excluded from guarantee.

Alterations reserved.

Not suited for outdoor use.