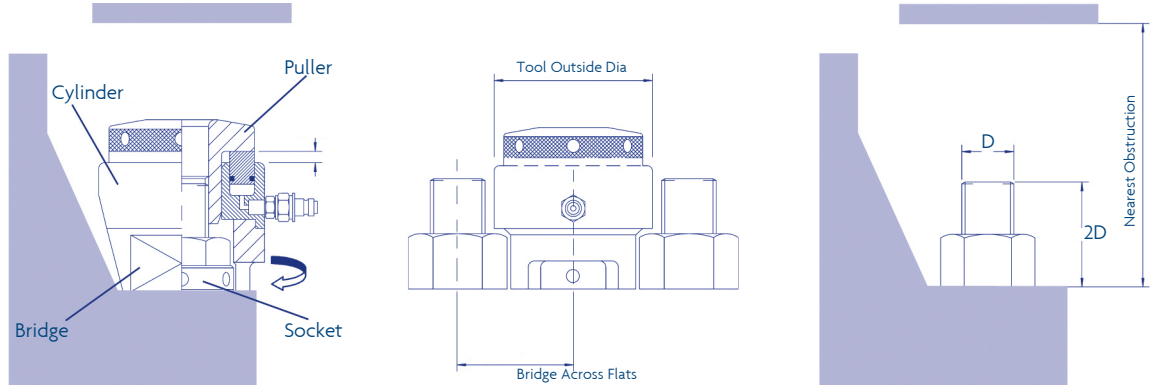


HYDRAULIC BOLT TENSIONING

Hydraulic Bolt Tensioning Tools (1000 bar)



Inch Sizes

Tool No	Bolt Diameters Imperial Sizes inch			Hydraulic Area		Maximum Load kN	Tool Outside Dia mm	Bridge Across Flats mm	Nearest Obstruction mm
				in	mm				
1	7/8	3/4		2.93	1,896	189	72*	60	115 - 118
2	1-1/8	1	7/8	4.10	2,650	265	86*	72	143 - 127 - 123
3	1-1/4	1-1/8	1	4.63	2,991	299	98	72	146 - 143 - 140
4	1-3/8	1-1/4	1-1/8	5.62	3,628	362	104	84	151 - 147 - 143
5	1-1/2	1-3/8	1-1/4	6.70	4,326	432	114	94	162 - 160 - 157
6	1-5/8	1-1/2	1-3/8	7.88	5,089	509	124	96	170 - 168 - 165
7	1-3/4	1-5/8	1-1/2	9.16	5,911	591	132	104	178 - 175 - 172
8	1-7/8	1-3/4	1-5/8	10.83	6,991	699	141	114	186 - 182 - 179
9	2	1-7/8	1-3/4	12.20	7,876	787	148	116	192 - 189 - 186
10	2-1/4	2	1-7/8	15.44	9,965	996	168	130	208 - 201 - 198
11	2-1/2	2-1/4	2	19.57	12,629	1,263	185	142	230 - 221 - 214
12	2-3/4	2-1/2	2-1/4	23.78	15,344	1,534	202	150	243 - 236 - 229
13	3	2-3/4	2-1/2	28.43	18,342	1,834	220	172	255 - 252 - 243
14	3-1/4	3	2-3/4	31.27	20,175	2,017	233	183	270 - 263 - 258
15	3-1/2	3-1/4	3	35.40	22,839	2,283	248	183	288 - 281 - 274

NOTES

*these tools are not circular

- Maximum load is generated at the maximum operating pressure of 1000 bar.
- The maximum piston stroke is 15 mm for all sizes. Contact Boltight for longer stroke tooling.
- This range of tooling has been designed to suit most standard flanges used in the oil and gas industry. Consult the flange and tool selection tables DS-21, DS-22 and DS-23 for suitability of tooling.
- All tools are assembled, filled with oil, pressure tested and a test certificate issued prior to despatch.
- Each tool is labelled with the maximum operating pressure, load and stroke.
- One tool comprises of one hydraulic cylinder, bridge, puller and socket.
- Extra pullers and sockets can be purchased to adapt the hydraulic cylinder to fit other bolt sizes. Special sizes can also be manufactured.
- Unless specified when ordering, imperial sizes 3/4", 7/8" and 1" pullers will be threaded UNC. 1-1/8" and above will be threaded UN8. Up to three tools are available for most bolt sizes giving a range of maximum loads. For example a 2" bolt can be tensioned with Tool No 9, 10 or 11.
- Any number of tools can be connected together for simultaneous operation.
- Pullers can be machined with other thread forms - specify when ordering.
- Sizes above 3-1/2" are available - send details of your application to Boltight.
- Tools are fitted with self sealing quick connectors.
- Boltight also manufactures 1500 bar tooling with greater load capacity or smaller tool outside diameters.
- Due to continuous product development dimensions may change without notice.

Options available :-

- Twin hydraulic connections
- Other thread forms
- Special designs
- Spring return system
- Piston Stop

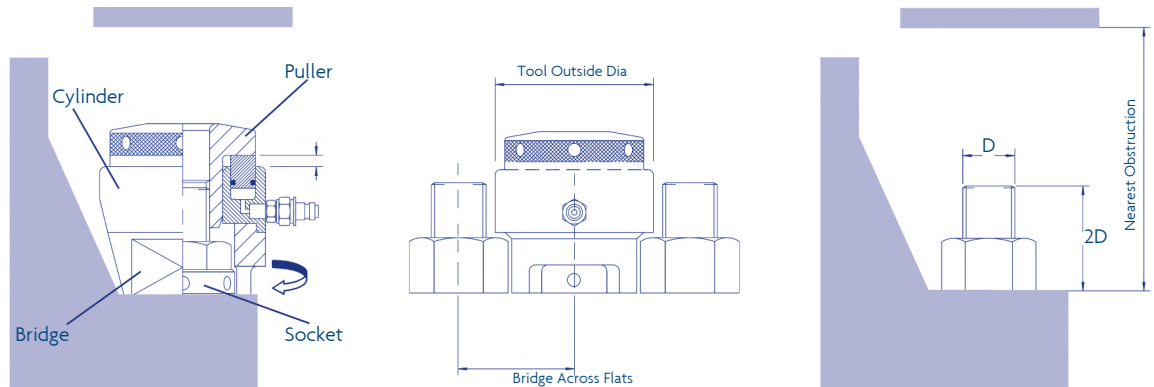


BOLTIGHT®
HYDRAULIC BOLT TENSIONING

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HYDRAULIC BOLT TENSIONING

Hydraulic Bolt Tensioning Tools (1000 bar)



Tool No	Bolt Diameters		Hydraulic Area		Maximum Load		Tool Outside Dia mm	Bridge Across Flats mm	Nearest Obstruction mm
	metric	imperial	in ²	mm ²	lbf	kN			
1	M16	-	2.10	1357	30506	135.7	73.5	55	121
	M18	3/4"						55	120
	M20	-						61	121
	M22	7/8"						61	126
2	M24	1"	3.35	2278	51211	227.8	86.0	64	147
	M27	1-1/8"						72	153
3	M30	-	5.40	3485	78346	348.5	107	79	167
	M33	1-1/4"						79	170
	M36	1-3/8"						82	176
4	M33	1-1/4"	6.63	4276	96128	427.6	117	79	172
	M36	1-3/8"						82	178
	M39	1-1/2"						86	187
5	M39	1-1/2"	9.16	5909	132840	590.9	136	86	191
	M42	1-5/8"						100	196
	M45	1-3/4"						100	202
6	M42	1-5/8"	12.22	7881	177172	788.1	150	100	198
	M45	1-3/4"						100	204
	M48	1-7/8"						112	210
	M52	2"						112	217
7	M48	1-7/8"	15.34	9894	222426	989.4	169	112	210
	M52	2"						112	217
	M56	2-1/4"						128	227
8	M56	2-1/4"	19.75	12743	286474	1274.3	190	128	234
	M60	-						141	245
9	M64	2-1/2"	24.71	15944	358435	1594.4	208	141	249
	M68	-						141	256
	M72	2-3/4"						160	270
10	M72	2-3/4"	28.40	18322	411895	1832.2	222	160	270
	M76	3"						172	281
11	M76	3"	33.76	21778	489589	2177.8	239	172	288
	M80	-						200	299
	M85	3-1/4"						200	304
	M90	3-1/2"						190	316
12	M95	3-3/4"	40.53	26147	587808	2614.7	276	228	326
	M100	4"						240	338

NOTES

- Maximum operating pressure of 1000 bar.
- All tools are pressure tested and a test certificate issued prior to despatch.
- Each tool is labelled with the maximum operating pressure, load and stroke.
- Extra pullers and sockets can be purchased to adapt the hydraulic cylinder to fit other bolt sizes. Longer stroke tooling and different threadforms can be manufactured.
- Unless specified when ordering, imperial sizes 3/4", 7/8" and 1" pullers will be threaded UNC. 1-1/8" and above will be threaded UN8. Up to three tools are available for most bolt sizes giving a range of maximum loads. For example a 2" bolt can be tensioned with Tool No 9, 10 or 11.
- Any number of tools can be connected together for simultaneous operation.
- Sizes above 4" are available - send details of your application to Boltight.
- Tools are fitted with self sealing quick connectors.
- Boltight also manufactures 1500 bar tooling with greater load capacity or smaller tool outside diameters.
- Due to continuous product development dimensions may change without notice

Options Available :-

- Twin hydraulic connections
- Other thread forms
- Special design
- Spring return system
- Piston Stop



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