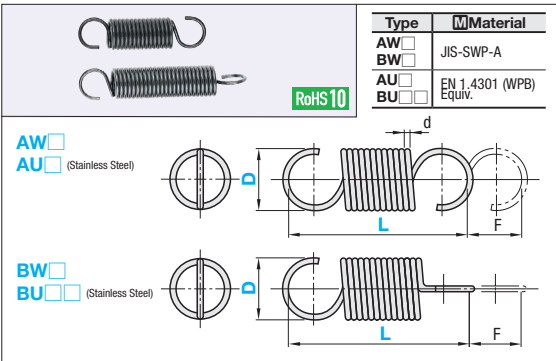


Tension Springs

Extra Light Load / Light Load / Light Medium Load / Medium Load



Extra Light Load

Part Number		Wire Dia. dmm	Dynamic Load		(Initial Tension) N	(Spring Constant) N/mm	Unit Price	
Type	D-L		Max. Deflection Fmax. mm	Max. Load N			AWA	AUA
AWA AUA	2-10	0.2	6.7	0.69	0.13	0.083		
	15		11.8			0.047		
	20		17.2			0.032		
	25		22.8			0.025		
	30		28.5			0.020		
AWA AUA	3-10	0.25	10.4	1.27	0.15	0.11		
	15		23.0			0.049		
	20		35.9			0.031		
	25		47.9			0.024		
	30		57.5			0.020		
AWA AUA	4-15	0.35	14.6	2.26	0.25	0.14		
	20		24.1			0.083		
	25		32.5			0.062		
	30		42.7			0.047		
	35		51.2			0.039		
AWA AUA	5-15	0.45	8.2	3.24	0.49	0.33		
	20		15.5			0.18		
	25		21.5			0.13		
	30		29.4			0.093		
	35		35.0			0.078		
AWA AUA	6-20	0.55	16.2	6.08	0.64	0.34		
	25		25.2			0.22		
	30		34.7			0.16		
	35		42.7			0.13		
	40		50.4			0.11		
AWA AUA	8-25	0.7	18.1	8.53	1.08	0.088		
	30		27.1			0.28		
	35		36.2			0.21		
	40		44.7			0.17		
	45		54.2			0.14		
AWA AUA	10-30	0.9	13.4	10.8	2.06	0.65		
	35		18.5			0.47		
	40		24.0			0.36		
	45		29.6			0.29		
	50		35.6			0.25		
AWA AUA	12-35	1.1	17.8	19.6	2.94	0.94		
	40		25.0			0.67		
	45		31.0			0.54		
	50		37.7			0.44		
	55		44.7			0.37		

Part Number
AWY10-50

Light Load Type

* marked dimensions are for AWY and AUU only.

Part Number		Wire Dia. dmm	Dynamic Load		(Initial Tension) N	(Spring Constant) N/mm	Unit Price	
Type	D-L		Max. Deflection Fmax. mm	Max. Load N			AWY BWY	AUY BUU
AWY AUY	2-10	0.25	5.7	1.86	0.34	0.27		
	15		10.3			0.15		
	20		14.0			0.11		
	25		18.2			0.08		
	30		22.1			0.07		
AWY BWY AUY BUU	3-10	0.3	8.7	2.25	0.29	0.23		
	15		16.6			0.12		
	20		25.0			0.08		
	25		33.3			0.06		
	30		40.0			0.05		
AWY BWY AUY BUU	4-15	0.4	10.0	3.24	0.59	0.26		
	20		16.8			0.16		
	25		22.5			0.12		
	30		28.4			0.09		
	35		33.7			0.08		
AWY BWY AUY BUU	5-15	0.5	6.8	4.22	0.88	0.49		
	20		11.7			0.28		
	25		17.0			0.20		
	30		21.2			0.16		
	35		26.1			0.13		
AWY BWY AUY BUU	6-20	0.6	14.0	8.14	1.27	0.49		
	25		21.2			0.32		
	30		28.0			0.25		
	35		35.0			0.20		
	40		41.1			0.17		
AWY BWY AUY BUU	8-25	0.8	15.1	12.75	2.35	0.69		
	30		21.2			0.49		
	35		26.5			0.39		
	40		33.1			0.31		
	45		39.2			0.26		
AWY BWY AUY BUU	10-30	1.0	11.5	15.00	3.73	0.98		
	35		15.3			0.74		
	40		19.8			0.57		
	45		23.9			0.47		
	50		28.7			0.39		
AWY BWY AUY BUU	12-35	1.2	11.8	31.37	5.39	1.18		
	40		22.0			0.93		
	45		27.8			0.74		
	50		35.3			0.62		
	55		42.0			0.52		
AWY AUY	14-40	1.5	15.4	38.24	8.43	1.94		
	45		21.0			1.42		
	50		25.4			1.17		
	55		30.8			0.97		
	60		37.0			0.8		
AWY AUY	16-45	1.6 (AWY) 1.7 (AUU)	15.8	43.15	9.12	2.16		
	50		21.0			1.62		
	55		25.7			1.32		
	60		31.5			1.08		
	65		35.8			0.95		
AWY	18-50	1.8	15.4	52.96	9.81	2.05		
	55		21.0			1.66		
	60		26.0			1.39		
	65		31.0			1.20		
	70		36.0			1.03		
AWY	20-60	2.0	15.4	78.45	12.75	2.26		
	70		29.1			1.57		
	80		41.8			1.23		
	90		53.6			0.98		
	100		67.0			0.83		

Initial tension and spring constant are for reference only. Load (kgf) = Load Nx0.101972

Light Medium Load Type

* marked dimensions are for AWU and AUU only.

Part Number		Wire Dia. dmm	Dynamic Load		(Initial Tension) N	(Spring Constant) N/mm	Unit Price	
Type	D-L		Max. Deflection Fmax. mm	Max. Load N			AWU BWU	AUU BUU
AWU AUU	2-10	0.28	4.0	2.45	0.49	0.49		
	15		6.7			0.29		
	20		10.0			0.20		
	25		13.3			0.15		
AWU BWU AUU BUU	3-10	0.35	4.6	3.33	0.66	0.59		
	15		9.1			0.29		
	20		14.3			0.19		
	25		19.5			0.14		
AWU BWU AUU BUU	4-15	0.45	7.5	4.81	0.98	0.51		
	20		12.2			0.31		
	25		16.9			0.23		
	30		21.7			0.18		
AWU BWU AUU BUU	5-15	0.55	10.0	6.37	1.37	0.89		
	20		14.2			0.35		
	25		18.9			0.26		
	30		24.3			0.21		
AWU BWU AUU BUU	6-20	0.7	9.6	12.94	1.67	1.18		
	25		14.4			0.78		
	30		20.2			0.56		
	35		28.8			0.39		
AWU BWU AUU BUU	8-25	0.9	10.0	18.63	3.92	1.47		
	30		14.3			1.03		
	35		18.8			0.78		
	40		23.8			0.62		
AWU BWU AUU BUU	10-30	1.1	11.7	23.24	4.71	1.87		
	35		14.0			1.32		
	40		18.0			1.03		
	45		22.2			0.83		
AWU BWU AUU BUU	12-35	1.4	11.7	47.7	10.49	3.14		
	40		15.5			2.35		
	45		19.6			1.86		
	50		23.3			1.57		
AWU AUU	14-40	1.6	12.9	58.84	13.73	3.53		
	45		16.7			2.7		
	50		21.0			2.16		
	55		25.5			1.77		
AWU AUU	16-45	1.8 (AWU)	12.9	70.61	16.67	3.53		
	50		17.7			3.04		
	55		22.0			2.45		
	60		26.0			2.06		
AWU AUU	18-50	1.9 (AUU)	30.5	98.07	22.56	1.77		
	65		34.3			1.57		
	70		39.2			1.37		
	80		42.3			1.27		
AWU	20-60	2.0	50.0	81.39	17.65	1.08		
	70		57.8			0.93		
	80		78.7			0.69		
	100		100.0			0.54		
AWU	22-75	2.3	13.7	98.07	22.56	3.92		
	80		17.7			3.04		
	90		22.0			2.45		
	100		26.0			2.06		
AWU	24-80	2.5	30.5	98.07	22.56	1.77		
	90		34.3			1.57		
	100		39.2			1.37		
	110		42.3			1.27		
AWU	26-90	2.8	50.0	98.07	22.56	1.08		
	100		57.8			0.93		
	110		78.7			0.69		
	125		100.0			0.54		
AWU	28-100	3.0	13.7	98.07	22.56	3.92		
	110		17.7			3.04		
	125		22.0			2.45		
	150		26.0			2.06		
AWU	30-110	3.2	30.5	98.07	22.56	1.77		
	125		34.3			1.57		
	150		39.2			1.37		
	175		42.3			1.27		