

## Gauge Chart

### Gauge

A system that numbers wire diameters, this system varies by who created it. All the most common gauges in the world are described below, and then listed in a chart that allows you to compare all of them together.

**Jump to** 18G 16G 14G 12G 10G 8G 0G

**Inches** 1/32 3/64 1/16 5/64 3/32 7/64 1/8 9/64 5/32 11/64

3/16 7/32 1/4 9/32 5/16 3/8 13/32 7/16 1/2 9/16 5/8

**Millimeter** 1 1.2 1.6 2 2.4 3.2 4 5 6 8

**American gauge** (also known as Browne&Sharpe gauge) system is used in North America to denote the diameter of the wire used to make a specific piece of body jewelry. The larger the gauge number, the thinner the wire is. The body jewelry industry uses mostly even gauges from 18 to 8ga.

A list of the inside diameter and outside diameter of some of the common gauge needles used in body piercing:

O.D.	I.D
.134"(8 Ga)	.106"(10 Ga)
.109"(10 Ga)	.085"(12 Ga)
.085"(12 Ga)	.063"(14 Ga)
.065"(14 Ga)	.047"(16 Ga)
.053"(16 Ga)	.033"(19 Ga)
.035"(19 Ga)	.025"(20 Ga)
.028"(20 Ga)	.019"(22 Ga)

### Millimeter

Most of the world uses the metric system, and for wire diameter the millimeter is the unit of measurement that is most often used. One millimeter is equal to .03973 inches. There is a trend in the wire industry to use millimeter diameter as a specification instead of gauge.

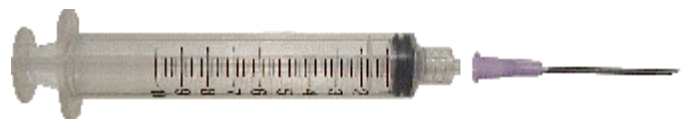
### Inch

This is what people in the United States use to measure. Even England is giving up this system in favor of the Metric system (The EU is sort of forcing the issue onto them). The unpopularity of the Imperial Standard (The system of measurement used in the US) derives from it's heavy use of fractions (especially on a ruler) such as 7/32, 3/16. One inch is equal to 25.4 Millimeters.

### Birmingham or Stubs

This is the international standard for needles used for injection (hypodermic needles). Care should be taken not to confuse this gauge with American Gauge (listed above) as the

diameters for the same gauge are different. This kind of needle also typically comes with an attached colored piece of plastic called a luer as shown in the photo.



### **British Imperial Standard S.W.G.**

This is the European equivalent to Washburn and Moen (see below) both gauges are used for wire cloth such as; Bolting Cloth, Filter Cloth, and Fine Mesh.

### **French Catheter Scale**

A metric based gauge used for some catheters, it is usually referred to as "French".

### **Washburn & Moen**

This Gauge was created by the company that bears its' name. The Washburn and Moen Manufacturing Company, ran a wire mill out of Worcester, MA, it drew its' first wire in December 1892. The mill was purchased in 1899 by The American Steel and Wire Company, which later became a part of the United States Steel Corporation. By the 1950's this plant was one of the areas largest employers. In 1979 it closed because it was unable to compete with imported wire that was made by low paid workers.

### **Pronunciation of "0"**

In the wire trade "0" is pronounced "aught", so a "00" wire or cable is called "two aught", the body piercing profession typically refers to "0" by pronouncing it as "owe" which is incorrect.

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
50		.02515	.00099				
		.0254	.001			50	
49		.02819	.00111				
		.0305	.0012			49	
48		.0315	.00124				
47		.03556	.00140				
46		.03988	.00157				
		.0406	.0016			48	
45		.0447	.00176				
44		.05029	.00198				
		.0508	.002			47	
43		.05639	.00222				
		.06096	.0024			46	
42		.06325	.00249				
41		.07112	.00280			45	
40		.07976	.00314				
		.08128	.0032			44	
39		.00353	.00353				
		.09144	.0036			43	
38		.10058	.00396				
		.1016	.0040	36		42	
		.11176	.0044			41	50
		.11303	.00445				
		.11684	.0046				49
37		.11303	.00445				
		.11684	.0046				49
		.12192	.0048			40	48
36		.127	.0050	35			47
		.13208	.0052			39	46
		.1397	.0055				45
35		.14249	.00561				
		.14732	.0058				44
		.1524	.0060			38	43
34		.16002	.00630				
		.15748	.0062				42
		.16764	.0066				41
		.17272	.0068			37	
		.1778	.007	34			
33		.17831	.00702				40
		.1905	.0075				39
		.19304	.0076			36	

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
32		.20193	.00795				
		.2032	.0080	33			38
		.21336	.0084			35	
		.2159	.0085				37
31		.22657	.00892				
		.2286	.0090	32			36
		.23368	.0092			34	
		.2413	.0095				35
30		.2540	.01002	31		33	
		.26416	.0104				34
		.27432	.0108			32	
29		.28575	.01125				
		.29464	.0116			31	
		.29972	.0118				33
		.3048	.0120	30			
		.31496	.0124			30	
28		.32106	.01264				
		.3302	.0130	29			
		.33528	.0132				31
		.34544	.0136			29	
		.35560	.0140	28			30
27		.36043	.01419				
		.37592	.0148			28	
		.381	.0150				29
26		.40488	.01594				
		.4064	.0160	27			
		.41148	.0162				28
		.41656	.0164			27	
		.43942	.0173				27
25		.45466	.0179				
		.4572	.0180	26		26	
		.4597	.0181				26
		.5000	.0197				
		.508	.0200			25	
24		.51054	.0201	25			
		.5182	.0204				25
		.55880	.0220			24	
23		.57328	.02257				
		.5842	.0230				24
		.60960	.0240			23	
		.6350	.0250	23			
22		.64364	.02534				

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
		.6502	.0256				
		.6553	.0258				23
		.7112	.0280	22		22	
21		.72288	.02846				
		.7264	.0286				22
20		.78892	.03106				
		.7925	1/32 .0312				
		.8000	.0315				
		.80518	.0317				21
		.8128	.0320	21		21	
		.8839	.0348				20
		.8890	.0350	20			
		.9042	.0356				
19		.91161	.03589				
		.9144	.036			20	
	1	1	.0394		3 0		
		1.016	.04			19	
18		1.02362	.0403				
		1.0414	.041				19
		1.0668	.042	19			
17		1.14935	.04525				
		1.1887	3/64 .0468				
	1.2	1.2	.0472				
		1.2065	.0475				18
		1.2192	.0480			18	
		1.2446	.0490	18			
16		1.29083	.05082				
		1.3564	.0534		4 0		
		1.3716	.0540				17
		1.4224	.0560			17	
15		1.44932	.05706				
		1.4732	.0580	17			
		1.5000	.0591				
		1.5875	1/16 .0625				16
	1.6	1.6000	.0630				
14		1.62712	.06406			16	
		1.6510	.0650	16			
		1.67	.066		5 0		
13		1.82753	.07196				

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
		1.8228	.0720	15		15	15
		1.9837	5/64 .0781				
	2	2.0000	.0787		6 0		
		2.0320	.0800			14	14
12		2.05232	.0808				
		2.1082	.0830	14			
11		2.3048	.09074		7 0		
		2.3241	.0915				13
		2.3368	.0920			13	
		2.3825	3/32 .0938				
	2.4	2.4000	.0945				
		2.4130	.0950	13			
		2.5000	.0984				
10		2.58801	.10189				
		2.6340	.1037				
		2.6416	.1040			12	
		2.6797	.1055				12
		2.7	.1063		8 0		
		2.7686	.1090	12			
		2.780	7/64 .10937				
9		2.90652	.11443				
		2.9134	.1147				
		2.9464	.1160			11	
		3.0000	.1181		9 0		
		3.0480	.1200	11			
		3.0607	.1205				11
		3.1750	1/8 .125				
	3.2	3.2000	.1260				
		3.2512	.1280			10	
8		3.26365	.12849				
		3.3	.1299		10		
		3.4036	.134	10			
		3.4290	.1350				10
		3.5712	9/64 .1406				
		3.6576	.1440			9	
7		3.66471	.14428				
		3.7	.1457		11		

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
		3.7592	.148	9			
		3.7668	.1483				9
		3.97	5/32 .1563				
	4	4	.1575		12		
		4.064	.1600			8	
6		4.1148	.16202				8
		4.1910	.165	8			
		4.3	.1693		13		
		4.366	11/64 .1719				
		4.4704	.1760			7	
		4.3663	.1770				7
		4.5720	.1800	7			
5		4.62128	.18194				
		4.7	.1850		14		
		4.7625	3/16 .1875				
		4.8768	.1920			6	6
	5	5.0000	.1969		15		
		5.1562	.2030	6			
4		5.18947	.20431				
		5.2578	.2070				5
		5.3	.2087		16		
		5.3848	.2120			5	
		5.5575	7/32 .2188				
		5.5880	.2200	5			
		5.7	.2244		17		
		5.7226	.2253				4
3		5.82727	.22942				
		5.8928	.2320			4	
	6	6.0000	.2362		18		
		6.0452	.2380	4			
		6.1900	.2437				3
		6.3	.248		19		
		6.3500	1/4 .2500				
		6.4008	.2520			3	
2		6.5438	.25763				
		6.5786	.2590	3			
		6.7	.2638		20		
1		7.34822	.2893				

American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
		6.6675	.2625				2
		7.0104	.2760			2	
		7.1450	9/32 .2813				
		7.1882	.2830				1
		7.2136	.2840	2			
		7.3	.2874		22		
		7.6200	.3000	1		1	
		7.7851	.3065				0
		7.9375	5/16 .3125				
		.82296	.3240			0	
0		8.25144	.32486				
	8	8.0000	.3150		24		
		8.4074	.3310				2/0
		8.6360	.3400	0			
		8.7	.3425		26		
		8.7300	.3437				
		8.8392	.3480			2/0	
		9.2075	.3625				3/0
2/0 = 00		9.26592	.3648				
		9.3	.3661		28		
		9.4488	.3720			3/0	
		9.5250	3/8 .3750				
		10	.3937		30		
		10.0025	.3938	2/0			4/0
		10.16	.4000			4/0	
		10.3200	13/32 .4063				
3/0		10.40486	.40964				
		10.7	.4213		32		
		10.7950	.4250	3/0			
		10.9347	.4305				5/0
		10.9728	.4320			5/0	
		11.1125	7/16 .4375				
		11.3			34		
		11.5316	.4540	4/0			
4/0		11.684	.46				
		11.7221	.4615				6/0
		11.7856	.4640			6/0	



American or Brown & Sharp	Body Jewelry Millimeters Non-U.S.	Millimeter size	Inch	Birmingham or Stubs Gauge	French	British Imperial Standard S.W.G.	Washburn & Moen Gauge
		12.0000	.4724				
		12.4460	.4900				7/0
		12.7000	½ .5	5/0		7/0	
		13.0000	.5118				
		13.1191	.5165				
		14.0000	.5512				
		14.2875	9/16 .5625				
		14.732	.5800				
		15.0000	.5906				
		15.8750	5/8 .6250				
		16.0000	.6300				
		17.0000	.6693				
		18.0000	.7087				
		19.0000	.7480				
		20.0000	.7874				

Gauge Chart

From the "Body Piercing Encyclopedia"

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