

Features

- Single non-return disc check valve
- Made from stainless steel
- 1/2 inch BSP (British Standard Pipe) female screw connections
- Suitable for use with steam and hot condensate
- Maximum working pressure of 25bar
- Maximum operating temperature of 220°C
- CE (European Conformity) pressure rating of PN25
- Low pressure drop

RS PRO Stainless Steel Single Non Return Valve 1/2 in BSP

RS Stock No.: 720-9279



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

The RS PRO single non-return valve is ideal for controlling the flow of water and steam in heating and cooling systems. It's made from stainless-steel construction and has a simple, compact design. With a maximum operating temperature of +220°C and maximum working pressure of 25 bar, the valve can withstand higher pressures and temperatures than brass alternatives.

Simple to install, this disk check valve has female screw connectors with a 1/2-inch BSP (British Standard Pipe) thread. As the valve is fitted with a spring, it can be installed either horizontally or vertically.

General Specifications

| | |
|-----------------|---|
| Type | Single |
| Connection | 1/2 in BSP |
| Body Material | Stainless Steel |
| Thread Size | 1/2in |
| Thread Standard | BSP |
| Applications | Saturated steam, water and other gases (Group 2) compatible with the construction |

Mechanical Specifications

| | |
|-----------|--------|
| Body Size | DN 2in |
|-----------|--------|

Operating Environment Specifications

| | |
|-------------------------------|--------|
| Maximum Operating Temperature | +220°C |
| Maximum Working Pressure | 32bar |

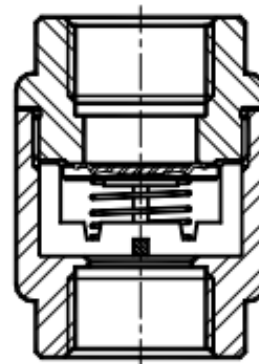
Approvals

| | |
|---------------------------|---|
| Compliance/Certifications | CE (European Conformity) pressure rating of PN25, ANSI/ESD S20.20:2014 and BS EN 61340-5-1:2007 |
|---------------------------|---|



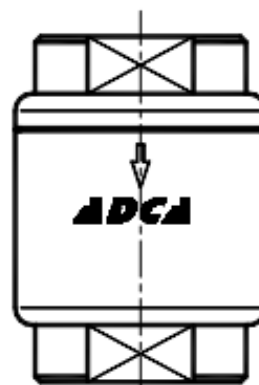
OPTIONS: Soft sealing : EPDM (E), NBR (N), VITON (V), PTFE (T).
USE : Inconel springs Saturated steam, water and other gases (Group 2) compatible with the construction.

AVAILABLE MODELS : RT 25
SIZES : DN 3/8" to DN 2"
CONNECTIONS : Female screwed ISO 7/1 Rp (BS21)
INSTALLATION : Horizontal or vertical installation See IMI, installation and maintenance instructions.



RATING : PN 25

PMA – Max.allowable pressure 32 bar
 TMA – Max.allowable temperature 250 °C
 PMO – Max.operating pressure 21 bar
 TMO –Max. Operating temperature 220 °C



| Recommended limit of operation with soft seats (°C) | | | |
|--|---------|-----------|----------|
| EPDM (E) | NBR (N) | VITON (V) | PTFE (T) |
| 130° | 95° | 180° | 180° |

| CE MARKING | |
|--------------------|--------------------------|
| PN 25 | Category |
| DN3/8" to DN 11/2" | SEP - art. 3, paragraph3 |
| DN 2" | Category 1 (CE marked) |

NON-RETURN VALVE RT 25

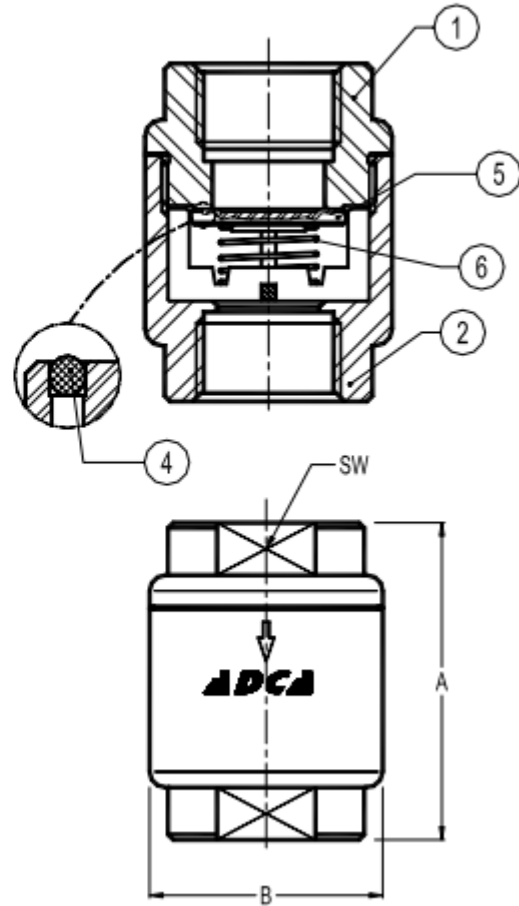
| DIMENSIONS (mm) | | | | | | | |
|-----------------|------|------|------|------|--------|--------|------|
| DN | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| A | 55 | 55 | 60 | 70 | 61 | 72 | 72 |
| B | 40 | 40 | 45 | 50 | 65 | 80 | 80 |
| SW | 27 | 27 | 32 | 41 | 50 | 55 | 70 |
| Kgs | 0,3 | 0,3 | 0,38 | 0,54 | 0,68 | 0,96 | 1,13 |

| MATERIALS | | |
|-----------|-------------|------------------|
| POS. | DESIGNATION | MATERIAL |
| 1 | Valve body | AISI316 / 1.4401 |
| 2 | Cover | AISI316 / 1.4401 |
| 4 | *Soft seal | See options |
| 5 | *Valve disc | AISI316 / 1.4401 |
| 6 | *Spring | AISI302 / 1.4300 |

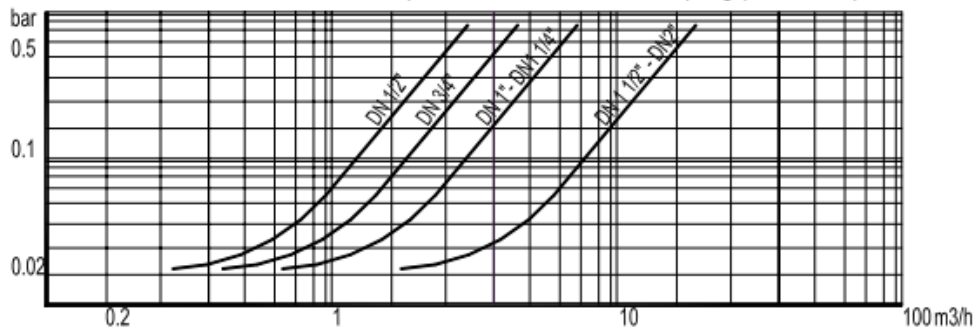
*Available spare parts

| Minimum opening pressures with standard spring in mbar | | | | | | | |
|--|------|------|------|----|--------|--------|----|
| DN | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| D.P. ↑ | 25 | 25 | 25 | 25 | 25 | 28 | 29 |
| D.P. → | 23 | 23 | 23 | 23 | 24 | 25 | 25 |
| D.P. ↓ | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| *D.P. ↑ | 2 | 2 | 2 | 2 | 3 | 4 | 4 |

* Vertical installation without springs (bottom to top). → Flow direct



Pressure drop, horizontal flow, standard spring (water - 20°)



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_w = \sqrt{\frac{Q}{1000}} \times V$

Vw = Equivalent water flow volume in m³/h ; Q = Density in Kg/m³ ; V = Flow volume in m³/h