BALON®

Made in USA

NEEDLE VALVE INSTALLATION, OPERATION & MAINTENANCE MANUAL

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⚠WARNING **THE NEEDLE VALVE BONNET SHOULD NEVER BE REMOVED OR LOOSENED. NEEDLE VALVES SHOULD BE OPERATED WITH THE VALVE STEM POINTED AWAY FROM THE OPERATOR AND OTHER PERSONNEL.**

BALON NEEDLE VALVE STORAGE

Balon Corporation ships needle valves in the open position. In order to protect valves during shipment, Balon ships needle valves in cardboard cartons.

Valves should always be stored in the fully open position and should be kept indoors under clean, dry conditions.

BALON NEEDLE VALVE INSTALLATION

Balon needle valves rated for 6,000 psi seal bi-directionally and may be installed in either direction.

Balon needle valves rated for 10,000 psi are uni-directional. An arrow on the body of a Balon 10,000 psi needle valve indicates the required flow direction. These valves are not bi-directional.

Needle valves should be installed in the open position.

Balon recommends the use of a high-quality thread compound when installing needle valves. A back-up wrench should be placed on the valve body at a point near to the pipe connection that is being adjusted.

Caution should be exercised when installing needle valves with male ends. Excessive torque and/or side loading could result in damaging the male end and compromising safety.

Trash, such as welding slag, dirt, sand, and other foreign matter, should always be flushed from the line before operating any valve.

Piping systems are often pressure tested prior to their being placed in service. With the needle valves in the open position or partially open position, valve shell testing may be done at a pressure up to 1.5 times the rated working pressure of the valves. Valves should be kept in the open position or partially open position during shell testing. Valve shell testing should never be done with the valves in the closed position.

With needle valves in the fully closed position, valve seat testing may be done at pressures up to 1.1 times the rated working pressure of the valves.

The pressure test medium should be eliminated from the system after testing has been completed. Water that is allowed to remain trapped inside valves can freeze. Water that freezes inside valves can damage the valves and associated pipe.

A needle valve should never be used to support any weight other than that of the adjacent instrumentation piping.

MAINTENANCE FOR BALON NEEDLE VALVES

Balon valves require no regular maintenance to maintain proper operation and sealing. Balon stems require no adjustment or greasing for proper sealing and operation.

BALON NEEDLE VALVE OPERATION

A Balon 6,000 psi needle valve is designed to be used in the fully open or fully closed position. Using a 6,000 psi needle valve in the partially open position can result in seat damage and, under certain conditions, damage to other valve components.

A Balon 10,000 psi needle valve is metal-seated. The Balon 10,000 psi needle valve is designed for metering and may be operated in the partially open position.

Applying excessive torque in an attempt to turn a needle valve handle beyond the fully open or fully closed position could result in damage to the valve.

A valve should always be operated within its pressure and temperature limits.

It is good practice to operate any valve periodically in order to assure that the valve stem is able to move freely.

A needle valve should be operated with the valve stem pointed away from the operator and other personnel.

The Balon needle valve is not designed for field repair. The needle valve bonnet should never be removed or loosened.

For cut sheets and other information, please see:
https://www.balon.com/downloads/CompleteCatalog.pdf

For additional information, contact the factory at sales@balon.com or at 405-677-3321.

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