



PKP Process Instruments Inc.

10 Brent Drive

Hudson, MA 01749

Tel: +1-978-212-0006

Fax: +1-978-568-0060

PKP Prozessmesstechnik GmbH

Borsigstrasse 24

D-65205 Wiesbaden-Nordenstadt

Tel: 06122 / 7055 - 0

Fax: 06122 / 7055 – 50

Operating Instructions

SNV01/SNV02

Needle Valves

Contents

1 Introduction	2
2 Safety information	2
3 Functional description	3
4 Installation and removal	3
5 Installation with thread connection	3
6 Maintenance	3
7 Specifications	See data sheet in the appendix

1 Introduction

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

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

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

- 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

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

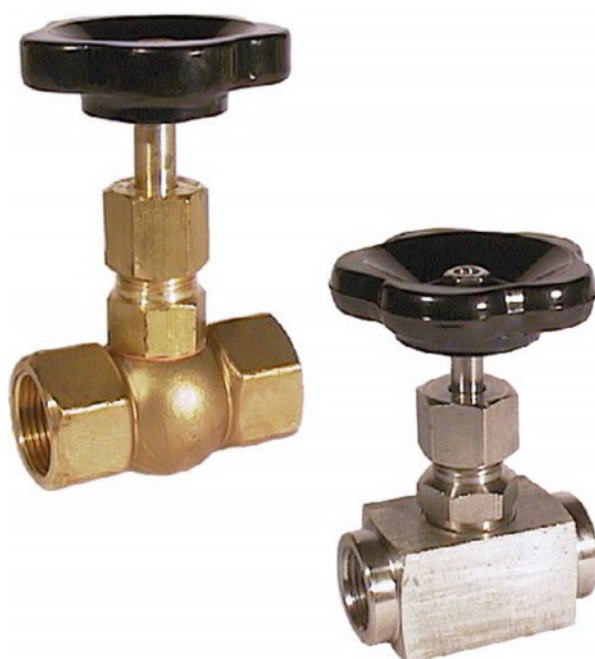
The device needs regular maintenance. How often you carry out this maintenance will depend on how often the device is used and the conditions of use. The following maintenance work should be carried out:

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

SNV01

Needle Valves made of Brass or Carbon Steel

- nominal pressures PN 100 and PN 200
- medium temperatures until 350 °C
- process connections from G 1/8 to G 2
- wetted parts made of brass or carbon steel, plastic or graphite packing



Description:

PKP needle valves of the SNV01 series are used for precise flow control of liquids flowing in pipelines. The devices are constructed in two parts, the upper part is screwed into the basic body and sealed with a plastic or graphite packing.

Typical applications:

PKP needle valves are used wherever liquids flowing in industrial plants have to be shut off, reduced and controlled. They are particularly suitable as shut-off devices for measuring tasks in the areas of level and flow.

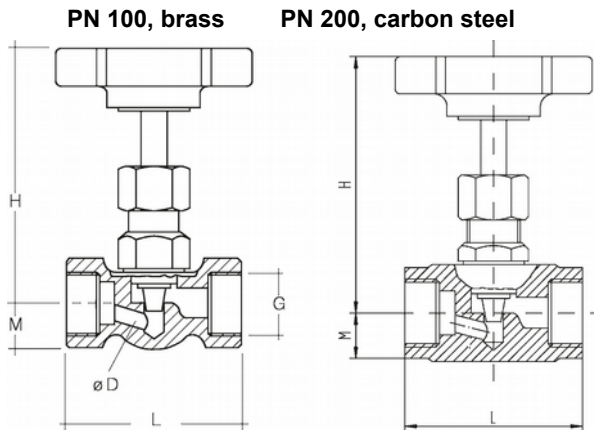
Models:

SNV01.G: thread connection G,
acc. to DIN / ISO 228

Pressure Rating:

SNV01.x.x.1: PN 100 (brass version only)
SNV01.x.x.2: PN 200 (carbon steel version only)

Dimensions:



Process connection G	Dimensions [mm]				
	L	H	M	D	kv* [m³/h]
brass, PN 100					
1/8	50	70	12,5	4	0,24
1/4	50	78	12,5	5	0,48
3/8	50	78	12,5	6	0,6
1/2	55	78	14	6,5	0,66
3/4	67	90	18	9	1,08
1	75	95	22,5	11	1,62
1 1/4	110	105	30	13	3,0
1 1/2	110	110	32,5	15	3,6
2	110	110	32,5	15	3,6
carbon steel, PN 200					
1/8	50	72	12	4	0,24
1/4	50	72	12	5	0,48
3/8	55	72	12	6	0,6
1/2	60	77	14	7	0,74
3/4	75	97	17	9	1,35
1	100	110	22	12	1,66
1 1/4	110	145	28	15	3,10
1 1/2	130	145	33	22	5,56
2	130	145	33	25	5,56

* $\Delta p = 1 \text{ bar}$

Order Code:

Order number: SNV01. G. 1. 1. 15. 0

Needle Valves made of brass or carbon steel

Model:
G = G threaded

Process connection:
1 = female thread on both sides

Material:
1 = brass, PN 100
2 = carbon steel, PN 200

Nominal pipe sizes:

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
9 = special version, please specify in plain text

Technical Data:

Materials:

SNV01.G.1.1: body made of brass
Packing made of Perbunan (G 1/8 to G1/2), or PTFE (G 3/4 to G2)

SNV01.G.1.2: carbon steel body 9 S 20 K
stainless steel spindle 1.4104
Packing made of graphite

Max. pressure:

SNV01.G.1.1: 100 bar
SNV01.G.1.2: 200 bar

Max. medium temperature:

SNV01.G.1.1: 100 °C
SNV01.G.1.2: 350 °C