

Music Wire

STANDARDS

ASTM-A-228
DIN 17223
BS 5216
JIS-G-3522

USES

- > Springs for tension, compression and torsion
- > Automotive forms
- > Musical instruments
- > Hold springs

ADVANTAGES

- > Excellent fatigue resistance
- > Strict control of chemical composition
- > Consistency in diameter and roundness
- > High tensile strength as well as high ductility
- > Manufactured and packaged to your specifications in an ISO 9001:2000 facility

DIAMETERS

Bright	
in	mm
0.020 - 0.500	0.5 - 12.7

Galvanized	
in	mm
0.020 - 0.177	0.5 - 4.5

PACKAGING

Coils: 441-1,100 lb (200-500 kg)
Tubular carriers: 1,500-2,000 lb (680-907 kg)
Spoolless cores: 3,000 or 6,000 lb (1,361-2,722 kg)
Spoolless cores or steel reels for finer diameters: 110-1,000 lb (50-454 kg)



**MUSIC WIRE TENSILE REQUIREMENTS
METRIC**

Diameter mm	Tensile Strength, MPa		Diameter mm	Tensile Strength, MPa	
	min	max		min	max
0.10	3000	3300	0.90	2200	2450
0.11	2950	3250	1.00	2150	2400
0.12	2900	3200	1.10	2120	2380
0.14	2850	3150	1.20	2100	2350
0.16	2800	3100	1.40	2050	2300
0.18	2750	3050	1.60	2000	2250
0.20	2700	3000	1.80	1980	2220
0.22	2680	2980	2.00	1950	2200
0.25	2650	2950	2.20	1900	2150
0.28	2620	2920	2.50	1850	2100
0.30	2600	2900	2.80	1820	2050
0.35	2550	2820	3.00	1800	2000
0.40	2500	2750	3.20	1780	2980
0.45	2450	2700	3.50	1750	2950
0.50	2400	2650	3.80	1720	1920
0.55	2380	2620	4.00	1700	1900
0.60	2350	2600	4.50	1680	1880
0.65	2320	2580	5.00	1650	1850
0.70	2300	2550	5.50	1620	1820
0.80	2250	2500	6.00	1600	1800

IMPERIAL

Diameter in	Tensile Strength, ksi		Diameter in	Tensile Strength, ksi	
	min	max		min	max
0.004	439	485	0.055	300	331
0.005	426	471	0.059	296	327
0.006	415	459	0.063	293	324
0.007	407	449	0.067	290	321
0.008	399	441	0.072	287	317
0.009	393	434	0.076	284	314
0.010	387	428	0.080	282	312
0.011	382	422	0.085	279	308
0.012	377	417	0.090	276	305
0.013	373	412	0.095	274	303
0.014	369	408	0.100	271	300
0.015	365	404	0.102	270	299
0.016	362	400	0.107	268	296
0.018	356	393	0.110	267	295
0.020	350	387	0.112	266	294
0.022	345	382	0.121	263	290
0.024	341	377	0.125	261	288
0.026	337	373	0.130	259	286
0.028	333	368	0.135	258	285
0.030	330	365	0.140	256	283
0.032	327	361	0.145	254	281
0.034	324	358	0.150	253	279
0.036	321	355	0.156	251	277
0.038	318	352	0.162	249	275
0.040	315	349	0.177	245	270
0.042	313	346	0.192	241	267
0.045	309	342	0.207	238	264
0.048	306	339	0.225	235	260
0.051	303	335	0.250	230	255

**TEST LENGTHS FOR TORSION TEST
METRIC**

Diameter - mm	Number of Torsion in 100d
0.70 to 2.0, incl	25
over 2.0 to 3.5, incl	20
over 3.5 to 6.0, incl	15

IMPERIAL

Diameter - in	Number of Torsion in 100d
0.028 to 0.079, incl	25
over 0.079 to 0.138, incl	20
over 0.138 to 0.250, incl	15

METRIC

Diameter - mm	Permissible Variations plus and minus - mm	Permissible out of Round - mm
To 0.25, incl	0.005	0.005
Over 0.25 to 0.70, incl	0.008	0.008
Over 0.70 to 1.50, incl	0.010	0.010
Over 1.50 to 2.00, incl	0.013	0.013
Over 2.00	0.03	0.03

IMPERIAL

Diameter - in	Permissible Variations plus and minus - in	Permissible out of Round - in
0.004 to 0.010, incl	0.0002	0.0002
Over 0.010 to 0.026, incl	0.0003	0.0003
Over 0.028 to 0.063, incl	0.0004	0.0004
Over 0.063 to 0.080 incl	0.0005	0.0005
Over 0.080 to 0.250 incl	0.001	0.001