**Tender Text, AVK Y-Strainer 910/21-001**

**1. Range**

DN 50-600, PN16

**2. Product description**

**General**

A filter designed to remove pebbles and other impurities from water supply or HVAC systems.

**Basic Design**

Basic design shall be a Y-formed strainer in cast iron with detachable screen in stainless steel.

Face-to-face shall be according to EN 558.

**Coating**

The body shall be both internally and externally corrosion protected with fusion bonded epoxy coating, 250 µm blue RAL 5017, approved for drinking water.

No uncoated parts of the iron surfaces may be in contact with the fluid or the environment.

Surface preparation, coating material, application process and final result shall be quality checked and documented by the valve manufacturer and frequently supervised through notified body inspections.

**Body**

Body and cap shall be made of ductile cast iron acc. to EN 1563, grade GJS 450-10.

Cap bolts shall be made of stainless steel, A2.

A flow direction shall be marked so that the filtered impurities are collected on the inside of the screen cylinder.

Following information shall be cast into the body:

 - Manufacturer

 - DN-class

 - PN-class

 - Cast material

 - Flow direction

Following information shall be shown on the label

 - Product number

 - Barcode

 - Max. application temperature

**Screen**

The filter screen shall be a 1.4301 (304) stainless steel cylinder with punched holes.

Hole diameter shall be from 1.5 mm for the smallest DN-sizes to 2.7 mm for the largest.

Wall thickness shall be from 0.8 for the smallest DN-sizes to 1.2 mm for the largest.

The open area ratio (total-hole-area to piping area) shall be greater than 2.

**Flow Coefficient**

Pressure drop across a clean unit with no impurities shall not exceed following approximation:

P ≈ 2400 x DN⁻⁴ x Q²

where P is measured in bar, DN is the nominal diameter in mm and Q is the flow in m³/h.

**Seals**

The sealing shall be an O-ring in high temperature (130°C), EPDM

**Installation**

Installation shall be possible in both vertical and horizontal position.

Items weighing more than 15 kg shall be fitted with lifting eyes.

**Operation**

The strainer itself shall not need operation.

A drain plug in stainless steel, A2 shall be fitted to make it possible to empty the system before removing the filter cylinder for cleaning.

**Quality**

The manufacturer shall have an ISO 9000 certified quality system and be audited by an independent third party.

Each finished product shall be inspected and tested for compliance with the product standards and local market specification.

**3. Standards and Approvals**

Materials and processes shall be according to following:

 - EN 1563 (cast iron)

 - EN 10088 (stainless steel)

 - EN 681 (rubber seals water)

 - DIN 3476 (coating)