



**Model: HLD Series Hydraulic Bolt Tensioner**

**Chart of Pressure and Tensile Force**

Model	HLD1	HLD2	HLD3	HLD4	HLD5	HLD6
Pressure (MPa)	Tensile Force (KN)	Tensile Force (KN)	Tensile Force (KN)	Tensile Force (KN)	Tensile Force (KN)	Tensile Force (KN)
20	30.1	60.6	107.2	171.8	263.8	362.3
22	33.1	66.7	117.9	189.0	290.1	398.5
24	36.2	72.7	128.6	206.2	316.5	434.7
26	39.2	78.8	139.3	223.4	342.9	471.0
28	42.2	84.9	150.0	240.5	369.3	507.2
30	45.2	90.9	160.7	257.7	395.6	543.4
32	48.2	97.0	171.4	274.9	422.0	579.6
34	51.2	103.1	182.2	292.1	448.4	615.9
36	54.2	109.1	192.9	309.3	474.8	652.1
38	57.2	115.2	203.6	326.5	501.1	688.3
40	60.3	121.2	214.3	343.6	527.5	724.6
42	63.3	127.3	225.0	360.8	553.9	760.8
44	66.3	133.4	235.7	378.0	580.3	797.0
46	69.3	139.4	246.5	395.2	606.6	833.2
48	72.3	145.5	257.2	412.4	633.0	869.5
50	75.3	151.5	267.9	429.6	659.4	905.7
52	78.3	157.6	278.6	446.7	685.8	941.9
54	81.3	163.7	289.3	463.9	712.2	978.1
56	84.4	169.7	300.0	481.1	738.5	1014.4
58	87.4	175.8	310.7	498.3	764.9	1050.6
60	90.4	181.9	321.5	515.5	791.3	1086.8
62	93.4	187.9	332.2	532.6	817.7	1123.1
64	96.4	194.0	342.9	549.8	844.0	1159.3
66	99.4	200.0	353.6	567.0	870.4	1195.5
68	102.4	206.1	364.3	584.2	896.8	1231.7
70	105.4	212.2	375.0	601.4	923.2	1268.0
72	108.5	218.2	385.7	618.6	949.5	1304.2
74	111.5	224.3	396.5	635.7	975.9	1340.4
76	114.5	230.3	407.2	652.9	1002.3	1376.7
78	117.5	236.4	417.9	670.1	1028.7	1412.9
80	120.5	242.5	428.6	687.3	1055.0	1449.1
82	123.5	248.5	439.3	704.5	1081.4	1485.3
84	126.5	254.6	450.0	721.6	1107.8	1521.6
86	129.6	260.7	460.8	738.8	1134.2	1557.8
88	132.6	266.7	471.5	756.0	1160.5	1594.0
90	135.6	272.8	482.2	773.2	1186.9	1630.2
92	138.6	278.8	492.9	790.4	1213.3	1666.5
94	141.6	284.9	503.6	807.6	1239.7	1702.7
96	144.6	291.0	514.3	824.7	1266.0	1738.9
98	147.6	297.0	525.0	841.9	1292.4	1775.2
100	150.6	303.1	535.8	859.1	1318.8	1811.4
102	153.7	309.2	546.5	876.3	1345.2	1847.6
104	156.7	315.2	557.2	893.5	1371.6	1883.8
106	159.7	321.3	567.9	910.7	1397.9	1920.1
108	162.7	327.3	578.6	927.8	1424.3	1956.3
110	165.7	333.4	589.3	945.0	1450.7	1992.5
112	168.7	339.5	600.1	962.2	1477.1	2028.8
114	171.7	345.5	610.8	979.4	1503.4	2065.0
116	174.7	351.6	621.5	996.6	1529.8	2101.2
118	177.8	357.6	632.2	1013.7	1556.2	2137.4
120	180.8	363.7	642.9	1030.9	1582.6	2173.7
122	183.8	369.8	653.6	1048.1	1608.9	2209.9
124	186.8	375.8	664.3	1065.3	1635.3	2246.1
126	189.8	381.9	675.1	1082.5	1661.7	2282.3
128	192.8	388.0	685.8	1099.7	1688.1	2318.6
130	195.8	394.0	696.5	1116.8	1714.4	2354.8
132	198.8	400.1	707.2	1134.0	1740.8	2391.0
134	201.9	406.1	717.9	1151.2	1767.2	2427.3
136	204.9	412.2	728.6	1168.4	1793.6	2463.5
138	207.9	418.3	739.4	1185.6	1819.9	2499.7
140	210.9	424.3	750.1	1202.7	1846.3	2535.9
142	213.9	430.4	760.8	1219.9	1872.7	2572.2
144	216.9	436.4	771.5	1237.1	1899.1	2608.4
146	219.9	442.5	782.2	1254.3	1925.4	2644.6
148	222.9	448.6	792.9	1271.5	1951.8	2680.9
150	226.0	454.6	803.6	1288.7	1978.2	2717.1