

Table 8

Guidelines for current carrying capabilities of 300/500v V-75 or V-90 flexible cords

De-rating factors for multicore cables up to 10mm²

Cross Section mm ²	Current carrying capacity (Amps) @ 25°C ambient air temperature
0.5	3
0.75	7.5
1.0	10
1.5	16
2.5	20
4.0	25

Number of current carrying cores	De-rating factor
5	0.75
7	0.65
10	0.55
14	0.50
19	0.45
24	0.40
40	0.35
61	0.30

Data, audio & instrumentation cables: Stranded conductor information

AWG Size	Conductor Stranding	Size (mm ²)	Maximum resistance ohms / km 20°C. Bare copper wire	Maximum resistance ohms / km 20°C. Tinned copper wire	Approximate current rating (Amps)
28	7/0.12	0.079	235.44	242.34	0.5
27	21/0.08	0.106	181.75	190.25	0.6
26	7/0.15	0.123	150.75	155.09	0.8
	26/0.08	0.131	146.80	153.17	0.8
25	14/0.12	0.158	117.77	121.17	0.8
24	7/0.20	0.219	84.79	87.24	1.4
22	7/0.25	0.355	54.27	55.83	2.0
	7/0.30	0.495	37.69	38.77	3.0
	10/0.25	0.507	37.99	39.10	3.0
18	16/0.20	0.502	37.10	38.20	3.0
	7/0.40	0.897	20.79	21.20	4.5
	16/0.25	0.810	23.74	24.42	4.5
17	24/0.20	0.754	24.73	25.45	4.5
	32/0.20	1.005	18.55	19.08	12.0
	7/0.50	1.374	13.31	13.56	16.0
16	30/0.25	1.470	12.66	12.66	16.0
	40/0.25	1.963	9.50	9.80	18.0
14	63/0.20	1.980	9.42	9.69	18.0
	50/0.25	2.530	7.59	7.82	20.0
12	63/0.25	3.093	6.03	6.20	22.5
11	80/0.25	3.930	4.75	4.89	25.0
10	112/0.25	5.497	3.39	3.50	32.0
	120/0.25	5.890	3.17	3.26	32.0
7	195/0.25	9.570	1.95	2.00	50.0

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