



# Selection Guide Cord & Cable Diameters \*\*

Article 400 of the NEC covers construction, requirements, applications and specifications for flexible cord. While cords and cables are manufactured to certain standards, the application and use of the correct cord and fitting are critical to meet the Code. Uses, ampacity, environment consideration are all to be taken into consideration. The following is provided as a guide \*\*.

Type of Cord	AWG Size of Conductors	Number of Conductors-Approximate O.D.* in Inches			
		2 Conductor	3 Conductor	4 Conductor	
SVO, SVTO	18	.235	.255	—	
	18	.290	.320	.335	
SJ, SJO, SJT, SJTO	16	.320	.340	.385	
	14	.350	.375	.415	
	12	.430	.445	.500	
	10	.560	.600	.680	
	18	.345	.365	.390	
S, SO, ST, STO	16	.370	.390	.415	
	14	.500	.530	.570	
	12	.575	.600	.650	
	10	.625	.660	.710	
	8	.675	.725	.780	
	6	.795	.865	.900	
	4	.900	.975	1.100	
	2	1.105	1.170	1.290	
	Type W power cord	6	.930	1.010	1.100
		4	1.080	1.170	1.270
3		1.170	1.240	1.340	
2		1.270	1.340	1.480	
1		1.440	1.510	1.680	
1/0		1.520	1.650	1.790	
2/0		1.650	1.750	1.930	
3/0		1.770	1.890	2.070	
4/0		1.920	2.040	2.260	
250		—	2.390	—	
BUS DROP CABLE	14	—	.400	—	
	12	—	.440	—	
	10	—	.500	—	
	8	—	.665	—	
	6	—	.815	—	
	4	—	.955	—	
	2	—	1.175	—	

\* Outer Diameters of cables shown are nominal dimensions and may vary with by min/max and also by manufacturer.

## Designation to Letter Codes:

Letter codes are defined by Underwriters Labs (UL) to describe various attributes and ratings of portable cords.

S = Severe Service Cord – 600 volts (also 277/480 or 480) – May be utilized in place of SJ or SV in extra-severe service

SJ = Junior Severe Service – 300 volts (also 120 or 120/208 or 120/240 or 240 or 277, but not 277/480)

SVT = Vacuum cleaner cord, or light duty cord

T = Tinsel Cord (only if first letter of code for a portable cord)

T = Thermoplastic (if not first letter of code)

H = Heat Resistant

HH = High Heat Resistant

N = Nylon Outer Jacket Material

E = Elastomer (flexible thermoplastic that looks and feels like rubber)

O = Oil-Resistant Outer Jacket

OO = Oil-Resistant Outer Jacket and Oil-Resistant Interior Insulation

P = Parallel Cord (conductors are not twisted around each other)

V = Vacuum Cord – 300 volts (typically used with vacuum cleaners and other portable cleaning equipment)

W-A = Weather Resistant (UL approved for indoor and outdoor use)

W = Weather and Water Resistant (CSA approved for indoor and outdoor use)

Power cables transfer energy from a source to equipment. Control cables send signals to control the functioning of equipment. Products include cables that range

\*\* This chart is prepared as a guideline for informational purposes only. Dimensions may vary by cable manufacturer.