

PEEK® Wires, solid and stranded

Solid Wires

(No stock item)

PEEK® is a linear, semi-crystalline, high aromatic polymer. It is an exceptional thermoplastic synthetic material and can withstand extreme temperatures, pressures and aggressive 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 RAL colour tone possible because of the strong inherent colour.

Dimensions:

AWG	Diameter	Cross Section [mm ²]	Resistance [Ω/km]	Metric equivalent [mm ²]
	[mm]			
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	Diameter	Cross Section [mm ²]	Resistance [Ω/km]	Metric equivalent [mm ²]
	[mm]			
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

(No stock item)

AWG	Construction [n×AWG]	Dia- meter [mm]	Cross Section [mm ²]	Resi- stance [Ω/km]	Metric Equivalent [mm ²]
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]	Dia- meter [mm]	Cross Section [mm ²]	Resi- stance [Ω/km]	Metric Equivalent [mm ²]
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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