

# LSR SERIES

## Spring Return Bolt Tensioner

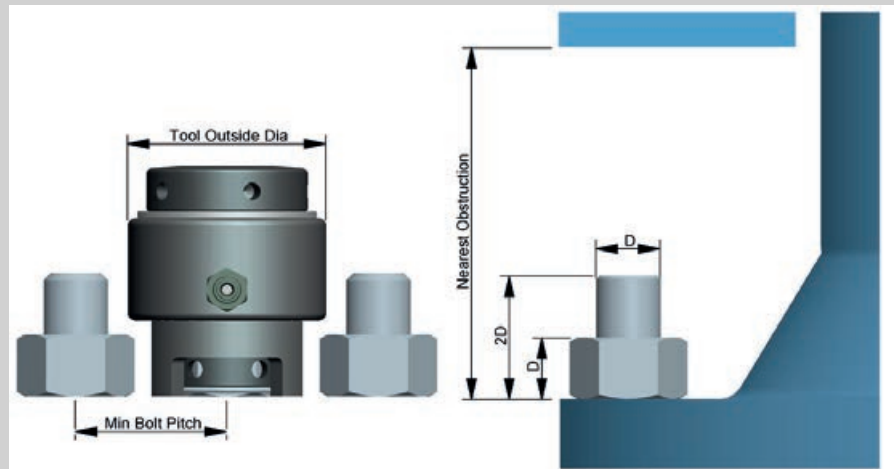


### LSR BOLT TENSIONER Spring Return Bolt Tensioner

- Unique quick release bridge adaptation
- Piston overstroke prevention
- Piston stroke indication
- Piston / cylinder misalignment compensation
- Bolt coverage from 1" to 3 1/2" with just 4 tools
- Designed to fit BS1560 / ANSI B16.5 / API flanges
- Fully enclosed load cell design eliminates entry of debris into piston retraction mechanism

The Spring Return design dramatically increases productivity and safety on the job site when compared to older technology manual return tensioners.

topside.



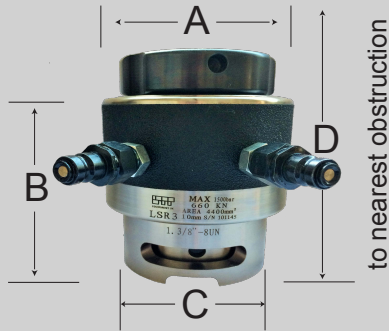
# SPRING RETURN BOLT TENSIONER

Our spring return bolt tensioner reduces operator fatigue, saving time and improving safety and productivity.



Order a load cell and an adaptor kit to make a complete tensioner, each are sold separately.

## Specifications and Dimensional Data



- Piston stroke - 10mm except for HS 0 - 8mm
- Max tool pressure - 21,750 psi (1,500 bar)
- Bolt protrusion above nut = 1 x bolt diameter
- 'D' includes an allowance for tool removal after bolt tightening with 10mm tool stroke
- Weight excludes puller sleeve
- Product development is constantly taking place and dimensions may change without notice

Load Cell	Stud Diameter		Tool Load		Hydraulic Area		A		B		C		D			
	Imp	Metric	lbs	kN	in <sup>2</sup>	mm <sup>2</sup>	in	mm	in	mm	in	mm	Imperial	Metric		
													in	mm		
LSR 0	3/4"	M20	35,500	160	1.65	1,067	2.6	66	3.7	93	2.5	63	5.4	136		
	7/8"	M22											5.6	142	5.6	144
LSR 1	1"	M24	61,950	280	2.89	1,867	3.4	87	4.6	117	2.7	68	6.9	175		
	M27	7.0											178			
LSR 2	1-1/8"	M24	99,700	450	4.65	3,001	4.1	103	4.7	120	3.2	80	7.1	181		
	1"												M27	6.9	175	6.9
	1-1/4"	M33											7.2	184		
LSR 3	1-3/8"	M36	145,950	660	6.82	4,401	4.7	118	5.0	126	3.8	96	7.8	197		
	1-1/2"	M39											8.0	203	8.0	204
	1-5/8"	M42											8.2	209	8.3	211
LSR 4	1-1/2"	M39	223,550	1,000	10.34	6,668	5.5	140.5	5.5	139	4.7	118	8.3	211		
	1-5/8"	M42											8.5	217	8.6	218
	1-3/4"	M45											8.8	223	8.9	225
	1-7/8"	M48											9.1	230	9.1	231
LSR 5	2"	M52	331,400	1,500	15.50	10,003	6.9	175.5	6.1	154	5.4	138	9.7	246		
	2-1/4"	M56											10.2	259	10.2	258
	2-1/2"	M60											10.7	272	10.8	273
	2-3/4"	M64											11.2	284	11.1	283
LSR 6	3"	M72	553,200	2,500	25.84	16,671	8.6	219	6.6	167	6.2	157	11.6	294		
	3-1/4"	M76											12.1	307	12.1	308
	3-1/2"	M80											12.6	320	12.7	323
	M85	13.1											332	13.2	334	
	M90	13.2											339	13.3	341	
LSR 7	3-1/2"	M90	708,200	3,200	33.06	21,339	9.9	252	7.3	186	7.9	200	13.5	346		
	3-3/4"	M95											13.7	352	13.9	356
	4"	M100											14.2	363		