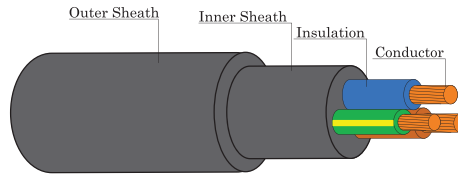
NYY-G

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

TIS 11 Part 101-2553



CABLE STRUCTURE

Conductor : Stranded annealed copper
: Sizes 25 mm² up to 300 mm² for phase wires
: Sizes 16 mm² up to 150 mm² for ground wires

Insulation : polyvinyl chloride (PVC/C)

Core identification : 2 cores + Ground : Blue, Brown, + Green/Yellow

Inner Sheath : Black polyvinyl chloride (PVC)

Outer Sheath : Black flame retardant polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum concuctor 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 101-2553 Table 5

APPLICATION

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

B

Number of core	Conductor				Insulation thickness nominal		Inner sheath thickness approx.	Outer sheath thickness nominal	Overall diameter maximum	Conductor resistance at 20°C maximum		Insulation resistance at 70°C minimum	Continuous current rating Maximum		Cable weight approx.	Standard Length
	Nominal cross sectional area		Type of Conducror										on cable Ladder at 40°C	direct burial in ground at 30°C		
	Phase	Ground	Phase	Ground	Phase	Ground				Phase	Ground					
	(mm^2)	(mm^2)			(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(Ω/km)	(MΩ-km)	(A)	(A)	(kg/km)	(m)
2+G	25	16	Stranded		1.3	1.1	1.2	2.0	28.0	0.727	1.15	0.0054	88	128	1,200	500/D
	35	16	Stranded		1.3	1.1	1.2	2.0	30.0	0.524	1.15	0.0047	110	154	1,500	500/D
	50	25	Stranded		1.5	1.3	1.2	2.2	34.0	0.387	0.727	0.0046	113	181	2,000	500/D
	70	35	Stranded		1.5	1.3	1.5	2.2	38.5	0.268	0.524	0.0039	171	223	2,700	500/D
	95	50	Stranded		1.7	1.5	1.5	2.2	43.5	0.193	0.387	0.0038	207	267	3,600	500/D
	120	70	Stranded		1.7	1.5	1.5	2.4	47.5	0.153	0.268	0.0034	240	304	4,500	500/D
	150	95	Stranded		1.9	1.7	1.8	2.6	53.0	0.124	0.193	0.0034	278	342	5,500	500/D
	185	95	Stranded		2.1	1.7	1.8	2.8	57.5	0.0991	0.193	0.0034	317	386	6,500	500/D
	240	120	Stranded		2.3	1.7	2.0	3.0	64.5	0.0754	0.153	0.0033	374	448	8,500	500/D
	300	150	Stranded		2.5	1.9	2.0	3.2	71.0	0.0601	0.124	0.0032	4362	507	10,500	300/D

Remark : Thermal resistivity of soil 1.2 K.m/W or °C.m/W

D : Packing in Drum

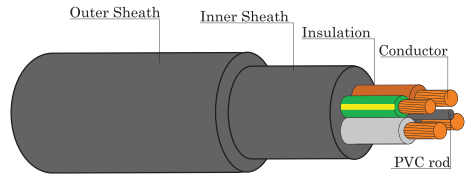
Deep of laying (For cable laid direct in ground) 0.8 m

Number of core	Nominal cross sectional 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	25	16	0.8700	0.2791	0.0877	0.8744
	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

NYY-G

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

TIS 11 Part 101-2553



CABLE STRUCTURE

Conductor : Stranded annealed copper
: Sizes 25 mm² up to 300 mm² for phase wires
: Sizes 16 mm² up to 150 mm² for ground wires

Insulation : polyvinyl chloride (PVC/C)

Core identification : 3 cores + Ground : Brown, Black, Grey+ Green/Yellow

Inner Sheath : Black polyvinyl chloride (PVC)

Outer Sheath : Black flame retardant polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum concuctor 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 101-2553 Table 5

APPLICATION

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

B

Number of core	Conductor				Insulation thickness norminal		Inner sheath thickness approx.	Outer sheath thickness nominal	Overall diameter maximum	Conductor resistance at 20°C maximum		Insulation resistance at 70°C minimum	Continuous current rating Maximum		Cable weight approx.	Standard Length
	Nominal cross sectional area		Type of Conducror										on cable Ladder at 40°C	direct burial in ground at 30°C		
	Phase	Ground	Phase	Ground	Phase	Ground				Phase	Ground					
	(mm^2)	(mm^2)			(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(Ω/km)	(MΩ-km)	(A)	(A)	(kg/km)	(m)
3+G	25	16	Stranded		1.3	1.1	1.2	2.0	30.5	0.727	1.15	0.0054	88	128	1,500	500/D
	35	16	Stranded		1.3	1.1	1.2	2.0	33.0	0.524	1.15	0.0047	110	154	1,900	500/D
	50	25	Stranded		1.5	1.3	1.5	2.2	38.5	0.387	0.727	0.0046	113	181	2,600	500/D
	70	35	Stranded		1.5	1.3	1.5	2.2	42.5	0.268	0.524	0.0039	171	223	3,500	500/D
	95	50	Stranded		1.7	1.5	1.5	2.4	48.5	0.193	0.387	0.0038	207	267	4,700	500/D
	120	70	Stranded		1.7	1.5	1.8	2.6	53.5	0.153	0.268	0.0034	240	304	6,000	500/D
	150	95	Stranded		1.9	1.7	1.8	2.8	59.0	0.124	0.193	0.0034	278	342	7,500	500/D
	185	95	Stranded		2.1	1.7	2.0	3.0	64.5	0.0991	0.193	0.0034	317	386	9,000	500/D
	240	120	Stranded		2.3	1.7	2.0	3.2	72.0	0.0754	0.153	0.0033	374	448	11,500	300/D
	300	150	Stranded		2.5	1.9	2.2	3.4	79.5	0.0601	0.124	0.0032	4362	507	14,000	300/D

Remark : Thermal resistivity of soil 1.2 K.m/W or °C.m/W

D : Packing in Drum

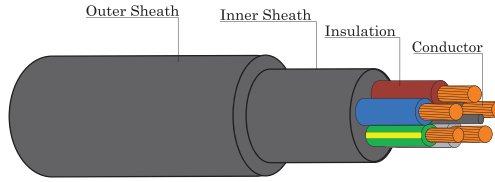
Deep of laying (For cable laid direct in ground) 0.8 m

Number of core	Nominal cross sectional 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)
3+G	25	16	0.8701	0.2791	0.0877	0.8745
	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

NYY-G

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

TIS 11 Part 101-2553



CABLE STRUCTURE

Conductor : Stranded annealed copper
: Sizes 25 mm² up to 300 mm² for phase wires
: Sizes 16 mm² up to 150 mm² for ground wires

Insulation : polyvinyl chloride (PVC/C)

Core identification : 4 cores + Ground : Blue, Brown, Black, Grey + Green/Yellow

Inner Sheath : Black polyvinyl chloride (PVC)

Outer Sheath : Black flame retardant polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum concuctor 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 101-2553 Table 5

APPLICATION

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

B

Number of core	Conductor				Insulation thickness nominal		Inner sheath thickness approx.	Outer sheath thickness nominal	Overall diameter maximum	Conductor resistance at 20°C maximum		Insulation resistance at 70°C minimum	Continuous current rating Maximum		Cable weight approx.	Standard Length
	Nominal cross sectional area		Type of Conducror										on cable Ladder at 40°C	direct burial in ground at 30°C		
	Phase	Ground	Phase	Ground	Phase	Ground				Phase	Ground					
	(mm^2)	(mm^2)			(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(Ω/km)	(MΩ-km)	(A)	(A)	(kg/km)	(m)
4+G	25	16	Stranded		1.3	1.1	1.2	2.0	34.0	0.727	1.15	0.0054	88	128	1,900	500/D
	35	16	Stranded		1.3	1.1	1.5	2.2	39.0	0.524	1.15	0.0047	110	154	2,400	500/D
	50	25	Stranded		1.5	1.3	1.5	2.2	43.5	0.387	0.727	0.0046	113	181	3,300	500/D
	70	35	Stranded		1.5	1.3	1.5	2.4	49.0	0.268	0.524	0.0039	171	223	4,500	500/D
	95	50	Stranded		1.7	1.5	1.8	2.6	56.5	0.193	0.387	0.0038	207	267	6,100	500/D
	120	70	Stranded		1.7	1.5	1.8	2.8	61.5	0.153	0.268	0.0034	240	304	7,500	500/D
	150	95	Stranded		1.9	1.7	2.0	3.0	68.0	0.124	0.193	0.0034	278	342	9,500	500/D
	185	95	Stranded		2.1	1.7	2.0	3.2	75.0	0.0991	0.193	0.0034	317	386	11,500	300/D
	240	120	Stranded		2.3	1.7	2.2	3.4	84.5	0.0754	0.153	0.0033	374	448	14,500	300/D
	300	150	Stranded		2.5	1.9	2.2	3.8	93.5	0.0601	0.124	0.0032	4362	507	18,000	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

D : Packing in Drum

Number of core	Nominal cross sectional 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)
4+G	25	16	0.8701	0.2791	0.0877	0.8745
	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