

QUICKINFO CONDUCTOR RESISTANCE AND AMPACITY



FOR CONTROL AND ELECTRONIC CABLES

The values for the conductor resistance and current-carrying capacity listed in the table below apply to conductors as used in electronic cables, e.g. LiYY, LiYCY, but also in machine control cables with PVC insulation such as YSLY-JZ, YSLYCY-JZ, HSLH-JZ, HSLCH-JZ and drag chain cables with TPE/PP insulation, for e.g. Faber® EFK-SC9Y11Y and Faber® EFK-SC9YC11Y. The conductor resistances meet the requirements for VDE 0295, the current carrying capacities were determined in accordance with VDE 0891 and 298-4.

cross section [mm ²]	conductor resistance at 20 °C in Ω/km (max.)				Ampacity	
	stranded conductor (VDE 0295 class 2)		flexible conductor (VDE 0295 class 5)		TPE/PP- insulation	PVC- insulation [A]
	tinned	blanc	tinned	blanc		
0.14	-	-	142.0	138.0	2,5	2
0.25	-	-	82.0	79.0	5	4
0.34	-	-	59.0	57.0	7	6
0.5	36.7	36.0	40.1	39.0	10	9
0.75	24.8	24.5	26.7	26.0	14	12
1.0	18.2	18.1	20.0	19.5	17	15
1.5	12.2	12.1	13.7	13.3	23	18
2.5	7.56	7.41	8.21	7.98	32	26
4	4.70	4.61	5.09	4.95	43	34
6	3.11	3.08	3.39	3.30	56	44
10	1.84	1.83	1.95	1.91	77	61
16	1.16	1.15	1.24	1.21	103	82
25	0.734	0.727	0.795	0.780	133	108
35	0.529	0.524	0.565	0.554	163	135
50	0.391	0.387	0.393	0.386	200	168
70	0.270	0.268	0.277	0.272	258	207
95	0.195	0.193	0.210	0.206	316	250
120	0.154	0.153	0.164	0.161	368	292
150	0.126	0.124	0.132	0.129	425	335
185	0.100	0.0991	0.108	0.106	488	382
240	0.0762	0.0754	0.0817	0.0801	540	453