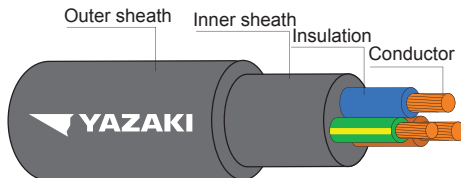


450/750 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATH WITH GROUND



TIS 11 Part 101-2559

CABLE STRUCTURE

Conductor	: Solid and stranded annealed copper wire
Insulation	: Polyvinyl chloride (PVC/C)
Insulation color	: Blue, Brown + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer 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
AC Testing voltage	: 2,500 volts
Reference standard	: TIS 11 Part 101-2559 Table 5

APPLICATION

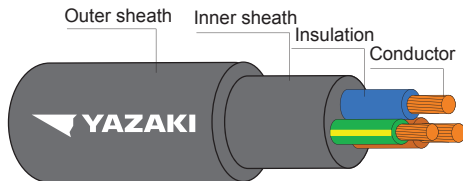
For Installation exposed, or in raceway, wet or dry location, or direct burial in ground

Number of cores	Conductor				Insulation thickness nominal	Inner sheath thickness approx.	Outer Sheath thick- ness nominal	Overall diameter maxi- mum	Conductor resistance at 20°C		Insulation resistance at 70°C minimum	Continuous current rating maximum		Cable weight approx.	Stand- ard Length per drum
	Nominal cross section area		Type of Conductor						maximum			on cable Ladder at 40°C	direct burial in ground at 30°C		
									Phase	Ground					
	Phase	Ground	Phase	Ground					(Ω/km)	(Ω/km)		(MΩ·km)	(A)		
(mm²)	(mm²)			(mm)	(mm)	(mm)	(mm)								
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	26	35	260	500
	2.5	2.5	Stranded		0.8	0.8	1.8	15.0	7.41	7.41	0.0093	26	35	270	500
	4	4	Solid		0.9	0.8	1.8	16.0	4.61	4.61	0.0094	35	47	340	500
	4	4	Stranded		0.9	0.8	1.8	16.5	4.61	4.61	0.0085	35	47	360	500
	6	6	Stranded		0.9	0.8	1.8	18.0	3.08	3.08	0.0073	44	60	450	500
	10	10	Stranded		1.1	0.8	1.8	21.0	1.83	1.83	0.0069	61	81	650	500
	16	16	Stranded		1.1	0.8	2.0	23.5	1.15	1.15	0.0057	82	105	900	500
	25	16	Stranded		1.3	1.2	2.0	28.0	0.727	1.15	0.0054	104	136	1200	500
	35	16	Stranded		1.3	1.2	2.0	30.0	0.524	1.15	0.0047	129	165	1500	500
	50	25	Stranded		1.5	1.2	2.2	34.0	0.387	0.727	0.0046	157	195	2000	500
	70	35	Stranded		1.5	1.5	2.2	38.5	0.268	0.524	0.0039	202	239	2700	500
	95	50	Stranded		1.7	1.5	2.2	43.5	0.193	0.387	0.0038	245	288	3600	500
	120	70	Stranded		1.7	1.5	2.4	47.5	0.153	0.268	0.0034	285	329	4500	500
	150	95	Stranded		1.9	1.8	2.6	53.0	0.124	0.193	0.0034	330	368	5500	500
	185	95	Stranded		2.1	1.8	2.8	57.5	0.0991	0.193	0.0034	378	417	6500	500
	240	120	Stranded		2.3	2.0	3.0	64.5	0.0754	0.153	0.0033	447	481	8500	500
	300	150	Stranded		2.5	2.0	3.2	71.0	0.0601	0.124	0.0032	516	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

NYG

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



TIS 11 Part 101-2559

CABLE STRUCTURE

Conductor	: Solid and stranded annealed copper
Insulation	: Polyvinyl chloride (PVC/C)
Insulation color	: Blue, Brown + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer 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
AC Testing voltage	: 2,500 volts
Reference standard	: TIS 11 Part 101-2559 Table 5

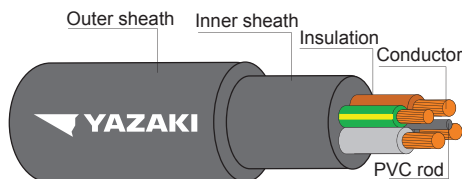
APPLICATION

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

Number of coress	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)
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	0.1201	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

NYG-G

450/750 V 70°C SOLID AND 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)
Insulation color	: Brown, Black, Grey + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer 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
AC Testing voltage	: 2,500 volts
Reference standard	: TIS 11 Part 101-2559 Table 5

APPLICATION

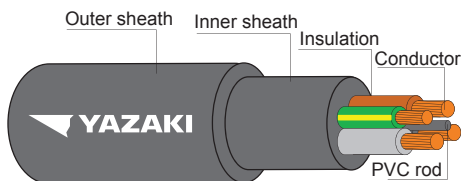
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

Number of coress	Conductor				Insulation thickness nominal (mm)	Inner sheath thickness approx. (mm)	Outer Sheath thick-ness nominal (mm)	Overall diameter maxi-mum (mm)	Conductor resistance at 20°C maximum		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 at 30°C (A)		
	Phase (mm²)	Ground (mm²)	Phase	Ground											
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	1.15	0.0054	88	128	1600	500
	35	16	Stranded		1.3	1.2	2.0	33.0	0.524	1.15	0.0047	110	154	1900	500
	50	25	Stranded		1.5	1.5	2.2	38.5	0.387	0.727	0.0046	133	181	2600	500
	70	35	Stranded		1.5	1.5	2.2	42.5	0.268	0.524	0.0039	171	223	3500	500
	95	50	Stranded		1.7	1.5	2.4	48.5	0.193	0.387	0.0038	207	267	4700	500
	120	70	Stranded		1.7	1.8	2.6	53.5	0.153	0.268	0.0034	240	304	6000	500
	150	95	Stranded		1.9	1.8	2.8	59.0	0.124	0.193	0.0034	278	342	7500	500
	185	95	Stranded		2.1	2.0	3.0	64.5	0.0991	0.193	0.0034	317	386	9000	500
	240	120	Stranded		2.3	2.0	3.2	72.0	0.0754	0.153	0.0033	374	448	11500	300
	300	150	Stranded		2.5	2.2	3.4	79.5	0.0601	0.124	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

NY-Y-G

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



TIS 11 Part 101-2559

CABLE STRUCTURE

Conductor	: Solid and stranded annealed copper wire
Insulation	: Polyvinyl chloride (PVC/C)
Insulation color	: Brown, Black, Grey + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer Sheath	: Black polyvinyl Chloride (PVC/ST4)

TECHNICAL DATA

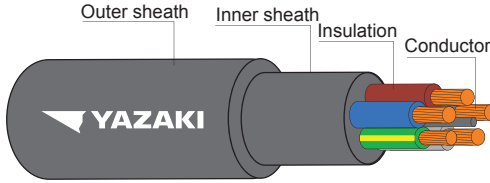
Classification	: Maximum conductor temperature 70°C : Circuit voltage not exceeding 450/750 Volts
Rated voltage	: 450 Volts between Line to Earth : 750 Volts between Line to Line
AC Testing voltage	: 2,500 volts
Reference standard	: TIS 11 Part 101-2559 Table 5

APPLICATION

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

Number of coress	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
3+G	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

450/750 V 70°C SOLID AND 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)
Insulation color	: Blue, Brown, Black, Grey + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer 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
AC Testing voltage	: 2,500 volts
Reference standard	: TIS 11 Part 101-2559 Table 5

APPLICATION

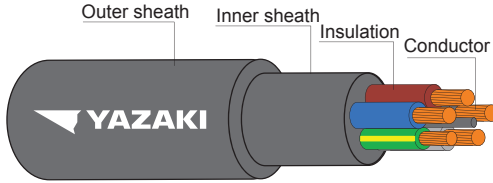
For installation exposed, or in raceway, wet or dry location, or direct burial in ground

Number of cores	Conductor				Insulation thickness nominal (mm)	Inner sheath thickness approx. (mm)	Outer Sheath thick- ness nominal (mm)	Overall diameter maxi- mum (mm)	Conductor resistance at 20°C maximum		Insulation resistance at 70°C minimum	Continuous current rating maxium		Cable weight approx. (kg/km)	Standar length per drum (m)		
	Nominal cross section area		Type of Conductor									on cable Ladder at 40°C				direct burial at 30°C	
	Phase (mm²)	Ground (mm²)	Phase	Ground								Phase (Ω/km)	Ground (Ω/km)			(A)	(A)
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	1.15	0.0054	88	128	1900	500		
	35	16	Stranded		1.3	1.5	2.2	39.0	0.524	1.15	0.0047	110	154	2500	500		
	50	25	Stranded		1.5	1.5	2.2	43.5	0.387	0.727	0.0046	133	181	3300	500		
	70	35	Stranded		1.5	1.5	2.4	49.0	0.268	0.524	0.0039	171	223	4500	500		
	95	50	Stranded		1.7	1.8	2.6	56.5	0.193	0.387	0.0038	207	267	6000	500		
	120	70	Stranded		1.7	1.8	2.8	61.5	0.153	0.268	0.0034	240	304	7500	500		
	150	95	Stranded		1.9	2.0	3.0	68.0	0.124	0.193	0.0034	278	342	9500	300		
	185	95	Stranded		2.1	2.0	3.2	75.0	0.0991	0.193	0.0034	317	386	11500	300		
	240	120	Stranded		2.3	2.2	3.4	84.5	0.0754	0.153	0.0033	374	448	14500	300		
	300	150	Stranded		2.5	2.2	3.8	93.5	0.0601	0.124	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

NY-Y-G

450/750 V 70°C SOLID AND 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)
Insulation color	: Blue, Brown, Black, Grey + Green/Yellow
Inner sheath	: Black polyvinyl chloride (PVC)
Outer 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
AC 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

Cable name	Nominal cross section area (No.x mm ²)	Conductor Type	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
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
4+G	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