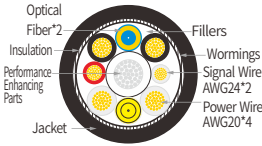


Hybrid Cable

Standard Hybrid Optical Fiber Cable

Cable Type	Optical Fiber * 2C										Attenuation (dB/km@1310m)
	Optical Fiber				Buffer layer		Jacket				
	Optical Fiber (μm)	Single coating (μm)	Contact	Fiber R reinforcement	Material	Dia. (mm)	Material	Dia. (mm)	Color		
FC.449N1.92SMC	9/125	330±15	2C	Aramid Fiber	Nylon	0.9	PVC	2	Blue/Yellow	≤0.5	
	Low Voltage*AWG20*4C+AWG24*2C										
	Conductor				Insulation			Rated voltage (V)			
	Gauge AWG	Parameters	Material	Contact	Material	Dia. (mm)					
	AWG20	19/0.2	Tinned copper wire	4C	HDPE	1.6	600V				
	AWG24	7/0.2	Tinned copper wire	2C	HDPE	1.1	300V				
	Shielded			Jacket			Ambient temperature				
Structure	Material	Coverage	Material	Dia. (mm)	Color						
Brads	Tinned copper wire	85%	PU	5.5	Black	-40°C~+80°C					



American Gauge AWG

AWG	Structure		Wire Max. Od		Wire Cross-Sections	
	Stranded Conductor No	Stranded Conductor AWG	(mm)	(in)	(mm²)	(Square IN.)
0	259	24	11.277	0.444	52.90	0.0820
1	817	30	9.702	0.382	41.40	0.0641
2	259	26	8.89	0.35	33.20	0.0514
4	133	25	6.9596	0.274	21.5925	0.0335
6	133	27	5.5118	0.217	13.5885	0.0211
8	168	30	4.445	0.175	8.5127	0.0132
8	133	29	4.3942	0.173	8.6053	0.0133
10	105	30	3.3020	0.13	5.3204	0.0082
10	37	26	2.9210	0.115	4.7397	0.0073
10	1	10	2.6162	0.103	5.2614	0.0082
12	37	28	2.3114	0.091	2.9765	0.0046
12	19	25	2.3622	0.093	3.0847	0.0048
12 <sup>1)</sup>	7	20	2.5400	0.10	3.6321	0.0056
12	1	12	2.0828	0.082	3.3081	0.0051
14	41	30	2.0574	0.081	2.0775	0.0032
14	19	27	1.8542	0.073	1.9413	0.0030
14 <sup>1)</sup>	7	22	2.0828	0.082	2.2704	0.0035
14	1	14	1.6510	0.065	2.0820	0.0032
16 <sup>1)</sup>	65	34	1.5748	0.062	1.3072	0.0020
16	26	30	1.5748	0.062	1.3174	0.0020
16	19	29	1.4986	0.059	1.2293	0.0019
16 <sup>1)</sup>	7	24	1.5494	0.061	1.4330	0.0022
16	1	16	1.3208	0.052	1.3076	0.0020
18 <sup>1)</sup>	65	36	1.2700	0.05	0.8234	0.0013
18 <sup>1)</sup>	42	34	1.2700	0.05	0.8447	0.0013
18	19	30	1.3208	0.052	0.9627	0.0015
18	16	30	1.2954	0.051	0.8107	0.0013
18	7	26	1.2700	0.05	0.8967	0.0014

AWG	Structure		Wire Max. Od		Wire Cross-Sections	
	Stranded Conductor No	Stranded Conductor AWG	(mm)	(in)	(mm²)	(Square IN.)
18	1	18	1.0414	0.041	0.8229	0.0013
20 <sup>1)</sup>	42	36	1.0160	0.04	0.5320	8.2×10 <sup>-4</sup>
20	19	32	1.0414	0.041	0.6162	0.0010
20	10	30	1.0160	0.04	0.5067	7.9×10 <sup>-4</sup>
20	7	28	0.9906	0.039	0.5631	8.7×10 <sup>-4</sup>
20	1	20	0.8382	0.033	0.5189	8.0×10 <sup>-4</sup>
22	19	34	0.8382	0.033	0.3821	5.9×10 <sup>-4</sup>
22	7	30	0.7874	0.031	0.3547	5.5×10 <sup>-4</sup>
22	1	22	0.6604	0.026	0.3243	5.0×10 <sup>-4</sup>
24 <sup>1)</sup>	42	40	0.6604	0.026	0.2045	3.2×10 <sup>-4</sup>
24	19	36	0.6858	0.027	0.2407	3.7×10 <sup>-4</sup>
24	7	32	0.6350	0.025	0.2270	3.5×10 <sup>-4</sup>
24	1	24	0.5588	0.022	0.2047	3.2×10 <sup>-4</sup>
26	19	38	0.5588	0.022	0.1540	2.4×10 <sup>-4</sup>
26	7	34	0.5080	0.02	0.1408	2.2×10 <sup>-4</sup>
26	1	26	0.4318	0.017	0.1281	2.0×10 <sup>-4</sup>
28 <sup>1)</sup>	19	40	0.4318	0.017	0.0925	1.4×10 <sup>-4</sup>
28	7	36	0.4064	0.016	0.0887	1.4×10 <sup>-4</sup>
28	1	28	0.3302	0.013	0.0804	1.2×10 <sup>-4</sup>
30	7	38	0.3302	0.013	0.0568	8.8×10 <sup>-5</sup>
30	1	30	0.2794	0.011	0.0507	7.9×10 <sup>-5</sup>
32	7	40	0.2794	0.011	0.0341	5.3×10 <sup>-5</sup>
32	1	32	0.2286	0.009	0.0324	5.0×10 <sup>-5</sup>
34	1	34	0.1693	0.007	0.0201	3.1×10 <sup>-5</sup>
36	1	36	0.127	0.005	0.0127	2.0×10 <sup>-5</sup>
38	1	38	0.1016	0.004	0.0081	1.3×10 <sup>-5</sup>
40	1	40	0.078	0.003	0.0049	7.5×10 <sup>-6</sup>

Note: 1) Not included in the standard

Max. Rated Current Of Conductor

Test data based on ambient temperature of 30 ° C (refer to sections VDE0100.430 and 532 and other VDE regulations)

Standard cross-sectional area mm²	Group 2 Max. current (A)	Group 3 Max. current (A)	Standard cross-sectional area mm²	Group 2 Max. current (A)	Group 3 Max. current (A)	Standard cross-sectional area mm²	Group 2 Max. current (A)	Group 3 Max. current (A)
0.08	1.0	1.5	0.34	6.0	8.0	1.00	15.0	19.0
0.14	2.0	3.0	0.50	9.0	12.0	1.50	18.0	24.0
0.25	4.0	5.0	0.75	12.0	15.0	2.50	26.0	32.0

The group 2 of multi-core conductors, such as solid core cable with outer leather, shielded cable, lead leather cable.....  
 The group 3 of single-core conductors and single-core cables shall be laid in an air environment with a spacing of at least one time of diameter