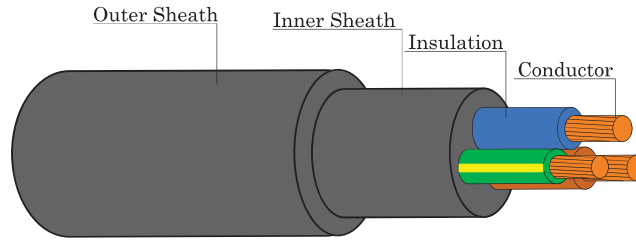


450/750 V 70 °C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATH WITH GROUND

TIS 11 Part 101-2559



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** : 2 Cores + Ground : Blue, Brown, + Green/Yellow
- 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 5

APPLICATION

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

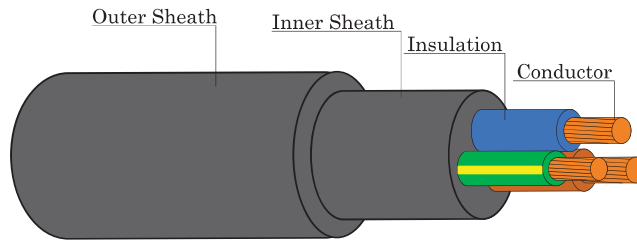
B

Number of cores	Conductor				Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance maximum at 20°C		Insulation resistance at 70°C minimum (MΩ-km)	Continuous current rating maximum		Cable weight approx. (kg/km)	Standard length per drum (m)		
	Nominal cross section area		Type of Conductor						Phase	Ground		Phase	Ground			on cable Ladder at 40°C (A)	direct burial in ground at 30°C (A)
	Phase (mm ²)	Ground (mm ²)	Phase	Ground													
2+G	1	1	Solid		0.8	0.8	1.8	13.0	18.1	18.1	0.0141	15	21	180	500		
	1	1	Stranded		0.8	0.8	1.8	13.5	18.1	18.1	0.0135	15	21	190	500		
	1.5	1.5	Solid		0.8	0.8	1.8	13.5	12.1	12.1	0.0123	19	27	210	500		
	1.5	1.5	Stranded		0.8	0.8	1.8	14.0	12.1	12.1	0.0116	19	27	220	500		
	2.5	2.5	Solid		0.8	0.8	1.8	14.5	7.41	7.41	0.0102	25	35	260	500		
	2.5	2.5	Stranded		0.8	0.8	1.8	15.0	7.41	7.41	0.0093	25	35	270	500		
	4	4	Solid		0.9	0.8	1.8	16.0	4.61	4.61	0.0094	33	47	340	500		
	4	4	Stranded		0.9	0.8	1.8	16.5	4.61	4.61	0.0085	33	47	360	500		
	6	6	Stranded		0.9	0.8	1.8	18.0	3.08	3.08	0.0073	43	60	450	500		
	10	10	Stranded		1.1	0.8	1.8	21.0	1.83	1.83	0.0069	60	81	650	500		
	16	16	Stranded		1.1	0.8	2.0	23.5	1.15	1.15	0.0057	80	105	900	500		
	25	16	Stranded		1.3	1.2	2.0	28.0	0.727	0.727	0.0054	108	136	1200	500		
	35	16	Stranded		1.3	1.2	2.0	30.0	0.524	0.524	0.0047	132	165	1500	500		
	50	25	Stranded		1.5	1.2	2.2	34.0	0.387	0.387	0.0046	160	195	2000	500		
	70	35	Stranded		1.5	1.5	2.2	38.5	0.268	0.268	0.0039	200	239	2700	500		
	95	50	Stranded		1.7	1.5	2.2	43.5	0.193	0.193	0.0038	245	288	3600	500		
	120	70	Stranded		1.7	1.5	2.4	47.5	0.153	0.153	0.0034	285	329	4500	500		
	150	95	Stranded		1.9	1.8	2.6	53.0	0.124	0.124	0.0034	325	368	5500	500		
	185	95	Stranded		2.1	1.8	2.8	57.5	0.0991	0.0991	0.0034	374	417	6500	500		
	240	120	Stranded		2.3	2.0	3.0	64.5	0.0754	0.0754	0.0033	440	481	8500	500		
300	150	Stranded		2.5	2.0	3.2	71.0	0.0601	0.0601	0.0032	505	541	10500	300			

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

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

TIS 11 Part 101-2559



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 2 Cores + Ground : Blue, Brown + Green/Yellow
- 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 5

APPLICATION

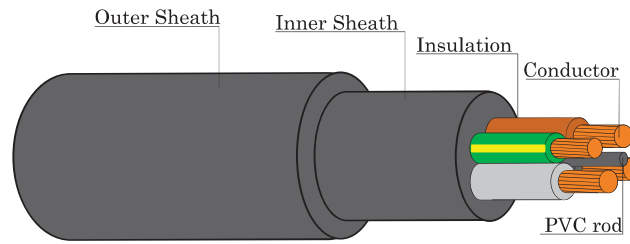
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

Number of cores	Nominal cross section area		A.C. Resistance	Inductance	Reactance	Impedance
	Phase	Ground	R	L	XL	Z
	(mm ²)	(mm ²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
2+G	1	1	21.7000	0.3771	0.1185	21.7000
	1	1	21.7000	0.3651	0.1147	21.7000
	1.5	1.5	14.5000	0.3505	0.1101	14.5000
	1.5	1.5	14.5000	0.3402	0.1069	14.5000
	2.5	2.5	8.8700	0.3238	0.1017	8.8710
	2.5	2.5	8.8700	0.3160	0.0993	8.8710
	4	4	5.5200	0.3135	0.0985	5.5210
	4	4	5.5200	0.3022	0.0950	5.5210
	6	6	3.6900	0.2869	0.0901	3.6910
	10	10	2.1900	0.2801	0.0880	2.1920
	16	16	1.3800	0.2791	0.0877	1.3828
	25	16	0.8700	0.2631	0.0827	0.8739
	35	16	0.6272	0.2593	0.0814	0.6325
	50	25	0.4634	0.2604	0.0818	0.4706
	70	35	0.3212	0.2506	0.0787	0.3307
	95	50	0.2317	0.2480	0.0779	0.2444
	120	70	0.1840	0.2409	0.0757	0.1990
	150	95	0.1495	0.2402	0.0755	0.1675
185	95	0.2101	0.2401	0.0754	0.1418	
240	120	0.0922	0.2361	0.0742	0.1183	
300	150	0.0744	0.2343	0.0736	0.1047	

B

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

TIS 11 Part 101-2559



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 3 Cores + Ground : Brown, Black, Grey + Green/Yellow
- 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 5

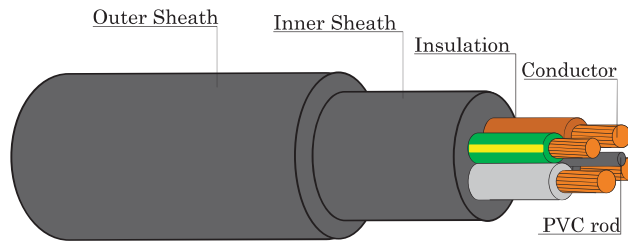
APPLICATION

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

B

Number of cores	Conductor				Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance maximum at 20°C		Insulation resistance at 70°C minimum (MQ-km)	Continuous current rating maximum		Cable weight approx. (kg/km)	Standard length per drum (m)				
	Nominal cross section area		Type of Conductor						Phase	Ground		Phase	Ground			Phase	Ground	on cable Ladder at 40°C (A)	direct burial in ground at 30°C (A)
	(mm ²)	(mm ²)																	
3+G	1	1	Solid		0.8	0.8	1.8	13.5	18.1	18.1	0.0141	13	18	210	500				
	1	1	Stranded		0.8	0.8	1.8	14.0	18.1	18.1	0.0135	13	18	220	500				
	1.5	1.5	Solid		0.8	0.8	1.8	14.0	12.1	12.1	0.0123	16	22	240	500				
	1.5	1.5	Stranded		0.8	0.8	1.8	15.0	12.1	12.1	0.0116	16	22	260	500				
	2.5	2.5	Solid		0.8	0.8	1.8	15.5	7.41	7.41	0.0102	22	30	300	500				
	2.5	2.5	Stranded		0.8	0.8	1.8	16.0	7.41	7.41	0.0093	22	30	320	500				
	4	4	Solid		0.9	0.8	1.8	17.0	4.61	4.61	0.0094	30	39	400	500				
	4	4	Stranded		0.9	0.8	1.8	18.0	4.61	4.61	0.0085	30	39	430	500				
	6	6	Stranded		0.9	0.8	1.8	19.0	3.08	3.08	0.0073	37	50	550	500				
	10	10	Stranded		1.1	0.8	1.8	22.5	1.83	1.83	0.0069	52	68	800	500				
	16	16	Stranded		1.1	1.2	2.0	26.5	1.15	1.15	0.0057	70	87	1200	500				
	25	16	Stranded		1.3	1.2	2.0	30.5	0.727	0.727	0.0054	88	128	1600	500				
	35	16	Stranded		1.3	1.2	2.0	33.0	0.524	0.524	0.0047	110	154	1900	500				
	50	25	Stranded		1.5	1.5	2.2	38.5	0.387	0.387	0.0046	133	181	2600	500				
	70	35	Stranded		1.5	1.5	2.2	42.5	0.268	0.268	0.0039	171	223	3500	500				
	95	50	Stranded		1.7	1.5	2.4	48.5	0.193	0.193	0.0038	207	267	4700	500				
	120	70	Stranded		1.7	1.8	2.6	53.5	0.153	0.153	0.0034	240	304	6000	500				
	150	95	Stranded		1.9	1.8	2.8	59.0	0.124	0.124	0.0034	278	342	7500	500				
185	95	Stranded		2.1	2.0	3.0	64.5	0.0991	0.0991	0.0034	317	386	9000	500					
240	120	Stranded		2.3	2.0	3.2	72.0	0.0754	0.0754	0.0033	374	448	11500	300					
300	150	Stranded		2.5	2.2	3.4	79.5	0.0601	0.0601	0.0032	432	507	14000	300					

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



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 3 Cores + Ground : Brown, Black, Grey + Green/Yellow
- 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 5

APPLICATION

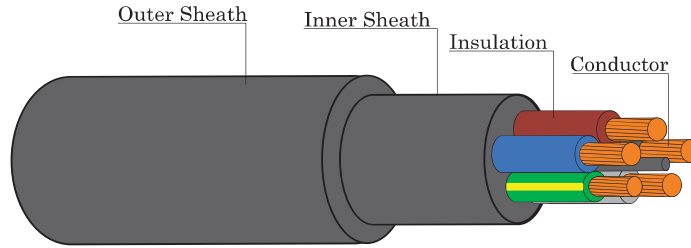
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

Number of cores	Nominal cross section area		A.C. Resistance	Inductance	Reactance	Impedance
	Phase (mm ²)	Ground (mm ²)	R (Ω/km)	L (mH/km)	XL (Ω/km)	Z (Ω/km)
3+G	1	1	21.7000	0.3771	0.1185	21.7000
	1	1	21.7000	0.3651	0.1147	21.7000
	1.5	1.5	14.5000	0.3505	0.1101	14.5000
	1.5	1.5	14.5000	0.3402	0.1069	14.5000
	2.5	2.5	8.8700	0.3238	0.1017	8.8710
	2.5	2.5	8.8700	0.3160	0.0993	8.8710
	4	4	5.5200	0.3135	0.0985	5.5210
	4	4	5.5200	0.3022	0.0950	5.5210
	6	6	3.6900	0.2869	0.0901	3.6910
	10	10	2.1900	0.2801	0.0880	2.1920
	16	16	1.3800	0.2791	0.0877	1.3828
	25	16	0.8700	0.2631	0.0827	0.8739
	35	16	0.6273	0.2593	0.0814	0.6326
	50	25	0.4635	0.2604	0.0818	0.4707
	70	35	0.3213	0.2506	0.0787	0.3308
	95	50	0.2319	0.2480	0.0779	0.2446
	120	70	0.1843	0.2409	0.0757	0.1992
	150	95	0.1499	0.2402	0.0755	0.1678
	185	95	0.1205	0.2401	0.0754	0.1422
	240	120	0.0928	0.2361	0.0742	0.1188
300	150	0.0751	0.2343	0.0736	0.1052	

B

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

TIS 11 Part 101-2559



CABLE STRUCTURE

- Conductor** : Solid and Stranded annealed copper wire
- Insulation** : Polyvinyl chloride (PVC/C)
- Core identification** 4 Cores + Ground : Blue, Brown, Black, Grey + Green/Yellow
- 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 5

APPLICATION

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

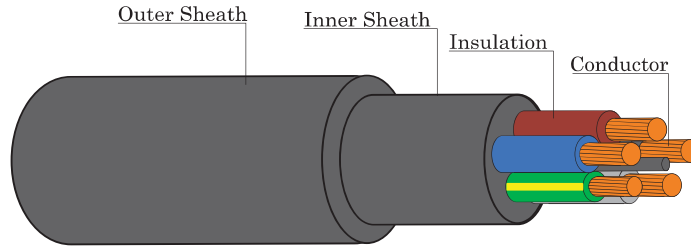
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Number of cores	Conductor				Insulation thickness nominal (mm)	Inner Sheath thickness approx. (mm)	Outer Sheath thickness nominal (mm)	Overall diameter maximum (mm)	Conductor resistance maximum at 20°C		Insulation resistance at 70°C minimum (MΩ-km)	Continuous current rating maximum		Cable weight approx. (kg/km)	Standard length per drum (m)
	Nominal cross section area		Type of Conductor						Phase (Ω/km)	Ground (Ω/km)		on cable Ladder at 40°C (A)	direct burial in ground at 30°C (A)		
	Phase (mm ²)	Ground (mm ²)	Phase	Ground											
4+G	1	1	Solid		0.8	0.8	1.8	14.5	18.1	18.1	0.0141	13	18	250	500
	1	1	Stranded		0.8	0.8	1.8	15.0	18.1	18.1	0.0135	13	18	260	500
	1.5	1.5	Solid		0.8	0.8	1.8	15.0	12.1	12.1	0.0123	16	22	280	500
	1.5	1.5	Stranded		0.8	0.8	1.8	16.0	12.1	12.1	0.0116	16	22	300	500
	2.5	2.5	Solid		0.8	0.8	1.8	16.5	7.41	7.41	0.0102	22	30	360	500
	2.5	2.5	Stranded		0.8	0.8	1.8	17.0	7.41	7.41	0.0093	22	30	390	500
	4	4	Solid		0.9	0.8	1.8	18.0	4.61	4.61	0.0094	30	39	480	500
	4	4	Stranded		0.9	0.8	1.8	19.0	4.61	4.61	0.0085	30	39	500	500
	6	6	Stranded		0.9	0.8	1.8	20.5	3.08	3.08	0.0073	37	50	650	500
	10	10	Stranded		1.1	0.8	2.0	25.0	1.83	1.83	0.0069	52	68	1000	500
	16	16	Stranded		1.1	1.2	2.0	28.5	1.15	1.15	0.0057	70	87	1400	500
	25	16	Stranded		1.3	1.2	2.0	34.0	0.727	0.727	0.0054	88	128	1900	500
	35	16	Stranded		1.3	1.5	2.2	39.0	0.524	0.524	0.0047	110	154	2500	500
	50	25	Stranded		1.5	1.5	2.2	43.5	0.387	0.387	0.0046	133	181	3300	500
	70	35	Stranded		1.5	1.5	2.4	49.0	0.268	0.268	0.0039	171	223	4500	500
	95	50	Stranded		1.7	1.8	2.6	56.5	0.193	0.193	0.0038	207	267	6000	500
	120	70	Stranded		1.7	1.8	2.8	61.5	0.153	0.153	0.0034	240	304	7500	500
	150	95	Stranded		1.9	2.0	3.0	68.0	0.124	0.124	0.0034	278	342	9500	300
	185	95	Stranded		2.1	2.0	3.2	75.0	0.0991	0.0991	0.0034	317	386	11500	300
	240	120	Stranded		2.3	2.2	3.4	84.5	0.0754	0.0754	0.0033	374	448	14500	300
300	150	Stranded		2.5	2.2	3.8	93.5	0.0601	0.0601	0.0032	432	507	18000	200	

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

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

TIS 11 Part 101-2559



CABLE STRUCTURE

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TECHNICAL DATA

- Classification** : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 450/750 Volts
- Rated voltage** : 450 Volts between Line to Earth
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- Testing voltage** : 2,500 Volts
- Reference standard** : TIS 11 Part 101-2559 Table 5

APPLICATION

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

Number of cores	Nominal cross section area		A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
	Phase (mm ²)	Ground (mm ²)				
4+G	1	1	21.7000	0.3771	0.1185	21.7000
	1	1	21.7000	0.3651	0.1147	21.7000
	1.5	1.5	14.5000	0.3505	0.1101	14.5000
	1.5	1.5	14.5000	0.3402	0.1069	14.5000
	2.5	2.5	8.8700	0.3238	0.1017	8.8710
	2.5	2.5	8.8700	0.3160	0.0993	8.8710
	4	4	5.5200	0.3135	0.0985	5.5210
	4	4	5.5200	0.3022	0.0950	5.5210
	6	6	3.6900	0.2869	0.0901	3.6910
	10	10	2.1900	0.2801	0.0880	2.1920
	16	16	1.3800	0.2791	0.0877	1.3828
	25	16	0.8700	0.2631	0.0827	0.8739
	35	16	0.6273	0.2593	0.0814	0.6326
	50	25	0.4635	0.2604	0.0818	0.4707
	70	35	0.3213	0.2506	0.0787	0.3308
	95	50	0.2319	0.2480	0.0779	0.2446
	120	70	0.1843	0.2409	0.0757	0.1992
150	95	0.1499	0.2402	0.0755	0.1678	
185	95	0.1205	0.2401	0.0754	0.1422	
240	120	0.0928	0.2361	0.0742	0.1188	
300	150	0.0751	0.2343	0.0736	0.1052	

B