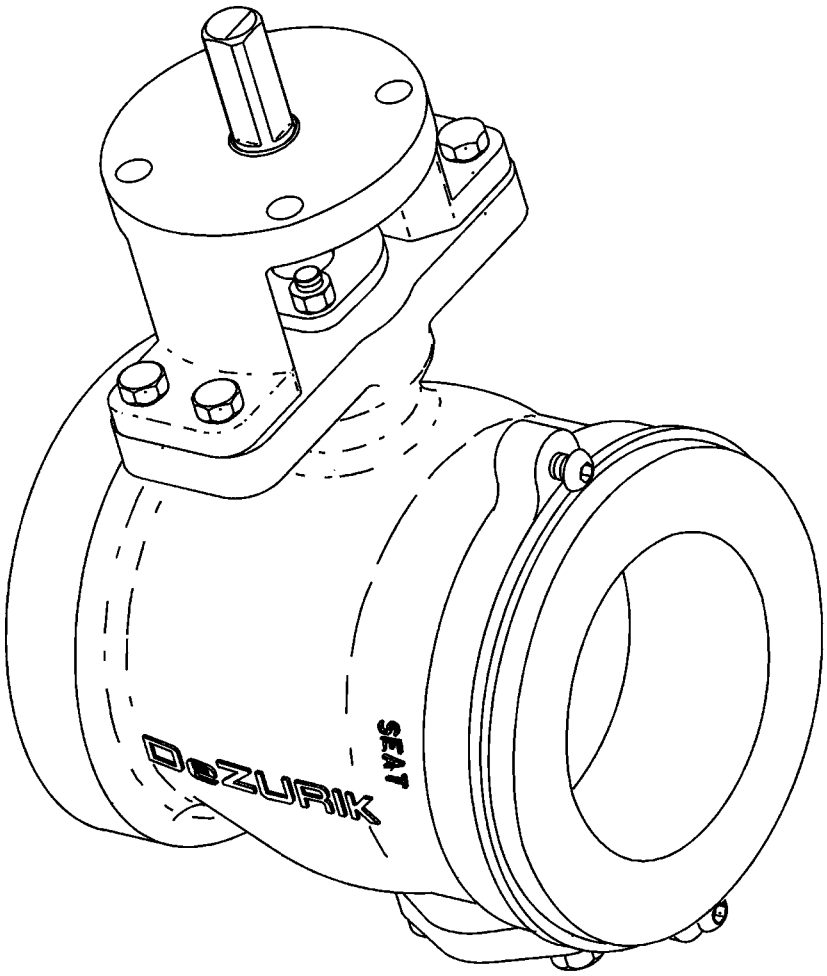
DeZURIK VPB V-PORT BALL VALVES



Instruction D10324
August 2018

DeZURIK | APCO | HILTON | WILLAMETTE

Instructions

These instructions provide information about VPB V-Port Ball Valves. They are for use by personnel who are responsible for installation, operation and maintenance of VPB V-Port Ball Valves.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your VPB V-Port Ball Valve has been packaged to provide protection during shipment; however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) and the serial number if available, located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

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Description

The DeZURIK VPB V-Port Ball Valve is a quarter-turn control valve for fibrous media, clean, dirty, viscous, corrosive and abrasive liquids, gases and slurries. A choice of materials, actuators, and accessories is available.

Handling

Lifting the valve improperly may damage it. Do not fasten lifting devices to the actuator, ball or through the seat opening in the body. Lift the valve with slings, chains or cables fastened around the valve body, or fastened to bolts or rods through bolt holes in the flanges.

Installing Valve

WARNING!

Metric fasteners should not be used with ASME Class 150/300 bolt holes and flange bolt patterns. If you use metric fasteners with ASME Class 150/300 bolt holes and flange bolt patterns, it may lead to product failure, injury, and loss of life. DeZURIK Inc. disclaims all liability associated with the use of metric fasteners with ASME Class 150/300 bolt holes and flange patterns, including but not limited to personal injury, loss of life, loss of product, production time, equipment, property damage, lost profits, consequential damages of any kind and environment damage and/or cleanup. Use of metric fasteners with ASME Class 150/300 bolt holes and flange bolt patterns is a misuse that voids all warranties and contractual assurances. If you use metric fasteners with ASME Class 150/300 bolt holes and flange bolt patterns, you do so at your sole risk and any liability associated with such use shall not be the responsibility of DeZURIK, Inc. In addition to the foregoing, DeZURIK's Manufacturer's Conditions apply.

Install the valve with self-centering flat ring gaskets and ASME flanges. Use either Class 150 or Class 300 flanges, as designated following "Class" on the valve data plate. Before installation, remove foreign material such as weld spatter, oil, grease, and dirt from the valve, flanges, and pipeline.

The valves with flex metal or clearance seats are bi-directional, and may be installed with flow in either direction. For maximum performance, the valve should be positioned in the pipeline with the greater pressure against the seat side of the valve. Valves with PTFE seats or rigid seats must be positioned in the pipeline with the greater pressure against the seat side of the valve.

Close the valve, align the pipeline on both sides of the valve, and ensure that the flanges, gaskets and valve are centered before tightening the flange bolts or studs. Tighten the bolts or studs evenly, in a crisscross pattern. Tighten the bolts or studs on the seat side of the valve so there is metal-to-metal contact between the seat retainer and the valve body.

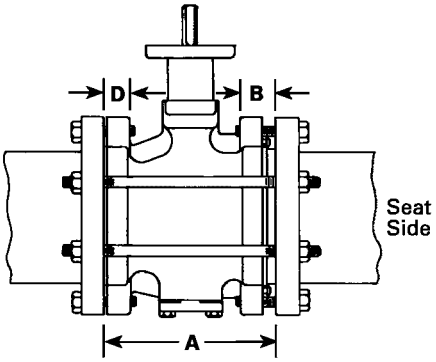
Operation

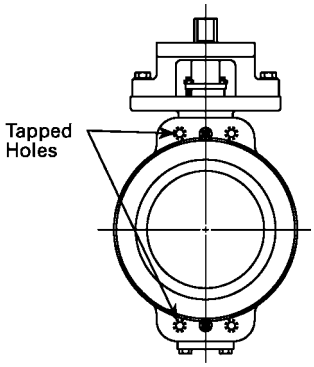
The ball is the closure member of the valve. Clockwise rotation of the valve shaft closes the ball in the valve. As the ball rotates, a V-shaped notch in the ball forms a variable orifice with the circular seat in the body. The valve actuator is connected to the valve shaft, and positions the ball at the open, closed, and intermediate positions.

The valve is fully closed when the ball is centered on the seat, and the valve is fully open when the ball is 90 degrees counterclockwise from the closed position. The open and closed positions are determined by the actuator. Refer to the Actuator Instructions for adjusting the open and closed position stops. A line is stamped on the top of the valve stem to indicate the angular position of the ball when the ball is not visible. See the top of the upper shaft (A6) in Figure 1.

Bolt Lengths

Tie Bolt & Bolt Lengths — Flangeless Valves





Valve Size	W1S		D
	A	B	
1" 25mm	4.00 102	—	—
1.5" 40mm	4.50 114	—	—
2" 50mm	4.88 124	1.38 35	1.12 28
2.5" 65mm	5.50 140	1.75 44	1.19 30
3" 80mm	6.50 165	1.75 44	1.19 30
4" 100mm	7.62 194	1.88 48	1.31 33
6" 150mm	9.00 229	2.12 54	1.62 41
8" 200mm	9.56 243	2.31 59	1.81 46
10" 250mm	11.69 297	2.00 51	1.38 35
12" 300mm	13.31 338	2.06 52	1.44 37

Valve Size	Quantity of Tapped Holes/Flange				
	ASME 150	DIN 10	DIN 16	JIS 10	JIS 16
1" 25mm	—	—	—	—	—
1.5" 40mm	—	—	—	—	—
2" 50mm	—	—	—	—	4
2.5" 65mm	—	—	—	—	4
3" 80mm	—	—	—	4	4
4" 100mm	—	—	—	4	4
6" 150mm	—	—	—	—	4
8" 200mm	—	—	4	4	4
10" 250mm	4	4	4	4	4
12" 300mm	4	4	4	4	4

Tie Bolt Length

To determine the minimum tie bolt length on flangeless valves:

- add valve length (dimension A from chart)
- add the two adjoining pipe flange thicknesses (customer determined)
- add the thicknesses of the two nuts (customer determined)
- add the thicknesses of the two gaskets (customer determined)

Bolt Length for Tapped Holes – Side Opposite Seat

To determine the minimum bolt length on flangeless valves for the side opposite the seat:

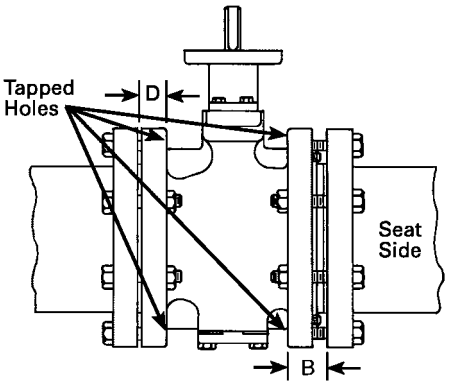
- add the tapped lug thickness (dimension D from chart)
- add the adjoining pipe flange thickness (customer determined)
- add the thickness of gasket (customer determined)

Bolt Length for Tapped Holes – Seat Side

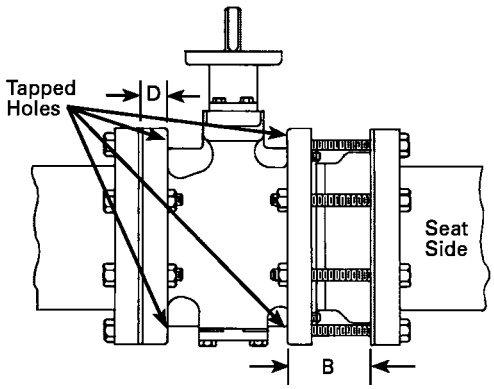
To determine the minimum bolt length on the seat side of flangeless valves:

- add the valve flange and seat retainer length (dimension B from chart)
- add the adjoining pipe flange thickness (customer determined)
- add the thickness of gasket (customer determined)

Bolt Lengths - Flanged Valves



F1A, F1S & F2S



F1L

Valve Size	B				D	
					Flange Thickness	
	F1L	F1A	F1S	F2S	(F1_) Class 150	(F2S) Class 300
1" 25mm	1.88 48	.88 22	.88 22	1.12 28	.56 14	.81 21
1.5" 40mm	3.00 76	1.00 25	1.00 25	1.25 32	.69 18	.94 24
2" 50mm	3.19 81	1.06 27	1.06 27	1.31 33	.75 19	1.00 25
2.5" 65mm	3.31 84	1.31 33	1.31 33	1.62 41	.81 21	1.12 28
3" 80mm	2.88 73	1.38 35	1.38 35	1.75 44	.88 22	1.25 32
4" 100mm	2.94 75	1.56 40	1.56 40	1.88 48	1.06 27	1.38 35
6" 150mm	3.06 78	1.56 40	1.56 40	2.00 51	1.12 28	1.56 40
8" 200mm	3.62 92	1.69 43	1.69 43	2.19 56	1.25 32	1.75 44
10" 250mm	3.19 81	1.88 48	1.88 48	2.56 65	1.31 33	2.00 51
12" 300mm	2.62 67	1.94 49	1.94 49	2.69 68	1.38 35	2.12 54
14" 350mm	—	—	2.31 59	—	1.50 38	—
16" 400mm	—	—	2.69 68	—	1.62 41	—
18" 450mm	—	—	2.81 71	—	1.75 44	—
20" 500mm	—	—	2.94 75	—	1.88 48	—

Valve Size	Quantity of Tapped Holes/Flange					
	ASME 150	ASME 300	DIN 10/16	DIN 25/40	JIS 10	JIS 16/20
1" 25mm	—	—	—	—	4	4
1.5" 40mm	—	—	—	—	4	4
2" 50mm	—	4	—	—	4	4
2.5" 65mm	—	4	—	4	4	4
3" 80mm	—	—	—	—	8	4
4" 100mm	—	—	—	—	8	8
6" 150mm	—	4	—	—	8	4
8" 200mm	—	4	—	4	12	4
10" 250mm	—	—	—	—	12	—
12" 300mm	—	—	—	—	16	4
14" 350mm	—	—	—	—	16	—
16" 400mm	—	—	—	—	16	—
18" 450mm	—	—	—	—	—	—
20" 500mm	—	—	—	—	—	—

Bolt Lengths - Flanged Valves *(Continued)*

Bolt Length for Tapped Holes – Side Opposite Seat

To determine the minimum bolt length on the side opposite the seat for those valves with tapped holes:

- add the valve flange thickness (dimension D from chart)
- add adjoining pipe flange thickness (customer determined)
- add the thickness of gasket (customer determined)

Bolt Length for Tapped Holes – Seat Side

To determine the minimum bolt length on the seat side for those valves with tapped holes:

- add valve flange and seat retainer length (dimension B from chart)
- add adjoining pipe flange thickness (customer determined)
- add the thickness of gasket (customer determined)

Bolt Length – Side Opposite Seat

To determine the minimum bolt length on the side opposite the seat:

- add the valve flange thickness (dimension D from chart)
- add the adjoining pipe flange thickness (customer determined)
- add nut thickness (customer determined)
- add the thickness of gasket (customer determined)

Bolt Length – Seat Side

To determine the minimum bolt length on the seat side of flanged valves:

- add valve flange and seat retainer length (dimension B from chart)
- add adjoining pipe flange thickness (customer determined)
- add nut thickness (customer determined)
- add the thickness of gasket (customer determined)

Required Tools

This valve is assembled using only SAE fasteners. To service this unit, you should have a full set of combination wrenches, Allen wrenches, a flat tipped screwdriver, a pin punch and a dead blow hammer.

Lubrication

The valve does not require lubrication except when it is being assembled. Refer to the actuator instructions for actuator lubrication requirements.

Fusion/Powder Coated Valves

CAUTION!

Valves with fusion/powder coated exterior paint require flat washers to be installed under the flange nuts when installing the valve to the pipeline flange to prevent the paint from cracking or chipping.

Adjusting Packing

The shaft seal consists of packing in the packing chamber of the body. The packing is contained and compressed by the packing gland. If the packing leaks, tighten the adjustment nuts (A8) on top of the packing gland (A9), shown in Figure 2A. Tighten the nuts evenly and gently — just enough to stop the leakage. Over-tightening will cause excessive operating forces, and will decrease the life of the packing.

Drawings

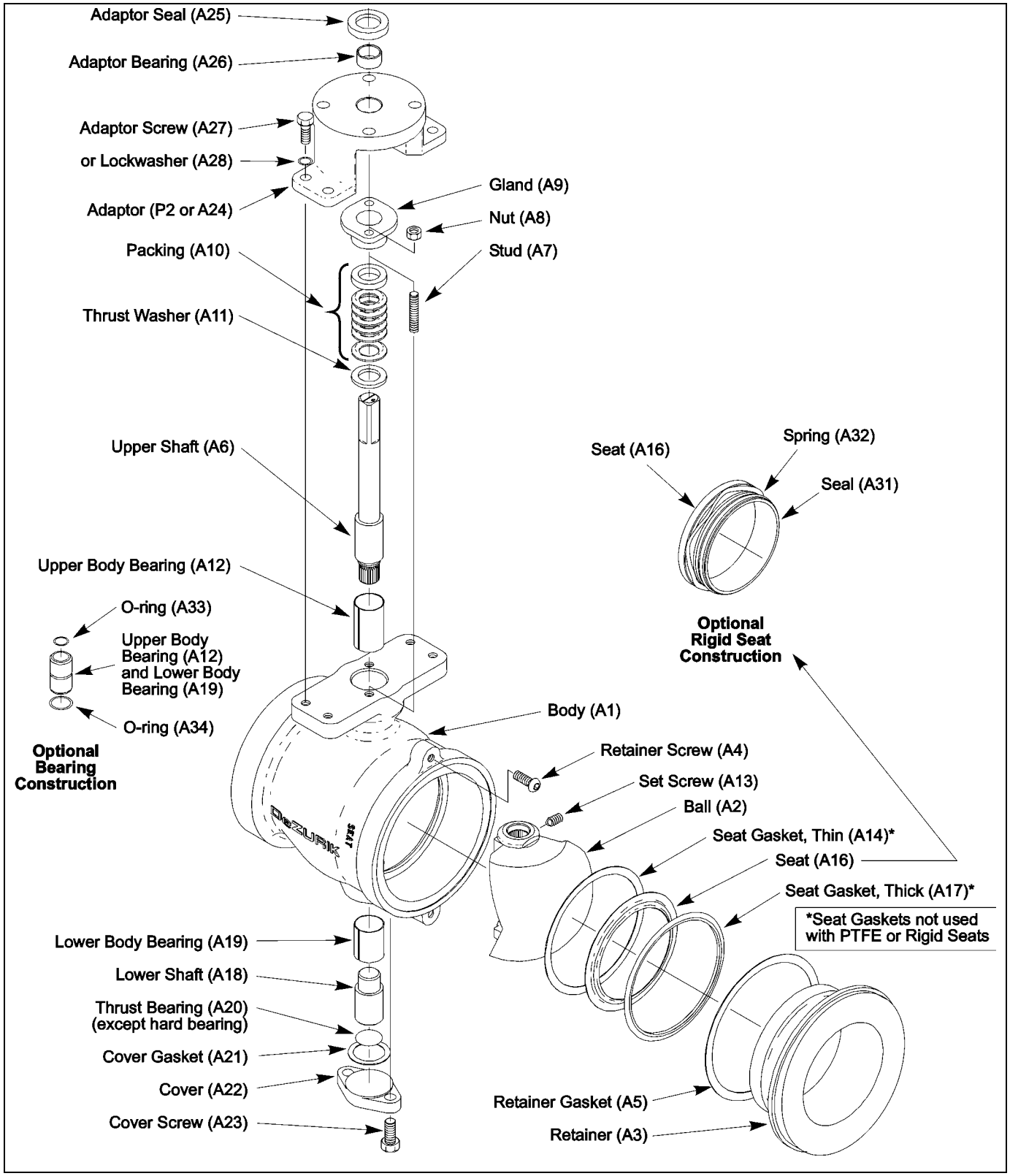


Figure 1 – Component Identification Disassembled

Drawings *(Continued)*

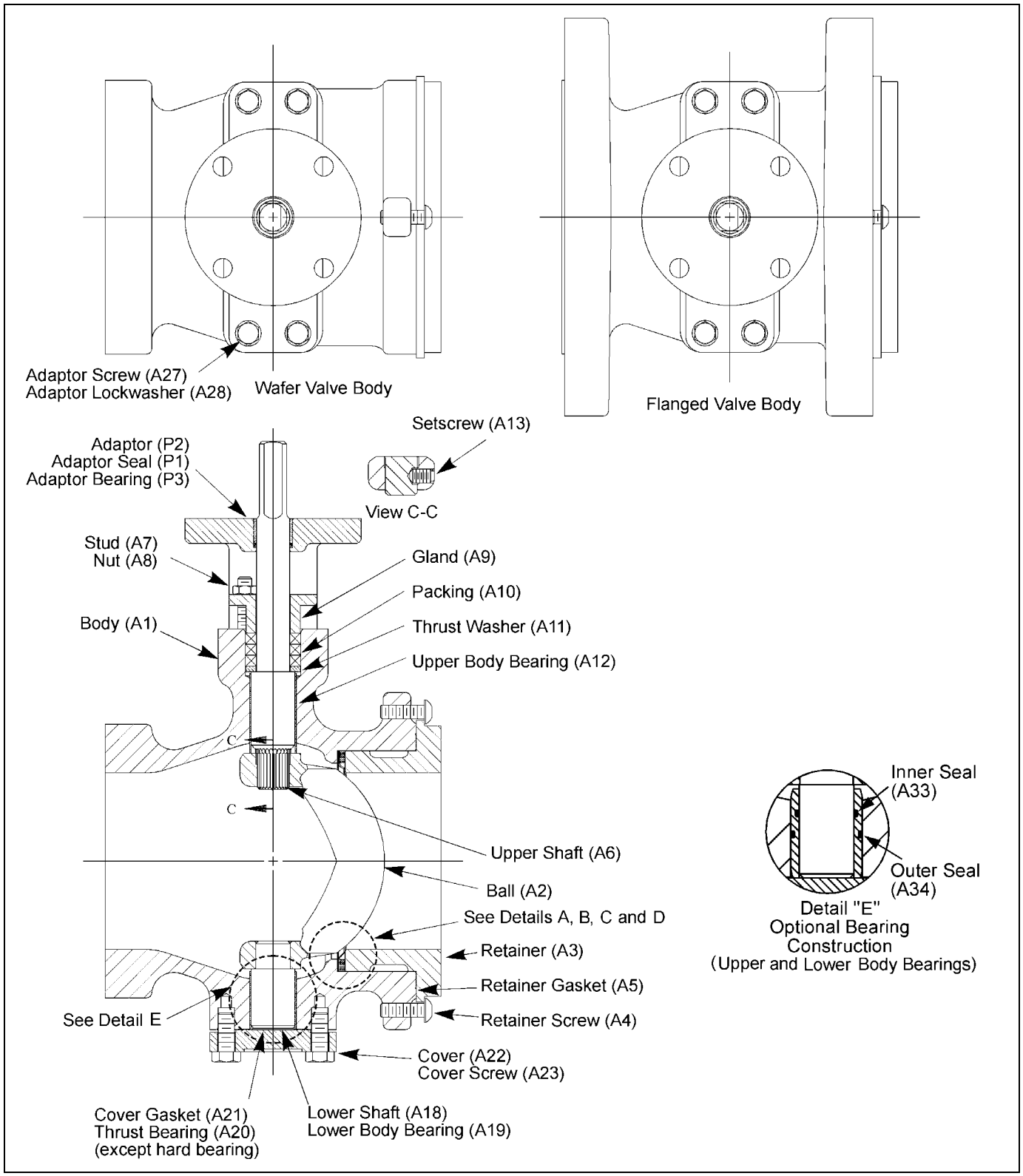


Figure 2A – Component Identification Assembled

Drawings *(Continued)*

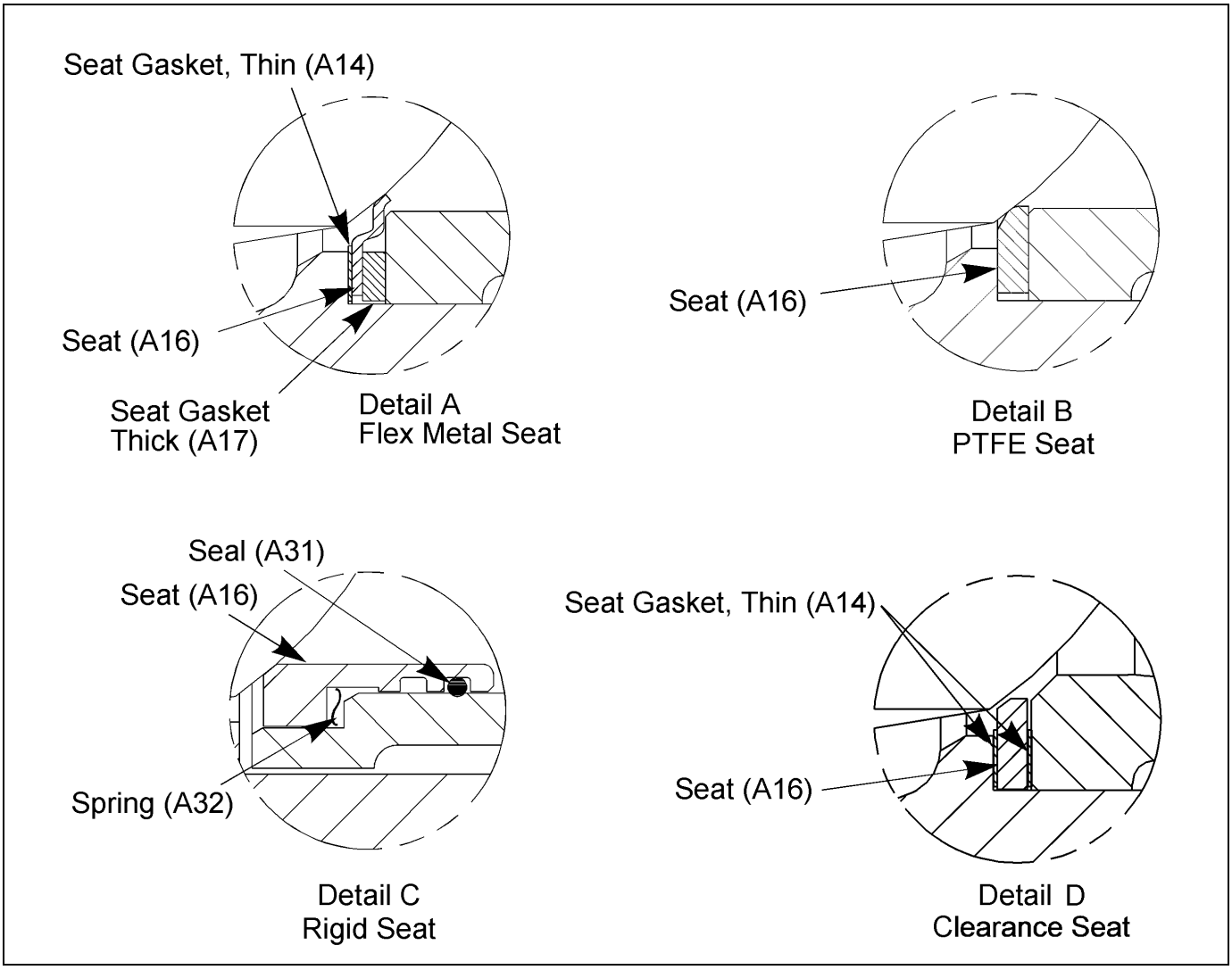


Figure 2B – Component Identification (Seat Details)

Replacing Packing

See Figure 1, Figure 2A and Figure 2B for parts identification.

WARNING!

Pipeline pressure can cause personal injury or equipment damage. Relieve the pressure in the pipeline before removing the packing gland.

1. Discontinue flow and relieve pipeline pressure.

WARNING!

Accidental operation of powered actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the power to the actuator.
3. Remove the actuator from the valve as described in the actuator instructions.
4. Remove the adaptor screws (A27), lock washers (A28), and the adaptor (P2) from the body (A1).
5. Remove the gland nuts (A8) and the gland (A9) from the body.
6. Remove the used packing rings (A10) from the packing chamber in the body.
7. Place the new packing rings (A10) onto the upper shaft (A6), and slide rings into position in the packing chamber.

   Note: If braided carbon graphite packing option G2 (A10) is used, lubricate the inside and outside diameters of each packing ring with Krytox 240 AC lubricant.
8. Place the gland (A9) in position over the upper shaft (A6) and packing rings (A10), and replace gland nuts (A8). Tighten gland nuts finger tight, plus ½ turn.
9. Mount the adaptor (P2) on the body (A1) with screws (A27) and lock washers (A28). See Table A for mounting screw torques:

Table A: Torques for Mounting Screws

Valve Size		Torque	
in	**mm**	**ft lbs**	**Nm**
1 - 2	25 - 50	12 ±2	16 ±2
2½" - 4	60 - 100	12 ±2	16 ±2
6 & 8	150 & 200	40 ±3	54 ±4
10 - 14	250 - 350	80 ±5	108 ±7
16 - 20	400 - 500	100 ±5	136 ±7

10. Mount the actuator on the valve as described in the actuator instructions.
11. Install the valve in the pipeline as described in the *Installing Valve* section.
12. The pipeline may now be pressurized. If packing leakage occurs, tighten the gland nuts (A8) evenly and slowly — just enough to stop the leakage.

Seat Replacement

See Figure 1, Figure 2A and Figure 2B for parts identification.

WARNING!

Pipeline pressure can cause personal injury or equipment damage. Relieve the pressure in the pipeline before removing flange bolts and flanges.

1. Relieve pressure in the pipeline and drain the pipeline.

WARNING!

Accidental operation of powered actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the power to the actuator.
3. Remove the flange bolting, and remove the valve from the pipeline.
4. Remove the two screws (A4), and remove the seat retainer (A3) and gasket (A5) from the body (A1).
5. Remove seat.
   - FLEX METAL, PTFE, AND CLEARANCE SEATS
     Remove the seat (A16). If the seat is the flex metal or clearance type, also remove the associated gaskets (A14 and A17).
   - RIGID SEAT
     Remove the seat (A16) from the seat retainer (A3).
6. Clean all gasket and/or seat material from the body and seat retainer.
7. Place the ball in the closed position.
8. Install seat.
   - FLEX METAL
     a. Place, in the following order, the thin gasket (A14), the seat (A16) and the thick gasket (A17) into the seat bore in the body.
     b. Place the seat against the closed ball as shown in Figure 2B, Detail A.
   - PTFE SEATS
     a. Place the seat (A16) into the bore of the body with the beveled side of the seat against the closed ball as shown in Figure 2B, Detail B.
   - CLEARANCE SEATS
     a. Place, in the following order, the thin gasket (A14), the seat (A16), and another thin gasket (A14) into the seat bore in the body as shown in Figure 2B, Detail D.
   - RIGID SEAT

     NOTE: When replacing a tungsten carbide seat, DeZURIK recommends replacing the plug and seat together as a matched set. In order to minimize seat leakage the ball and seat must be lapped together at the factory.

     a. Place the spring (A32) in the spring groove in the seat (A16).
     b. Place the seal (A31) in the groove nearest the outer edge of the seat.

Seat Replacement *(Continued)*

c. Apply a light coat of silicon base grease to the seal (A31) after it has been placed in the groove.
d. Apply a light coat of grease to the edge of the seat that rests against the ball when assembled.
e. Insert the seat (A16) into the retainer (A3). See Figure 2B, Detail C.

9. Place the seat retainer gasket (A5) in the body.
10. Place the seat retainer (A3) in the valve body.
11. Apply a thread locking compound (removable type) to the retainer screw threads.
12. Tighten the retainer screws evenly (A4) to the following torque in Table B while allowing seat to center on the closed ball.

Table B: Torques for Retainer Screws

Valve Size		Torque	
in	**mm**	**ft lbs**	**Nm**
1 - 2	25 - 50	10 ±2	13 ±2
2½ - 4	60 - 100	12 ±2	16 ±2
6 & 8	150 & 200	16 ±2	22 ±2
10 - 14	250 - 350	40 ±3	54 ±4
16 - 20	400 - 500	80 ±5	108 ±7

13. The valve may now be installed in the pipeline as described in the *Installing Valve* section.
14. If the actuator is a powered actuator, reconnect power to the actuator.

Valve Disassembly

The valve may be disassembled and reassembled by following the steps in the next two sections. All parts should be inspected for wear, and worn parts should be replaced. Refer to Figures 1 and 2 for component identification.

WARNING!

Pipeline pressure can cause personal injury or equipment damage. Relieve the pressure in the pipeline before removing flange bolts and flanges.

1. Relieve the pressure in the pipeline, drain the pipeline and close the valve.

WARNING!

Accidental operation of powered actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the power to the actuator.
3. Remove the flange bolting, and remove the valve from the pipeline.
4. Remove the actuator from the valve as described in the actuator instructions.
5. Remove the adaptor screws (A27), lock washers (A28) and the adaptor (P2) from the body (A1).
6. Remove the two screws (A4), and remove the seat retainer (A3) and gasket (A5) from the body (A1).
7. Remove seat.
   - FLEX METAL, CLEARANCE, AND PTFE SEATS
     a. Remove the seat (A16).
     b. If the seat is the flex metal or clearance type, also remove the associated gaskets (A14 and A17).
   - RIGID SEAT
     a. Remove the seat (A16) from the seat retainer (A3).
8. With the ball in the open position, loosen and remove the set screw (A13) from the ball upper hub.
9. Remove the gland nuts (A8) and the gland (A9) from the body.
10. Remove the screws (A23), cover (A22), thrust bearing (A20), and gasket (A21) from the bottom of the body.
11. Remove the packing rings (A10) and thrust washer (A11) from the packing chamber in the body.
12. Remove the upper shaft (A6) and the lower shaft (A18) from the ball (A2) and body (A1).
13. Remove the ball (A2) through the seat side of the body (A1).
14. Remove the upper bearing (A12) and lower bearing (A19) from body (A1).
15. Clean all gasket and/or seat material from the body and seat retainer.

Valve Reassembly

Clean and inspect all parts, and replace worn parts before reassembly. Refer to Figures 1 and 2 for component identification. The valve requires lubrication only when it is being assembled. Refer to the Actuator Instructions for lubrication requirements for the actuator.

1. Place the ball (A2) in the body (A1), with the splined hole toward the top of the valve.
2. Apply a light coat of media compatible grease to the inside and outside diameters, and to the ends of the lower solid bearing (A19).
   a. If bearing has a fabric liner, the bearing does not require lubrication.
   b. If bearing seals are required, place seal (A33) in the inner groove, and seal (A34) in the outer groove. Apply a light coat of media-compatible grease to the O-rings.
   c. If bearing has counterbore, counterbore must face the plug.
3. Place the bearing into the lower body bore.
4. Insert the lower shaft (A18) through the shaft hole in the bottom of the body (A1), and into the hole in the ball (A2).
5. For valves that require a thrust bearing, apply a light coat of media-compatible grease to the flat sides of the thrust bearing (A20). If thrust bearing has a fabric side, the bearing does not require lubrication.
6. Place the thrust bearing (A20) against the bottom of the lower shaft (A18). If thrust bearing has a fabric side, fabric side must face the shaft.
7. Apply a light coat of anti-seize compound to the threads of the screws (A23).
8. Place the gasket (A21) and the cover (A22) on the bottom of the body (A1). Fasten the cover with screws (A23).
   - For valve sizes 1 - 2” (25–50mm), tighten the 1/4" screws to 10 ±2 ft lbs (13 ±2 Nm).
   - For valve sizes 2-1/2 - 6” (60–50 mm), tighten the 3/8" screws to 16 ±2 ft lbs (22 ±2 Nm).
   - For valve sizes 8 – 14” (200-350mm), tighten the 1/2" screws to 40 ±3 ft lbs (54 ±4 Nm).
   - For valve sizes 16 – 20” (400-500mm), tighten the 3/4" screws to 100 ±5 ft lbs (135 ±7 Nm).
9. Apply a light coat of media-compatible grease to the inside and outside diameters of the upper solid bearing (A12).
   - If bearing has a fabric liner, the bearing does not need lubrication.
   - If bearing seals are required, place seal (A33) in the inner groove, and seal (A34) in the outer groove. Apply a light coat of media-compatible grease to the O-rings.
   - If bearing has a counterbore, counterbore must face the plug.
10. Place the upper bearing into the upper body bearing bore.
11. Apply a light coat of media-compatible grease to the valve shaft (A6) splines.
12. Insert the upper shaft (A6) through the bearing located in the upper body bearing bore, and into the splined hole in the plug (A2), making sure the threaded hole in the upper plug hub is in line with the recessed hole located in the shaft spline area. Push the upper shaft downward into the valve body until all axial movement is taken up.

Valve Reassembly *(Continued)*

13. Place the thrust washer (A11) onto the upper shaft, and slide the washer into position in the packing chamber, against the shoulder on the upper shaft (A6).
14. Place the packing rings (A10) onto the upper shaft (A6) and slide the rings into position in the packing chamber.

    Note: If braided carbon graphite packing option G2 (A10) is used, lubricate the inside and outside diameters of each packing ring with Krytox 240 AC lubricant.
15. Place the gland (A9) in position over the upper shaft (A6) and packing rings (A10), and replace the gland nuts (A8). Tighten the gland nuts finger tight, plus 1/2 turn.
16. Apply a light coat of media compatible, anti-seize compound to the setscrew (A13).
17. With the ball in the open position, install the setscrew (A13) into the ball upper hub, and tighten to the torque specified in Table C:

Table C: Torques for Setscrews

Valve Size		Torque	
in	**mm**	**ft lbs**	**Nm**
1 - 2	25 - 50	6 ±1	8 ±1
2½ - 4	60 - 100	10 ±2	13 ±2
6	150	12 ±2	16 ±2
8	200	16 ±2	22 ±2
10 - 20	250 - 500	18 ±2	24 ±2

18. Stake the set screw in the ball hub to secure it in place.
19. Replace the seat and seat retainer as described in steps 7 thru 12 in the Seat Replacement section.
20. Mount the adaptor (P2) on the body (A1) with screws (A27) and lock washers (A28). See Table A for mounting screw torques.
21. Mount the actuator on the valve as described in the actuator instructions.
22. Install the valve in the pipeline as described in the *Installing Valve* section.
23. If the actuator is a powered actuator, reconnect power to the actuator.
24. The pipeline may now be pressurized. Once pressurized, verify that the valve is sealing properly.
    a. If seat leakage occurs, adjust the actuator closed position stop until seat leakage stops.
    b. If packing leakage occurs, tighten the gland nuts (A8) evenly and slowly, just enough to stop leakage.

Troubleshooting

Condition	Possible Cause	Corrective Action
Packing leaks.	Packing is loose.	Adjust packing gland.
	Packing is worn.	Replace packing.
PTFE seated valve leaks when fully closed.	Seat is worn.	Replace seat.
Valve leaks when fully closed, and ball is galled. (see Note below)	Ball is worn or galled.	Replace ball and seat.
Valve body leaks from retainer joint.	Pipeline flange bolting is loose.	Tighten pipeline flange bolts or studs.
	Gasket is worn.	Replace gasket(s).
Opening/closing torque is excessive.	Bearings, shafts, ball, and/or seat are worn.	Replace worn part(s).

Note: Rigid and flex metal seats are allowed some leakage, up to class IV shutoff standards. Clearance seats may leak up to 5% of full rated valve flow when closed.

Guarantee

Products, auxiliaries and parts thereof of DeZURIK, Inc. manufacture are warranted to the original purchaser for a period of twenty-four (24) months from date of shipment from factory, against defective workmanship and material, but only if properly installed, operated and serviced in accordance with DeZURIK, Inc. recommendations. Repair or replacement, at our option, for items of DeZURIK, Inc. manufacture will be made free of charge, (FOB) our facility with removal, transportation and installation at your cost, if proved to be defective within such time, and this is your sole remedy with respect to such products. Equipment or parts manufactured by others but furnished by DeZURIK, Inc. will be repaired or replaced, but only to the extent provided in and honored by the original manufacturers warranty to DeZURIK, Inc., in each case subject to the limitations contained therein. No claim for transportation, labor or special or consequential damages or any other loss, cost or damage shall be allowed. You shall be solely responsible for determining suitability for use and in no event shall DeZURIK, Inc. be liable in this respect. DeZURIK, Inc. does not guarantee resistance to corrosion, erosion, abrasion or other sources of failure, nor does DeZURIK, Inc. guarantee a minimum length of service. Your failure to give written notice to us of any alleged defect under this warranty within twenty (20) days of its discovery, or attempts by someone other than DeZURIK, Inc. or its authorized representatives to remedy the alleged defects therein, or failure to return product or parts for repair or replacement as herein provided, or failure to install and operate said products and parts according to instructions furnished by DeZURIK, Inc., or misuse, modification, abuse or alteration of such product, accident, fire, flood or other Act of God, or failure to pay entire contract price when due shall be a waiver by you of all rights under this warranty.

The foregoing guarantee shall be null and void if, after shipment from our factory, the item is modified in any way or a component of another manufacturer, such as but not limited to, an actuator is attached to the item by anyone other than DeZURIK, Inc. Factory Service personnel. All orders accepted shall be deemed accepted subject to this limited warranty, which shall be exclusive of any other or previous Warranty, and this shall be the only effective guarantee or warranty binding on DeZURIK, Inc., despite anything to the contrary contained in the purchase order or represented by any agent or employee of DeZURIK, Inc., in writing or otherwise, notwithstanding, including but not limited to implied warranties.

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Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

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