



**INSTALLATION – MAINTENANCE MANUAL  
SERIES H, HP & HX**

During shipment, storage, and in operation, the valve should be fully open or fully closed (“open” is preferred for shipping and storage). Do not use in intermediate positions without knowledge of flow and pressure drop.

ITEM	NAME	MATERIAL	QTY.
1	Body	Stainless Steel 316	1
2	End Connector	Stainless Steel 316	2
3	Ball	Stainless Steel 316	1
4	Seat*	PVDF / PEEK	2
5	Stem	Stainless Steel 316	1
6	Body Seal*	PTFE	2
12	Thrust Washer*	RPTFE / PVDF	1
14	Stem Packing*	RPTFE	1
15	Packing Gland	Stainless Steel	1
19	Lock Washer	Stainless Steel	2
23	Stop Pin	Stainless Steel	1
25	Lever Handle	Stainless Steel	1
25a	Pointer Handle	Mazak 3	1
26	Lock Nut	Stainless Steel	1
28	Handle Sleeve	Vinyl	1

\*Items included in repair kit

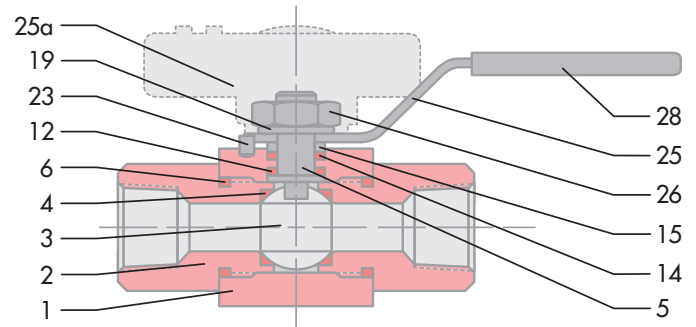
**Dismantling Instruction:**

**CAUTION- Ball Valves can trap pressurized media when closed**

1. Remove the valve from the pipeline placing the wrench only on the end connector for each side of the pipe.
2. Clean the valve of any residual media.
3. Remove the retaining pin. Take out each end connector, holding the body while unscrewing the ends
4. Ensure that the ball is in the closed position and push the ball and seats out, in either direction.
5. Remove the handle retaining nut and remove the handle.
6. Push the stem out through the body bore to access both stem seals and remove them.
7. Inspect the ball to ensure no signs of wear or marks, if it has either, consult factory for a replacement ball. Visible lines which can not be easily felt are acceptable on ball surface.

**Assembly**

1. Ensure that you have the correct repair kit for the



pressure rating of the valve (The repair kit contains the recommended spares).

2. Ensure that all parts are cleaned prior to assembly.
3. Place the stem seal (5) onto the stem (9), being careful not to damage it.
4. Insert the stem through the stem hole, pushing firmly into place. Put the stem packing (10) onto the stem and fit the packing gland (12) and lever handle (13) in that order then apply the washer (8) and nut (11) carefully, so as not to cross thread it. Tighten the handle nut and ensure that the stem turns smoothly.
5. Place the valve seat (4) into the bore on one side, make sure the flat face is pointing away from the center of the valve.
6. Insert the ball ensuring that the slot fits onto drive key on the bottom of the stem, then turn the handle 90° to hold the ball in place. Repeat step 5 for second seat.
7. Place the new body seals (5) onto each end connector and insert into the valve body and with the ball in the closed position, tighten the end connectors to a torque of 163 ft lb (220 Nm) both sides. Install the retaining pins.
8. Finally adjust the handle nut so as to stop any leaks but without tightening too tight so as to cause excessive torque for turning the valve (Normally hand tight plus 1/4 turn.)