

Keystone Bolting Guide

Butterfly Valve Industry Standards

Size	GR L		222		Series 60		AR		KLOK #150		KLOK #300		ASME B 16.1 Spec		ASME B 16.5 Spec 150		ASME B 16.47 150A		ASME B 16.5 Spec 300	
	Thread info	# of holes	Thread info	# of holes	Thread info	# of holes	Thread info	# of holes	Thread info	# of holes	Thread info	# of holes	Bolt Size	# of holes	Bolt Size	# of holes	Bolt Size	# of holes	Bolt Size	# of holes
	2	5/8 - 11 UNC	4	5/8 - 11 UNC - 2B	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	5/8 - 11 UNC	8	5/8 - 11 UNC	4	5/8 - 11 UNC	4			5/8
2.5	5/8 - 11 UNC	4	5/8 - 11 UNC - 2B	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	3/4 - 10 UNC	8	5/8 - 11 UNC	4	5/8 - 11 UNC			3/4	8	
3	5/8 - 11 UNC	4	5/8 - 11 UNC - 2B	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	5/8 - 11 UNC	4	3/4 - 10 UNC	8	5/8 - 11 UNC	4	5/8 - 11 UNC			3/4	8	
4	5/8 - 11 UNC	8	5/8 - 11 UNC - 2B	8	5/8 - 11 UNC	8	5/8 - 11 UNC	8	5/8 - 11 UNC	8	3/4 - 10 UNC	8	5/8 - 11 UNC	8	5/8 - 11 UNC			3/4	8	
5	3/4 - 10 UNC	8	3/4 - 10 UNC - 2B	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC			3/4	8	
6	3/4 - 10 UNC	8	3/4 - 10 UNC - 2B	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	12	3/4 - 10 UNC	8	3/4 - 10 UNC			3/4	12	
8	3/4 - 10 UNC	8	3/4 - 10 UNC - 2B	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	3/4 - 10 UNC	8	7/8 - 9 UNC	12	3/4 - 10 UNC	8	3/4 - 10 UNC			7/8	12	
10	7/8 - 9 UNC	12	7/8 - 9 UNC - 2B	12	7/8 - 9 UNC	12	7/8 - 9 UNC	12	7/8 - 9 UNC	12	1 - 8 UN	16	7/8 - 9 UNC	12	7/8 - 9 UNC			1	16	
12	7/8 - 9 UNC	12	7/8 - 9 UNC - 2B	12	7/8 - 9 UNC	12	7/8 - 9 UNC	12	7/8 - 9 UNC	12	1 1/8 - 8 UN	16	7/8 - 9 UNC	12	7/8 - 9 UNC			1-1/8	16	
14	1 - 8 UN	12	N/A	N/A	1 - 8 UN		1 - 8 UN	12	1 - 8 UN	12	1 - 8 UN	20	1 - 8 UNC	12	1 - 8 UNC			1-1/8	20	
16	1 1/8 - 8 UN	16	N/A	N/A	1 - 8 UN		1 - 8 UN	16	1 - 8 UN	16	1 1/4 - 8 UN	20	1 - 8 UNC	16	1 - 8 UNC			1-1/4	20	
18	1 1/8 - 8 UN	16	N/A	N/A	1 1/8 - 7 UN		1 1/8 - 7 UN	16	1 1/8 - 8 UN	16	1 1/4 - 8 UN	24	1-1/8 - 7 UNC	16	1-1/8			1-1/4	24	
20	1 1/4 - 8 UN	20	N/A	N/A	1 1/8 - 7 UN		1 1/8 - 7 UN	20	1 1/8 - 8 UN	20	1 1/4 - 8 UN	24	1-1/8 - 7 UNC	20	1-1/8			1-1/4	24	
24	1 1/4 - 8 UN	20	N/A	N/A	1 1/4 - 7 UN	20	1 1/4 - 7 UN	20	1 1/4 - 8 UN	20	1 1/2 - 8 UN	24	1-1/4 - 7 UNC	20	1-1/4			1-1/2	24	
28	1 1/4 - 8 UN	28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						1-1/4	28	
30	1 1/4 - 8 UN	28	N/A	N/A	N/A	N/A	N/A	N/A	1 1/4 - 8 UN	28			1-1/4 - 7 UNC	28				1-1/4	28	
32	1 1/2 - 8 UN	28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							1-1/2	28	
36	1 1/2 - 8 UN	32	N/A	N/A	N/A	N/A	N/A	N/A	1 1/2 - 8 UN	32			1-1/2 - 6 UNC	32				1-1/2	32	

Notes
 For bolts greater than 1" diameter, UNC is the same as UN dimensions as the call outs are the same number of threads-per-inch (TPI)
 ASME B16.5 Table 1C specifies Carbon Steel Bolting shall be coarse series and Alloy Steel Bolting shall be coarse series up through 1"; 8 thread series for larger bolts.
 ASME B16.47 Table 42 specifies Carbon Steel Bolting shall be coarse series and Alloy Steel Bolting shall be coarse series up through 1"; 8 thread series for larger bolts.
 Should you have questions regarding the talbe please contact your Pentair Technical Support