

Wire Capacities of Conduits

The average number of duplex wires that can be run inside conduit are shown below. The AWG sizes listed are the most common used in conduit. The capacities are determined by conduit length and the number and degree of bends. Use this table as a guide only, since definite figures cannot be listed to suite all installations.

Conduit Size (Inches)	Average Number of Duplex Wires in Conduit		
	Type PP 16 AWG	Type SFSF 16 AWG	Type PAP 16 AWG
.50	5	3	4
.75	8	4	7
1.00	14	7	11
1.25	25	13	20
1.50	34	18	27
2.00	56	30	45
2.50	80	42	64
3.00	123	48	72

Nominal Resistance of Wire

(loop) - resistance (Ω) per foot (All tolerances $\pm 10\%$) AWG

AWG	J	T	K	N	E
14	.0899	.07413	.1466	.1948	.1751
16	.1426	.1178	.2330	.3097	.2783
18	.2279	.1874	.3707	.4926	.4427
20	.3612	.2982	.5897	.7030	.7043
24	.9133	.7534	1.490	1.9802	1.7797
26	1.454	1.198	2.370	3.1496	2.830
28	2.312	1.905	3.768	5.0062	4.500
30	3.672	3.025	5.984	7.9523	7.147
36	14.76	12.17	24.08	N/A	28.76
16S (7/24)	.1305	.1077	.2129	.2829	.2543
17S (19/30)	.1933	.1592	.3150	.4186	.3762
18S (7/26)	.2077	.1711	.3385	.4497	.4043
20S (7/28)	.3304	.2722	.5384	.7149	.6429