








Manual Force Test Stands Comparison Chart

Model	Force Capacity	Maximum Travel ¹	Loading Method	Travel Rate	Clearance ²
 ES05	30 lbF [150 N]	1.5 in [38 mm]	Spring-loaded lever	---	8.0 in [203 mm]
 ES10 / ES20	100 lbF [500 N]	9.0 in [229 mm]	ES10: Lever ES20: Top-mounted hand wheel	ES10: 1.05 in [26.7 mm] per lever revolution ES20: 0.06 in [1.5 mm] per wheel revolution	9.0 in [229 mm]
 ES30	200 lbF [1,000 N]	13.0 in [330 mm]	Side-mounted hand wheel	0.05 in [1.3 mm] per wheel revolution	14.0 in [356 mm] ³
 TSA750 / TSA750H	750 lbF [3,750 N]	With travel stops: 2.75 in [70 mm] Without travel stops: 6.00 in [152 mm]	Lever with rack & pinion, lever can be positioned in 30° increments	3.00 in [76.2 mm] per lever revolution	TSA750: 10.5 in [267 mm] ³ TSA750H: 14.5 in [368 mm] ³
 TSB100	100 lbF [500 N]	With travel stops: 2.75 in [70 mm] Without travel stops: 6.00 in [152 mm]	Lever with rack & pinion, lever can be positioned in 30° increments	3.00 in [76.2 mm] per lever revolution	13.0 in [330 mm] ³
 TSC1000 / TSC1000H	1,000 lbF [5,000 N]	3.5 in [89 mm]	Inline hand wheel	0.10 in [2.5 mm] per wheel revolution	TSC1000: 10 in [254 mm] ³ TSC1000H: 13 in [330 mm] ³
 TSF / TSFH	1,000 lbF [5,000 N]	4.0 in [102 mm]	Side-mounted hand wheel	0.013 in [0.34 mm] per wheel revolution	TSF: 14.0 in [356 mm] ³ TSFH: 16.5 in [419 mm] ³

1. Maximum travel depends on the grips or fixtures used during testing. The dimensions indicate distances without the use of grips or fixtures.
2. The distance between the bottom of a mounted force gauge or sensor and the loading surface of the test stand. This distance is reduced if grips or fixtures are used. Column extensions are available with certain test stand models.
3. Column extensions are available.

» **Questions? Call Mark-10 toll-free at 888-MARK-TEN for application and product assistance.**