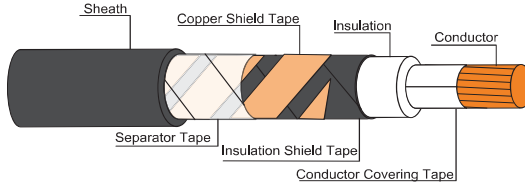


1.8/3KV-CV

1.8/3(3.6)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE

IEC 60502-1



CABLE STRUCTURE

- Conductor** : Compacted round annealed copper
Single-core : Sizes 10 mm² up to 400 mm²
- Insulation** : Cross-Linked polyethylene (XLPE)
- Core identification**
Single-core : Natural (Translucent)
- Shield** : Copper tape
- Sheath** : Black flame retardant polyvinyl chloride (PVC/ST2)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 90°C
: Circuit voltage not exceeding 3,300 Volts
- Rated voltage** : 1,800 Volts between Line to Earth
: 3,000 Volts between Line to Line
- Testing voltage** : 6,500 Volts
- Reference standard** : IEC 60502-1, IEC 60228, IEC 60332-1
- Remark** : Special protection can be produced

APPLICATION

For installation exposed, or in raceway, wet or dry location, or direct burial in ground

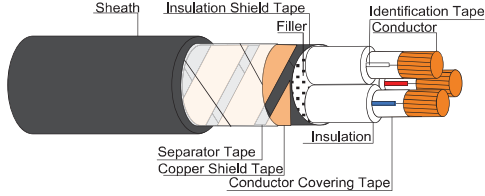
Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ·km)	Continuous current rating in free air at 40°C maximum (A)			Continuous current rating in ground at 30°C maximum (A)	Cable weight approx (kg/km)	Standard Length (m)
								Spaced	Touching	Trefoil			
								(A)	(A)	(A)			
1	10	6	2.0	1.8	12.0	1.83	2,900	100	81	79	85	220	500/D
	16	6	2.0	1.8	13.0	1.15	2,450	132	106	104	109	290	500/D
	25	6	2.0	1.8	14.5	0.727	2,050	173	140	136	140	390	300/D
	35	6	2.0	1.9	15.5	0.524	1,800	211	171	166	167	490	300/D
	50	6	2.0	2.0	16.5	0.387	1,550	255	207	201	198	600	300/D
	70	12	2.0	2.1	18.5	0.268	1,350	321	261	253	241	850	300/D
	95	15	2.0	2.2	21	0.193	1,150	395	321	311	289	1,100	300/D
	120	18	2.0	2.3	22	0.153	1,050	457	373	362	328	1,400	300/D
	150	18	2.0	2.4	24	0.124	950	522	426	413	368	1,600	300/D
	185	30	2.0	2.5	26	0.0991	850	601	492	476	415	2,000	300/D
	240	34	2.0	2.7	28	0.0754	750	716	587	567	480	2,600	300/D
	300	34	2.0	2.9	30	0.0601	700	827	678	654	541	3,200	300/D
	400	53	2.0	3.1	33	0.0470	600	963	791	762	611	4,000	200/D

Remark : Thermal resistivity of soil 1.2 K.m/W or °C.m/W

D : Packing in drum

Deep of laying (For cable laid direct in ground) 0.8 m

Number of core	Nominal cross sectional area (mm ²)	A.C.Resistance			Inductance			Reactance			Impedance		
		R			L			XL			Z		
		(Ω/km)			(mH/km)			(Ω/km)			(Ω/km)		
		Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil
1	10	2.3335	2.3335	2.3335	0.6258	0.4872	0.4410	0.1966	0.1531	0.1385	2.3417	2.3385	2.3376
	16	1.4664	1.4664	1.4664	0.5945	0.4559	0.4096	0.1868	0.1432	0.1287	1.4783	1.4734	1.4721
	25	0.9271	0.9271	0.9271	0.5689	0.4283	0.3820	0.1781	0.1345	0.1200	0.9440	0.9368	0.9349
	35	0.6683	0.6683	0.6683	0.5492	0.4106	0.3644	0.1725	0.1290	0.1145	0.6902	0.6807	0.6781
	50	0.4936	0.4937	0.4937	0.5223	0.3836	0.3374	0.1641	0.1205	0.1060	0.5202	0.5082	0.5050
	70	0.3420	0.3421	0.3422	0.5093	0.3706	0.3244	0.1600	0.1164	0.1019	0.3776	0.3614	0.3570
	95	0.2465	0.2466	0.2467	0.4940	0.3553	0.3091	0.1552	0.1116	0.0971	0.2913	0.2707	0.2652
	120	0.1956	0.1958	0.1959	0.4829	0.3443	0.2981	0.1517	0.1082	0.0936	0.2475	0.2237	0.2172
	150	0.1587	0.1590	0.1592	0.4749	0.3362	0.2900	0.1492	0.1056	0.0911	0.2178	0.1909	0.1834
	185	0.1271	0.1275	0.1277	0.4681	0.3295	0.2833	0.1471	0.1035	0.0890	0.1944	0.1642	0.1557
	240	0.0972	0.0976	0.0980	0.4595	0.3209	0.2747	0.1444	0.1008	0.0863	0.1740	0.1403	0.1306
	300	0.0779	0.0786	0.0791	0.4521	0.3135	0.2672	0.1420	0.0985	0.0840	0.1620	0.1280	0.1153
	400	0.0616	0.0624	0.0631	0.4478	0.3092	0.2630	0.1407	0.0971	0.0826	0.1536	0.1155	0.1039



CABLE STRUCTURE

- Conductor** : Compacted round annealed copper
Single-core : Sizes 10 mm² up to 400 mm²
- Insulation** : Cross-Linked polyethylene (XLPE)
- Core identification**
3 Cores : White, Red, Blue
- Shield** : Copper tape
- Sheath** : Black flame retardant polyvinyl chloride (PVC/ST2)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 90°C
: Circuit voltage not exceeding 3,300 Volts
- Rated voltage** : 1,800 Volts between Line to Earth
: 3,000 Volts between Line to Line
- Testing voltage** : 6,500 Volts
- Reference standard** : IEC 60502-1, IEC 60228, IEC 60332-1
- Remark** : Special protection can be produced

APPLICATION

For installation exposed, or in raceway, wet or dry location, or direct burial in ground

B

Number of cores	Nominal cross sectional area	Number of wires minimum	Insulation thickness nominal	Sheath thickness nominal	Overall diameter approx.	Conductor resistance at 20°C maximum	Insulation resistance at 20°C minimum	Continuous current rating in free air at 40°C maximum	Continuous current rating in ground at 30°C maximum	Cable weight approx.	Standard Length
3	10	6	2.0	1.8	23	1.83	2,900	73	80	650	500/D
	16	6	2.0	1.8	25	1.15	2,450	96	103	850	500/D
	25	6	2.0	1.8	28	0.727	2,050	126	133	1,200	300/D
	35	6	2.0	1.9	30	0.524	1,800	154	159	1,500	300/D
	50	6	2.0	2.0	33	0.387	1,550	186	188	1,900	300/D
	70	12	2.0	2.1	37	0.268	1,350	233	230	2,600	300/D
	95	15	2.0	2.2	41	0.193	1,150	286	275	3,500	300/D
	120	18	2.0	2.3	44	0.153	1,050	331	313	4,300	300/D
	150	18	2.0	2.4	48	0.124	950	377	350	5,000	300/D
	185	30	2.0	2.5	52	0.0991	850	434	395	6,500	300/D
	240	34	2.0	2.7	57	0.0754	750	514	457	8,000	300/D
	300	34	2.0	2.9	62	0.0601	700	589	513	12,000	300/D
400	53	2.0	3.1	69	0.0470	600	679	578	12,500	200/D	

Remark : Thermal resistivity of soil 1.2 K.m/W or °C.m/W

D : Packing in drum

Deep of laying (For cable laid direct in ground) 0.8 m

Number of cores	Nominal cross sectional area	A.C. Resistance R	Inductance L	Reactance XL	Impedance Z
3	10	2.3335	0.3685	0.1158	2.3364
	16	1.4665	0.3435	0.1079	1.4704
	25	0.9272	0.3222	0.1012	0.9327
	35	0.6684	0.3090	0.0971	0.6754
	50	0.4938	0.2868	0.0901	0.5020
	70	0.3423	0.2744	0.0862	0.3530
	95	0.2469	0.2640	0.0829	0.2605
	120	0.1962	0.2546	0.0800	0.2118
	150	0.1595	0.2493	0.0783	0.1777
	185	0.1281	0.2440	0.0767	0.1493
	240	0.0985	0.2359	0.0741	0.1233
	300	0.0797	0.2331	0.0732	0.1082
400	0.0638	0.2288	0.0719	0.0961	