



## HydraMax Tensioners

Packed with user-friendly features, Hydratight's HydraMax Topside Tensioner has also been cleverly designed to fit all standard flanges, including ANSI, API and Compact flanges based on Norsok L005.

With its compact fit and high load generation, alongside the flexibility to work with all standard flanges, the new HydraMax tool can be used in almost every industry and within so many different applications.

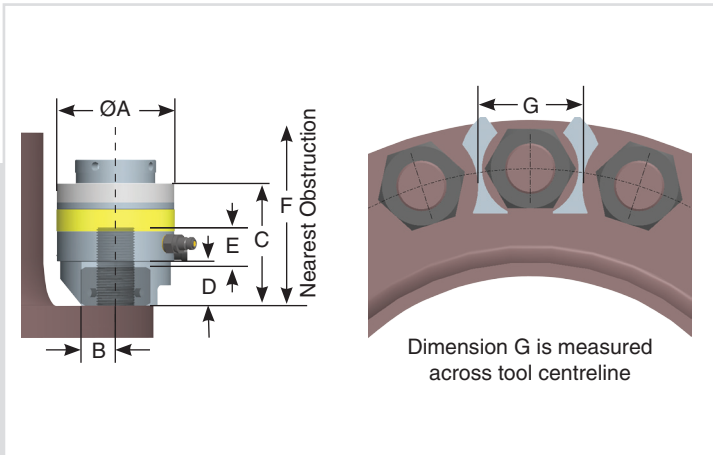
Although originally designed for customers in the Oil & Gas sector requiring a tool for the newly adopted compact flange, the opportunities for this tool's use are now vast. Its versatility provides clients with the need for fewer kits and therefore reduces total tool inventory.

HydraMax tools have been designed to generate high bolt loads associated with compact flanges, while providing versatility for maximum bolt coverage, and include the latest user-friendly features.

Incorporating the proven sealing technology used in Hydratight's Aquajack Tensioner line, the HydraMax series combines the reassurance of trusted technology with the usability of simple service operations.

### Features:

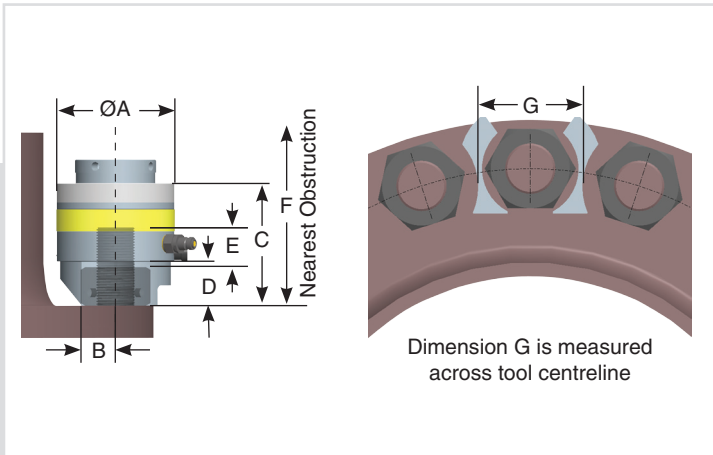
- Up to 30% more load capacity (1500 bar/21,750psi) than Hydratight's HL Tensioners
- Large stroke capability of 15mm (9/16") with over stroke elimination
- HM01-HM05 have a mechanical over stroke prevention and no spring return; HM06-HM15 have a relief valve over stroke prevention and spring return
- Quick release bridge
- Stroke indicator
- Misalignment compensation
- Interchangeable adapter kits
- Quick, simple, hose connection
- Eccentric shape tool applies to HM01, HM02 and HM03
- Alternative size adaptor kits can be supplied upon request



Tool Ref	Bolt Dia.		Tool		Max Load	Weight	Unit of Measure	A	B	C	D	E	F	G							
	in	mm	Hyd Area																		
HM01	3/4"	M20	in <sup>2</sup> mm <sup>2</sup>	1.39 894	tonf lbf kN	13.4 30124 134.0	4.5 lb 2.06 kg	Std - in	2.40	0.59	3.79	1.08	0.79	8.20	1.90						
								Metric - mm	61.0	15.0	96.3	27.5	20	208	48.0						
HM02	3/4"	M20	in <sup>2</sup> mm <sup>2</sup>	1.92 1240	tonf lbf kN	18.7 41814 186.0	5.6 lb 2.52 kg	Std - in	2.7	0.6	4.1	1.1	0.8	8.9	1.9						
								Metric - mm	69.0	15.0	103.3	27.5	20.0	227.0	48.0						
								7/8"	M22	in <sup>2</sup> mm <sup>2</sup>	1.92 1240	tonf lbf kN	18.7 41814 186.0	5.5 lb 2.48 kg	Std - in	2.7	0.7	4.1	1.1	0.9	8.9
Metric - mm	69.0	18.4	103.3	27.5	22.0	225.0	55.0														
HM03	3/4"	M20	in <sup>2</sup> mm <sup>2</sup>	2.52 1628	tonf lbf kN	24.5 54876 244.1	6.9 lb 3.12 kg	Std - in	3	0.6	4.1	1.1	0.8	9.1	1.9						
								Metric - mm	77	15	104.8	27.5	20	230	48						
								7/8"	M22	in <sup>2</sup> mm <sup>2</sup>	2.52 1628	tonf lbf kN	24.5 54876 244.1	6.8 lb 3.07 kg	Std - in	3	0.7	4.1	1.1	0.9	9
	Metric - mm	77	18.4	104.8	27.5	22	228	55													
	1"	M24	in <sup>2</sup> mm <sup>2</sup>	2.52 1628	tonf lbf kN	24.5 54876 244.1	7 lb 3.16 kg	Std - in							3	0.8	4.3	1.3	1	9.1	2.3
	Metric - mm							77	20	109.8	32.5	25	232	59.5							
7/8"	M22							in <sup>2</sup> mm <sup>2</sup>	3.35 2159	tonf lbf kN	32.5 72793 323.8	9 lb 4.1 kg	Std - in	3.5	0.7	4.4	1.1	0.9	9.8	2.2	
Metric - mm		89.5	18.4	112.3	27.5	22	250						55								
1"		M24	in <sup>2</sup> mm <sup>2</sup>	3.35 2159	tonf lbf kN	32.5 72793 323.8	9.1 lb 4.15 kg						Std - in	3.5	0.8	4.6	1.3	1	10	2.3	
Metric - mm													89.5	20	117.3	32.5	25	255	59.5		
HM04		1"	M27	in <sup>2</sup> mm <sup>2</sup>	3.35 2159	tonf lbf kN	32.5 72793 323.8						9.1 lb 4.15 kg	Std - in	3.5	0.8	4.6	1.3	1	10.1	2.3
														Metric - mm	89.5	20	117.3	33.5	27	256	59.5
HM04	1 1/8"	M30	in <sup>2</sup> mm <sup>2</sup>	3.35 2159	tonf lbf kN	32.5 72793 323.8	9.1 lb 4.15 kg	Std - in	3.5	0.9	4.7	1.4	1.2	10.1	2.7						
								Metric - mm	89.5	23.4	120.3	35.5	30	257	67.2						
HM05	1"	M24	in <sup>2</sup> mm <sup>2</sup>	4.27 2752	tonf lbf kN	41.4 92779 412.7	11.5 lb 5.2 kg	Std - in	3.9	0.8	4.7	1.3	1	10.4	2.3						
								Metric - mm	99	20	119.2	32.5	25	263	59.5						
		M27						in <sup>2</sup> mm <sup>2</sup>	4.27 2752	tonf lbf kN	41.4 92779 412.7	11.4 lb 5.19 kg	Std - in	3.9	0.8	4.7	1.3	1.1	10.4	2.3	
	Metric - mm	99	20	119.2	33.5	27	263						59.5								
	1 1/8"	M30	in <sup>2</sup> mm <sup>2</sup>	4.27 2752	tonf lbf kN	41.4 92779 412.7	11.4 lb 5.19 kg	Std - in	3.9	0.9	4.8	1.4	1.2	10.3	2.7						
	Metric - mm							99	23.4	122.2	35.5	30	261	67.2							
	HM05	1 1/4"	M33	in <sup>2</sup> mm <sup>2</sup>	4.27 2752	tonf lbf kN	41.4 92779 412.7	11.6 lb 5.24 kg	Std - in	3.9	1.1	4.9	1.5	1.3	10.3	2.9					
Metric - mm									99	27.3	125.2	38.5	33	262	74						
HM06	1 1/8"	M30	in <sup>2</sup> mm <sup>2</sup>	6.45 4162	tonf lbf kN	62.6 140303 624.1	15.6 lb 7.07 kg	Std - in	4.6	0.9	4.9	1.4	1.2	10.5	2.7						
								Metric - mm	117.5	23.4	125	35.5	30	266	67.2						
	1 1/4"	M33					in <sup>2</sup> mm <sup>2</sup>	6.45 4162	tonf lbf kN	62.6 140303 624.1	15.7 lb 7.11 kg	Std - in	4.6	1.1	5	1.5	1.3	10.6	2.9		
												Metric - mm	117.5	27.3	128	38.5	33	269	74		
	1 3/8"	M36					in <sup>2</sup> mm <sup>2</sup>	6.45 4162	tonf lbf kN	62.6 140303 624.1	16 lb 7.24 kg	Std - in	4.6	1.3	5.2	1.6	1.4	10.8	3.4		
												Metric - mm	117.5	31.8	131	41.5	36	273	86.4		
	1 1/2"	M39					in <sup>2</sup> mm <sup>2</sup>	6.45 4162	tonf lbf kN	62.6 140303 624.1	16.2 lb 7.35 kg	Std - in	4.6	1.3	5.3	1.8	1.5	10.9	3.4		
												Metric - mm	117.5	33.2	134	44.5	39	277	86.4		

## HydraMax Tensioners

Tool Ref	Bolt Dia.		Tool Hyd Area		Max Load		Weight	Unit of Measure	A	B	C	D	E	F	G
	in	mm													
HM07	1 1/4"	M33	in <sup>2</sup> mm <sup>2</sup>	7.72 4980	tonf lbf kN	74.9 167887 746.8	18.4 lb	Std - in	5	1.1	5	1.5	1.3	10.9	2.9
		8.35 kg					Metric - mm	127	27.3	128	38.5	33	278	74	
	1 3/8"	M36					18.7 lb	Std - in	5	1.3	5.2	1.6	1.4	11	3.4
		8.47 kg					Metric - mm	127	31.8	131	41.5	36	279	86.4	
	1 1/2"	M39					18.9 lb	Std - in	5	1.3	5.3	1.8	1.5	11	3.4
		8.57 kg					Metric - mm	127	33.2	134	44.5	39	280	86.4	
	1 5/8"	M42					19 lb	Std - in	5	1.3	5.4	1.9	1.7	11	3.8
		8.64 kg					Metric - mm	127	34	137	47.5	42	280	96	
HM08	1 3/8"	M36	in <sup>2</sup> mm <sup>2</sup>	9.1 5869	tonf lbf kN	88.3 197854 880.1	22 lb	Std - in	5.4	1.3	5.2	1.6	1.4	11.1	3.4
		9.96 kg					Metric - mm	136.5	31.8	132.5	41.5	36	283	86.4	
	1 1/2"	M39					22.2 lb	Std - in	5.4	1.3	5.3	1.8	1.5	11.2	3.4
		10.05 kg					Metric - mm	136.5	33.2	135.5	44.5	39	284	86.4	
	1 5/8"	M42					22.3 lb	Std - in	5.4	1.3	5.5	1.9	1.7	11.2	3.8
		10.12 kg					Metric - mm	136.5	34	138.5	47.5	42	284	96	
	1 3/4"	M45					23.1 lb	Std - in	5.4	1.6	5.6	2	1.8	11.2	3.8
		10.47 kg					Metric - mm	136.5	39.3	141.5	50.5	45	285	96.8	
HM09	1 1/2"	M39	in <sup>2</sup> mm <sup>2</sup>	10.59 6834	tonf lbf kN	102.9 230407 1024.9	25.1 lb	Std - in	5.7	1.3	5.3	1.8	1.5	10.9	3.4
		11.38 kg					Metric - mm	144.5	33.2	135.5	44.5	39	278	86.4	
	1 5/8"	M42					25.2 lb	Std - in	5.7	1.3	5.5	1.9	1.7	11.1	3.8
		11.41 kg					Metric - mm	144.5	34	138.5	47.5	42	281	96	
	1 3/4"	M45					25.8 lb	Std - in	5.7	1.6	5.6	2	1.8	11.2	3.8
		11.71 kg					Metric - mm	144.5	39.3	141.5	50.5	45	285	96.8	
	1 7/8"	M48					25.9 lb	Std - in	5.7	1.7	5.7	2.1	1.9	11.3	4.3
		11.73 kg					Metric - mm	144.5	43	144.5	53.5	48	288	108.4	
HM10	1 5/8"	M42	in <sup>2</sup> mm <sup>2</sup>	12.2 7868	tonf lbf kN	118.4 265230 1179.8	30.4 lb	Std - in	6.1	1.3	5.6	1.9	1.7	11.4	3.8
		13.77 kg					Metric - mm	156	34	142.5	47.5	42	289	96	
	1 3/4"	M45					30.1 lb	Std - in	6.1	1.6	5.7	2	1.8	11.5	3.8
		13.67 kg					Metric - mm	156	39.3	145.5	50.5	45	293	96.8	
	1 7/8"	M48					31 lb	Std - in	6.1	1.7	5.8	2.1	1.9	11.7	4.3
		14.07 kg					Metric - mm	156	43	148.5	53.5	48	296	108.4	
	2"	M52					31.6 lb	Std - in	6.1	1.7	6	2.3	2.1	11.6	4.6
		14.35 kg					Metric - mm	156	44.1	152.5	57.5	52	301	116.6	
HM11	1 3/4"	M45	in <sup>2</sup> mm <sup>2</sup>	15.74 10152	tonf lbf kN	152.8 342272 1522.5	38.8 lb	Std - in	6.9	1.5	5.7	2	1.8	11.7	3.8
		17.59 kg					Metric - mm	174.5	39.3	145.5	50.5	45	297	96.8	
	1 7/8"	M48					39.6 lb	Std - in	6.9	1.7	5.8	2.1	1.9	11.9	4.3
		17.97 kg					Metric - mm	174.5	43	148.5	53.5	48	301	108.4	
	2"	M52					40.2 lb	Std - in	6.9	1.7	6	2.3	2.1	12.1	4.6
		18.24 kg					Metric - mm	174.5	44.1	152.5	57.5	52	306	116.6	
	2 1/4"	M56					41.8 lb	Std - in	6.9	2	6.3	2.6	2.2	12.5	5.1
		18.94 kg					Metric - mm	174.5	49.5	160.5	65.5	57	318	130.3	
	M60	41.5 lb	Std - in	6.9	2	6.3	2.6	2.4	12.7	5.1					
	18.82 kg	Metric - mm	174.5	49.5	160.5	65.5	60	323	130.3						
HM12	1 7/8"	M48	in <sup>2</sup> mm <sup>2</sup>	19.72 12722	tonf lbf kN	191.5 428868 1907.7	49.6 lb	Std - in	7.6	1.7	5.9	2.1	1.9	11.9	4.3
		22.48 kg					Metric - mm	193.5	43	148.5	53.5	48	301	108.4	
	2"	M52					50.1 lb	Std - in	7.6	1.7	6	2.3	2.1	12.1	4.6
		22.71 kg					Metric - mm	193.5	44.1	152.5	57.5	52	306	116.6	
	2 1/4"	M56					51.4 lb	Std - in	7.6	2	6.3	2.6	2.2	12.5	5.1
		23.3 kg					Metric - mm	193.5	49.5	160.5	65.5	57	318	130.3	
		M60					51.9 lb	Std - in	7.6	2	6.3	2.6	2.4	12.7	5.1
		23.54 kg					Metric - mm	193.5	49.5	160.5	65.5	60	323	130.3	
2 1/2"	M64	52.4 lb	Std - in	7.6	2.2	6.5	2.7	2.5	12.6	5.7					
	23.77 kg	Metric - mm	193.5	56	164.5	69.5	64	320	143.5						



Tool Ref	Bolt Dia.		Tool Hyd Area		Max Load	Weight	Unit of Measure	A	B	C	D	E	F	G	
	in	mm	in <sup>2</sup>	mm <sup>2</sup>											
HM13	2 1/2"	M64	26.29	16964	tonf lbf kN	255.3 571914 2544	71.4 lb	Std - in	8.6	2.2	6.8	2.7	2.5	13.3	5.7
		32.39 kg					Metric - mm	218.5	56	172.2	69.5	64	337	143.5	
	2 3/4"	M68					72.9 lb	Std - in	8.6	2.5	7.1	3.1	2.8	13.8	6.3
		33.05 kg					Metric - mm	218.5	63	180.2	77.5	70	350	158.7	
	3"	M72					72.8 lb	Std - in	8.6	2.7	7.3	3.2	2.8	13.7	6.9
		33.03 kg					Metric - mm	218.5	69	184.5	81.7	72	347	176	
3"	M76	72.8 lb	Std - in	8.6	2.7	7.3	3.2	3	13.9	6.9					
	33.01 kg	Metric - mm	218.5	69	184.5	81.7	76	352	176						
HM14	3"	M72	36.35	23451	tonf lbf kN	352.9 790586 3516.7	101.6 lb	Std - in	10.2	2.7	7.3	3.2	2.8	13.8	6.9
		46.1 kg					Metric - mm	259	69	184.5	81.7	72	351	176	
	3"	M76					103.1 lb	Std - in	10.2	2.7	7.3	3.2	3	13.9	6.9
		46.75 kg					Metric - mm	259	69	184.5	81.7	76	352	176	
	3 1/4"	M80					104.7 lb	Std - in	10.2	2.7	7.6	3.6	3.2	14.5	7.3
		47.5 kg					Metric - mm	259	69.6	193.2	90.5	80	367	186	
	3 1/2"	M85					106 lb	Std - in	10.2	2.7	7.6	3.6	3.4	14.7	7.3
		48.07 kg					Metric - mm	259	69.6	193.2	90.5	85	374	186	
3 1/2"	M90	108.6 lb	Std - in	10.2	3.1	7.8	3.6	3.5	15.3	7.9					
	49.27 kg	Metric - mm	259	78.6	198.2	95.5	90	389	200						
HM15	3 1/2"	M90	48.06	31008	tonf lbf kN	466.7 1045362 4650	139.6 lb	Std - in	11.6	3.1	7.8	3.6	3.5	15.3	7.9
		63.3 kg					Metric - mm	295.5	78.6	199.3	95.5	90	389	200	
	3 3/4"	M95					150.4 lb	Std - in	11.6	3.2	8.1	4	3.7	16	8.6
		68.24 kg					Metric - mm	295.5	80.7	204.6	100.8	95	405	217.4	
	4"	M100					145.5 lb	Std - in	11.6	3.5	8.3	4.2	4	16.6	9.1
							65.98 kg	Metric - mm	295.5	89.9	210.9	107.1	102	421	232