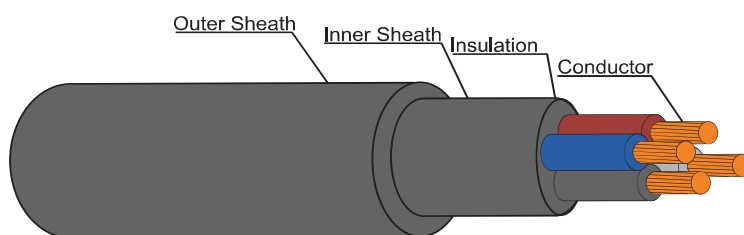


450/750 V 70° C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



TIS 11 Part 101-2559

CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire  
: Multi-core : Sizes 50 mm<sup>2</sup> up to 300 mm<sup>2</sup>
- 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 <sup>2</sup> )	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

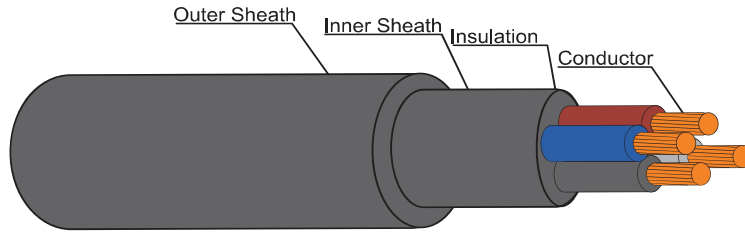
C : Packing in coil  
D : Packing in drum

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 <sup>2</sup> )	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				



450/750 V 70° C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, SUPER SOFT POWER CABLE



TIS 11 Part 101-2559

**CABLE STRUCTURE**

- Conductor** : Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 4 Cores : Blue, Brown, Black, Grey
- Inner sheath** : Black polyvinyl choride (PVC)
- Sheath** : Black polyvinyl choride (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 <sup>2</sup> )	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 (MQ-km)	Continuous currnt rating in free air at 40°C maximum (A)	Continuous currnt rating in ground at 30°C maximum (A)	Cable weight approx. (kg/km)	Standard length per drum (m)
4	6	Non-Compacted	0.9	0.8	1.8	19.0	3.08	0.0073	37	50	550	1000
	10	Non-Compacted	1.1	0.8	2.0	23.0	1.83	0.0069	52	68	800	1000
	16	Compacted	1.1	1.2	2.0	26.5	1.15	0.0057	70	87	1100	1000
	25	Compacted	1.3	1.2	2.0	31.0	0.727	0.0054	88	128	1600	1000
	35	Compacted	1.3	1.5	2.2	35.0	0.524	0.0047	110	154	2100	1000
	50	Compacted	1.5	1.5	2.2	39.5	0.387	0.0046	133	181	2800	1000
	70	Compacted	1.5	1.5	2.4	44.5	0.268	0.0039	171	223	3700	800

**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 <sup>2</sup> )	A.C. Resistance		Inductance		Reactance		Impedance	
		R (Ω/km)	L (mH/km)	XL (Ω/km)	Z (Ω/km)				
4	6	3.6900	0.2869	0.0901	3.6910				
	10	2.1900	0.2801	0.0880	2.1920				
	16	1.3800	0.2631	0.0827	1.3820				
	25	0.8700	0.2607	0.0819	0.8738				
	35	0.6273	0.2593	0.0814	0.6326				
	50	0.4635	0.2604	0.0818	0.4707				
	70	0.3213	0.2506	0.0787	0.3308				

