

BELVEN STRAINERS

Installation, Operation en Maintenance instruction

Applicable to **BELVEN STRAINERS type BV56**
with nominal diameter **DN 15 till DN 300 – NPS 1/2 till 12**

1. Safety

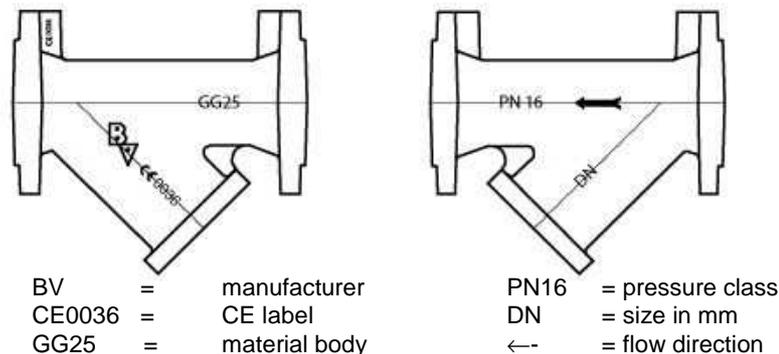
- ✓ For safety reasons, the installation must take place under the supervision of a foreman taking into account the local safety instructions and advises.
- ✓ The operation of strainers and their controls must be done by staff trained in all aspects of their operation.

2. General remarks

- ✓ Strainers are mono-directional, meaning that the flow through the strainer must always be respected to guarantee a correct functioning.
- ✓ The correct flow is indicated on the strainer body by means of an arrow.
- ✓ The 'screening element' (mesh) must be always on the down side of the strainer body so the entrapped material can be properly collected in it.

3. Check prior to installation

- ✓ Before fitting the strainer between the flanges, make sure that the operating conditions (pressure, temperature and fluid) are compatible with the technical specifications of the strainer.
- ✓ Identification of the strainer :



- ✓ **Before installation make sure that the main is depressurised and purged in order to avoid any danger to the operator.**

4. Installation

- ✓ If applicable remove the plastic protection caps covering both flange connections.
- ✓ Check if the pipeline is free of welding splashes and slivers of metal.
- ✓ Check if the flange connections of the pipeline are parallel with each other
- ✓ Make sure that the strainer fits between the flanges without difficulty. Force apart the flanges with a suitable tool if the fit is too tight.
- ✓ Do not forget to insert a gasket between flange and strainer to guarantee a perfect sealing.
- ✓ Insert the strainer between the flanges and centre the strainer before tightening the bolts of the flange connections.
- ✓ Keep the strainer well aligned with the flanges while removing the flange separators and tighten the screws with a torque wrench to assure correct sealing (opposing bolts sequentially).

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5. Storage

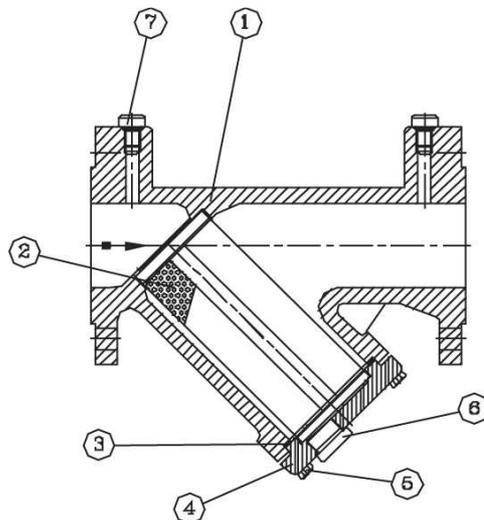
- ✓ If available, leave the plastic protection caps on the both flange ends
- ✓ Store inside in a clean and dry place.

6. Maintenance

- ✓ As there are no moving parts the strainer is virtually maintenance free.
- ✓ In case of an increase in pressure drop over the strainer (1 bar for fluids, 0.03 bar for gases), this indicates that the strainers screen is contaminated.

7. Removing and cleaning the screen

- ✓ Depressurise the pipeline where the strainer is installed.
- ✓ Unscrew the drain plug (if available) in the strainers bonnet to control if the pipeline is depressurised and to collect the fluids residue.
- ✓ Unscrew the bolts (opposing bolts sequentially) of the strainer bonnet, remove the bonnet and collect the available fluids residue.
- ✓ Remove the screen from the body and clean the screen with a non-aggressive cleaner and check for possible damages. The filth can be washed away from the outside towards the inner part of the screen. If the screen appears to be damaged, replace it.
- ✓ Check and clean the bonnet and bolts, if necessary replace them. Always replace the gasket to guarantee sealing.
- ✓ Re-insert the screen in the strainers body, be careful not to compress the screen while screwing the bonnet and gasket onto the strainer.
- ✓ Increase pressure slowly, check for leakage through bonnet and possible drain plug, when no leakage appears the pipeline can be pressurised as usual.



1. body
2. screen (mesh)
3. aramid fibre gasket
4. bonnet
5. hex bolts
6. drain plug
7. plug(s) for manometer