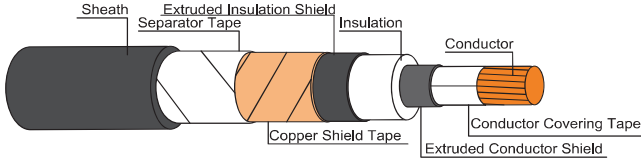


8.7/15(17.5)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE

IEC 60502-2



CABLE STRUCTURE

- Conductor** : Compacted round annealed copper
Single-core : Sizes 25 mm² up to 1000 mm²
- Insulation** : Cross-Linked polyethylene (XLPE)
- Core Identification**
Single-core : Natural (Translucent)
- Shield** : Copper tape
- Sheath** : Black polyvinyl chloride (PVC/ST2)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 90°C
: Circuit voltage not exceeding 17,500 Volts
- Rated voltage** : 8,700 Volts between Line to Earth
: 15,000 Volts between Line to Line
- Testing voltage** : 30,500 Volts
- Reference standard** : IEC 60502-2, 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 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			Continuous current rating in ground at 30°C maximum (A)	Cable weight approx. (kg/km)	Standard Length (m)
								Spaced (A)	Touching (A)	Trefoil (A)			
1	25	6	4.5	1.6	22	0.727	3.300	177	151	148	140	650	500/D
	35	6	4.5	1.7	23	0.524	3.000	215	184	179	167	750	500/D
	50	6	4.5	1.7	25	0.387	2.700	258	220	215	197	900	500/D
	70	12	4.5	1.8	26	0.268	2.400	322	275	268	240	1,200	500/D
	95	15	4.5	1.8	28	0.193	2.100	394	336	327	298	1,400	500/D
	120	18	4.5	1.9	30	0.153	1.950	454	388	377	327	1,700	500/D
	150	18	4.5	1.9	31	0.124	1.800	517	441	429	367	2,000	500/D
	185	30	4.5	2.0	33	0.0991	1.650	595	508	494	414	2,400	500/D
	240	34	4.5	2.1	36	0.0754	1.500	705	602	584	480	3,000	500/D
	300	34	4.5	2.1	38	0.0601	1.350	805	688	667	539	3,700	500/D
	400	53	4.5	2.2	41	0.0470	1.200	935	798	773	611	4,500	500/D
	500	53	4.5	2.3	45	0.0366	1.100	1093	932	900	693	5,500	500/D
	630	53	4.5	2.4	48	0.0283	950	1272	1081	1039	780	7,000	500/D
	800	53	4.5	2.6	53	0.0221	850	1460	1235	1181	864	8,500	500/D
	1000	53	4.5	2.7	58	0.0176	750	1669	1403	1331	945	11,500	300/D

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

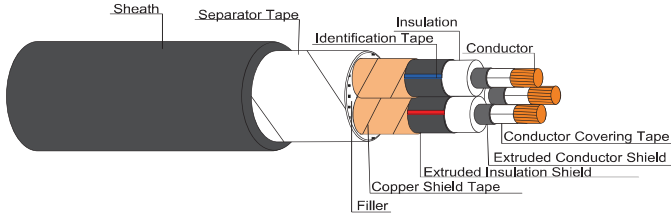
D : Packing in drum

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

Number of core	Nominal cross sectional area (mm ²)	A.C.Resistance R (Ω/km)			Inductance L (mH/km)			Reactance XL (Ω/km)			Impedance Z (Ω/km)		
		Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil
1	25	0.3271	0.3271	0.3271	0.8511	0.5125	0.4663	0.2046	0.1610	0.1465	0.8494	0.9410	0.9386
	35	0.6883	0.6883	0.6883	0.8316	0.4930	0.4467	0.1984	0.1549	0.1403	0.6971	0.6860	0.6829
	50	0.4936	0.4937	0.4937	0.5986	0.4600	0.4139	0.1801	0.1445	0.1300	0.5282	0.5144	0.5105
	70	0.3420	0.3420	0.3421	0.5773	0.4387	0.3925	0.1814	0.1378	0.1233	0.3871	0.3687	0.3636
	95	0.2465	0.2465	0.2466	0.5589	0.4183	0.3721	0.1750	0.1314	0.1169	0.3022	0.2794	0.2729
	120	0.1955	0.1957	0.1957	0.5418	0.4032	0.3570	0.1702	0.1267	0.1121	0.2593	0.2331	0.2256
	150	0.1587	0.1588	0.1589	0.5307	0.3921	0.3459	0.1667	0.1232	0.1087	0.2302	0.2010	0.1925
	185	0.1271	0.1273	0.1274	0.5227	0.3841	0.3379	0.1642	0.1207	0.1061	0.2076	0.1754	0.1659
	240	0.0971	0.0974	0.0976	0.5097	0.3711	0.3249	0.1601	0.1166	0.1021	0.1873	0.1519	0.1412
	300	0.0778	0.0782	0.0785	0.4991	0.3604	0.3142	0.1568	0.1132	0.0987	0.1750	0.1376	0.1261
	400	0.0615	0.0620	0.0624	0.4895	0.3508	0.3046	0.1538	0.1102	0.0957	0.1656	0.1285	0.1143
	500	0.0486	0.0494	0.0500	0.4814	0.3427	0.2965	0.1512	0.1077	0.0932	0.1588	0.1184	0.1057
	630	0.0386	0.0396	0.0404	0.4721	0.3335	0.2872	0.1483	0.1048	0.0902	0.1532	0.1120	0.0989
	800	0.0313	0.0325	0.0335	0.4648	0.3262	0.2799	0.1460	0.1025	0.0879	0.1493	0.1075	0.0941
	1000	0.0262	0.0277	0.0289	0.4553	0.3167	0.2704	0.1430	0.0995	0.0850	0.1454	0.1033	0.0898

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- Core identification**
3 Cores : White, Red, Blue
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- Reference standard** : IEC 60502-2, 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 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	25	6	4.5	2.4	45	0.727	3,300	142	137	2,200	500/D
	35	6	4.5	2.5	48	0.524	3,000	173	165	2,600	500/D
	50	6	4.5	2.6	51	0.387	2,700	208	195	3,100	500/D
	70	12	4.5	2.7	54	0.268	2,400	258	238	3,900	500/D
	95	15	4.5	2.8	58	0.193	2,100	314	284	4,800	500/D
	120	18	4.5	2.9	62	0.153	1,950	362	323	5,500	500/D
	150	18	4.5	3.1	66	0.124	1,800	409	361	6,500	500/D
	185	30	4.5	3.2	69	0.0991	1,650	468	407	8,000	500/D
	240	34	4.5	3.4	75	0.0754	1,500	551	470	10,000	300/D
	300	34	4.5	3.5	80	0.0601	1,350	629	529	12,000	300/D
400	53	4.5	3.7	86	0.0470	1,200	722	598	15,000	300/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	Inductance	Reactance	Impedance
		R	L	XL	Z
	(mm ²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
3	25	0.9271	0.4248	0.1334	0.9367
	35	0.6683	0.4057	0.1274	0.6804
	50	0.4937	0.3749	0.1178	0.5076
	70	0.3421	0.3546	0.1114	0.3598
	95	0.2467	0.3369	0.1058	0.2684
	120	0.1958	0.3223	0.1013	0.2205
	150	0.1591	0.3129	0.0983	0.1870
	185	0.1276	0.3053	0.0959	0.1596
	240	0.0978	0.2935	0.0922	0.1344
	300	0.0788	0.2848	0.0895	0.1192
400	0.0628	0.2762	0.0868	0.1071	

B