

## SERIES: HTST Spring Return Tensioners

1500 bar pressure  
10 mm stroke



### SAFE AND RELIABLE

- CE marked
- Over-stroke protection
- Max stroke indicator
- Pressure Test Certification
- Full colour operating and safety manual
- Long life performance

### OPTIONS AND FEATURES

- Special threads
- Special load requirements
- Twin or single port
- Special bridge for tight clearance
- Oil pressure calculations
- Long stroke designs
- Interchangeable parts

**HTST** series standard range tensioners are versatile and reliable hydraulic tensioners suitable for all bolting applications. Optimised for top-side applications they are designed to suit ANSI, ASME and API flanges. With fast spring piston return they are perfect for tightening multi-bolt and multi-pass operations.

### SPRING RETURN

**HTST** Spring Return Tensioners incorporate powerful internal springs to reset the tensioner piston ready for the next operation. Reduces operator fatigue and increases speed of tensioning.



### NO OVER-STROKE

An internal valve prevents accidental piston over-stroke. This prevents unnecessary downtime to effect a seal replacement.



### PAL PURE AXIAL LOADING

The TensionPro Tensioner method allows bolts to be loaded with an accurate force that is directly proportional to the pressure applied to the tool. **NO FRICTION** bolt tightening for an accurate and repeatable bolt tightening method.

The tensioner load or force is easily calculated:

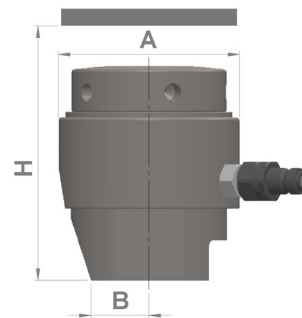
$$F = (P \times A) / 10,000$$

Tensioner Force	F [kN]
Tool Pressure Area	A [mm <sup>2</sup> ]
Pressure	P [kN]

## SERIES: HTST Spring Return Tensioners

1500 bar pressure

10 mm stroke



Tool No	Bolt Thread Size		Maximum Tensioner Load		Pressure Area	Tool OD	Height Clear	Bridge Clear	Weight
	T		F		HPA	A	H	B	W
	inch	Metric	tonf	kN	mm <sup>2</sup>	mm	mm	mm	kg
HTST-1	1	M24	28.1	280	1867	87	178	28	2.7
	1 1/8	M27					181	30	
HTST-2	1	M24	45.2	450	3001	103	175	30	4.1
	1 1/8	M27					181	30	
	1 1/4	M30					188	30	
	1 3/8	M33					195	35	
	-	M36					195	38	
HTST-3	1 1/4	M33	66.2	660	4401	118	190	35	5.4
	1 3/8	M36					197	38	
	1 1/2	M39					203	42	
	1 5/8	M42					209	42	
HTST-4	1 1/2	M39	101.4	1000	6668	140.5	211	42	8.4
	1 5/8	M42					217	45	
	1 3/4	M45					223	52	
	1 7/8	M48					230	52	
	2	M52					236	52	
HTST-5	2	M52	150.5	1500	10003	175.5	246	52	13.8
	2-1/4	M56					259	63	
	2 1/2	M60					272	68	
	2 3/4	M64					272	68	
	-	M68					284	70	
HTST-6	2- 3/4	M72	250.9	2500	16671	219	294	72	23
	3	M76					307	80	
	3 1/4	M80					320	84	
	3 1/2	M85					332	88	
	-	M90					332	88	
HTST-7	3-1/2	M90	321.2	3200	21339	252	339	88	32
	3 3/4	M95					352	94	
	4	M100					364	114	