The Safe Choice For High Purity Applications

LKC UltraPure Non-return Valve

Concept
LKC is a non-return valve preventing reverse flow in a system. The UltraPure execution is designed and documented to meet the demand in industries like BioPharm and Personal Care.

Working principle
The spring acts on the valve plug and keeps the valve closed until the force from the pressure in the inlet exceeds the force of the spring. If a reverse flow should occur the spring force and the pressure from the outlet will keep the valve closed.

Standard Design
The valve body is made in two parts that are assembled with a clamp ring. A guide disc and four legs guide the spring loaded valve plug in the valve body.

TECHNICAL DATA

Max. product pressure: 0.69 PSI (10 bar)
Required differential pressure for opening the valve when fitted in a vertical pipe, as shown in fig. 2, is approx. 0.41 PSI (0.06 bar).

Surface specification (Product wetted steel parts)
- Alfa Laval designation: 7
- Internal: ......... Ra < 32 µin
- ASME BPE designation: SF3
- External: ............ Ra < 32 µin
- Alfa Laval designation: PL
- Internal: ......... Ra < 20 µin
- ASME BPE designation: SF1
- External: ............ Ra < 20 µin

PHYSICAL DATA

Product wetted steel part: 1.4404 (316L)
Other steel parts: 1.4301 (304)
Spring: Electropolished
Elastomers
Product wetted elastomer: EPDM
Other steel parts: 1.4301 (304)
Spring: Electropolished
Elastomers
Product wetted elastomer: FPM
Other steel parts: 1.4301 (304)
Spring: Electropolished

Temperature: 14°F - 284°F
Temperature: 14°F - 356°F

Connections
Weld ends: Matching tubes and fittings: ISO 2037 / Series ADIN
Clamp ends: Matching tubes and fittings: ISO 2037 / Series ADIN

Authorized to carry the 3A symbol.
Fig. 1. Note!
For the diagram the following applies:
Medium: Water (68°F).
Measurement: In accordance with VDI 2173.

Fig. 2.
1 = Flow direction.
Shows the optimal built-in situation to make sure the valve is drainable. The four guide legs of the valve cone ensure good alignment.
90° rotation.

Table 1: Dimensions.

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<th>Size</th>
<th>25</th>
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<th>51</th>
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</table>

Weight (lb):
- Welding ends: 1.5, 2.2, 2.9, 4.6, 6.4, 9.5
- Clamp ends: 2.0, 2.4, 3.1, 5.5, 7.5, 10.4