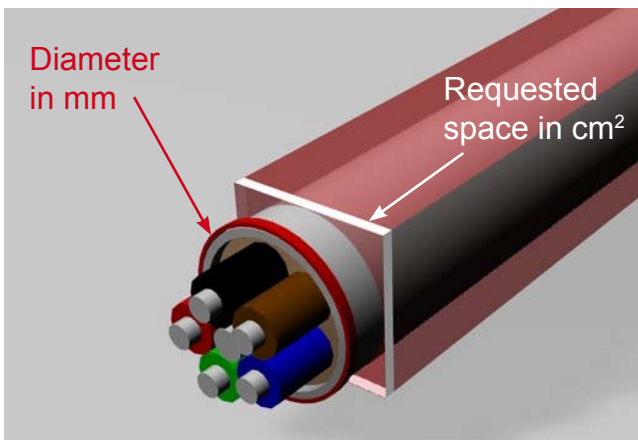
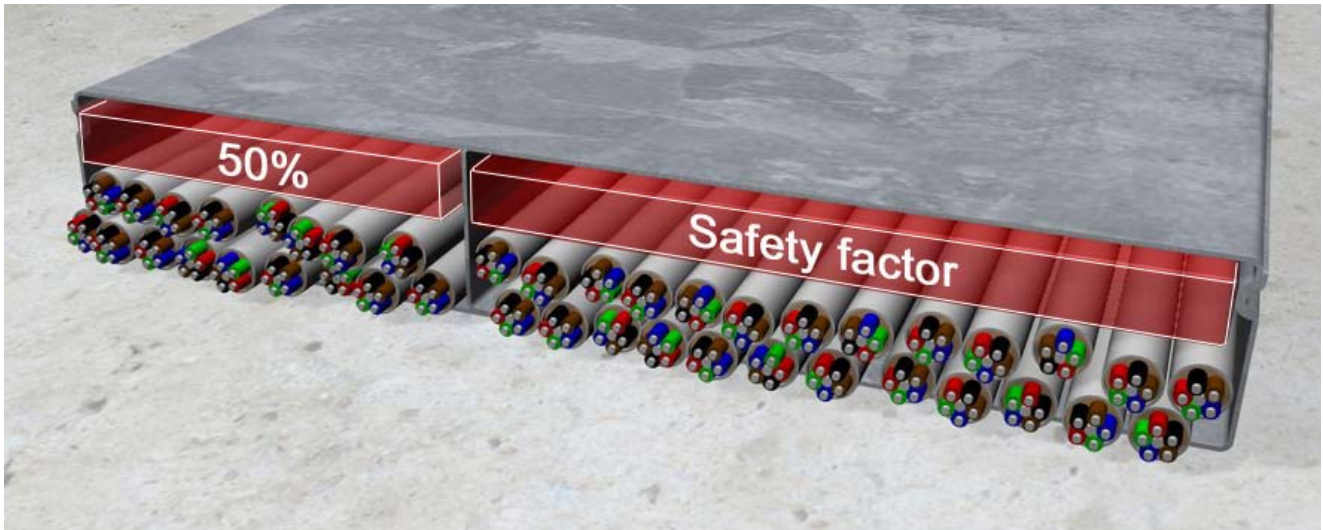
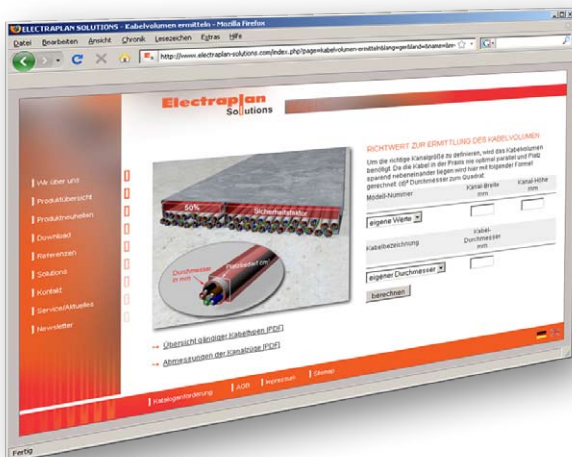


# Calculate cable volume



In order to define the right trunking size you do need the cable capacity. As the cable never lay space-saving next to each other and never lay optimal parallel here you can calculate with the following formula:  $(d)^2$  diameter squared. In order to be prepared for later refitting of cables the trunkings should be filled 50% only. Thereby the cable can be pulled easier through the trunkings.

Additionally you have to consider that at the calculation no floor boxes or cable outlets has been included who could disturb the cable way. In practice power and data cable are layed separate in the trunkings. Divider walls are dividing the trunkings into several compartments. Is this the case at your place, please calculate the demand for your cables separately.

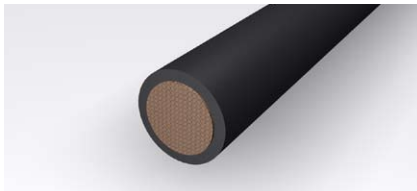


The cable configurator assist you at your calculation. You will find it under: [www.electraplan-solutions.com](http://www.electraplan-solutions.com) at the column „Service“.

This calculation is a general reference value. At a heavy current load the heating of the cables has to be considered. At the same time all prevailing regulation e.g. DIN VDE 0100, has receive attention.

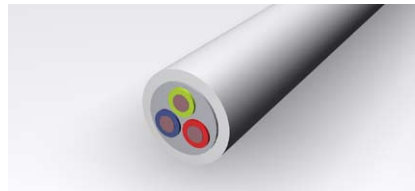
At the following side you will find an overview of the current types of cables. These list contains the cable diameter and the space demand. The data are average values, exact data you will get from the respective manufacturer.

Power line



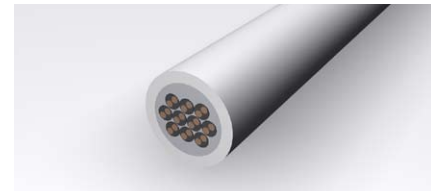
Type of cable	Diameter mm	Space cm <sup>2</sup>
1 x 10	10,5	1,10
1 x 16	11,5	1,32
1 x 25	12,5	1,56
1 x 35	13,5	1,82
1 x 50	15,5	2,40
1 x 70	16,5	2,72
1 x 95	18,5	3,42
1 x 120	20,5	4,20
1 x 150	22,5	5,06
3 x 1,5	11,5	1,32
3 x 2,5	12,5	1,56
3 x 10	17,5	3,06
3 x 16	19,5	3,80
3 x 50	26,0	6,76
3 x 70	30,0	9,00
3 x 120	36,0	12,96
4 x 1,5	12,5	1,56
4 x 2,5	13,5	1,82
4 x 6	16,5	2,72
4 x 10	18,5	3,42
4 x 16	21,5	4,62
4 x 25	25,5	6,50
4 x 35	28,0	7,84
4 x 50	30,0	9,00
4 x 70	34,0	11,56
4 x 95	39,0	15,21
4 x 120	42,0	17,64
4 x 150	47,0	22,00
5 x 1,5	13,5	1,82
5 x 2,5	14,5	2,10
5 x 6	18,5	3,42
5 x 10	20,5	4,20
5 x 16	22,5	5,06
5 x 25	27,5	7,56
5 x 35	34,0	11,56
5 x 50	40,0	16,00

Power cable



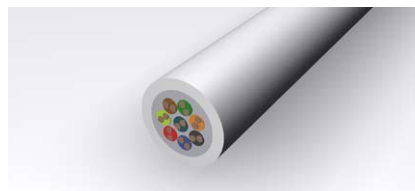
Type of cable	Diameter mm	Space cm <sup>2</sup>
1 x 4	6,5	0,42
1 x 6	7,0	0,49
1 x 10	8,0	0,64
1 x 16	9,5	0,90
1 x 25	12,5	1,56
3 x 1,5	9,1	0,83
3 x 2,5	10,4	1,08
3 x 4	11,0	1,21
4 x 1,5	9,0	0,81
4 x 2,5	10,5	1,10
4 x 4	12,5	1,56
4 x 6	13,5	1,82
4 x 10	16,5	2,72
4 x 16	19,0	3,61
4 x 25	23,5	5,52
4 x 35	26,0	6,76
5 x 1,5	10,8	1,17
5 x 2,5	12,2	1,49
5 x 4	13,5	1,82
5 x 6	14,5	2,10
5 x 10	18,0	3,24

Telephone line



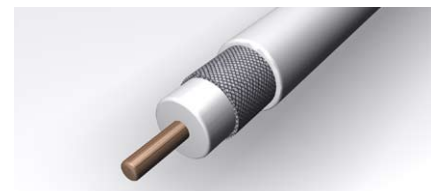
Type of cable	Diameter mm	Space cm <sup>2</sup>
2 x 2 x 0,6	5,0	0,25
4 x 2 x 0,6	6,9	0,48
6 x 2 x 0,6	7,2	0,52
10 x 2 x 0,6	7,5	0,56
20 x 2 x 0,6	9,0	0,81
40 x 2 x 0,6	11,0	1,12
60 x 2 x 0,6	13,0	1,69
100 x 2 x 0,6	17,0	2,89
200 x 2 x 0,6	23,0	5,29
2 x 2 x 0,8	6,0	0,36
4 x 2 x 0,8	7,0	0,49
6 x 2 x 0,8	8,5	0,72
10 x 2 x 0,8	9,5	0,90
20 x 2 x 0,8	13,0	1,69
40 x 2 x 0,8	16,5	2,72
60 x 2 x 0,8	20,0	4,00
100 x 2 x 0,8	25,5	6,50
200 x 2 x 0,8	32,0	10,24

Data line



Type of cable	Diameter mm	Space cm <sup>2</sup>
CAT 5	8,2	0,67
CAT 6	8,2	0,67

Koax line



Type of cable	Diameter mm	Space cm <sup>2</sup>
RG-59	6,5	0,42
10Base5	12,5	1,56