

**Table 5 Steel Pipe Ends, Models 8503, 8504, 8505 and 8506**

**Design Pressure: 200 psig Test Pressure: 300 psig Temperature Range: -400°F to 500°F**

Nominal Size (NPS)	Axial Spring Rate (lb/in)	Outside Diameter (inches)	Part Number	Axial Compr. (inches)	8503, 8504, 8506		8505	
					Overall Length (inches)	Weight (lbs)	Overall Length (inches)	Weight (lbs)
3/4	81	2.375	-214-2	2.0	12.750	2.5	13.125	5.0
	58		-214-3	3.0	16.500	3.0	16.875	5.5
1	88	2.875	-219-2	2.0	12.750	4.0	13.125	7.5
	63		-219-3	3.0	16.500	4.7	16.875	8.3
1-1/4	75	2.875	-224-2	2.0	12.750	4.5	13.125	8.5
	52		-224-3	3.0	16.500	5.4	16.875	9.4
1-1/2	121	3.500	-227-2	2.0	14.000	5.8	14.375	10.8
	82		-227-3	3.0	17.500	6.5	17.875	11.5
2	143	4.000	-231-2	2.0	14.000	7.0	14.375	15.5
	117		-231-3	3.0	17.500	8.5	17.875	17.0
2-1/2	187	5.000	-235-2	2.0	15.500	12.3	16.000	23.5
	132		-235-3	3.0	18.750	14.8	19.250	26.0
3	230	5.563	-240-2	2.0	15.500	15.5	16.000	30.0
	161		-240-3	3.0	19.250	18.5	19.750	33.0
4	484	6.625	-248-2	2.0	16.375	21.0	16.875	41.0
	341		-248-3	3.0	19.250	25.0	19.750	45.0
1	2	3	4	5	6	7	8	9

**Table 6 Copper Tube Ends, Models 8509 and 8510**

**Design Pressure: 200 psig Test Pressure: 300 psig Temperature Range: -320°F to 500°F**

Copper Tube Size	Actual Tube O.D. (inches)	Axial Spring Rate (lb/in)	Outside Diameter (inches)	Part Number	Axial Compr. (inches)	8509, 8510	
						Overall Length (inches)	Weight (lbs)
3/4	0.875	82	1.500	-212-2	2.0	11.000	0.8
		58		-212-3	3.0	14.750	0.9
1	1.125	89	1.875	-216-2	2.0	11.250	1.1
		63		-216-3	3.0	15.000	1.2
1-1/4	1.375	75	2.250	-220-2	2.0	12.500	1.6
		54		-220-3	3.0	16.250	1.8
1-1/2	1.625	74	2.500	-223-2	2.0	12.875	1.9
		52		-223-3	3.0	16.375	2.1
2	2.125	168	3.000	-229-2	2.0	13.187	3.0
		118		-229-3	3.0	17.688	3.3
2-1/2	2.625	159	4.000	-233-2	2.0	13.500	4.0
		110		-233-3	3.0	16.750	4.4
3	3.125	251	4.500	-237-2	2.0	14.000	4.5
		175		-237-3	3.0	17.750	5.0
4	4.125	341	5.563	-245-2	2.0	14.500	8.4
		241		-245-3	3.0	18.500	9.2
1	2	3	4	5	6	7	8

**Note:** Standard construction is designed for 2" or 3" axial compression and 0.5" axial extension. Refer to Ordering Instructions on Page 6 to order factory preset for axial extension.