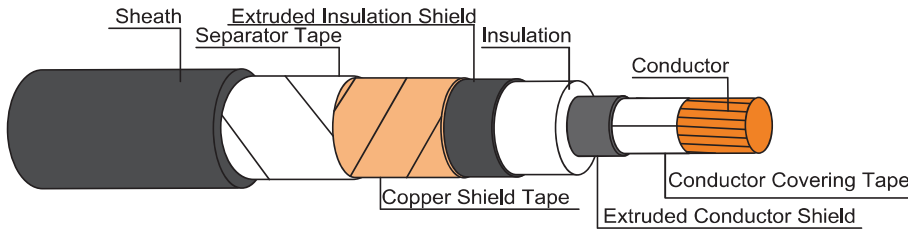


3.6/6(7.2)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE

IEC 60502-2

TIS 2143-2546



CABLE STRUCTURE

- Conductor** : Compacted round annealed copper
- Conductor shield** : Semi-conductive Cross-linked polyethylene compound
- Insulation** : Cross-Linked polyethylene (XLPE)
- Insulation shield** : Semi-conductive Cross-linked polyethylene compound
- 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 7,200 Volts
- Rated voltage** : 3,600 Volts between Line to Earth  
: 6,000 Volts between Line to Line
- Testing voltage** : 12,500 Volts
- Reference standard** : IEC 60502-2, IEC 60228, IEC 60332-1
- Remark** : Special protection can be produced  
\*Insulation shield shall be applied semi-conductive tape

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 <sup>2</sup> )	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	*10	6	2.5	1.4	14.0	1.83	2,850	100	83	81	84	260	500/D
	*16	6	2.5	1.5	15.6	1.15	2,500	132	109	107	108	350	500/D
	25	6	2.5	1.5	17.5	0.727	2,150	175	145	142	139	480	500/D
	35	6	2.5	1.5	18.5	0.524	1,900	213	177	172	167	600	500/D
	50	6	2.5	1.6	20	0.387	1,700	256	213	208	197	750	500/D
	70	12	2.5	1.6	21	0.268	1,500	321	267	259	240	950	500/D
	95	15	2.5	1.7	24	0.193	1,300	393	327	318	288	1200	500/D
	120	18	2.5	1.7	25	0.153	1,200	455	379	368	327	1500	500/D
	150	18	2.5	1.8	27	0.124	1,100	518	432	419	366	1800	500/D
	185	30	2.5	1.8	28	0.0991	1,000	597	498	484	414	2200	500/D
	240	34	2.6	1.9	31	0.0754	900	710	594	575	479	2800	500/D
	300	34	2.8	2.0	34	0.0601	900	822	688	666	541	3400	500/D
	400	53	3.0	2.1	37	0.0470	850	960	804	777	614	4300	500/D
	500	53	3.2	2.2	42	0.0366	800	1126	943	908	696	5500	500/D
	630	53	3.2	2.4	46	0.0283	700	1308	1094	1048	782	7000	500/D
	800	53	3.2	2.5	50	0.0221	600	1504	1251	1191	865	8500	300/D
1000	53	3.2	2.6	55	0.0176	550	1720	1422	1343	944	11000	300/D	

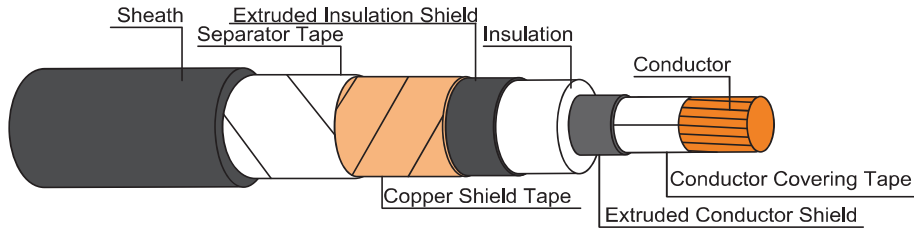
**Remark** : Thermal resistivity of soil 1.2 K.m/W or °C.m/W  
Deep of laying (For cable laid direct in ground) 0.8 m

D : Packing in drum

3.6/6(7.2)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE

IEC 60502-2

TIS 2143-2546



**CABLE STRUCTURE**

- Conductor** : Compacted round annealed copper
- Conductor shield** : Semi-conductive Cross-linked polyethylene compound
- Insulation** : Cross-Linked polyethylene (XLPE)
- Insulation shield** : Semi-conductive Cross-linked polyethylene compound
- 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 7,200 Volts
- Rated voltage** : 3,600 Volts between Line to Earth  
: 6,000 Volts between Line to Line
- Testing voltage** : 12,500 Volts
- Reference standard** : IEC 60502-2, IEC 60228, IEC 60332-1
- Remark** : Special protection can be produced

**APPLICATION**

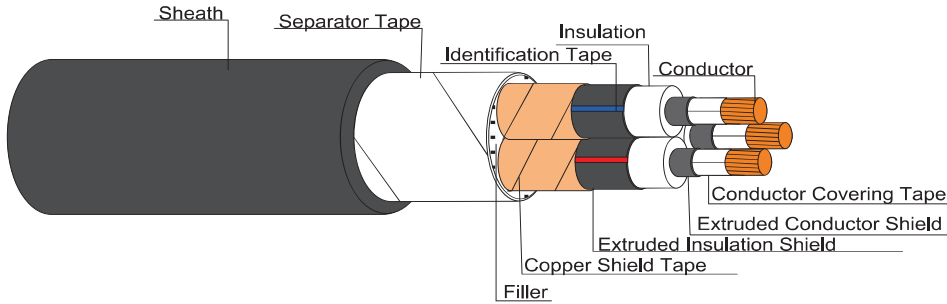
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

B

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	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	0.6541	0.5155	0.4693	0.2055	0.1619	0.1474	2.3425	2.3391	2.3381
	16	1.4664	1.4664	1.4664	0.6260	0.4873	0.4411	0.1967	0.1531	0.1386	1.4796	1.4744	1.4730
	25	0.9271	0.9271	0.9271	0.6052	0.4665	0.4203	0.1901	0.1466	0.1320	0.9464	0.9386	0.9365
	35	0.6683	0.6683	0.6683	0.5863	0.4477	0.4015	0.1842	0.1406	0.1261	0.6932	0.6829	0.6801
	50	0.4936	0.4937	0.4937	0.5578	0.4191	0.3729	0.1752	0.1317	0.1172	0.5238	0.5109	0.5074
	70	0.3420	0.3421	0.3421	0.5377	0.3990	0.3528	0.1689	0.1254	0.1108	0.3814	0.3643	0.3596
	95	0.2465	0.2466	0.2467	0.5217	0.3831	0.3369	0.1639	0.1204	0.1058	0.2960	0.2744	0.2684
	120	0.1956	0.1957	0.1958	0.5072	0.3686	0.3223	0.1593	0.1158	0.1013	0.2523	0.2274	0.2205
	150	0.1587	0.1589	0.1591	0.4992	0.3606	0.3144	0.1568	0.1133	0.0988	0.2231	0.1952	0.1872
	185	0.1271	0.1274	0.1276	0.4915	0.3529	0.3067	0.1544	0.1109	0.0963	0.2000	0.1689	0.1599
	240	0.0971	0.0975	0.0978	0.4821	0.3435	0.2973	0.1515	0.1079	0.0934	0.1799	0.1454	0.1352
	300	0.0779	0.0784	0.0788	0.4772	0.3386	0.2924	0.1499	0.1064	0.0919	0.1689	0.1321	0.1210
	400	0.0615	0.0622	0.0627	0.4719	0.3332	0.2870	0.1482	0.1047	0.0902	0.1605	0.1217	0.1098
	500	0.0487	0.0495	0.0502	0.4672	0.3286	0.2823	0.1468	0.1032	0.0887	0.1546	0.1145	0.1019
630	0.0386	0.0397	0.0406	0.4599	0.3213	0.2751	0.1445	0.1009	0.0864	0.1496	0.1085	0.0955	
800	0.0313	0.0327	0.0339	0.4528	0.3142	0.2680	0.1423	0.0987	0.0842	0.1457	0.1040	0.0907	
1000	0.0262	0.0279	0.0293	0.4445	0.3059	0.2596	0.1396	0.0961	0.0816	0.1421	0.1001	0.0867	

3.6/6(7.2)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE

IEC 60502-2



CABLE STRUCTURE

- Conductor** : Compacted round annealed copper
- Conductor shield** : Semi-conductive Cross-linked polyethylene compound
- Insulation** : Cross-Linked polyethylene (XLPE)
- Insulation shield** : Semi-conductive Cross-linked polyethylene compound
- Core identification**  
3 Cores : White, Red, Blue
- Shield** : Copper tape
- Sheath** : Black polyvinyl chloride (PVC/ST2)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 90°C  
: Circuit voltage not exceeding 7,200 Volts
- Rated voltage** : 3,600 Volts between Line to Earth  
: 6,000 Volts between Line to Line
- Testing voltage** : 12,500 Volts
- Reference standard** : IEC 60502-2, IEC 60228, IEC 60332-1
- Remark** : Special protection can be produced  
: \*Insulation shield shall be applied semi-conductive tape

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	*10	6	2.5	2.0	28	1.83	2,850	81	85	850	500/D
	*16	6	2.5	2.0	30	1.15	2,500	106	108	1,100	500/D
	25	6	2.5	2.1	35	0.727	2,150	139	139	1,600	500/D
	35	6	2.5	2.2	38	0.524	1,900	170	174	1,900	500/D
	50	6	2.5	2.3	40	0.387	1,700	203	195	2,400	500/D
	70	12	2.5	2.4	44	0.268	1,500	252	238	3,100	500/D
	95	15	2.5	2.5	48	0.193	1,300	308	284	4,000	500/D
	120	18	2.5	2.6	52	0.153	1,200	355	322	4,900	500/D
	150	18	2.5	2.8	55	0.124	1,100	402	360	6,000	500/D
	185	30	2.5	2.9	59	0.0991	1,000	461	406	7,000	500/D
	240	34	2.6	3.1	65	0.0754	900	545	470	9,000	500/D
	300	34	2.8	3.3	71	0.0601	900	625	529	11,000	300/D
	400	53	3.0	3.5	79	0.0470	850	724	598	13,500	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 cores	Nominal cross sectional area	A.C. Resistance		Inductance	Reactance	Impedance
		R		L	XL	Z
		(mm <sup>2</sup> )	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
3	10	2.3335	0.4117	0.1294	2.3371	
	16	1.4664	0.3827	0.1202	1.4714	
	25	0.9271	0.3694	0.1161	0.9344	
	35	0.6684	0.3539	0.1112	0.6775	
	50	0.4938	0.3265	0.1026	0.5043	
	70	0.3422	0.3102	0.0975	0.3558	
	95	0.2468	0.2962	0.0931	0.2637	
	120	0.1960	0.2843	0.0893	0.2154	
	150	0.1593	0.2770	0.0870	0.1815	
	185	0.1278	0.2721	0.0855	0.1538	
	240	0.0981	0.2646	0.0831	0.1286	
300	0.0792	0.2606	0.0819	0.1139		
400	0.0632	0.2570	0.0807	0.1025		