



H6800 SERIES INSTRUMENTATION BALL VALVES

General Note

When a ball valve is removed or installed in a tube system, a back-up wrench (spanner) must be used on the end connector, NOT on the valve body.

Tube Fitting Connectors (LET-LOK® Twin-Ferrule Compression Fittings)

1. Insert the tubing, nesting it in the counterbore.
2. Ensure that the nut is finger tight, and mark the nut for reference.
3. Now tighten the nut 1 1/4 turns.

Note: For sizes 1/16 to 3/16 inch (2 to 4 mm), tighten 3/4 turn only from finger tight.

Taper Threaded Connectors

(NPT, BSPT, Male or Female)

1. On the male thread of the connector, apply PFTE tape or high-quality sealing compound. When PFTE tape is used, no more than two full turns of the tape should be applied. The tape must not overhang the end of the connector.
2. Screw the valve and connector together until hand tight.
3. With the proper size wrench (spanner), holding both sides of the connector (not the valve body), continue to tighten until a leak-tight joint is achieved.

Welded Connectors

1. We recommend disassembling all valves prior to welding in order to avoid damage to seats and seals.
2. If the valve must be welded when fully assembled, put the valve in the full open position, and continuously purge it with cool gas. People who have been trained in established procedures should perform all the welding tasks.
3. For socket weld ports: insert the tube into the connector until it bottoms out against the stop, then pull it back approximately 1/16 inch (1.5 mm) and weld. This will help to avoid excess static stress.

Packing Adjustment

Due to the varied service applications of the valve, packing adjustment may be occasionally necessary. We recommend Initial adjustment after installation and prior to start-up.

1. Remove the handle by turning the set screw counter clockwise using the appropriate hex-socket tool.
2. Tighten the packing nut 1/8 to 1/4 turn.
3. Replace the handle and retighten the set screw.

Installation of Panel-Mounted Valves

Valve Size	Max. Panel Thickness	Panel Hole Diameter
1/4	11/32" (9mm)	13/16" (2mm)
3/8	-	-
1/2	-	-

1. Remove the handle by turning the set screw counter clockwise using the appropriate hex-socket tool.
2. Insert the valve through the panel hole and assemble the panel nut.
Note: If the valve is mounted to a thin panel, it may be necessary to fit a spacer (washer) to the valve to allow proper engagement of the panel nut.
3. If required, adjust the stem packing as explained above.
4. Replace the handle and retighten the set screw.

Maximum Allowable Working Pressures and Temperatures

Seat Material	Valve Body Material	
	Brass	Stainless Steel
TFM 1600 (Teflon®)	2,800 psig@100°F	2,800 psig@100°F
PCTFE (KEL-F®)	3,000 psig@100°F	6,000 psig@100°F
PEEK	3,000 psig@100°F	6,000 psig@100°F

For allowable pressure at various temperatures, see graph in main catalogue.

Warning! For Your Safety

Select the right component for safety's sake: The total design of the system must be taken into consideration when selecting components in order to ensure that your Ham-Let products provide safe, trouble-free operation. It is the responsibility of the system designer and the user to consider the compatibility of the materials, of the components and system, the function of the component, appropriate ratings and to ensure proper installation, operation and maintenance.

Improper selection or use of products can cause property damage or personal injury, in respect of which the system designer and/or the user shall be solely liable and responsible.