

# STANDARD RANGE HYDRAULIC BOLT TENSIONING TOOLS

Boltight's T-Series hydraulic bolt tensioners are a standard range designed for general use on topside applications.



## SPECIFICATION

Designed to fit most ANSI B16.5, MSS SP-44 and API17D flanges.

Compatible with imperial and metric bolts from 3/4" - 4" (M16 – M100).

1500 bar maximum working pressure.

Each tool comprises of a hydraulic cylinder, bridge, puller and socket.


**Interchangeable adaptor kits fit a common hydraulic cylinder capable of tightening multiple bolt sizes.**



- 1 Hydraulic oil flows into load cell
- 2 Load generated by load cell is transferred into the puller
- 3 Puller transfers the load directly into the bolt
- 4 The nut lifts clear of the flange surface due to bolt stretch
- 5 The socket is used to turn the nut down retaining the load

## BENEFITS

- High wear and corrosion resistant surface treatment.
- Internal features to compensate for joint misalignment.
- Tools can be connected in sequence improving operation speed and ensuring even joint compression.
- Available from stock.

Boltight has developed an Augmented Reality experience for this product. To view this experience please download the Vuforia View App  from the Apple App Store™ or Google Play™.

Open the App and scan the mark below for an IoT experience using Augmented Reality.

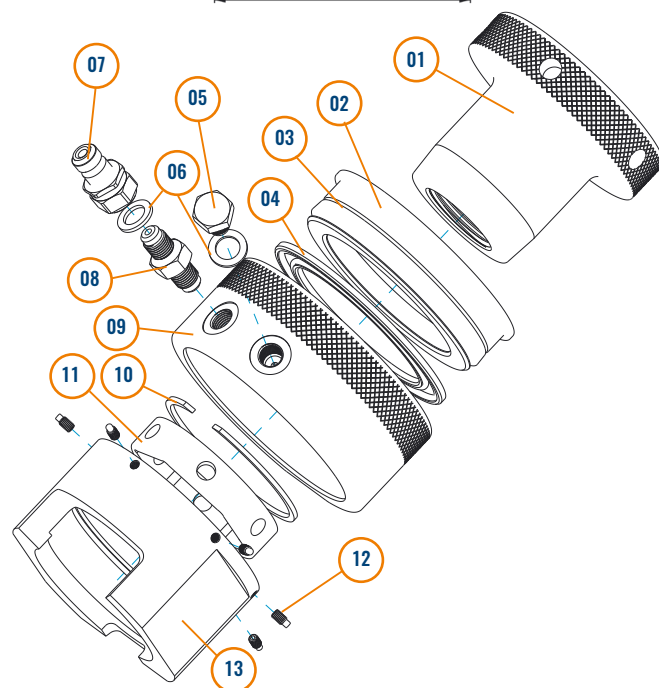
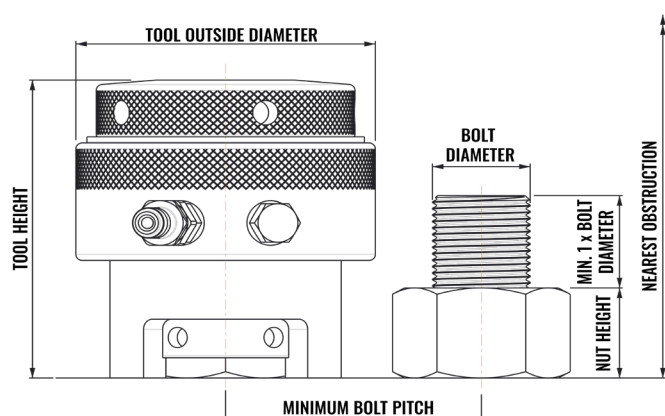


**BOLTIGHT™**  
PART OF THE NORD-LOCK GROUP

# TECHNICAL & DIMENSIONAL DATA

- Nut height is assumed 1 x Bolt Diameter.
- All tools are 15 mm stroke except Tool No. 21 which is 12 mm.
- Thread pitch for metric bolt sizes will be metric coarse.
- Thread pitch for imperial bolt sizes will be UNC up to 1 inch and UN8 for 1-1/8 inch upwards.

Tool No. & Spec.			Bolt Diameter		Min. Bolt Pitch		Weights		
			mm	in	mm	in	Component	kg	lbs
<b>Tool #</b>	<b>21</b>		M16	-	53	2.1	Full Tool	2.3	5.0
<b>Hydraulic Area</b>	<b>1555 mm<sup>2</sup></b>	<b>2.41 in<sup>2</sup></b>	M20	3/4	53	2.1	Cylinder	1.1	2.4
<b>Max. Load</b>	<b>233 kN</b>	<b>52.4 klbf</b>	M22	7/8	53	2.1	Bridge	0.4	0.8
<b>Tool Outside Dia.</b>	<b>73 mm</b>	<b>2.9 in</b>	M24	1	62	2.4	Puller	0.7	1.5
<b>Nearest Obstruction</b>	<b>145 mm</b>	<b>5.7 in</b>	M27	1-1/8	62	2.4	Socket	0.1	0.2
<b>Tool Height</b>	<b>102 mm</b>	<b>4.0 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>22</b>		M27	1-1/8	62	2.4	Full Tool	5.7	12.4
<b>Hydraulic Area</b>	<b>2884 mm<sup>2</sup></b>	<b>4.47 in<sup>2</sup></b>	M30	1-1/4	73	2.9	Cylinder	2.8	6.2
<b>Max. Load</b>	<b>433 kN</b>	<b>97.3 klbf</b>	M33	-	73	2.9	Bridge	1	2.2
<b>Tool Outside Dia.</b>	<b>105 mm</b>	<b>4.1 in</b>	M36	1-3/8	81	3.2	Puller	1.7	3.7
<b>Nearest Obstruction</b>	<b>175 mm</b>	<b>6.9 in</b>	M39	1-1/2	83	3.3	Socket	0.15	0.3
<b>Tool Height</b>	<b>131 mm</b>	<b>5.2 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>23</b>		M39	1-1/2	83	3.3	Full Tool	9.6	21.1
<b>Hydraulic Area</b>	<b>5271 mm<sup>2</sup></b>	<b>8.17 in<sup>2</sup></b>	M42	1-5/8	93	3.7	Cylinder	4.1	9.0
<b>Max. Load</b>	<b>791 kN</b>	<b>177.8 klbf</b>	M45	1-3/4	96	3.8	Bridge	2	4.4
<b>Tool Outside Dia.</b>	<b>136 mm</b>	<b>5.4 in</b>	M48	1-7/8	101	4.0	Puller	3.2	7.0
<b>Nearest Obstruction</b>	<b>200 mm</b>	<b>7.9 in</b>	M52	2	104	4.1	Socket	0.3	0.7
<b>Tool Height</b>	<b>147 mm</b>	<b>5.8 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>24</b>		M52	2	104	4.1	Full Tool	16.3	35.9
<b>Hydraulic Area</b>	<b>8445 mm<sup>2</sup></b>	<b>13.09 in<sup>2</sup></b>	M56	2-1/4	123	4.8	Cylinder	6.3	13.9
<b>Max. Load</b>	<b>1267 kN</b>	<b>284.8 klbf</b>	M64	2-1/2	129	5.1	Bridge	3.7	8.1
<b>Tool Outside Dia.</b>	<b>172 mm</b>	<b>6.8 in</b>	-	-	-	-	Puller	5.6	12.3
<b>Nearest Obstruction</b>	<b>230 mm</b>	<b>9.1 in</b>	-	-	-	-	Socket	0.7	1.5
<b>Tool Height</b>	<b>168 mm</b>	<b>6.6 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>25</b>		M64	2-1/2	129	5.1	Full Tool	25.3	55.7
<b>Hydraulic Area</b>	<b>12197 mm<sup>2</sup></b>	<b>18.91 in<sup>2</sup></b>	M72	2-3/4	150	5.9	Cylinder	9.5	20.9
<b>Max. Load</b>	<b>1830 kN</b>	<b>411.4 klbf</b>	M76	3	154	6.1	Bridge	6.6	14.5
<b>Tool Outside Dia.</b>	<b>200 mm</b>	<b>7.9 in</b>	-	-	-	-	Puller	8.2	18.0
<b>Nearest Obstruction</b>	<b>255 mm</b>	<b>10.0 in</b>	-	-	-	-	Socket	1	2.2
<b>Tool Height</b>	<b>188 mm</b>	<b>7.4 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>26</b>		M76	3	154	6.1	Full Tool	36.1	79.3
<b>Hydraulic Area</b>	<b>16682 mm<sup>2</sup></b>	<b>25.86 in<sup>2</sup></b>	M80	3-1/4	176	6.9	Cylinder	12.8	28.1
<b>Max. Load</b>	<b>2502 kN</b>	<b>562.5 klbf</b>	M90	3-1/2	185	7.3	Bridge	9.1	20.0
<b>Tool Outside Dia.</b>	<b>235 mm</b>	<b>9.3 in</b>	-	-	-	-	Puller	12.9	28.4
<b>Nearest Obstruction</b>	<b>288 mm</b>	<b>11.3 in</b>	-	-	-	-	Socket	1.3	2.9
<b>Tool Height</b>	<b>212 mm</b>	<b>8.4 in</b>	-	-	-	-	-	-	-
<b>Tool #</b>	<b>27</b>		M90	3-1/2	185	7.3	Full Tool	41.4	91.1
<b>Hydraulic Area</b>	<b>17530 mm<sup>2</sup></b>	<b>27.17 in<sup>2</sup></b>	M95	3-3/4	191	7.5	Cylinder	13.7	30.1
<b>Max. Load</b>	<b>2629 kN</b>	<b>593.3 klbf</b>	M100	4	197	7.8	Bridge	12.2	26.8
<b>Tool Outside Dia.</b>	<b>245 mm</b>	<b>9.7 in</b>	-	-	-	-	Puller	13.5	29.7
<b>Nearest Obstruction</b>	<b>320 mm</b>	<b>12.6 in</b>	-	-	-	-	Socket	2	4.4
<b>Tool Height</b>	<b>227 mm</b>	<b>8.9 in</b>	-	-	-	-	-	-	-



PART REFERENCE	DESCRIPTION
01	PULLER
02	PISTON
03	INDICATOR RING
04	SEAL KIT
05	BLANKING PLUG
06	BONDED WASHER SEAL (where applicable)
07	MALE QUICK CONNECTOR
08	MALE - MALE ADAPTOR
09	BODY
10	SNAP RING
11	SOCKET
12	GRUB SCREW
13	BRIDGE

Items in orange are standard tools but are not held in stock. For price and delivery please contact the sales department