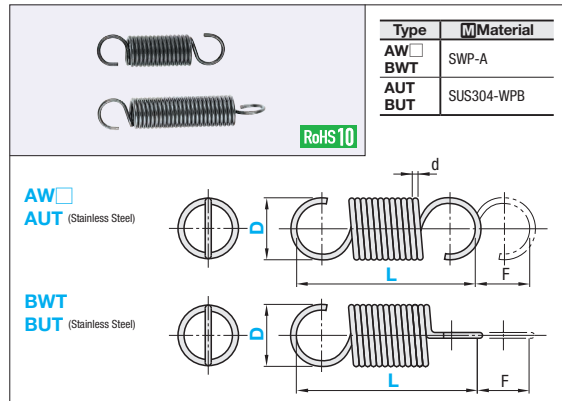


# Tension Springs

## Medium Heavy Load / Heavy Load Type



### Medium Heavy Load Type

Part Number	Wire Dia. dmm	Dynamic Load Max. Deflection Fmax. mm	Max. Load N	Initial Tension N	(Spring Constant) N/mm	Unit Price
AWF	3-10	2.2	6.47	1.57	2.26	
	15	4.5			1.08	
	20	6.7			0.74	
	25	9.1			0.54	
	30	11.4			0.43	
AWF	4-15	4.5	8.43	1.86	1.47	
	20	7.1			0.93	
	25	10.0			0.66	
	30	12.6			0.52	
	35	15.2			0.43	
AWF	5-15	18.1	14.71	2.45	0.36	
	20	3.9			3.14	
	25	6.9			1.77	
	30	9.6			1.28	
	35	12.5			0.98	
AWF	6-20	3.9	23.54	5.88	4.51	
	25	6.0			2.94	
	30	7.8			2.26	
	35	10.0			1.77	
	40	12.0			1.47	
AWF	8-25	5.8	31.38	6.86	4.23	
	30	8.3			2.94	
	35	10.9			2.26	
	40	13.2			1.86	
	45	15.6			1.57	
AWF	10-30	6.5	49.03	12.75	5.58	
	35	8.7			4.17	
	40	10.7			3.39	
	45	12.9			2.81	
	50	15.2			2.39	
AWF	12-35	5.0	83.36	23.54	12.0	
	40	7.0			8.55	
	45	9.0			6.65	
	50	11.0			5.44	
	60	13.0			4.60	

Part Number  
AWT10-50

### Heavy Load Type \* marked dimensions are for AWT and AUT only.

Part Number	Wire Dia. dmm	Dynamic Load Max. Deflection Fmax. mm	Max. Load N	Initial Tension N	(Spring Constant) N/mm	Unit Price
AWT AUT BWT BUT	3-10	2.0	8.8	2.16	3.24	
	15	3.7			1.77	
	20	5.2			1.27	
	25	6.8			0.98	
	*30	8.5			0.78	
AWT AUT BWT BUT	4-15	4.0	11.1	2.55	2.16	
	20	6.4			1.37	
	25	8.4			0.98	
	30	10.9			0.78	
	*35	12.4			0.69	
AWT AUT BWT BUT	5-15	2.9	20.79	5.1	5.39	
	20	4.6			3.43	
	25	6.4			2.45	
	30	8.4			1.86	
	*40	11.4			1.57	
AWT BWT AUT BUT	6-20	3.7	33.15	8.6	6.57	
	25	5.3			4.61	
	30	6.9			3.53	
	35	8.3			2.94	
	40	10.0			2.45	
AWT BWT AUT BUT	*45	10.8			2.27	
	*50	12.5			1.96	
	*55	14.3			1.71	
	*60	15.6			1.57	
	AWT BWT AUT BUT	8-25	5.3	41.19	9.81	5.88
30		7.3			4.31	
35		9.1			3.43	
40		11.9			2.65	
45		13.6			2.35	
AWT BWT AUT BUT	*50	15.5			2.06	
	*55	16.8			1.87	
	*60	18.8			1.67	
	*65	20.6			1.52	
	*70	22.8			1.38	
AWT BWT AUT BUT	10-30	5.2	77.47	20.59	10.89	
	35	6.8			8.34	
	40	8.4			6.77	
	45	10.0			5.69	
	50	11.6			4.9	
AWT BWT AUT BUT	*55	13.2			4.31	
	*60	15.2			3.73	
	*65	17.0			3.35	
	*70	19.3			2.95	
	*75	20.7			2.75	
AWT BWT AUT BUT	*80	24.1			2.36	
	*90	26.3			2.16	
	*100	29.0			1.96	
	12-40	6.6	120.62	34.3	13.04	
	45	7.7			11.18	
AWT BWT AUT BUT	50	9.4			9.22	
	55	10.5			8.24	
	60	12.1			7.46	
	65	13.1			6.57	
	70	14.9			5.79	
AWT	75	16.0			5.39	
	80	17.6			4.9	
	*90	19.1			4.52	
	*100	22.0			3.92	
	14-40	5.8	154.95	45.11	19.02	
AWT	45	7.0			15.59	
	50	8.4			13.14	
	55	9.6			11.47	
	60	10.9			10.1	
	65	12.9			8.53	
AWT	70	14.2			7.75	
	75	15.3			7.16	
	80	16.7			6.57	
	90	18.6			5.91	
	100	21.1			5.21	
AWT	125	28.0			3.92	
	16-50	7.5	195.15	55.9	18.63	
	55	9.0			15.49	
	60	10.4			13.34	
	65	11.9			11.67	
AWT	70	13.4			10.4	
	75	15.0			9.32	
	80	16.5			8.43	
	90	19.4			7.16	
	100	22.4			6.18	
AWT	125	28.4			4.90	
	150	35.5			3.92	
	18-55	8.3	236.34	68.65	20.1	
	60	10.0			16.67	
	65	11.6			14.71	
AWT	70	12.5			13.44	
	75	14.1			11.77	
	80	15.8			10.79	
	90	18.4			9.12	
	100	21.6			7.75	
AWT	125	27.1			6.19	
	150	34.2			4.90	
	20-60	9.2	281.45	82.38	21.57	
	70	11.9			16.67	
	80	14.7			13.53	
AWT	90	17.5			11.38	
	100	20.1			9.9	
	125	27.8			7.16	
	150	33.8			5.89	
	175	40.6			4.90	
AWT	24-80	11.7	430.51	123.6	26.48	
	90	13.7			22.46	
	100	16.6			18.63	
	125	22.5			13.63	
	150	28.5			10.79	
AWT	175	34.4			8.92	
	200	41.2			7.45	

\* Initial tension and spring constant are for reference only. Load (kgf) = Load N x 0.101972