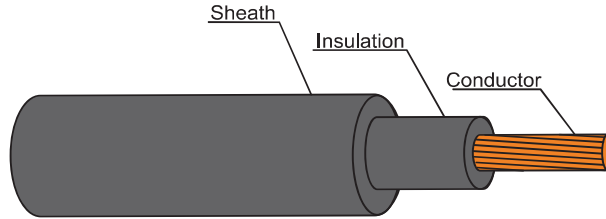


450/750 V 70 °C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



TIS 11 Part 101-2559

CABLE STRUCTURE

- Conductor** : Solid and stranded annealed copper
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** Single-cores : Black
- Sheath** : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750 Volts
- Rated voltage** : 450 Volts between Line to Earth
: 750 Volts between Line to Line
- Testing voltage** : 2,500 Volts
- Reference standard** : TIS 11 Part 101-2559 Table 3

APPLICATION

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

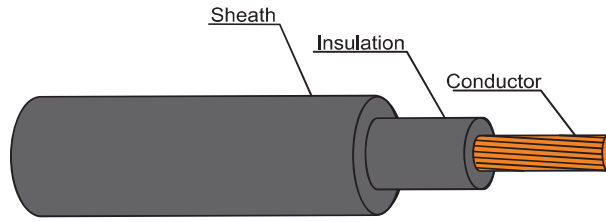
Number of core	Nominal cross sectional area (mm ²)	Conductor type	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°C minimum (MΩ-km)	Continuous current rating in free air at 40°C maximum (A)			Continuous current rating in ground at 30°C maximum (A)	Cable weight approx. (kg/km)	Standard Length (m)
								Spaced	Touching	Trefoil			
1	1	Solid	1.5	1.8	8.6	18.1	0.0207	19	16	15	21	80	100/C
	1	Stranded	1.5	1.8	8.8	18.1	0.0200	19	16	15	21	80	100/C
	1.5	Solid	1.5	1.8	9.0	12.1	0.0184	24	19	19	26	85	100/C
	1.5	Stranded	1.5	1.8	9.2	12.1	0.0175	24	19	19	26	90	100/C
	2.5	Solid	1.5	1.8	9.4	7.41	0.0157	32	24	26	35	100	100/C
	2.5	Stranded	1.5	1.8	9.8	7.41	0.0146	32	24	26	35	110	100/C
	4	Solid	1.5	1.8	10.0	4.61	0.0135	42	33	34	45	120	100/C
	4	Stranded	1.5	1.8	10.5	4.61	0.0124	42	33	34	45	130	100/C
	300	Stranded	2.5	2.2	35.0	0.0601	0.0032	617	511	488	507	3,400	500/D
	400	Stranded	2.7	2.2	38.5	0.0470	0.0030	741	599	571	577	4,300	500/D
500	Stranded	3.1	2.4	43.0	0.0366	0.0031	854	686	652	654	5,400	500/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

B

450/750 V 70 °C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATH



TIS 11 Part 101-2559

CABLE STRUCTURE

Conductor : Solid and stranded annealed copper

Insulation : Polyvinyl chloride (PVC/C)

Core identification Single-cores : Black,

Sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750 Volts

Rated voltage : 450 Volts between Line to Earth
: 750 Volts between Line to Line

Testing voltage : 2,500 Volts

Reference standard : TIS 11 Part 101-2559 Table 3

APPLICATION

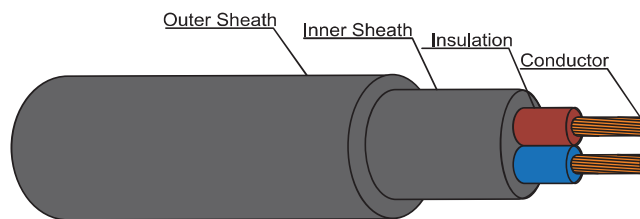
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

B

Number of core	Nominal cross sectional area (mm ²)	Conductor type	A.C.Resistance			Inductance			Reactance			Impedance		
			R (Ω/km)			L (mH/km)			XL (Ω/km)			Z (Ω/km)		
			Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil	Space	Touching	Trefoil
1	1	Solid	21.6567	21.6567	21.6567	0.7840	0.6454	0.5991	0.2463	0.2027	0.1882	21.6581	21.6576	21.6575
	1	Stranded	21.6567	21.6567	21.6567	0.7740	0.6353	0.5891	0.2431	0.1996	0.1851	21.6580	21.6576	21.6574
	1.5	Solid	14.4777	14.4777	14.4777	0.7485	0.6099	0.5637	0.2352	0.1916	0.1771	14.4796	14.4789	14.4787
	1.5	Stranded	14.4777	14.4777	14.4777	0.7388	0.6001	0.5539	0.2321	0.1885	0.1740	14.4795	14.4789	14.4787
	2.5	Solid	8.8661	8.8661	8.8661	0.7063	0.5677	0.5214	0.2219	0.1783	0.1638	8.8689	8.8679	8.8676
	2.5	Stranded	8.8661	8.8661	8.8661	0.7025	0.5639	0.5176	0.2207	0.1771	0.1626	8.8688	8.8678	8.8676
	4	Solid	5.5159	5.5159	5.5159	0.6698	0.5312	0.4850	0.2104	0.1669	0.1524	5.5199	5.5184	5.5180
	4	Stranded	5.5159	5.5159	5.5159	0.6649	0.5263	0.4801	0.2089	0.1653	0.1508	5.5198	5.5184	5.5179
	300	Stranded	0.0733	0.0740	0.0745	0.4517	0.3131	0.2668	0.1419	0.0984	0.0838	0.1597	0.1231	0.1122
	400	Stranded	0.0580	0.0589	0.0596	0.4465	0.3079	0.2617	0.1403	0.0967	0.0822	0.1518	0.1132	0.1015
	500	Stranded	0.0460	0.0471	0.0480	0.4460	0.3074	0.2612	0.1401	0.0966	0.0820	0.1475	0.1074	0.0951

450/750 V 70°C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

TIS 11 Part 101-2559



CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper wire

Insulation : Polyvinyl chloride (PVC/C)

Core identification 2 Cores : Blue, Brown

Inner sheath : Black polyvinyl chloride (PVC)

Sheath : Black polyvinyl chloride

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750

Rated voltage : 450 Volts between Line to Earth
: 750 Volts between Line to Line

Testing voltage : 2,500 Volts

Reference standard : TIS 11 Part 101-2559 Table 4

APPLICATION

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

Number of cores	Nominal cross sectional area (mm ²)	Conductor type	Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°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)
2	1	Solid	0.8	0.8	1.8	12.0	18.1	0.0141	15	21	170	100/C
	1	Stranded	0.8	0.8	1.8	12.5	18.1	0.0135	15	21	170	100/C
	1.5	Solid	0.8	0.8	1.8	12.5	12.1	0.0123	19	27	180	100/C
	1.5	Stranded	0.8	0.8	1.8	13.0	12.1	0.0116	19	27	200	100/C
	2.5	Solid	0.8	0.8	1.8	13.5	7.41	0.0102	25	35	220	100/C
	2.5	Stranded	0.8	0.8	1.8	14.0	7.41	0.0093	25	35	240	100/C
	4	Solid	0.9	0.8	1.8	15.0	4.61	0.0094	33	47	290	100/C
	4	Stranded	0.9	0.8	1.8	15.5	4.61	0.0085	33	47	310	100/C
	95	Stranded	1.7	1.5	2.2	42.5	0.193	0.0038	245	288	3300	500/D
	120	Stranded	1.7	1.5	2.4	46.5	0.153	0.0034	285	329	4000	500/D
	150	Stranded	1.9	1.8	2.6	52.0	0.124	0.0034	325	368	4900	500/D
	185	Stranded	2.1	1.8	2.8	57.0	0.0991	0.0034	374	417	6000	500/D
	240	Stranded	2.3	2.0	3.0	64.0	0.0754	0.0033	440	481	8000	300/D
	300	Stranded	2.5	2.0	3.2	70.5	0.0601	0.0032	505	541	9500	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

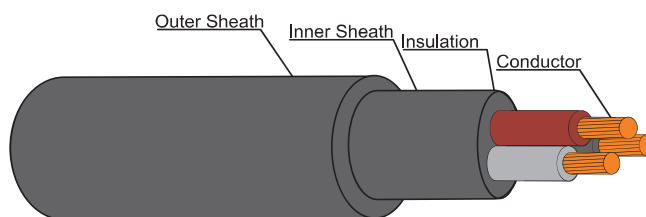
C : Packing in coil
D : Packing in drum

Number of cores	Nominal cross sectional area (mm ²)	Conductor type	A.C. Resistance		Inductance		Reactance		Impedance	
			R (Ω/km)	XL (Ω/km)	L (mH/km)	Z (Ω/km)				
2	1	Solid	21.7000	0.3771	0.1185	21.7000				
	1	Stranded	21.7000	0.3651	0.1147	21.7000				
	1.5	Solid	14.5000	0.3505	0.1101	14.5000				
	1.5	Stranded	14.5000	0.3402	0.1069	14.5000				
	2.5	Solid	8.8700	0.3238	0.1017	8.8710				
	2.5	Stranded	8.8700	0.3160	0.0993	8.8710				
	4	Solid	5.5200	0.3135	0.0985	5.5210				
	4	Stranded	5.5200	0.3022	0.0950	5.5210				
	95	Stranded	0.2317	0.2480	0.0779	0.2444				
	120	Stranded	0.1840	0.2409	0.0757	0.1990				
	150	Stranded	0.1495	0.2402	0.0755	0.1675				
	185	Stranded	0.1201	0.2401	0.0754	0.1418				
	240	Stranded	0.0922	0.2361	0.0742	0.1183				
	300	Stranded	0.0744	0.2343	0.0736	0.1047				



450/750 V 70° C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

TIS 11 Part 101-2559



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 3 Cores : Brown, Black, Grey
- Inner sheath** : Black polyvinyl chloride (PVC)
- Sheath** : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750 Volts
- Rated voltage** : 450 Volts between Line to Earth
: 750 Volts between Line to Line
- Testing voltage** : 2,500 Volts
- Reference standard** : TIS 11 Part 101-2559 Table 4

APPLICATION

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

B

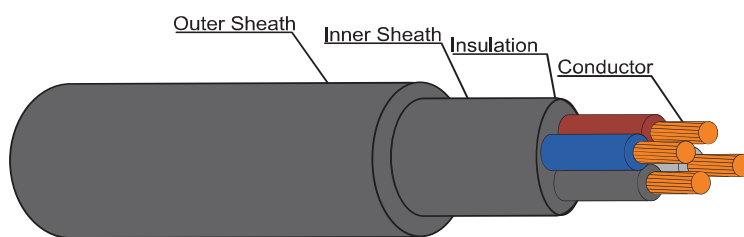
Number of cores	Nominal cross sectional area (mm ²)	Conductor type	Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°C minimum (MΩ·km)	Continuous 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)
3	1	Solid	0.8	0.8	1.8	12.5	18.1	0.0141	13	18	180	100/C
	1	Stranded	0.8	0.8	1.8	13.0	18.1	0.0135	13	18	190	100/C
	1.5	Solid	0.8	0.8	1.8	13.0	12.1	0.0123	16	22	210	100/C
	1.5	Stranded	0.8	0.8	1.8	13.5	12.1	0.0116	16	22	220	100/C
	2.5	Solid	0.8	0.8	1.8	14.0	7.41	0.0102	22	30	260	100/C
	2.5	Stranded	0.8	0.8	1.8	15.0	7.41	0.0093	22	30	270	100/C
	4	Solid	0.9	0.8	1.8	15.5	4.61	0.0094	30	39	34	100/C
	4	Stranded	0.9	0.8	1.8	16.5	4.61	0.0085	30	39	360	100/C
	95	Stranded	1.7	1.5	2.4	46.0	0.193	0.0038	207	267	4200	500/D
	120	Stranded	1.7	1.8	2.6	50.5	0.153	0.0034	240	304	5000	500/D
	150	Stranded	1.9	1.8	2.8	56.0	0.124	0.0034	278	342	6500	500/D
	185	Stranded	2.1	2.0	3.0	61.5	0.0991	0.0034	317	386	8000	300/D
	240	Stranded	2.3	2.0	3.2	69.0	0.0754	0.0033	374	448	10000	300/D
	300	Stranded	2.5	2.2	3.4	76.0	0.0601	0.0032	432	507	12500	200/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

C : Packing in coil
D : Packing in drum

Number of cores	Nominal cross sectional area (mm ²)	Conductor type	A.C. Resistance		Inductance		Reactance		Impedance	
			R (Ω/km)	XL (Ω/km)	L (mH/km)	Z (Ω/km)				
3	1	Solid	21.7000	0.3771	0.1185	21.7000				
	1	Stranded	21.7000	0.3651	0.1147	21.7000				
	1.5	Solid	14.5000	0.3505	0.1101	14.5000				
	1.5	Stranded	14.5000	0.3402	0.1069	14.5000				
	2.5	Solid	8.8700	0.3238	0.1017	8.8710				
	2.5	Stranded	8.8700	0.3160	0.0993	8.8710				
	4	Solid	5.5200	0.3135	0.0985	5.5210				
	4	Stranded	5.5200	0.3022	0.0950	5.5210				
	95	Stranded	0.2319	0.2480	0.0779	0.2446				
	120	Stranded	0.1843	0.2409	0.0757	0.1992				
	150	Stranded	0.1499	0.2402	0.0755	0.1678				
	185	Stranded	0.1205	0.2401	0.0754	0.1422				
	240	Stranded	0.0928	0.2361	0.0742	0.1188				
	300	Stranded	0.0751	0.2343	0.0736	0.1052				

450/750 V 70° C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



TIS 11 Part 101-2559

CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
: Multi-core : Sizes 50 mm² up to 300 mm²
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 4 Cores : Blue, Brown, Black, Grey
- Inner sheath** : Black polyvinyl chloride (PVC)
- Sheath** : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

- Classification** : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750 Volts
- Rated voltage** : 450 Volts between Line to Earth
: 750 Volts between Line to Line
- Testing voltage** : 2,500 Volts
- Reference standard** : TIS 11 Part 101-2559 Table 4

APPLICATION

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

Number of cores	Nominal cross sectional area (mm ²)	Conductor type	Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°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)
4	1	Solid	0.8	0.8	1.8	13.5	18.1	0.0141	13	18	210	100/C
	1	Stranded	0.8	0.8	1.8	14.0	18.1	0.0135	13	18	220	100/C
	1.5	Solid	0.8	0.8	1.8	14.0	12.1	0.0123	16	22	240	100/C
	1.5	Stranded	0.8	0.8	1.8	14.5	12.1	0.0116	16	22	260	100/C
	2.5	Solid	0.8	0.8	1.8	15.0	7.41	0.0102	22	30	300	100/C
	2.5	Stranded	0.8	0.8	1.8	16.0	7.41	0.0093	22	30	320	100/C
	4	Solid	0.9	0.8	1.8	17.0	4.61	0.0094	30	39	400	100/C
	4	Stranded	0.9	0.8	1.8	17.5	4.61	0.0085	30	39	430	100/C
	95	Stranded	1.7	1.8	2.6	51.5	0.193	0.0038	207	267	5500	500/D
	120	Stranded	1.7	1.8	2.8	56.0	0.153	0.0034	240	304	6500	500/D
	150	Stranded	1.9	2.0	3.0	62.0	0.124	0.0034	278	342	8000	300/D
	185	Stranded	2.1	2.0	3.2	68.0	0.0991	0.0034	317	386	10000	300/D
	240	Stranded	2.3	2.2	3.4	76.5	0.0754	0.0033	374	448	13000	200/D
	300	Stranded	2.5	2.2	3.8	85.0	0.0601	0.0032	432	507	16000	200/D

C : Packing in coil
D : Packing in drum

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

Number of cores	Nominal cross sectional area (mm ²)	Conductor type	A.C. Resistance		Inductance		Reactance		Impedance	
			R (Ω/km)	XL (Ω/km)	L (mH/km)	Z (Ω/km)				
4	1	Solid	21.7000	0.3771	0.1185	21.7000				
	1	Stranded	21.7000	0.3651	0.1147	21.7000				
	1.5	Solid	14.5000	0.3505	0.1101	14.5000				
	1.5	Stranded	14.5000	0.3402	0.1069	14.5000				
	2.5	Solid	8.8700	0.3238	0.1017	8.8710				
	2.5	Stranded	8.8700	0.3160	0.0993	8.8710				
	4	Solid	5.5200	0.3135	0.0985	5.5210				
	4	Stranded	5.5200	0.3022	0.0950	5.5210				
	95	Stranded	0.2319	0.2480	0.0779	0.2446				
	120	Stranded	0.1843	0.2409	0.0757	0.1992				
	150	Stranded	0.1499	0.2402	0.0755	0.1678				
	185	Stranded	0.1205	0.2401	0.0754	0.1422				
	240	Stranded	0.0928	0.2361	0.0742	0.1188				
	300	Stranded	0.0751	0.2343	0.0736	0.1052				