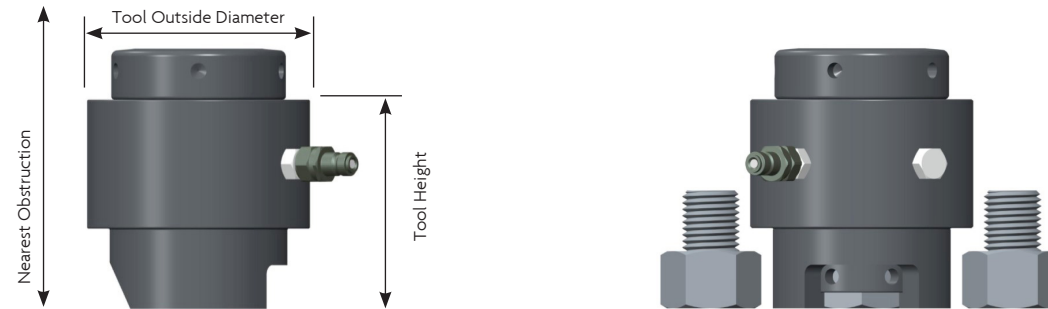


## TENDEURS HYDRAULIQUES TSR

### TSR Range - Spring Return Bolt Tensioners



Tool No:	Bolt Diameter		Hydraulic Area mm <sup>2</sup>	Max. Load		Tool Outside Diameter mm	Tool Height mm	Nearest Obstruction mm	Tool Weight	
	inch	mm		kN	lbf				kg	lbs
TSR 0	3/4	M20	1,070	160	35,970	66	93	142	1.4	3.1
	7/8	M22								
TSR 1	1	M24	1,870	280	62,950	87	117	175	2.7	6.0
	1-1/8	M27					117	178		
								120		
TSR 2	1	M24	3,000	450	101,160	103	117	175	4.1	9.0
	1-1/8	M27					117	178		
		M30					120	184		
	1-1/4	M33					123	190		
	1-3/8	M36					126	196		
TSR 3	1-1/4	M33	4,400	660	148,370	118	123	192	5.4	11.9
	1-3/8	M36					126	198		
	1-1/2	M39					130	204		
	1-5/8	M42					133	211		
TSR 4	1-1/2	M39 M42 M45 M48	6,670	1,000	224,810	141	132	212	8.4	18.5
	1-5/8						135	218		
	1-3/4						139	225		
	1-7/8						142	231		
	2						145	231		
TSR 5	2	M52 M56 M60 M64 M68	10,000	1,500	337,210	176	148	248	13.8	30.4
	2-1/4						154	258		
	2-1/2						161	262		
	2-3/4						161	273		
							167	283		
TSR 6	2-3/4	M72 M76 M80 M85 M90	16,670	2,500	562,020	219	167	297	23.0	50.7
	3						171	308		
	3-1/4						180	312		
	3-1/2						180	323		
							186	334		
TSR 7	3-1/2	M90 M95 M100	21,340	3,200	719,390	252	186	341	32.0	70.5
	3-3/4						186	346		
	4						192	356		
							199	356		