RPZ Back Flow Preventer

I 0303 / I 0305

- Ideal protection for drinking water network
- Compact design
- Minimal maintenance
- With or without pressure reducer
HERZ I 0303 / I 0305 RPZ Back Flow Preventer

I 0303 RPZ back flow preventers prevent the back-pressuring, back-flowing or back-suction of contaminated water into the drinking water network. I 0305 expands the functions of the RPZ valve I 0303 additionally with a pressure regulator and a manometer.

Application area
RPZ back flow preventers prevent the back-pressuring, back-flowing or back-suction of contaminated water into the drinking water network in accordance with EN 1717. HERZ RPZ valves I 0303 or I 0305 belong to safety device type „BA“ and are therefore only suitable for use with liquid media up to category 4. Application areas are all areas in which a connection is established between the drinking water network and industrial water through fixed or flexible lines. Preferred application fields are softening, de-acidification and de-carbonisation plants. Furthermore, the RPZ valves can also be used in disinfection plants or upstream of chemical cleaning apparatus, in order to prevent the back-flowing of chemically contaminated water.

Functional description I 0303
The RPZ valve operates according to the three-chamber system, whereby a venting middle chamber is separated by a back-flow preventer between the intake and outlet chamber respectively. Under normal operating conditions, a pressure drop exists in the flow direction from one chamber to the next, which prevents a back-flow. When the pressure drop between the intake and middle chamber has dropped to 0.14 bar, the middle chamber will vent to a tundish. Any contaminated drinking water that is forced back at the back-flow preventer on the outlet side is then safely transported away via the differential pressure-controlled discharge valve and the tundish fitted on the outlet of the ventilation hole.

Function description I 0305
Refilling combination for the filling and top-up of heating systems. Expands the functions of the RPZ valve I 0303 additionally with a pressure regulator and a manometer. Furthermore, automation of the filling process is also possible.

Operation, maintenance
In order to obtain the desired back flow prevention, the function should be checked and tested every 6 months. It is additionally important that the individual parts of the system separator can be replaced under pressure at any time. In order guarantee this, it is possible to shut off and then maintain the RPZ valve with the help of the shut-off valves.

<table>
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<tr>
<th>Order number</th>
<th>Dimension</th>
<th>G</th>
<th>L</th>
<th>D</th>
<th>H1</th>
<th>H2</th>
<th>SW</th>
<th>Medium</th>
<th>Nominal pressure</th>
<th>Temperature</th>
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<td>70 mm</td>
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