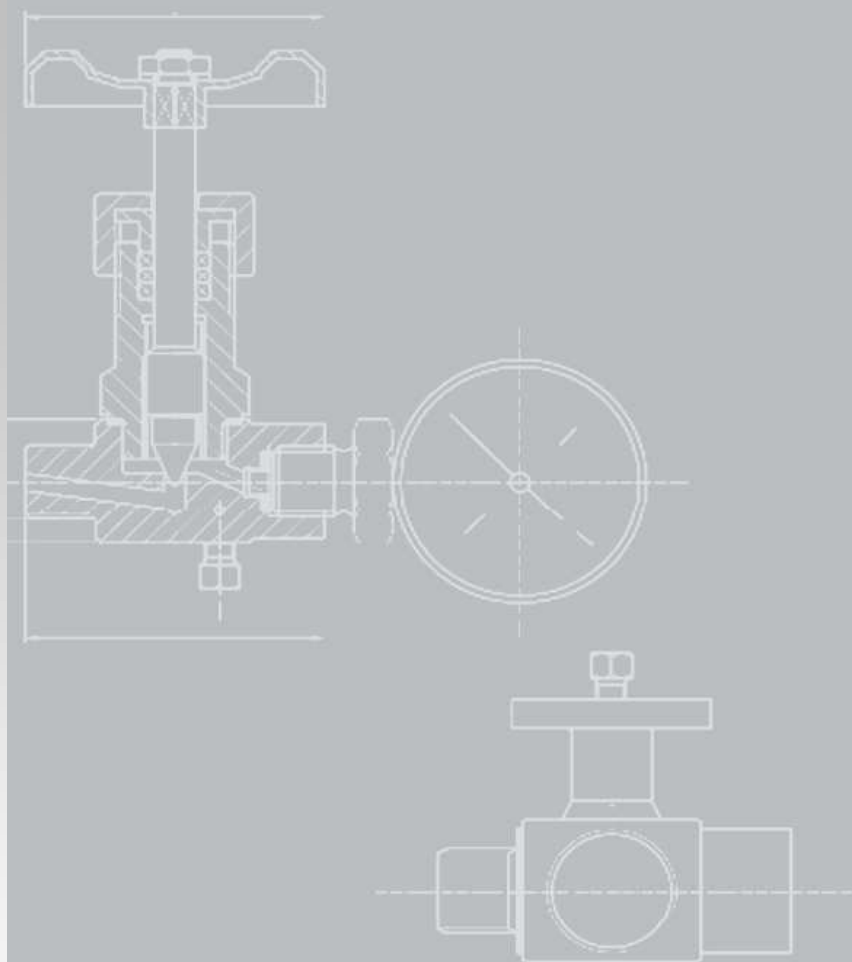




**DS** **DIESSSE** S.p.A.  
Fluid Control



## NEEDLE VALVES

**INSTALLATION & OPERATION MANUAL**

## 1 ADVICE

The following instructions apply to DIESSE needle valves. Before installation you must take care completely these instructions which must always follows our product.

## 2 INSPECTION

Our valves are tested and prepared for preservation according to the requirements stated in the customer's purchase order.

## 3 PRODUCT'S DATA

Codes:

NEEDLE VALVE Class 3000/6000 psi (Light type): DS NV 3000/6000

NEEDLE VALVE Class 3000/6000 psi (Heavy type): DS NV HB 3000/6000

NEEDLE VALVE ANGLE PATTERN Class 3000 ps: DS NV SQ 3000

CHECK NEEDLE VALVE Class 3000 psi: DS NV PT 3000

Body material	A 105 – AISI 316
Max. working pressure (bar) Max. working temperature (°C)	According to the data evaluated by parties during order issuing

## 4 INSTALLATION/OPERATION

It is responsibility of the user to eliminate risks which may endanger the life of the people or the goods.

Installation is the responsibility of the user and shall conform to local safety requirements. Personnel must utilize equipments and protective devices to work with the process where the valve is installed.

It is the responsibility of the end user to eliminate risks which may endanger the life of the people or the goods and to ensure that the valve's materials are compatible with the process fluid; in case of doubts the user must contact the manufacturer.

### 4.1 IMPROPER USE

The following conditions can be considered as improper use:

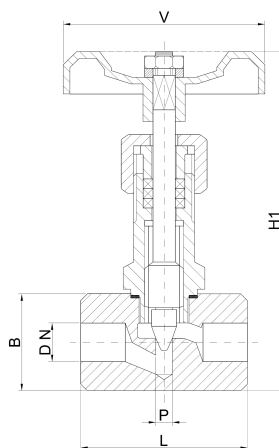
- No-compliance with the in force regulations/laws.
- Utilization of these valves with diameters bigger than DN25 with dangerous mediums belonging to European Directive 97/23/CE.
- Working pressure and temperature not within the limits of the class defined by ANSI B16.34 and/or indications on the valve body.
- No-compliance with the manufacturers warnings with special regard to the maximum temperature and pressure: these values must be within the limits and indications evaluated by the manufacturer. Excessive vibrations, quick changes in pressure and temperature must be avoided.
- Wrong assembling and installing operations.
- Wrong re-installation after maintenance operations.
- Modifications or interventions on the valve that are not authorized by the manufacturer.

- No-original spare parts replacement.
- No-compliance with the instructions.
- Utilization of the valve by no-authorized personnel.
- Exceptional events such as earthquake, flood, accidental crash etc. which could damage the valve .
- Maintenance interventions carried out without depressuring, drain and neutralizing all the components on the line where the valve is installed.
- Maintenance operations carried out by no-skilled personnel.
- Utilization of valve with oxygen.

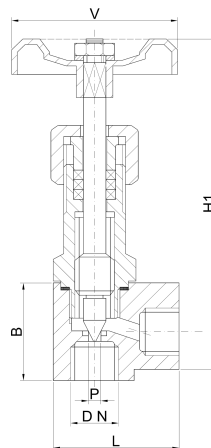
## 5 ASSEMBLING OPERATIONS

Connect piping with the threaded parts and close properly the parts placing suitable gaskets to avoid fluid leakage. When tightening the connection parts pay attention and do not exceed with the tightening to avoid the thread damage.

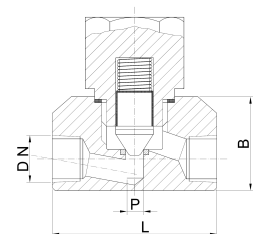
### DRAWINGS



LIGHT TYPE: DS NV 3000/6000



DS NV SQ 3000



DS NV PT 3000

HEAVY TYPE: DS NV HB 3000/6000

## 6 MAINTENANCE

- Maintenance is the responsibility of the end user.
- All the maintenance and check performance on the valve must be carried out at room temperature and pressure and it should be free of the medium inside.
- All the maintenance activities must be carried out by skilled personnel provided with the devices normally used with the process where the valve is installed and in compliance with the local law and regulation.
- Before maintenance to avoid injuries it is necessary to depressure, drain and neutralize all the components on the line where the valve is installed, as soon as the pressure is discharged, operate the valve a couple of time to ensure that all medium and pressure inside is vented out.

- Check periodically the valve body corrosion damages.
- Open/close operation and tightening of the packing shall be carried out at least twice a year. In case of replacement use original spare parts only.
- Any signs of leakage at packing should be addressed immediately by depressurizing the valve and tightening the packing gradually and evenly. If body seat or body seal leakage is suspected, than the valve require a complete overhaul. Inspection and repair must be carried out at our site or in approved repair shops after decontamination.
- The manufacturer denies all responsibility in case of non respect of the above instructions and/or in case of valve modification without its written approval.

## **7 SPARE PARTS**

No particular spare parts are needed.

**For further information or clarifications contact:**

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**tel. +39 (0)2 96731337 - fax +39 (0)2 96731683**