

TTS

3/4" to 4" (M20-M100)
236 kN - 2.820 kN
Stroke 10 - 15 mm
1.500 bar

Series
TTS

Standard hydraulic bolt tensioners



High forces – reduced dimensions: anti over-stroke device.

- TTS Series tensioners are designed to suit most flanges type: ANSI B16.5 - ANSI B16.47 - B.S.3293 - AWWA - MSS-SP44 - API-6A - API-17D - UNI EN 1092-1.
- High forces and reduced dimensions. TTS Series tensioners represent the optimal combination between the developed strength and their size.
- Extremely compact dimensions and low weight. In TTS series the spaces for the installation are reduced to a minimum level and operations are facilitated by reduced weights.
- Maximum flexibility. With only 6 hydraulic cells the operator can cover an extended range of Imperial or Metric thread sizes from 3/4" to 4" (M20 – M100).
- 15 mm stroke cover most of the tensioning application. If longer

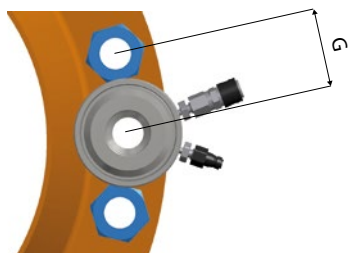
strokes are required the tensioning operation can be carried on by steps.

- All components are manufactured with hardened high tensile strength steel.
- Special treatment to guarantee: high resistance to corrosion - high resistance to wear – extremely low friction to help during screw operations.
- Safety is a must. All size have over stroke indicators.
- All model are equipped with 2 quick couplers, male and female, for serial hydraulic connection.
- Special high quality seals for leak free operations and easy maintenance.

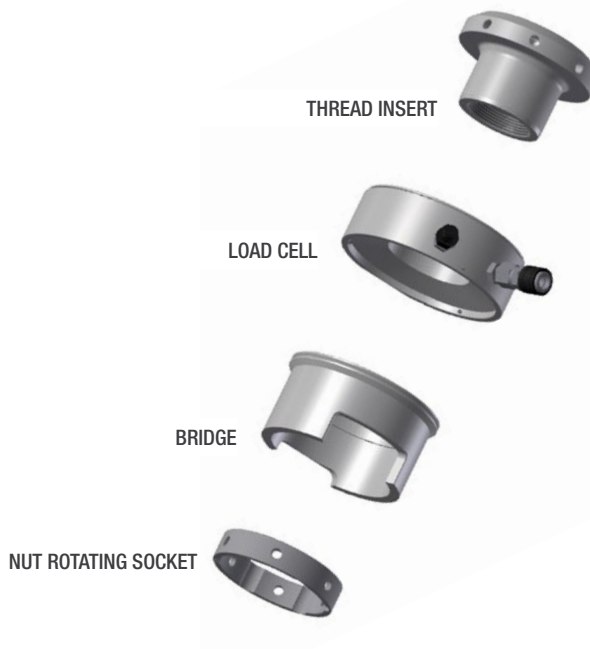
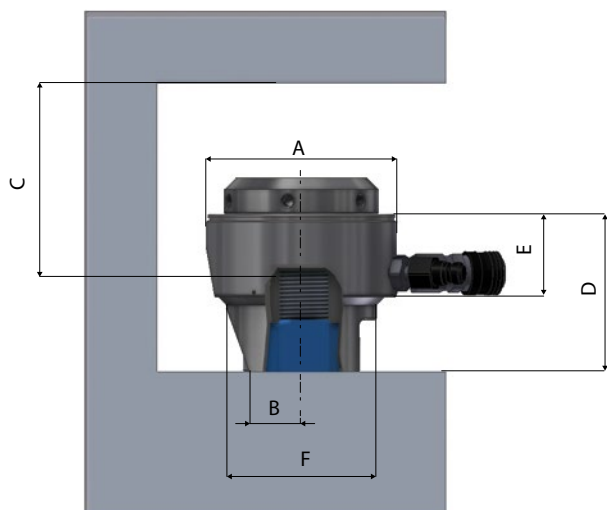
Anti over stroke device for the maximum safety during operations.

CUSTOM TENSIONERS ON REQUEST





TENSIONING TOOL TTS SERIES COMPONENTS



| HYDRAULIC CELL | IMPERIAL ADAPTER KITS | | METRIC ADAPTER KITS | | FORCE | | HYDRAULIC AREA | | STROKE | WEIGHT | DIMENSIONS (mm) | | | | | | | | | | | |
|----------------|-----------------------|---------------|---------------------|-------------|--------|-------|-----------------|-----------------|--------|--------|-----------------|----|-----|-----|----|-----|---------|------|----|-----|-----|--------|
| | Thread size | Kit code | Thread size | Kit code | kN | Ton | in ² | mm ² | | | A | B | C | D | E | F | G (min) | | | | | |
| TTS1 | 3/4"-10 UNC | 1.KI030410UNC | M20x2,5 | 1.KM.020025 | 236,5 | 24,1 | 2,44 | 1576,46 | 10 | 2 | 73 | 16 | 64 | 75 | 45 | 52 | 44,50 | | | | | |
| | 7/8"-9 UNC | 1.KI070809UNC | M22x2,5 | 1.KM.022025 | | | | | | | | | | | | | | 1,9 | 22 | 79 | 58 | 50,50 |
| | 1"-8 UN | 1.KI100008UN | M24x3 | 1.KM.024030 | | | | | | | | | | | | | | 1,8 | 23 | 81 | 62 | 55 |
| | 1.1/8"-8 UN | 1.KI110808UN | M27x3 | 1.KM.027030 | | | | | | | | | | | | | | 1,8 | 24 | 81 | 68 | 61 |
| TTS2 | 1.1/8"-8 UN | 2.KI110808UN | M27x3 | 2.KM.027030 | 459,5 | 46,8 | 4,75 | 3063,05 | 15 | 4,6 | 101 | 25 | 89 | 104 | 54 | 75 | 64,50 | | | | | |
| | - | - | M30x3,5 | 2.KM.030035 | | | | | | | | | | | | | | 4,6 | 25 | 104 | 75 | 64,50 |
| | 1.1/4"-8 UN | 2.KI110408UN | M33x3,5 | 2.KM.033035 | | | | | | | | | | | | | | 4,5 | 28 | 108 | 80 | 69,50 |
| | 1.3/8"-8 UN | 2.KI130808UN | M36x4 | 2.KM.036040 | | | | | | | | | | | | | | 4,4 | 30 | 111 | 84 | 74,50 |
| | 1.1/2"-8 UN | 2.KI110208UN | M39x4 | 2.KM.039040 | | | | | | | | | | | | | | 4,2 | 33 | 114 | 88 | 79 |
| TTS3 | 1.1/2"-8UN | 3.KI110208UN | M39x4 | 3.KM.039040 | 831,3 | 84,7 | 8,59 | 5541,77 | 15 | 7,7 | 133 | 34 | 89 | 106 | 57 | 95 | 82,50 | | | | | |
| | 1.5/8"-8 UN | 3.KI150808UN | M42x4,5 | 3.KM.042045 | | | | | | | | | | | | | | 7,7 | 36 | 109 | 104 | 90 |
| | 1.3/4"-8 UN | 3.KI130408UN | M45x4,5 | 3.KM.045045 | | | | | | | | | | | | | | 7,5 | 40 | 112 | 108 | 94,50 |
| | 1.7/8"-8 UN | 3.KI170808UN | M48x5 | 3.KM.048050 | | | | | | | | | | | | | | 7,6 | 42 | 117 | 112 | 99,50 |
| | 2"-8 UN | 3.KI200008UN | M52x5 | 3.KM.052050 | | | | | | | | | | | | | | 7,5 | 48 | 118 | 116 | 104,50 |
| TTS4 | 1.7/8"-8 UN | 4.KI170808UN | M48x5 | 4.KM.048050 | 1345,5 | 137,2 | 13,90 | 8970,03 | 15 | 13,7 | 163 | 43 | 102 | 125 | 63 | 122 | 104,50 | | | | | |
| | 2"-8 UN | 4.KI200008UN | M52x5 | 4.KM.052050 | | | | | | | | | | | | | | 13,2 | 45 | 128 | 123 | 108 |
| | 2.1/4"-8 UN | 4.KI210408UN | M56x5,5 | 4.KM.056055 | | | | | | | | | | | | | | 12,7 | 54 | 133 | 132 | 117,50 |
| | - | - | M60x5,5 | 4.KM.060055 | | | | | | | | | | | | | | 13,3 | 53 | 137 | 140 | 120,50 |
| | 2.1/2"-8 UN | 4.KI210208UN | M64x6 | 4.KM.064060 | | | | | | | | | | | | | | 13 | 57 | 141 | 146 | 128 |
| TTS5 | 2.1/2"-8 UN | 5.KI210208UN | M64x6 | 5.KM.064060 | 1927,3 | 196,5 | 19,91 | 12848,33 | 15 | 18,9 | 193 | 59 | 98 | 134 | 63 | 148 | 131 | | | | | |
| | - | - | M68x6 | 5.KM.068060 | | | | | | | | | | | | | | 19 | 62 | 137 | 154 | 135 |
| | 2.3/4"-8 UN | 5.KI230408UN | M72x6 | 5.KM.072060 | | | | | | | | | | | | | | 18,2 | 68 | 140 | 158 | 141,50 |
| | 3"-8 UN | 5.KI300008UN | M76x6 | 5.KM.076060 | | | | | | | | | | | | | | 17,5 | 70 | 146 | 165 | 150,50 |
| TTS6 | 3"-8 UN | 6.KI300008UN | M76x6 | 6.KM.076060 | 2819,9 | 287,5 | 29,14 | 18799,29 | 15 | 34,3 | 232 | 75 | 125 | 160 | 73 | 170 | 153 | | | | | |
| | - | - | M80x6 | 6.KM.080060 | | | | | | | | | | | | | | 36,3 | 77 | 165 | 177 | 155 |
| | 3.1/4"-8 UN | 6.KI310408UN | M85x6 | 6.KM.085060 | | | | | | | | | | | | | | 34,3 | 77 | 170 | 182 | 164,50 |
| | 3.1/2"-8 UN | 6.KI310208UN | M90x6 | 6.KM.090060 | | | | | | | | | | | | | | 33 | 82 | 175 | 191 | 174,50 |
| | 3.3/4"-8 UN | 6.KI330408UN | M95x6 | 6.KM.095060 | | | | | | | | | | | | | | 32,9 | 86 | 180 | 206 | 187,50 |
| | 4"-8 UN | 6.KI400008UN | M100x6 | 6.KM.100060 | | | | | | | | | | | | | | 32,9 | 95 | 185 | 216 | 198 |