

## 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.**

### 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 and scan the mark below



- 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

# 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>	1555 mm <sup>2</sup>	2.41 in <sup>2</sup>	M20	3/4	53	2.1	Cylinder	1.1	2.4
<b>Max. Load</b>	233 kN	52.4 klbf	M22	7/8	53	2.1	Bridge	0.4	0.8
<b>Tool Outside Dia.</b>	73 mm	2.9 in	M24	1	62	2.4	Puller	0.7	1.5
<b>Nearest Obstruction</b>	145 mm	5.7 in	M27	1-1/8	62	2.4	Socket	0.1	0.2
<b>Tool Height</b>	102 mm	4.0 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>22</b>		M27	1-1/8	62	2.4	Full Tool	5.7	12.4
<b>Hydraulic Area</b>	2884 mm <sup>2</sup>	4.47 in <sup>2</sup>	M30	1-1/4	73	2.9	Cylinder	2.8	6.2
<b>Max. Load</b>	433 kN	97.3 klbf	M33	-	73	2.9	Bridge	1	2.2
<b>Tool Outside Dia.</b>	105 mm	4.1 in	M36	1-3/8	81	3.2	Puller	1.7	3.7
<b>Nearest Obstruction</b>	175 mm	6.9 in	M39	1-1/2	83	3.3	Socket	0.15	0.3
<b>Tool Height</b>	131 mm	5.2 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>23</b>		M39	1-1/2	83	3.3	Full Tool	9.6	21.1
<b>Hydraulic Area</b>	5271 mm <sup>2</sup>	8.17 in <sup>2</sup>	M42	1-5/8	93	3.7	Cylinder	4.1	9.0
<b>Max. Load</b>	791 kN	177.8 klbf	M45	1-3/4	96	3.8	Bridge	2	4.4
<b>Tool Outside Dia.</b>	136 mm	5.4 in	M48	1-7/8	101	4.0	Puller	3.2	7.0
<b>Nearest Obstruction</b>	200 mm	7.9 in	M52	2	104	4.1	Socket	0.3	0.7
<b>Tool Height</b>	147 mm	5.8 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>24</b>		M52	2	104	4.1	Full Tool	16.3	35.9
<b>Hydraulic Area</b>	8445 mm <sup>2</sup>	13.09 in <sup>2</sup>	M56	2-1/4	123	4.8	Cylinder	6.3	13.9
<b>Max. Load</b>	1267 kN	284.8 klbf	M64	2-1/2	129	5.1	Bridge	3.7	8.1
<b>Tool Outside Dia.</b>	172 mm	6.8 in	-	-	-	-	Puller	5.6	12.3
<b>Nearest Obstruction</b>	230 mm	9.1 in	-	-	-	-	Socket	0.7	1.5
<b>Tool Height</b>	168 mm	6.6 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>25</b>		M64	2-1/2	129	5.1	Full Tool	25.3	55.7
<b>Hydraulic Area</b>	12197 mm <sup>2</sup>	18.91 in <sup>2</sup>	M72	2-3/4	150	5.9	Cylinder	9.5	20.9
<b>Max. Load</b>	1830 kN	411.4 klbf	M76	3	154	6.1	Bridge	6.6	14.5
<b>Tool Outside Dia.</b>	200 mm	7.9 in	-	-	-	-	Puller	8.2	18.0
<b>Nearest Obstruction</b>	255 mm	10.0 in	-	-	-	-	Socket	1	2.2
<b>Tool Height</b>	188 mm	7.4 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>26</b>		M76	3	154	6.1	Full Tool	36.1	79.3
<b>Hydraulic Area</b>	16682 mm <sup>2</sup>	25.86 in <sup>2</sup>	M80	3-1/4	176	6.9	Cylinder	12.8	28.1
<b>Max. Load</b>	2502 kN	562.5 klbf	M90	3-1/2	185	7.3	Bridge	9.1	20.0
<b>Tool Outside Dia.</b>	235 mm	9.3 in	-	-	-	-	Puller	12.9	28.4
<b>Nearest Obstruction</b>	288 mm	11.3 in	-	-	-	-	Socket	1.3	2.9
<b>Tool Height</b>	212 mm	8.4 in	-	-	-	-	-	-	-
<b>Tool #</b>	<b>27</b>		M90	3-1/2	185	7.3	Full Tool	41.4	91.1
<b>Hydraulic Area</b>	17530 mm <sup>2</sup>	27.17 in <sup>2</sup>	M95	3-3/4	191	7.5	Cylinder	13.7	30.1
<b>Max. Load</b>	2629 kN	593.3 klbf	M100	4	197	7.8	Bridge	12.2	26.8
<b>Tool Outside Dia.</b>	245 mm	9.7 in	-	-	-	-	Puller	13.5	29.7
<b>Nearest Obstruction</b>	320 mm	12.6 in	-	-	-	-	Socket	2	4.4
<b>Tool Height</b>	227 mm	8.9 in	-	-	-	-	-	-	-

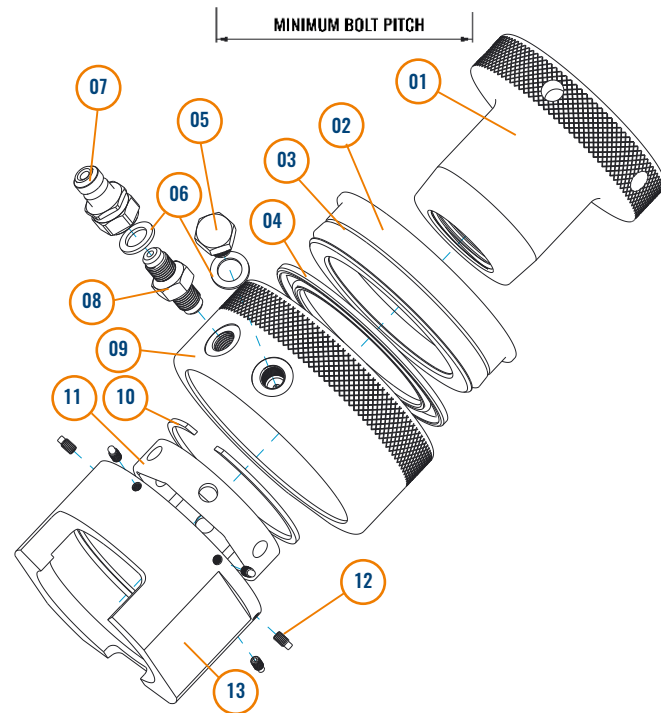
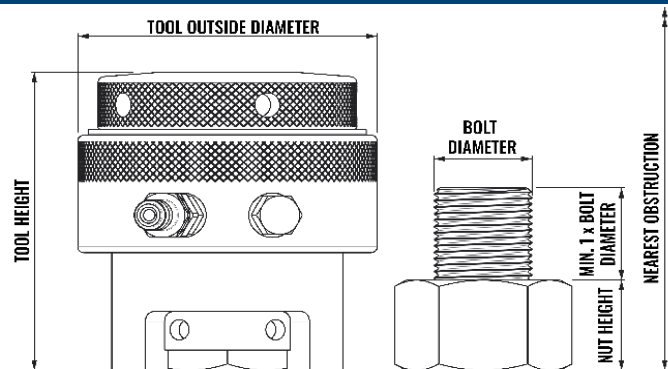
Items in orange are standard tools but are not held in stock. For price and delivery please contact the sales department

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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

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