

SUBSEA TENSIONER

STUD TENSIONER - SST

Bolt coverage from 3/4" to 3-1/2"
only 7 tools, SST1 to SST7



Patented Quick
Reaction Nut

SST STUD TENSIONER

Quick Reaction Subsea Tensioner

Our Subsea stud tensioner incorporating the quick reaction nut feature reduces diver fatigue, improving diver safety and productivity.

- Visible piston stroke indication
- Positive 'over-stroke' stop to prevent piston expulsion/ seal damage.
- Piston/cylinder misalignment compensation
- Anti-slip cylinder surface for improved handling
- Low friction seals
- Anti-corrosion coating
- Bolt coverage from 3/4" to 4" (M20 to M100)
- Designed to fit BS1560/ANSI B16.5/API flanges, as well as most compact flange designs

Specifications and Dimensional Data

(Tool Reference)	Stud Diameter				Tool Load			Hydraulic Area		Approx. Wt.		Minimum Bolt Protrusion Above Nut				
	Load Cell Order No.	Imperial	Adapter Kit Order No.	Metric	Adapter Kit Order No.	Ton	Lbf	kN	in ²	mm ²	lb	kg	Imp bolts		met bolts	
													in	mm	in	mm
(SST1) SSTAS010001	3/4"	QRNAS010001	M20	QRNAS010004	15.7	31,500	140	1.45	934	3.30	1.50	4.09	104	4.21	107	
	7/8"	QRNAS010003	M22	QRNAS010005								3.98	101	4.13	105	
(SST2) SSTAS020001	1"	QRNAS020001	M24	QRNAS020004	27	53,900	240	2.48	1,600	6.16	2.80	5.24	133	5.47	139	
	1-1/8"	QRNAS020003	M27	QRNAS020005								5.12	130	5.35	136	
	-	-	M30	QRNAS020006								-	-	5.28	134	
(SST3) SSTAS030001	1-1/4"	QRNAS030003	M33	QRNAS030005	43	85,400	380	3.928	2,534	8.80	4	5.35	136	5.59	142	
	1-3/8"	QRNAS030004	M36	QRNAS030006								5.24	133	5.47	139	
(SST4) SSTAS040001	1-1/2"	QRNAS040003	M39	QRNAS040005	62	123,700	550	5.685	3,668	13.20	6	5.51	140	5.79	147	
	1-5/8"	QRNAS040004	M42	QRNAS040006								5.35	136	5.67	144	
(SST5) SSTAS050001	1-3/4"	QRNAS050001	M45	QRNAS050005	99	197,800	880	9.095	5,868	19.80	9	5.94	151	6.3	160	
	1-7/8"	QRNAS050003	M48	QRNAS050006								5.83	148	6.22	158	
	2"	QRNAS050004	M52	QRNAS050007								5.71	145	6.06	154	
(SST6) SSTAS060001	2-1/4"	QRNAS060001	M56	QRNAS060005	175	351,000	1,560	16.137	10,411	32.34	14.7	6.54	166	7.01	178	
	2-1/2"	QRNAS060003	M60	QRNAS060006								6.30	160	6.89	175	
	2-3/4"	QRNAS060004	M64	QRNAS060007								6.06	154	6.77	172	
	-	-	M68	QRNAS060008								-	-	6.65	169	
	-	-	M70	QRNAS060009								-	-	6.5	165	
(SST7) SSTAS070001	3"	QRNAS070001	M76	QRNAS070005	289	579,000	2,575	26.623	17,176	55	25	7.13	181	7.68	195	
	3-1/4"	QRNAS070003	M80	QRNAS070006								6.89	175	7.56	192	
	3-1/2"	QRNAS070004	M85	QRNAS070007								6.65	169	7.40	188	
	-	-	M90	QRNAS070008								-	-	7.24	184	
(SST8) SSTAS080001	3-3/4"	QRNAS080001	M95	QRNAS080004	388	775,300	3,447	35.645	22,997	86.02	39.1	8.07	205	8.82	224	
	4"	QRNAS080003	M100	QRNAS080005								7.83	199	8.66	220	

In order to form a complete tensioner, order a load cell (SSTAS0#0001) and an adapter kit (QRNAS0#00##).

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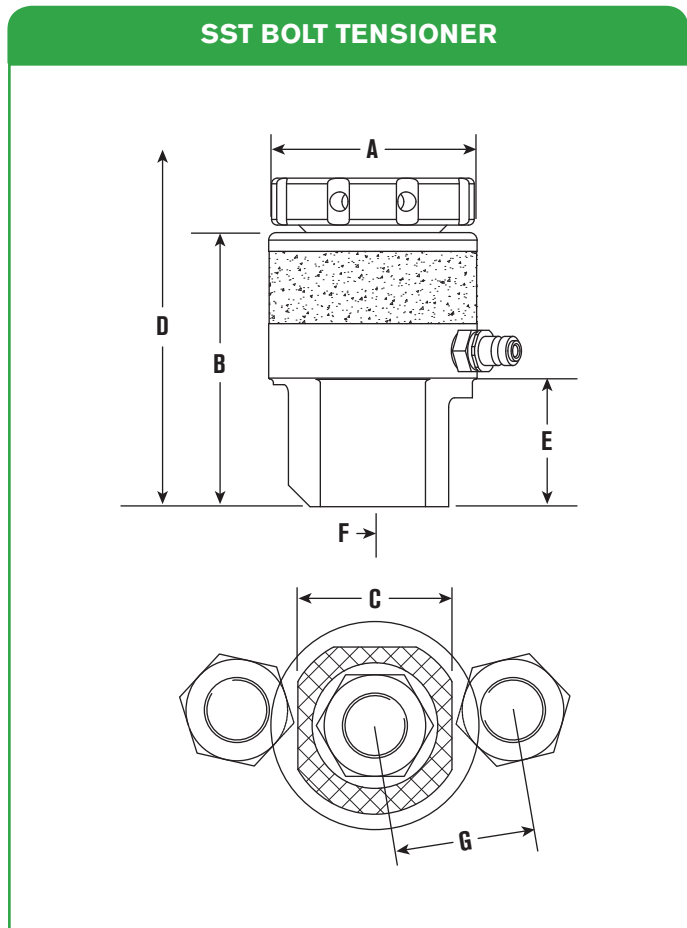
Piston stroke: 30mm except for SST1 - 20mm

Max tool pressure: 21,750 psi (1,500 bar)

Bolt protrusion above nut: refer to chart below for stud protrusion requirements

'D' includes an allowance for tool removal after bolt tightening with 30mm tool stroke

Product development is constantly taking place and dimensions may change without notice



A		B		C		D		E		F		G				Stud Diameter		(Tool Reference)		
in	mm	in	mm	in	mm	Imp bolts	met bolts	in	mm	in	mm	Imp bolts	met bolts	Imp	Metric	Load Cell Order No.				
2.6	66	3.8	97	1.9	48	9	228	9	228	1.6	40	0.7	19	1.7	44	1.7	44	3/4"	M20	(SST1)
														1.8	46	1.8	45	7/8"	M22	SSTAS010001
3.2	82	5	127.5	2.4	60	11.7	296	11.7	296	2.2	56.5	1	24.5	2.2	55	2.1	54	1"	M24	(SST2)
														2.3	58	2.2	56	1-1/8"	M27	SSTAS020001
														-	-	2.3	58	-	M30	
														2.7	69	2.7	68	1-1/4"	M33	(SST3)
3.8	97	5.4	137	3	77	12.2	309	12.2	309	2.5	63	1.1	28	2.8	72	2.8	71	1-3/8"	M36	SSTAS030001
														3.2	81	3.2	81	1-1/2"	M39	(SST4)
4.4	111	5.7	146	3.5	90	12.7	322	12.7	322	2.7	68	1.3	33.5	3.3	84	3.3	84	1-5/8"	M42	SSTAS040001
														3.9	98	3.9	98	1-3/4"	M45	(SST5)
5.4	136	6.2	158	4.5	114	13.5	342	13.5	342	3.1	77.5	1.6	40	4	101	4	101	1-7/8"	M48	SSTAS050001
														4.1	104	4.1	104	2"	M52	
														4.8	122	4.7	120	2-1/4"	M56	(SST6)
7	177	7.1	180.5	5.5	140	14.7	374	14.7	374	3.8	97	2.1	53	5	128	4.8	123	2-1/2"	M60	SSTAS060001
														5.2	133	5	126	2-3/4"	M64	
														-	-	5.1	129	-	M68	
														-	-	5.2	132	-	M70	
														6.3	159	6.1	155	3"	M76	(SST7)
8.5	217	8	202	7.1	180	16.1	409	16.1	409	4.6	117.5	3.5	88	6.5	164	6.2	157	3-1/4"	M80	SSTAS070001
														6.7	170	6.3	160	3-1/2"	M85	
														-	-	6.5	166	-	M90	
9.8	248	9.1	230	8.3	210	18.9	480	18.9	480	5	128	3.3	85	7.5	190	7.2	184	3-3/4"	M95	(SST8)
														7.7	196	7.5	190	4"	M100	SSTAS080001