PEEK® Wires, solid and stranded

Solid Wires

not available from stock

PEEK® is a linear, semi- cristalline, high aromatic polymer. It is an exceptional thermoplastic synthetic material and can withstand extreme temperatures, pressions and agressive fluids.

Properties:

- very high permanent operating temperature of 220°C (20.000 h)
- very good behavior concerning burning LOI 24-35 (dependant on thickness))
- halogen free
- very good mechanical resistance
- good behavior against abrasion / good tensile strength
- very low toxicity of fire gases at simultaneously low smoke gas density
- can be sterilized, applicable in medical equipment (Ethylene oxide / steam / gamma radiation) USP Class VI approbation for basis material exists
- very high radiation resistance
- UL94 V-0 listed
- very high dielectric strength (190 kV/mm)

Conductor: Bare copper
Tin plated copper (TPC) Nickel plated copper (NPC) Silver plated copper (SPC)

Insulation: from 0,1 mm wall thickness dependent on cross section also with double insulation possible (e. g 2 x 0,1 mm wall)

Colours: no accurate r RAL colour tone possible because of the strong inherent colour.

Dimensions:

AWG	Diameter	Cross Section	Resi-stance	Metric equivalent
	[mm]	[mm2]	[Ω/km]	[mm²]
1	7,35	42,41	0,42	50
2	6,54	33,62	0,53	35
3	5,83	26,66	0,67	
4	5,19	21,15	0,84	25
5	4,62	16,76	1,06	
6	4,11	13,30	1,34	16
7	3,66	10,55	1,69	
8	3,26	8,37	2,13	10
9	2,90	6,63	2,68	
10	2,59	5,26	3,38	6
11	2,30	4,17	4,27	
12	2,05	3,31	5,38	4
13	1,83	2,62	6,78	
14	1,63	2,08	8,55	2,5
15	1,45	1,65	10,79	

AWG	Dia-meter	Cross Section	Resistance	Metric equivalent
	[mm]	[mm²]	[Ω/km]	[mm²]
16	1,29	1,31	13,60	1,5
17	1,15	1,04	17,15	
18	1,02	0,82	21,63	1
19	0,91	0,65	27,27	0,75
20	0,81	0,52	34,39	0,75
21	0,72	0,41	43,37	0,5
22	0,64	0,32	54,66	0,34
23	0,57	0,26	68,96	
24	0,51	0,20	86,95	0,25
25	0,45	0,16	109,64	
26	0,40	0,12	138,26	0,14
27	0,36	0,10	174,22	
28	0,32	0,08	219,87	0,09
29	0,29	0,06	277,07	
30	0,25	0,05	349,19	

These values only are approximate

Note
These wires are manufactured according to the specifications of the customer (diameter, wall thickness) and are not available from stock.

Stranded Wires

AWG	Construction [n×AWG]	Diameter [mm]	Cross Section [mm²]	Resistance [Ω/km]	Metric Equivalent [mm²]
1	133×22	7,35	42,41	0,42	50
	259×25				
	817×30				
	2109×34				
2	133×23	33,62	0,53	35	
	259×26				
	655×30				
	2646×36				
4	133×25	5,19	21,15	0,84	25
	259×27				
	1666×36				
6	133×27	4,11	13,30	1,34	
	259×30				
	1050×36				
8	49×25	3,26	8,37	2,13	10
	133×29				
	655×36				
10	37×26	2,59	5,26	3,38	6
	49×27				
	105×30				
12	7×20	2,05	3,31	5,38	4
	19×26				
	60×30				
	165×34				
14	7×22	1,63	2,08	8,55	2,5
	19×27				
	41×30				
	105×34				

AWG	Construction [n×AWG]	Diameter [mm]	Cross Section [mm²]	Resistance [Ω/km]	Metric Equivalent [mm²]
16	7×24	1,29	1,31	13,60	1,5
	19×28				
	26×30				
	65×34				
	105×36				
18	7×26	1,02	0,82	21,63	1
	16×30				
	19×32				
	41×34				
	65×36				
20	7×28	0,81	0,52	34,39	0,75
	10×30				
	19×32				
	26×34				
22	7×30	0,64	0,32	54,66	0,34
	19×34				
	26×36				
24	7×32	0,51	0,20	86,95	0,25
	10×34				
	19×36				
	41×40				
26	7×34	0,40	0,12	138,26	0,14
	10×36				
	19×38				
27	7×35				
28	7×36	0,32	0,08	219,87	0,09
	19×40				
30	7×38	0,25	0,05	349,19	

These values approximate

Note
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