INSTALLATION AND MAINTENANCE INSTRUCTIONS

Reverse Acting Bursting Disc Assemblies – SRX, SRL, RD520 Axius, RD320, RD500 Atlas, RD300 Holder

PRESSURE RELIEF

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Rev. July, 2020

Fike®

SOLUTIONS

- Fire Protection
- Explosion Protection
- Overpressure Protection
- Pressure Activation

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REVISION HISTORY

ORIGINAL RELEASE DATE: .....June, 2017

REVISION / DESCRIPTION OF CHANGE	REVISION DATE

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1. WARNING

- Read these instructions carefully and completely before attempting to unpack, install or service the bursting disc and holder.
- Do not vent a bursting disc assembly to an area where it would endanger personnel.
- Install the bursting disc assembly in such a way that equipment in the area will not prevent bursting disc from opening or be damaged by system discharge.
- A baffle plate on the outlet end of vent piping does NOT necessarily prevent potentially dangerous discharge.
- Piping should be braced to absorb shock when the bursting disc ruptures.
- Install the enclosed DANGER sign in a conspicuous location near the zone of potential danger.
- RD520 Axius and RD320 are not suitable for liquid systems in a 1" size (DN25) at burst pressures less than 20 psig (1.38 barg) and an inlet piping length greater than 10 inches (25 cm).
- RD520 Axius and RD320 are not suitable for liquid systems in a ¾" size (DN20) at burst pressures less than 30 psig (2.07 barg) and an inlet piping greater than 8 inches (20 cm).
- RD500 Atlas and RD 300 are not suitable for liquid systems in sizes 14" (DN350) and larger.
- Spiral wound gaskets may not be suitable for size 1" (DN25). Spiral wound gaskets may not be suitable for all flange ratings for sizes 2" (DN50) to 4" (DN100). Consult factory.
- If the bursting disc features a fluoropolymer liner, do not remove this component.

NOTE: Bursting disc specifications and year of manufacture can be found on the bursting disc tag.

Table 1 - Disc/Holder model compatibility

Disc Model	Holder Model			
	SRX	SRL / SRLO	XL / XLO	ATLAS / ATLAS-LO
SRX	✓			
SRL		✓	✓ [1]	
RD520 Axius		✓ [2]	✓	
RD320		✓ [2]	✓	
RD500 ATLAS				✓
RD300				✓
AGT			✓	

(1) 1.5" SRL disc not compatible with 1.5" XL/XLO holder

(2) 1.5" RD520 Axius and RD320 disc not compatible with 1.5" SRL/SRLO holder

2. INSPECTION/PREPARATION

2.1. New Bursting Discs

WARNING: Always handle the bursting disc with extreme caution. Nicks, dents, scratches or foreign material may result in leakage or affect the burst pressure. Read the bursting disc tag completely before installing to confirm that the size and type are correct for your system.

1. Carefully remove the bursting disc from its packaging container.
2. Inspect the bursting disc for damage. Look for dents, scratches or dings in the seat area or dents in the dome of the bursting disc (See Figure 1).
3. If foreign material is present, carefully clean the bursting disc with a solvent that is compatible with your media.

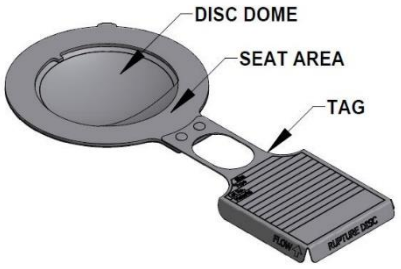

Figure 1 - Check for damage

NOTE: Handle bursting disc holders with care. Damage to the bursting disc holder could affect the performance of the bursting disc. Do not install or use a bursting disc that has been damaged!

2.2. New Holder

1. Carefully take the bursting disc holder apart by removing the side clips or cap screws and discard the white shipping protector (See Figure 2).
2. Inspect the seat area for scratches, dents, nicks or dirt. Flaws may adversely affect sealing and disc burst pressure.
3. If necessary, clean dust or dirt on the seat area with a solvent that is compatible with your media.

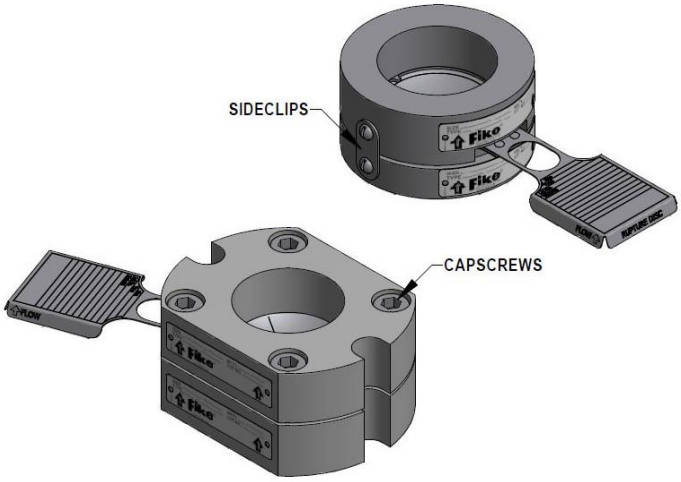

Figure 2 - Insert holder (top) and pre-torqueable holder

2.3. Existing Holder

1. For insert style holders, carefully remove the bursting disc assembly from piping.
2. Separate bursting disc holder components.
3. Remove old bursting disc.
4. Inspect the seat area of the bursting disc holder. Look for scratches, nicks, corrosion or deposits left from the media.
5. Check to make sure the gasket faces of the assembly are flat by placing a straight edge across the face. If faces are not flat, holder is not suitable for use (See Figure 3).

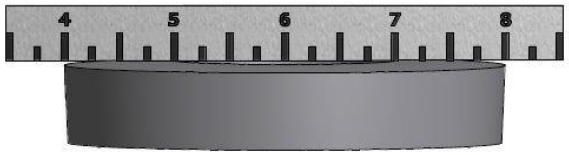

Figure 3 - Measuring for flatness

6. If necessary, clean the seat area with a solvent that is compatible with your media. If this does not remove dirt, hand polish the seat area with Scotch Brite fine emery cloth or #0000 steel wool. DO NOT MACHINE THE BURSTING DISC HOLDER! If scratches, nicks, corrosion, or deposits cannot be removed by hand, contact the factory.

3. ASSEMBLY

WARNING: Before attempting to assemble the bursting disc and bursting disc holder, confirm that the seat area of the bursting disc is designed to fit the bursting disc holder.

1. Place holder component with female seat on a work surface (See Figures 4, 5 and 6).

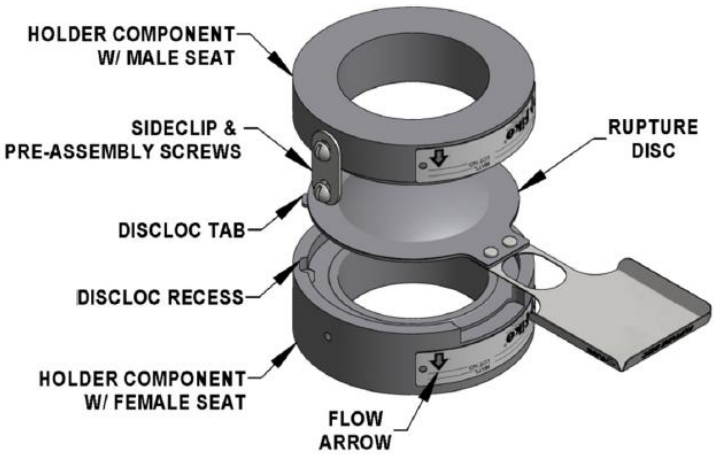

Figure 4 - Insert Holder

2. If the holder was supplied with an optional o-ring groove, install an o-ring into the groove of the component with the female seat.
   Note: Use of an o-ring is for improved sealing and is not required for proper function of the bursting disc assembly. Do not install an o-ring unless the holder is designed to accept these components by Fike!

3. Place bursting disc into holder component with female seat with flow arrow on tag pointing in the same direction as holder component with female seat flow arrow.
   Disc Loc™ tab, if present, must seat properly in recess.

4. If the holder was supplied with an optional o-ring groove, install an o-ring into the groove of the component with the male seat.
   Note: Use of an o-ring is for improved sealing and is not required for proper function of the bursting disc assembly. Do not install an o-ring unless the holder is designed to accept these components by Fike!

5. Carefully align and place holder component with male seat onto rupture disc with flow arrow in the same direction as disc and holder component with female seat flow arrows.
   CAUTION: Be careful to not allow the male seat component to strike or damage the dome of the rupture disc!

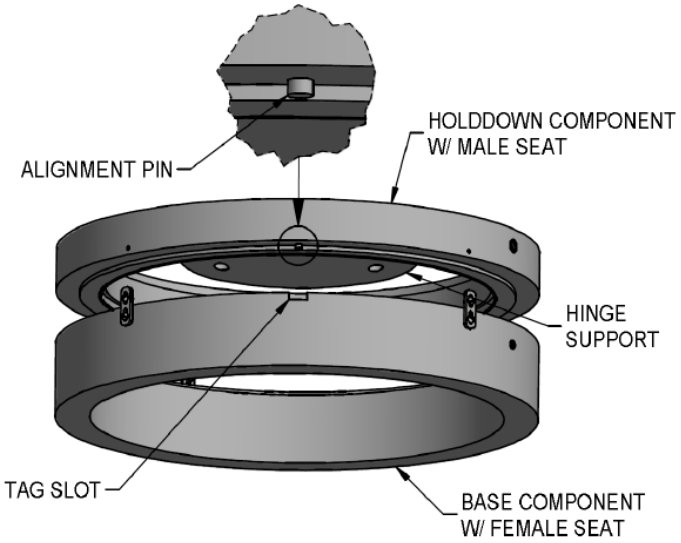

Figure 5 - Alignment pin fitting in tag slot (Atlas sizes 14" and larger)

WARNING: For ATLAS sizes 14" and larger, ensure that the alignment pin in the hold down fits into the tag slot of base (see figure 5) and check the gap (see figure 7). Fragmentation or leaking can occur if this feature is not aligned properly.

6. Rotate component with male seat to align side clip holes.

7. If holder configuration is insert, install side clips and tighten securely.

8. If holder configuration is TQ, turn assembly over to access cap screw holes (depending on design) **NOTE**: It may be beneficial to move/tilt or support the holder to first install a few cap screws evenly around the perimeter before turning the assembly over.

9. If holder configuration is TQ, TQ+ or TQ(+) Full Torque, lubricate uncoated cap screws with light oil such as SAE grade 20. Lubricate both the threads and the underside of the head. Install lubricated cap screws and tighten until recessed and snug in the holder (see figure 6).

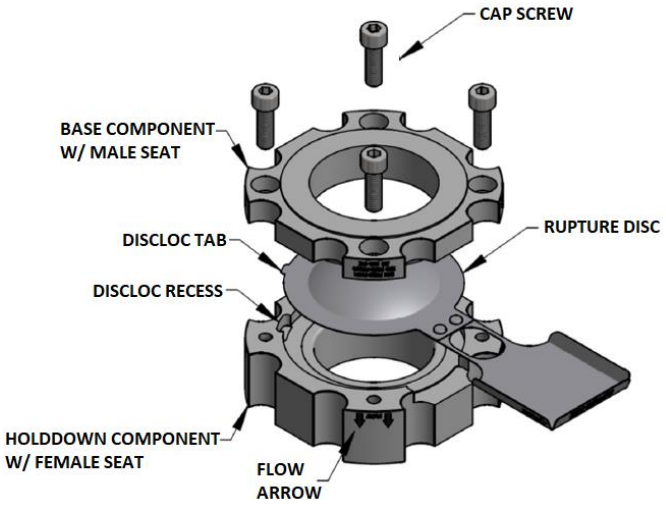

Figure 6 - Pretorquaeble Holder (TQ+/TQ(+) Full Torque Configuration Shown)

10. Check gap between base and hold down. The gap must be the same size on all sides of the assembly. This can be assured by measuring the distance between the hold down and base at various places around the circumference of the assembly. Adjust pre-assembly screws if necessary to provide an even gap (See Figure 7).

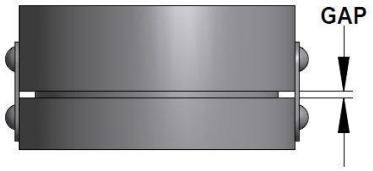

Figure 7 - Gap Inspection

11. If holder configuration is TQ, TQ+ or TQ(+) Full Torque, torque the cap screws to the values shown on the tag of the holder using crisscross pattern in 20% increments until the torque specified on the tag is achieved on all cap screws. The torque values of the flange studs can be found on the tag of the rupture disc.

CAUTION: The torque value on the tag of the disc and the tag of the holder may vary. Make sure to use the proper value.

12. If holder configuration is TQ, TQ+ or TQ(+) Full Torque, reconfirm the gap per step 10 after the cap screws are torqued.

CAUTION: For TQ(+) Full Torque, depending on the flange execution do NOT use the torque value as shown on the nameplate of the bursting disc. The user must confirm the required load or torque value required when ordering.

4. INSTALLATION

1. Place gaskets on top and bottom of assembly. Gaskets subject to relaxation or cold flow are not recommended for use with the holder assembly. Spiral wound gasket are not suitable for sizes 1" (DN25). Spiral wound gaskets may not be suitable for all flange ratings for sizes 2" (DN50) to 4" (DN100). Consult factory.

2. Carefully slide bursting disc assembly between companion flanges.

WARNING: For installations directly under a pressure relief valve that utilize a spool/spacer, ensure spool/spacer is installed between the outlet of the holder and inlet of the pressure relief valve. SRLO, XLO and ATLAS-LO holder sizes 12" and smaller are not suitable for direct-coupling to a pressure relief valve; they must utilize a high-profile hold down, spool or a suitable spacer. Atlas holders 14" and larger require a spool piece if under a pressure relief valve. Refer to Fike Technical Bulletin TB8105 for code requirements.

WARNING: Double check the orientation of the bursting disc. Verify flow arrows on the holder and disc tag are pointed in the same direction as process flow.

3. If necessary, clean threads on studs and nuts. Wire brushing is usually sufficient. Oil studs with a light oil such as SAE grade 20. Do not use studs and nuts that show evidence of galling.

4. Finger-tighten flange studs and nuts.

5. Refer to Appendix A to obtain torque value. Locate nominal disc size and flange rating. This is the required torque value.

6. Using the crisscross pattern shown in Figure 8, apply torque in 4 steps of 25% increments. For larger quantities of bolts than shown below, use a similar crisscross pattern. For example, if the torque required from Table 1 is 100 ft-lb, the torque should be applied in 25 ft-lb increments. Apply 25 ft-lb to each nut, then 50 ft-lb, then 75 ft-lb, etc. For larger quantities of bolts than shown below, use a similar crisscross pattern.

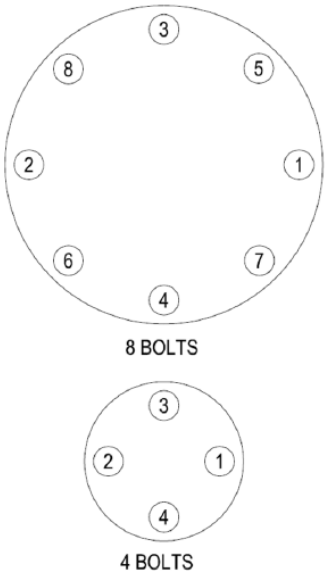

Figure 8 - Bolt tightening sequence

7. After recommended torque has been achieved, perform a final tightening in a clockwise bolt-to-bolt fashion to ensure that all studs have equal loading.

CHECK GAP BETWEEN BASE AND HOLDDOWN AFTER EACH TORQUE STEP. MAINTAIN AN EQUAL DISTANCE BETWEEN COMPANION FLANGE FACES ON ALL SIDES.

8. Experience has shown that, in some installation conditions, it may be necessary to re-torque the flange bolting after the system has operated through normal pressure and temperature cycles. Under normal operating conditions, the bursting disc is recommended to be replaced yearly. Severe operating conditions may require that the bursting disc be replaced more often.

SEE APPENDIX A FOR STUD TORQUE VALUES

4.1 Connecting grounding

The holders are provided with strips (See figure 9) that can be folded and connected to ground the holder to the flanges.

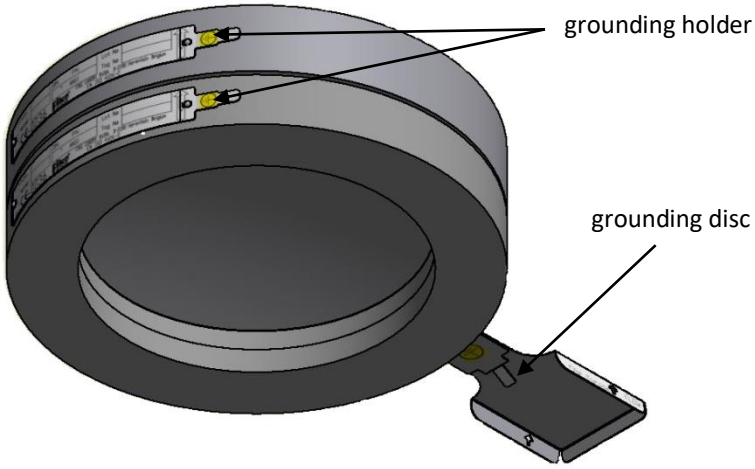

Figure 9 - connecting grounding

APPENDIX A – STUD TORQUE VALUES

Connect the braided SST grounding strip or grounding wire (not included) to an appropriate ground and the explosion panel. Pay extra attention to the grounding connections. Install serrated lock washers to assure metal to metal contact as shown.

Table 1 – Stud Torque Values – ASME (SRX, SRL/SRLO, XL/XLO)

Nominal Pipe Size (in)	Torque by Flange Rating (ft-lb [N-m])					
	150 ANSI	300 ANSI	600 ANSI	900 ANSI	1500 ANSI	2500 ANSI
1"	30 [41]	60 [81]	60 [81]	160 [217]	160 [217]	160 [217]
1.5	30 [41]	100 [136]	100 [136]	245 [332]	245 [332]	355 [481]
2	60 [81]	60 [81]	60 [81]	160 [217]	160 [217]	245 [332]
3	60 [81]	100 [136]	100 [136]	160 [217]	355 [481]	500 [678]
4	60 [81]	100 [136]	160 [217]	355 [481]	500 [678]	800 [1,085]
6	100 [136]	100 [136]	245 [332]	355 [481]	680 [922]	2,200 [2,983]
8	100 [136]	160 [217]	355 [481]	680 [922]	1,100 [1,491]	2,200 [2,983]
10	160 [217]	245 [332]	500 [678]	680 [922]	2,000 [2712]	4,400 [5,966]
12	160 [217]	355 [481]	500 [678]	680 [922]	2,200 [2,983]	5,920 [8,026]
14	245 [332]	355 [481]	680 [922]	800 [1,085]	3,180 [4,312]	N/A
16	245 [332]	500 [678]	800 [1085]	1,100 [1,491]	4,400 [5,966]	N/A
18	355 [481]	500 [678]	1100 [1491]	2,000 [2712]	5,920 [8,026]	N/A
20	355 [481]	500 [678]	1100 [1491]	2,200 [2,983]	7,720 [10,467]	N/A
24	500 [678]	800 [1085]	2000 [2712]	4,400 [5,966]	11,651 [15,797]	N/A

Table 2 – Stud Torque Values – EN/ISO/DIN (SRX, SRL/SRLO, XL/XLO)

Nominal Pipe Size (in [mm])	Torque by Flange Rating (ft-lb [N-m])									
	PN 6	PN 10	PN 16	ISO PN 20	PN 25	PN 40	ISO PN 50	DIN PN 63/64	DIN PN 100	ISO PN 100/110
1" [DN 25]	23 [31]	28 [37]	28 [37]	32 [44]	45 [61]	45 [61]	60 [82]	60 [82]	60 [82]	60 [82]
1.5 [DN 40]	28 [37]	37 [50]	37 [50]	32 [44]	84 [114]	84 [114]	105 [142]	105 [142]	105 [142]	105 [142]
2 [DN 50]	45 [61]	60 [82]	60 [82]	60 [82]	121 [164]	121 [164]	60 [82]	151 [205]	181 [246]	60 [82]
3 [DN 80]	60 [82]	30 [41]	30 [41]	60 [82]	84 [114]	84 [114]	105 [142]	105 [142]	126 [171]	105 [142]
4 [DN 100]	121 [164]	60 [82]	60 [82]	60 [82]	105 [142]	105 [142]	105 [142]	173 [235]	195 [264]	173 [235]
6 [DN 150]	84 [114]	105 [142]	105 [142]	105 [142]	189 [256]	189 [256]	105 [142]	433 [587]	289 [391]	260 [352]
8 [DN 200]	84 [114]	105 [142]	70 [95]	105 [142]	173 [235]	195 [264]	173 [235]	410 [555]	410 [555]	372 [505]
10 [DN 250]	115 [157]	144 [196]	173 [235]	173 [235]	347 [470]	385 [523]	260 [353]	693 [939]	756 [1,025]	520 [705]
12 [DN 300]	144 [196]	144 [196]	173 [235]	173 [235]	336 [455]	373 [505]	373 [505]	650 [881]	768 [1,041]	520 [705]
14 [DN 350]	192 [261]	144 [196]	173 [235]	260 [352]	466 [632]	513 [695]	372 [504]	875 [1,187]	1,094 [1,484]	700 [950]
16 [DN 400]	192 [261]	231 [314]	260 [353]	260 [353]	650 [881]	709 [961]	520 [705]	1,024 [1,388]	N/A	819 [1,110]
18 [DN 450]	249 [337]	239 [323]	268 [364]	373 [505]	624 [846]	680 [922]	520 [705]	N/A	N/A	1,119 [1,517]
20 [DN 500]	249 [337]	298 [405]	373 [506]	372 [504]	624 [846]	737 [999]	520 [705]	N/A	N/A	1,120 [1,518]
24 [DN 600]	378 [512]	425 [576]	520 [705]	520 [705]	907 [1,230]	1,134 [1,537]	819 [1,110]	N/A	N/A	2,016 [2,733]

Table 3 – Stud Torque Values – JIS (SRX, SRL/SRLO, XL/XLO)

Nominal Pipe Size (in [mm])	Torque by Flange Rating (ft-lb [N-m])						
	JIS 5	JIS 10	JIS 16	JIS 20	JIS 30	JIS 40	JIS 63
1" [DN 25]	23 [31]	37 [50]	37 [50]	60 [82]	60 [82]	60 [82]	75 [102]
1.5 [DN 40]	28 [37]	37 [50]	37 [50]	84 [114]	105 [142]	105 [142]	115 [157]
2 [DN 50]	45 [61]	60 [82]	60 [82]	60 [82]	60 [82]	60 [82]	75 [102]
3 [DN 80]	60 [82]	30 [41]	30 [41]	105 [142]	105 [142]	105 [142]	115 [157]
4 [DN 100]	60 [82]	60 [82]	75 [102]	105 [142]	115 [157	115 [157]	173 [235]
6 [DN 150]	84 [114]	105 [142]	77 [104]	115 [157]	126 [171]	157 [214]	289 [391]]
8 [DN 200]	105 [142]	70 [95]	77 [104]	159 [215]	173 [235]	217 [294]	372 [505]
10 [DN 250]	144 [196]	159 [215]	173 [235]	308 [418]	385 [523]	385 [523]	756 [1,025]
12 [DN 300]	144 [196]	119 [161]	130 [176]	298 [404]	373 [505]	447 [607]	709 [961]
14 [DN 350]	212 [287]	159 [215]	217 [294]	465 [631]	465 [631]]	558 [757]	1,021 [1,385]
16 [DN 400]	212 [287]	231 [314]	289 [392]	591 [801]	709 [961]	709 [961]	1,102 [1,495]
18 [DN 450]	273 [370]	239 [323]	298 [404]	567 [769]	N/A	N/A	N/A
20 [DN 500]	273 [370]	298 [404]	372 [504]	567 [769]	N/A	N/A	N/A
24 [DN 600]	378 [512]	394 [534]	472 [641]	756 [1,025]	N/A	N/A	N/A

NOTE: Torque values in Appendix A are based on a nut factor K = 0.2. Adjustments to the torque should be considered if the installation utilizes bolting/lubrication with a nut factor other than K = 0.2. The following expression may be used for correction:

Equation 1: $T_2 = (T_1/K_1) * K_2$ where T_1 and K_1 are the Fike default torque and nut factor values.

Table 4 – Stud Torque Values – ASME (ATLAS/ATLAS-LO)

Nominal Pipe Size (in)	Torque by Flange Rating (ft-lb [N-m])										
	150 ANSI	300 ANSI	600 ANSI	900 ANSI	1500 ANSI	2500 ANSI	Series B 75	Series B 150	Series B 300	Series A 150	Series A 300
1"	30 [41]	60 [81]	60 [81]	160 [217]	160 [217]	160 [217]	N/A	N/A	N/A	N/A	N/A
1.5	30 [41]	100 [136]	100 [136]	245 [332]	245 [332]	355 [481]	N/A	N/A	N/A	N/A	N/A
2	60 [81]	60 [81]	60 [81]	160 [217]	160 [217]	245 [332]	N/A	N/A	N/A	N/A	N/A
3	60 [81]	100 [136]	100 [136]	160 [217]	355 [481]	500 [678]	N/A	N/A	N/A	N/A	N/A
4	60 [81]	100 [136]	160 [217]	355 [481]	500 [678]	800 [1,085]	N/A	N/A	N/A	N/A	N/A
14	260 [353]	355 [481]	730 [990]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	245 [332]	815 [1,105]	860 [1,166]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	460 [624]	695 [942]	1,100 [1,491]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	682 [925]	968 [1,312]	1,593 [2,160]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	968 [1,312]	984 [1,334]	1,947 [2,640]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	N/A	N/A	N/A	N/A	N/A	N/A	100 [136]	110 [149]	505 [685]	650 [881]	1,200 [1,627]
28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	159 [216]	527 [715]	419 [568]	1,493 [2,024]
30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	154 [209]	722 [979]	418 [567]	1,556 [2,110]
32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	150 [203]	958 [1,299]	703 [953]	1,968 [2,668]
36	N/A	N/A	N/A	N/A	N/A	N/A	155 [210]	160 [217]	1,575 [2,135]	1,370 [1,857]	2,200 [2,983]

Table 5 – Stud Torque Values – EN/ISO/DIN (ATLAS/ATLAS-LO)

Nominal Pipe Size (in [mm])	Torque by Flange Rating (ft-lb [N-m])									
	PN 1, 2, & 6	PN 10	PN 16	ISO PN 20	PN 25	PN 40	ISO PN 50	DIN PN 63/64	DIN PN 100	ISO PN 100/110
1" [DN 25]	23 [31]	28 [37]	28 [37]	32 [44]	45 [61]	45 [61]	60 [82]	60 [82]	60 [82]	60 [82]
1.5 [DN 40]	28 [37]	37 [50]	37 [50]	32 [44]	84 [114]	84 [114]	105 [142]	105 [142]	105 [142]	105 [142]
2 [DN 50]	45 [61]	60 [82]	60 [82]	60 [82]	121 [164]	121 [164]	60 [82]	151 [205]	181 [246]	60 [82]
3 [DN 80]	60 [82]	30 [41]	30 [41]	60 [82]	84 [114]	84 [114]	105 [142]	105 [142]	126 [171]	105 [142]
4 [DN 100]	121 [164]	60 [82]	60 [82]	60 [82]	105 [142]	105 [142]	105 [142]	173 [235]	195 [264]	173 [235]
14 [DN 350]	215 [292]	165 [224]	355 [481]	530 [719]	430 [583]	915 [1,241]	650 [881]	935 [1,268]	N/A	745 [1,010]
16 [DN 400]	205 [278]	235 [319]	370 [502]	370 [502]	1,115 [1,512]	1,145 [1,552]	900 [1,220]	1,300 [1,763]	N/A	1,110 [1,505]
18 [DN 450]	165 [224]	325 [441]	365 [495]	490 [664]	915 [1,241]	935 [1,268]	765 [1,037]	N/A	N/A	1,140 [1,546]
20 [DN 500]	N/A	277 [376]	354 [480]	816 [1,106]	608 [824]	1,058 [1,434]	1,116 [1,513]	N/A	N/A	1,948 [2,641]
24 [DN 600]	N/A	374 [507]	460 [624]	1,116 [1,513]	807 [1,094]	1,326 [1,798]	1,085 [1,471]	N/A	N/A	1,864 [2,527]
28 [DN 700]	N/A	N/A	483 [655]	N/A	775 [1051]	N/A	N/A	N/A	N/A	N/A
32 [DN 800]	N/A	N/A	593 [804]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36 [DN 900]	365 [495]	575 [780]	725 [983]	N/A	2,100 [2,847]	N/A	N/A	N/A	N/A	N/A

Table 6 – Stud Torque Values – JIS (ATLAS/ATLAS-LO)

Nominal Pipe Size (in [mm])	Torque by Flange Rating (ft-lb [N-m])							
	JIS 2	JIS 5	JIS 10	JIS 16	JIS 20	JIS 30	JIS 40	JIS 63
1" [DN 25]	N/A	23 [31]	37 [50]	37 [50]	60 [82]	60 [82]	60 [82]	75 [102]
1.5 [DN 40]	N/A	28 [37]	37 [50]	37 [50]	84 [114]	105 [142]	105 [142]	115 [157]
2 [DN 50]	N/A	45 [61]	60 [82]	60 [82]	60 [82]	60 [82]	60 [82]	75 [102]
3 [DN 80]	N/A	60 [82]	30 [41]	30 [41]	105 [142]	105 [142]	105 [142]	115 [157]
4 [DN 100]	N/A	60 [82]	60 [82]	75 [102]	105 [142]	115 [157	115 [157]	173 [235]
14 [DN 350]	N/A	240 [325]	185 [251]	430 [583]	430 [583]	N/A	N/A	N/A
16 [DN 400]	N/A	225 [305]	235 [319]	425 [576]	425 [576]	N/A	N/A	N/A
18 [DN 450]	165 [224]	185 [251]	325 [441]	425 [576]	425 [576]	N/A	N/A	N/A
20 [DN 500]	N/A	N/A	387 [525]	816 [1,106]	816 [1,106]	N/A	N/A	N/A
24 [DN 600]	N/A	N/A	571 [774]	1,111 [1,506]	1,185 [1,607]	N/A	N/A	N/A
26 [DN 650]	205 [278]	225 [305]	625 [847]	725 [983]	1,760 [2,386]	N/A	N/A	N/A
28 [DN 700]	N/A	N/A	735 [997]	N/A	N/A	N/A	N/A	N/A
30 [DN 750]	N/A	N/A	816 [1,106]	N/A	N/A	N/A	N/A	N/A
32 [DN 800]	N/A	N/A	735 [997]	N/A	N/A	N/A	N/A	N/A
36 [DN 900]	330 [447]	650 [881]	575 [780]	2,100 [2,847]	2,250 [3,051]	N/A	N/A	N/A

NOTE: Torque values for Atlas sizes 14" and larger were determined by considering ASME PCC-1 and ASME Section VIII Devision 1 Mandatory Appendix II guidelines. Torque values in Appendix A are based on a nut factor K = 0.2. Adjustments to the torque should be considered if the installation utilizes bolting/lubrication with a nut factor other than K = 0.2. The following expression may be used for correction:

Equation 1: $T_2 = (T_1/K_1) * K_2$ where T_1 and K_1 are the Fike default torque and nut factor values.

Notes:

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