

# Universal Flat Load Cell® & Fatigue Rated Flat Load Cell® Hold-Down & Loading Bolt Preload Torque Values

BASIC MODEL <sup>1</sup>	FATIGUE RATED MODEL	HOLD-DOWN BOLTS	TORQUE FT-LBS	LOADING BOLT	TORQUE FT-LBS
FL025U(C)		#10-32NF	1.25	1/4-20NC	3
FL05U(C)		#10-32NF	1.25	1/4-20NC	3
FL1U(C)		#10-32NF	1.25	5/16-18NC	6
FL2.5U(C)		#10-32NF	2.5	3/8-16NC	16
	FFL(1.8/±1.2)U(C)	#10-32NF	2.5	3/8-16NC	16
FL5U(C)		#10-32NF	5.0	7/16-20NF	50
FL7.5U(C)		#10-32NF	6.0	7/16-20NF	60
FL10U(C)		1/4-28NF	11.0	5/8-18NF	130
	FFL(4.5/±3)U(C)	1/4-28NF	11.0	7/16-20NF	60
	FFL(7.5/±5)U(C)	1/4-28NF	11.0	5/8-18NF	130
FL25U(C)		3/8-24NF	35	1-14NF	450
	FFL(15/±10)U(C)	3/8-24NF	35	1-14NF	450
FL35U(C)		7/16-20NF	55	1-1/4-12N	750
	FFL(22.5/±15)U(C)	7/16-20NF	55	1-1/4-12N	750
FL50U(C2)		1/2-20NF	90	1-1/2-12N	1,340
	FFL(30/±20)U(C2)	1/2-20NF	90	1-1/2-12N	1,340
FL75U(C1)		3/4-16NF	270	1-3/4-12N	2,200
	FFL(45/±30)U(C1)	3/4-16NF	270	1-3/4-12N	2,200
FL100U(C)		3/4-16NF	270	2-12N	3,300
	FFL(60/±40)U(C)	3/4-16NF	270	2-12N	3,300
FL150U(C)		3/4-16NF	270	2-3/8-12N	6,000
	FFL(99/±66)U(C)	3/4-16NF	270	2-3/8-12N	6,000
FL200U(C)		3/4-16NF	270	2-3/8-12N	7,700
	FFL(120/±80)U(C)	3/4-16NF	270	2-3/8-12N	7,700
FL300U(C)		1-14NF	560	3-12N	14,600
	FFL(180/±120)U(C)	1-14NF	560	3-12N	14,600
FL400U(C)		1-1/8-12NF	800	3-1/2-8N	23,000
	FFL(270/±180)U(C)	1-1/8-12NF	800	3-1/2-8N	23,000

## Compression Flat Load Cell® Hold-Down Bolt Preload Torque Values

BASIC MODEL	HOLD-DOWN BOLTS	TORQUE INCH-LBS
FL025C(C)	#4-40NC	7
FL05C(C)	#4-40NC	7
FL1C(C)	#4-40NC	7
FL2.5C(C)	#6-32NC	12
FL5C(C)	#6-32NC	12
FL7.5C(C)	#6-32NC	12
FL10C(C)	#8-32NC	17
FL25C(C)	#10-32NF	26
FL50C(C)	1/4-28NF	39
FL100C(C)	5/16-24NF	82
FL150C(C)	5/16-24NF	82
FL200C(C)	3/8-24NF	150
FL300C(C)	7/16-20NF	230
FL500C(C)	7/16-20NF	300

- Note: 1. Universal Flat Load Cells® and Fatigue Rated Flat Load Cells® require high strength socket head cap screws, with corresponding torque valves, and spacers as illustrated.  
 2. Torque values given are for lubricated threads.  
 3. Loading bolt must engage all the threads in the load cell threaded hole.  
 4. Spacers should be used with the knurl towards the bolt head.