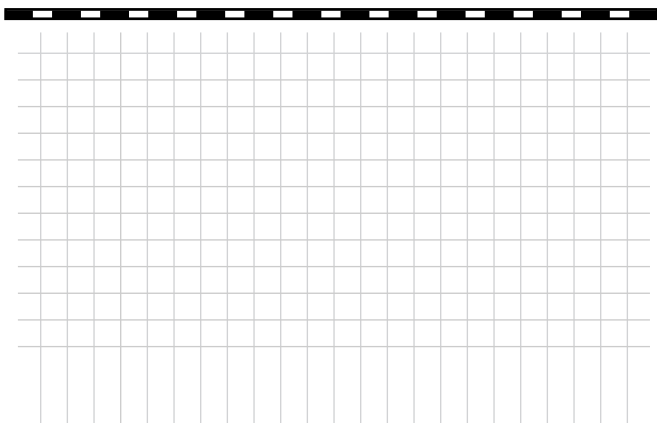


ZT Series Ball Valve

Operating, Installation & Maintenance Manual

*Corrosion Resistant Fluid and
Air Handling Systems.*

SIMTECH



SIMTECH
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Installation Instructions For Simtech Valves

SIMTECH RECOMMENDS READING THE FOLLOWING INFORMATION PRIOR TO INSTALLING AND USING OUR VALVES, STRAINERS, CONTROLS AND OTHER ASSOCIATED PRODUCTS.

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.

1. Simtech guarantees its products against defective material and workmanship only. Simtech assumes no responsibility for damage or injuries resulting from improper installation, misapplication, or abuse of any product.
2. Simtech assumes no responsibility for damage or injury resulting from chemical incompatibility between its products and the process fluids to which they are subjected. Compatibility charts provided in Simtech literature are based on ambient temperatures of 70F and are for reference only. Customer should always test to determine application suitability.
3. Consult Simtech literature to determine operating pressure and temperature limitations before installing any Simtech product. Note that the maximum recommended fluid velocity through any Simtech product is eight feet per second. Higher flow rates can result in possible damage due to the water hammer effect. Also note that maximum operating pressure is dependent upon material selection as well as operating temperature.
4. Simtech products are designed primarily for use with non-compressible liquids. They should NEVER be used or tested with compressible fluids such as compressed air or nitrogen.
5. Systems should always be depressurized and drained prior to installing or maintaining Simtech products.
6. Temperature effect on piping systems should always be considered when the systems are initially designed. Piping systems must be designed and supported to prevent excess mechanical loading on Simtech equipment due to system misalignment, weight, shock, vibration, and the effects of thermal expansion and contraction.
7. Published operating torque requirements are based upon testing of new valves using clean water at 70F. Valve torque is affected by many factors including fluid chemistry, viscosity, flow rate, and temperature. These should be considered when sizing electric or pneumatic actuators.
8. Due to differential thermal expansion rates between metal and plastic, transmittal of pipe vibration, and pipe loading forces **DIRECT INSTALLATION OF METAL PIPE INTO PLASTIC CONNECTIONS IS NOT RECOMMENDED.** Wherever installation of plastic valves into metal piping systems is necessary, it is recommended that at least 10 pipe diameter in length of plastic pipe be installed upstream and downstream of the plastic valve to compensate for the factors mentioned above.

FLANGED CONNECTION:

Flange bolts should be tight enough to slightly compress the gasket and make a good seal, without distorting or putting excessive stress on the flanges. Suitable washers should be used between the bolt head and flange and the nut and flange. Bolts should be tightened in alternating sequence.

RECOMMENDED FLANGE BOLT TORQUE

VALVE	BOLT	TORQUE
SIZE	DIA.	FT. LBS.
1/2"	1/2"	10-15
3/4"	1/2"	10-15
1"	1/2"	10-15
1-1/2"	1/2"	10-15

FLANGE	BOLT	TORQUE
SIZE	DIA.	FT. LBS.
2"	5/8"	15-25
2-1/2"	5/8"	20-25
3"	5/8"	20-25
4"	5/8"	20-25

NOTE: USE WELL LUBRICATED METAL BOLTS AND NUTS.

Adjustment / Replacing Seals For ZT Series Flanged Ball Valve

SIMTECH RECOMMENDS EXTREME CAUTION MUST BE TAKEN WHEN WORKING ON THIS VALVE. THE PIPING SYSTEM MUST BE DEPRESSURIZED AND DRAINED. PROPER CARE MUST BE TAKEN. CONSULT M.S.D.S. (MATERIAL SAFETY DATA SHEETS) INFORMATION REGARDING YOUR SPECIFIC APPLICATION AND MEDIA.

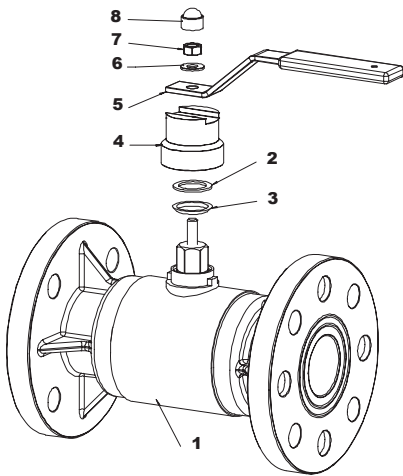
Tightening Stem packing on ZT Series ball valve

1. Remove the cap (part 8) with flat head screw driver
2. Using a adjustable wrench turn nut (part 7) in clockwise direction

Replacement of Stem Packing (1/2" to 2" only)

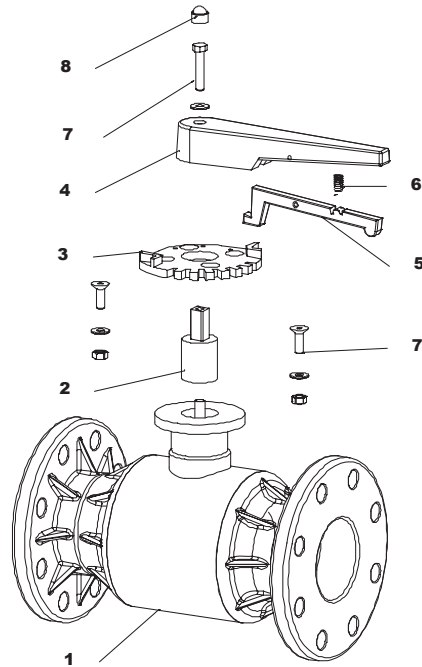
- 1 Remove the cap (Part 8) with a flat head screw driver
2. With an adjustable wrench remove the nut (part 7)
3. remove drive socket (part 4) by pulling straight up.
4. Pull packing out (Parts 2 & 3) & replace with new packing.
5. replace the drive socket and tension nut & cap.

1/2" to 2"



Number	Description	Material
1	Body	PP, PVDF
2	Flat stem seat	PTFE
3	Conical stem seat	PTFE
4	Drive socket	PP, PVDF
5	Handle	Stainless Steel & PP
6	Washer	Stainless Steel
7	Nut	Stainless Steel
8	Cap	PE

2 1/2" to 4"



Number	Description	Material
1	Body	PP, PVDF
2	Drive socket	Al
3	Plate	PP
4	Handle	PP
5	Trigger	PP
6	Spring	Stainless Steel
7	Screws and bolts	Stainless Steel
8	Cap	PE

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Web site: www.SimtechUSA.com

WARRANTY

Simtech Industrial Products, Inc. products are warranted to be free from defects in materials and workmanship for one (1) year from date of shipment. No claim shall be permitted under this warranty unless Buyer gives Simtech Industrial Products, Inc. written notice of all respects in which Buyer claims the product to be defective. Notice must be received within ten (10) days from the date which the Buyer discovers, or should have discovered the defect. Buyer shall give Simtech Industrial Products, Inc. a reasonable opportunity to inspect the product after notice has been given. This warranty shall not apply to any products or components, which have been subjected to abnormal use, negligence or accident.

Seller's sole obligation under this warranty shall be limited solely on the repair or replacement, as elected by Simtech Industrial Products, Inc., of defective or non-conforming material. To the maximum extent permitted by law, Buyer irrevocably waives all claims for money damages relating to the condition, use and performance of the goods purchased. In no event shall Simtech Industrial Products, Inc. liability exceed the purchase price of the product sold by Simtech Industrial Products, Inc.

In no event, whether because of a breach of warranty or representation or any other cause, whether based upon contract, tort, warranty or otherwise, arising out of the performance or nonperformance by seller of its obligations under this agreement or with respect to the products sold pursuant here to; shall seller be liable for lost earnings, income or profits or indirect, incidental, liquidated or consequential damages.

The implied warranties of merchantability and fitness for a particular purpose except as set forth in this warranty, express or implied, are hereby disclaimed and excluded. Nothing shall be construed as an additional warranty unless specifically designated as such in writing and signed by Simtech Industrial Products, Inc.

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