



## HYDRAMAX TENSIONER ANSI B16.5 WN FLANGES

HydraMax Tensioner tool selection chart for ANSI B16.5 weld neck flanges

NOM BORE	NPS (DN)	FLANGE RATING											
		150 # (PN20)		300 # (PN50)		600 # (PN100)		900 # (PN150)		1500 # (PN250)		2500 # (PN420)	
2" (50)								HM02	8 x 7/8" (M24)	HM02	8 x 7/8" (M24)	HM03	8 x 1" (M27)
								HM03		HM03		HM04	
3" (80)				HM01	8 x 3/4" (M20)	HM01	8 x 3/4" (M20)	HM02	8 x 7/8" (M24)	HM04	8 x 1 1/8" (M30)	HM05	8 x 1 1/4" (M33)
				HM02 (1)		HM02		HM03					
4" (100)				HM01	8 x 3/4" (M20)	HM02	8 x 7/8" (M24)	HM04	8 x 1 1/8" (M30)	HM05	8 x 1 1/4" (M33)	HM06	8 x 1 1/2" (M39)
				HM02		HM03		HM05				HM07	
5" (125)		HM01 (1)	8 x 3/4" (M20)	HM01	8 x 3/4" (M20)	HM03	8 x 1" (M27)	HM05	8 x 1 1/4" (M33)	HM06	8 x 1 1/2" (M39)	HM08	8 x 1 3/4" (M45)
				HM02		HM04		HM07		HM07			
6" (150)		HM01 (1)	8 x 3/4" (M20)	HM01	12 x 3/4" (M20)	HM03	12 x 1" (M27)	HM04	12 x 1 1/8" (M30)	HM06	12 x 1 3/8" (M36)	HM10	8 x 2" (M52)
				HM02		HM04		HM05					
				TS03									
8" (200)		HM01	8 x 3/4" (M20)	HM02	12 x 7/8" (M24)	HM04	12 x 1 1/8" (M30)	HM06	12 x 1 3/8" (M36)	HM07	12 x 1 5/8" (M42)	HM10	12 x 2" (M52)
				HM03		HM05		HM08					
10" (250)		HM02	12 x 7/8" (M24)	HM03	16 x 1" (M27)	HM05	16 x 1 1/4" (M33)	HM06	16 x 1 3/8" (M36)	HM09	12 x 1 7/8" (M48)	HM12	12 x 2 1/2" (M64)
				HM04		HM06		HM07		HM10			
12" (300)		HM02	12 x 7/8" (M24)	HM04	16 x 1 1/8" (M30)	HM05	20 x 1 1/4" (M33)	HM06	20 x 1 3/8" (M36)	HM10	16 x 2" (M52)	HM13	12 x 2 3/4" (M72)
		HM03		HM05				HM07					
14" (350)		HM03	12 x 1" (M27)	HM04	20 x 1 1/8" (M30)	HM06	20 x 1 3/8" (M36)	HM06	20 x 1 1/2" (M39)	HM08 (1)	16 x 2 1/4" (M56)		
		HM04		HM05		HM07		HM07		HM11			
16" (400)		HM03	16 x 1" (M27)	HM05	20 x 1 1/4" (M33)	HM06	20 x 1 1/2" (M39)	HM07	20 x 1 5/8" (M42)	HM08	16 x 2 1/2" (M64)		
		HM04		HM06		HM08		HM09		HM12			
		HM05				HM09							
18" (450)		HM04	16 x 1 1/8" (M30)	HM05	24 x 1 1/4" (M33)	HM07	20 x 1 5/8" (M42)	HM09	20 x 1 7/8" (M48)	HM10	16 x 2 3/4" (M72)		
				HM06		HM08		HM10		HM13			
				HM07 (1)		HM09							
20" (500)		HM04	20 x 1 1/8" (M30)	HM05	24 x 1 1/4" (M33)	HM07	24 x 1 5/8" (M42)	HM10	20 x 2" (M52)	HM11	16 x 3" (M76)		
				HM06		HM08		HM11		HM14 (2)			
				HM07		HM09 (1)							
24" (600)		HM05	20 x 1 1/4" (M33)	HM06	24 x 1 1/2" (M39)	HM09	24 x 1 7/8" (M48)	HM12	20 x 2 1/2" (M64)	HM14	16 x 3 1/2" (M90)		
				HM07		HM10				HM15 (1)			
				HM08									
				HM09									
26" (650)		HM05	24 x 1 1/4" (M33)	HM07	28 x 1 5/8" (M42)	HM09	28 x 1 7/8" (M48)	HM13	20 x 2 3/4" (M72)				
		HM06		HM08									
		HM07		HM09									
28" (700)		HM05	28 x 1 1/4" (M33)	HM07	28 x 1 5/8" (M42)	HM10	28 x 2" (M52)	HM13	20 x 3" (M76)				
		HM06		HM08				HM14 (2)					
		HM07		HM09									
30" (750)		HM05	28 x 1 1/4" (M33)	HM08	28 x 3/4" (M45)	HM10	28 x 2" (M52)	HM13	20 x 3" (M76)				
		HM06		HM09				HM14 (1)					
		HM07		HM10									
32" (800)		HM06	28 x 1 1/2" (M39)	HM09	28 x 1 7/8" (M48)	HM11	28 x 2 1/4" (M56)	HM14	20 x 3 1/4" (M85)				
		HM07		HM10									
		HM08		HM11									
		HM09		HM12									
34" (850)		HM06	32 x 1 1/2" (M39)	HM09	28 x 1 7/8" (M48)	HM11	28 x 2 1/4" (M56)	HM14	20 x 3 1/2" (M90)				
		HM07		HM10									
		HM08		HM11									
		HM09		HM12									
36" (900)		HM06	32 x 1 1/2" (M39)	HM10	32 x 2" (M52)	HM12	28 x 2 1/2" (M64)	HM14	20 x 3 1/2" (M90)				
		HM07						HM15					
		HM08											
		HM09											
		HM10											

1) Bolts must be central in holes or bolt protrusion must be staggered either side of the flange.  
 2) Bolt protrusion must be staggered either side of the flange.



## HYDRAMAX TENSIONER SPO COMPACT WN FLANGES

### HydraMax Tensioner tool selection chart for SPO Compact weld neck flanges

NOM BORE	NPS (DN)	FLANGE RATING																					
		CL 150		CL 300		CL 600		CL 900		CL 1500		CL 2500		CL 4500									
2 1/2"	(65)											HM01	8 x 3/4" (M20)	HM01	8 x 3/4" (M20)								
3"	(80)											HM02	8 x 7/8" (M22)	HM02	8 x 7/8" (M22)								
4"	(100)											HM01	12 x 3/4" (M20)	HM03	8 x 1" (M24)	HM02	12 x 7/8" (M22)						
5"	(125)											HM02	12 x 7/8" (M22)	HM03	12 x 1" (M24)	HM04	12 x 1 1/8" (M30)						
6"	(150)											HM03	12 x 1" (M24)	HM04	12 x 1 1/8" (M30)	HM05	12 x 1 1/4" (M33)						
8"	(200)											HM01	20 x 3/4" (M20)	HM03	16 x 1" (M24)	HM06 (2)	12 x 3/8" (M36)	HM06	12 x 1 1/2" (M39)				
10"	(250)											HM01	20 x 3/4" (M20)	HM02	20 x 7/8" (M22)	HM05	16 x 1 1/4" (M33)	HM06 (1)	16 x 1 1/2" (M39)	HM09	12 x 1 7/8" (M48)		
12"	(300)											HM02	20 x 7/8" (M22)	HM03	20 x 1" (M24)	HM05	20 x 1 1/4" (M33)	HM08	16 x 3/4" (M45)	HM09	16 x 1 7/8" (M48)		
14"	(350)											HM02	24 x 7/8" (M22)	HM03	24 x 1" (M24)	HM06 (2)	20 x 3/8" (M36)	HM09	16 x 1 7/8" (M48)	HM10	16 x 2" (M52)		
16"	(400)											HM01	24 x 3/4" (M20)	HM03	24 x 1" (M25)	HM04	24 x 1 1/8" (M30)	HM05	20 x 1 1/2" (M39)	HM06	16 x 2 1/4" (M56)	HM11	16 x 2 1/2" (M64)
18"	(450)											HM01	28 x 3/4" (M20)	HM04	24 x 1 1/8" (M30)	HM05	24 x 1 1/4" (M33)	HM08	20 x 3/4" (M45)	HM11	16 x 2 1/4" (M56)	HM12	16 x 2 1/2" (M64)
20"	(500)											HM02	24 x 7/8" (M22)	HM04	28 x 1 1/8" (M30)	HM06	24 x 3/8" (M36)	HM09	20 x 1 7/8" (M48)	HM10	16 x 2 1/2" (M64)	HM12	12 x 3 1/4" (M85)
22"	(550)											HM02	28 x 7/8" (M22)	HM03 (1)	24 x 1 1/4" (M33)	HM05	24 x 1 1/2" (M39)	HM06	20 x 2" (M52)	HM10	16 x 3" (M76)	HM13	12 x 3 1/2" (M90)
24"	(600)	HM01	24 x 3/4" (M20)	HM02	28 x 1" (M24)	HM03	28 x 1 1/4" (M33)	HM04	24 x 1 1/2" (M30)	HM05	28 x 1 1/4" (M33)	HM07 (1)	24 x 5/8" (M42)	HM08	24 x 1 1/4" (M45)	HM09	20 x 2 1/4" (M56)	HM11	16 x 3 1/4" (M85)	HM12	12 x 4" (M100)		
26"	(650)	HM01	24 x 3/4" (M20)	HM02	32 x 1" (M24)	HM03	32 x 1 1/4" (M33)	HM04	24 x 1 1/2" (M30)	HM05	32 x 1 1/4" (M33)	HM08	24 x 1 1/4" (M45)	HM09	24 x 1 1/4" (M45)	HM11	20 x 2 1/4" (M56)	HM12					
28"	(700)	HM01	28 x 3/4" (M20)	HM02	32 x 1" (M24)	HM03	32 x 1 1/4" (M33)	HM04	32 x 1 1/8" (M30)	HM06	32 x 1 3/8" (M36)	HM08	24 x 1 3/8" (M45)	HM09	24 x 1 3/8" (M45)	HM11	24 x 2 1/4" (M56)	HM12					
30"	(750)	HM01	32 x 3/4" (M20)	HM02	32 x 1 1/8" (M30)	HM03	32 x 1 1/4" (M33)	HM04	32 x 1 1/8" (M30)	HM06 (1)	36 x 1 3/8" (M36)	HM09	24 x 1 7/8" (M48)	HM10	24 x 1 7/8" (M48)	HM12	24 x 2 1/2" (M64)						
32"	(800)	HM01	36 x 3/4" (M20)	HM02	32 x 1 1/8" (M30)	HM03	32 x 1 1/4" (M33)	HM04	32 x 1 1/8" (M30)	HM06	32 x 1 1/2" (M39)	HM07 (1)	24 x 2" (M52)	HM10	24 x 2" (M52)	HM12	24 x 2 1/2" (M64)						
34"	(850)	HM01	40 x 3/4" (M20)	HM02	32 x 1 1/4" (M33)	HM03	32 x 1 1/4" (M33)	HM04	32 x 1 1/4" (M33)	HM05	32 x 1 5/8" (M42)	HM07	24 x 2 1/4" (M56)	HM11	24 x 2 1/4" (M56)	HM13 (2)	24 x 2 3/4" (M72)						
36"	(900)	HM02	32 x 7/8" (M22)	HM03	32 x 1 1/4" (M33)	HM04	32 x 1 1/4" (M33)	HM05	32 x 1 1/4" (M33)	HM07	32 x 1 5/8" (M42)	HM08 (1)	24 x 2 1/4" (M56)	HM11	24 x 2 1/4" (M56)	HM14	20 x 3 1/4" (M85)						
38"	(950)	HM02	36 x 7/8" (M22)	HM03	36 x 1 1/4" (M33)	HM04	36 x 1 1/4" (M33)	HM05	36 x 1 1/4" (M33)	HM06	32 x 1 3/4" (M45)	HM08	24 x 2 1/2" (M64)	HM12	24 x 2 1/2" (M64)	HM14	20 x 3 1/2" (M90)						
40"	(1000)	HM02	40 x 7/8" (M22)	HM03	40 x 1 1/4" (M33)	HM04	40 x 1 1/4" (M33)	HM05	40 x 1 1/4" (M33)	HM06	32 x 1 3/4" (M45)	HM08	24 x 2 1/2" (M64)	HM09	24 x 2 1/2" (M64)	HM12	24 x 3 1/4" (M85)						
42"	(1050)	HM02	44 x 7/8" (M22)	HM03	36 x 1 3/8" (M36)	HM04	36 x 1 3/8" (M36)	HM05	36 x 1 3/8" (M36)	HM06	32 x 1 7/8" (M48)	HM08 (1)	28 x 2 1/2" (M64)	HM09	28 x 2 1/2" (M64)	HM12	20 x 3 3/4" (M95)						
44"	(1100)	HM02	44 x 7/8" (M22)	HM03	40 x 1 3/8" (M36)	HM04	40 x 1 3/8" (M36)	HM05	40 x 1 3/8" (M36)	HM06	36 x 1 7/8" (M48)	HM08	28 x 2 1/2" (M64)	HM09	28 x 2 1/2" (M64)	HM12	24 x 3 1/2" (M90)						
46"	(1150)	HM02	48 x 7/8" (M22)	HM03	36 x 1 1/2" (M39)	HM04	36 x 1 1/2" (M39)	HM05	36 x 1 1/2" (M39)	HM06	36 x 2" (M52)	HM07	28 x 2 3/4" (M72)	HM08	28 x 2 3/4" (M72)	HM10	24 x 3 3/4" (M95)						
48"	(1200)	HM02	52 x 7/8" (M22)	HM03	36 x 1 1/2" (M39)	HM04	36 x 1 1/2" (M39)	HM05	36 x 1 1/2" (M39)	HM06	36 x 2" (M52)	HM07	28 x 3" (M76)	HM08	28 x 3" (M76)	HM10	24 x 3 3/4" (M95)						

1) Bolts must be central in holes or bolt protrusion must be staggered either side of the flange.  
 2) Bolt protrusion must be staggered either side of the flange.



## HYDRAMAX TENSIONER API 6A & 17D WN FLANGES

### HydraMax Tensioner tool selection chart for API 6A & 17D weld neck flanges

NOM BORE	API CLASS														
	2000		3000		5000		5017		10000		15000		20000		
1 13/16"									HM01	8 x 3/4" (M20)	HM01	8 x 7/8" (M24)	HM03	8 x 1" (M27)	
2 1/16"			HM02 HM03	8 x 7/8" (M24)	HM02 HM03	8 x 7/8" (M24)	HM02 HM03	8 x 7/8" (M24)	HM01 HM02 (1)	8 x 3/4" (M20)	HM02 HM03 (1)	8 x 7/8" (M24)	HM04	8 x 1 1/8" (M30)	
2 9/16"	HM01	8 x 3/4" (M20)	HM03 HM04	8 x 1" (M27)	HM03 HM04	8 x 1" (M27)	HM03 HM04	8 x 1" (M27)	HM02	8 x 7/8" (M24)	HM03	8 x 1" (M27)	HM05	8 x 1 1/4" (M33)	
3 1/16"									HM03	8 x 1" (M27)	HM04	8 x 1 1/8" (M30)	HM06	8 x 1 3/8" (M36)	
3 1/8"	HM01 HM02 (1)	8 x 3/4" (M20)	HM02 HM03	8 x 7/8" (M24)	HM04	8 x 1 1/8" (M30)	HM04	8 x 1 1/8" (M30)							
4 1/16"	HM02 HM03	8 x 7/8" (M24)	HM04 HM05	8 x 1 1/8" (M30)	HM05	8 x 1 1/4" (M33)	HM05	8 x 1 1/4" (M33)	HM04	8 x 1 1/8" (M30)	HM06 (1)	8 x 1 3/8" (M36)	HM08	8 x 1 3/4" (M45)	
5 1/8"	HM03 HM04 HM05 (1)	8 x 1" (M27)	HM05 HM06 (1)	8 x 1 1/4" (M33)	HM06 HM07	8 x 1 1/2" (M39)	HM06 HM07	8 x 1 1/2" (M39)	HM04	12 x 1 1/8" (M30)					
7 1/16"	HM03 HM04 HM05	12 x 1" (M27)	HM04 HM05	12 x 1 1/8" (M30)	HM06	12 x 1 3/8" (M36)	HM06	12 x 1 3/8" (M36)	HM06 HM07 (1)	12 x 1 1/2" (M39)	HM06 HM07 (2)	16 x 1 1/2" (M39)	HM10	16 x 2" (M52)	
9"	HM04 HM05	12 x 1 1/8" (M30)	HM06 HM07	12 x 1 3/8" (M36)	HM07	12 x 1 5/8" (M42)	HM07	12 x 1 5/8" (M42)	HM06 HM07	16 x 1 1/2" (M39)	HM09 HM10	16 x 1 7/8" (M48)	HM12	16 x 2 1/2" (M64)	
11"	HM05 HM06	16 x 1 1/4" (M33)	HM06 HM07 HM08	16 x 1 3/8" (M36)	HM09 HM10	12 x 1 7/8" (M48)	HM09 HM10	12 x 1 7/8" (M48)	HM08	16 x 1 3/4" (M45)	HM10	20 x 2" (M52)	HM13 (1)	16 x 2 3/4" (M72)	
13 5/8"	FLANGE DATA REQ	20 x 1 1/4" (M33)	FLANGE DATA REQ	20 x 1 3/8" (M36)	HM07	16 x 1 5/8" (M42)			HM09 HM10	20 x 1 7/8" (M48)	HM11	20 x 2 1/4" (M56)	HM13 HM14 (2)	20 x 3" (M90)	
16 3/4"	FLANGE DATA REQ	20 x 1 1/2" (M39)	FLANGE DATA REQ	20 x 1 5/8" (M42)					HM09	24 x 1 7/8" (M48)					
18 3/4"					HM10 HM11	20 x 2" (M52)			HM11	24 x 2 1/4" (M56)	HM13 HM14 (2)	20 x 3" (M90)			
21 1/4"	FLANGE DATA REQ	24 x 1 5/8" (M42)			HM10 HM11 (1)	24 x 2" (M52)			HM12	24 x 2 1/2" (M64)					
26 3/4"	HM08	16 x 1 3/4" (M45)	HM10 HM11	24 x 2" (M52)											
30"	HM07	32 x 1 5/8" (M42)	HM09 HM10	32 x 1 7/8" (M48)											

1) Bolts must be central in holes or bolt protrusion must be staggered either side of the flange.  
 2) Bolt protrusion must be staggered either side of the flange.



# HYDRAMAX TENSIONER TAPER-LOK WN FLANGES

## HydraMax Tensioner tool selection chart for Taper-Lok weld neck flanges

NOM BORE	PC CLASS																																		
	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10	PC 11	PC 12	PC 13	PC 14	PC 15	PC 16	PC 17	PC 18	PC 19																
2"		HMO1 HMO2 (M)	8 x 1/4" (M2)	HMO2 HMO3 (M)	8 x 1/4" (M2)																														
2 1/2"		HMO1 HMO2 (M)	8 x 1/4" (M2)	HMO2 HMO3	8 x 1/4" (M2)	HMO3	8 x 1/4" (M2)																												
3"		HMO1 HMO2 (M)	12 x 1/2" (M3)		HMO3	8 x 1/4" (M2)	HMO4	8 x 1/2" (M3)																											
3 1/2"		HMO1 HMO2 (M)	12 x 1/2" (M3)		HMO3	8 x 1/4" (M2)	HMO4	8 x 1/2" (M3)	HMO5	8 x 1/2" (M3)																									
4"	HMO1 HMO2 (M)	12 x 1/2" (M3)	HMO2 HMO3 (M)	12 x 1/2" (M3)		HMO4	8 x 1/2" (M3)	HMO5	8 x 1/2" (M3)	HMO6	8 x 1/2" (M3)																								
5"	HMO1 HMO2 (M)	12 x 1/2" (M3)	HMO2 HMO3 (M)	12 x 1/2" (M3)	HMO4	12 x 1/2" (M3)		HMO5	8 x 1/2" (M3)	HMO6	8 x 1/2" (M3)	HMO7 (1)	8 x 1/2" (M3)																						
6"	HMO1 HMO2 (M)	16 x 1/2" (M3)		HMO3	12 x 1/2" (M3)	HMO4	12 x 1/2" (M3)	HMO5	12 x 1/2" (M3)	HMO6	12 x 1/2" (M3)		HMO7	8 x 1/2" (M3)	HMO8	12 x 1/2" (M3)	HMO9	12 x 1/2" (M3)																	
8"	HMO1 HMO2 (M)	20 x 1/2" (M3)		HMO3	16 x 1/2" (M3)	HMO4	12 x 1/2" (M3)	HMO5	12 x 1/2" (M3)	HMO6	12 x 1/2" (M3)	HMO7	12 x 1/2" (M3)	HMO8	12 x 1/2" (M3)	HMO9	12 x 1/2" (M3)	HMO10	12 x 1/2" (M3)																
10"	HMO1 HMO2 (M)	24 x 1/2" (M3)		HMO3	20 x 1/2" (M3)	HMO4	16 x 1/2" (M3)	HMO5	16 x 1/2" (M3)	HMO6	16 x 1/2" (M3)	HMO7	16 x 1/2" (M3)		HMO8	12 x 1/2" (M3)	HMO9	12 x 2" (M5)	HMO10	12 x 2" (M5)															
12"		HMO2 HMO3 (M)	24 x 1/2" (M3)		HMO4	20 x 1/2" (M3)		HMO5	16 x 1/2" (M3)	HMO6	16 x 1/2" (M3)	HMO7	16 x 1/2" (M3)	HMO8	16 x 1/2" (M3)	HMO9	16 x 1/2" (M3)		HMO10	12 x 2" (M5)	HMO11	12 x 2" (M5)	HMO12	12 x 2" (M5)	HMO13	12 x 2" (M5)									
14"	HMO1 HMO2 (M)	28 x 1/2" (M3)	HMO2 HMO3	24 x 1/2" (M3)	HMO3	24 x 1/2" (M3)	HMO4	20 x 1/2" (M3)	HMO5	20 x 1/2" (M3)	HMO6	16 x 1/2" (M3)	HMO7	16 x 1/2" (M3)	HMO8	16 x 1/2" (M3)	HMO9	16 x 1/2" (M3)	HMO10	16 x 1/2" (M3)	HMO11	16 x 2" (M5)													
16"	HMO1 HMO2 (M)	32 x 1/2" (M3)		HMO3	24 x 1/2" (M3)	HMO4	24 x 1/2" (M3)		HMO5	20 x 1/2" (M3)	HMO6	20 x 1/2" (M3)		HMO7	16 x 1/2" (M3)	HMO8	16 x 1/2" (M3)	HMO9	16 x 1/2" (M3)	HMO10	16 x 2" (M5)	HMO11	16 x 2" (M5)												
18"	HMO1 HMO2 (M)	36 x 1/2" (M3)	HMO2 HMO3 (M)	32 x 1/2" (M3)		HMO4	24 x 1/2" (M3)	HMO5	24 x 1/2" (M3)	HMO6	20 x 1/2" (M3)	HMO7	20 x 1/2" (M3)	HMO8	20 x 1/2" (M3)	HMO9	20 x 1/2" (M3)		HMO10	16 x 2" (M5)	HMO11	16 x 2" (M5)	HMO12	16 x 2" (M5)											
20"	HMO1 HMO2 (M)	40 x 1/2" (M3)		HMO3 HMO4 (M)	32 x 1/2" (M3)	HMO4	24 x 1/2" (M3)	HMO5	24 x 1/2" (M3)	HMO6	24 x 1/2" (M3)		HMO7	24 x 1/2" (M3)	HMO8	20 x 1/2" (M3)	HMO9	20 x 1/2" (M3)		HMO10	16 x 2" (M5)	HMO11	16 x 2" (M5)	HMO12	16 x 2" (M5)	HMO13	16 x 2" (M5)								
22"	HMO1 HMO2 (M)	44 x 1/2" (M3)				HMO5	28 x 1/2" (M3)						HMO7	24 x 1/2" (M3)	HMO8				HMO10	20 x 2" (M6)						HMO13	16 x 3" (M7)								
24"	HMO1 HMO2 (M)	48 x 1/2" (M3)		HMO3 HMO4 (M)	40 x 1/2" (M3)	HMO4	32 x 1/2" (M3)		HMO5	28 x 1/2" (M3)	HMO6	28 x 1/2" (M3)		HMO7	24 x 1/2" (M3)	HMO8	24 x 1/2" (M3)	HMO9	24 x 1/2" (M3)	HMO10	24 x 1/2" (M3)	HMO11	20 x 2" (M5)			HMO13	16 x 3" (M7)								
26"		HMO2 HMO3	44 x 1/2" (M3)					HMO6	32 x 1/2" (M3)					HMO9	24 x 1/2" (M3)	HMO10	24 x 1/2" (M3)		HMO11	20 x 2" (M5)	HMO12	20 x 2" (M5)					HMO14	16 x 3" (M7)							
28"		HMO2 HMO3 (M)	48 x 1/2" (M3)					HMO6	32 x 1/2" (M3)	HMO7	32 x 1/2" (M3)					HMO10	24 x 2" (M6)		HMO11	20 x 2" (M5)	HMO12	20 x 2" (M5)													
30"				HMO3 HMO4 (M)	48 x 1/2" (M3)			HMO6	32 x 1/2" (M3)	HMO7	32 x 1/2" (M3)								HMO11	24 x 2" (M6)							HMO13	20 x 3" (M8)			HMO15	16 x 4" (M10)			
32"				HMO3	52 x 1/2" (M3)			HMO6	36 x 1/2" (M3)										HMO11	24 x 2" (M6)	HMO12	24 x 2" (M6)													
34"				HMO3 HMO4 (M)	52 x 1/2" (M3)					HMO7	36 x 1/2" (M3)	HMO8	36 x 1/2" (M3)														HMO13	20 x 3" (M8)			HMO15	16 x 4" (M10)			
36"					HMO4	52 x 1/2" (M3)							HMO8	36 x 1/2" (M3)	HMO9	36 x 1/2" (M3)			HMO11	28 x 2" (M6)								HMO14	20 x 3" (M8)						
38"					HMO4	52 x 1/2" (M3)							HMO8	36 x 1/2" (M3)	HMO9	36 x 1/2" (M3)													HMO14	20 x 3" (M8)					
40"					HMO4	56 x 1/2" (M3)							HMO8	40 x 1/2" (M4)	HMO9	40 x 1/2" (M4)					HMO12	28 x 2" (M6)						HMO14	20 x 3" (M8)			HMO15	20 x 4" (M10)		
42"					HMO4	60 x 1/2" (M3)														HMO10	36 x 2" (M7)	HMO11	36 x 2" (M7)				HMO13	28 x 2" (M6)							

- 1) Bolts must be central in holes or bolt protrusion must be staggered either side of the flange.
- 2) Bolt protrusion must be staggered either side of the flange.