

MICROFINISH NEEDLE VALVES

INSTALLATION OPERATION AND MAINTENANCE MANUAL



MICROFINISH VALVES PVT. LTD. 

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ITEM CODE: NVSE001 "MICROFINISH" MAKE "NEEDLE VALVE"

Features	: Single Piece robust body construction, Screwed-in bonnet with aesthetically functionally designed hand-wheel with powder coated painting.
Application	: Pneumatic System, Air lines, steam lines, Gas & Oxygen Acetylene Industries.
Design Standard	: Manufacturer's Standard
Testing Standard	: BS:6755 (Part-1)
Type	: 2Way & 4Way Port Valve
Size Range	: 6mm to 50mm
Rating	: Class -800 / Class-1500
End Connection	: Screwed Male/ Female Ends to BSP/BSPT/NPT Socket weld ends to ASME B16.11

Design Standard /
Manufacturer standard: BS EN 122266 Part 1
Testing Standard : BS EN 122266 Part 1
Service : Industrial / Water

Material of Construction:

Body/Bonnet	: SS-410/SS-316/SS-304/SS-316L
Needle	: SS-410/SS-316/SS-304/SS-316L
Packing / Seal	: PTFE /PA-12
Working Pressure	: Pneumatic Test 7 kg/cm ² , Hydro Test 210 g/cm ²
Working Temp	: 180° C to 425° C
Operation	: Hand Wheel Operated (Standard)

Introduction

This section provides information about important safety requirements as well as highlighting the precautions taken at Microfinish Valves to ensure the cleanliness of our products. Details regarding servicing are also introduced.

Installation

This details the method of installing the valve on site, and includes information on storage, unpacking and inspection. Preparation of the valve and site is also discussed to allow ease of installation and operation.

Personnel carrying out Assembly / Joining / Welding / Inspection must be adequately trained and hold the necessary approvals. Valves should be installed in any position and ensure that environmental conditions (atmospheric pollution) are compatible with the valve materials. (NOTE: Ensure there is enough space around the valves installed position to allow the removal and refit of the headwork / valve).

Installation Overview

The quality of performance in service is a function of the care taken to ensure good installation. A careful study of these instructions is therefore recommended, as properly installed equipment will normally operate for long periods without problems. The most critical point in the lifetime of a valve is the time of installation, therefore, proper care at this stage and during any maintenance will increase the probability of trouble free valve service. It is important to maintain cleanliness throughout all stages of the installation, with particular care being taken not to contaminate the internals of the valve with grease, moisture, grinding dust, weld / brazing spatter or other foreign matter. Clean practices will save time later with reduced 'flushing' and maintenance.

Before installation the engineer should check for:

Damaged Packaging
Bent or Distorted Items
Scratches, Dents or Damage

Maintenance :

Provides information relating to the on-site maintenance of the supplied valve, as well as discussing common problems and solutions.

Do not use the valve to fluid containing slurry. (The valve will not operate properly.) Do not exert excessive force in closing the valve.

Don't take the indicator apart. - Turn right the handle when the divide is set.

In addition to this, a regular inspection should take place to ensure correct operational condition.

Regular inspections are suggested on a monthly basis and maintenance work should be carried out in line with this service manual.

WARNING !

BEFORE ANY INSTALLATION AND MAINTENANCE WORK CAN COMMENCE ENSURE THE VALVE AND SURROUNDING SYSTEM IS DRAINED OF PRESSURE AND ISOLATED.

Remove the headwork before installation and cover the top of the body to protect the internals of the valve from particulate contamination.

Also ensure that enough room is left above / around the valve for the headwork once this is replaced after installation.

Identify the intended flow direction and match the valve orientation with its flow direction arrow.

Ensure that all end connections to the valve are in line and that the pipe work is supported to reduce unwanted stresses, loading and vibration on the valve and system pipe work.

Ensure that all joining materials / components used during the installation of the valve are compatible, and will not cause any deterioration to the valve structure.

Safety :

Read and understand these instructions before installing the valve. Improper installation, operation or maintenance by the owner or operator of this valve can result in personal injury.

Only use genuine Microfinish Valves spares to ensure safe and optimum performance.

Prior to the installation of the valve into the system and any maintenance work, ensure the system is de- pressurized and isolated for the duration of the installation and during any subsequent maintenance.

The valve must be installed within a system that has adequate draining and venting provisions.

In cryogenic applications the area of pipe-work to receive the valve must be allowed to reach ambient temperature. It is essential that the installers and operators are conversant with all of the safety issues relating to the medium within the system, and are fully trained to an adequate standard.

Wear safety glasses and gloves during any installation or operation of the valve.

TOOLS REQUIRED:

No special tooling is required for the installation of this valve.

Note:

If unsure about the installation and operation of this valve please contact Microfinish Valves before you continue.