IPDE-IOM-20K-NEEDLE-VALVE Effective: ISS - : November 2021 Ver1.



# **Installation and Operation Manual 20K Needle Valves**





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# **Installation and Operation Manual**

# 20K Needle Valves

#### **Parker Hannifin**

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## **IDENTIFICATION OF HAZARDS**

NEVER adjust valves under pressure.

NEVER slacken or remove any valve parts under pressure.

NEVER use any mechanical aids i.e. wrenches, extensions to operate handles.

NEVER carry valves by the handle.

NEVER obscure valve body marking.

NEVER remove end connectors.

## **INSTALLATION**

Wear suitable PPE before installation and follow appropriate site safety procedures.

Before installation, ensure that all valves are in the closed position.

Installation must ensure that the bleed holes (2) are visible on at least one side.

Valve must be installed in the correct flow direction as indicated on the Valve body.

Phastite: Assembly instructions can be found in Catalogue 4235-PH & BULLETIN 5909

Cone and Thread: Assembly instructions and Torques can be found in Catalogue 02-0124SE

MPI: Assembly instructions can be found in Catalogue 4234-MA

(See Catalogue 4190-HH/20K for full product offering)

## HANDLING AND STORAGE

#### Handling

Do not lift or carry by the operating handles, as this may cause damage.

#### Storage

There is no specified shelf-life.

Boxed products should be stored in a covered area, preferably indoors, and away from excessive moisture, heat, or airborne contaminants.

The use of desiccant or corrosion inhibitors is not required during normal storage periods.







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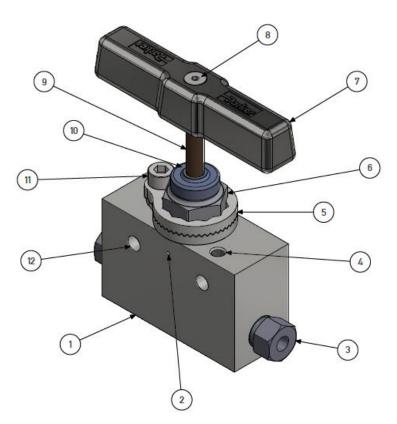
#### **OPERATION**

#### **Needle Valve:**

To close: Rotate handle (7) clockwise until a stop is felt.

To open: Fully rotate the handle (7) anti-clockwise until a stop is felt. There are approximately 6 rotations between fully open and fully closed.

Do not force rotation past the stop, as damage may occur.



- 1. BODY
- 2. BLEED HOLE
- 3. VALVE CONNECTIONS
- 4. PANEL MTG. HOLE
- 5. TRU-LOC LOCKING MECHANISM
- 6. GLAND ADJUSTER
- 7. HANDLE
- 8. C/S SCREW
- 9. STEM
- 10. DUST CAP
- 11. M6 SOCKET HEAD CAP SCREW
- 12. BRACKET MOUNTING HOLES

#### **MAINTENANCE**

Parker 20K Needle Valves are supplied ready for service at their rated design pressure and should not normally require adjustment.

Gland adjustment becomes necessary when the valve is visibly leaking through the bleed hole(s) (2) or on the stem (9) below the handle (7).

# 20K Needle Valve Gland Adjustment.

CAUTION: Adjustment of the gland must be carried out at zero pressure

- 1. Fully open the valve by turning the handle (7) in a counter clockwise direction.
- 2. Unscrew C/S Screw (8) on handle (7) and remove handle from stem (9).
- 3. Unscrew Socket Head Cap Screw (11) from Tru-Loc Plate and remove Tru-Loc Mechanism (5).
- 4. Tighten Gland Nut (6) to 45 Nm
- 5. Re-fit Tru-Loc plates (5) and secure in position with Socket Head Cap Screw (11) to 7.9 Nm.
- 6. Re-fit handle (7) on to Stem (9) and secure into position with C/S Screw (8) to 2 Nm.





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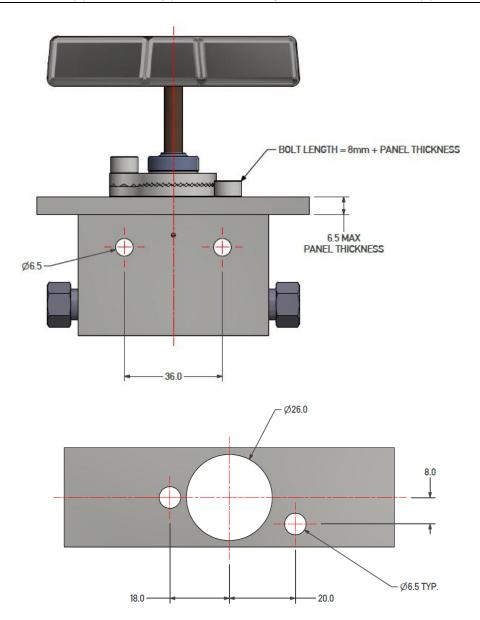
#### **FURTHER INFORMATION**

Needle valve maximum Cv value is 0.66 (Dependant on fitting size).

For Panel Mounting of the 20K Needle Valve please follow the below:

# 20K Needle Valve Panel Mounting.

- 1. Unscrew C/S Screw (8) on handle (7) and remove handle from stem (9).
- 2. Unscrew Socket Head Cap Screw (11) from Tru-Loc Plate and remove Tru-Loc Mechanism (5).
- 3. Position valve body in panel and fasten into position with an M6 Socket Head Cap Screw (See Bolt Length note below) using mounting hole (4).
- 4. Re-fit Tru-Loc plates (5) and secure in position with M6 Socket Head Cap Screw (11) Length 20mm to 7.9 Nm.
- 5. Re-fit handle (7) on to Stem (9) and secure into position with C/S Screw (8) to 2 Nm.







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## **WARNING - USER RESPONSIBILITY**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyse all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalogue and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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