Tentec Airbac bolt tensioners



A groundbreaking range of air activated piston retract tensioners focused on improving operational productivity





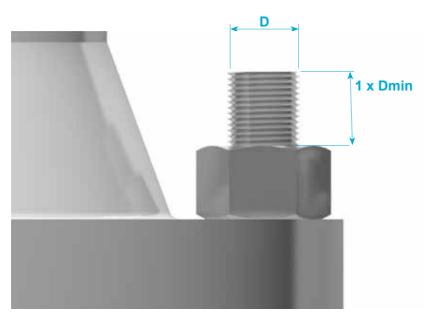
Tentec Airbac Bolt Tensioners Topside Bolt Tensioning

The patented Airbac range of Tentec topside bolt tensioning tools consist of 6 base tools covering bolt sizes from 3/4" to 4" (M20 to M100). The tools are designed to fit on to most ANSI B16.5, ANSI B16.47 Series 1, MSS-SP44, API-6A and API-17D flanges.



Bolt Protrusion

The patented Airbac Series tensioners need a minimum of 1 x bolt diameter protruding above the hexagon or round nut.



Bolt Tightening Solutions

Consistent, Dependable and Safe.

Using multiple bolt tensioning tools on a bolted joint gives a much improved uniform bolt load across all bolts.

Axial Bolt Load: Bolt load is applied axially to the bolt. Inconsistencies such as friction, bending and lubricant are not a factor when using bolt tensioners. No torsional stresses are involved.

Rapid: Multiple bolt tensioners offer a rapid and accurate method of tightening a bolt.

Accurate: Bolt load is directly proportional to the pressure applied to the tensioner.

Available for Customised Solutions

The patented Airbac piston retract technology can also be incorporated into our custom tensioner designs ensuring that customers who have unique applications can also benefit from operational time savings



Benefits

- Piston return more than 3 times as fast as spring assisted tensioners
- A 20% weight saving versus spring assisted equivalents reduces operator fatigue
- Enhanced corrosion protection for harsh environments
- Identical hydraulic pressure areas, load outputs, and MWP (1500 bar) as the CTST range
- **Easier and less frequent maintenance than spring assisted tensioners**

Conversion Kits

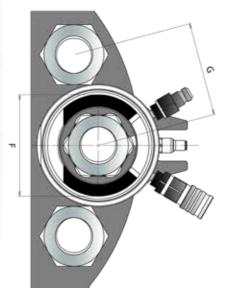
Conversion Kits offer a very economical way to expand your inventory of bolt tensioning tools. Kits are available to convert the patented Airbac tensioner to suit an alternative bolt size within its size range. Kits consist of a Puller, Bridge and Nut Rotating Socket. Please refer to technical data sheet for corresponding

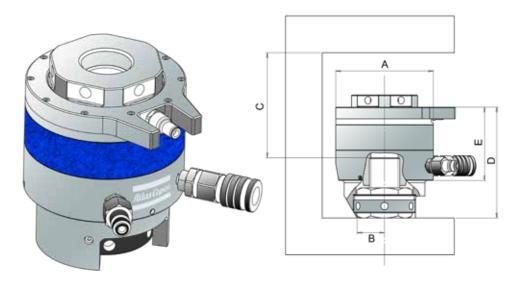


Maximum Working Pressure = 1500bar

Tool	Thread Size	Complete Tool GA No	Ordering No	Conversion Kit No	Ordering No	Tool Load		Hydraulic Pressure Area		Stroke		Total Tool Weight		Load Cell Weight Onl	
Identification						kN	Ton	mm²	In²	mm	In	kg	lbs	kg	lbs
AB-01	3/4"	HTT.18001.034	8434220431	HTT.18001.201	4222260050							2.70	5.94		
	M20 x 2.5	HTT.18001.020	8434220432	HTT.18001.202	4222260051	227.81	22.86		2.35	10	0.394	2.70	5.94		3.59
	7/8"	HTT.18001.078	8434220433	HTT.18001.203	4222260052								5.72		
	M22 x 2.5	HTT.18001.022	8434220434	HTT.18001.204	4222260053			1518.75				2.62	5.76	1.63	
	1"	HTT.18001.100	8434220435	HTT.18001.205	4222260054							2.70	5.94		
	M24 x 3	HTT.18001.024	8434220436	HTT.18001.206	4222260055							2.75	6.05		
	1 1/8"	HTT.18001.118	8434220437	HTT.18001.207	4222260056							2.72	5.98		
	M27 x 3	HTT.18001.027	8434220438	HTT.18001.208	4222260057							2.80	6.16		
	1 1/8"	HTT.18002.118	8434220440	HTT.18002.200	4222260058		44.47	2953.73	4.58			5.57	12.25		6.64
	M27 x 3	HTT.18002.027	8434220441	HTT.18002.201	4222260059							5.64	12.41	1	
	M30 x 3.5	HTT.18002.030	8434220442	HTT.18002.202	4222260060							5.68	12.50		
	1 1/4"	HTT.18002.114	8434220443	HTT.18002.203	4222260061							5.50	12.10	3.02	
AB-02	M33 x 3.5	HTT.18002.033	8434220444	HTT.18002.204	4222260062	443.06				10	0.394	5.49	12.08		
	1 3/8"	HTT.18002.138	8434220445	HTT.18002.205	4222260063	-						5.56	12.23		
	M36 x 4	HTT.18001.036	8434220446	HTT.18002.206	4222260064							5.57	12.25		
	1 1/2"	HTT.18002.112	8434220447	HTT.18002.207	4222260065							5.59	12.30		
	M39 x 4	HTT.18002.039	8434220448	HTT.18002.208	4222260066							5.71	12.56		
	M36 x 4	HTT.18003.036	8434220450	HTT.18003.300	4222260067							11.83	26.03		
	1 1/2"	HTT.18003.112	8434220451	HTT.18003.301	4222260068	810.85	81.38	5405.67	8.38	10	0.394	11.67	25.67	1	14.34
	M39 x 4	HTT.18003.039	8434220452	HTT.18003.302	4222260069							11.72	25.78	1	
AB-03	1 5/8"	HTT.18003.158	8434220453	HTT.18003.303	4222260070							11.37	25.01	1	
	M42 x 4.5	HTT.18003.042	8434220454	HTT.18003.304	4222260071							11.52	25.34	1	
	1 3/4"	HTT.18003.134	8434220455	HTT.18003.305	4222260072								25.65	6.52	
	M45 x 4.5	HTT.18003.045	8434220456	HTT.18003.306	4222260073								25.76		
	1 7/8"	HTT.18003.178	8434220457	HTT.18003.307	4222260074								25.34		
	M48 x 5	HTT.18003.048	8434220458	HTT.18003.308	4222260075								25.54		
	2"	HTT.18003.200	8434220459	HTT.18003.309	4222260076								24.55		
	 M52 x 5	HTT.18003.052	8434220460	HTT.18003.310	4222260077								24.60	1	
	M42 x 4.5	HTT.18004.042	8434220462	HTT.18004.300	4222260078	1273.49	127.81	8489.93	13.16	10	0.394		40.30		20.92
	1 7/8"	HTT.18004.178	8434220463	HTT.18004.301	4222260079								39.31		
	M48 x 5	HTT.18004.048	8434220463	HTT.18004.302	4222260080								39.53		
	2"	HTT.18004.200	8434220465	HTT.18004.303	4222260080								38.57		
	M52 x 5	HTT.18004.052	8434220465	HTT.18004.304	4222260082								38.65	9.51	
AB-04	2 1/4"	HTT.18004.032	8434220400	HTT.18004.305	4222260082								39.31		
	M56 x 5.5	HTT.18004.056	8434220467	HTT.18004.306	4222260083								40.22		
	M60 x 5.5	HTT.18004.060	8434220469	HTT.18004.307	4222260084								45.14		
	2 1/2"	HTT.18004.212	8434220403	HTT.18004.308	4222260085								38.19		
	M64 x 6	HTT.18004.064	8434220470		4222260088								38.96		
				HTT.18004.309									59.38		
	2 1/2"	HTT.18005.212	8434220473	HTT.18005.400	4222260088	1829.47	183.61	12196.50	18.90	10	0.394		60.17	ł	32.58
	M64 x 6	HTT.18005.064	8434220474	HTT.18005.401	4222260089								61.71	-	
AB-05	M68 x 6	HTT.18005.068	8434220475	HTT.18005.402	4222260090									14.81	
	2 3/4"	HTT.18005.234	8434220476	HTT.18005.403	4222260091								63.98		
	M72 x 6	HTT.18005.072	8434220477	HTT.18005.404	4222260092								64.53	-	
	3"	HTT.18005.300	8434220478	HTT.18005.405	4222260093								59.36	-	
	M76 x 6	HTT.18005.076	8434220479	HTT.18005.406	4222260094								61.07		
AB-06	3"	HTT.18006.300	8434220481	HTT.18006.500	4222260095	2644.13	3 265.37	17627.51	27.32	10	0.394		91.19	20.33	44.73
	M76 x 6	HTT.18006.076	8434220482	HTT.18006.501	4222260096								92.91		
	M80 x 6	HTT.18006.080	8434220483	HTT.18006.502	4222260097								91.39		
	3 1/4"	HTT.18006.314	8434220484	HTT.18006.503	4222260098								91.12		
	M85 x 6	HTT.18006.085	8434220485	HTT.18006.504	4222260099								92.29		
	3 1/2"	HTT.18006.312	8434220486	HTT.18006.505	4222260100								89.21		
	M90 x 6	HTT.18006.090	8434220487	HTT.18006.506	4222260101								90.64		
	3 3/4"	HTT.18006.334	8434220488	HTT.18006.507	4222260102								89.78	1	
	M95 x 6	HTT.18006.095	8434220489	HTT.18006.508	4222260103								92.40	1	
	4"	HTT.18006.400	8434220490	HTT.18006.509	4222260104								89.94		
	M100 x 6	HTT.18006.100	8434220491	HTT.18006.510	4222260105	1					1 1	41.79	91.94		

Technical Specifications





Tool Identification	Thread Size	Tentec Complete Tool No	Ordering No	Dimensions							
dentification		loonto		А	в	с	D	E	F	G	
	3/4"	HTT.18001.034	8434220431		21	75	79		62	49.5	
	M20 x 2.5	HTT.18001.020	8434220432	1	21	74	79		63	49.5	
	7/8"	HTT.18001.078	8434220433	1	24	72	79		63	53	
	M22 x 2.5	HTT.18001.022	8434220434	70 5	24	72	79	50	63	53	
AB-01	1"	HTT.18001.100	8434220435	73.5	24	75.75	86	53	69	58.5	
	M24 x 3	HTT.18001.024	8434220436	1	24	77	86		69	58.5	
F	1 1/8"	HTT.18001.118	8434220437	1	27	73.5	87		74	63.5	
	M27 x 3	HTT.18001.027	8434220438	1	27	75	87		74	63.5	
	1 1/8"	HTT.18002.118	8434220440		27	97.5	104		82	67.5	
-	M27 x 3	HTT.18002.027	8434220441	1	27	99	104		82	67.5	
-	M30 x 3.5	HTT.18002.030	8434220442	1	32	97	105		85	69	
-	1 1/4"	HTT.18002.114	8434220443	1	31	97.5	107		85	72	
AB-02	M33 x 3.5	HTT.18002.033	8434220444	102	31	96	107	66	85	72	
	1 3/8"	HTT.18002.138	8434220445		34	97.25	110		91	78	
	M36 x 4	HTT.18001.036	8434220446	1	34	96	110		91	78	
	1 1/2"	HTT.18002.112	8434220447	1	36.5	96	112		90	80	
	M39 x 4	HTT.18002.039	8434220448	1	36.5	95	112		90	80	
	M36 x 4	HTT.18003.036	8434220450		36.5	130.5	153		97	83.5	
-	1 1/2"	HTT.18003.112	8434220451	1	36.5	128.5	153		97	83.5	
-	M39 x 4	HTT.18003.039	8434220452	-	36.5	127.5	153		97	83.5	
-	1 5/8"	HTT.18003.158	8434220453	-	37.5	123.25	155		110	92.5	
-	M42 x 4.5	HTT.18003.042	8434220454	-	37.5	122.5	151		110	92.5	
AB-03	1 3/4"	HTT.18003.134	8434220455	133	40.5	122.5	160	100	115	98	
AD-03	M45 x 4.5	HTT.18003.045	8434220455	- 133	40.5	129.25	160		115	98	
-	17/8"	HTT.18003.178	8434220457	-	40.5	128.5	160		115	101	
-	M48 x 5	HTT.18003.048	8434220458	-	42.5	125.5	160		116	101	
-	2"	HTT.18003.200	8434220459	-	50	123.75	161		110	101	
-	M52 x 5	HTT.18003.052	8434220455	-	50	123.75	161		120	100	
	M42 x 4.5	HTT.18004.042	8434220462		43.5	134.25	161		120	100	
-	1 7/8"		8434220462	-	43.5	1			130	108	
-	M48 x 5	HTT.18004.178 HTT.18004.048	8434220463	-	43.5	128.75 128.25	161 161		130	108	
-	2"	HTT.18004.200	8434220465	-	43.5	128.25	160		130	108	
-	M52 x 5	HTT.18004.052	8434220465	-	46	124.5	160		124	108	
AB-04	2 1/4"		8434220466	163	55	123.25	166	100	124	118.5	
	M56 x 5.5	HTT.18004.214 HTT.18004.056	8434220467		55	124.25	166		134	118.5	
-	M60 x 5.5	HTT.18004.050	8434220469	-	54	143.75	188.5		150	118.5	
-	2 1/2"	HTT.18004.212	8434220469	-	58	124.75	173		130	130.5	
-	M64 x 6	HTT.18004.064	8434220470	-	58	124.75	173		147	130.5	
	2 1/2"	HTT.18005.212	8434220473	4	64	138.25	184.25		147	130.5	
	M64 x 6	HTT.18005.064	8434220474	4	64	137.75	184.25		147	130.5	
	M68 x 6	HTT.18005.068	8434220475	100	80	141.75	192.25	111 25	160	138	
AB-05	2 3/4"	HTT.18005.234	8434220476	193	72	146	198.25	111.25	161	143	
	M72 x 6	HTT.18005.072	8434220477	4	72	143.75	198.25		161	143	
	3"	HTT.18005.300	8434220478	4	77	138.75	197.25		170	153	
	M76 x 6	HTT.18005.076	8434220479		77	138.75	197.25		170	153	
	3"	HTT.18006.300	8434220481	4	77	141.75	200.25		170	153	
	M76 x 6	HTT.18006.076	8434220482	4	77	141.75	200.25		170	153	
	M80 x 6	HTT.18006.080	8434220483	4	78	138.75	201.25		178	155.5	
	3 1/4"	HTT.18006.314	8434220484	4	78	136.25	201.25		182	165.5	
	M85 x 6	HTT.18006.085	8434220485	4 .	78	133.75	201.25		182	165.5	
AB-06	3 1/2"	HTT.18006.312	8434220486	233	86	136	207.25	111.25	191	174.5	
	M90 x 6	HTT.18006.090	8434220487	4	86	134.75	207.25		191	174.5	
	3 3/4"	HTT.18006.334	8434220488	4	99	137.5	215.25		210	189.5	
	M95 x 6	HTT.18006.095	8434220489	4	99	137.75	215.25		210	189.5	
	4"	HTT.18006.400	8434220490	4	105	137.25	221.25		220	200	
	M100 x 6	HTT.18006.100	8434220491	1	105	138.75	221.25		220	200	

Designs and specifications are subject to change without notice or obligation. Read all safety instructions in the manual before usage. AB-01 and AB-02 are manual retract tensioners.

Pump Options

Operation of the Airbac tools is simple and users can choose a pump system to best match their needs. The new style pump unit comes complete with the integrated Airbac charging system, whereas the retro-fit kit easily and quickly adapts to the standard Tentec Air driven pump unit allowing existing customers to utilise pumps already in their fleet

New Style -

-11

Built in re-charging system
Stainless Steel frame
Reduced size and weight
Hi Flow 600 motor as standard, 500 motor optional

Retro fit kit ⊢

Rapidly installed using just two bolts
Separate FRL controls charging pressure
Reduces overall investment cost

TA-NEW

Tentec Part No.	Description	Ordering No.						
HTT.18007.000A	Airbac Pump	4222260106						
HTT.18008.000A	Retro -fit kit	4222260107						

10 times faster piston retraction than our standard air operated pump unit

Tentec BTS-Bolt Tightening Software & IOS/Android APP

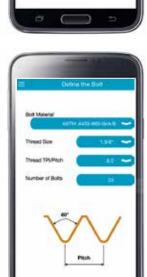
Airbac's technical data has been built into our Bolt Tightening Software to complement our other standard tension and torque tightening products. The latest AMSE PCC-1 compliant version is now also available to install on IOS and Android platforms allowing users even easier access to critical calculations and bolt tightening procedures. The software includes data for the following standard flanges:

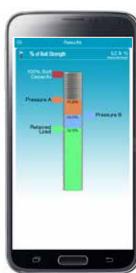
- ANSI B16.5
- ANSI B16.47 Series A
- MSS SP-44
- API 6A

in in

- API 17SV
 Vector SPO Compact Flanges
- Norsok L-005

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