



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

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 (DN)	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	HM02 HM03 (2)	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 HM04	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 HM03 (1)	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 HM03 (1)	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 HM05	24 x 1 1/8" (M30)	HM06 HM07	20 x 1 1/2" (M39)	HM11	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 HM12	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 1 3/8" (M36)	HM09 HM10	20 x 1 7/8" (M48)	HM12	16 x 2 1/2" (M64)	HM14	12 x 3 1/4" (M85)			
22" (550)			HM02 HM03 (1)	28 x 7/8" (M22)	HM05	24 x 1 1/4" (M33)	HM06 HM07 (1)	24 x 1 1/2" (M39)	HM10 HM11	20 x 2" (M52)	HM13	16 x 3" (M76)	HM14	12 x 3 1/2" (M90)			
24" (600)		HM01 HM02	24 x 3/4" (M20)	HM03	28 x 1" (M24)	HM05	28 x 1 1/4" (M33)	HM07 HM08	24 x 5/8" (M42)	HM11 HM12	20 x 2 1/4" (M56)	HM14 (2)	16 x 3 1/4" (M85)	HM15	12 x 4" (M100)		
26" (650)		HM01 HM02 HM03	24 x 3/4" (M20)	HM03	32 x 1" (M24)	HM05	32 x 1 1/4" (M33)	HM08 HM09	24 x 1 3/4" (M45)	HM11 HM12	20 x 2 1/4" (M56)						
28" (700)		HM01 HM02 HM03	28 x 3/4" (M20)	HM03 HM04	32 x 1" (M24)	HM06	32 x 1 3/8" (M36)	HM08 HM09	24 x 3/4" (M45)	HM11	24 x 2 1/4" (M56)						
30" (750)		HM01 HM02 HM03	32 x 3/4" (M20)	HM04 HM05	32 x 1 1/8" (M30)	HM06 (1)	36 x 1 3/8" (M36)	HM09 HM10	24 x 1 7/8" (M48)	HM12	24 x 2 1/2" (M64)						
32" (800)		HM01 HM02 HM03	36 x 3/4" (M20)	HM04 HM05	32 x 1 1/8" (M30)	HM06 HM07 (1)	32 x 1 1/2" (M39)	HM10	24 x 2" (M52)	HM12	24 x 2 1/2" (M64)						
34" (850)		HM01 HM02 HM03	40 x 3/4" (M20)	HM05	32 x 1 1/4" (M33)	HM07	32 x 1 5/8" (M42)	HM11	24 x 2 1/4" (M56)	HM13 (2)	24 x 2 3/4" (M72)						
36" (900)		HM02 HM03 HM04	32 x 7/8" (M22)	HM05	32 x 1 1/4" (M33)	HM07 HM08 (1)	32 x 1 5/8" (M42)	HM11	24 x 2 1/4" (M56)	HM14	20 x 3 1/4" (M85)						
38" (950)		HM02 HM03 HM04	36 x 7/8" (M22)	HM05 HM06	36 x 1 1/4" (M33)	HM08	32 x 1 3/4" (M45)	HM12	24 x 2 1/2" (M64)	HM14	20 x 3 1/2" (M90)						
40" (1000)		HM02 HM03 HM04	40 x 7/8" (M22)	HM05 HM06	40 x 1 1/4" (M33)	HM08 HM09	32 x 1 3/4" (M45)	HM12	24 x 2 1/2" (M64)	HM14 (2)	24 x 3 1/4" (M85)						
42" (1050)		HM02 HM03 HM04	44 x 7/8" (M22)	HM06 HM07	36 x 1 3/8" (M36)	HM09	32 x 1 7/8" (M48)	HM12	28 x 2 1/2" (M64)	HM15	20 x 3 3/4" (M95)						
44" (1100)		HM02 HM03 HM04	44 x 7/8" (M22)	HM06 HM07	40 x 1 3/8" (M36)	HM09	36 x 1 7/8" (M48)	HM12	28 x 2 1/2" (M64)	HM14	24 x 3 1/2" (M90)						
46" (1150)		HM02 HM03 HM04	48 x 7/8" (M22)	HM06 HM07 HM08	36 x 1 1/2" (M39)	HM10 HM11	36 x 2" (M52)	HM13	28 x 2 3/4" (M72)	HM15 (2)	24 x 3 3/4" (M95)						
48" (1200)		HM02 HM03 HM04	52 x 7/8" (M22)	HM06 HM07 HM08	36 x 1 1/2" (M39)	HM10	36 x 2" (M52)	HM13	28 x 3" (M76)	HM15	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	16 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	16 x 1/2" (M3)	
14"	HMO1 HMO2 (M)	28 x 1/2" (M3)	HMO2 HMO3 (M)	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 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	20 x 1/2" (M3)	HMO8	16 x 1/2" (M3)	HMO9	16 x 1/2" (M3)	HMO10	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)	
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)	
22"	HMO1 HMO2 (M)	44 x 1/2" (M3)				HMO5	28 x 1/2" (M3)					HMO7	24 x 1/2" (M3)			HMO10	20 x 2" (M5)			
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	28 x 1/2" (M3)	HMO8	24 x 1/2" (M3)	HMO9	24 x 1/2" (M3)	HMO10	20 x 2" (M5)
26"		HMO2 HMO3	44 x 1/2" (M3)					HMO6	32 x 1/2" (M3)				HMO9	34 x 1/2" (M3)	HMO10	34 x 1/2" (M3)	HMO11	20 x 2" (M5)	HMO12	20 x 2" (M5)
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" (M5)	HMO11	24 x 2" (M5)	HMO12	24 x 2" (M5)	
30"				HMO3 HMO4 (M)	48 x 1/2" (M3)			HMO6	32 x 1/2" (M3)	HMO7	32 x 1/2" (M3)			HMO10	24 x 2" (M5)	HMO11	24 x 2" (M5)	HMO12	24 x 2" (M5)	
32"				HMO3	52 x 1/2" (M3)			HMO6	36 x 1/2" (M3)	HMO7	36 x 1/2" (M3)			HMO10	24 x 2" (M5)	HMO11	24 x 2" (M5)	HMO12	24 x 2" (M5)	
34"				HMO3 HMO4 (M)	52 x 1/2" (M3)					HMO7	36 x 1/2" (M3)	HMO8	36 x 1/2" (M3)				HMO10	24 x 2" (M5)	HMO11	24 x 2" (M5)
36"					HMO4	52 x 1/2" (M3)						HMO8	36 x 1/2" (M3)	HMO9	36 x 1/2" (M3)	HMO10	28 x 2" (M5)	HMO11	28 x 2" (M5)	
38"				HMO4	52 x 1/2" (M3)	HMO5						HMO8	36 x 1/2" (M3)	HMO9	36 x 1/2" (M3)	HMO10	28 x 2" (M5)	HMO11	28 x 2" (M5)	
40"				HMO4	56 x 1/2" (M3)	HMO5						HMO8	40 x 1/2" (M3)	HMO9	40 x 1/2" (M3)	HMO10	28 x 2" (M5)	HMO11	28 x 2" (M5)	
42"				HMO4	60 x 1/2" (M3)							HMO8	40 x 1/2" (M3)	HMO9	40 x 1/2" (M3)	HMO10	28 x 2" (M5)	HMO11	28 x 2" (M5)	

- 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.