

Series 150 Flange									
Pipe Size	Wrench Size	Flange Bolts		Raised Face			Flange Dia.	Ring Joint	
		Quan	Size	Stud L'gth	Gasket			Stud L'gth	Ring No.
					I.D.	O.D.			
1	7/8	4	1/2	2 1/2	15/16	2 5/8	4 1/4	3	R15
1.5	7/8	4	1/2	2 3/4	1 29/32	3 3/8	5	3 1/4	R19
2	1 1/16	4	5/8	3	2 3/8	4 1/8	6	3 3/4	R22
3	1 1/16	4	5/8	3 1/2	3 1/2	5 3/8	7 1/2	4 1/4	R29
4	1 1/16	8	5/8	3 1/2	4 1/2	6 7/8	9	4 1/4	R36
6	1 1/4	8	3/4	3 3/4	6 5/8	8 3/4	11	4 1/2	R43
8	1 1/4	8	3/4	4	8 5/8	11	13 1/2	4 3/4	R48
10	1 7/16	12	7/8	4 1/2	10 3/4	13 3/8	16	5 1/4	R52
12	1 7/16	12	7/8	4 1/2	12 3/4	16 1/8	19	5 1/2	R56

RESIN SYSTEMS, INC. 625-4541

Series 300 Flange									
Pipe Size	Wrench Size	Flange Bolts		Raised Face			Flange Dia.	Ring Joint	
		Quan	Size	Stud L'gth	Gasket			Stud L'gth	Ring No.
					I.D.	O.D.			
1	1 1/16	4	5/8	3	1 5/16	2 7/8	4 7/8	3 1/4	R16
1.5	1 1/4	4	3/4	3 1/2	1 29/32	3 3/4	6 1/8	4	R20
2	1 1/16	8	5/8	3 1/4	2 3/8	4 3/8	6 1/2	4 1/4	R23
3	1 1/4	8	3/4	4	3 1/2	5 7/8	8 1/4	5	R31
4	1 1/4	8	3/4	4 1/4	4 1/2	7 1/8	10	5 1/4	R37
6	1 1/4	12	3/4	4 3/4	6 5/8	9 7/8	12 1/2	5 3/4	R45
8	1 7/16	12	7/8	5 1/4	8 5/8	12 1/8	15	6 1/4	R49
10	1 5/8	16	1	6	10 3/4	14 1/4	17 1/2	7 1/4	R53
12	1 13/16	16	1 1/8	6 1/2	12 3/4	16 5/8	20 1/2	7 1/2	R57

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Fiberglass Flange Torques Requirements:										
Size	25# Class		50# Class		75# Class		100# Class		150# Class	
	Thick	Torque	Thick	Torque	Thick	Torque	Thick	Torque	Thick	Torque
2"	1/2"	25 ft-lbs	1/2"	25 ft-lbs	1/2"	25 ft-lbs	9/16"	25 ft-lbs	11/16"	25 ft-lbs
3"	1/2"	25 ft-lbs	1/2"	25 ft-lbs	5/8"	25 ft-lbs	11/16"	25 ft-lbs	13/16"	25 ft-lbs
4"	1/2"	25 ft-lbs	9/16"	25 ft-lbs	11/16"	25 ft-lbs	13/16"	25 ft-lbs	15/16"	25 ft-lbs
6"	1/2"	25 ft-lbs	5/8"	25 ft-lbs	3/4"	25 ft-lbs	7/8"	25 ft-lbs	1 1/16"	25 ft-lbs
8"	9/16"	25 ft-lbs	3/4"	25 ft-lbs	7/8"	30 ft-lbs	1"	40 ft-lbs	1 1/4"	25 ft-lbs
10"	11/16"	25 ft-lbs	7/8"	25 ft-lbs	1 1/16"	30 ft-lbs	1 3/16"	40 ft-lbs	1 7/16"	25 ft-lbs
12"	3/4"	25 ft-lbs	1"	25 ft-lbs	1 1/4"	30 ft-lbs	1 7/16"	45 ft-lbs	1 3/4"	25 ft-lbs

Torque Procedure:  
 Lubricate stud threads & face of nut. Install all bolts & nuts finger tight.  
 Apply torque in 20% (1/5) steps of required final torque, loading all bolts at each step before proceeding to next step. Tighten all bolts in sequential order at each step until final torque is reached. Use rotational tightening until all bolts are stable at final torque level. Two times around is usually required. RESIN SYSTEMS, INC. 625-4541

Lined Pipe Torque Requirements:						PVC/CPVC & Kynar Flange Torques					
Size	PTFE/PFA		POLYPRO		KYNAR		Size	Torque			
	min	MAX	min	MAX	min	MAX					
1"	15	25	30	35	35	55	1/2"-1 1/2"	10-15 ft-lbs		1	
1.5"	25	55	40	75	50	60			8	5	
2"	35	75	45	110	50	125	2"-4"	20-30 ft-lbs	4	+	3
3"	40	110	50	125	75	125			6	7	
4"	45	125	60	140	75	125	6"-8"	33-50 ft-lbs		2	
6"	65	125	120	225	120	225					
8"	95	150	120	225	120	225	10"	53-75 ft-lbs			
10"	85	200	140	250	-	-					
12"	100	200	140	250	-	-	12"	80-110 ft-lbs			

Torque Procedure: Follow same as Fiberglass Flange Requirements.  
 Lined Pipe: After 24-30 hours or a temperature or pressure cycle, check the torque for each bolt and retorquing those falling below the above listed torque values.

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