

### COPPER WIRE TABLE

Wire size AWG	Diameter in inches (enamel)	Circular mil area	Turns per linear inch	Turns per sq.cm	Continuous duty current (amp) single wire, open air	Continuous duty, (amp) conduit or in wire bundles
8	.1285	16510	7.6		73	46.0
10	.1019	10380	10.7	13.8	55	33.0
12	.0808	6530	12.0	21.7	41	23.0
14	.0640	4107	15.0	34.1	32	17.0
16	.0508	2583	18.9	61.2	22	13.0
18	.0403	1624	23.6	79.1	16	10.0
20	.0319	1022	29.4	124.0	11	7.5
22	.0253	642	37.0	186.0	—	5.0
24	.0201	404	46.3	294.0	—	—
26	.0159	254	58.0	465.0	—	—
28	.0126	160	72.7	728.0	—	—
30	.0100	101	90.5	1085.0	—	—
32	.0079	63	113.0	1628.0	—	—
34	.0063	40	141.0	2480.0	—	—
36	.0050	25	175.0	3876.0	—	—
38	.0039	16	224.0	5736.0	—	—
40	.0031	10	382.0	10077.0	—	—

### IRON POWDER CORE SIZE vs. TURNS and WIRE SIZE

Approximate number of turns for full single layer winding

Awg wire	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Core Size																
T-12	0	0	0	1	1	1	2	4	5	8	11	15	21	29	37	47
T-16	0	0	1	1	1	3	3	5	8	11	16	21	29	38	49	63
T-20	0	1	1	1	3	4	5	6	9	14	18	25	33	43	56	72
T-25	1	1	1	3	4	5	7	11	15	21	28	37	48	62	79	101
T-30	1	1	3	4	5	7	11	15	21	28	37	48	62	78	101	129
T-37	1	3	5	7	9	12	17	23	31	41	53	67	87	110	140	177
T-44	3	5	6	7	10	15	20	27	35	46	60	76	97	124	157	199
T-50	5	6	8	11	16	21	28	37	49	63	81	103	131	166	210	265
T-68	7	9	12	15	21	28	36	47	61	79	101	127	162	205	257	325
T-80	8	12	17	23	30	39	51	66	84	108	137	172	219	276	347	438
T-94	10	14	20	27	35	45	58	75	96	123	156	195	248	313	393	496
T-106	10	14	20	27	35	45	58	75	96	123	156	195	248	313	393	496
T-130	17	23	30	40	51	66	83	107	137	173	220	275	348	439	550	693
T-157	22	29	38	50	64	82	104	132	168	213	270	336	426	536	672	846
T-184	22	29	38	50	64	82	104	132	168	213	270	336	426	536	672	846
T-200	31	41	53	68	86	109	139	176	223	282	357	445	562	707	886	1115
T-225	36	46	60	77	98	123	156	198	250	317	400	499	631	793	993	1250
T-300	52	66	85	108	137	172	217	274	347	438	553	688	870	1093	1368	1721
T-400	61	79	100	127	161	202	255	322	407	513	648	806	1018	1278	1543	2013
T-520	86	110	149	160	223	279	349	443	559	706	889	1105	1396	1753	2192	2758