

# EXTENSION SPRINGS

## Guide to using tables

### Maximum Load

each spring will accept, excess load will cause damage (See note 5).

### Initial Tension

the force that keeps the coils of an extension spring closed and which must be overcome before the coils start to open. (See note 5).

### Loop Position

loop-to-loop relative position, **INLINE** refers to ends on the same plane. **RANDOM** refers to ends without targeted placement.

### Lee Stock Number

Please add suffix **M** for Music Wire, **S** for Stainless Steel or **S316** for Type 316 Stainless when ordering.

### Outside Diameter

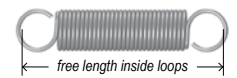
arranged through the pages in ascending order of size.

### Wire Diameter

in ascending order of size, within each group of outside diameters.

### Free Length

length of the spring in the unloaded position, measured from inside the end loops.



### Price Group

reference to the price list.

### Maximum Extended Length

the total overall length at maximum load (See note 5).

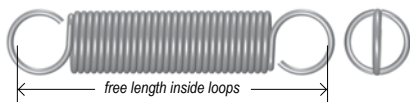
### Spring Rate

change in load or force per unit of deflection (See note 5).

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP	
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	M	S316
EI007A01	1.50	0.063	0.007	0.007	1.42	0.32	0.13	0.03	RANDOM	6.35	0.250	0.175	0.200	13.72	K	M	T
EI007A02										7.95	0.313	0.121	0.200	18.62	K	M	T
EI007A03										9.53	0.375	0.093	0.250	23.50	K	M	T
EI007A04										11.13	0.438	0.075	0.438	28.14	K	M	T
EI007A05										12.70	0.500	0.063	0.360	33.27	K	M	T
EI008A01			0.20	0.008	2.00	0.45	0.18	0.04	RANDOM	6.35	0.250	0.350	2.000	1.68	K	M	T
EI008A02										7.95	0.313	0.245	1.400	1.82	K	M	T
EI008A03										9.53	0.375	0.193	1.100	1.82	K	M	T
EI008A04										11.13	0.438	0.154	0.880	23.08	K	M	T
EI008A05										12.70	0.500	0.130	0.740	26.67	K	M	T
EI008A06										15.88	0.625	0.100	0.570	34.16	K	M	T
EI008A07										19.05	0.750	0.081	0.460	41.65	K	M	T
EI008A08										22.23	0.875	0.067	0.380	49.66	K	M	T
EI009A01			0.23	0.009	2.76	0.62	0.27	0.06	RANDOM	6.35	0.250	0.648	3.700	10.16	K	M	T
EI009A02										7.95	0.313	0.473	2.700	13.28	K	M	T
EI009A03										9.53	0.375	0.368	2.100	16.38	K	M	T
EI009A04										11.13	0.438	0.298	1.700	19.51	K	M	T
EI009A05										12.70	0.500	0.245	1.400	22.86	K	M	T
EI009A06										15.88	0.625	0.193	1.100	28.63	K	M	T
EI009A07										19.05	0.750	0.151	0.860	35.56	K	M	T
EI009A08										22.23	0.875	0.126	0.720	42.04	K	M	T
EI011A01			0.28	0.011	5.07	1.14	0.44	0.10	RANDOM	6.35	0.250	1.944	11.100	8.74	K	M	T
EI011A02										7.95	0.313	1.384	7.900	11.30	K	M	T
EI011A03										9.53	0.375	1.033	5.900	14.00	K	M	T
EI011A04										11.13	0.438	0.841	4.800	16.64	K	M	T
EI011A05										12.70	0.500	0.718	4.100	19.15	K	M	T
EI011A06										15.88	0.625	0.560	3.200	24.13	K	M	T
EI011A07										19.05	0.750	0.438	2.500	29.62	K	M	T
EI017AA01	1.98	0.078	0.18	0.007	1.14	0.26	0.11	0.03	RANDOM	6.35	0.250	0.107	0.611	16.00	J	L	T
EI017AA02										7.95	0.313	0.069	0.394	22.91	J	L	T
EI017AA03										9.53	0.375	0.051	0.292	29.69	J	L	T
EI017AA04										11.13	0.438	0.040	0.231	36.60	J	L	T
EI017AA05										12.70	0.500	0.034	0.192	43.41	J	L	T
EI008AA01			0.20	0.008	1.72	0.39	0.16	0.04	RANDOM	6.35	0.250	0.212	1.210	13.72	J	L	T
EI008AA02										7.95	0.313	0.138	0.789	19.28	J	L	T
EI008AA03										9.53	0.375	0.103	0.587	24.71	J	L	T
EI008AA04										11.13	0.438	0.082	0.466	30.28	J	L	T
EI008AA05										12.70	0.500	0.068	0.388	35.74	J	L	T
EI008AA06										15.88	0.625	0.051	0.289	46.74	J	L	T
EI008AA07										19.05	0.750	0.040	0.231	57.73	J	L	T
EI008AA08										22.23	0.875	0.034	0.192	68.73	J	L	T
EI009AA01			0.23	0.009	2.47	0.56	0.22	0.05	RANDOM	6.35	0.250	0.389	2.221	12.12	J	L	T
EI009AA02										7.95	0.313	0.256	1.459	16.74	J	L	T
EI009AA03										9.53	0.375	0.191	1.091	21.29	J	L	T
EI009AA04										11.13	0.438	0.152	0.869	25.91	J	L	T
EI009AA05										12.70	0.500	0.127	0.723	30.43	J	L	T
EI009AA06										15.88	0.625	0.095	0.541	39.60	J	L	T
EI009AA07										19.05	0.750	0.076	0.432	48.74	J	L	T
EI009AA08										22.23	0.875	0.063	0.360	57.91	J	L	T
EI011AA01			0.28	0.011	4.58	1.03	0.40	0.09	RANDOM	6.35	0.250	1.104	6.302	10.13	J	L	T
EI011AA02										7.95	0.313	0.737	4.209	13.61	J	L	T
EI011AA03										9.53	0.375	0.556	3.173	17.04	J	L	T
EI011AA04										11.13	0.438	0.444	2.538	20.52	J	L	T
EI011AA05										12.70	0.500	0.371	1.120	23.95	J	L	T
EI011AA06										15.88	0.625	0.279	1.592	30.89	J	L	T
EI011AA07										19.05	0.750	0.223	1.274	37.80	J	L	T
EI011AA08										22.23	0.875	0.186	1.062	44.70	J	L	T

### ADDITIONAL INFORMATION

- To find the load at any working length, when free length, spring rate and initial tension are given, use the formula  $F = (S \times L) + F_0$  (where  $F$  is the load;  $S$  is the spring rate;  $L$  is the deflection from free length;  $F_0$  is the initial tension).
- The free length of an extension spring is measured from inside the end loops. To obtain the overall length add two wire diameters to the given length.
- As with compression springs, in order to achieve long life and service, good design suggests that extension springs are not extended beyond 80% of their deflective capability.
- Material specifications, finishes and tolerances are detailed on page 251.
- Please note that the spring rates, maximum loads and initial tension listed in the following extension spring tables relate only to music wire. **When choosing stainless steel multiply the factors by 0.833. When choosing S316 for type 316 stainless steel the maximum load and maximum extended length should be further reduced approximately 75%-90% depending on the size.** To discuss S316 material applications please call Lee Spring's Engineering Department.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

● Music Wire (Plated\*), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP			
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless	
																M	S	S316	
EI 007A 01	1.60	0.063	0.18	0.007	1.42	0.32	0.13	0.03	RANDOM	6.35	0.250	0.175	1.000	13.72	0.540	K	M	T	
EI 007A 02										7.95	0.313	0.121	0.690	18.62	0.733	K	M	T	
EI 007A 03										9.53	0.375	0.093	0.530	23.50	0.925	K	M	T	
EI 007A 04										11.13	0.438	0.075	0.430	28.14	1.108	K	M	T	
EI 007A 05			12.70	0.500	0.063	0.360	33.27	1.310		K	M	T							
EI 008A 01			0.20	0.008	2.00	0.45	0.18	0.04		RANDOM	6.35	0.250	0.350	2.000	11.68	0.460	K	M	T
EI 008A 02											7.95	0.313	0.245	1.400	15.32	0.603	K	M	T
EI 008A 03											9.53	0.375	0.193	1.100	18.92	0.745	K	M	T
EI 008A 04											11.13	0.438	0.154	0.880	23.06	0.908	K	M	T
EI 008A 05											12.70	0.500	0.130	0.740	26.67	1.050	K	M	T
EI 008A 06											15.88	0.625	0.100	0.570	34.16	1.345	K	M	T
EI 008A 07											19.05	0.750	0.081	0.460	41.66	1.640	K	M	T
EI 008A 08											22.23	0.875	0.067	0.380	49.66	1.955	K	M	T
EI 009A 01			0.23	0.009	2.76	0.62	0.27	0.06		RANDOM	6.35	0.250	0.648	3.700	10.16	0.400	K	M	T
EI 009A 02											7.95	0.313	0.473	2.700	13.28	0.523	K	M	T
EI 009A 03											9.53	0.375	0.368	2.100	16.38	0.645	K	M	T
EI 009A 04	11.13	0.438							0.298		1.700	19.51	0.768	K	M	T			
EI 009A 05	12.70	0.500							0.245		1.400	22.86	0.900	K	M	T			
EI 009A 06	15.88	0.625							0.193		1.100	28.83	1.135	K	M	T			
EI 009A 07	19.05	0.750							0.151		0.860	35.56	1.400	K	M	T			
EI 009A 08	22.23	0.875							0.126		0.720	42.04	1.655	K	M	T			
EI 011A 01	0.28	0.011	5.07	1.14	0.44	0.10	RANDOM	6.35	0.250	1.944	11.100	8.74	0.344	K	M	T			
EI 011A 02								7.95	0.313	1.384	7.900	11.30	0.445	K	M	T			
EI 011A 03								9.53	0.375	1.033	5.900	14.00	0.551	K	M	T			
EI 011A 04								11.13	0.438	0.841	4.800	16.64	0.655	K	M	T			
EI 011A 05								12.70	0.500	0.718	4.100	19.15	0.754	K	M	T			
EI 011A 06								15.88	0.625	0.560	3.200	24.13	0.950	K	M	T			
EI 011A 07								19.05	0.750	0.438	2.500	29.62	1.166	K	M	T			
EI 007AA 01	1.98	0.078	0.18	0.007	1.14	0.26	0.11	0.03	RANDOM	6.35	0.250	0.107	0.611	16.00	0.630	J	L	T	
EI 007AA 02										7.95	0.313	0.069	0.394	22.91	0.902	J	L	T	
EI 007AA 03										9.53	0.375	0.051	0.292	29.69	1.169	J	L	T	
EI 007AA 04										11.13	0.438	0.040	0.231	36.60	1.441	J	L	T	
EI 007AA 05			12.70	0.500	0.034	0.192	43.41	1.709		J	L	T							
EI 008AA 01			0.20	0.008	1.72	0.39	0.16	0.04		RANDOM	6.35	0.250	0.212	1.210	13.72	0.540	J	L	T
EI 008AA 02											7.95	0.313	0.138	0.789	19.28	0.759	J	L	T
EI 008AA 03											9.53	0.375	0.103	0.587	24.71	0.973	J	L	T
EI 008AA 04											11.13	0.438	0.082	0.466	30.28	1.192	J	L	T
EI 008AA 05											12.70	0.500	0.068	0.388	35.74	1.407	J	L	T
EI 008AA 06											15.88	0.625	0.051	0.289	46.74	1.840	J	L	T
EI 008AA 07											19.05	0.750	0.040	0.231	57.73	2.273	J	L	T
EI 008AA 08											22.23	0.875	0.034	0.192	68.73	2.706	J	L	T
EI 009AA 01			0.23	0.009	2.47	0.56	0.22	0.05		RANDOM	6.35	0.250	0.389	2.221	12.12	0.477	J	L	T
EI 009AA 02											7.95	0.313	0.256	1.459	16.74	0.659	J	L	T
EI 009AA 03											9.53	0.375	0.191	1.091	21.29	0.838	J	L	T
EI 009AA 04	11.13	0.438							0.152		0.869	25.91	1.020	J	L	T			
EI 009AA 05	12.70	0.500							0.127		0.723	30.43	1.198	J	L	T			
EI 009AA 06	15.88	0.625							0.095		0.541	39.60	1.559	J	L	T			
EI 009AA 07	19.05	0.750							0.076		0.432	48.74	1.919	J	L	T			
EI 009AA 08	22.23	0.875							0.063		0.360	57.91	2.280	J	L	T			
EI 011AA 01	0.28	0.011	4.58	1.03	0.40	0.09	RANDOM	6.35	0.250	1.104	6.302	10.13	0.399	J	L	T			
EI 011AA 02								7.95	0.313	0.737	4.209	13.61	0.536	J	L	T			
EI 011AA 03								9.53	0.375	0.556	3.173	17.04	0.671	J	L	T			
EI 011AA 04								11.13	0.438	0.444	2.538	20.52	0.808	J	L	T			
EI 011AA 05								12.70	0.500	0.371	2.120	23.95	0.943	J	L	T			
EI 011AA 06								15.88	0.625	0.279	1.592	30.89	1.216	J	L	T			
EI 011AA 07								19.05	0.750	0.223	1.274	37.80	1.488	J	L	T			
EI 011AA 08								22.23	0.875	0.186	1.062	44.70	1.760	J	L	T			

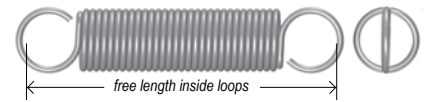
\* Finish may be based on Pre-coated Tin wire, or Pre-coated Zinc wire, at Lee Spring's discretion.

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire.

When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS



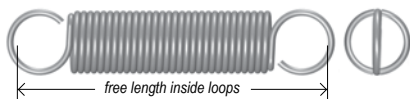
● Loops at Random Position, except for † springs

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LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP						
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless				
																M	S	S316				
EIM020A 01	2.00	0.079	0.20	0.008	1.70	0.38	0.13	0.03	RANDOM	10.00	0.394	0.099	0.564	25.86	1.018	K	M	SPECIAL				
EIM020A 02										12.50	0.492	0.070	0.401	34.75	1.368	K	M	SPECIAL				
EIM020A 03										15.00	0.591	0.055	0.312	43.64	1.718	K	M	SPECIAL				
EIM020A 04			0.25	0.010	3.37	0.76	0.27	0.06	RANDOM	17.50	0.689	0.045	0.255	52.55	2.069	K	M	SPECIAL				
EIM020A 05										20.00	0.787	0.038	0.215	61.44	2.419	K	M	SPECIAL				
EIM025A 01			2.39	0.094	0.25	0.010	2.67	0.60	0.22	0.05	RANDOM	10.00	0.394	0.325	1.858	19.53	0.769	K	M	SPECIAL		
EIM025A 02												12.50	0.492	0.232	1.327	25.83	1.017	K	M	SPECIAL		
EIM025A 03												15.00	0.591	0.181	1.032	32.16	1.266	K	M	SPECIAL		
EIM025A 04					0.28	0.011	3.56	0.80	0.31	0.07	RANDOM	17.50	0.689	0.148	0.844	38.48	1.515	K	M	SPECIAL		
EIM025A 05												20.00	0.787	0.125	0.714	44.78	1.763	K	M	SPECIAL		
EIM025A 06					0.30	0.012	4.45	1.00	0.44	0.10	RANDOM	22.50	0.886	0.108	0.619	51.10	2.012	K	M	SPECIAL		
EIM025A 07												25.00	0.984	0.096	0.546	57.43	2.261	K	M	SPECIAL		
Ei 010B 01					2.39	0.094	0.25	0.010	2.67	0.60	0.22	0.05	RANDOM	9.53	0.375	0.210	1.200	21.21	0.835	J	L	T
Ei 010B 02														11.13	0.438	0.165	0.940	26.11	1.028	J	L	T
Ei 010B 03	12.70	0.500												0.133	0.760	30.99	1.220	J	L	T		
Ei 010B 04	0.28	0.011					3.56	0.80	0.31	0.07	RANDOM	15.88	0.625	0.098	0.560	40.77	1.605	J	L	T		
Ei 010B 05												19.05	0.750	0.077	0.440	50.80	2.000	J	L	T		
Ei 010B 06	0.30	0.012					4.45	1.00	0.44	0.10	RANDOM	22.23	0.875	0.063	0.360	61.09	2.405	J	L	T		
Ei 010B 07												25.40	1.000	0.054	0.310	70.36	2.770	J	L	T		
Ei 011B 01	2.39	0.094	0.28	0.011			3.56	0.80	0.31	0.07	RANDOM	9.53	0.375	0.350	2.000	18.92	0.745	J	L	T		
Ei 011B 02												11.13	0.438	0.268	1.530	23.32	0.918	J	L	T		
Ei 011B 03												12.70	0.500	0.221	1.260	27.43	1.080	J	L	T		
Ei 011B 04			0.33	0.013			5.56	1.25	0.58	0.13	RANDOM	15.88	0.625	0.163	0.930	35.69	1.405	J	L	T		
Ei 011B 05												19.05	0.750	0.128	0.730	44.45	1.750	J	L	T		
Ei 011B 06			0.36	0.014			6.67	1.50	0.76	0.17	RANDOM	22.23	0.875	0.105	0.600	53.21	2.095	J	L	T		
Ei 011B 07												25.40	1.000	0.091	0.517	60.96	2.400	J	L	T		
Ei 012B 01			2.39	0.094	0.30	0.012	4.45	1.00	0.44	0.10	RANDOM	9.53	0.375	0.560	3.200	16.64	0.655	J	L	T		
Ei 012B 02												11.13	0.438	0.420	2.400	20.78	0.818	J	L	T		
Ei 012B 03												12.70	0.500	0.350	2.000	24.13	0.950	J	L	T		
Ei 012B 04					0.33	0.013	5.56	1.25	0.58	0.13	RANDOM	15.88	0.625	0.263	1.500	31.12	1.225	J	L	T		
Ei 012B 05												19.05	0.750	0.210	1.200	38.10	1.500	J	L	T		
Ei 012B 06					0.36	0.014	6.67	1.50	0.76	0.17	RANDOM	22.23	0.875	0.168	0.960	46.10	1.815	J	L	T		
Ei 012B 07												25.40	1.000	0.144	0.820	53.34	2.100	J	L	T		
Ei 013B 01	2.39	0.094			0.33	0.013	5.56	1.25	0.58	0.13	RANDOM	9.53	0.375	0.841	4.800	15.37	0.605	J	L	T		
Ei 013B 02												11.13	0.438	0.648	3.700	18.75	0.738	J	L	T		
Ei 013B 03												12.70	0.500	0.543	3.100	21.84	0.860	J	L	T		
Ei 013B 04					0.36	0.014	6.67	1.50	0.76	0.17	RANDOM	15.88	0.625	0.396	2.260	28.58	1.125	J	L	T		
Ei 013B 05												19.05	0.750	0.315	1.800	34.80	1.370	J	L	T		
Ei 013B 06					0.41	0.016	10.05	2.26	0.85	0.19	RANDOM	22.23	0.875	0.263	1.500	41.28	1.625	J	L	T		
Ei 013B 07												25.40	1.000	0.222	1.270	47.75	1.880	J	L	T		
Ei 014B 01			2.39	0.094	0.36	0.014	6.67	1.50	0.76	0.17	RANDOM	9.53	0.375	1.243	7.100	14.35	0.565	J	L	T		
Ei 014B 02												11.13	0.438	0.963	5.500	17.22	0.678	J	L	T		
Ei 014B 03												12.70	0.500	0.806	4.600	20.07	0.790	J	L	T		
Ei 014B 04					0.36	0.014	6.67	1.50	0.76	0.17	RANDOM	15.88	0.625	0.595	3.400	25.78	1.015	J	L	T		
Ei 014B 05												19.05	0.750	0.473	2.700	31.50	1.240	J	L	T		
Ei 014B 06					0.41	0.016	10.05	2.26	0.85	0.19	RANDOM	22.23	0.875	0.385	2.200	37.47	1.475	J	L	T		
Ei 014B 07												25.40	1.000	0.333	1.900	43.18	1.700	J	L	T		
Ei 016B 01	2.39	0.094			0.41	0.016	10.05	2.26	0.85	0.19	RANDOM	9.53	0.375	2.487	14.200	13.23	0.521	J	L	T		
Ei 016B 02												11.13	0.438	1.926	11.000	15.90	0.626	J	L	T		
Ei 016B 03												12.70	0.500	1.611	9.200	18.42	0.725	J	L	T		
Ei 016B 04					0.41	0.016	10.05	2.26	0.85	0.19	RANDOM	15.88	0.625	1.191	6.800	23.60	0.929	J	L	T		
Ei 016B 05												19.05	0.750	0.928	5.300	28.98	1.141	J	L	T		
Ei 016B 06					0.41	0.016	10.05	2.26	0.85	0.19	RANDOM	22.23	0.875	0.771	4.400	34.16	1.345	J	L	T		
Ei 016B 07												25.40	1.000	0.648	3.700	39.60	1.559	J	L	T		

\* Finish may be based on Pre-coated Tin wire, or Pre-coated Zinc wire, at Lee Spring's discretion.

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

● Music Wire (Plated\*), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
EIM025B 01	2.50	0.098	0.25	0.010	2.45	0.55	0.18	0.04	RANDOM	9.50	0.374	0.168	0.960	22.96	0.904	K	M	SPECIAL
EIM025B 02										11.00	0.433	0.131	0.750	28.27	1.113	K	M	SPECIAL
EIM025B 03										12.50	0.492	0.107	0.610	33.83	1.332	K	M	SPECIAL
EIM025B 04										15.50	0.610	0.079	0.450	44.20	1.740	K	M	SPECIAL
EIM025B 05										19.00	0.748	0.060	0.340	57.10	2.248	K	M	SPECIAL
EIM025B 06										22.00	0.866	0.051	0.290	66.70	2.626	K	M	SPECIAL
EIM025B 07										25.00	0.984	0.042	0.240	79.10	3.114	K	M	SPECIAL
EIM030B 01			0.30	0.012	4.61	1.04	0.40	0.09	RANDOM	10.00	0.394	0.490	2.798	18.59	0.732	K	M	SPECIAL
EIM030B 02										12.50	0.492	0.333	1.904	25.12	0.989	K	M	SPECIAL
EIM030B 03										15.00	0.591	0.253	1.443	31.65	1.246	K	M	SPECIAL
EIM030B 04										17.50	0.689	0.203	1.162	38.18	1.503	K	M	SPECIAL
EIM030B 05										20.00	0.787	0.170	0.973	44.70	1.760	K	M	SPECIAL
EIM030B 06										22.50	0.886	0.146	0.836	51.23	2.017	K	M	SPECIAL
EIM030B 07										25.00	0.984	0.128	0.733	57.76	2.274	K	M	SPECIAL
LEM050ZA 01†	0.50	0.020	16.10	3.62	2.45	0.55	INLINE	7.90	0.311	7.980	45.57	9.60	0.378	K	M	SPECIAL		
LEM050ZA 02†								10.90	0.429	4.980	28.44	13.64	0.537	K	M	SPECIAL		
LEM050ZA 03†								15.40	0.606	3.190	18.22	19.69	0.775	K	M	SPECIAL		
EI 010C 01	2.77	0.109	0.25	0.010	2.34	0.53	0.22	0.05	RANDOM	9.53	0.375	0.144	0.821	24.26	0.955	J	L	T
EI 010C 02										11.13	0.438	0.107	0.613	30.84	1.214	J	L	T
EI 010C 03										12.70	0.500	0.086	0.491	37.29	1.468	J	L	T
EI 010C 04										15.88	0.625	0.061	0.350	50.34	1.982	J	L	T
EI 010C 05										19.05	0.750	0.048	0.272	63.40	2.496	J	L	T
EI 010C 06										22.23	0.875	0.039	0.223	76.45	3.010	J	L	T
EI 010C 07										25.40	1.000	0.033	0.188	89.51	3.524	J	L	T
EI 011C 01			0.28	0.011	3.13	0.70	0.29	0.07	RANDOM	9.53	0.375	0.235	1.341	21.62	0.851	J	L	T
EI 011C 02										11.13	0.438	0.176	1.006	27.23	1.072	J	L	T
EI 011C 03										12.70	0.500	0.141	0.807	32.77	1.290	J	L	T
EI 011C 04										15.88	0.625	0.101	0.578	43.92	1.729	J	L	T
EI 011C 05										19.05	0.750	0.079	0.450	55.09	2.169	J	L	T
EI 011C 06										22.23	0.875	0.064	0.368	66.24	2.608	J	L	T
EI 011C 07										25.40	1.000	0.055	0.312	77.39	3.047	J	L	T
EI 012C 01	0.30	0.012	4.07	0.92	0.38	0.09	RANDOM	9.53	0.375	0.368	2.103	19.56	0.770	J	L	T		
EI 012C 02								11.13	0.438	0.277	1.584	24.43	0.962	J	L	T		
EI 012C 03								12.70	0.500	0.223	1.274	29.24	1.151	J	L	T		
EI 012C 04								15.88	0.625	0.160	0.914	38.94	1.533	J	L	T		
EI 012C 05								19.05	0.750	0.125	0.713	48.62	1.914	J	L	T		
EI 012C 06								22.23	0.875	0.102	0.584	58.32	2.296	J	L	T		
EI 012C 07								25.40	1.000	0.087	0.495	68.00	2.677	J	L	T		
EI 013C 01	0.33	0.013	5.19	1.17	0.47	0.11	RANDOM	9.53	0.375	0.558	3.187	17.98	0.708	J	L	T		
EI 013C 02								11.13	0.438	0.422	2.409	22.30	0.878	J	L	T		
EI 013C 03								12.70	0.500	0.340	1.943	26.57	1.046	J	L	T		
EI 013C 04								15.88	0.625	0.245	1.397	35.15	1.384	J	L	T		
EI 013C 05								19.05	0.750	0.191	1.091	43.74	1.722	J	L	T		
EI 013C 06								22.23	0.875	0.157	0.895	52.32	2.060	J	L	T		
EI 013C 07								25.40	1.000	0.133	0.759	60.91	2.398	J	L	T		
EI 014C 01	0.36	0.014	6.51	1.46	0.58	0.13	RANDOM	9.53	0.375	0.821	4.690	16.74	0.659	J	L	T		
EI 014C 02								11.13	0.438	0.623	3.559	20.65	0.813	J	L	T		
EI 014C 03								12.70	0.500	0.504	2.877	24.46	0.963	J	L	T		
EI 014C 04								15.88	0.625	0.363	2.074	32.21	1.268	J	L	T		
EI 014C 05								19.05	0.750	0.284	1.622	39.93	1.572	J	L	T		
EI 014C 06								22.23	0.875	0.233	1.332	47.65	1.876	J	L	T		
EI 014C 07								25.40	1.000	0.198	1.130	55.37	2.180	J	L	T		
LEM055ZB 01†	2.80	0.110	0.55	0.022	19.00	4.27	2.79	0.63	INLINE	8.80	0.346	8.180	46.71	10.77	0.424	J	L	SPECIAL
LEM055ZB 02†										12.10	0.476	5.110	29.18	15.27	0.601	J	L	SPECIAL
LEM055ZB 03†										17.00	0.669	3.270	18.67	21.97	0.865	J	L	SPECIAL

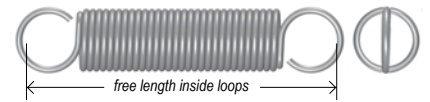
\* Finish may be based on Pre-coated Tin wire, or Pre-coated Zinc wire, at Lee Spring's discretion.

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire.

When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS



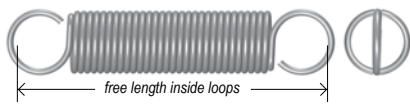
● Loops at Random Position, except for † springs

● Music Wire (Plated\*), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP							
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless					
																M	S	\$316					
EIM030C 01	3.00	0.118	0.30	0.012	3.74	0.84	0.33	0.08	RANDOM	10.00	0.394	0.323	1.847	20.52	0.808	K	M	SPECIAL					
EIM030C 02										12.50	0.492	0.205	1.169	29.13	1.147	K	M	SPECIAL					
EIM030C 03										15.00	0.591	0.150	0.855	37.74	1.486	K	M	SPECIAL					
EIM030C 04										17.50	0.689	0.118	0.674	46.33	1.824	K	M	SPECIAL					
EIM030C 05										20.00	0.787	0.097	0.556	54.94	2.163	K	M	SPECIAL					
EIM030C 06										22.50	0.886	0.083	0.474	63.55	2.502	K	M	SPECIAL					
EIM030C 07										25.00	0.984	0.072	0.412	72.16	2.841	K	M	SPECIAL					
LEM035A 01			0.35	0.014	4.90	1.10	0.53	0.12	RANDOM	12.50	0.492	0.387	2.21	23.67	0.932	J	L	SPECIAL					
LEM035A 02										14.00	0.551	0.322	1.84	27.46	1.081	J	L	SPECIAL					
LEM035A 03										15.50	0.610	0.277	1.58	31.24	1.230	J	L	SPECIAL					
LEM035A 04										17.00	0.669	0.242	1.38	35.03	1.379	J	L	SPECIAL					
LEM035A 05										19.00	0.748	0.208	1.19	39.83	1.568	J	L	SPECIAL					
LEM035A 06										21.00	0.827	0.182	1.04	44.88	1.767	J	L	SPECIAL					
LEM035A 07										23.00	0.906	0.161	0.92	50.19	1.976	J	L	SPECIAL					
LEM035A 08	25.00	0.984								0.145	0.83	54.97	2.164	J	L	SPECIAL							
LEM035A 09	30.00	1.181								0.117	0.67	67.08	2.641	K	M	SPECIAL							
LEM035A 10	35.00	1.378								0.096	0.55	80.21	3.158	K	M	SPECIAL							
LEM035A 11	40.00	1.575								0.084	0.48	91.82	3.615	K	M	SPECIAL							
LEM063A 01†	0.63	0.025	26.20	5.89	4.19	0.94	INLINE	9.70	0.382	12.100	69.09	11.56	0.455	J	L	SPECIAL							
LEM063A 02†								13.50	0.531	7.510	42.88	16.46	0.648	J	L	SPECIAL							
LEM063A 03†								19.20	0.756	4.810	27.47	23.83	0.938	J	L	SPECIAL							
LE 014A 01	3.18	0.125	0.36	0.014	4.89	1.10	0.53	0.12	RANDOM	12.70	0.500	0.350	2.00	25.15	0.990	J	L	U					
LE 014A 02										14.30	0.563	0.289	1.65	29.29	1.153	J	L	U					
LE 014A 03										15.88	0.625	0.245	1.40	33.66	1.325	J	L	U					
LE 014A 04										19.05	0.750	0.189	1.08	42.16	1.660	J	L	U					
LE 014A 05										20.65	0.813	0.170	0.97	46.30	1.823	J	L	U					
LE 014A 06										22.23	0.875	0.154	0.88	50.42	1.985	J	L	U					
LE 014A 07										23.83	0.938	0.142	0.81	54.56	2.148	J	L	U					
LE 014A 08										25.40	1.000	0.131	0.75	58.67	2.310	K	M	V					
LE 014A 09										28.58	1.125	0.113	0.64	67.44	2.655	K	M	V					
LE 014A 10										31.75	1.250	0.099	0.57	75.44	2.970	K	M	V					
LE 014A 11										34.93	1.375	0.088	0.50	84.71	3.335	K	M	V					
LE 014A 12										38.10	1.500	0.080	0.46	92.81	3.654	K	M	V					
LE 016A 003	0.41	0.016	7.12	1.60	0.89	0.20	RANDOM	9.53	0.375	1.229	7.02	14.61	0.575	J	L	U							
LE 016A 002								12.70	0.500	0.718	4.10	21.34	0.840	J	L	U							
LE 016A 001								15.88	0.625	0.501	2.86	28.32	1.115	J	L	U							
LE 016A 00								19.05	0.750	0.368	2.10	36.07	1.420	J	L	U							
LE 016A 0								22.23	0.875	0.306	1.75	42.55	1.675	J	L	U							
LE 016A 01								25.40	1.000	0.263	1.50	49.02	1.930	K	M	V							
LE 016A 02								28.58	1.125	0.228	1.30	56.01	2.205	K	M	V							
LE 016A 03								31.75	1.250	0.210	1.20	61.47	2.420	K	M	V							
LE 016A 04								34.93	1.375	0.175	1.00	70.49	2.775	K	M	V							
LE 016A 05								38.10	1.500	0.158	0.90	77.72	3.060	L	N	W							
LE 016A 06								44.45	1.750	0.137	0.78	89.92	3.540	L	N	W							
LE 016A 07								50.80	2.000	0.118	0.68	103.12	4.060	M	P	X							
LE 018A 003								0.46	0.018	9.79	2.20	1.33	0.30	RANDOM	9.53	0.375	2.264	12.93	13.26	0.522	J	L	U
LE 018A 002															12.70	0.500	1.328	7.58	19.05	0.750	J	L	U
LE 018A 001	15.88	0.625	0.937	5.35	25.02	0.985	J								L	U							
LE 018A 00	19.05	0.750	0.701	4.00	31.24	1.230	J								L	U							
LE 018A 0	22.23	0.875	0.578	3.30	36.96	1.455	J								L	U							
LE 018A 01	25.40	1.000	0.508	2.90	42.16	1.660	K								M	V							
LE 018A 02	28.58	1.125	0.438	2.50	47.88	1.885	K								M	V							
LE 018A 03	31.75	1.250	0.385	2.20	53.59	2.110	K								M	V							
LE 018A 04	34.93	1.375	0.350	2.00	59.06	2.325	K								M	V							
LE 018A 05	38.10	1.500	0.315	1.80	65.02	2.560	L								N	W							
LE 018A 06	44.45	1.750	0.263	1.50	76.71	3.020	L								N	W							
LE 018A 07	50.80	2.000	0.228	1.30	87.88	3.460	M								P	X							
LE 018A 08	57.15	2.250	0.198	1.13	99.82	3.930	M								P	X							

\* Finish may be based on Pre-coated Tin wire, or Pre-coated Zinc wire, at Lee Spring's discretion.

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

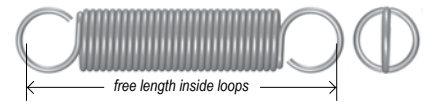
● Music Wire (Plated\*), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 020A 002	3.18	0.125	0.51	0.020	12.90	2.90	1.78	0.40	RANDOM	12.70	0.500	2.343	13.38	17.53	0.690	J	L	U							
LE 020A 001										15.88	0.625	1.650	9.42	22.73	0.895	J	L	U							
LE 020A 00										19.05	0.750	1.313	7.50	27.43	1.080	J	L	U							
LE 020A 0										22.23	0.875	1.051	6.00	32.89	1.295	J	L	U							
LE 020A 01										25.40	1.000	0.893	5.10	37.85	1.490	K	M	V							
LE 020A 02										28.58	1.125	0.771	4.40	43.05	1.695	K	M	V							
LE 020A 03										31.75	1.250	0.683	3.90	48.01	1.890	K	M	V							
LE 020A 04										34.93	1.375	0.613	3.50	52.96	2.085	K	M	V							
LE 020A 05										38.10	1.500	0.560	3.20	57.91	2.280	L	N	W							
LE 020A 06										44.45	1.750	0.473	2.70	68.07	2.680	L	N	W							
LE 020A 07										50.80	2.000	0.403	2.30	78.49	3.090	M	P	X							
LE 020A 08										57.15	2.250	0.350	2.00	88.90	3.500	M	P	X							
LE 022A 01										0.56	0.022	17.35	3.90	2.00	0.45	RANDOM	15.88	0.625	2.820	16.10	21.21	0.835	J	L	U
LE 022A 02																	19.05	0.750	2.172	12.40	26.16	1.030	J	L	U
LE 022A 03																	22.23	0.875	1.786	10.20	30.86	1.215	J	L	U
LE 022A 04																	25.40	1.000	1.524	8.70	35.56	1.400	K	M	V
LE 022A 05	28.58	1.125	1.313	7.50	40.26	1.585	K	M	V																
LE 022A 06	31.75	1.250	1.156	6.60	44.96	1.770	K	M	V																
LE 022A 07	34.93	1.375	1.051	6.00	49.40	1.945	K	M	V																
LE 022A 08	38.10	1.500	0.946	5.40	54.36	2.140	L	N	W																
LE 022A 09	44.45	1.750	0.788	4.50	64.01	2.520	L	N	W																
LE 022A 10	50.80	2.000	0.683	3.90	73.15	2.880	M	P	X																
LE 022A 11	57.15	2.250	0.599	3.42	82.80	3.260	M	P	X																
LE 022A 12	63.50	2.500	0.534	3.05	92.20	3.630	M	P	X																
LEM050AB 01†	3.50	0.138	0.50	0.020	12.00	2.7	1.77	0.40	INLINE	9.50	0.374	2.350	13.42	13.82	0.544	J	L	SPECIAL							
LEM050AB 02†										12.50	0.492	1.470	8.39	19.41	0.764	J	L	SPECIAL							
LEM050AB 03†										17.00	0.669	0.940	5.37	27.79	1.094	J	L	SPECIAL							
LEM050AB 04†										24.50	0.965	0.590	3.37	41.81	1.646	K	M	SPECIAL							
LEM050AB 05†										290.00	11.417	0.050	0.29	500.00	19.685	BC	BD	SPECIAL							
LEM055AB 01†	0.55	0.022	15.70	3.53	2.38	0.54	INLINE	9.90	0.390	3.630	20.73	13.59	0.535	J	L	SPECIAL									
LEM055AB 02†								13.20	0.520	2.270	12.96	19.10	0.752	J	L	SPECIAL									
LEM055AB 03†								18.10	0.713	1.450	8.28	27.31	1.075	J	L	SPECIAL									
LEM055AB 04†								26.40	1.039	0.900	5.14	41.10	1.618	K	M	SPECIAL									
LEM070AB 01†	0.70	0.028	30.70	6.90	4.47	1.01	INLINE	11.10	0.437	11.100	63.38	13.46	0.530	K	M	SPECIAL									
LEM070AB 02†								15.30	0.602	6.950	39.69	19.08	0.751	K	M	SPECIAL									
LEM070AB 03†								21.60	0.850	4.440	25.35	27.51	1.083	K	M	SPECIAL									
EIM030D 01	4.00	0.157	0.30	0.012	2.73	0.61	0.25	0.06	RANDOM	10.00	0.394	0.186	1.060	23.39	0.921	K	M	SPECIAL							
EIM030D 02										12.50	0.492	0.113	0.644	34.57	1.361	K	M	SPECIAL							
EIM030D 03										15.00	0.591	0.074	0.424	48.49	1.909	K	M	SPECIAL							
EIM030D 04										17.50	0.689	0.055	0.316	62.41	2.457	K	M	SPECIAL							
EIM030D 05										20.00	0.787	0.044	0.252	76.33	3.005	K	M	SPECIAL							
EIM030D 06										22.50	0.886	0.037	0.210	90.25	3.553	K	M	SPECIAL							
EIM030D 07										25.00	0.984	0.031	0.179	104.17	4.101	K	M	SPECIAL							
EIM030D 08										27.50	1.083	0.027	0.157	118.08	4.649	K	M	SPECIAL							
EIM030D 09										30.00	1.181	0.024	0.139	132.00	5.197	K	M	SPECIAL							
LEM080AC 01†	0.80	0.031	39.90	8.97	5.96	1.34	INLINE	12.60	0.496	12.700	72.52	15.27	0.601	J	L	SPECIAL									
LEM080AC 02†								17.40	0.685	8.000	45.68	21.67	0.853	J	L	SPECIAL									
LEM080AC 03†								24.60	0.969	5.100	29.12	31.27	1.231	K	M	SPECIAL									
LEM045B 01	4.50	0.177	0.45	0.018	6.85	1.54	0.62	0.14	RANDOM	15.50	0.610	0.366	2.09	32.51	1.280	J	L	SPECIAL							
LEM045B 02										17.00	0.669	0.306	1.75	37.31	1.469	J	L	SPECIAL							
LEM045B 03										19.00	0.748	0.252	1.44	43.64	1.718	J	L	SPECIAL							
LEM045B 04										21.00	0.827	0.215	1.23	49.96	1.967	K	M	SPECIAL							
LEM045B 05										23.00	0.906	0.187	1.07	56.29	2.216	K	M	SPECIAL							
LEM045B 06										25.00	0.984	0.166	0.95	62.33	2.454	K	M	SPECIAL							
LEM045B 07										30.00	1.181	0.128	0.73	78.77	3.101	K	M	SPECIAL							
LEM045B 08										35.00	1.378	0.105	0.60	94.18	3.708	L	N	SPECIAL							
LEM045B 09										40.00	1.575	0.089	0.51	109.86	4.325	L	N	SPECIAL							
LEM045B 10										45.00	1.772	0.077	0.44	125.78	4.952	L	N	SPECIAL							
LEM045B 11										50.00	1.969	0.068	0.39	141.20	5.559	M	P	SPECIAL							
LEM045B 12										55.00	2.165	0.061	0.35	156.59	6.165	M	P	SPECIAL							
LEM045B 13										60.00	2.362	0.054	0.31	174.80	6.882	M	P	SPECIAL							

\* Finish may be based on Pre-coated Tin wire, or Pre-coated Zinc wire, at Lee Spring's discretion.  
 † Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire.  
 When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

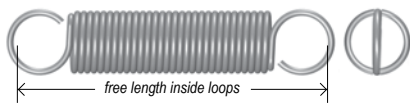


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP				
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless		
																M	S	S316		
LEM060B 01	4.50	0.177	0.60	0.024	15.70	3.53	1.87	0.42	RANDOM	15.50	0.610	1.632	9.32	23.88	0.940	J	L	SPECIAL		
LEM060B 02										17.00	0.669	1.384	7.90	26.90	1.059	J	L	SPECIAL		
LEM060B 03										19.00	0.748	1.149	6.56	30.94	1.218	J	L	SPECIAL		
LEM060B 04										21.00	0.827	0.982	5.61	34.98	1.377	K	M	SPECIAL		
LEM060B 05										23.00	0.906	0.858	4.90	39.01	1.536	K	M	SPECIAL		
LEM060B 06										25.00	0.984	0.762	4.35	43.03	1.694	K	M	SPECIAL		
LEM060B 07										30.00	1.181	0.594	3.39	53.37	2.101	K	M	SPECIAL		
LEM060B 08										35.00	1.378	0.487	2.78	63.45	2.498	L	N	SPECIAL		
LEM060B 09										40.00	1.575	0.413	2.36	73.53	2.895	L	N	SPECIAL		
LEM060B 10										45.00	1.772	0.359	2.05	83.62	3.292	L	N	SPECIAL		
LEM060B 11										50.00	1.969	0.317	1.81	93.70	3.689	M	P	SPECIAL		
LEM060B 12										55.00	2.165	0.284	1.62	103.76	4.085	M	P	SPECIAL		
LEM060B 13										60.00	2.362	0.257	1.47	113.84	4.482	M	P	SPECIAL		
LEM063B 01†	4.78	0.188	0.63	0.025	18.30	4.11	2.61	0.59	INLINE	12.10	0.476	2.770	15.82	17.75	0.699	J	L	SPECIAL		
LEM063B 02†										15.90	0.626	1.730	9.88	24.94	0.982	J	L	SPECIAL		
LEM063B 03†										21.60	0.850	1.110	6.34	35.71	1.406	K	M	SPECIAL		
LEM063B 04†			31.00	1.220	0.700	4.00	53.59	2.110	K	M	SPECIAL									
LEM090B 01†			0.90	0.035	49.70	11.17	7.45	1.68	INLINE	14.20	0.559	14.300	81.66	17.15	0.675	J	L	SPECIAL		
LEM090B 02†										19.60	0.772	8.960	51.16	24.31	0.957	K	M	SPECIAL		
LEM090B 03†										27.70	1.091	5.730	32.72	35.08	1.381	K	M	SPECIAL		
LE 014B 01			4.78	0.188	0.36	0.014	3.56	0.80	0.18	0.04	RANDOM	15.88	0.625	0.093	0.53	52.20	2.055	J	L	U
LE 014B 1A												19.05	0.750	0.064	0.37	71.50	2.815	J	L	U
LE 014B 02												22.23	0.875	0.049	0.28	91.06	3.585	J	L	U
LE 014B 03												25.40	1.000	0.040	0.23	109.22	4.300	K	M	V
LE 014B 04												28.58	1.125	0.033	0.19	130.18	5.125	K	M	V
LE 014B 05												31.75	1.250	0.030	0.17	145.29	5.720	K	M	V
LE 014B 06	34.93	1.375										0.026	0.15	163.70	6.445	K	M	V		
LE 014B 07	38.10	1.500										0.023	0.13	186.69	7.350	L	N	W		
LE 014B 08	41.28	1.625										0.021	0.12	202.06	7.955	L	N	W		
LE 014B 09	44.45	1.750										0.019	0.11	219.96	8.660	L	N	W		
LE 014B 10	47.63	1.875										0.018	0.10	240.67	9.475	L	N	W		
LE 014B 11	50.80	2.000										0.016	0.09	265.18	10.440	M	P	X		
LE 014B 12	57.15	2.250										0.014	0.08	298.45	11.750	M	P	X		
LE 014B 13	63.50	2.500	0.012	0.07	339.34	13.360	M	P	X											
LE 016B 01	4.78	0.188	0.41	0.016	5.34	1.20	0.36	0.08	RANDOM	15.88	0.625	0.182	1.04	43.31	1.705	J	L	U		
LE 016B 1A										19.05	0.750	0.128	0.73	57.91	2.280	J	L	U		
LE 016B 02										22.23	0.875	0.100	0.57	72.14	2.840	J	L	U		
LE 016B 03										25.40	1.000	0.081	0.46	87.12	3.430	K	M	V		
LE 016B 04										28.58	1.125	0.068	0.39	101.47	3.995	K	M	V		
LE 016B 05										31.75	1.250	0.060	0.34	115.32	4.540	K	M	V		
LE 016B 06										34.93	1.375	0.053	0.30	129.67	5.105	K	M	V		
LE 016B 07										38.10	1.500	0.046	0.26	147.57	5.810	L	N	W		
LE 016B 08										41.28	1.625	0.042	0.24	159.89	6.295	L	N	W		
LE 016B 09										44.45	1.750	0.039	0.22	173.74	6.840	L	N	W		
LE 016B 10										47.63	1.875	0.035	0.20	189.87	7.475	L	N	W		
LE 016B 11										50.80	2.000	0.032	0.18	208.79	8.220	M	P	X		
LE 016B 12										57.15	2.250	0.028	0.16	234.95	9.250	M	P	X		
LE 016B 13	63.50	2.500	0.025	0.14	266.70	10.500	M	P	X											
LE 018B 01	4.78	0.188	0.46	0.018	6.67	1.50	0.62	0.14	RANDOM	15.88	0.625	0.333	1.90	34.16	1.345	J	L	U		
LE 018B 1A										19.05	0.750	0.236	1.35	44.68	1.759	J	L	U		
LE 018B 02										22.23	0.875	0.184	1.05	55.25	2.175	J	L	U		
LE 018B 03										25.40	1.000	0.151	0.86	65.53	2.580	K	M	V		
LE 018B 04										28.58	1.125	0.128	0.73	75.82	2.985	K	M	V		
LE 018B 05										31.75	1.250	0.110	0.63	86.61	3.410	K	M	V		
LE 018B 06										34.93	1.375	0.096	0.55	97.66	3.845	K	M	V		
LE 018B 07										38.10	1.500	0.088	0.50	107.19	4.220	L	N	W		
LE 018B 08										41.28	1.625	0.079	0.45	117.98	4.645	L	N	W		
LE 018B 09										44.45	1.750	0.072	0.41	128.78	5.070	L	N	W		
LE 018B 10										47.63	1.875	0.067	0.38	138.56	5.455	L	N	W		
LE 018B 11										50.80	2.000	0.061	0.35	149.61	5.890	M	P	X		
LE 018B 12										57.15	2.250	0.053	0.30	172.21	6.780	M	P	X		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

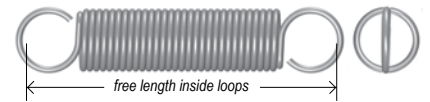
LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP							
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless					
																M	S	S316					
LE 018B 13	4.78	0.188	0.46	0.018	6.67	1.50	0.62	0.14	RANDOM	63.50	2.500	0.047	0.27	191.52	7.540	M	P	X					
LE 020B 01			0.51	0.020	8.90	2.00	0.98	0.22	RANDOM	15.88	0.625	0.578	3.30	29.59	1.165	J	L	U					
LE 020B 1A										19.05	0.750	0.409	2.33	38.43	1.513	J	L	U					
LE 020B 02										22.23	0.875	0.315	1.80	47.37	1.865	J	L	U					
LE 020B 03										25.40	1.000	0.263	1.50	55.63	2.190	K	M	V					
LE 020B 04										28.58	1.125	0.228	1.30	63.37	2.495	K	M	V					
LE 020B 05										31.75	1.250	0.193	1.10	72.90	2.870	K	M	V					
LE 020B 06										34.93	1.375	0.170	0.97	81.66	3.215	K	M	V					
LE 020B 07										38.10	1.500	0.152	0.87	90.17	3.550	L	N	W					
LE 020B 08										41.28	1.625	0.138	0.79	98.43	3.875	L	N	W					
LE 020B 09										44.45	1.750	0.126	0.72	107.19	4.220	L	N	W					
LE 020B 10										47.63	1.875	0.116	0.66	116.21	4.575	L	N	W					
LE 020B 11										50.80	2.000	0.107	0.61	124.97	4.920	M	P	X					
LE 020B 12										57.15	2.250	0.093	0.53	142.49	5.610	M	P	X					
LE 020B 13										63.50	2.500	0.082	0.47	159.77	6.290	M	P	X					
LE 022B 002	0.56	0.022								11.12	2.50	1.33	0.30	RANDOM	12.70	0.500	1.524	8.70	19.05	0.750	J	L	U
LE 022B 001			15.88	0.625	0.946	5.40	26.29	1.035	J						L	U							
LE 022B 00			19.05	0.750	0.666	3.80	33.78	1.330	J						L	U							
LE 022B 0			22.23	0.875	0.560	3.20	39.75	1.565	K						M	V							
LE 022B 01			25.40	1.000	0.438	2.50	47.75	1.880	K						M	V							
LE 022B 02			28.58	1.125	0.368	2.10	55.25	2.175	K						M	V							
LE 022B 03			31.75	1.250	0.315	1.80	62.74	2.470	K						M	V							
LE 022B 04			34.93	1.375	0.280	1.60	69.98	2.755	K						M	V							
LE 022B 05			38.10	1.500	0.245	1.40	77.98	3.070	L						N	W							
LE 022B 06			44.45	1.750	0.210	1.20	90.93	3.580	L						N	W							
LE 022B 07			50.80	2.000	0.175	1.00	106.68	4.200	M						P	X							
LE 022B 08			57.15	2.250	0.156	0.89	119.89	4.720	M						P	X							
LE 022B 09			63.50	2.500	0.137	0.78	135.13	5.320	M						P	X							
LE 024B 01			0.61	0.024	15.12	3.40	1.78	0.40	RANDOM						15.88	0.625	1.489	8.50	24.77	0.975	J	L	U
LE 024B 02															17.48	0.688	1.261	7.20	28.14	1.108	J	L	U
LE 024B 03	19.05	0.750								1.051	6.00	31.75	1.250	J	L	U							
LE 024B 04	20.65	0.813								0.928	5.30	35.13	1.383	K	M	V							
LE 024B 05	22.23	0.875								0.841	4.80	38.23	1.505	K	M	V							
LE 024B 06	23.83	0.938								0.753	4.30	41.61	1.638	K	M	V							
LE 024B 07	25.40	1.000								0.701	4.00	44.45	1.750	K	M	V							
LE 024B 08	28.58	1.125								0.588	3.36	51.18	2.015	K	M	V							
LE 024B 09	31.75	1.250								0.510	2.91	57.91	2.280	K	M	V							
LE 024B 10	34.93	1.375								0.450	2.57	64.64	2.545	L	N	W							
LE 024B 11	38.10	1.500								0.403	2.30	71.12	2.800	L	N	W							
LE 024B 12	44.45	1.750								0.333	1.90	84.58	3.330	M	P	X							
LE 024B 13	50.80	2.000								0.284	1.62	97.79	3.850	M	P	X							
LE 024B 14	57.15	2.250								0.249	1.42	110.74	4.360	M	P	X							
LE 024B 15	63.50	2.500								0.221	1.26	123.95	4.880	M	P	X							
LE 026B 002	0.66	0.026	19.13	4.30	2.22	0.50	RANDOM	12.70	0.500	3.590	20.50	17.53	0.690	J	L	U							
LE 026B 001								15.88	0.625	2.212	12.63	23.50	0.925	J	L	U							
LE 026B 00								19.05	0.750	1.664	9.50	29.21	1.150	K	M	V							
LE 026B 0								22.23	0.875	1.296	7.40	35.18	1.385	K	M	V							
LE 026B 01								25.40	1.000	1.068	6.10	41.15	1.620	K	M	V							
LE 026B 02								28.58	1.125	0.893	5.10	47.63	1.875	K	M	V							
LE 026B 03								31.75	1.250	0.788	4.50	53.09	2.090	K	M	V							
LE 026B 04								34.93	1.375	0.701	4.00	59.06	2.325	L	N	W							
LE 026B 05								38.10	1.500	0.613	3.50	65.79	2.590	L	N	W							
LE 026B 06								44.45	1.750	0.508	2.90	77.72	3.060	M	P	X							
LE 026B 07								50.80	2.000	0.438	2.50	89.41	3.520	M	P	X							
LE 026B 08								57.15	2.250	0.385	2.20	101.09	3.980	M	P	X							
LE 026B 09								63.50	2.500	0.338	1.93	113.54	4.470	M	P	X							
LE 029B 01								0.74	0.029	25.80	5.80	3.34	0.75	RANDOM	15.88	0.625	3.923	22.40	21.72	0.855	J	L	U
LE 029B 02															17.48	0.688	3.363	19.20	24.08	0.948	J	L	U
LE 029B 03	19.05	0.750	2.942	16.80	26.67	1.050	K								M	V							
LE 029B 04	20.65	0.813	2.609	14.90	29.29	1.153	K								M	V							
LE 029B 05	22.23	0.875	2.294	13.10	32.13	1.265	K								M	V							

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.



# EXTENSION SPRINGS

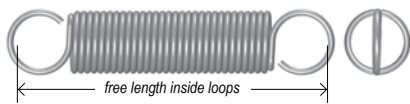


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 029B 06	4.78	0.188	0.74	0.029	25.80	5.80	3.34	0.75	RANDOM	23.83	0.938	2.102	12.00	34.49	1.358	K	M	V							
LE 029B 07										25.40	1.000	1.926	11.00	37.08	1.460	K	M	V							
LE 029B 08										28.58	1.125	1.625	9.28	42.29	1.665	K	M	V							
LE 029B 09										31.75	1.250	1.417	8.09	47.50	1.870	L	N	W							
LE 029B 10										34.93	1.375	1.256	7.17	52.71	2.075	L	N	W							
LE 029B 11										38.10	1.500	1.128	6.44	57.91	2.280	M	P	X							
LE 029B 12										44.45	1.750	0.933	5.33	68.58	2.700	M	P	X							
LE 029B 13										50.80	2.000	0.799	4.56	78.99	3.110	M	P	X							
LE 029B 14										57.15	2.250	0.702	4.01	89.15	3.510	M	P	X							
LE 029B 15										63.50	2.500	0.620	3.54	99.82	3.930	M	P	X							
LE 031B 002										0.79	0.031	31.14	7.00	3.78	0.85	RANDOM	12.70	0.500	9.107	52.00	15.75	0.620	J	L	U
LE 031B 001																	15.88	0.625	5.555	31.72	20.70	0.815	J	L	U
LE 031B 00																	19.05	0.750	4.221	24.10	25.65	1.010	K	M	V
LE 031B 0																	22.23	0.875	3.328	19.00	30.35	1.195	K	M	V
LE 031B 01																	25.40	1.000	2.767	15.80	35.31	1.390	K	M	V
LE 031B 02	28.58	1.125	2.364	13.50	40.26	1.585	L	N	W																
LE 031B 03	31.75	1.250	2.049	11.70	45.21	1.780	L	N	W																
LE 031B 04	34.93	1.375	1.821	10.40	49.91	1.965	L	N	W																
LE 031B 05	38.10	1.500	1.611	9.20	55.12	2.170	M	P	X																
LE 031B 06	44.45	1.750	1.349	7.70	64.77	2.550	M	P	X																
LE 031B 07	50.80	2.000	1.156	6.60	74.42	2.930	M	P	X																
LE 031B 08	57.15	2.250	0.998	5.70	84.58	3.330	M	P	X																
LE 031B 09	63.50	2.500	0.893	5.10	94.23	3.710	N	Q	Y																
LE 031B 10	69.85	2.750	0.788	4.50	104.65	4.120	N	Q	Y																
LE 034B 01	0.86	0.034	40.03	9.00	4.00	0.90	RANDOM	15.88	0.625								9.335	53.30	19.69	0.775	J	L	U		
LE 034B 02								19.05	0.750	7.005	40.00	24.13	0.950	K	M	V									
LE 034B 03								22.23	0.875	5.429	31.00	28.83	1.135	K	M	V									
LE 034B 04								25.40	1.000	4.553	26.00	33.27	1.310	K	M	V									
LE 034B 05								28.58	1.125	3.923	22.40	37.72	1.485	L	N	W									
LE 034B 06								31.75	1.250	3.380	19.30	42.42	1.670	L	N	W									
LE 034B 07								34.93	1.375	3.012	17.20	46.86	1.845	L	N	W									
LE 034B 08								38.10	1.500	2.715	15.50	51.31	2.020	M	P	X									
LE 034B 09								44.45	1.750	2.259	12.90	60.45	2.380	M	P	X									
LE 034B 10								50.80	2.000	1.926	11.00	69.60	2.740	M	P	X									
LE 034B 11								57.15	2.250	1.681	9.60	78.49	3.090	M	P	X									
LE 034B 12								63.50	2.500	1.489	8.50	87.63	3.450	N	Q	Y									
LE 034B 13								69.85	2.750	1.331	7.60	97.03	3.820	N	Q	Y									
LEM070BA 01†								5.00	0.197	0.70	0.028	22.60	5.08	3.39	0.76	INLINE	13.50	0.531	3.070	17.53	19.76	0.778	J	L	SPECIAL
LEM070BA 02†																	17.70	0.697	1.920	10.96	27.71	1.091	J	L	SPECIAL
LEM070BA 03†	24.00	0.945	1.230	7.02	39.60	1.559	K										M	SPECIAL							
LEM070BA 04†	34.50	1.358	0.770	4.40	59.51	2.343	L										N	SPECIAL							
LEM100BA 01†	1.00	0.039	60.80	13.67	7.52	1.69	INLINE	15.80	0.622	15.900	90.79	19.05	0.750	J	L	SPECIAL									
LEM100BA 02†								21.80	0.858	9.900	56.53	27.00	1.063	K	M	SPECIAL									
LEM100BA 03†								30.80	1.213	6.370	36.37	38.89	1.531	L	N	SPECIAL									
LEM050BB 01†	5.50	0.217	0.50	0.020	7.80	1.75	1.02	0.23	INLINE	12.70	0.500	0.510	2.91	25.81	1.016	J	L	SPECIAL							
LEM050BB 02†										15.70	0.618	0.310	1.77	36.60	1.441	J	L	SPECIAL							
LEM050BB 03†										20.20	0.795	0.210	1.20	52.91	2.083	J	L	SPECIAL							
LEM050BB 04†										27.70	1.091	0.130	0.74	80.01	3.150	K	M	SPECIAL							
LEM050BB 05†										37.70	1.484	0.090	0.51	116.10	4.571	L	N	SPECIAL							
LEM080BB 01†	0.80	0.031	30.20	6.79	4.79	1.08	INLINE	15.00	0.591	4.000	22.84	21.41	0.843	J	L	SPECIAL									
LEM080BB 02†								19.80	0.780	2.500	14.28	30.00	1.181	K	M	SPECIAL									
LEM080BB 03†								27.00	1.063	1.600	9.14	43.00	1.693	L	N	SPECIAL									
LEM080BB 04†								39.00	1.535	1.000	5.71	64.59	2.543	M	P	SPECIAL									
LEM080BB 05†	290.00	11.417	0.110	0.63	515.01	20.276	BC	BD	SPECIAL																
LEM110BB 01†	1.10	0.043	72.80	16.37	10.77	2.42	INLINE	17.40	0.685	17.500	99.93	20.93	0.824	K	M	SPECIAL									
LEM110BB 02†								24.00	0.945	11.000	62.81	29.67	1.168	L	N	SPECIAL									
LEM110BB 03†								33.90	1.335	7.000	39.97	42.75	1.683	L	N	SPECIAL									
LEM055BC 01†	6.00	0.236	0.55	0.022	9.50	2.14	1.09	0.25	INLINE	13.90	0.547	0.580	3.31	27.99	1.102	J	L	SPECIAL							
LEM055BC 02†										17.20	0.677	0.360	2.06	39.70	1.563	J	L	SPECIAL							
LEM055BC 03†										22.10	0.870	0.230	1.31	57.20	2.252	J	L	SPECIAL							
LEM055BC 04†										30.40	1.197	0.150	0.86	86.59	3.409	K	M	SPECIAL							

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

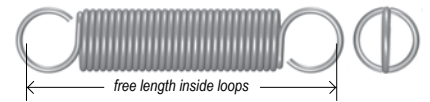
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LEM055BC 05†	6.00	0.236	0.55	0.022	9.50	2.14	1.09	0.25	INLINE	41.40	1.630	0.110	0.63	125.70	4.949	L	N	SPECIAL
LEM120BC 01†			1.20	0.047	85.30	19.18	12.63	2.84	INLINE	19.00	0.748	19.100	109.06	22.81	0.898	K	M	SPECIAL
LEM120BC 02†										26.20	1.031	12.000	68.52	32.28	1.271	L	N	SPECIAL
LEM120BC 03†										37.00	1.457	7.630	43.57	46.51	1.831	M	P	SPECIAL
LEM055C 01	6.30	0.248	0.55	0.022	8.80	1.98	0.85	0.19	RANDOM	15.50	0.610	0.602	3.44	28.70	1.130	J	L	SPECIAL
LEM055C 02										19.00	0.748	0.340	1.94	42.37	1.668	J	L	SPECIAL
LEM055C 03										22.00	0.866	0.247	1.41	54.25	2.136	J	L	SPECIAL
LEM055C 04										25.00	0.984	0.194	1.11	65.89	2.594	K	M	SPECIAL
LEM055C 05										30.00	1.181	0.144	0.82	85.37	3.361	K	M	SPECIAL
LEM055C 06										35.00	1.378	0.114	0.65	104.85	4.128	K	M	SPECIAL
LEM055C 07										40.00	1.575	0.095	0.54	124.08	4.885	L	N	SPECIAL
LEM055C 08										45.00	1.772	0.081	0.46	143.81	5.662	L	N	SPECIAL
LEM055C 09										50.00	1.969	0.070	0.40	163.55	6.439	M	P	SPECIAL
LEM055C 10										55.00	2.165	0.061	0.35	184.79	7.275	M	P	SPECIAL
LEM055C 11										60.00	2.362	0.056	0.32	201.98	7.952	N	Q	SPECIAL
LEM055C 12										65.00	2.559	0.051	0.29	221.72	8.729	N	Q	SPECIAL
LEM075C 01	6.30	0.248	0.75	0.030	19.60	4.41	2.45	0.55	RANDOM	15.50	0.610	2.786	15.91	21.59	0.850	J	L	SPECIAL
LEM075C 02										19.00	0.748	1.659	9.47	29.41	1.158	J	L	SPECIAL
LEM075C 03										22.00	0.866	1.231	7.03	35.97	1.416	J	L	SPECIAL
LEM075C 04										25.00	0.984	0.979	5.59	42.52	1.674	K	M	SPECIAL
LEM075C 05										30.00	1.181	0.730	4.17	53.62	2.111	K	M	SPECIAL
LEM075C 06										35.00	1.378	0.581	3.32	64.47	2.538	K	M	SPECIAL
LEM075C 07										40.00	1.575	0.483	2.76	75.57	2.975	L	N	SPECIAL
LEM075C 08										45.00	1.772	0.415	2.37	86.41	3.402	L	N	SPECIAL
LEM075C 09										50.00	1.969	0.363	2.07	97.26	3.829	M	P	SPECIAL
LEM075C 10										55.00	2.165	0.322	1.84	108.33	4.265	M	P	SPECIAL
LEM075C 11										60.00	2.362	0.289	1.65	119.43	4.702	N	Q	SPECIAL
LEM075C 12										65.00	2.559	0.263	1.50	130.28	5.129	N	Q	SPECIAL
LEM075C 13										70.00	2.756	0.240	1.37	141.58	5.574	N	Q	SPECIAL
LEM080C 01	6.30	0.248	0.80	0.031	24.50	5.51	3.25	0.73	RANDOM	15.50	0.610	3.842	21.94	21.08	0.830	J	L	SPECIAL
LEM080C 02										19.00	0.748	2.314	13.21	28.14	1.108	J	L	SPECIAL
LEM080C 03										22.00	0.866	1.725	9.85	34.44	1.356	J	L	SPECIAL
LEM080C 04										25.00	0.984	1.377	7.86	40.49	1.594	K	M	SPECIAL
LEM080C 05										30.00	1.181	1.028	5.87	50.57	1.991	K	M	SPECIAL
LEM080C 06										35.00	1.378	0.821	4.69	60.91	2.398	K	M	SPECIAL
LEM080C 07										40.00	1.575	0.683	3.90	71.25	2.805	L	N	SPECIAL
LEM080C 08										45.00	1.772	0.585	3.34	81.33	3.202	L	N	SPECIAL
LEM080C 09										50.00	1.969	0.511	2.92	91.67	3.609	M	P	SPECIAL
LEM080C 10										55.00	2.165	0.455	2.60	101.73	4.005	M	P	SPECIAL
LEM080C 11										60.00	2.362	0.408	2.33	112.06	4.412	N	Q	SPECIAL
LEM080C 12										65.00	2.559	0.371	2.12	122.15	4.809	N	Q	SPECIAL
LEM080C 13										70.00	2.756	0.340	1.94	132.49	5.216	N	Q	SPECIAL
LEM080C 14										75.00	2.953	0.313	1.79	142.82	5.623	N	Q	SPECIAL
LEM090C 01†	6.30	0.248	0.90	0.035	37.10	8.34	5.58	1.25	INLINE	17.10	0.673	4.230	24.15	24.54	0.966	J	L	SPECIAL
LEM090C 02†										22.50	0.886	2.650	15.13	34.39	1.354	K	M	SPECIAL
LEM090C 03†										30.60	1.205	1.700	9.71	49.20	1.937	K	M	SPECIAL
LEM090C 04†										44.10	1.736	1.060	6.05	73.81	2.906	L	N	SPECIAL
LE 018C 01	6.35	0.250	0.46	0.018	4.89	1.10	0.44	0.10	RANDOM	15.88	0.625	0.222	1.27	35.94	1.415	J	L	U
LE 018C 02										19.05	0.750	0.130	0.74	53.34	2.100	J	L	U
LE 018C 03										22.23	0.875	0.093	0.53	70.23	2.765	J	L	U
LE 018C 04										25.40	1.000	0.072	0.41	87.38	3.440	K	M	V
LE 018C 05										28.58	1.125	0.060	0.34	103.51	4.075	K	M	V
LE 018C 06										31.75	1.250	0.049	0.28	122.68	4.830	K	M	V
LE 018C 07										34.93	1.375	0.044	0.25	136.78	5.385	K	M	V
LE 018C 08										38.10	1.500	0.037	0.21	159.26	6.270	L	N	W
LE 018C 09										44.45	1.750	0.030	0.17	194.06	7.640	L	N	W
LE 018C 10										50.80	2.000	0.025	0.14	232.66	9.160	L	N	W
LE 018C 11										57.15	2.250	0.023	0.13	252.98	9.960	M	P	X
LE 018C 12										63.50	2.500	0.019	0.11	294.89	11.610	M	P	X
LE 018C 13										69.85	2.750	0.018	0.10	324.36	12.770	M	P	X

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

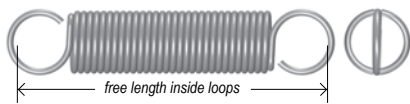


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 022C 01	6.35	0.250	0.56	0.022	9.34	2.10	0.89	0.20	RANDOM	15.88	0.625	0.578	3.30	30.61	1.205	J	L	U
LE 022C 02										19.05	0.750	0.350	2.00	43.18	1.700	J	L	U
LE 022C 03										22.23	0.875	0.263	1.50	54.48	2.145	J	L	U
LE 022C 04										25.40	1.000	0.200	1.14	67.82	2.670	K	M	V
LE 022C 05										28.58	1.125	0.165	0.94	79.88	3.145	K	M	V
LE 022C 06										31.75	1.250	0.140	0.80	92.20	3.630	K	M	V
LE 022C 07										34.93	1.375	0.123	0.70	103.76	4.085	K	M	V
LE 022C 08										38.10	1.500	0.105	0.60	118.62	4.670	L	N	W
LE 022C 09										44.45	1.750	0.088	0.50	140.97	5.550	L	N	W
LE 022C 10										50.80	2.000	0.070	0.40	171.45	6.750	L	N	W
LE 022C 11										57.15	2.250	0.063	0.36	191.26	7.530	M	P	X
LE 022C 12										63.50	2.500	0.056	0.32	214.38	8.440	M	P	X
LE 022C 13										69.85	2.750	0.049	0.28	242.32	9.540	M	P	X
LE 026C 002	6.35	0.250	0.66	0.026	13.79	3.10	1.78	0.40	RANDOM	12.70	0.500	3.555	20.30	16.00	0.630	J	L	U
LE 026C 001										15.88	0.625	1.331	7.60	25.02	0.985	J	L	U
LE 026C 00										19.05	0.750	0.841	4.80	33.27	1.310	J	L	U
LE 026C 0										22.23	0.875	0.613	3.50	41.78	1.645	K	M	V
LE 026C 01										25.40	1.000	0.490	2.80	49.78	1.960	K	M	V
LE 026C 02										28.58	1.125	0.403	2.30	58.29	2.295	K	M	V
LE 026C 03										31.75	1.250	0.333	1.90	67.82	2.670	K	M	V
LE 026C 04										34.93	1.375	0.298	1.70	75.31	2.965	K	M	V
LE 026C 05										38.10	1.500	0.263	1.50	83.82	3.300	L	N	W
LE 026C 06										44.45	1.750	0.210	1.20	101.60	4.000	L	N	W
LE 026C 07										50.80	2.000	0.175	1.00	119.38	4.700	L	N	W
LE 026C 08										57.15	2.250	0.151	0.86	136.91	5.390	M	P	X
LE 026C 09										63.50	2.500	0.133	0.76	153.67	6.050	M	P	X
LE 026C 10										69.85	2.750	0.119	0.68	170.69	6.720	M	P	X
LE 026C 11										76.20	3.000	0.105	0.60	190.50	7.500	N	Q	Y
LE 026C 12	88.90	3.500	0.090	0.52	222.07	8.743	P	R	Z									
LE 026C 13	101.60	4.000	0.078	0.44	256.41	10.095	Q	S	BA									
LE 026C 14	114.30	4.500	0.068	0.39	290.60	11.441	Q	S	BA									
LE 026C 15	127.00	5.000	0.061	0.35	325.20	12.803	R	T	BB									
LE 029C 001	6.35	0.250	0.74	0.029	19.13	4.30	2.45	0.55	RANDOM	15.88	0.625	2.294	13.10	23.24	0.915	J	L	U
LE 029C 00										19.05	0.750	1.384	7.90	30.99	1.220	J	L	U
LE 029C 0										22.23	0.875	1.051	6.00	38.23	1.505	K	M	V
LE 029C 01										25.40	1.000	0.823	4.70	45.72	1.800	K	M	V
LE 029C 02										28.58	1.125	0.683	3.90	52.96	2.085	K	M	V
LE 029C 03										31.75	1.250	0.595	3.40	59.69	2.350	K	M	V
LE 029C 04										34.93	1.375	0.508	2.90	67.69	2.665	K	M	V
LE 029C 05										38.10	1.500	0.447	2.55	75.44	2.970	L	N	W
LE 029C 06										44.45	1.750	0.368	2.10	89.92	3.540	L	N	W
LE 029C 07										50.80	2.000	0.315	1.80	103.63	4.080	L	N	W
LE 029C 08										57.15	2.250	0.280	1.60	116.59	4.590	M	P	X
LE 029C 09										63.50	2.500	0.240	1.37	133.10	5.240	M	P	X
LE 029C 10										69.85	2.750	0.214	1.22	147.83	5.820	M	P	X
LE 029C 11										76.20	3.000	0.193	1.10	162.81	6.410	N	Q	Y
LE 029C 12										88.90	3.500	0.162	0.92	192.07	7.562	P	R	Z
LE 029C 13	101.60	4.000	0.139	0.80	221.39	8.716	Q	S	BA									
LE 029C 14	114.30	4.500	0.122	0.70	250.95	9.880	Q	S	BA									
LE 029C 15	127.00	5.000	0.109	0.62	280.37	11.038	R	T	BB									
LE 031C 001	6.35	0.250	0.79	0.031	23.13	5.20	3.11	0.70	RANDOM	15.88	0.625	3.300	18.84	21.97	0.865	J	L	U
LE 031C 00										19.05	0.750	2.102	12.00	28.70	1.130	J	L	U
LE 031C 0										22.23	0.875	1.541	8.80	35.18	1.385	K	M	V
LE 031C 01										25.40	1.000	1.208	6.90	41.91	1.650	K	M	V
LE 031C 02										28.58	1.125	0.998	5.70	48.64	1.915	K	M	V
LE 031C 03										31.75	1.250	0.858	4.90	55.12	2.170	K	M	V
LE 031C 04	34.93	1.375	0.753	4.30	61.60	2.425	K	M	V									
LE 031C 05	38.10	1.500	0.666	3.80	68.07	2.680	L	N	W									
LE 031C 06	44.45	1.750	0.525	3.00	82.55	3.250	L	N	W									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

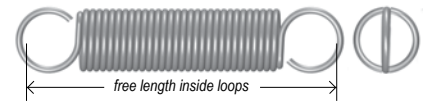
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 031C 07	6.35	0.250	0.79	0.031	23.13	5.20	3.11	0.70	RANDOM	50.80	2.000	0.455	2.60	94.74	3.730	L	N	W							
LE 031C 08										57.15	2.250	0.385	2.20	109.22	4.300	M	P	X							
LE 031C 09										63.50	2.500	0.350	2.00	120.65	4.750	M	P	X							
LE 031C 10										69.85	2.750	0.306	1.75	135.13	5.320	M	P	X							
LE 031C 11										76.20	3.000	0.275	1.57	149.10	5.870	N	Q	Y							
LE 031C 12										88.90	3.500	0.231	1.32	175.49	6.909	P	R	Z							
LE 031C 13										101.60	4.000	0.200	1.14	201.85	7.947	Q	S	BA							
LE 031C 14										114.30	4.500	0.175	1.00	228.60	9.000	R	S	BA							
LE 031C 15										127.00	5.000	0.156	0.89	255.42	10.056	R	T	BB							
LE 034C 001										0.86	0.034	30.25	6.80	3.78	0.85	RANDOM	15.88	0.625	4.974	28.40	21.21	0.835	J	L	U
LE 034C 00																	19.05	0.750	3.117	17.80	27.43	1.080	J	L	U
LE 034C 0																	22.23	0.875	2.364	13.50	33.40	1.315	K	M	V
LE 034C 01																	25.40	1.000	1.891	10.80	39.37	1.550	K	M	V
LE 034C 02																	28.58	1.125	1.594	9.10	45.09	1.775	K	M	V
LE 034C 03																	31.75	1.250	1.384	7.90	50.80	2.000	K	M	V
LE 034C 04	34.93	1.375	1.173	6.70	57.53	2.265	K	M	V																
LE 034C 05	38.10	1.500	1.068	6.10	62.99	2.480	L	N	W																
LE 034C 06	44.45	1.750	0.858	4.90	75.18	2.960	L	N	W																
LE 034C 07	50.80	2.000	0.736	4.20	86.87	3.420	L	N	W																
LE 034C 08	57.15	2.250	0.630	3.60	99.06	3.900	M	P	X																
LE 034C 09	63.50	2.500	0.560	3.20	110.74	4.360	M	P	X																
LE 034C 10	69.85	2.750	0.499	2.85	122.94	4.840	M	P	X																
LE 034C 11	76.20	3.000	0.455	2.60	134.37	5.290	N	Q	Y																
LE 034C 12	88.90	3.500	0.382	2.18	158.22	6.229	P	R	Z																
LE 034C 13	101.60	4.000	0.329	1.88	181.99	7.165	Q	S	BA																
LE 034C 14	114.30	4.500	0.289	1.65	205.89	8.106	R	T	BB																
LE 034C 15	127.00	5.000	0.257	1.47	229.82	9.048	S	U	BC																
LE 037C 00	0.94	0.037	37.81	8.50	4.45	1.00	RANDOM	15.88	0.625								7.828	44.70	20.19	0.795	J	L	U		
LE 037C 0								19.05	0.750								5.096	29.10	25.65	1.010	J	L	U		
LE 037C 01								25.40	1.000								3.100	17.70	36.07	1.420	K	M	V		
LE 037C 02								28.58	1.125								2.627	15.00	41.28	1.625	K	M	V		
LE 037C 03								31.75	1.250								2.224	12.70	46.74	1.840	K	M	V		
LE 037C 04								34.93	1.375								1.926	11.00	52.20	2.055	K	M	V		
LE 037C 05								38.10	1.500								1.699	9.70	57.66	2.270	L	N	W		
LE 037C 06								44.45	1.750								1.401	8.00	68.33	2.690	L	N	W		
LE 037C 07								50.80	2.000								1.173	6.70	79.25	3.120	L	N	W		
LE 037C 08								57.15	2.250								1.016	5.80	89.92	3.540	M	P	X		
LE 037C 09								63.50	2.500								0.893	5.10	100.84	3.970	M	P	X		
LE 037C 10								69.85	2.750								0.806	4.60	111.25	4.380	M	P	X		
LE 037C 11								76.20	3.000	0.718	4.10	122.68	4.830	N	Q	Y									
LE 037C 12								82.55	3.250	0.657	3.75	133.35	5.250	N	Q	Y									
LE 037C 13								88.90	3.500	0.599	3.42	144.53	5.690	N	Q	Y									
LE 037C 14								101.60	4.000	0.522	2.98	165.53	6.517	Q	S	BA									
LE 037C 15								114.30	4.500	0.459	2.62	187.02	7.363	R	T	BB									
LE 037C 16								127.00	5.000	0.408	2.33	208.76	8.219	S	U	BC									
LE 041C 01								1.04	0.041	52.04	11.70	4.67	1.05	RANDOM	19.05	0.750	9.037	51.60	24.38	0.960	J	L	U		
LE 041C 02															25.40	1.000	5.254	30.00	34.54	1.360	K	M	V		
LE 041C 03															28.58	1.125	4.378	25.00	39.50	1.555	K	M	V		
LE 041C 04															31.75	1.250	3.765	21.50	44.45	1.750	K	M	V		
LE 041C 05															34.93	1.375	3.328	19.00	49.15	1.935	K	M	V		
LE 041C 06															38.10	1.500	2.942	16.80	54.10	2.130	L	N	W		
LE 041C 07															44.45	1.750	2.417	13.80	64.01	2.520	L	N	W		
LE 041C 08															50.80	2.000	2.049	11.70	73.91	2.910	L	N	W		
LE 041C 09															57.15	2.250	1.769	10.10	83.82	3.300	M	P	X		
LE 041C 10															63.50	2.500	1.559	8.90	93.98	3.700	M	P	X		
LE 041C 11															69.85	2.750	1.401	8.00	103.63	4.080	M	P	X		
LE 041C 12															76.20	3.000	1.270	7.25	113.54	4.470	N	Q	Y		
LE 041C 13	88.90	3.500	1.068	6.10	133.35	5.250	N								Q	Y									
LE 041C 14	101.60	4.000	0.919	5.25	153.14	6.029	Q								S	BA									
LE 041C 15	114.30	4.500	0.809	4.62	172.85	6.805	R								T	BB									
LE 041C 16	127.00	5.000	0.722	4.12	192.66	7.585	S								U	BC									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

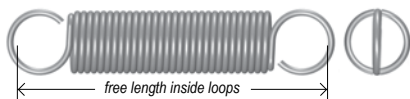


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP				
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless		
																M	S	S316		
LEM063CA 01†	7.00	0.276	0.63	0.025	12.20	2.74	1.67	0.38	INLINE	16.10	0.634	0.620	3.54	32.69	1.287	J	L	SPECIAL		
LEM063CA 02†										19.90	0.783	0.390	2.23	46.51	1.831	J	L	SPECIAL		
LEM063CA 03†										25.60	1.008	0.250	1.43	67.21	2.646	K	M	SPECIAL		
LEM063CA 04†										35.00	1.378	0.160	0.91	101.50	3.996	K	M	SPECIAL		
LEM063CA 05†										47.60	1.874	0.110	0.63	147.29	5.799	L	N	SPECIAL		
LEM100CA 01†			1.00	0.039	45.30	10.18	5.70	1.28	INLINE	19.00	0.748	4.710	26.89	27.18	1.070	J	L	SPECIAL		
LEM100CA 02†										25.00	0.984	2.940	16.79	38.10	1.500	K	M	SPECIAL		
LEM100CA 03†										34.00	1.339	1.830	10.45	54.41	2.142	K	M	SPECIAL		
LEM100CA 04†										49.00	1.929	1.180	6.74	81.71	3.217	L	N	SPECIAL		
LEM100CA 05†										290.00	11.417	0.180	1.03	510.01	20.079	BC	BD	SPECIAL		
LEM140CA 01†			1.40	0.055	114.00	25.63	16.88	3.80	INLINE	22.10	0.870	22.300	127.34	26.47	1.042	L	N	SPECIAL		
LEM140CA 02†										30.50	1.201	13.900	79.37	37.49	1.476	M	P	SPECIAL		
LEM140CA 03†										43.10	1.697	8.910	50.88	54.00	2.126	N	Q	SPECIAL		
LEM070CB 01†			7.50	0.295	0.70	0.028	15.40	3.46	2.18	0.49	INLINE	17.50	0.689	0.780	4.45	34.39	1.354	K	M	SPECIAL
LEM070CB 02†												21.70	0.854	0.490	2.80	48.69	1.917	K	M	SPECIAL
LEM070CB 03†	28.00	1.102										0.310	1.77	70.21	2.764	K	M	SPECIAL		
LEM070CB 04†	38.50	1.516										0.200	1.14	105.99	4.173	L	N	SPECIAL		
LEM070CB 05†	52.50	2.067										0.130	0.74	153.49	6.043	M	P	SPECIAL		
LEM110CB 01†	1.10	0.043	55.50	12.48	8.25	1.86	INLINE	20.60	0.811	5.690	32.49	28.91	1.138	K	M	SPECIAL				
LEM110CB 02†								27.20	1.071	3.550	20.27	40.49	1.594	K	M	SPECIAL				
LEM110CB 03†								37.10	1.461	2.280	13.02	57.91	2.280	L	N	SPECIAL				
LEM110CB 04†								53.60	2.110	1.420	8.11	86.79	3.417	M	P	SPECIAL				
LE 030CD 01	7.95	0.313	0.76	0.030	17.79	4.00	1.78	0.40	RANDOM	25.40	1.000	0.613	3.50	51.56	2.030	K	M	V		
LE 030CD 02										28.58	1.125	0.473	2.70	62.36	2.455	K	M	V		
LE 030CD 03										31.75	1.250	0.403	2.30	71.63	2.820	K	M	V		
LE 030CD 04										34.93	1.375	0.333	1.90	82.93	3.265	K	M	V		
LE 030CD 05										38.10	1.500	0.298	1.70	91.95	3.620	L	N	W		
LE 030CD 06										44.45	1.750	0.228	1.30	114.81	4.520	L	N	W		
LE 030CD 07										50.80	2.000	0.193	1.10	133.86	5.270	L	N	W		
LE 030CD 08										57.15	2.250	0.165	0.94	154.43	6.080	M	P	X		
LE 030CD 09										63.50	2.500	0.145	0.83	173.74	6.840	M	P	X		
LE 030CD 10										69.85	2.750	0.127	0.73	195.63	7.702	N	Q	Y		
LE 030CD 11										76.20	3.000	0.114	0.65	216.23	8.513	P	R	Z		
LE 037CD 0	0.94	0.037	31.14	7.00	3.69	0.83	RANDOM	19.05	0.750	3.221	18.39	27.58	1.086	K	M	V				
LE 037CD 01								25.40	1.000	1.576	9.00	42.93	1.690	K	M	V				
LE 037CD 02								28.58	1.125	1.226	7.00	50.93	2.005	K	M	V				
LE 037CD 03								31.75	1.250	1.051	6.00	57.91	2.280	K	M	V				
LE 037CD 04								34.93	1.375	0.911	5.20	65.15	2.565	K	M	V				
LE 037CD 05								38.10	1.500	0.806	4.60	72.14	2.840	L	N	W				
LE 037CD 06								44.45	1.750	0.630	3.60	87.88	3.460	L	N	W				
LE 037CD 07								50.80	2.000	0.543	3.10	101.35	3.990	L	N	W				
LE 037CD 08								57.15	2.250	0.455	2.60	117.35	4.620	M	P	X				
LE 037CD 09								63.50	2.500	0.420	2.40	128.78	5.070	M	P	X				
LE 037CD 10								69.85	2.750	0.368	2.10	144.53	5.690	M	P	X				
LE 037CD 11	76.20	3.000	0.333	1.90	158.75	6.250	N	Q	Y											
LE 043CD 01	1.09	0.043	45.82	10.30	5.78	1.30	RANDOM	25.40	1.000	3.928	22.43	35.56	1.400	K	M	V				
LE 043CD 02								28.58	1.125	3.149	17.98	41.28	1.625	K	M	V				
LE 043CD 03								31.75	1.250	2.627	15.00	46.99	1.850	K	M	V				
LE 043CD 04								34.93	1.375	2.254	12.87	52.71	2.075	K	M	V				
LE 043CD 05								38.10	1.500	1.974	11.27	58.42	2.300	L	N	W				
LE 043CD 06								44.45	1.750	1.581	9.03	69.85	2.750	L	N	W				
LE 043CD 07								50.80	2.000	1.319	7.53	81.28	3.200	L	N	W				
LE 043CD 08								57.15	2.250	1.131	6.46	92.46	3.640	M	P	X				
LE 043CD 09								63.50	2.500	0.990	5.65	103.89	4.090	M	P	X				
LE 043CD 10								69.85	2.750	0.879	5.02	115.32	4.540	M	P	X				
LE 043CD 11								76.20	3.000	0.792	4.52	126.75	4.990	N	Q	Y				
LE 049CD 01	1.24	0.049	66.72	15.00	8.01	1.80	RANDOM	25.40	1.000	6.305	36.00	34.80	1.370	K	M	V				
LE 049CD 02								28.58	1.125	5.254	30.00	39.75	1.565	K	M	V				
LE 049CD 03								31.75	1.250	4.553	26.00	44.70	1.760	K	M	V				

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

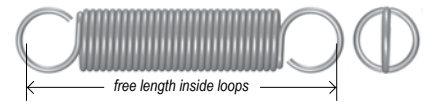
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 049CD 04	7.95	0.313	1.24	0.049	66.72	15.00	8.01	1.80	RANDOM	34.93	1.375	4.028	23.00	49.40	1.945	K	M	V							
LE 049CD 05										38.10	1.500	3.678	21.00	54.10	2.130	L	N	W							
LE 049CD 06										44.45	1.750	2.890	16.50	64.77	2.550	L	N	W							
LE 049CD 07										50.80	2.000	2.452	14.00	74.68	2.940	L	N	W							
LE 049CD 08										57.15	2.250	2.102	12.00	85.09	3.350	M	P	X							
LE 049CD 09										63.50	2.500	1.926	11.00	93.98	3.700	M	P	X							
LE 049CD 10										69.85	2.750	1.751	10.00	103.38	4.070	M	P	X							
LE 049CD 11										76.20	3.000	1.576	9.00	113.54	4.470	N	Q	Y							
LE 055CD 01										1.40	0.055	93.41	21.00	13.34	3.00	RANDOM	25.40	1.000	14.398	82.21	30.99	1.220	L	N	W
LE 055CD 02																	28.58	1.125	11.695	66.78	35.43	1.395	L	N	W
LE 055CD 03																	31.75	1.250	9.846	56.22	39.88	1.570	M	P	X
LE 055CD 04	34.93	1.375	8.503	48.55	44.32	1.745	M	P	X																
LE 055CD 05	38.10	1.500	7.482	42.72	48.77	1.920	N	Q	Y																
LE 055CD 06	44.45	1.750	6.033	34.45	57.66	2.270	N	Q	Y																
LE 055CD 07	50.80	2.000	5.053	28.85	66.55	2.620	N	Q	Y																
LE 055CD 08	57.15	2.250	4.349	24.83	75.44	2.970	P	R	Z																
LE 055CD 09	63.50	2.500	3.816	21.79	84.58	3.330	P	R	Z																
LE 055CD 10	69.85	2.750	3.399	19.41	93.47	3.680	P	R	Z																
LE 055CD 11	76.20	3.000	3.065	17.50	102.36	4.030	Q	S	BA																
LEM075CD 01	8.00	0.315	0.75	0.030	16.70	3.75	1.65	0.37	RANDOM	25.00	0.984	0.573	3.27	51.16	2.014	K	M	SPECIAL							
LEM075CD 02										30.00	1.181	0.396	2.26	68.10	2.681	K	M	SPECIAL							
LEM075CD 03										35.00	1.378	0.303	1.73	84.53	3.328	K	M	SPECIAL							
LEM075CD 04										40.00	1.575	0.245	1.40	101.22	3.985	K	M	SPECIAL							
LEM075CD 05										45.00	1.772	0.207	1.18	117.65	4.632	L	N	SPECIAL							
LEM075CD 06										50.00	1.969	0.177	1.01	135.10	5.319	L	N	SPECIAL							
LEM075CD 07										55.00	2.165	0.156	0.89	151.51	5.965	L	N	SPECIAL							
LEM075CD 08										60.00	2.362	0.138	0.79	168.71	6.642	M	P	SPECIAL							
LEM075CD 09										65.00	2.559	0.126	0.72	184.12	7.249	M	P	SPECIAL							
LEM160CD 01†	1.60	0.063	146.00	32.82	21.81	4.90	INLINE	25.30	0.996	25.400	145.04	30.18	1.188	L	N	SPECIAL									
LEM160CD 02†								34.90	1.374	15.900	90.79	42.70	1.681	L	N	SPECIAL									
LEM160CD 03†								49.30	1.941	10.200	58.24	61.49	2.421	M	P	SPECIAL									
LEM120CE 01†	8.50	0.335	1.20	0.047	62.80	14.12	9.22	2.07	INLINE	23.00	0.906	5.430	31.01	32.84	1.293	L	N	SPECIAL							
LEM120CE 02†										30.20	1.189	3.390	19.36	46.00	1.811	L	N	SPECIAL							
LEM120CE 03†										41.00	1.614	2.170	12.39	65.61	2.583	M	P	SPECIAL							
LEM120CE 04†										59.00	2.323	1.350	7.71	98.60	3.882	M	P	SPECIAL							
LEM120CE 05†										290.00	11.417	0.240	1.37	515.01	20.276	BD	BE	SPECIAL							
LEM080CF 01†	9.00	0.354	0.80	0.031	19.00	4.27	2.73	0.61	INLINE	20.60	0.811	0.760	4.34	42.01	1.654	J	L	SPECIAL							
LEM080CF 02†										25.40	1.000	0.470	2.68	59.69	2.350	K	M	SPECIAL							
LEM080CF 03†										32.60	1.283	0.300	1.71	86.11	3.390	K	M	SPECIAL							
LEM080CF 04†										44.60	1.756	0.190	1.08	130.20	5.126	L	N	SPECIAL							
LEM080CF 05†										60.60	2.386	0.130	0.74	188.60	7.425	M	P	SPECIAL							
LEM180CF 01†	1.80	0.071	180.00	40.47	26.47	5.95	INLINE	28.40	1.118	28.600	163.31	33.78	1.330	N	R	SPECIAL									
LEM180CF 02†								39.20	1.543	17.800	101.64	47.78	1.881	Q	T	SPECIAL									
LEM180CF 03†								55.40	2.181	11.500	65.67	68.81	2.709	R	U	SPECIAL									
LEM095D 01	9.50	0.374	0.95	0.037	26.00	5.84	3.16	0.71	RANDOM	19.00	0.748	4.492	25.65	24.08	0.948	J	L	SPECIAL							
LEM095D 02										22.00	0.866	2.187	12.49	32.41	1.276	J	L	SPECIAL							
LEM095D 03										25.00	0.984	1.447	8.26	40.74	1.604	K	M	SPECIAL							
LEM095D 04										30.00	1.181	0.925	5.28	54.64	2.151	K	M	SPECIAL							
LEM095D 05										35.00	1.378	0.680	3.88	68.53	2.698	K	M	SPECIAL							
LEM095D 06										40.00	1.575	0.536	3.06	82.68	3.255	L	N	SPECIAL							
LEM095D 07										45.00	1.772	0.443	2.53	96.57	3.802	L	N	SPECIAL							
LEM095D 08										50.00	1.969	0.378	2.16	110.46	4.349	L	N	SPECIAL							
LEM095D 09										55.00	2.165	0.329	1.88	124.33	4.895	M	P	SPECIAL							
LEM095D 10										60.00	2.362	0.292	1.67	137.97	5.432	M	P	SPECIAL							
LEM095D 11										65.00	2.559	0.263	1.50	151.87	5.979	M	P	SPECIAL							
LEM095D 12										70.00	2.756	0.238	1.36	165.76	6.526	N	Q	SPECIAL							
LEM120D 01	1.20	0.047	54.00	12.14	6.85	1.54	RANDOM	25.00	0.984	4.687	26.76	35.15	1.384	M	N	SPECIAL									
LEM120D 02								30.00	1.181	3.082	17.60	45.24	1.781	M	P	SPECIAL									
LEM120D 03								35.00	1.378	2.296	13.11	55.58	2.188	M	P	SPECIAL									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

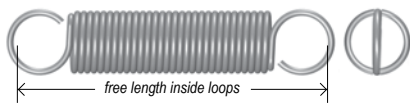


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LEM120D 04	9.50	0.374	1.20	0.047	54.00	12.14	6.85	1.54	RANDOM	40.00	1.575	1.828	10.44	65.91	2.595	N	Q	SPECIAL							
LEM120D 05										45.00	1.772	1.520	8.68	76.00	2.992	N	Q	SPECIAL							
LEM120D 06										50.00	1.969	1.301	7.43	86.33	3.399	P	R	SPECIAL							
LEM120D 07										55.00	2.165	1.137	6.49	96.39	3.795	P	R	SPECIAL							
LEM120D 08										60.00	2.362	1.009	5.76	106.73	4.202	P	R	SPECIAL							
LEM120D 09										70.00	2.756	0.825	4.71	127.15	5.006	Q	S	SPECIAL							
LEM120D 10										80.00	3.150	0.697	3.98	147.57	5.810	Q	S	SPECIAL							
LEM120D 11										90.00	3.543	0.602	3.44	168.22	6.623	Q	S	SPECIAL							
LEM120D 12										100.00	3.937	0.532	3.04	188.65	7.427	R	T	SPECIAL							
LEM120D 13										115.00	4.528	0.452	2.58	219.41	8.638	R	T	SPECIAL							
LEM150D 01										1.50	0.059	98.00	22.05	14.68	3.30	RANDOM	25.00	0.984	14.604	83.39	30.58	1.204	P	R	SPECIAL
LEM150D 02																	30.00	1.181	9.893	56.49	38.38	1.511	P	R	SPECIAL
LEM150D 03																	35.00	1.378	7.480	42.71	46.18	1.818	Q	S	SPECIAL
LEM150D 04	40.00	1.575	6.014	34.34	53.98	2.125	Q	S	SPECIAL																
LEM150D 05	45.00	1.772	5.028	28.71	61.52	2.422	Q	S	SPECIAL																
LEM150D 06	50.00	1.969	4.321	24.67	69.32	2.729	R	T	SPECIAL																
LEM150D 07	55.00	2.165	3.786	21.62	77.09	3.035	R	T	SPECIAL																
LEM150D 08	60.00	2.362	3.370	19.24	84.63	3.332	R	T	SPECIAL																
LEM150D 09	70.00	2.756	2.764	15.78	100.23	3.946	R	T	SPECIAL																
LEM150D 10	80.00	3.150	2.342	13.37	115.57	4.550	S	U	SPECIAL																
LE 026D 01	9.53	0.375	0.66	0.026	10.23	2.30	0.98	0.22	RANDOM	25.40	1.000	0.228	1.30	66.04	2.600	J	L	BA							
LE 026D 02										28.58	1.125	0.161	0.92	85.98	3.385	K	M	BB							
LE 026D 03										31.75	1.250	0.126	0.72	105.16	4.140	K	M	BB							
LE 026D 04										34.93	1.375	0.105	0.60	123.06	4.845	K	M	BB							
LE 026D 05										38.10	1.500	0.088	0.50	143.76	5.660	L	N	BC							
LE 026D 06										44.45	1.750	0.068	0.39	179.83	7.080	L	N	BC							
LE 031D 0	0.79	0.031	15.12	3.40	1.33	0.30	RANDOM	22.23	0.875	0.851	4.86	38.48	1.515	J	L	BA									
LE 031D 01								25.40	1.000	0.543	3.10	50.80	2.000	J	L	BA									
LE 031D 02								28.58	1.125	0.403	2.30	62.87	2.475	K	M	BB									
LE 031D 03								31.75	1.250	0.315	1.80	75.44	2.970	K	M	BB									
LE 031D 04								34.93	1.375	0.263	1.50	87.50	3.445	K	M	BB									
LE 031D 05								38.10	1.500	0.228	1.30	98.55	3.880	L	N	BC									
LE 031D 06								44.45	1.750	0.168	0.96	126.49	4.980	L	N	BC									
LE 031D 07								50.80	2.000	0.137	0.78	151.64	5.970	L	N	BC									
LE 031D 08								57.15	2.250	0.116	0.66	176.53	6.950	M	P	BD									
LE 031D 09								63.50	2.500	0.100	0.57	201.68	7.940	M	P	BD									
LE 031D 10								69.85	2.750	0.088	0.50	227.33	8.950	M	P	BD									
LE 031D 11	76.20	3.000	0.079	0.45	251.21	9.890	N	Q	BE																
LE 034D 01	0.86	0.034	20.46	4.60	2.22	0.50	RANDOM	25.40	1.000	0.841	4.80	46.99	1.850	J	L	BA									
LE 034D 02								28.58	1.125	0.630	3.60	57.53	2.265	K	M	BB									
LE 034D 03								31.75	1.250	0.490	2.80	68.83	2.710	K	M	BB									
LE 034D 04								34.93	1.375	0.420	2.40	78.36	3.085	K	M	BB									
LE 034D 05								38.10	1.500	0.350	2.00	90.17	3.550	L	N	BC									
LE 034D 06								44.45	1.750	0.280	1.60	109.47	4.310	L	N	BC									
LE 034D 07								50.80	2.000	0.228	1.30	130.81	5.150	M	P	BD									
LE 034D 08								57.15	2.250	0.188	1.07	154.20	6.071	M	P	BD									
LE 034D 09								63.50	2.500	0.163	0.93	175.72	6.918	M	P	BD									
LE 034D 10								69.85	2.750	0.143	0.82	197.15	7.762	M	P	BD									
LE 034D 11								76.20	3.000	0.128	0.73	218.67	8.609	N	Q	BE									
LE 034D 12								88.90	3.500	0.106	0.60	261.59	10.299	N	Q	BE									
LE 034D 13								101.60	4.000	0.090	0.51	304.60	11.992	P	R	BF									
LE 034D 14								114.30	4.500	0.078	0.45	347.80	13.693	P	R	BF									
LE 034D 15								127.00	5.000	0.069	0.40	390.65	15.380	Q	S	BG									
LE 037D 0	0.94	0.037	25.80	5.80	3.11	0.70	RANDOM	19.05	0.750	4.256	24.30	24.38	0.960	J	L	BA									
LE 037D 01								25.40	1.000	1.349	7.70	42.16	1.660	J	L	BA									
LE 037D 02								28.58	1.125	0.981	5.60	51.69	2.035	K	M	BB									
LE 037D 03								31.75	1.250	0.771	4.40	61.21	2.410	K	M	BB									
LE 037D 04								34.93	1.375	0.648	3.70	69.98	2.755	K	M	BB									
LE 037D 05	38.10	1.500	0.560	3.20	78.49	3.090	L	N	BC																

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

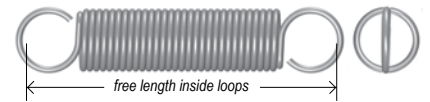
LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 037D 06	9.53	0.375	0.94	0.037	25.80	5.80	3.11	0.70	RANDOM	44.45	1.750	0.420	2.40	98.55	3.880	L	N	BC							
LE 037D 07										50.80	2.000	0.350	2.00	115.57	4.550	M	P	BD							
LE 037D 08										57.15	2.250	0.298	1.70	133.35	5.250	M	P	BD							
LE 037D 09										63.50	2.500	0.245	1.40	155.96	6.140	M	P	BD							
LE 037D 10										69.85	2.750	0.221	1.26	172.72	6.800	M	P	BD							
LE 037D 11										76.20	3.000	0.200	1.14	189.74	7.470	N	Q	BE							
LE 037D 12										88.90	3.500	0.165	0.94	226.42	8.914	P	R	BF							
LE 037D 13										101.60	4.000	0.140	0.80	263.32	10.367	Q	S	BG							
LE 037D 14										114.30	4.500	0.122	0.70	299.90	11.807	R	S	BG							
LE 037D 15										127.00	5.000	0.108	0.62	336.60	13.252	R	T	BH							
LE 039D 01										0.99	0.039	30.25	6.80	3.56	0.80	RANDOM	25.40	1.000	1.681	9.60	41.40	1.630	J	L	BA
LE 039D 02																	28.58	1.125	1.226	7.00	50.42	1.985	K	M	BB
LE 039D 03																	31.75	1.250	0.998	5.70	58.42	2.300	K	M	BB
LE 039D 04																	34.93	1.375	0.841	4.80	66.68	2.625	K	M	BB
LE 039D 05																	38.10	1.500	0.718	4.10	75.18	2.960	L	N	BC
LE 039D 06	44.45	1.750	0.560	3.20	92.20	3.630	L	N	BC																
LE 039D 07	50.80	2.000	0.455	2.60	109.47	4.310	M	P	BD																
LE 039D 08	57.15	2.250	0.385	2.20	126.49	4.980	M	P	BD																
LE 039D 09	63.50	2.500	0.333	1.90	143.76	5.660	M	P	BD																
LE 039D 10	69.85	2.750	0.296	1.69	160.02	6.300	M	P	BD																
LE 039D 11	76.20	3.000	0.264	1.51	177.04	6.970	N	Q	BE																
LE 041D 0	1.04	0.041	34.70	7.80	4.00	0.90	RANDOM	19.05	0.750	6.655	38.00	23.62	0.930	L	P	BD									
LE 041D 01								25.40	1.000	2.224	12.70	39.12	1.540	L	P	BD									
LE 041D 02								28.58	1.125	1.664	9.50	47.12	1.855	M	Q	BE									
LE 041D 03								31.75	1.250	1.331	7.60	54.86	2.160	M	Q	BE									
LE 041D 04								34.93	1.375	1.121	6.40	62.36	2.455	M	Q	BE									
LE 041D 05								38.10	1.500	0.963	5.50	69.85	2.750	N	R	BF									
LE 041D 06								44.45	1.750	0.736	4.20	86.11	3.390	N	R	BF									
LE 041D 07								50.80	2.000	0.595	3.40	102.36	4.030	N	R	BF									
LE 041D 08								57.15	2.250	0.508	2.90	117.60	4.630	P	S	BG									
LE 041D 09								63.50	2.500	0.438	2.50	133.60	5.260	P	S	BG									
LE 041D 10								69.85	2.750	0.384	2.19	149.86	5.900	P	S	BG									
LE 041D 11								76.20	3.000	0.343	1.96	165.61	6.520	Q	T	BH									
LE 041D 12								88.90	3.500	0.285	1.63	196.34	7.730	Q	T	BH									
LE 041D 13								101.60	4.000	0.242	1.38	228.52	8.997	R	U	BJ									
LE 041D 14								114.30	4.500	0.210	1.20	260.35	10.250	R	U	BJ									
LE 041D 15	127.00	5.000	0.187	1.07	290.83	11.450	R	U	BJ																
LE 045D 0	1.14	0.045	44.48	10.00	5.34	1.20	RANDOM	19.05	0.750	9.983	57.00	22.86	0.900	L	P	BD									
LE 045D 01								25.40	1.000	3.538	20.20	36.58	1.440	L	P	BD									
LE 045D 02								28.58	1.125	2.732	15.60	42.80	1.685	M	Q	BE									
LE 045D 03								31.75	1.250	2.137	12.20	50.04	1.970	M	Q	BE									
LE 045D 04								34.93	1.375	1.769	10.10	57.02	2.245	M	Q	BE									
LE 045D 05								38.10	1.500	1.541	8.80	63.50	2.500	N	R	BF									
LE 045D 06								44.45	1.750	1.313	7.50	74.17	2.920	N	R	BF									
LE 045D 07								50.80	2.000	0.981	5.60	90.68	3.570	N	R	BF									
LE 045D 08								57.15	2.250	0.841	4.80	103.63	4.080	P	S	BG									
LE 045D 09								63.50	2.500	0.718	4.10	118.11	4.650	P	S	BG									
LE 045D 10								69.85	2.750	0.630	3.60	131.83	5.190	P	S	BG									
LE 045D 11								76.20	3.000	0.560	3.20	146.05	5.750	Q	T	BH									
LE 045D 12								88.90	3.500	0.455	2.60	174.75	6.880	Q	T	BH									
LE 045D 13								101.60	4.000	0.394	2.25	200.91	7.910	R	U	BJ									
LE 045D 14								114.30	4.500	0.347	1.98	227.08	8.940	R	U	BJ									
LE 045D 15								127.00	5.000	0.308	1.76	254.00	10.000	S	V	BK									
LE 045D 16								139.70	5.500	0.277	1.58	281.18	11.070	S	V	BK									
LE 045D 17	152.40	6.000	0.250	1.43	308.71	12.154	S	V	BK																
LE 049D 01	1.24	0.049	57.83	13.00	6.67	1.50	RANDOM	25.40	1.000	5.254	30.00	35.05	1.380	L	P	BD									
LE 049D 02								28.58	1.125	4.151	23.70	41.02	1.615	M	Q	BE									
LE 049D 03								31.75	1.250	3.328	19.00	47.24	1.860	M	Q	BE									
LE 049D 04								34.93	1.375	2.802	16.00	53.21	2.095	M	Q	BE									
LE 049D 05								38.10	1.500	2.434	13.90	59.18	2.330	N	R	BF									
LE 049D 06								44.45	1.750	1.891	10.80	71.37	2.810	N	R	BF									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.



# EXTENSION SPRINGS

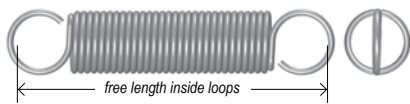


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	S316							
LE 049D 07	9.53	0.375	1.24	0.049	57.83	13.00	6.67	1.50	RANDOM	50.80	2.000	1.576	9.00	83.31	3.280	N	R	BF							
LE 049D 08										57.15	2.250	1.313	7.50	96.01	3.780	P	S	BG							
LE 049D 09										63.50	2.500	1.121	6.40	109.22	4.300	P	S	BG							
LE 049D 10										69.85	2.750	1.016	5.80	120.14	4.730	P	S	BG							
LE 049D 11										76.20	3.000	0.911	5.20	132.33	5.210	Q	T	BH							
LE 049D 12										88.90	3.500	0.736	4.20	158.50	6.240	Q	T	BH							
LE 049D 13										101.60	4.000	0.630	3.60	182.63	7.190	R	U	BJ							
LE 049D 14										114.30	4.500	0.560	3.20	205.49	8.090	R	U	BJ							
LE 049D 15										127.00	5.000	0.485	2.77	232.41	9.150	S	V	BK							
LE 049D 16										139.70	5.500	0.438	2.50	256.54	10.100	T	W	BL							
LE 049D 17										152.40	6.000	0.398	2.27	281.08	11.066	T	W	BL							
LE 052D 01										1.32	0.052	68.95	15.50	7.78	1.75	RANDOM	25.40	1.000	7.128	40.70	34.04	1.340	N	R	BF
LE 052D 02																	28.58	1.125	5.429	31.00	39.75	1.565	P	S	BG
LE 052D 03																	31.75	1.250	4.378	25.00	45.72	1.800	P	S	BG
LE 052D 04																	34.93	1.375	3.800	21.70	50.93	2.005	P	S	BG
LE 052D 05																	38.10	1.500	3.257	18.60	56.90	2.240	Q	T	BH
LE 052D 06																	44.45	1.750	2.539	14.50	68.58	2.700	Q	T	BH
LE 052D 07	50.80	2.000	2.294	13.10	77.47	3.050	R	U	BJ																
LE 052D 08	57.15	2.250	1.786	10.20	91.44	3.600	R	U	BJ																
LE 052D 09	63.50	2.500	1.541	8.80	103.12	4.060	R	U	BJ																
LE 052D 10	69.85	2.750	1.366	7.80	114.55	4.510	R	U	BJ																
LE 052D 11	76.20	3.000	1.226	7.00	125.98	4.960	S	V	BK																
LE 055D 0	1.40	0.055	77.84	17.50	8.90	2.00	RANDOM	25.40	1.000								9.772	55.80	32.51	1.280	N	R	BF		
LE 055D 0A								28.58	1.125								7.472	42.66	37.80	1.488	P	S	BG		
LE 055D 01								31.75	1.250								6.095	34.80	43.18	1.700	P	S	BG		
LE 055D 02								34.93	1.375								5.219	29.80	48.13	1.895	P	S	BG		
LE 055D 03								38.10	1.500								4.448	25.40	53.59	2.110	Q	T	BH		
LE 055D 04								44.45	1.750								3.485	19.90	64.26	2.530	Q	T	BH		
LE 055D 05								50.80	2.000	2.872	16.40	74.93	2.950	Q	T	BH									
LE 055D 06								57.15	2.250	2.434	13.90	85.60	3.370	R	U	BJ									
LE 055D 07								63.50	2.500	2.084	11.90	96.52	3.800	R	U	BJ									
LE 055D 08								69.85	2.750	1.856	10.60	106.93	4.210	R	U	BJ									
LE 055D 09								76.20	3.000	1.664	9.50	117.60	4.630	S	V	BK									
LE 055D 10								88.90	3.500	1.384	7.90	138.68	5.460	S	V	BK									
LE 055D 11								101.60	4.000	1.191	6.80	159.51	6.280	T	W	BL									
LE 055D 12								114.30	4.500	1.033	5.90	181.10	7.130	T	W	BL									
LE 055D 13								127.00	5.000	0.928	5.30	201.17	7.920	U	X	BM									
LE 055D 14								139.70	5.500	0.820	4.68	223.77	8.810	U	X	BM									
LE 055D 15								152.40	6.000	0.741	4.23	245.36	9.660	V	Y	BN									
LE 058D 01	1.47	0.058	88.96	20.00	11.12	2.50	RANDOM	25.40	1.000	12.452	71.10	31.75	1.250	N	R	BF									
LE 058D 02								28.58	1.125	9.825	56.10	36.45	1.435	P	S	BG									
LE 058D 03								31.75	1.250	7.776	44.40	41.66	1.640	P	S	BG									
LE 058D 04								34.93	1.375	6.673	38.10	46.61	1.835	P	S	BG									
LE 058D 05								38.10	1.500	5.832	33.30	51.56	2.030	Q	T	BH									
LE 058D 06								44.45	1.750	4.553	26.00	61.47	2.420	Q	T	BH									
LE 058D 07								50.80	2.000	3.818	21.80	71.12	2.800	Q	T	BH									
LE 058D 08								57.15	2.250	3.222	18.40	81.28	3.200	R	U	BJ									
LE 058D 09								63.50	2.500	2.785	15.90	91.44	3.600	R	U	BJ									
LE 058D 10								69.85	2.750	2.487	14.20	101.09	3.980	R	U	BJ									
LE 058D 11								76.20	3.000	2.224	12.70	111.25	4.380	S	V	BK									
LE 058D 12								88.90	3.500	1.851	10.57	130.96	5.156	S	V	BK									
LE 058D 13								101.60	4.000	1.581	9.03	150.83	5.938	T	W	BL									
LE 058D 14								114.30	4.500	1.380	7.88	170.71	6.721	T	W	BL									
LE 058D 15								127.00	5.000	1.224	6.99	190.60	7.504	U	X	BM									
LE 058D 16								139.70	5.500	1.100	6.28	210.49	8.287	U	X	BM									
LE 058D 17								152.40	6.000	0.998	5.70	230.38	9.070	V	Y	BN									
LEM090DB 01†	10.00	0.394	0.90	0.035	24.00	5.4	3.46	0.78	INLINE	23.00	0.906	0.880	5.02	46.10	1.815	J	L	SPECIAL							
LEM090DB 02†										28.40	1.118	0.550	3.14	65.30	2.571	K	M	SPECIAL							
LEM090DB 03†										36.50	1.437	0.350	2.00	94.11	3.705	L	N	SPECIAL							
LEM090DB 04†										50.00	1.969	0.230	1.31	142.19	5.598	M	P	SPECIAL							
LEM090DB 05†										68.00	2.677	0.150	0.86	205.99	8.110	M	P	SPECIAL							

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

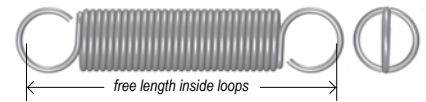
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP				
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless		
																M	S	S316		
LEM140DB 01†	10.00	0.394	1.40	0.055	83.60	18.79	12.66	2.85	INLINE	26.90	1.059	6.140	35.06	38.51	1.516	N	R	SPECIAL		
LEM140DB 02†										35.30	1.390	3.830	21.87	53.80	2.118	P	S	SPECIAL		
LEM140DB 03†										47.90	1.886	2.460	14.05	76.81	3.024	Q	T	SPECIAL		
LEM140DB 04†										68.90	2.713	1.540	8.79	115.09	4.531	R	U	SPECIAL		
LEM140DB 05†										290.00	11.417	0.320	1.83	510.01	20.079	BD	BE	SPECIAL		
LEM200DB 01†			2.00	0.079	220.00	49.46	32.94	7.41	INLINE	31.60	1.244	31.800	181.58	37.47	1.475	Q	T	SPECIAL		
LEM200DB 02†										43.60	1.717	19.900	113.63	52.98	2.086	Q	T	SPECIAL		
LEM200DB 03†										61.60	2.425	12.800	73.09	76.30	3.004	R	U	SPECIAL		
LE 037DD 01			10.67	0.420	0.94	0.037	21.48	4.83	2.22	0.50	RANDOM	25.40	1.000	1.541	8.80	37.90	1.492	L	N	BF
LE 037DD 02												28.58	1.125	0.963	5.50	48.56	1.912	L	N	BF
LE 037DD 03	31.75	1.250										0.683	3.90	59.94	2.360	L	N	BF		
LE 037DD 04	34.93	1.375										0.543	3.10	70.41	2.772	M	P	BG		
LE 037DD 05	38.10	1.500										0.438	2.50	82.09	3.232	M	P	BG		
LE 037DD 06	44.45	1.750										0.333	1.90	102.31	4.028	M	P	BG		
LE 037DD 07	50.80	2.000										0.263	1.50	124.10	4.886	N	Q	BH		
LE 037DD 08	57.15	2.250										0.210	1.20	148.79	5.858	N	Q	BH		
LE 037DD 09	63.50	2.500										0.175	1.00	173.38	6.826	N	Q	BH		
LE 037DD 10	69.85	2.750										0.158	0.90	191.95	7.557	P	R	BJ		
LE 037DD 11	76.20	3.000										0.140	0.80	213.66	8.412	P	R	BJ		
LE 045DD 01	1.14	0.045	39.14	8.80	4.00	0.90	RANDOM	25.40	1.000	3.116	17.79	36.68	1.444	M	P	BG				
LE 045DD 02								28.58	1.125	2.189	12.50	44.63	1.757	M	P	BG				
LE 045DD 03								31.75	1.250	1.687	9.63	52.58	2.070	M	P	BG				
LE 045DD 04								34.93	1.375	1.371	7.83	60.55	2.384	N	Q	BH				
LE 045DD 05								38.10	1.500	1.156	6.60	68.50	2.697	N	Q	BH				
LE 045DD 06								44.45	1.750	0.879	5.02	84.43	3.324	N	Q	BH				
LE 045DD 07								50.80	2.000	0.709	4.05	100.36	3.951	P	R	BJ				
LE 045DD 08								57.15	2.250	0.595	3.40	116.18	4.574	P	R	BJ				
LE 045DD 09								63.50	2.500	0.511	2.92	132.21	5.205	P	R	BJ				
LE 045DD 10								69.85	2.750	0.450	2.57	147.93	5.824	Q	S	BK				
LE 045DD 11								76.20	3.000	0.401	2.29	163.83	6.450	Q	S	BK				
LE 055DD 01	1.40	0.055	71.66	16.11	6.23	1.40	RANDOM	25.40	1.000	9.913	56.60	32.00	1.260	N	R	BJ				
LE 055DD 02								28.58	1.125	6.795	38.80	38.20	1.504	N	R	BJ				
LE 055DD 03								31.75	1.250	5.079	29.00	44.63	1.757	P	S	BK				
LE 055DD 04								34.93	1.375	4.116	23.50	50.80	2.000	P	S	BK				
LE 055DD 05								38.10	1.500	3.415	19.50	57.25	2.254	Q	T	BL				
LE 055DD 06								44.45	1.750	2.574	14.70	69.88	2.751	Q	T	BL				
LE 055DD 07								50.80	2.000	2.067	11.80	82.47	3.247	Q	T	BL				
LE 055DD 08								57.15	2.250	1.716	9.80	95.28	3.751	R	U	BM				
LE 055DD 09								63.50	2.500	1.471	8.40	107.98	4.251	R	U	BM				
LE 055DD 10								69.85	2.750	1.296	7.40	120.35	4.738	R	U	BM				
LE 055DD 11								76.20	3.000	1.156	6.60	132.82	5.229	S	V	BN				
LEM100DE 01†	11.00	0.433	1.00	0.039	29.60	6.65	4.18	0.94	INLINE	25.40	1.000	1.020	5.82	50.19	1.976	L	N	SPECIAL		
LEM100DE 02†										31.40	1.236	0.640	3.65	70.99	2.795	M	P	SPECIAL		
LEM100DE 03†										40.40	1.591	0.410	2.34	102.31	4.028	N	Q	SPECIAL		
LEM100DE 04†										55.40	2.181	0.260	1.48	154.41	6.079	P	R	SPECIAL		
LEM100DE 05†										75.40	2.969	0.170	0.97	224.41	8.835	Q	S	SPECIAL		
LEM160DE 01†	1.60	0.063	111.00	24.95	16.91	3.80	INLINE	30.10	1.185	8.040	45.91	41.81	1.646	P	S	SPECIAL				
LEM160DE 02†								39.70	1.563	5.020	28.66	58.39	2.299	Q	T	SPECIAL				
LEM160DE 03†								54.10	2.130	3.220	18.39	83.39	3.283	R	U	SPECIAL				
LEM160DE 04†								78.10	3.075	2.010	11.48	124.89	4.917	S	V	SPECIAL				
LE 037DE 01	11.13	0.438	0.94	0.037	24.47	5.50	2.45	0.55	RANDOM	25.40	1.000	0.666	3.80	47.75	1.880	L	N	BF		
LE 037DE 02										28.58	1.125	0.525	3.00	59.94	2.360	M	P	BG		
LE 037DE 03										31.75	1.250	0.420	2.40	84.07	3.310	M	P	BG		
LE 037DE 04										34.93	1.375	0.350	2.00	97.92	3.855	M	P	BG		
LE 037DE 05										38.10	1.500	0.306	1.75	109.98	4.330	N	Q	BH		
LE 037DE 06										44.45	1.750	0.245	1.40	134.37	5.290	N	Q	BH		
LE 037DE 07										50.80	2.000	0.193	1.10	165.10	6.500	N	Q	BH		
LE 037DE 08										57.15	2.250	0.170	0.97	186.69	7.350	P	R	BJ		
LE 037DE 09										63.50	2.500	0.149	0.85	211.33	8.320	P	R	BJ		
LE 037DE 10										69.85	2.750	0.131	0.75	237.49	9.350	P	R	BJ		
LE 037DE 11										76.20	3.000	0.116	0.66	266.70	10.500	Q	S	BK		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

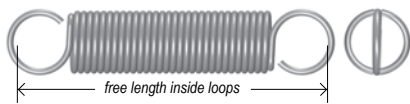


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 046DE 01	11.13	0.438	1.17	0.046	44.48	10.00	4.45	1.00	RANDOM	25.40	1.000	3.275	18.70	37.59	1.480	N	R	BJ
LE 046DE 02										28.58	1.125	2.312	13.20	45.85	1.805	P	S	BK
LE 046DE 03										31.75	1.250	1.708	9.75	55.12	2.170	P	S	BK
LE 046DE 04										34.93	1.375	1.401	8.00	63.63	2.505	P	S	BK
LE 046DE 05										38.10	1.500	1.191	6.80	71.63	2.820	Q	T	BL
LE 046DE 06										44.45	1.750	0.893	5.10	89.15	3.510	Q	T	BL
LE 046DE 07										50.80	2.000	0.718	4.10	106.68	4.200	Q	T	BL
LE 046DE 08										57.15	2.250	0.595	3.40	124.46	4.900	R	U	BM
LE 046DE 09										63.50	2.500	0.508	2.90	142.24	5.600	R	U	BM
LE 046DE 10										69.85	2.750	0.447	2.55	159.51	6.280	R	U	BM
LE 046DE 11										76.20	3.000	0.394	2.25	177.80	7.000	S	V	BN
LE 055DE 01	12.00	0.472	1.10	0.043	35.80	8.05	5.26	1.18	RANDOM	25.40	1.000	5.079	29.00	36.32	1.430	N	R	BJ
LE 055DE 02										28.58	1.125	3.940	22.50	43.18	1.700	P	S	BK
LE 055DE 03										31.75	1.250	3.328	19.00	49.78	1.960	P	S	BK
LE 055DE 04										34.93	1.375	2.802	16.00	56.26	2.215	P	S	BK
LE 055DE 05										38.10	1.500	2.452	14.00	62.48	2.460	Q	T	BL
LE 055DE 06										44.45	1.750	1.926	11.00	75.69	2.980	Q	T	BL
LE 055DE 07										50.80	2.000	1.629	9.30	87.63	3.450	Q	T	BL
LE 055DE 08										57.15	2.250	1.401	8.00	100.08	3.940	R	U	BM
LE 055DE 09										63.50	2.500	1.191	6.80	114.05	4.490	R	U	BM
LE 055DE 10										69.85	2.750	1.051	6.00	127.00	5.000	R	U	BM
LE 055DE 11										76.20	3.000	0.946	5.40	139.70	5.500	S	V	BN
LEM110DF 01†	12.00	0.472	1.10	0.043	35.80	8.05	5.26	1.18	INLINE	27.80	1.094	1.150	6.57	54.20	2.134	M	Q	SPECIAL
LEM110DF 02†										34.40	1.354	0.720	4.11	76.71	3.020	M	Q	SPECIAL
LEM110DF 03†										44.30	1.744	0.460	2.63	110.39	4.346	N	R	SPECIAL
LEM110DF 04†										60.80	2.394	0.280	1.60	166.80	6.567	P	S	SPECIAL
LEM110DF 05†										82.80	3.260	0.200	1.14	241.81	9.520	Q	T	SPECIAL
LEM180DF 01†	12.00	0.472	1.80	0.071	141.00	31.70	21.43	4.82	INLINE	33.20	1.307	10.100	57.67	45.11	1.776	P	S	SPECIAL
LEM180DF 02†										44.00	1.732	6.280	35.86	62.99	2.480	Q	T	SPECIAL
LEM180DF 03†										60.20	2.370	4.020	22.95	89.89	3.539	R	U	SPECIAL
LEM180DF 04†										87.20	3.433	2.520	14.39	134.80	5.307	S	V	SPECIAL
LEM180DF 05†										290.00	11.417	0.680	3.88	465.00	18.307	BE	BF	SPECIAL
LEM120E 01	12.50	0.492	1.20	0.047	39.20	8.82	3.91	0.88	RANDOM	30.00	1.181	2.074	11.84	47.02	1.851	M	Q	SPECIAL
LEM120E 02										40.00	1.575	0.958	5.47	76.84	3.025	N	R	SPECIAL
LEM120E 03										50.00	1.969	0.623	3.56	106.65	4.199	N	R	SPECIAL
LEM120E 04										55.00	2.165	0.531	3.03	121.54	4.785	P	S	SPECIAL
LEM120E 05										60.00	2.362	0.462	2.64	136.45	5.372	P	S	SPECIAL
LEM120E 06										65.00	2.559	0.410	2.34	151.10	5.949	P	S	SPECIAL
LEM120E 07										70.00	2.756	0.366	2.09	166.52	6.556	Q	T	SPECIAL
LEM120E 08										80.00	3.150	0.305	1.74	195.83	7.710	Q	T	SPECIAL
LEM120E 09										90.00	3.543	0.259	1.48	226.14	8.903	Q	T	SPECIAL
LEM120E 10										100.00	3.937	0.228	1.30	255.19	10.047	R	U	SPECIAL
LEM160E 01	12.50	0.492	1.60	0.063	88.25	19.84	11.79	2.65	RANDOM	30.00	1.181	8.543	48.78	38.89	1.531	P	S	SPECIAL
LEM160E 02										35.00	1.378	5.657	32.30	48.46	1.908	P	S	SPECIAL
LEM160E 03										40.00	1.575	4.228	24.14	58.04	2.285	Q	T	SPECIAL
LEM160E 04										45.00	1.772	3.377	19.28	67.61	2.662	Q	T	SPECIAL
LEM160E 05										50.00	1.969	2.809	16.04	77.19	3.039	Q	T	SPECIAL
LEM160E 06										55.00	2.165	2.406	13.74	86.74	3.415	R	U	SPECIAL
LEM160E 07										60.00	2.362	2.103	12.01	96.32	3.792	R	U	SPECIAL
LEM160E 08										65.00	2.559	1.869	10.67	105.89	4.169	R	U	SPECIAL
LEM160E 09										70.00	2.756	1.681	9.60	115.47	4.546	S	V	SPECIAL
LEM160E 10										80.00	3.150	1.399	7.99	134.62	5.300	S	V	SPECIAL
LEM160E 11										90.00	3.543	1.200	6.85	153.75	6.053	S	V	SPECIAL
LEM160E 12										100.00	3.937	1.049	5.99	172.90	6.807	T	W	SPECIAL
LEM160E 13										115.00	4.528	0.883	5.04	201.63	7.938	U	X	SPECIAL
LE 034E 01	12.70	0.500	0.86	0.034	16.01	3.60	1.33	0.30	RANDOM	31.75	1.250	0.331	1.89	76.20	3.000	M	P	BH
LE 034E 02										34.93	1.375	0.249	1.42	93.85	3.695	M	P	BH
LE 034E 03										38.10	1.500	0.193	1.10	114.30	4.500	N	Q	BJ
LE 034E 04										44.45	1.750	0.138	0.79	150.62	5.930	N	Q	BJ
LE 034E 05										50.80	2.000	0.107	0.61	188.21	7.410	P	R	BK
LE 034E 06										57.15	2.250	0.088	0.50	224.79	8.850	P	R	BK

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

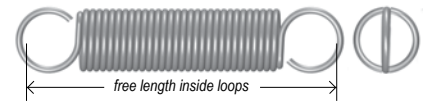
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 037E 01	12.70	0.500	0.94	0.037	19.13	4.30	1.78	0.40	RANDOM	31.75	1.250	0.525	3.00	64.77	2.550	M	P	BH
LE 037E 02										34.93	1.375	0.385	2.20	79.88	3.145	M	P	BH
LE 037E 03										38.10	1.500	0.298	1.70	96.27	3.790	N	Q	BJ
LE 037E 04										44.45	1.750	0.210	1.20	127.00	5.000	N	Q	BJ
LE 037E 05										50.80	2.000	0.158	0.90	160.78	6.330	P	R	BK
LE 037E 06										57.15	2.250	0.135	0.77	185.67	7.310	P	R	BK
LE 037E 07										63.50	2.500	0.123	0.70	205.03	8.072	P	S	BL
LE 037E 08										69.85	2.750	0.105	0.60	234.90	9.248	Q	T	BM
LE 037E 09										76.20	3.000	0.088	0.50	274.14	10.793	Q	T	BM
LE 037E 10										88.90	3.500	0.070	0.40	335.94	13.226	Q	T	BM
LE 037E 11										101.60	4.000	0.053	0.30	431.70	16.996	R	U	BN
LE 037E 12										114.30	4.500	0.051	0.29	457.10	17.996	R	U	BN
LE 037E 13										127.00	5.000	0.035	0.20	620.22	24.418	S	V	BP
LE 041E 01	12.70	0.500	1.04	0.041	25.80	5.80	2.22	0.50	RANDOM	31.75	1.250	0.858	4.90	59.18	2.330	M	Q	BJ
LE 041E 02										34.93	1.375	0.648	3.70	71.25	2.805	M	Q	BJ
LE 041E 03										38.10	1.500	0.508	2.90	84.58	3.330	N	R	BK
LE 041E 04										44.45	1.750	0.368	2.10	108.46	4.270	N	R	BK
LE 041E 05										50.80	2.000	0.280	1.60	134.87	5.310	P	S	BL
LE 041E 06										57.15	2.250	0.228	1.30	160.78	6.330	P	S	BL
LE 041E 07										63.50	2.500	0.194	1.11	184.66	7.270	Q	T	BM
LE 041E 08										69.85	2.750	0.168	0.96	210.06	8.270	Q	T	BM
LE 041E 09										76.20	3.000	0.140	0.80	244.55	9.628	Q	T	BM
LE 041E 10										88.90	3.500	0.123	0.70	281.20	11.071	Q	T	BM
LE 041E 11										101.60	4.000	0.105	0.60	325.91	12.831	R	U	BN
LE 041E 12										114.30	4.500	0.088	0.50	383.29	15.090	R	U	BN
LE 041E 13										127.00	5.000	0.070	0.40	462.74	18.218	S	V	BP
LE 045E 00	12.70	0.500	1.14	0.045	33.36	7.50	3.11	0.70	RANDOM	25.40	1.000	3.818	21.80	33.27	1.310	M	Q	BJ
LE 045E 0										31.75	1.250	1.349	7.70	54.10	2.130	M	Q	BJ
LE 045E 01										34.93	1.375	0.998	5.70	65.15	2.565	M	Q	BJ
LE 045E 02										38.10	1.500	0.823	4.70	74.93	2.950	N	R	BK
LE 045E 03										44.45	1.750	0.595	3.40	95.25	3.750	N	R	BK
LE 045E 04										50.80	2.000	0.455	2.60	117.35	4.620	P	S	BL
LE 045E 05										57.15	2.250	0.368	2.10	139.45	5.490	P	S	BL
LE 045E 06										63.50	2.500	0.315	1.80	159.51	6.280	P	S	BL
LE 045E 07										69.85	2.750	0.271	1.55	181.36	7.140	Q	T	BM
LE 045E 08										76.20	3.000	0.240	1.37	202.18	7.960	Q	T	BM
LE 045E 09										88.90	3.500	0.193	1.10	245.85	9.679	Q	T	BM
LE 045E 10										101.60	4.000	0.158	0.90	293.50	11.555	R	U	BN
LE 045E 11										114.30	4.500	0.140	0.80	330.20	13.000	R	U	BN
LE 045E 12	127.00	5.000	0.123	0.70	373.71	14.713	S	V	BP									
LE 049E 01	12.70	0.500	1.24	0.049	44.48	10.00	3.91	0.88	RANDOM	31.75	1.250	2.067	11.80	51.31	2.020	M	Q	BJ
LE 049E 1A										34.93	1.375	1.550	8.85	61.11	2.406	N	R	BK
LE 049E 02										38.10	1.500	1.271	7.26	70.10	2.760	N	R	BK
LE 049E 03										44.45	1.750	0.918	5.24	88.65	3.490	N	R	BK
LE 049E 04										50.80	2.000	0.701	4.00	108.71	4.280	P	S	BL
LE 049E 05										57.15	2.250	0.578	3.30	127.25	5.010	P	S	BL
LE 049E 06										63.50	2.500	0.490	2.80	146.30	5.760	P	S	BL
LE 049E 07										69.85	2.750	0.420	2.40	166.37	6.550	Q	T	BM
LE 049E 08										76.20	3.000	0.375	2.14	184.40	7.260	Q	T	BM
LE 049E 09										88.90	3.500	0.306	1.75	221.23	8.710	Q	T	BM
LE 049E 10										101.60	4.000	0.257	1.47	259.08	10.200	R	U	BN
LE 049E 11										114.30	4.500	0.222	1.27	296.70	11.681	S	V	BP
LE 049E 12										127.00	5.000	0.194	1.11	335.69	13.216	T	W	BQ
LE 055E 0	12.70	0.500	1.40	0.055	58.72	13.20	5.78	1.30	RANDOM	31.75	1.250	3.615	20.64	46.48	1.830	P	S	BL
LE 055E 01										34.93	1.375	2.732	15.60	54.23	2.135	P	S	BL
LE 055E 02										38.10	1.500	2.277	13.00	61.47	2.420	Q	T	BM
LE 055E 03										44.45	1.750	1.646	9.40	76.71	3.020	Q	T	BM
LE 055E 04										50.80	2.000	1.296	7.40	91.69	3.610	Q	T	BM
LE 055E 05	57.15	2.250	1.068	6.10	106.68	4.200	R	U	BN									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

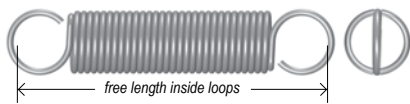


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 055E 06	12.70	0.500	1.40	0.055	58.72	13.20	5.78	1.30	RANDOM	63.50	2.500	0.911	5.20	121.67	4.790	R	U	BN
LE 055E 07										69.85	2.750	0.788	4.50	136.91	5.390	R	U	BN
LE 055E 08										76.20	3.000	0.683	3.90	153.67	6.050	S	V	BP
LE 055E 09										88.90	3.500	0.560	3.20	183.39	7.220	S	V	BP
LE 055E 10										101.60	4.000	0.473	2.70	213.61	8.410	T	W	BQ
LE 055E 11										114.30	4.500	0.403	2.30	245.62	9.670	U	X	BR
LE 055E 12			127.00	5.000	0.363	2.07	273.05	10.750	U	X	BR							
LE 063E 0			1.60	0.063	84.52	19.00	8.90	2.00	RANDOM	31.75	1.250	7.116	40.63	42.42	1.670	P	S	BL
LE 063E 01										34.93	1.375	5.499	31.40	48.64	1.915	P	S	BL
LE 063E 02										38.10	1.500	4.501	25.70	54.86	2.160	P	S	BL
LE 063E 03										44.45	1.750	3.310	18.90	67.31	2.650	Q	T	BM
LE 063E 04										50.80	2.000	2.609	14.90	79.76	3.140	Q	T	BM
LE 063E 05	57.15	2.250								2.154	12.30	92.20	3.630	Q	T	BM		
LE 063E 06	63.50	2.500			1.874	10.70	103.89	4.090	R	U	BN							
LE 063E 07	69.85	2.750			1.594	9.10	117.35	4.620	R	U	BN							
LE 063E 08	76.20	3.000			1.436	8.20	128.78	5.070	S	V	BP							
LE 063E 09	88.90	3.500			1.173	6.70	153.42	6.040	S	V	BP							
LE 063E 10	101.60	4.000			0.981	5.60	178.82	7.040	T	V	BP							
LE 063E 11	114.30	4.500			0.841	4.80	204.22	8.040	U	X	BR							
LE 063E 12	127.00	5.000	0.753	4.30	227.33	8.950	U	X	BR									
LE 067E 01	1.70	0.067	106.85	24.02	15.57	3.50	RANDOM	31.75	1.250	9.687	55.31	41.15	1.620	P	S	BL		
LE 067E 02								38.10	1.500	6.231	35.58	52.83	2.080	P	S	BL		
LE 067E 03								44.45	1.750	4.594	26.23	64.26	2.530	Q	T	BM		
LE 067E 04								50.80	2.000	3.638	20.77	75.95	2.990	Q	T	BM		
LE 067E 05								57.15	2.250	3.011	17.19	87.38	3.440	R	U	BN		
LE 067E 06								63.50	2.500	2.567	14.66	99.06	3.900	R	U	BN		
LE 067E 07			69.85	2.750	2.238	12.78	110.74	4.360	S	V	BP							
LE 067E 08			76.20	3.000	1.984	11.33	122.17	4.810	S	V	BP							
LE 067E 09			88.90	3.500	1.616	9.23	145.29	5.720	T	W	BQ							
LE 067E 10			101.60	4.000	1.364	7.79	168.40	6.630	U	X	BR							
LE 067E 11			114.30	4.500	1.180	6.74	191.52	7.540	V	Y	BS							
LE 067E 12			127.00	5.000	1.040	5.94	214.63	8.450	W	Z	BT							
LE 069E 01	1.75	0.069	113.43	25.50	17.79	4.00	RANDOM	31.75	1.250	11.230	64.12	40.26	1.585	Q	T	SPECIAL		
LE 069E 1A								34.93	1.375	8.818	50.35	45.77	1.802	Q	T	SPECIAL		
LE 069E 02								38.10	1.500	7.259	41.45	51.28	2.019	R	U	SPECIAL		
LE 069E 03								44.45	1.750	5.363	30.62	62.28	2.452	R	U	SPECIAL		
LE 069E 04								50.80	2.000	4.252	24.28	73.30	2.886	S	V	SPECIAL		
LE 069E 05								57.15	2.250	3.522	20.11	84.30	3.319	S	V	SPECIAL		
LE 069E 06			63.50	2.500	3.007	17.17	95.30	3.752	T	W	SPECIAL							
LE 069E 07			69.85	2.750	2.622	14.97	106.32	4.186	T	W	SPECIAL							
LE 069E 08			76.20	3.000	2.326	13.28	117.32	4.619	U	X	SPECIAL							
LE 069E 09			88.90	3.500	1.895	10.82	139.37	5.487	V	Y	SPECIAL							
LE 069E 10			101.60	4.000	1.601	9.14	161.34	6.352	W	Z	SPECIAL							
LE 069E 11			114.30	4.500	1.384	7.90	183.44	7.222	X	BA	SPECIAL							
LE 069E 12	127.00	5.000	1.221	6.97	205.36	8.085	X	BA	SPECIAL									
LE 075E 01	1.91	0.075	155.69	35.00	22.24	5.00	RANDOM	31.75	1.250	17.096	97.62	39.62	1.560	R	U	SPECIAL		
LE 075E 1A								34.93	1.375	13.534	77.28	44.78	1.763	R	U	SPECIAL		
LE 075E 02								38.10	1.500	11.202	63.96	50.04	1.970	R	U	SPECIAL		
LE 075E 03								44.45	1.750	8.329	47.56	60.45	2.380	S	V	SPECIAL		
LE 075E 04								50.80	2.000	6.629	37.85	70.87	2.790	S	V	SPECIAL		
LE 075E 05								57.15	2.250	5.506	31.44	81.28	3.200	T	W	SPECIAL		
LE 075E 06			63.50	2.500	4.694	26.80	91.95	3.620	T	W	SPECIAL							
LE 075E 07			69.85	2.750	4.112	23.48	102.36	4.030	U	X	SPECIAL							
LE 075E 08			76.20	3.000	3.650	20.84	112.78	4.440	U	X	SPECIAL							
LE 075E 09			88.90	3.500	2.981	17.02	133.60	5.260	V	Y	SPECIAL							
LE 075E 10			101.60	4.000	2.518	14.38	154.69	6.090	W	Z	SPECIAL							
LE 075E 11			114.30	4.500	2.180	12.45	175.51	6.910	X	BA	SPECIAL							
LE 075E 12	127.00	5.000	1.921	10.97	196.34	7.730	Y	BB	SPECIAL									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

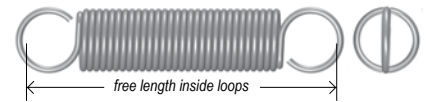
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LEM120EB 01†	13.00	0.512	1.20	0.047	42.20	9.49	6.56	1.48	INLINE	30.20	1.189	1.280	7.31	58.09	2.287	M	Q	SPECIAL
LEM120EB 02†										37.40	1.472	0.800	4.57	82.09	3.232	N	R	SPECIAL
LEM120EB 03†										48.20	1.898	0.510	2.91	118.01	4.646	P	S	SPECIAL
LEM120EB 04†										66.20	2.606	0.320	1.83	178.21	7.016	P	S	SPECIAL
LEM120EB 05†										90.20	3.551	0.210	1.20	258.19	10.165	Q	T	SPECIAL
LEM200EC 01†	14.00	0.551	2.00	0.079	164.00	36.87	25.25	5.68	INLINE	38.00	1.496	9.420	53.79	52.71	2.075	R	U	SPECIAL
LEM200EC 02†										50.00	1.969	5.880	33.58	73.61	2.898	S	V	SPECIAL
LEM200EC 03†										68.00	2.677	3.770	21.53	104.90	4.130	U	X	SPECIAL
LEM200EC 04†										98.00	3.858	2.350	13.42	157.00	6.181	W	Z	SPECIAL
LEM140ED 01†	15.00	0.591	1.40	0.055	57.10	12.84	8.50	1.91	INLINE	34.90	1.374	1.550	8.85	66.09	2.602	N	R	SPECIAL
LEM140ED 02†										43.30	1.705	0.970	5.54	93.29	3.673	N	R	SPECIAL
LEM140ED 03†										55.90	2.201	0.620	3.54	134.01	5.276	P	S	SPECIAL
LEM140ED 04†										76.90	3.028	0.390	2.23	201.90	7.949	R	U	SPECIAL
LEM140ED 05†										105.00	4.134	0.260	1.48	292.00	11.496	T	W	SPECIAL
LE 055F 00	15.88	0.625	1.40	0.055	46.71	10.50	4.45	1.00	RANDOM	38.10	1.500	1.720	9.82	62.74	2.470	N	R	BL
LE 055F 0										44.45	1.750	1.074	6.13	83.82	3.300	N	R	BL
LE 055F 01										50.80	2.000	0.788	4.50	104.39	4.110	P	S	BM
LE 055F 02										57.15	2.250	0.613	3.50	125.98	4.960	P	S	BM
LE 055F 03										63.50	2.500	0.508	2.90	146.81	5.780	Q	T	BN
LE 055F 04										69.85	2.750	0.438	2.50	166.37	6.550	Q	T	BN
LE 055F 05										76.20	3.000	0.368	2.10	191.01	7.520	R	U	BP
LE 055F 06			88.90	3.500	0.298	1.70	230.89	9.090	S	V	BQ							
LE 055F 07			101.60	4.000	0.245	1.40	274.07	10.790	T	W	BR							
LE 063F 01			1.60	0.063	66.72	15.00	6.67	1.50	RANDOM	50.80	2.000	1.559	8.90	89.41	3.520	R	U	BP
LE 063F 02										57.15	2.250	1.173	6.70	108.20	4.260	R	U	BP
LE 063F 03										63.50	2.500	1.016	5.80	122.68	4.830	S	V	BQ
LE 063F 04										69.85	2.750	0.858	4.90	139.95	5.510	S	V	BQ
LE 063F 05										76.20	3.000	0.753	4.30	155.96	6.140	T	W	BR
LE 063F 06	88.90	3.500								0.595	3.40	189.74	7.470	U	X	BS		
LE 063F 07	101.60	4.000								0.508	2.90	219.96	8.660	V	Y	BT		
LE 063F 08	114.30	4.500								0.420	2.40	257.30	10.130	W	Z	BU		
LE 063F 09	127.00	5.000								0.373	2.13	288.04	11.340	X	BA	BV		
LE 069F 01	1.75	0.069	84.52	19.00	8.90	2.00	RANDOM	50.80	2.000	2.469	14.10	81.53	3.210	R	U	SPECIAL		
LE 069F 02								57.15	2.250	1.979	11.30	95.25	3.750	R	U	SPECIAL		
LE 069F 03								63.50	2.500	1.646	9.40	109.47	4.310	S	V	SPECIAL		
LE 069F 04								69.85	2.750	1.419	8.10	123.19	4.850	S	V	SPECIAL		
LE 069F 05								76.20	3.000	1.243	7.10	136.91	5.390	T	W	SPECIAL		
LE 069F 06								88.90	3.500	0.981	5.60	166.12	6.540	U	X	SPECIAL		
LE 069F 07								101.60	4.000	0.806	4.60	195.58	7.700	V	Y	SPECIAL		
LE 069F 08								114.30	4.500	0.701	4.00	222.25	8.750	W	Z	SPECIAL		
LE 069F 09								127.00	5.000	0.608	3.47	251.46	9.900	X	BA	SPECIAL		
LE 055FG 00	16.51	0.650	1.40	0.055	44.48	10.00	4.45	1.00	RANDOM	38.10	1.500	1.720	9.82	61.37	2.416	R	S	BM
LE 055FG 0										44.45	1.750	1.021	5.83	83.67	3.294	R	S	BM
LE 055FG 01										50.80	2.000	0.725	4.14	106.02	4.174	S	T	BN
LE 055FG 02										57.15	2.250	0.562	3.21	128.37	5.054	S	T	BN
LE 055FG 03										63.50	2.500	0.461	2.63	150.42	5.922	T	U	BP
LE 055FG 04										69.85	2.750	0.389	2.22	172.82	6.804	T	U	BP
LE 055FG 05										76.20	3.000	0.336	1.92	195.28	7.688	U	V	BQ
LE 055FG 06			88.90	3.500	0.266	1.52	239.29	9.421	V	W	BR							
LE 055FG 07			101.60	4.000	0.219	1.25	284.48	11.200	W	X	BS							
LE 063FG 00			1.59	0.063	64.50	14.50	6.67	1.50	RANDOM	38.10	1.500	3.189	18.21	56.24	2.214	S	T	BN
LE 063FG 0										44.45	1.750	1.939	11.07	74.27	2.924	S	T	BN
LE 063FG 01										50.80	2.000	1.392	7.95	92.33	3.635	S	T	BN
LE 063FG 02										57.15	2.250	1.086	6.20	110.41	4.347	T	U	BP
LE 063FG 03										63.50	2.500	0.890	5.08	128.50	5.059	T	U	BP
LE 063FG 04	69.85	2.750								0.755	4.31	146.46	5.766	T	U	BP		
LE 063FG 05	76.20	3.000								0.655	3.74	164.49	6.476	U	V	BQ		
LE 063FG 06	88.90	3.500								0.517	2.95	200.84	7.907	V	W	BR		
LE 063FG 07	101.60	4.000								0.427	2.44	236.93	9.328	W	X	BS		
LE 063FG 08	114.30	4.500								0.364	2.08	273.05	10.750	X	Y	BT		
LE 063FG 09	127.00	5.000								0.317	1.81	309.42	12.182	Y	Z	BU		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

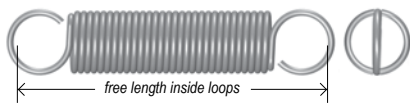


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 069FG 0	16.51	0.650	1.75	0.069	82.29	18.50	8.90	2.00	RANDOM	44.45	1.750	3.189	18.21	67.46	2.656	S	T	SPECIAL
LE 069FG 01										50.80	2.000	2.310	13.19	82.58	3.251	S	T	SPECIAL
LE 069FG 02										57.15	2.250	1.811	10.34	97.69	3.846	T	U	SPECIAL
LE 069FG 03										63.50	2.500	1.489	8.50	112.80	4.441	T	U	SPECIAL
LE 069FG 04										69.85	2.750	1.264	7.22	127.91	5.036	U	V	SPECIAL
LE 069FG 05										76.20	3.000	1.099	6.27	143.00	5.630	U	V	SPECIAL
LE 069FG 06										88.90	3.500	0.870	4.97	173.23	6.820	V	W	SPECIAL
LE 069FG 07										101.60	4.000	0.721	4.12	203.45	8.010	W	X	SPECIAL
LE 069FG 08										114.30	4.500	0.615	3.51	233.68	9.200	X	Y	SPECIAL
LE 069FG 09										127.00	5.000	0.536	3.06	263.88	10.389	Y	Z	SPECIAL
LEM160FC 01†	17.00	0.669	1.60	0.063	74.00	16.64	11.62	2.61	INLINE	39.70	1.563	1.820	10.39	73.99	2.913	R	V	SPECIAL
LEM160FC 02†										49.30	1.941	1.140	6.51	104.09	4.098	R	V	SPECIAL
LEM160FC 03†										63.70	2.508	0.730	4.17	149.30	5.878	S	W	SPECIAL
LEM160FC 04†										87.70	3.453	0.460	2.63	224.69	8.846	T	Y	SPECIAL
LEM160FC 05†										120.00	4.724	0.300	1.71	324.99	12.795	V	BA	SPECIAL
LEM160G 01	19.00	0.748	1.60	0.063	56.90	12.79	5.38	1.21	RANDOM	50.00	1.969	1.224	6.99	92.18	3.629	R	V	SPECIAL
LEM160G 02										55.00	2.165	0.944	5.39	109.60	4.315	R	V	SPECIAL
LEM160G 03										60.00	2.362	0.767	4.38	127.05	5.002	S	W	SPECIAL
LEM160G 04										65.00	2.559	0.648	3.70	144.50	5.689	S	W	SPECIAL
LEM160G 05										70.00	2.756	0.559	3.19	162.20	6.386	S	W	SPECIAL
LEM160G 06										80.00	3.150	0.440	2.51	197.10	7.760	T	Y	SPECIAL
LEM160G 07										90.00	3.543	0.363	2.07	231.98	9.133	T	Y	SPECIAL
LEM160G 08										100.00	3.937	0.308	1.76	267.13	10.517	U	Z	SPECIAL
LEM160G 09										115.00	4.528	0.252	1.44	319.23	12.568	V	BA	SPECIAL
LEM160G 10										130.00	5.118	0.212	1.21	373.08	14.688	W	BC	SPECIAL
LEM160G 11										145.00	5.709	0.184	1.05	425.17	16.739	X	BD	SPECIAL
LE 049G 01	19.05	0.750	1.24	0.049	29.36	6.60	2.62	0.59	RANDOM	50.80	2.000	0.403	2.30	117.09	4.610	R	V	BQ
LE 049G 02										57.15	2.250	0.263	1.50	159.00	6.260	R	V	BQ
LE 049G 03										63.50	2.500	0.210	1.20	190.75	7.510	R	V	BQ
LE 049G 04										69.85	2.750	0.158	0.90	239.52	9.430	S	X	BS
LE 049G 05										76.20	3.000	0.140	0.80	266.95	10.510	S	X	BS
LE 049G 06										82.55	3.250	0.123	0.70	300.74	11.840	T	Z	BU
LE 049G 07										88.90	3.500	0.105	0.60	343.41	13.520	T	Z	BU
LE 055G 01			1.40	0.055	39.14	8.80	3.56	0.80	RANDOM	50.80	2.000	0.595	3.40	110.49	4.350	R	V	BQ
LE 055G 02										57.15	2.250	0.438	2.50	138.43	5.450	R	V	BQ
LE 055G 03										63.50	2.500	0.350	2.00	165.10	6.500	R	V	BQ
LE 055G 04										69.85	2.750	0.280	1.60	196.85	7.750	S	X	BS
LE 055G 05										76.20	3.000	0.245	1.40	221.23	8.710	S	X	BS
LE 055G 06										88.90	3.500	0.175	1.00	292.10	11.500	T	Z	BU
LE 063G 01			1.60	0.063	56.94	12.80	5.34	1.20	RANDOM	50.80	2.000	1.156	6.60	95.50	3.760	R	V	BQ
LE 063G 02	57.15	2.250								0.858	4.90	117.35	4.620	R	V	BQ		
LE 063G 03	63.50	2.500								0.666	3.80	140.97	5.550	S	W	BR		
LE 063G 04	69.85	2.750								0.560	3.20	162.05	6.380	S	W	BR		
LE 063G 05	76.20	3.000								0.473	2.70	185.42	7.300	T	Y	BT		
LE 063G 06	88.90	3.500								0.368	2.10	229.11	9.020	T	Y	BT		
LE 063G 07	101.60	4.000								0.298	1.70	274.83	10.820	U	Z	BU		
LE 063G 08	114.30	4.500								0.245	1.40	324.87	12.790	V	BA	BV		
LE 063G 09	127.00	5.000								0.210	1.20	372.62	14.670	W	BC	BX		
LE 063G 10	139.70	5.500								0.193	1.10	407.67	16.050	X	BD	BY		
LE 069G 01	1.75	0.069	73.40	16.50	7.12	1.60	RANDOM	50.80	2.000	1.795	10.25	87.63	3.450	S	W	SPECIAL		
LE 069G 02								57.15	2.250	1.349	7.70	106.43	4.190	S	W	SPECIAL		
LE 069G 03								63.50	2.500	1.077	6.15	124.97	4.920	T	X	SPECIAL		
LE 069G 04								69.85	2.750	0.898	5.13	143.51	5.650	T	X	SPECIAL		
LE 069G 05								76.20	3.000	0.755	4.31	164.08	6.460	U	Z	SPECIAL		
LE 069G 06								88.90	3.500	0.590	3.37	201.17	7.920	U	Z	SPECIAL		
LE 069G 07								101.60	4.000	0.478	2.73	240.28	9.460	V	BA	SPECIAL		
LE 069G 08								114.30	4.500	0.406	2.32	277.37	10.920	W	BB	SPECIAL		
LE 069G 09								127.00	5.000	0.350	2.00	316.23	12.450	X	BC	SPECIAL		
LE 069G 10								139.70	5.500	0.310	1.77	353.57	13.920	Y	BD	SPECIAL		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

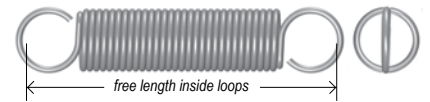
LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	\$316
LE 075G 01	19.05	0.750	1.91	0.075	92.08	20.70	8.90	2.00	RANDOM	50.80	2.000	2.837	16.20	80.01	3.150	S	W	SPECIAL
LE 075G 02										57.15	2.250	2.067	11.80	97.28	3.830	S	W	SPECIAL
LE 075G 03										63.50	2.500	1.629	9.30	114.55	4.510	T	X	SPECIAL
LE 075G 04										69.85	2.750	1.384	7.90	130.05	5.120	T	X	SPECIAL
LE 075G 05										76.20	3.000	1.173	6.70	147.07	5.790	U	Z	SPECIAL
LE 075G 06										88.90	3.500	0.911	5.20	180.34	7.100	V	BA	SPECIAL
LE 075G 07										101.60	4.000	0.753	4.30	212.09	8.350	W	BB	SPECIAL
LE 075G 08										114.30	4.500	0.630	3.60	246.13	9.690	X	BC	SPECIAL
LE 075G 09										127.00	5.000	0.543	3.10	280.16	11.030	Y	BD	SPECIAL
LE 075G 10										139.70	5.500	0.478	2.73	313.69	12.350	Z	BE	SPECIAL
LE 075G 11										152.40	6.000	0.429	2.45	346.20	13.630	BA	BF	SPECIAL
LE 085G 01	2.16	0.085	140.12	31.50	12.46	2.80	RANDOM	50.80	2.000	5.492	31.36	74.17	2.920	T	X	SPECIAL		
LE 085G 02								57.15	2.250	4.060	23.18	88.65	3.490	T	X	SPECIAL		
LE 085G 03								63.50	2.500	3.219	18.38	103.12	4.060	U	Z	SPECIAL		
LE 085G 04								69.85	2.750	2.594	14.81	119.13	4.690	U	Z	SPECIAL		
LE 085G 05								76.20	3.000	2.277	13.00	132.33	5.210	V	BA	SPECIAL		
LE 085G 06								88.90	3.500	1.751	10.00	161.80	6.370	W	BB	SPECIAL		
LE 085G 07								101.60	4.000	1.436	8.20	190.50	7.500	X	BC	SPECIAL		
LE 085G 08								114.30	4.500	1.212	6.92	219.71	8.650	Y	BD	SPECIAL		
LE 085G 09								127.00	5.000	1.061	6.06	247.40	9.740	Z	BE	SPECIAL		
LE 093G 01	2.36	0.093	177.93	40.00	15.57	3.50	RANDOM	50.80	2.000	7.969	45.50	71.12	2.800	T	X	SPECIAL		
LE 093G 02								57.15	2.250	6.165	35.20	83.57	3.290	T	X	SPECIAL		
LE 093G 03								63.50	2.500	4.834	27.60	97.03	3.820	U	Z	SPECIAL		
LE 093G 04								69.85	2.750	4.116	23.50	109.22	4.300	U	Z	SPECIAL		
LE 093G 05								76.20	3.000	3.573	20.40	121.67	4.790	V	BA	SPECIAL		
LE 093G 06								88.90	3.500	2.767	15.80	147.57	5.810	W	BB	SPECIAL		
LE 093G 07								101.60	4.000	2.259	12.90	173.48	6.830	X	BC	SPECIAL		
LE 093G 08								114.30	4.500	1.909	10.90	199.39	7.850	Y	BD	SPECIAL		
LE 093G 09								127.00	5.000	1.681	9.60	223.52	8.800	Z	BE	SPECIAL		
LE 093G 10								139.70	5.500	1.506	8.60	247.50	9.744	BA	BF	SPECIAL		
LE 093G 11								152.40	6.000	1.349	7.70	272.80	10.740	BB	BG	SPECIAL		
LE 105G 01	2.67	0.105	249.19	56.02	26.69	6.00	RANDOM	50.80	2.000	14.711	84.00	66.04	2.600	V	BB	SPECIAL		
LE 105G 02								57.15	2.250	11.279	64.40	76.96	3.030	V	BB	SPECIAL		
LE 105G 03								63.50	2.500	9.121	52.08	87.88	3.460	W	BC	SPECIAL		
LE 105G 04								69.85	2.750	7.650	43.68	99.06	3.900	W	BD	SPECIAL		
LE 105G 05								76.20	3.000	6.571	37.52	109.98	4.330	X	BE	SPECIAL		
LE 105G 06								88.90	3.500	5.198	29.68	131.83	5.190	Y	BF	SPECIAL		
LE 105G 07								101.60	4.000	4.217	24.08	154.43	6.080	Z	BG	SPECIAL		
LE 105G 08								114.30	4.500	3.629	20.72	175.51	6.910	BA	BH	SPECIAL		
LE 105G 09								127.00	5.000	3.138	17.92	197.87	7.790	BB	BJ	SPECIAL		
LE 112G 01	2.84	0.112	306.93	69.00	35.59	8.00	RANDOM	50.80	2.000	20.436	116.69	64.01	2.520	X	BE	SPECIAL		
LE 112G 02								57.15	2.250	15.732	89.83	74.42	2.930	X	BE	SPECIAL		
LE 112G 03								63.50	2.500	12.788	73.02	84.84	3.340	Y	BF	SPECIAL		
LE 112G 04								69.85	2.750	10.772	61.51	95.00	3.740	Y	BF	SPECIAL		
LE 112G 05								76.20	3.000	9.305	53.13	105.41	4.150	Z	BG	SPECIAL		
LE 112G 06								88.90	3.500	7.314	41.76	125.98	4.960	BA	BH	SPECIAL		
LE 112G 07								101.60	4.000	6.025	34.40	146.56	5.770	BB	BJ	SPECIAL		
LE 112G 08								114.30	4.500	5.121	29.24	167.39	6.590	BC	BK	SPECIAL		
LE 112G 09								127.00	5.000	4.454	25.43	187.96	7.400	BD	BL	SPECIAL		
LE 112G 10								139.70	5.500	3.940	22.50	208.56	8.211	BF	BN	SPECIAL		
LE 112G 11								152.40	6.000	3.532	20.17	229.21	9.024	BG	BP	SPECIAL		
LE 125G 01	3.18	0.125	387.00	87.00	84.52	19.00	RANDOM	50.80	2.000	35.965	205.36	59.21	2.331	BF	BH	SPECIAL		
LE 125G 02								57.15	2.250	27.972	159.72	67.97	2.676	BF	BH	SPECIAL		
LE 125G 03								63.50	2.500	22.886	130.68	76.71	3.020	BG	BJ	SPECIAL		
LE 125G 04								69.85	2.750	19.366	110.58	85.47	3.365	BG	BJ	SPECIAL		
LE 125G 05								76.20	3.000	16.783	95.83	94.23	3.710	BG	BJ	SPECIAL		
LE 125G 06								88.90	3.500	13.251	75.66	111.73	4.399	BJ	BL	SPECIAL		
LE 125G 07								101.60	4.000	10.946	62.50	129.24	5.088	BL	BN	SPECIAL		
LE 125G 08								114.30	4.500	9.324	53.24	146.74	5.777	BM	BP	SPECIAL		
LE 125G 09								127.00	5.000	8.121	46.37	164.24	6.466	BN	BQ	SPECIAL		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.



# EXTENSION SPRINGS

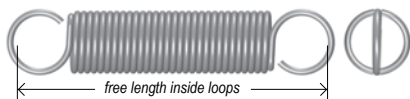


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LEM180GH 01†	20.00	0.787	1.80	0.071	87.00	19.56	13.05	2.93	INLINE	46.00	1.811	1.780	10.16	87.91	3.461	S	W	SPECIAL
LEM180GH 02†										56.80	2.236	1.110	6.34	123.80	4.874	S	W	SPECIAL
LEM180GH 03†										73.00	2.874	0.710	4.05	178.00	7.008	U	Z	SPECIAL
LEM180GH 04†										100.00	3.937	0.440	2.51	267.00	10.512	W	BB	SPECIAL
LEM180GH 05†										136.00	5.354	0.290	1.66	386.99	15.236	Z	BE	SPECIAL
LE 055H 01	21.59	0.850	1.40	0.055	34.70	7.80	3.11	0.70	RANDOM	50.80	2.000	0.560	3.20	107.19	4.220	T	X	CE
LE 055H 02										57.15	2.250	0.368	2.10	143.00	5.630	T	X	CE
LE 055H 03										63.50	2.500	0.280	1.60	176.28	6.940	U	Z	CF
LE 055H 04										69.85	2.750	0.210	1.20	220.22	8.670	U	Z	CF
LE 063H 01			1.60	0.063	50.26	11.30	4.45	1.00	RANDOM	57.15	2.250	0.683	3.90	124.21	4.890	T	X	CE
LE 063H 02										63.50	2.500	0.508	2.90	153.67	6.050	T	X	CE
LE 063H 03										69.85	2.750	0.403	2.30	183.64	7.230	U	Z	CF
LE 063H 04										76.20	3.000	0.333	1.90	213.87	8.420	W	BA	CG
LE 063H 05			88.90	3.500	0.245	1.40	275.84	10.860	X	BB	CH							
LE 075H 01			1.91	0.075	81.85	18.40	7.56	1.70	RANDOM	57.15	2.250	1.699	9.70	100.84	3.970	T	Y	SPECIAL
LE 075H 02										63.50	2.500	1.313	7.50	120.14	4.730	T	Y	SPECIAL
LE 075H 03										69.85	2.750	1.051	6.00	140.46	5.530	U	Z	SPECIAL
LE 075H 04										76.20	3.000	0.876	5.00	161.04	6.340	V	BA	SPECIAL
LE 075H 05										88.90	3.500	0.666	3.80	200.41	7.890	W	BB	SPECIAL
LE 075H 06										101.60	4.000	0.525	3.00	243.08	9.570	X	BC	SPECIAL
LE 075H 07										114.30	4.500	0.438	2.50	283.97	11.180	Y	BD	SPECIAL
LE 075H 08	120.65	4.750								0.403	2.30	305.05	12.010	Z	BE	SPECIAL		
LE 075H 09	127.00	5.000								0.385	2.20	319.79	12.590	BA	BF	SPECIAL		
LE 085H 0	2.16	0.085	115.21	25.90	10.68	2.40	RANDOM	50.80	2.000	4.729	27.00	72.90	2.870	S	X	SPECIAL		
LE 085H 01								57.15	2.250	3.363	19.20	88.14	3.470	T	Y	SPECIAL		
LE 085H 02								63.50	2.500	2.452	14.00	106.17	4.180	T	Y	SPECIAL		
LE 085H 03								69.85	2.750	1.944	11.10	123.70	4.870	U	Z	SPECIAL		
LE 085H 04								76.20	3.000	1.664	9.50	138.94	5.470	V	BA	SPECIAL		
LE 085H 05								88.90	3.500	1.278	7.30	170.69	6.720	W	BB	SPECIAL		
LE 085H 06								101.60	4.000	1.016	5.80	204.47	8.050	X	BC	SPECIAL		
LE 085H 07								114.30	4.500	0.858	4.90	236.22	9.300	Y	BD	SPECIAL		
LE 085H 08								120.65	4.750	0.788	4.50	253.24	9.970	Z	BE	SPECIAL		
LE 085H 09								127.00	5.000	0.718	4.10	272.54	10.730	BA	BF	SPECIAL		
LE 085H 10								139.70	5.500	0.630	3.60	305.56	12.030	BB	BG	SPECIAL		
LE 085H 11	152.40	6.000	0.569	3.25	336.04	13.230	BC	BH	SPECIAL									
LEM200HB 01†	22.00	0.866	2.00	0.079	107.00	24.05	16.11	3.62	INLINE	50.80	2.000	2.030	11.59	95.50	3.760	S	X	SPECIAL
LEM200HB 02†										62.80	2.472	1.270	7.25	134.29	5.287	T	Y	SPECIAL
LEM200HB 03†										80.80	3.181	0.810	4.63	192.81	7.591	W	BB	SPECIAL
LEM200HB 04†										111.00	4.370	0.510	2.91	289.99	11.417	Y	BD	SPECIAL
LEM200HB 05†										151.00	5.945	0.340	1.94	419.00	16.496	BC	BH	SPECIAL
LE 063J 01	25.40	1.000	1.60	0.063	43.15	9.70	4.00	0.90	RANDOM	63.50	2.500	0.455	2.60	149.35	5.880	Y	BC	CJ
LE 063J 02										69.85	2.750	0.333	1.90	187.45	7.380	Y	BC	CJ
LE 063J 03										76.20	3.000	0.263	1.50	225.30	8.870	Z	BD	CK
LE 063J 04										82.55	3.250	0.210	1.20	268.73	10.580	Z	BD	CK
LE 075J 01	1.91	0.075	69.84	15.70	6.23	1.40	RANDOM	63.50	2.500	1.103	6.30	121.16	4.770	Y	BE	SPECIAL		
LE 075J 02								69.85	2.750	0.806	4.60	148.84	5.860	Y	BE	SPECIAL		
LE 075J 03								76.20	3.000	0.630	3.60	177.04	6.970	Z	BF	SPECIAL		
LE 075J 04								88.90	3.500	0.455	2.60	228.60	9.000	Z	BF	SPECIAL		
LE 075J 05								101.60	4.000	0.350	2.00	283.21	11.150	BA	BG	SPECIAL		
LE 075J 06								114.30	4.500	0.298	1.70	327.91	12.910	BB	BG	SPECIAL		
LE 075J 07								127.00	5.000	0.245	1.40	386.33	15.210	BC	BJ	SPECIAL		
LE 085J 0	2.16	0.085	99.20	22.30	8.90	2.00	RANDOM	63.50	2.500	2.016	11.51	108.31	4.264	Y	BE	SPECIAL		
LE 085J 01								69.85	2.750	1.489	8.50	130.56	5.140	Y	BE	SPECIAL		
LE 085J 02								76.20	3.000	1.191	6.80	152.15	5.990	Z	BF	SPECIAL		
LE 085J 03								88.90	3.500	0.876	5.00	192.02	7.560	Z	BF	SPECIAL		
LE 085J 04								101.60	4.000	0.683	3.90	233.93	9.210	BA	BG	SPECIAL		
LE 085J 05								114.30	4.500	0.560	3.20	275.34	10.840	BB	BH	SPECIAL		
LE 085J 06	127.00	5.000	0.473	2.70	318.01	12.520	BC	BJ	SPECIAL									
LE 095J 0	2.41	0.095	133.45	30.00	12.01	2.70	RANDOM	63.50	2.500	4.221	24.10	92.28	3.633	Y	BD	SPECIAL		
LE 095J 01								69.85	2.750	2.627	15.00	116.08	4.570	Y	BE	SPECIAL		
LE 095J 02								76.20	3.000	2.137	12.20	133.10	5.240	Z	BF	SPECIAL		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

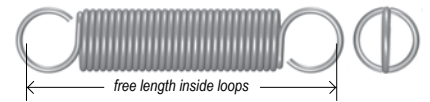
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP									
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless							
																M	S	\$316							
LE 095J 03	25.40	1.000	2.41	0.095	133.45	30.00	12.01	2.70	RANDOM	88.90	3.500	1.524	8.70	168.66	6.640	Z	BF	SPECIAL							
LE 095J 04										101.60	4.000	1.208	6.90	202.18	7.960	BA	BG	SPECIAL							
LE 095J 05										114.30	4.500	0.981	5.60	238.25	9.380	BB	BH	SPECIAL							
LE 095J 06										127.00	5.000	0.841	4.80	271.53	10.690	BC	BJ	SPECIAL							
LE 095J 07										139.70	5.500	0.722	4.12	308.10	12.130	BD	BK	SPECIAL							
LE 095J 08										152.40	6.000	0.641	3.66	341.88	13.460	BE	BL	SPECIAL							
LE 095J 09										165.10	6.500	0.573	3.27	377.19	14.850	BF	BM	SPECIAL							
LE 095J 10										177.80	7.000	0.518	2.96	411.99	16.220	BG	BN	SPECIAL							
LE 095J 11										203.20	8.000	0.420	2.40	492.07	19.373	BH	BN	SPECIAL							
LE 095J 12										228.60	9.000	0.368	2.10	558.80	22.000	BJ	BP	SPECIAL							
LE 105J 0										2.67	0.105	177.93	40.00	17.79	4.00	RANDOM	63.50	2.500	6.830	39.00	86.94	3.423	Z	BE	SPECIAL
LE 105J 01																	69.85	2.750	4.063	23.20	109.22	4.300	Z	BE	SPECIAL
LE 105J 02	76.20	3.000	3.415	19.50	123.19	4.850	BA	BF	SPECIAL																
LE 105J 03	88.90	3.500	2.434	13.90	154.69	6.090	BB	BG	SPECIAL																
LE 105J 04	101.60	4.000	1.944	11.10	183.90	7.240	BC	BH	SPECIAL																
LE 105J 05	114.30	4.500	1.580	9.02	215.65	8.490	BD	BJ	SPECIAL																
LE 105J 06	127.00	5.000	1.354	7.73	245.36	9.660	BE	BK	SPECIAL																
LE 105J 07	139.70	5.500	1.168	6.67	276.86	10.900	BF	BL	SPECIAL																
LE 105J 08	152.40	6.000	1.028	5.87	308.10	12.130	BG	BM	SPECIAL																
LE 105J 09	165.10	6.500	0.930	5.31	337.31	13.280	BH	BP	SPECIAL																
LE 105J 10	177.80	7.000	0.842	4.81	367.79	14.480	BJ	BQ	SPECIAL																
LE 105J 11	203.20	8.000	0.736	4.20	420.90	16.571	BK	BQ	SPECIAL																
LE 105J 12	228.60	9.000	0.630	3.60	482.60	19.000	BL	BR	SPECIAL																
LE 115J 0	2.92	0.115	222.41	50.00	22.24	5.00	RANDOM	63.50	2.500	10.578	60.40	82.42	3.245	Z	BE	SPECIAL									
LE 115J 01								69.85	2.750	6.690	38.20	99.82	3.930	BA	BF	SPECIAL									
LE 115J 02								76.20	3.000	5.289	30.20	114.05	4.490	BA	BF	SPECIAL									
LE 115J 03								88.90	3.500	3.976	22.70	139.19	5.480	BB	BG	SPECIAL									
LE 115J 04								101.60	4.000	3.100	17.70	166.12	6.540	BC	BH	SPECIAL									
LE 115J 05								114.30	4.500	2.539	14.50	193.04	7.600	BD	BJ	SPECIAL									
LE 115J 06								127.00	5.000	2.189	12.50	218.44	8.600	BE	BK	SPECIAL									
LE 115J 07								139.70	5.500	1.891	10.80	245.62	9.670	BF	BL	SPECIAL									
LE 115J 08								152.40	6.000	1.664	9.50	272.80	10.740	BG	BM	SPECIAL									
LE 115J 09								165.10	6.500	1.506	8.60	297.94	11.730	BJ	BQ	SPECIAL									
LE 115J 10								177.80	7.000	1.366	7.80	324.36	12.770	BL	BS	SPECIAL									
LE 115J 11								203.20	8.000	1.173	6.70	373.79	14.716	BM	BS	SPECIAL									
LE 115J 12	228.60	9.000	1.016	5.80	425.68	16.759	BN	BT	SPECIAL																
LE 125J 0	3.18	0.125	311.38	70.00	31.14	7.00	RANDOM	63.50	2.500	15.289	87.30	81.84	3.222	BB	BF	SPECIAL									
LE 125J 01								69.85	2.750	10.194	58.21	97.28	3.830	BC	BJ	SPECIAL									
LE 125J 02								76.20	3.000	8.340	47.62	109.73	4.320	BD	BK	SPECIAL									
LE 125J 03								88.90	3.500	6.116	34.92	134.62	5.300	BE	BL	SPECIAL									
LE 125J 04								101.60	4.000	4.828	27.57	159.77	6.290	BF	BM	SPECIAL									
LE 125J 05								114.30	4.500	3.990	22.78	184.66	7.270	BG	BN	SPECIAL									
LE 125J 06								127.00	5.000	3.398	19.40	209.55	8.250	BH	BP	SPECIAL									
LE 125J 07								139.70	5.500	2.960	16.90	234.44	9.230	BJ	BQ	SPECIAL									
LE 125J 08								152.40	6.000	2.622	14.97	259.33	10.210	BK	BR	SPECIAL									
LE 125J 09								165.10	6.500	2.417	13.80	281.05	11.065	BK	BQ	SPECIAL									
LE 125J 10								177.80	7.000	2.189	12.50	305.82	12.040	BL	BR	SPECIAL									
LE 125J 11								203.20	8.000	1.839	10.50	355.60	14.000	BM	BS	SPECIAL									
LE 125J 12	228.60	9.000	1.576	9.00	406.40	16.000	BN	BT	SPECIAL																
LE 135J 0	3.43	0.135	378.10	85.00	40.03	9.00	RANDOM	63.50	2.500	23.496	134.16	77.90	3.067	BE	BL	SPECIAL									
LE 135J 01								69.85	2.750	15.102	86.23	92.20	3.630	BE	BL	SPECIAL									
LE 135J 02								76.20	3.000	12.413	70.88	103.38	4.070	BF	BM	SPECIAL									
LE 135J 03								88.90	3.500	9.156	52.28	125.73	4.950	BG	BN	SPECIAL									
LE 135J 04								101.60	4.000	7.252	41.41	148.34	5.840	BH	BP	SPECIAL									
LE 135J 05								114.30	4.500	6.004	34.28	170.69	6.720	BJ	BQ	SPECIAL									
LE 135J 06								127.00	5.000	5.123	29.25	193.04	7.600	BK	BR	SPECIAL									
LE 135J 07								139.70	5.500	4.466	25.50	215.39	8.480	BL	BS	SPECIAL									
LE 135J 08								152.40	6.000	3.960	22.61	237.74	9.360	BM	BT	SPECIAL									
LE 135J 09								165.10	6.500	3.643	20.80	257.91	10.154	BN	BR	SPECIAL									
LE 135J 10								177.80	7.000	3.310	18.90	279.93	11.021	BP	BS	SPECIAL									

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS

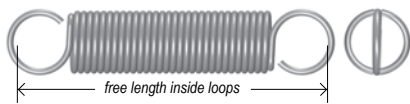


● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	S316
LE 135J 11	25.40	1.000	3.43	0.135	378.10	85.00	40.03	9.00	RANDOM	203.20	8.000	2.785	15.90	324.61	12.780	BQ	BT	SPECIAL
LE 135J 12										228.60	9.000	2.399	13.70	369.49	14.547	BR	BU	SPECIAL
LE 148J 01			3.76	0.148	498.42	112.05	43.06	9.68	RANDOM	63.50	2.500	35.517	202.80	76.20	3.000	BF	BL	SPECIAL
LE 148J 02										69.85	2.750	27.899	159.30	86.18	3.393	BG	BM	SPECIAL
LE 148J 03										76.20	3.000	21.699	123.90	97.18	3.826	BH	BN	SPECIAL
LE 148J 04										88.90	3.500	16.270	92.90	116.89	4.602	BJ	BP	SPECIAL
LE 148J 05										101.60	4.000	12.592	71.90	137.77	5.424	BK	BQ	SPECIAL
LE 148J 06										114.30	4.500	10.280	58.70	158.60	6.244	BL	BR	SPECIAL
LE 148J 07										127.00	5.000	8.687	49.60	179.43	7.064	BM	BS	SPECIAL
LE 148J 08										139.70	5.500	7.653	43.70	199.21	7.843	BN	BT	SPECIAL
LE 148J 09										152.40	6.000	6.743	38.50	219.94	8.659	BP	BU	SPECIAL
LE 148J 10										165.10	6.500	6.007	34.30	240.92	9.485	BQ	BV	SPECIAL
LE 148J 11										177.80	7.000	5.429	31.00	261.67	10.302	BR	BW	SPECIAL
LE 148J 12	203.20	8.000								4.588	26.20	302.44	11.907	BS	BX	SPECIAL		
LE 148J 13	228.60	9.000	3.940	22.50	344.17	13.550	BT	BY	SPECIAL									
LE 085JK 01	28.58	1.125	2.16	0.085	93.41	21.00	8.41	1.89	RANDOM	76.20	3.000	1.226	7.00	145.54	5.730	BA	BF	SPECIAL
LE 085JK 02										88.90	3.500	0.753	4.30	201.68	7.940	BB	BG	SPECIAL
LE 085JK 03										101.60	4.000	0.543	3.10	258.06	10.160	BC	BH	SPECIAL
LE 085JK 04										114.30	4.500	0.438	2.50	308.36	12.140	BD	BJ	SPECIAL
LE 085JK 05										127.00	5.000	0.350	2.00	369.82	14.560	BE	BK	SPECIAL
LE 085JK 06										139.70	5.500	0.298	1.70	425.20	16.740	BF	BL	SPECIAL
LE 085JK 07										152.40	6.000	0.263	1.50	476.00	18.740	BG	BM	SPECIAL
LE 085JK 08										165.10	6.500	0.228	1.30	538.48	21.200	BH	BN	SPECIAL
LE 085JK 09										177.80	7.000	0.210	1.20	582.42	22.930	BJ	BQ	SPECIAL
LE 105JK 01	28.58	1.125	2.67	0.105	168.14	37.80	15.12	3.40	RANDOM	76.20	3.000	3.433	19.60	120.90	4.760	BA	BF	SPECIAL
LE 105JK 02										88.90	3.500	2.189	12.50	158.75	6.250	BB	BG	SPECIAL
LE 105JK 03										101.60	4.000	1.611	9.20	196.60	7.740	BC	BH	SPECIAL
LE 105JK 04										114.30	4.500	1.278	7.30	233.93	9.210	BD	BJ	SPECIAL
LE 105JK 05										127.00	5.000	1.051	6.00	272.54	10.730	BE	BK	SPECIAL
LE 105JK 06										139.70	5.500	0.893	5.10	311.15	12.250	BF	BL	SPECIAL
LE 105JK 07										152.40	6.000	0.788	4.50	346.46	13.640	BG	BM	SPECIAL
LE 105JK 08										165.10	6.500	0.683	3.90	389.13	15.320	BH	BN	SPECIAL
LE 105JK 09										177.80	7.000	0.613	3.50	427.48	16.830	BJ	BQ	SPECIAL
LE 125JK 01	28.58	1.125	3.18	0.125	265.11	59.60	24.51	5.51	RANDOM	76.20	3.000	8.091	46.20	105.94	4.171	BD	BJ	SPECIAL
LE 125JK 02										88.90	3.500	5.307	30.30	134.24	5.285	BE	BK	SPECIAL
LE 125JK 03										101.60	4.000	3.940	22.50	162.66	6.404	BF	BL	SPECIAL
LE 125JK 04										114.30	4.500	3.135	17.90	191.06	7.522	BG	BM	SPECIAL
LE 125JK 05										127.00	5.000	2.609	14.90	219.20	8.630	BH	BN	SPECIAL
LE 125JK 06										139.70	5.500	2.224	12.70	247.88	9.759	BJ	BP	SPECIAL
LE 125JK 07										152.40	6.000	1.944	11.10	276.17	10.873	BK	BQ	SPECIAL
LE 125JK 08										165.10	6.500	1.734	9.90	303.89	11.964	BL	BR	SPECIAL
LE 125JK 09										177.80	7.000	1.559	8.90	332.16	13.077	BM	BS	SPECIAL
LE 095K 01	31.75	1.250	2.41	0.095	115.65	26.00	10.45	2.35	RANDOM	82.55	3.250	1.275	7.28	165.10	6.500	BB	BH	SPECIAL
LE 095K 02										88.90	3.500	1.026	5.86	191.52	7.540	BB	BH	SPECIAL
LE 095K 03										101.60	4.000	0.739	4.22	243.84	9.600	BC	BJ	SPECIAL
LE 095K 04										114.30	4.500	0.578	3.30	296.42	11.670	BD	BK	SPECIAL
LE 095K 05										127.00	5.000	0.475	2.71	348.74	13.730	BE	BL	SPECIAL
LE 095K 06										139.70	5.500	0.403	2.30	400.81	15.780	BF	BM	SPECIAL
LE 095K 07										152.40	6.000	0.349	1.99	454.15	17.880	BG	BN	SPECIAL
LE 095K 08										165.10	6.500	0.308	1.76	506.48	19.940	BH	BP	SPECIAL
LE 095K 09										177.80	7.000	0.275	1.57	560.32	22.060	BJ	BQ	SPECIAL
LE 095K 10										190.50	7.500	0.250	1.43	610.62	24.040	BK	BR	SPECIAL
LE 115K 01	31.75	1.250	2.92	0.115	200.17	45.00	18.90	4.25	RANDOM	82.55	3.250	3.163	18.06	139.95	5.510	BF	BK	SPECIAL
LE 115K 02										88.90	3.500	2.574	14.70	159.26	6.270	BF	BK	SPECIAL
LE 115K 03										101.60	4.000	1.877	10.72	198.12	7.800	BG	BL	SPECIAL
LE 115K 04										114.30	4.500	1.476	8.43	236.98	9.330	BH	BM	SPECIAL
LE 115K 05										127.00	5.000	1.217	6.95	275.84	10.860	BJ	BN	SPECIAL
LE 115K 06										139.70	5.500	1.035	5.91	314.96	12.400	BK	BP	SPECIAL
LE 115K 07										152.40	6.000	0.900	5.14	353.82	13.930	BK	BQ	SPECIAL
LE 115K 08										165.10	6.500	0.797	4.55	392.68	15.460	BL	BR	SPECIAL

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.



# EXTENSION SPRINGS

● Loops at Random Position, except for † springs

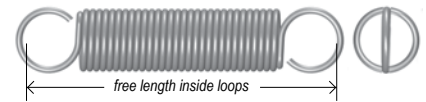
● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP		
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless
																M	S	\$316
LE 115K 09	31.75	1.250	2.92	0.115	200.17	45.00	18.90	4.25	RANDOM	177.80	7.000	0.715	4.08	431.55	16.990	BM	BS	SPECIAL
LE 115K 10										190.50	7.500	0.648	3.70	470.15	18.510	BN	BT	SPECIAL
LE 135K 01			3.43	0.135	289.13	65.00	27.58	6.20	RANDOM	82.55	3.250	7.093	40.50	119.38	4.700	BJ	BL	SPECIAL
LE 135K 02										88.90	3.500	6.025	34.40	132.33	5.210	BJ	BL	SPECIAL
LE 135K 03										101.60	4.000	4.466	25.50	160.27	6.310	BK	BM	SPECIAL
LE 135K 04										114.30	4.500	3.450	19.70	189.99	7.480	BK	BM	SPECIAL
LE 135K 05										127.00	5.000	2.872	16.40	218.19	8.590	BL	BP	SPECIAL
LE 135K 06										139.70	5.500	2.382	13.60	249.43	9.820	BL	BP	SPECIAL
LE 135K 07										152.40	6.000	2.084	11.90	277.88	10.940	BM	BR	SPECIAL
LE 135K 08										165.10	6.500	1.856	10.60	306.07	12.050	BM	BR	SPECIAL
LE 135K 09										177.80	7.000	1.664	9.50	335.03	13.190	BN	BS	SPECIAL
LE 135K 10										190.50	7.500	1.506	8.60	364.24	14.340	BP	BT	SPECIAL
LE 148K 01			3.76	0.148	384.77	86.50	35.59	8.00	RANDOM	82.55	3.250	11.187	63.88	113.77	4.479	BK	BP	SPECIAL
LE 148K 02										88.90	3.500	9.251	52.82	126.64	4.986	BK	BP	SPECIAL
LE 148K 03										101.60	4.000	6.872	39.24	152.43	6.001	BL	BQ	SPECIAL
LE 148K 04										114.30	4.500	5.466	31.21	178.18	7.015	BL	BQ	SPECIAL
LE 148K 05										127.00	5.000	4.538	25.91	203.96	8.030	BM	BR	SPECIAL
LE 148K 06										139.70	5.500	3.879	22.15	229.72	9.044	BM	BR	SPECIAL
LE 148K 07										152.40	6.000	3.387	19.34	255.50	10.059	BN	BS	SPECIAL
LE 148K 08										165.10	6.500	3.005	17.16	281.31	11.075	BN	BS	SPECIAL
LE 148K 09	177.80	7.000								2.702	15.43	307.01	12.087	BP	BT	SPECIAL		
LE 148K 10	190.50	7.500								2.454	14.01	332.82	13.103	BQ	BU	SPECIAL		
LE 125L 01	38.10	1.500	3.18	0.125	200.17	45.00	18.68	4.20	RANDOM	114.30	4.500	1.576	9.00	229.36	9.030	BJ	BN	SPECIAL
LE 125L 02										127.00	5.000	1.243	7.10	273.05	10.750	BK	BP	SPECIAL
LE 125L 03										139.70	5.500	1.028	5.87	316.23	12.450	BL	BQ	SPECIAL
LE 125L 04										152.40	6.000	0.876	5.00	359.66	14.160	BM	BR	SPECIAL
LE 125L 05										165.10	6.500	0.762	4.35	403.35	15.880	BN	BS	SPECIAL
LE 125L 06										177.80	7.000	0.676	3.86	446.28	17.570	BP	BT	SPECIAL
LE 125L 07										190.50	7.500	0.606	3.46	489.97	19.290	BQ	BU	SPECIAL
LE 125L 08										203.20	8.000	0.550	3.14	533.15	20.990	BR	BV	SPECIAL
LE 148L 01	3.76	0.148	314.18	70.63	29.80	6.70	RANDOM	114.30	4.500	4.256	24.30	181.13	7.131	BP	BS	SPECIAL		
LE 148L 02								127.00	5.000	3.275	18.70	213.84	8.419	BQ	BT	SPECIAL		
LE 148L 03								139.70	5.500	2.680	15.30	245.82	9.678	BR	BU	SPECIAL		
LE 148L 04								152.40	6.000	2.259	12.90	278.28	10.956	BS	BV	SPECIAL		
LE 148L 05								165.10	6.500	1.961	11.20	310.08	12.208	BT	BW	SPECIAL		
LE 148L 06								177.80	7.000	1.716	9.80	343.48	13.523	BU	BX	SPECIAL		
LE 148L 07								190.50	7.500	1.541	8.80	375.03	14.765	BV	BY	SPECIAL		
LE 148L 08								203.20	8.000	1.384	7.90	408.74	16.092	BW	BZ	SPECIAL		
LE 177L 01	4.50	0.177	538.06	120.96	48.80	10.97	RANDOM	114.30	4.500	10.490	59.90	160.93	6.336	BQ	BW	SPECIAL		
LE 177L 02								127.00	5.000	8.214	46.90	186.56	7.345	BR	BX	SPECIAL		
LE 177L 03								139.70	5.500	6.743	38.50	212.27	8.357	BS	BY	SPECIAL		
LE 177L 04								152.40	6.000	5.727	32.70	237.85	9.364	BT	BZ	SPECIAL		
LE 177L 05								165.10	6.500	4.974	28.40	263.47	10.373	BU	CA	SPECIAL		
LE 177L 06								177.80	7.000	4.396	25.10	289.10	11.382	BV	CB	SPECIAL		
LE 177L 07								190.50	7.500	3.940	22.50	314.66	12.388	BW	CC	SPECIAL		
LE 177L 08								203.20	8.000	3.555	20.30	340.82	13.418	BX	CD	SPECIAL		
LE 148N 01	44.45	1.750	3.76	0.148	286.15	64.33	25.76	5.79	RANDOM	127.00	5.000	2.627	15.00	226.14	8.903	BR	BX	SPECIAL
LE 148N 02										139.70	5.500	2.014	11.50	268.99	10.590	BS	BY	SPECIAL
LE 148N 03										152.40	6.000	1.646	9.40	310.59	12.228	BT	BZ	SPECIAL
LE 148N 04										165.10	6.500	1.384	7.90	353.31	13.910	BU	CA	SPECIAL
LE 148N 05										177.80	7.000	1.191	6.80	396.47	15.609	BV	CB	SPECIAL
LE 148N 06										190.50	7.500	1.051	6.00	438.30	17.256	BW	CC	SPECIAL
LE 148N 07										203.20	8.000	0.928	5.30	483.74	19.045	BX	CD	SPECIAL
LE 148N 08										228.60	9.000	0.771	4.40	566.52	22.304	BY	CE	SPECIAL
LE 177N 01	4.50	0.177	469.33	105.51	42.26	9.50	RANDOM	127.00	5.000	6.410	36.60	193.62	7.623	BS	BY	SPECIAL		
LE 177N 02								139.70	5.500	4.991	28.50	225.27	8.869	BT	BZ	SPECIAL		
LE 177N 03								152.40	6.000	4.081	23.30	257.07	10.121	BU	CA	SPECIAL		
LE 177N 04								165.10	6.500	3.450	19.70	288.90	11.374	BV	CB	SPECIAL		
LE 177N 05								177.80	7.000	2.995	17.10	320.42	12.615	BW	CC	SPECIAL		
LE 177N 06								190.50	7.500	2.645	15.10	351.99	13.858	BX	CD	SPECIAL		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

Spring rates and maximum loads relate only to music wire. When using stainless steel, multiply by 0.833.

# EXTENSION SPRINGS



● Loops at Random Position, except for † springs

● Music Wire (Plated), or Stainless Steel (Passivated)

LEE STOCK NUMBER	OUTSIDE DIAMETER		NOMINAL WIRE DIAMETER		MAXIMUM LOAD		INITIAL TENSION		LOOP POSITION	NOMINAL FREE LENGTH		SPRING RATE		MAXIMUM EXTENDED LENGTH		PRICE GROUP				
	MM	IN	MM	IN	N	LB	N	LB		MM	IN	N/MM	LB/IN	MM	IN	Music Wire	302 Stainless	316 Stainless		
																M	S	S316		
LE 177N 07 LE 177N 08	44.45	1.750	4.50	0.177	469.33	105.51	42.26	9.50	RANDOM	203.20 228.60	8.000 9.000	2.364 1.961	13.50 11.20	383.84 446.33	15.112 17.572	BY BZ	CE CF	SPECIAL SPECIAL		
LE 207N 01 LE 207N 02 LE 207N 03			5.26	0.207	723.06	162.55	64.90	14.59	RANDOM	127.00 139.70 152.40	5.000 5.500 6.000	14.046 11.068 9.124	80.20 63.20 52.10	173.86 199.16 224.54	6.845 7.841 8.840	BT BU BV	BZ CA CB	SPECIAL SPECIAL SPECIAL		
LE 207N 04 LE 207N 05 LE 207N 06			165.10 177.80 190.50	6.500 7.000 7.500	7.758 6.760 5.990	44.30 38.60 34.20	249.94 275.16 300.38	9.840 10.833 11.826	BW BX BY	CC CD CE	SPECIAL SPECIAL SPECIAL									
LE 207N 07 LE 207N 08			203.20 228.60	8.000 9.000	5.359 4.448	30.60 25.40	326.01 376.56	12.835 14.825	BZ CA	CF CG	SPECIAL SPECIAL									
LE 177P 01 LE 177P 02 LE 177P 03			50.80	2.000	4.50	0.177	413.46	92.95	37.23	8.37	RANDOM	139.70 152.40 165.10	5.500 6.000 6.500	4.238 3.275 2.680	24.20 18.70 15.30	228.47 267.28 305.51	8.995 10.523 12.028	BU BV BW	CA CB CC	SPECIAL SPECIAL SPECIAL
LE 177P 04 LE 177P 05 LE 177P 06												177.80 190.50 203.20	7.000 7.500 8.000	2.259 1.944 1.716	12.90 11.10 9.80	344.35 384.05 422.43	13.557 15.120 16.631	BX BY BZ	CD CE CF	SPECIAL SPECIAL SPECIAL
LE 177P 07 LE 177P 08												228.60 254.00	9.000 10.000	1.384 1.156	7.90 6.60	500.53 579.50	19.706 22.815	CA CB	CG CH	SPECIAL SPECIAL
LE 207P 01 LE 207P 02 LE 207P 03												139.70 152.40 165.10	5.500 6.000 6.500	9.194 7.198 5.919	52.50 41.10 33.80	202.72 232.89 262.97	7.981 9.169 10.353	BV BW BX	CB CC CD	SPECIAL SPECIAL SPECIAL
LE 207P 04 LE 207P 05 LE 207P 06	177.80 190.50 203.20	7.000 7.500 8.000										5.026 4.361 3.853	28.70 24.90 22.00	293.07 323.37 353.57	11.538 12.731 13.920	BY BZ CA	CE CF CG	SPECIAL SPECIAL SPECIAL		
LE 207P 07 LE 207P 08	228.60 254.00	9.000 10.000										3.135 2.627	17.90 15.00	413.41 474.55	16.276 18.683	CB CC	CH CJ	SPECIAL SPECIAL		

† Indicates DIN Extension Springs meeting the design parameters outlined in Standard DIN 2097.

# SPECIALITY STOCK PARTS - MIL-SPEC SPRINGS

## Guide to using tables

**Free Length**  
The overall height of the spring in the unloaded position.

**Active Coils**  
Those coils which are free to deflect under load.

**Deflection Per Coil**  
Amount of movement per coil to achieve the design load.

**Deflection**  
The amount of spring movement under the design load.

**Lee Spring Stock Number**

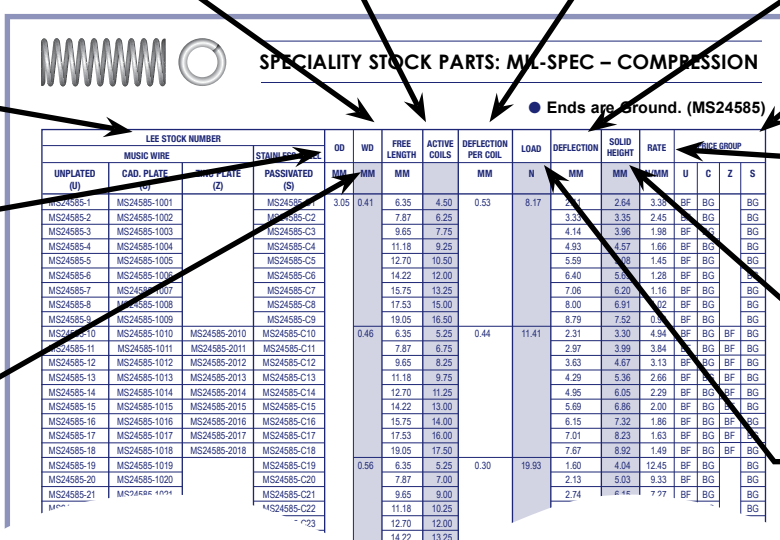
**Price Group**  
Reference for price list.

**Rate**  
Change in load or force per unit of deflection.

**Solid Height**  
Length when fully compressed.

**Outside Diameter**  
Spring outer diameter, parts listed in ascending order.

**Wire Diameter**  
Wire diameter of spring wire.



**SPECIALITY STOCK PARTS: MIL-SPEC – COMPRESSION**

• Ends are ground. (MS24585)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	LOAD	DEFLECTION	SOLID HEIGHT	RATE	PRICE GROUP				
UNPLATED (U)	MUSIC WIRE CAD. PLATE (C)	CAD. PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	MM	MM	N/25.4	U	C	Z	S	
MS24585-1	MS24585-1001		MS24585-C1	3.05	0.41	6.35	4.50	0.53	8.17	2.14	2.64	3.38	BF				BG
MS24585-2	MS24585-1002		MS24585-C2			7.87	6.25			3.32	3.35	2.45	BF				BG
MS24585-3	MS24585-1003		MS24585-C3			9.65	7.75			4.14	3.96	1.98	BF				BG
MS24585-4	MS24585-1004		MS24585-C4			11.18	9.25			4.93	4.57	1.66	BF				BG
MS24585-5	MS24585-1005		MS24585-C5			12.70	10.50			5.59	5.08	1.45	BF				BG
MS24585-6	MS24585-1006		MS24585-C6			14.22	12.00			6.40	5.83	1.28	BF				BG
MS24585-7	MS24585-1007		MS24585-C7			15.75	13.25			7.06	6.20	1.16	BF				BG
MS24585-8	MS24585-1008		MS24585-C8			17.53	15.00			8.00	6.91	1.02	BF				BG
MS24585-9	MS24585-1009		MS24585-C9			19.05	16.50			8.79	7.52	0.91	BF				BG
MS24585-10	MS24585-1010	MS24585-2010	MS24585-C10		0.46	6.35	5.25	0.44	11.41	2.31	3.30	4.94	BF	BF	BF		BG
MS24585-11	MS24585-1011	MS24585-2011	MS24585-C11			7.87	6.75			2.97	3.99	3.84	BF	BF	BF		BG
MS24585-12	MS24585-1012	MS24585-2012	MS24585-C12			9.65	8.25			3.63	4.67	3.13	BF	BF	BF		BG
MS24585-13	MS24585-1013	MS24585-2013	MS24585-C13			11.18	9.75			4.29	5.36	2.66	BF	BF	BF		BG
MS24585-14	MS24585-1014	MS24585-2014	MS24585-C14			12.70	11.25			4.95	6.05	2.29	BF	BF	BF		BG
MS24585-15	MS24585-1015	MS24585-2015	MS24585-C15			14.22	13.00			5.69	6.86	2.00	BF	BF	BF		BG
MS24585-16	MS24585-1016	MS24585-2016	MS24585-C16			15.75	14.00			6.15	7.32	1.86	BF	BF	BF		BG
MS24585-17	MS24585-1017	MS24585-2017	MS24585-C17			17.53	16.00			7.01	8.23	1.63	BF	BF	BF		BG
MS24585-18	MS24585-1018	MS24585-2018	MS24585-C18			19.05	17.50			7.67	8.92	1.49	BF	BF	BF		BG
MS24585-19	MS24585-1019		MS24585-C19		0.56	6.35	5.25	0.30	19.93	1.60	4.04	12.45	BF	BF	BF		BG
MS24585-20	MS24585-1020		MS24585-C20			7.87	7.00			2.13	5.03	9.33	BF	BF	BF		BG
MS24585-21	MS24585-1021		MS24585-C21			9.65	9.00			2.74	6.44	7.77	BF	BF	BF		BG
MS24585-22	MS24585-1022		MS24585-C22			11.18	10.25										BG
						12.70	12.00										BG
						14.22	13.25										BG

### ADDITIONAL INFORMATION

Be sure to specify the complete numbers as designated by AS24585 and AS24586. MIL-SPEC Springs begin with the prefix MS24585 or MS24586 followed by a hyphen and the part number, e.g., MS24585-1002 or MS24586-C13. The following chart (right) is a helpful reference:

MIL-SPEC	Unplated	Cadmium Plated	Zinc Plated	Stainless Steel
Compression MS24585	MS24585-1 through MS24585-527	MS24585-1001 through MS24585-1527	MS24585-2010 through MS24585-2507	MS24585-C1 through MS24585-C527
Extension MS24586	MS24586-1 through MS24586-354	MS24586-501 through MS24586-854	MS24586-1006 through MS24586-1354	MS24586-C1 through MS24586-C354



### MIL-SPEC SPRINGS AVAILABLE IN STOCK.

When you need MIL-SPEC Springs, Lee Spring simplifies the purchasing process by offering the full range of MIL-SPEC Compression Springs and Extension Springs.

- **Simplified pricing** – no complicated price grids.
- **Paperwork included** – no additional charges for material certifications or traceability.
- **DFARS Compliance** – all Stainless Steel MIL-SPEC springs meet DFARS specifications.
- **Quick RFQ turnaround** – quantities over 1000.

### ABOUT MIL-SPEC SPRINGS

These products are part of the United States Defense Standard. They are used to help achieve standardisation objectives set by the U.S. Department of Defense. They are known interchangeably as “military standards”, “MIL-SPEC”, “MIL-STD”, or “MilSpecs.” These high precision designs meet stringent technical requirements and are used in a multitude of Military and Aerospace applications, both defense and non-defense related. MIL-SPEC springs are increasingly specified by other non-Defense government organisations, technical organisations, and highly regulated industries. The MIL-SPEC standard for compression springs for loads below 20 lbs. is AS24585; this standard was formerly MS24585. The MIL-SPEC standard for extension springs for loads below 30 lbs. is AS24586; this was formerly MS24586.

### MATERIALS:

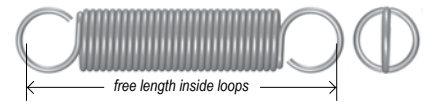
All MIL-SPEC springs are available in the four authorised AS24585 and AS24586 materials:

- Uncoated Music Wire per ASTM A228.
- Cadmium Plated Music Wire in accordance with SAE-AMS-QQ-P-416, Type II, Class 2.
- Zinc Plated Music Wire in accordance with ASTM B633, Type II, Fe/Zn5.
- Corrosion Resistant Stainless Steel 302 per ASTM A313 with passivation treatment in accordance with ASTM A967 or AMS2700. DFARS Compliant material only.

### ABOUT DFARS COMPLIANCE

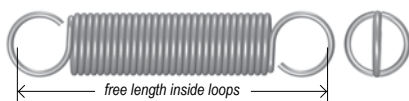
DFARS regulates the supply country for certain materials. It applies to Stainless Steel but does not apply to Music Wire. For a complete explanation of DFARS Compliance, please contact us for engineering assistance.

# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION



## ● Loops In-line position (MS24586)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP			
MUSIC WIRE			STAINLESS STEEL										U	C	Z	S
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM				
MS24586-1	MS24586-501		MS24586-C1	3.05	0.41	25.40	50.5	0.41	7.12	0.89	45.97	0.30	BH	BJ		BJ
MS24586-2	MS24586-502		MS24586-C2			28.58	58.5				52.58	0.26	BH	BJ		BJ
MS24586-3	MS24586-503		MS24586-C3			31.75	66.0				58.67	0.23	BJ	BJ		BJ
MS24586-4	MS24586-504		MS24586-C4			34.93	74.0				65.28	0.21	BJ	BJ		BJ
MS24586-5	MS24586-505		MS24586-C5			38.10	82.0				71.63	0.19	BJ	BJ		BJ
MS24586-6	MS24586-506	MS24586-1006	MS24586-C6	0.46	25.40	45.5	0.34	9.79	0.89	40.64	0.58	BJ	BJ	BJ	BJ	
MS24586-7	MS24586-507	MS24586-1007	MS24586-C7		28.58	52.0				45.97	0.51	BJ	BJ	BJ	BJ	
MS24586-8	MS24586-508	MS24586-1008	MS24586-C8		31.75	59.0				51.56	0.45	BJ	BJ	BJ	BJ	
MS24586-9	MS24586-509	MS24586-1009	MS24586-C9		34.93	66.5				57.15	0.40	BJ	BJ	BJ	BJ	
MS24586-10	MS24586-510	MS24586-1010	MS24586-C10		38.10	73.0				62.74	0.36	BJ	BJ	BJ	BJ	
MS24586-11	MS24586-511	MS24586-1011	MS24586-C11		41.28	80.0				68.33	0.33	BJ	BJ	BJ	BJ	
MS24586-12	MS24586-512	MS24586-1012	MS24586-C12		44.45	87.0				73.66	0.30	BJ	BJ	BJ	BJ	
MS24586-13	MS24586-513	MS24586-1013	MS24586-C13		47.63	94.0				79.25	0.28	BJ	BJ	BJ	BJ	
MS24586-14	MS24586-514	MS24586-1014	MS24586-C14		50.80	101.0				84.84	0.26	BJ	BJ	BJ	BJ	
MS24586-15	MS24586-515		MS24586-C15		0.51	25.40				41.0	0.28	13.34	1.33	36.83	1.05	BH
MS24586-16	MS24586-516		MS24586-C16	28.58		47.0	41.66	0.92	BH	BH					BJ	
MS24586-17	MS24586-517		MS24586-C17	31.75		53.5	46.74	0.80	BH	BH					BJ	
MS24586-18	MS24586-518		MS24586-C18	34.93		60.0	51.82	0.71	BH	BH					BJ	
MS24586-19	MS24586-519		MS24586-C19	38.10		66.0	56.64	0.65	BH	BH					BJ	
MS24586-20	MS24586-520		MS24586-C20	41.28		72.5	61.72	0.59	BH	BH					BJ	
MS24586-21	MS24586-521		MS24586-C21	44.45		78.5	66.55	0.54	BJ	BJ					BJ	
MS24586-22	MS24586-522		MS24586-C22	47.63		84.5	71.37	0.51	BJ	BJ					BJ	
MS24586-23	MS24586-523		MS24586-C23	50.80		91.0	76.45	0.47	BJ	BJ					BJ	
MS24586-24	MS24586-524		MS24586-C24	0.56		25.40	37.5	0.23	17.35	1.78				34.04	1.82	BH
MS24586-25	MS24586-525		MS24586-C25		28.58	43.0	38.35				1.58	BH	BJ		BJ	
MS24586-26	MS24586-526		MS24586-C26		31.75	49.0	42.93				1.39	BJ	BJ		BJ	
MS24586-27	MS24586-527		MS24586-C27		34.93	54.5	47.24				1.26	BJ	BJ		BJ	
MS24586-28	MS24586-528		MS24586-C28		38.10	60.0	51.82				1.13	BJ	BJ		BJ	
MS24586-29	MS24586-529		MS24586-C29		41.28	66.0	56.39				1.03	BJ	BJ		BJ	
MS24586-30	MS24586-530		MS24586-C30		44.45	71.5	60.71				0.96	BJ	BJ		BJ	
MS24586-31	MS24586-531		MS24586-C31		47.63	77.0	65.28				0.88	BJ	BJ		BJ	
MS24586-32	MS24586-532		MS24586-C32		50.80	83.0	69.85				0.82	BJ	BJ		BJ	
MS24586-33	MS24586-533		MS24586-C33		53.98	88.5	74.17				0.77	BJ	BJ		BJ	
MS24586-34	MS24586-534		MS24586-C34		57.15	94.5	78.74				0.72	BJ	BJ		BJ	
MS24586-35	MS24586-535		MS24586-C35		60.33	100.0	83.31				0.68	BJ	BJ		BJ	
MS24586-36	MS24586-536		MS24586-C36	63.50	106.5	87.63	0.64	BJ	BJ		BJ					
MS24586-37	MS24586-537	MS24586-1037	MS24586-C37	6.10	0.66	25.40	23.0	1.08	14.68	1.33	50.04	0.54	BG	BH	BG	BH
MS24586-38	MS24586-538	MS24586-1038	MS24586-C38			28.58	28.0				58.67	0.44	BG	BH	BG	BH
MS24586-39	MS24586-539	MS24586-1039	MS24586-C39			31.75	32.5				67.06	0.38	BG	BH	BG	BH
MS24586-40	MS24586-540	MS24586-1040	MS24586-C40			34.93	37.5				75.18	0.33	BG	BH	BG	BH
MS24586-41	MS24586-541	MS24586-1041	MS24586-C41			38.10	42.0				83.31	0.30	BG	BH	BG	BH
MS24586-42	MS24586-542	MS24586-1042	MS24586-C42			41.28	47.0				91.95	0.26	BG	BH	BG	BH
MS24586-43	MS24586-543	MS24586-1043	MS24586-C43			44.45	52.0				100.33	0.24	BH	BJ	BH	BJ
MS24586-44	MS24586-544	MS24586-1044	MS24586-C44			47.63	56.5				108.46	0.22	BH	BJ	BH	BJ
MS24586-45	MS24586-545	MS24586-1045	MS24586-C45			50.80	61.5				116.84	0.20	BH	BJ	BH	BJ
MS24586-46	MS24586-546	MS24586-1046	MS24586-C46			0.79	25.40				20.0	0.81	23.58	2.22	41.66	1.32
MS24586-47	MS24586-547	MS24586-1047	MS24586-C47	28.58	24.0		48.01	1.14	BG	BH	BG				BH	
MS24586-48	MS24586-548	MS24586-1048	MS24586-C48	31.75	28.0		54.36	0.94	BG	BH	BG				BH	
MS24586-49	MS24586-549	MS24586-1049	MS24586-C49	34.93	31.0		59.94	0.85	BG	BH	BG				BH	
MS24586-50	MS24586-550	MS24586-1050	MS24586-C50	38.10	36.0		67.06	0.74	BG	BH	BG				BH	
MS24586-51	MS24586-551	MS24586-1051	MS24586-C51	41.28	40.0		73.41	0.66	BG	BH	BG				BH	
MS24586-52	MS24586-552	MS24586-1052	MS24586-C52	44.45	44.0		80.01	0.60	BG	BH	BG				BH	
MS24586-53	MS24586-553	MS24586-1053	MS24586-C53	47.63	47.0		85.60	0.56	BH	BJ	BH				BJ	
MS24586-54	MS24586-554	MS24586-1054	MS24586-C54	50.80	52.0		92.71	0.51	BH	BJ	BH				BJ	
MS24586-55	MS24586-555	MS24586-1055	MS24586-C55	53.98	56.0		99.31	0.47	BH	BJ	BH				BJ	
MS24586-56	MS24586-556	MS24586-1056	MS24586-C56	57.15	60.0	105.66	0.44	BH	BJ	BH	BJ					
MS24586-57	MS24586-557	MS24586-1057	MS24586-C57	60.33	64.0	112.01	0.41	BH	BJ	BH	BJ					
MS24586-58	MS24586-558	MS24586-1058	MS24586-C58	63.50	68.0	118.36	0.39	BH	BJ	BH	BJ					
MS24586-59	MS24586-559		MS24586-C59	0.94	25.40	17.0	0.60	38.70	3.56	35.56	3.47	BG	BH		BH	
MS24586-60	MS24586-560		MS24586-C60		28.58	20.5				40.89	2.88	BG	BH		BH	



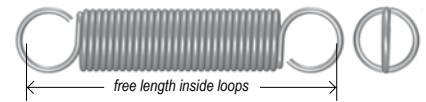
# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION

## ● Loops In-line position (MS24586)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP			
MUSIC WIRE			STAINLESS STEEL										U	C	Z	S
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM				
MS24586-61	MS24586-561		MS24586-C61	6.10	0.94	31.75	24.0	0.60	38.70	3.56	45.97	2.45	BG	BH		BH
MS24586-62	MS24586-562		MS24586-C62			34.93	27.0				51.05	2.18	BG	BH		BH
MS24586-63	MS24586-563		MS24586-C63			38.10	30.5				55.88	1.96	BG	BH		BH
MS24586-64	MS24586-564		MS24586-C64			41.28	34.0				61.47	1.73	BH	BJ		BJ
MS24586-65	MS24586-565		MS24586-C65			44.45	37.5				66.80	1.57	BH	BJ		BJ
MS24586-66	MS24586-566		MS24586-C66			47.63	40.5				71.88	1.46	BH	BJ		BJ
MS24586-67	MS24586-567		MS24586-C67			50.80	44.0				77.22	1.34	BH	BJ		BJ
MS24586-68	MS24586-568		MS24586-C68			53.98	47.5				82.30	1.24	BH	BJ		BJ
MS24586-69	MS24586-569		MS24586-C69			57.15	51.0				87.63	1.15	BH	BJ		BJ
MS24586-70	MS24586-570		MS24586-C70			60.33	54.5				91.19	1.08	BH	BJ		BJ
MS24586-71	MS24586-571		MS24586-C71			63.50	57.5				97.79	1.02	BJ	BJ		BJ
MS24586-72	MS24586-572		MS24586-C72			69.85	64.5				108.46	0.91	BJ	BJ		BJ
MS24586-73	MS24586-573		MS24586-C73			76.20	71.0				118.62	0.83	BJ	BJ		BJ
MS24586-74	MS24586-574	MS24586-1074	MS24586-C74		1.04	25.40	15.5	0.49	50.71	4.45	33.02	6.05	BH	BJ	BH	BJ
MS24586-75	MS24586-575	MS24586-1075	MS24586-C75			28.58	18.5				37.59	5.07	BH	BJ	BH	BJ
MS24586-76	MS24586-576	MS24586-1076	MS24586-C76			31.75	21.5				42.42	4.37	BH	BJ	BH	BJ
MS24586-77	MS24586-577	MS24586-1077	MS24586-C77			34.93	25.0				47.24	3.75	BH	BJ	BH	BJ
MS24586-78	MS24586-578	MS24586-1078	MS24586-C78			38.10	28.0				51.82	3.35	BH	BJ	BH	BJ
MS24586-79	MS24586-579	MS24586-1079	MS24586-C79			41.28	31.0				56.64	3.03	BH	BJ	BH	BJ
MS24586-80	MS24586-580	MS24586-1080	MS24586-C80			44.45	34.0				61.21	2.76	BJ	BJ	BJ	BJ
MS24586-81	MS24586-581	MS24586-1081	MS24586-C81			47.63	37.0				65.79	2.54	BJ	BJ	BJ	BJ
MS24586-82	MS24586-582	MS24586-1082	MS24586-C82			50.80	40.0				70.61	2.35	BJ	BJ	BJ	BJ
MS24586-83	MS24586-583	MS24586-1083	MS24586-C83			53.98	43.0				75.18	2.18	BJ	BJ	BJ	BJ
MS24586-84	MS24586-584	MS24586-1084	MS24586-C84			57.15	46.0				79.76	2.04	BJ	BJ	BJ	BJ
MS24586-85	MS24586-585	MS24586-1085	MS24586-C85			60.33	49.0				84.58	1.92	BJ	BJ	BJ	BJ
MS24586-86	MS24586-586	MS24586-1086	MS24586-C86			63.50	52.0				89.15	1.81	BJ	BJ	BJ	BJ
MS24586-87	MS24586-587	MS24586-1087	MS24586-C87			69.85	58.5				98.55	1.60	BJ	BJ	BJ	BJ
MS24586-88	MS24586-588	MS24586-1088	MS24586-C88			76.20	64.5				107.95	1.46	BJ	BJ	BJ	BJ
MS24586-89	MS24586-589	MS24586-1089	MS24586-C89			82.55	70.5				117.35	1.33	BJ	BJ	BJ	BJ
MS24586-90	MS24586-590	MS24586-1090	MS24586-C90			88.90	76.5				126.49	1.23	BJ	BJ	BJ	BJ
MS24586-91	MS24586-591	MS24586-1091	MS24586-C91	9.14	0.79	25.40	12.0	2.16	16.01	1.33	51.31	0.57	BG	BH	BG	BH
MS24586-92	MS24586-592	MS24586-1092	MS24586-C92			28.58	16.0				62.99	0.43	BG	BH	BG	BH
MS24586-93	MS24586-593	MS24586-1093	MS24586-C93			31.75	20.0				74.93	0.34	BG	BH	BG	BH
MS24586-94	MS24586-594	MS24586-1094	MS24586-C94			34.93	24.0				86.61	0.28	BG	BH	BG	BH
MS24586-95	MS24586-595	MS24586-1095	MS24586-C95			38.10	28.0				96.77	0.25	BG	BH	BG	BH
MS24586-96	MS24586-596		MS24586-C96		0.94	25.40	10.5	1.65	26.24	2.22	42.67	1.39	BG	BH		BH
MS24586-97	MS24586-597		MS24586-C97			28.58	14.0				51.82	1.04	BG	BH		BH
MS24586-98	MS24586-598		MS24586-C98			31.75	17.5				60.71	0.83	BG	BH		BH
MS24586-99	MS24586-599		MS24586-C99			34.93	20.5				68.83	0.71	BG	BH		BH
MS24586-100	MS24586-600		MS24586-C100			38.10	24.0				77.72	0.61	BG	BH		BH
MS24586-101	MS24586-601		MS24586-C101			41.28	27.5				86.61	0.53	BG	BH		BH
MS24586-102	MS24586-602		MS24586-C102			44.45	31.0				95.76	0.47	BG	BH		BH
MS24586-103	MS24586-603		MS24586-C103			47.63	34.0				103.89	0.43	BH	BJ		BJ
MS24586-104	MS24586-604		MS24586-C104			50.80	37.5				112.78	0.39	BH	BJ		BJ
MS24586-105	MS24586-605		MS24586-C105			53.98	41.0				121.67	0.36	BH	BJ		BJ
MS24586-106	MS24586-606		MS24586-C106			57.15	44.5				130.56	0.33	BH	BJ		BJ
MS24586-107	MS24586-607		MS24586-C107			60.33	47.5				138.68	0.31	BH	BJ		BJ
MS24586-108	MS24586-608		MS24586-C108			63.50	51.0				147.57	0.29	BH	BJ		BJ
MS24586-109	MS24586-609	MS24586-1109	MS24586-C109		1.04	25.40	10.0	1.41	35.14	3.11	39.37	2.27	BG	BH	BG	BH
MS24586-110	MS24586-610	MS24586-1110	MS24586-C110			28.58	13.0				46.99	1.75	BG	BH	BG	BH
MS24586-111	MS24586-611	MS24586-1111	MS24586-C111			31.75	16.0				54.36	1.42	BG	BH	BG	BH
MS24586-112	MS24586-612	MS24586-1112	MS24586-C112			34.93	19.0				61.72	1.20	BG	BH	BG	BH
MS24586-113	MS24586-613	MS24586-1113	MS24586-C113			38.10	22.0				69.09	1.03	BG	BH	BG	BH
MS24586-114	MS24586-614	MS24586-1114	MS24586-C114			41.28	25.0				76.45	0.91	BG	BH	BG	BH
MS24586-115	MS24586-615	MS24586-1115	MS24586-C115			44.45	28.0				83.82	0.81	BG	BH	BG	BH
MS24586-116	MS24586-616	MS24586-1116	MS24586-C116			47.63	31.0				91.44	0.73	BH	BJ	BH	BJ
MS24586-117	MS24586-617	MS24586-1117	MS24586-C117			50.80	34.0				98.81	0.67	BH	BJ	BH	BJ
MS24586-118	MS24586-618	MS24586-1118	MS24586-C118			53.98	37.0				106.17	0.61	BH	BJ	BH	BJ
MS24586-119	MS24586-619	MS24586-1119	MS24586-C119			57.15	40.5				114.30	0.56	BH	BJ	BH	BJ
MS24586-120	MS24586-620	MS24586-1120	MS24586-C120			60.33	43.5				121.67	0.52	BJ	BJ	BJ	BJ

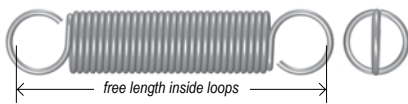


# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION



## ● Loops In-line position (MS24586)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP						
MUSIC WIRE			STAINLESS STEEL										U	C	Z	S			
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM							
MS24586-121	MS24586-621	MS24586-1121	MS24586-C121	9.14	1.04	63.50	46.5	1.41	35.14	3.11	129.03	0.49	BJ	BJ	BJ	BJ			
MS24586-122	MS24586-622	MS24586-1122	MS24586-C122		1.14	25.40	9.0	1.20			45.37	4.00	36.32	3.83	BG	BH	BG	BH	
MS24586-123	MS24586-623	MS24586-1123	MS24586-C123		28.58	12.0	42.93	2.88			BG	BH	BG	BH					
MS24586-124	MS24586-624	MS24586-1124	MS24586-C124		31.75	14.5	49.02	2.38			BG	BH	BG	BH					
MS24586-125	MS24586-625	MS24586-1125	MS24586-C125		34.93	17.5	55.88	1.97			BG	BH	BG	BH					
MS24586-126	MS24586-626	MS24586-1126	MS24586-C126		38.10	20.5	62.74	1.68			BG	BH	BG	BH					
MS24586-127	MS24586-627	MS24586-1127	MS24586-C127		41.28	23.0	68.83	1.50			BG	BH	BG	BH					
MS24586-128	MS24586-628	MS24586-1128	MS24586-C128		44.45	26.0	75.69	1.33			BG	BH	BG	BH					
MS24586-129	MS24586-629	MS24586-1129	MS24586-C129		47.63	28.5	81.79	1.21			BG	BJ	BG	BJ					
MS24586-130	MS24586-630	MS24586-1130	MS24586-C130		50.80	31.5	88.65	1.09			BG	BJ	BG	BJ					
MS24586-131	MS24586-631	MS24586-1131	MS24586-C131		53.98	34.0	95.76	1.01			BH	BJ	BH	BJ					
MS24586-132	MS24586-632	MS24586-1132	MS24586-C132		57.15	37.0	101.60	0.93			BH	BJ	BH	BJ					
MS24586-133	MS24586-633	MS24586-1133	MS24586-C133		60.33	40.0	108.20	0.86			BJ	BJ	BJ	BJ					
MS24586-134	MS24586-634	MS24586-1134	MS24586-C134		63.50	42.5	114.55	0.81			BJ	BJ	BJ	BJ					
MS24586-135	MS24586-635	MS24586-1135	MS24586-C135		69.85	48.0	127.51	0.72			BJ	BJ	BJ	BJ					
MS24586-136	MS24586-636	MS24586-1136	MS24586-C136		76.20	53.5	140.46	0.64			BJ	BJ	BJ	BJ					
MS24586-137	MS24586-637		MS24586-C137		1.40	28.58	10.5	0.84			78.29	7.12	37.85	8.05	BH	BJ			BJ
MS24586-138	MS24586-638		MS24586-C138			31.75	12.5						42.16	6.77	BH	BJ			BJ
MS24586-139	MS24586-639		MS24586-C139			34.93	15.0						47.50	5.64	BH	BJ			BJ
MS24586-140	MS24586-640		MS24586-C140			38.10	17.0						52.32	4.98	BH	BJ			BJ
MS24586-141	MS24586-641		MS24586-C141			41.28	19.5						57.66	4.35	BH	BJ			BJ
MS24586-142	MS24586-642		MS24586-C142			44.45	21.5						62.48	3.94	BH	BJ			BJ
MS24586-143	MS24586-643		MS24586-C143			47.63	24.0						67.82	3.53	BJ	BJ			BJ
MS24586-144	MS24586-644		MS24586-C144			50.80	26.5						72.90	3.19	BJ	BJ			BJ
MS24586-145	MS24586-645		MS24586-C145			53.98	28.5						77.98	2.97	BJ	BK			BK
MS24586-146	MS24586-646		MS24586-C146			57.15	31.0						83.31	2.73	BJ	BK			BK
MS24586-147	MS24586-647		MS24586-C147			60.33	33.0						88.14	2.57	BJ	BK			BK
MS24586-148	MS24586-648		MS24586-C148			63.50	35.5						93.47	2.39	BJ	BK			BK
MS24586-149	MS24586-649		MS24586-C149			69.85	40.0						103.38	2.12	BJ	BK			BK
MS24586-150	MS24586-650		MS24586-C150			76.20	44.5						113.54	1.90	BJ	BK			BK
MS24586-151	MS24586-651		MS24586-C151			82.55	49.0						123.70	1.73	BJ	BL			BL
MS24586-152	MS24586-652		MS24586-C152			88.90	53.5						133.86	1.58	BJ	BL			BL
MS24586-153	MS24586-653		MS24586-C153			95.25	58.0						144.02	1.46	BJ	BL			BL
MS24586-154	MS24586-654		MS24586-C154			101.60	62.5						154.94	1.35	BJ	BL			BL
MS24586-155	MS24586-655		MS24586-C155			107.95	67.0						164.34	1.26	BK	BM			BM
MS24586-156	MS24586-656		MS24586-C156			114.30	71.5						172.97	1.18	BK	BM			BM
MS24586-157	MS24586-657	MS24586-1157	MS24586-C157	12.70	0.94	31.75	10.0	3.56	19.57	1.78	67.31	0.50	BH	BJ	BH	BJ			
MS24586-158	MS24586-658	MS24586-1158	MS24586-C158			34.93	13.0				81.28	0.38	BH	BJ	BH	BJ			
MS24586-159	MS24586-659	MS24586-1159	MS24586-C159			38.10	16.5				96.77	0.30	BH	BJ	BH	BJ			
MS24586-160	MS24586-660	MS24586-1160	MS24586-C160			41.28	20.0				112.52	0.25	BJ	BJ	BJ	BJ			
MS24586-161	MS24586-661	MS24586-1161	MS24586-C161			44.45	23.0				126.49	0.22	BJ	BJ	BJ	BJ			
MS24586-162	MS24586-662		MS24586-C162			1.04	31.75				9.0	3.07	25.80	2.22	59.44	0.85	BH	BJ	
MS24586-163	MS24586-663		MS24586-C163		34.93		12.0	71.88	0.64	BH	BJ						BJ		
MS24586-164	MS24586-664		MS24586-C164		38.10		15.0	84.33	0.51	BH	BJ						BJ		
MS24586-165	MS24586-665		MS24586-C165		41.28		18.0	96.52	0.43	BJ	BJ						BJ		
MS24586-166	MS24586-666		MS24586-C166		44.45		21.0	108.97	0.37	BJ	BJ						BJ		
MS24586-167	MS24586-667		MS24586-C167		47.63		24.5	122.94	0.31	BJ	BK						BK		
MS24586-168	MS24586-668		MS24586-C168		50.80	27.5	135.38	0.28	BJ	BK			BK						
MS24586-169	MS24586-669		MS24586-C169	53.98	30.5	147.83	0.25	BJ	BK			BK							
MS24586-170	MS24586-670		MS24586-C170	57.15	33.5	160.02	0.23	BJ	BK			BK							
MS24586-171	MS24586-671	MS24586-1171	MS24586-C171	1.14	34.93	11.5	2.65	33.36	3.11	65.53	0.99	BH	BJ	BH	BJ				
MS24586-172	MS24586-672	MS24586-1172	MS24586-C172		38.10	14.0				74.68	0.81	BH	BJ	BH	BJ				
MS24586-173	MS24586-673	MS24586-1173	MS24586-C173		41.28	17.0				86.36	0.67	BJ	BJ	BJ	BJ				
MS24586-174	MS24586-674	MS24586-1174	MS24586-C174		44.45	19.5				96.27	0.58	BJ	BJ	BJ	BJ				
MS24586-175	MS24586-675	MS24586-1175	MS24586-C175		47.63	22.5				107.44	0.51	BJ	BK	BJ	BK				
MS24586-176	MS24586-676	MS24586-1176	MS24586-C176		50.80	25.0				117.09	0.46	BJ	BK	BJ	BK				
MS24586-177	MS24586-677	MS24586-1177	MS24586-C177		53.98	28.0				128.27	0.41	BJ	BK	BJ	BK				
MS24586-178	MS24586-678	MS24586-1178	MS24586-C178		57.15	31.0				139.45	0.37	BJ	BK	BJ	BK				
MS24586-179	MS24586-679		MS24586-C179	1.40	34.93	10.0	1.93	58.27	5.34	54.36	2.74	BJ	BJ			BJ			
MS24586-180	MS24586-680		MS24586-C180		38.10	12.0				61.21	2.28	BJ	BJ			BJ			

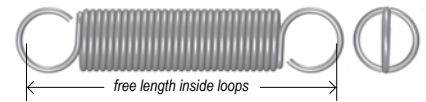


# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION

## ● Loops In-line position (MS24586)

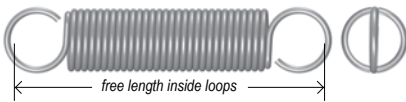
LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP			
MUSIC WIRE			STAINLESS STEEL										MM	MM	MM	MM
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM	U	C	Z	S
MS24586-181	MS24586-681		MS24586-C181	12.70	1.40	41.28	14.5	1.93	58.27	5.34	69.34	1.89	BJ	BJ		BJ
MS24586-182	MS24586-682		MS24586-C182			44.45	16.5				76.45	1.58	BJ	BJ		BJ
MS24586-183	MS24586-683		MS24586-C183			47.63	19.0				99.57	1.44	BJ	BJ		BJ
MS24586-184	MS24586-684		MS24586-C184			50.80	21.0				91.44	1.30	BJ	BJ		BJ
MS24586-185	MS24586-685		MS24586-C185			53.98	23.5				99.31	1.17	BJ	BK		BK
MS24586-186	MS24586-686		MS24586-C186			57.15	25.5				108.97	1.07	BJ	BK		BK
MS24586-187	MS24586-687		MS24586-C187			60.33	28.0				114.55	0.98	BJ	BK		BK
MS24586-188	MS24586-688		MS24586-C188			63.50	30.5				122.43	0.90	BJ	BK		BK
MS24586-189	MS24586-689		MS24586-C189			69.85	35.0				137.41	0.78	BJ	BL		BL
MS24586-190	MS24586-690		MS24586-C190			76.20	39.5				152.65	0.69	BK	BL		BL
MS24586-191	MS24586-691		MS24586-C191			82.55	43.0				165.61	0.64	BK	BM		BM
MS24586-192	MS24586-692		MS24586-C192			88.90	48.5				182.63	0.56	BK	BN		BN
MS24586-193	MS24586-693		MS24586-C193			95.25	54.0				199.64	0.51	BK	BN		BN
MS24586-194	MS24586-694		MS24586-C194			101.60	57.5				212.85	0.48	BK	BN		BN
MS24586-195	MS24586-695		MS24586-C195			107.95	62.0				227.84	0.44	BK	BN		BN
MS24586-196	MS24586-696		MS24586-C196			114.30	66.5				242.82	0.41	BK	BN		BN
MS24586-197	MS24586-697	MS24586-1197	MS24586-C197		1.60	34.93	9.0	1.54	83.63	7.56	48.77	5.47	BJ	BJ	BJ	BJ
MS24586-198	MS24586-698	MS24586-1198	MS24586-C198			38.10	11.0				55.12	4.48	BJ	BJ	BJ	BJ
MS24586-199	MS24586-699	MS24586-1199	MS24586-C199			41.28	13.0				61.47	3.79	BJ	BJ	BJ	BJ
MS24586-200	MS24586-700	MS24586-1200	MS24586-C200			44.45	15.0				67.56	3.28	BJ	BJ	BJ	BJ
MS24586-201	MS24586-701	MS24586-1201	MS24586-C201			47.63	17.0				73.91	2.90	BJ	BJ	BJ	BJ
MS24586-202	MS24586-702	MS24586-1202	MS24586-C202			50.80	19.0				80.26	2.59	BJ	BJ	BJ	BJ
MS24586-203	MS24586-703	MS24586-1203	MS24586-C203			53.98	21.0				86.36	2.35	BJ	BJ	BJ	BJ
MS24586-204	MS24586-704	MS24586-1204	MS24586-C204			57.15	23.0				92.71	2.14	BJ	BK	BJ	BK
MS24586-205	MS24586-705	MS24586-1205	MS24586-C205			60.33	25.0				99.06	1.97	BJ	BK	BJ	BK
MS24586-206	MS24586-706	MS24586-1206	MS24586-C206			63.50	27.0				104.65	1.82	BJ	BK	BJ	BK
MS24586-207	MS24586-707	MS24586-1207	MS24586-C207			69.85	30.5				116.84	1.61	BJ	BL	BJ	BL
MS24586-208	MS24586-708	MS24586-1208	MS24586-C208			76.20	34.5				129.54	1.43	BK	BL	BK	BL
MS24586-209	MS24586-709	MS24586-1209	MS24586-C209			82.55	38.5				141.99	1.28	BK	BL	BK	BL
MS24586-210	MS24586-710	MS24586-1210	MS24586-C210			88.90	42.5				154.43	1.16	BK	BL	BK	BL
MS24586-211	MS24586-711	MS24586-1211	MS24586-C211			95.25	46.5				167.13	1.06	BK	BM	BK	BM
MS24586-212	MS24586-712	MS24586-1212	MS24586-C212			101.60	50.5				179.58	0.98	BK	BM	BK	BM
MS24586-213	MS24586-713	MS24586-1213	MS24586-C213			107.95	54.5				192.02	0.90	BK	BN	BK	BN
MS24586-214	MS24586-714	MS24586-1214	MS24586-C214			114.30	58.5				204.72	0.84	BK	BN	BK	BN
MS24586-215	MS24586-715	MS24586-1215	MS24586-C215			120.65	62.5				217.17	0.79	BL	BQ	BL	BQ
MS24586-216	MS24586-716	MS24586-1216	MS24586-C216			127.00	66.5				229.62	0.74	BL	BQ	BL	BQ
MS24586-217	MS24586-717		MS24586-C217	16.51	1.40	50.80	15.5	3.61	44.93	4.00	106.68	0.73	BJ	BK		BK
MS24586-218	MS24586-718		MS24586-C218			53.98	18.0				118.87	0.63	BJ	BK		BK
MS24586-219	MS24586-719		MS24586-C219			57.15	20.0				130.30	0.57	BJ	BK		BK
MS24586-220	MS24586-720		MS24586-C220			60.33	22.5				141.48	0.50	BJ	BL		BL
MS24586-221	MS24586-721		MS24586-C221			63.50	24.5				151.89	0.46	BJ	BL		BL
MS24586-222	MS24586-722		MS24586-C222			69.85	29.5				176.28	0.39	BJ	BL		BL
MS24586-223	MS24586-723		MS24586-C223			76.20	34.0				198.88	0.33	BK	BM		BM
MS24586-224	MS24586-724		MS24586-C224			82.55	38.5				221.49	0.29	BK	BN		BN
MS24586-225	MS24586-725		MS24586-C225			88.90	43.0				244.09	0.26	BK	BN		BN
MS24586-226	MS24586-726		MS24586-C226			95.25	47.5				266.70	0.24	BK	BN		BN
MS24586-227	MS24586-727		MS24586-C227			101.60	52.0				289.05	0.22	BK	BN		BN
MS24586-228	MS24586-728	MS24586-1228	MS24586-C228		1.60	50.80	14.0	2.92	65.83	6.23	91.69	1.46	BJ	BK	BJ	BK
MS24586-229	MS24586-729	MS24586-1229	MS24586-C229			53.98	16.0				100.84	1.27	BJ	BL	BJ	BL
MS24586-230	MS24586-730	MS24586-1230	MS24586-C230			57.15	18.0				109.73	1.13	BJ	BL	BJ	BL
MS24586-231	MS24586-731	MS24586-1231	MS24586-C231			60.33	20.0				118.87	1.02	BJ	BL	BJ	BL
MS24586-232	MS24586-732	MS24586-1232	MS24586-C232			63.50	22.0				127.76	0.93	BJ	BL	BJ	BL
MS24586-233	MS24586-733	MS24586-1233	MS24586-C233			69.85	26.0				145.80	0.78	BJ	BM	BJ	BM
MS24586-234	MS24586-734	MS24586-1234	MS24586-C234			76.20	30.0				163.83	0.68	BK	BN	BK	BN
MS24586-235	MS24586-735	MS24586-1235	MS24586-C235			82.55	34.0				181.86	0.60	BK	BN	BK	BN
MS24586-236	MS24586-736	MS24586-1236	MS24586-C236			88.90	38.0				199.90	0.54	BK	BN	BK	BN
MS24586-237	MS24586-737	MS24586-1237	MS24586-C237			95.25	42.0				217.93	0.49	BK	BQ	BK	BQ
MS24586-238	MS24586-738	MS24586-1238	MS24586-C238			101.60	46.0				235.97	0.44	BK	BQ	BK	BQ
MS24586-239	MS24586-739	MS24586-1239	MS24586-C239			107.95	50.0				254.00	0.41	BL	BQ	BL	BQ
MS24586-240	MS24586-740	MS24586-1240	MS24586-C240			114.30	54.0				272.03	0.38	BL	BQ	BL	BQ

# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION



## ● Loops In-line position (MS24586)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP						
MUSIC WIRE			STAINLESS STEEL										U	C	Z	S			
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM							
MS24586-241	MS24586-741		MS24586-C241	19.05	1.40	50.80	12.0	5.00	39.14	3.56	110.74	0.59	BJ	BL		BJ			
MS24586-242	MS24586-742		MS24586-C242			53.98	14.5				126.49	0.49	BK	BM		BK			
MS24586-243	MS24586-743		MS24586-C243			57.15	16.5				127.00	0.43	BK	BM		BK			
MS24586-244	MS24586-744		MS24586-C244			60.33	19.0				157.23	0.37	BK	BN		BN			
MS24586-245	MS24586-745		MS24586-C245			63.50	21.0				168.66	0.34	BK	BN		BN			
MS24586-246	MS24586-746		MS24586-C246			69.85	25.5				197.36	0.28	BK	BN		BN			
MS24586-247	MS24586-747		MS24586-C247			76.20	30.0				226.31	0.24	BK	BN		BN			
MS24586-248	MS24586-748		MS24586-C248			82.55	35.0				257.81	0.20	BL	BQ		BQ			
MS24586-249	MS24586-749		MS24586-C249			88.90	39.5				286.51	0.18	BL	BQ		BQ			
MS24586-250	MS24586-750	MS24586-1250	MS24586-C250			1.60	50.80				11.0	4.09	56.94	5.34	95.76	1.15	BJ	BL	BJ
MS24586-251	MS24586-751	MS24586-1251	MS24586-C251	53.98	13.0		107.19	0.97	BJ	BM	BJ				BM				
MS24586-252	MS24586-752	MS24586-1252	MS24586-C252	57.15	15.0		118.62	0.84	BJ	BM	BJ				BM				
MS24586-253	MS24586-753	MS24586-1253	MS24586-C253	60.33	17.0		129.79	0.74	BJ	BN	BJ				BN				
MS24586-254	MS24586-754	MS24586-1254	MS24586-C254	63.50	19.0		141.22	0.66	BJ	BN	BJ				BN				
MS24586-255	MS24586-755	MS24586-1255	MS24586-C255	69.85	22.0		159.77	0.57	BK	BN	BK				BN				
MS24586-256	MS24586-756	MS24586-1256	MS24586-C256	76.20	27.0		186.69	0.47	BK	BN	BK				BN				
MS24586-257	MS24586-757	MS24586-1257	MS24586-C257	82.55	30.5		207.26	0.41	BK	BQ	BK				BQ				
MS24586-258	MS24586-758	MS24586-1258	MS24586-C258	88.90	34.5		229.87	0.37	BK	BQ	BK				BQ				
MS24586-259	MS24586-759	MS24586-1259	MS24586-C259	95.25	38.5		252.73	0.33	BL	BQ	BL				BQ				
MS24586-260	MS24586-760	MS24586-1260	MS24586-C260	101.60	42.5	275.34	0.30	BL	BS	BL	BS								
MS24586-261	MS24586-761	MS24586-1261	MS24586-C261	107.95	46.5	298.20	0.27	BM	BT	BM	BT								
MS24586-262	MS24586-762	MS24586-1262	MS24586-C262	114.30	50.5	320.80	0.25	BM	BU	BM	BU								
MS24586-263	MS24586-763	MS24586-1263	MS24586-C263	120.65	54.5	343.66	0.23	BN	BW	BN	BW								
MS24586-264	MS24586-764	MS24586-1264	MS24586-C264	127.00	58.5	366.27	0.22	BN	BW	BN	BW								
MS24586-265	MS24586-765	MS24586-1265	MS24586-C265	1.91	50.80	9.5	3.09	92.08	8.45	80.26	2.85	BJ	BL	BJ	BL				
MS24586-266	MS24586-766	MS24586-1266	MS24586-C266		53.98	11.5				92.20	2.35	BJ	BL	BJ	BL				
MS24586-267	MS24586-767	MS24586-1267	MS24586-C267		57.15	13.0				97.28	2.08	BJ	BN	BJ	BN				
MS24586-268	MS24586-768	MS24586-1268	MS24586-C268		60.33	14.5				105.16	1.87	BK	BN	BK	BN				
MS24586-269	MS24586-769	MS24586-1269	MS24586-C269		63.50	16.5				114.55	1.64	BK	BN	BK	BN				
MS24586-270	MS24586-770	MS24586-1270	MS24586-C270		69.85	19.5				130.30	1.39	BK	BN	BK	BN				
MS24586-271	MS24586-771	MS24586-1271	MS24586-C271		76.20	23.0				147.32	1.18	BK	BQ	BK	BQ				
MS24586-272	MS24586-772	MS24586-1272	MS24586-C272		82.55	26.5				164.59	1.02	BK	BS	BK	BS				
MS24586-273	MS24586-773	MS24586-1273	MS24586-C273		88.90	29.5				180.09	0.92	BL	BS	BL	BS				
MS24586-274	MS24586-774	MS24586-1274	MS24586-C274		95.25	33.0				197.36	0.82	BL	BT	BL	BT				
MS24586-275	MS24586-775	MS24586-1275	MS24586-C275	101.60	36.5	214.63	0.74	BM	BU	BM	BU								
MS24586-276	MS24586-776	MS24586-1276	MS24586-C276	107.95	39.5	230.12	0.68	BM	BW	BM	BW								
MS24586-277	MS24586-777	MS24586-1277	MS24586-C277	114.30	43.0	247.40	0.63	BM	BW	BM	BW								
MS24586-278	MS24586-778	MS24586-1278	MS24586-C278	120.65	46.5	264.41	0.58	BN	BW	BN	BW								
MS24586-279	MS24586-779	MS24586-1279	MS24586-C279	127.00	49.5	280.16	0.55	BN	BW	BN	BW								
MS24586-280	MS24586-780		MS24586-C280	21.59	1.40	50.80	8.5	6.64	34.70	3.11	107.19	0.56	BM	BT		BT			
MS24586-281	MS24586-781		MS24586-C281			53.98	10.5				123.70	0.45	BM	BT		BT			
MS24586-282	MS24586-782		MS24586-C282			57.15	13.0				143.51	0.37	BM	BT		BT			
MS24586-283	MS24586-783		MS24586-C283			60.33	15.0				159.77	0.32	BM	BT		BT			
MS24586-284	MS24586-784		MS24586-C284			63.50	17.5				179.58	0.27	BM	BT		BT			
MS24586-285	MS24586-785		MS24586-C285		69.85	22.0	215.90				0.22	BM	BT		BT				
MS24586-286	MS24586-786		MS24586-C286		1.60	53.98	9.5				5.81	50.26	4.45	109.22	0.83	BM	BU		BU
MS24586-287	MS24586-787		MS24586-C287			57.15	11.5							123.95	0.69	BM	BU		BU
MS24586-288	MS24586-788		MS24586-C288			60.33	13.5							138.68	0.58	BM	BU		BU
MS24586-289	MS24586-789		MS24586-C289			63.50	15.5							153.42	0.51	BM	BU		BU
MS24586-290	MS24586-790		MS24586-C290	69.85		19.5	183.13	0.40	BM	BU					BU				
MS24586-291	MS24586-791		MS24586-C291	76.20	23.5	212.60	0.34	BN	BW		BW								
MS24586-292	MS24586-792		MS24586-C292	82.55	27.5	242.32	0.29	BN	BW		BW								
MS24586-293	MS24586-793		MS24586-C293	88.90	31.5	271.78	0.25	BN	BW		BW								
MS24586-294	MS24586-794		MS24586-C294	1.91	57.15	10.5	4.17	81.85	7.56	100.84	1.70	BN	BW		BW				
MS24586-295	MS24586-795		MS24586-C295		60.33	12.0				135.64	1.49	BN	BW		BW				
MS24586-296	MS24586-796		MS24586-C296		63.50	13.5				119.63	1.32	BN	BW		BW				
MS24586-297	MS24586-797		MS24586-C297		69.85	17.0				140.72	1.05	BN	BW		BW				
MS24586-298	MS24586-798		MS24586-C298		76.20	20.5				161.54	0.87	BN	BW		BW				
MS24586-299	MS24586-799		MS24586-C299		82.55	23.5				180.34	0.76	BN	BW		BW				
MS24586-300	MS24586-800		MS24586-C300	88.90	27.0	201.42	0.66	BN	BW		BW								



# SPECIALITY STOCK PARTS: MIL-SPEC – EXTENSION

## ● Loops In-line position (MS24586)

LEE STOCK NUMBER				OD	WD	FREE LENGTH	ACTIVE COILS	DEFLECTION PER COIL	MAX LOAD	INIT TENSION	MAX EXT	RATE	PRICE GROUP											
MUSIC WIRE			STAINLESS STEEL										U	C	Z	S								
UNPLATED (U)	CAD. PLATE (C)	ZINC PLATE (Z)	PASSIVATED (S)	MM	MM	MM		MM	N	N	MM	N/MM												
MS24586-301	MS24586-801		MS24586-C301	21.59	1.91	95.25	30.5	4.17	81.85	7.56	222.25	0.58	BN	BW		BW								
MS24586-302	MS24586-802		MS24586-C302			101.60	33.0				241.05	0.53					BN	BW	BW					
MS24586-303	MS24586-803		MS24586-C303			107.95	37.0				262.13	0.48					BN	BX	BX					
MS24586-304	MS24586-804		MS24586-C304			114.30	40.5				282.96	0.44					BN	BX	BX					
MS24586-305	MS24586-805		MS24586-C305			120.65	43.5				301.75	0.41					BN	BX	BX					
MS24586-306	MS24586-806		MS24586-C306			127.00	47.0				322.83	0.38					BN	BX	BX					
MS24586-307	MS24586-807		MS24586-C307			2.16	57.15				9.5	3.41					115.21	10.68	89.41	3.35	BN	BW		BW
MS24586-308	MS24586-808		MS24586-C308				60.33				11.0								97.79	2.78	BN	BW	BW	
MS24586-309	MS24586-809		MS24586-C309				63.50				12.5								106.17	2.45	BN	BW	BW	
MS24586-310	MS24586-810		MS24586-C310		69.85		15.5	122.68	1.98	BN	BW		BW											
MS24586-311	MS24586-811		MS24586-C311		76.20		18.5	139.45	1.66	BN	BW		BW											
MS24586-312	MS24586-812		MS24586-C312		82.55		21.5	155.96	1.42	BN	BX		BX											
MS24586-313	MS24586-813		MS24586-C313		88.90		24.0	170.94	1.27	BN	BX		BX											
MS24586-314	MS24586-814		MS24586-C314		95.25		27.0	187.45	1.13	BN	BX		BX											
MS24586-315	MS24586-815		MS24586-C315		101.60		30.0	203.96	1.02	BN	BX		BX											
MS24586-316	MS24586-816		MS24586-C316		107.95		33.0	220.47	0.93	BN	BX		BX											
MS24586-317	MS24586-817		MS24586-C317		114.30	36.0	237.24	0.85	BN	BX	BX													
MS24586-318	MS24586-818		MS24586-C318		120.65	39.0	253.75	0.78	BN	BX	BX													
MS24586-319	MS24586-819		MS24586-C319		127.00	42.0	270.26	0.73	BN	BX	BX													
MS24586-320	MS24586-820	MS24586-1320	MS24586-C320	25.40	1.60	63.50	11.0	7.87	43.15	4.00	150.11	0.45	BN	BW	BN	BW								
MS24586-321	MS24586-821	MS24586-1321	MS24586-C321			69.85	15.0				187.96	0.33	BN	BW	BN	BW								
MS24586-322	MS24586-822	MS24586-1322	MS24586-C322			76.20	19.0				225.81	0.26	BN	BW	BN	BW								
MS24586-323	MS24586-823	MS24586-1323	MS24586-C323			82.55	23.0				263.65	0.22	BN	BW	BN	BW								
MS24586-324	MS24586-824	MS24586-1324	MS24586-C324			1.91	63.50				9.5	6.06	69.84	6.23	121.16	1.11	BN	BW	BN	BW				
MS24586-325	MS24586-825	MS24586-1325	MS24586-C325				69.85				13.0				148.59	0.81	BN	BW	BN	BW				
MS24586-326	MS24586-826	MS24586-1326	MS24586-C326				76.20				16.5				176.28	0.64	BN	BW	BN	BW				
MS24586-327	MS24586-827	MS24586-1327	MS24586-C327				82.55				19.5				200.91	0.54	BN	BX	BN	BX				
MS24586-328	MS24586-828	MS24586-1328	MS24586-C328				88.90				23.0				228.35	0.46	BN	BX	BN	BX				
MS24586-329	MS24586-829	MS24586-1329	MS24586-C329		95.25		26.5	255.78	0.40	BN	BX				BN	BX								
MS24586-330	MS24586-830	MS24586-1330	MS24586-C330		101.60		29.5	280.42	0.36	BN	BX				BN	BX								
MS24586-331	MS24586-831	MS24586-1331	MS24586-C331		107.95		33.0	308.10	0.32	BN	BZ				BN	BZ								
MS24586-332	MS24586-832	MS24586-1332	MS24586-C332		114.30		36.5	335.53	0.29	BN	BZ				BN	BZ								
MS24586-333	MS24586-833	MS24586-1333	MS24586-C333		120.65		39.5	360.17	0.27	BN	BZ				BN	BZ								
MS24586-334	MS24586-834	MS24586-1334	MS24586-C334		127.00	43.0	387.60	0.24	BN	BZ	BN	BZ												
MS24586-335	MS24586-835		MS24586-C335		2.16	69.85	12.0	5.01	98.75	8.90	130.05	1.49	BN	BX		BX								
MS24586-336	MS24586-836		MS24586-C336			76.20	15.0				151.38	1.19	BN	BX		BX								
MS24586-337	MS24586-837		MS24586-C337			82.55	18.0				172.72	1.00	BN	BX		BX								
MS24586-338	MS24586-838		MS24586-C338			88.90	20.5				191.77	0.87	BN	BX		BX								
MS24586-339	MS24586-839		MS24586-C339	95.25		23.5	213.11				0.76	BN	BX		BX									
MS24586-340	MS24586-840		MS24586-C340	101.60		26.5	234.44				0.68	BN	BX		BX									
MS24586-341	MS24586-841		MS24586-C341	107.95		29.5	255.78				0.61	BQ	BZ		BZ									
MS24586-342	MS24586-842		MS24586-C342	114.30		32.5	277.37				0.55	BQ	BZ		BZ									
MS24586-343	MS24586-843		MS24586-C343	120.65		35.5	298.70				0.50	BQ	BZ		BZ									
MS24586-344	MS24586-844		MS24586-C344	127.00		38.5	320.04				0.47	BQ	BZ		BZ									
MS24586-345	MS24586-845	MS24586-1345	MS24586-C345	2.41	69.85	11.0	4.21	133.45	12.01	116.08	2.62	BN	BX	BN	BX									
MS24586-346	MS24586-846	MS24586-1346	MS24586-C346		76.20	13.5				133.10	2.14	BN	BX	BN	BX									
MS24586-347	MS24586-847	MS24586-1347	MS24586-C347		82.55	16.0				149.86	1.80	BN	BX	BN	BX									
MS24586-348	MS24586-848	MS24586-1348	MS24586-C348		88.90	19.0				168.91	1.52	BN	BX	BN	BX									
MS24586-349	MS24586-849	MS24586-1349	MS24586-C349		95.25	21.5				185.67	1.34	BN	BX	BN	BX									
MS24586-350	MS24586-850	MS24586-1350	MS24586-C350		101.60	24.0				202.69	1.20	BQ	BZ	BQ	BZ									
MS24586-351	MS24586-851	MS24586-1351	MS24586-C351		107.95	26.5				219.46	1.09	BQ	BZ	BQ	BZ									
MS24586-352	MS24586-852	MS24586-1352	MS24586-C352		114.30	29.5				238.51	0.98	BQ	BZ	BQ	BZ									
MS24586-353	MS24586-853	MS24586-1353	MS24586-C353		120.65	32.0				255.27	0.90	BQ	BZ	BQ	BZ									
MS24586-354	MS24586-854	MS24586-1354	MS24586-C354		127.00	34.5				272.29	0.84	BQ	CA	BQ	CA									