

# T1700

## Needle Valve



Tradinco Instruments T1700 needle valve is a precision flow regulating and shut off needle valve.

The maximum admissible pressure is 400 bar.

Both the pressure inlet and outlet of the valve have a 1/8 NPT female connection.

For mounting the valve into a panel, Ø17mm hole is required.

## Installation



The instrument can only be installed by trained personal.



Check tread of the pressure ports and fittings before installation and make sure they are clean and not damaged.

### Installation into panel

- If the needle valve is used in a pressure system and is attached to tubing, mount the needle valve into a bracket or a panel to relief the weight of the needle valve on the tubing.
- Remove the black plastic cap on the control knob.
- Unscrew the Philips head screw and remove the control knob
- Remove front ring
- Cut a panel hole of Ø17 mm
- Fit the needle valve behind the panel install the front ring
- Install the control knob with the Philips head screw



Tapered NPT treads usually are screwed in together with Teflon tape to protect against galling and to improve sealing. It is important that no remains of the tape are able to get into the interior of the needle valve.



The valves have a soft seat and a tight shut-off. It is not necessary to close them with excess force.

### Installation of pressure connections

- Connect supply to the inlet connection on the bottom with a 1/8 NPT male coupling.
- Connect outlet with a 1/8 NPT male coupling.
- Close the valve by turning the control knob fully counter clockwise.
- Supply pressure to the needle valve
- Check for leaks
- If any leaks are detected; turn the control knob fully counter clockwise, relief pressure of the entire pressurised system, eliminate the leaks and repeat procedure from step "Supply pressure needle valve" until no leaks are detected.



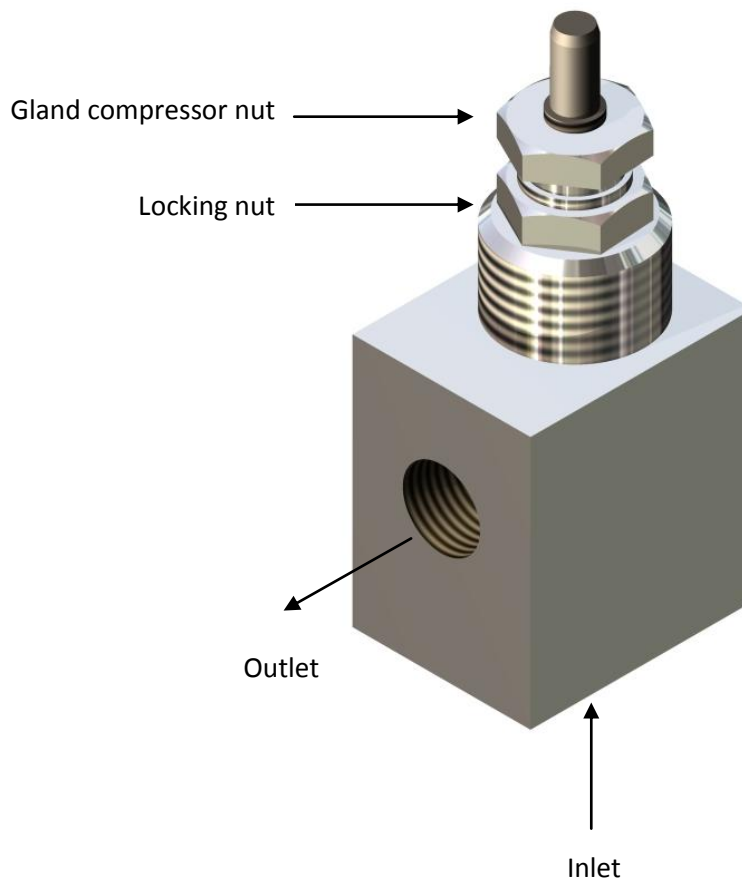
Be careful when you are working with high pressure.

## Maintenance

If a leakage is detected when the valve is closed, the following procedure has to be followed:

- Open the valve.
- Unscrew the 11 mm locking nut.
- Adjust the 11mm gland compressor nut. Adjustment must be made in order that a light friction is detected when turning the control knob.
- When ready tighten the lock nut again.

A spare part kit with new needle and seats is available at Tradinco Instruments.



## Specifications

Media:	All gasses / liquids compatible with the materials of construction
Pressure range:	-1 to 400 bar
Materials of construction:	- Body: Brass - Needle: Stainless steel AISI 316 - Seat: Teflon - Seals: Teflon
Operating temperature:	-20° C to +75° C
Pressure connections:	1/8" NPT female
Dimensions (LxHxD):	65x20x25mm
Weight:	±0.2 kg
Application:	Needle valve

## Warranty

During the design and manufacturing of this instrument the at most attention has been given to quality and durability.

**This User Guide contains information needed for the safe and effective use of the capabilities of the instrument.**

**Please read the User Guide carefully before operating the instrument. By doing so possible damage to the instrument or damage caused by the incorrect use of the instrument can be avoided.**

TRADINCO INSTRUMENTS warrants the instrument in accordance with the Standard Terms and Conditions of the Instrument Trade as issued by the Association bearing the name "Federation Het Instrument" (The Instrument Federation, (filed with the Clerk of Utrecht District Court on 13 January 1993 under number 16/93 and with the Chamber of Commerce and Industry in Amersfoort on 18 January 1993. A copy is available on request.

TRADINCO INSTRUMENTS warrants that this product will be free from defects in materials and workmanship for a period of 12 months from the date of shipment. If any such product proves defective during this warranty period, TRADINCO INSTRUMENTS, at its option, will either repair the defective product without charge for parts or labour, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, Customer must notify TRADINCO INSTRUMENTS of the defect before the expiration of the warranty period and make suitable arrangements for the performance of the service.

Customer shall be responsible for packaging and shipping of the defective product to the service centre designated by TRADINCO INSTRUMENTS, with shipping charges prepaid.

If no defect can be found Customer may be charged for costs of the investigation.

This warranty does not apply to any defect, failure or damage caused by:

- Improper use of the instrument.
- Normal wear of the product.
- Modification or repair carried out by or on behalf of the owner or by a third party.
- Implementation of modifications to the product that are not supplied or implemented by TRADINCO INSTRUMENTS.

TRADINCO INSTRUMENTS and its vendors will not be liable for any indirect, special, incidental or consequential damages irrespective of whether TRADINCO INSTRUMENTS or the vendor has advance notice of the possibility of such damages.

The type number of the product, as listed on the instrument tag plate, should always be mentioned in any correspondence concerning the product.

### **Tradinco Instrumenten-Apparaten b.v.**

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# Declaration of conformity

We ,

**Tradinco Instruments  
Radonstraat 250  
2718 TB Zoetermeer  
The Netherlands,**

Declare as manufacturer, that the following product(s):

## **T1700 needle Valve**

has been evaluated and found compliant with the requirements of article 4, paragraph 3 of  
**Directive 2014/68/EU of the European Parliament ( PED).**

The above mentioned instrument and its components are intended for fine flow regulation and shut off purposes in pneumatic control systems.

As stated in the directive 2014/68/EU, all equipment covered by article 4, paragraph 3 is subject to SEP (Sound Engineering Practice), and as such these products do not carry a CE mark.

### **Basic specifications of the system:**

Medium:	pressurized air
Total pressurized system Volume:	<= 1 liter
Maximum Safe working pressure:	400 barg
Design Pressure:	600 barg
Test/burst pressure:	> 800 barg

### **Limited responsibility:**

The declaration above is solely applicable to the instrument as manufactured by Tradinco. It is the user's responsibility to ensure all applicable regulations and safety measures are met/taken to ensure safe operation and working conditions when the instrument is connected to integrated in external circuits, as well upstream (supply) as downstream.

Date: September 22, 2011

Signature:

Peter Groote  
Technical Director,  
Tradinco Instruments

