



## ***Instruction Manual***

### ***SNV02***

***Needle Valves mad of Stainless Steel,  
High Pressure Version***



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## *1 Introduction*

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Series SNV01/SNV02 needle valves are noted for their reliable function and easy operation. To obtain the greatest benefit from this device, please observe the following cautionary statement:

**Persons who are responsible for setting up or operating this device must be sure to read the and understand the operating instructions and the safety information pertaining to it.**

## *2 Safety Information*

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### *2.1 General Instructions*

To ensure safe operation, the device must only be operated according to the information in the operating instructions. When the device is in use, the regulations and safety standards applicable to the specific application must also be observed. This statement also applies to the use of accessories.

### *2.2 Proper Usage*

Series SNV01/SNV02 needle valves are designed to regulate the flow by partly opening/closing the valve. Any application extending beyond this specific intended use does not constitute proper usage.

Series SNV01/SNV02 needle valves must not be employed as the sole means of avoiding hazardous conditions in machinery and installations.

The machinery and installations must be designed in such a manner that faulty conditions and malfunctions will not present hazardous situations for operating personnel.

### *2.3 Qualified Personnel*

Series SNV01/SNV02 must only be used by qualified, knowledgeable personnel trained in correct use of these devices. Qualified personnel are those persons familiar with setting up and assembling these devices, placing them in service and operating them. In addition, such personnel must also be qualified to perform the work associated with the application for which the device is being used.

### ***3 Functional Description***

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Open and close the needle valves by turning the hand wheel. You can regulate the flow by partly opening/closing the valve.

**Caution:** Don't put your hand inside the flow fitting or insert any objects into it. Otherwise, you could injure yourself or damage the device. If necessary, install a suitable guard on the device.

### ***4 Installation and Removal***

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- If necessary, remove all transport restrainers and any remaining pieces of packaging from the fitting (e.g. caps or plugs).
- Be sure the piping is properly aligned to avoid mechanical strain on the device.
- Clean the pipe system before installing the fitting. Soiled piping can negatively impact reliability and service life. If necessary, fit a dirt trap upstream of the flow fitting.
- Be sure the piping is properly aligned to avoid mechanical strain on the device.

### ***5 Installation with Thread Connection***

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**Caution:** Be sure to observe the direction of flow when installing the device

- Before applying any sealing material, check that you can screw the piping easily into/onto the fitting housing.
- Attach suitable sealing material to the pipe ends. When using PTFE sealing tape or hemp packing note the thread direction. Avoid using sealing material unsuitable for your application.
- Screw the piping into/onto the ends of the threads in the flow fitting. Do not use the hand wheel as a lever.
- Do not pressurize the piping system until the sealing material has hardened. See the manufacturer's specifications for the hardening time for the sealing material.
- Check that all joints are tight.

### ***6 Maintenance***

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The device needs regular maintenance. How often you carry out this maintenance will depend on how often the device is used and the conditions of use. The following maintenance work should be carried out:

- Check the packing gland for leakage
- If necessary, re-adjust the packing gland

# SNV02

## Needle Valves made of Stainless Steel, High Pressure Version

- Max. pressure PN 250 and PN 400
- Medium temperatures until 250 °C
- For nominal pipe sizes from 1/8" to 2"
- Process connections G or NPT
- Wetted parts made of stainless steel 1.4571, packing made of PTFE or graphite



### Description:

PKP needle valves model SNV02 accurately regulate the flow of liquids in piping systems.

The devices are designed in two parts, the upper part is screwed into the base and is sealed with PTFE or graphite packing.

### Typical applications:

Versions are available in stainless steel 1.4571 for nominal sizes 1/8" to 2" G- or NPT- screw threads, and for two nominal pressures (PN250 or PN400) These device versions can be used in a wide range of applications.

## Models:

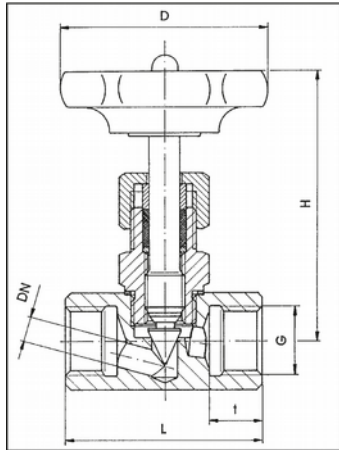
|                 |  |
|-----------------|--|
| <b>SNV02.G:</b> | Thread connection G,<br>acc. to DIN / ISO 228              |
| <b>SNV02.N:</b> | Thread connection NPT,<br>acc. to ANSI / ASME B1.20.1-1983 |

## Nominal pressures:

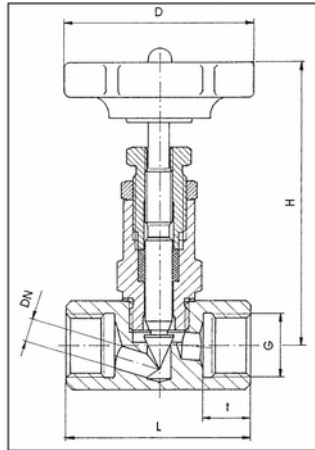
|                     |        |
|---------------------|--------|
| <b>SNV02.x.x.1:</b> | PN 250 |
| <b>SNV02.x.x.2:</b> | PN 400 |

## Dimensions:

### PN 250



### PN 400



| Process connection<br>G | Dimensions in mm    |                       |     |     | Kvs-value*<br>[l/min] |
|-------------------------|---------------------|-----------------------|-----|-----|-----------------------|
|                         | L screw thread<br>G | L screw thread<br>NPT | H   | D   |                       |
| <b>PN 250</b>           |                     |                       |     |     |                       |
| 1/8                     | 45                  | 50                    | 74  | 50  | 4,5                   |
| 1/4                     | 50                  | 55                    | 73  | 50  | 8                     |
| 3/8                     | 55                  | 60                    | 72  | 50  | 9                     |
| 1/2                     | 60                  | 65                    | 83  | 63  | 15                    |
| 3/4                     | 75                  | 80                    | 100 | 63  | 28                    |
| 1                       | 100                 | 105                   | 110 | 80  | 42,5                  |
| 1 1/4                   | 120                 | 125                   | 135 | 100 | 70                    |
| 1 1/2                   | 130                 | 135                   | 140 | 100 | 93                    |
| 2                       | 160                 | 165                   | 150 | 100 | 120                   |
| <b>PN 400</b>           |                     |                       |     |     |                       |
| 1/8                     | 45                  | 50                    | 94  | 50  | 4,5                   |
| 1/4                     | 50                  | 55                    | 93  | 50  | 8                     |
| 3/8                     | 55                  | 60                    | 92  | 50  | 9                     |
| 1/2                     | 60                  | 65                    | 96  | 63  | 15                    |
| 3/4                     | 75                  | 80                    | 108 | 63  | 28                    |
| 1                       | 100                 | 105                   | 123 | 80  | 42,5                  |

## Special versions:

- Compression fitting to DIN 2353, series S and L
- Clamp tapered ring screw joints
- Non-standard sizes up to 4"
- Maximum pressure version up to 630 bar

on request

## Order Code:

Order number: **SNV02.G.1.1.15.0**

Needle Valve made of stainless steel,  
high pressure version

### Model:

G = G-screw thread  
N = NPT-screw thread  
S = Special connection

### Process connection:

1 = Female thread at both sides  
2 = Female/male thread  
3 = Male thread at both sides

### Max. pressure:

1 = PN 250  
2 = PN 400  
9 = Special version

### Nominal pipe size:

06 = 1/8"  
08 = 1/4"  
10 = 3/8"  
15 = 1/2"  
20 = 3/4"  
25 = 1"  
32 = 1 1/4"  
40 = 1 1/2"  
50 = 2"

### Options:

0 = without  
2 = high temperature version up to 250 °C  
9 = please specify in plain text

## Technical Data:

### Material:

Housing: stainless steel 1.4571  
Packing: standard up to 100 °C: PTFE  
high temperature up to 250 °C: graphite

### Max. pressure:

PN 250 / PN 400  
acc. to Model Code

### Max. medium temperature:

standard: 100 °C  
high temperature: 250 °C