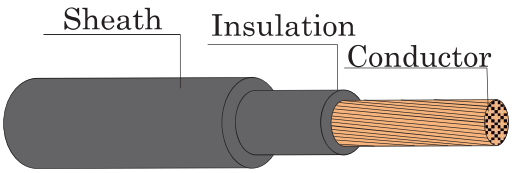
VCT

450/750 V 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE

TIS 11 Part 101-2559



CABLE STRUCTURE

Conductor : Flexible annealed copper wire

Insulation : Polyvinyl chloride (PVC/D)

Core identification 1 Cores : Black

Sheath : Black polyvinyl chloride (PVC/ST5)

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 7

B

APPLICATION

For mobile-electrical equipment used in mines, factories, farm or household appliances. This cable is suitable for use in places where cables come in contact with oils.

Number of cores	Nominal cross sectional area (mm^2)	Conductor type	Insulation thickness nominal (mm)	Sheath thickness approx. (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°C minimum (MΩ-km)	Continuous currunt rating in free air at 40°C maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	1	Flexible	0.8	1.2	6.2	19.5	0.0127	14	40	100/C
	1.5	Flexible	0.8	1.2	6.6	13.3	0.0111	16	50	100/C
	2.5	Flexible	0.8	1.2	7.4	7.98	0.0092	25	65	100/C
	4	Flexible	0.9	1.4	8.6	4.95	0.0084	30	90	100/C
	6	Flexible	0.9	1.4	9.4	3.30	0.0071	39	120	100/C
	10	Flexible	1.1	1.8	12.0	1.91	0.0068	51	210	100/C
	16	Flexible	1.1	1.8	13.5	1.21	0.0050	73	270	100/C
	25	Flexible	1.3	2.2	16.0	0.780	0.0048	97	410	100/C
	35	Flexible	1.3	2.2	17.5	0.554	0.0041	140	550	500/D

C : Packing in coil
D : Packing in drum

Number of cores	Nominal cross sectional area (mm^2)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
1	1	23.3000	0.6620	0.2079	23.3000
	1.5	15.9000	0.6310	0.1983	15.9000
	2.5	9.5500	0.5930	0.1864	9.5520
	4	5.9227	0.5946	0.1868	5.9256
	6	3.9485	0.5605	0.1761	3.9524
	10	2.2854	0.5529	0.1737	2.2919
	16	1.4478	0.5306	0.1667	1.4574
	25	0.9334	0.5275	0.1657	0.9480
	35	0.6630	0.5086	0.1598	0.6820

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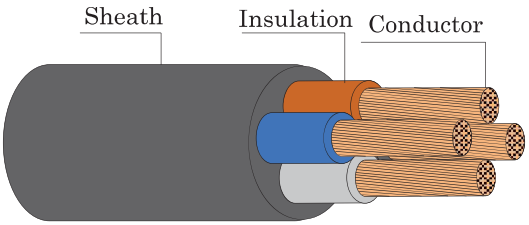

CABLE STRUCTURE

Conductor : Flexible annealed copper wire

Insulation : Polyvinyl chloride (PVC/D)

Core identification
2 Cores : Blue, Brown
3 Cores : Brown, Black, Grey
4 Cores : Blue, Brown, Black, Grey

Sheath : Black polyvinyl chloride (PVC/ST5)

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 7

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APPLICATION

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Number of cores	Nominal cross sectional area (mm^2)	Conductor type s	Insulation thickness nominal (mm)	Sheath thickness approx. (mm)	Overall diameter maximum (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 70°C minimum (MΩ-km)	Continuous currunt rating in free air at 40°C maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
2	1	Flexible	0.8	1.2	9.6	19.5	0.0127	14	100	100/C
	1.5	Flexible	0.8	1.4	11.0	13.3	0.0111	16	130	100/C
	2.5	Flexible	0.8	1.4	12.5	7.98	0.0092	25	170	100/C
	4	Flexible	0.9	1.6	14.5	4.95	0.0084	30	230	100/C
	6	Flexible	0.9	1.6	16.0	3.30	0.0071	39	320	100/C
	10	Flexible	1.1	1.8	20.0	1.91	0.0068	51	500	500/D
	16	Flexible	1.1	2.2	23.0	1.21	0.0050	73	700	500/D
	25	Flexible	1.3	2.4	27.5	0.780	0.0048	97	1000	500/D
	35	Flexible	1.3	2.6	31.0	0.554	0.0041	140	1400	500/D
3	1	Flexible	0.8	1.4	10.5	19.5	0.0127	12	100	100/C
	1.5	Flexible	0.8	1.4	11.5	13.3	0.0111	15	130	100/C
	2.5	Flexible	0.8	1.4	13.0	7.98	0.0092	20	170	100/C
	4	Flexible	0.9	1.6	15.5	4.95	0.0084	26	230	100/C
	6	Flexible	0.9	1.8	17.5	3.30	0.0071	34	320	100/C
	10	Flexible	1.1	2.0	21.5	1.91	0.0068	47	500	500/D
	16	Flexible	1.1	2.4	25.0	1.21	0.0050	63	700	500/D
	25	Flexible	1.3	2.6	30.0	0.780	0.0048	83	1000	500/D
	35	Flexible	1.3	2.8	33.5	0.554	0.0041	102	1400	500/D
4	1	Flexible	0.8	1.6	10.5	19.5	0.0127	12	100	100/C
	1.5	Flexible	0.8	1.6	11.5	13.3	0.0111	15	130	100/C
	2.5	Flexible	0.8	1.6	13.0	7.98	0.0092	20	170	100/C
	4	Flexible	0.9	1.8	15.5	4.95	0.0084	26	230	100/C
	6	Flexible	0.9	2.0	17.5	3.30	0.0071	34	320	100/C
	10	Flexible	1.1	2.2	21.5	1.91	0.0068	47	500	500/D
	16	Flexible	1.1	2.6	25.0	1.21	0.0050	63	700	500/D
	25	Flexible	1.3	2.8	30.0	0.780	0.0048	83	1000	500/D
	35	Flexible	1.3	3.1	33.5	0.554	0.0041	102	1400	500/D

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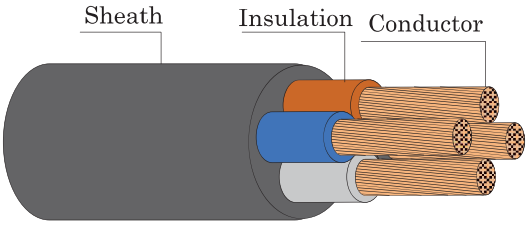

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Number of cores	Nominal cross sectional area (mm^2)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
2	1	23.3000	0.3560	0.1118	23.3000
	1.5	15.9000	0.3330	0.1048	15.9000
	2.5	9.5500	0.3070	0.0965	9.5500
	4	5.9227	0.3084	0.0969	5.9235
	6	3.9485	0.8662	0.0899	3.9495
	10	2.2854	0.2768	0.0870	2.2870
	16	1.4479	0.2638	0.0829	1.4502
	25	0.9334	0.2602	0.0817	0.9370
	35	0.6631	0.2500	0.0785	0.6677
3	1	23.3000	0.3560	0.1118	23.3000
	1.5	15.9000	0.3330	0.1048	15.9000
	2.5	9.5500	0.3070	0.0965	9.5500
	4	5.9227	0.3084	0.0969	5.9235
	6	3.9485	0.2862	0.0899	3.9495
	10	2.2854	0.2768	0.0870	2.2870
	16	1.4479	0.2638	0.0829	1.4503
	25	0.9335	0.2602	0.0817	0.9371
	35	0.6632	0.2500	0.0785	0.6678
4	1	23.3000	0.3560	0.1118	23.3000
	1.5	15.9000	0.3330	0.1048	15.9000
	2.5	9.5500	0.3070	0.0965	9.5500
	4	5.9227	0.3084	0.0969	5.9235
	6	3.9485	0.2862	0.0899	3.9495
	10	2.2854	0.2768	0.0870	2.2870
	16	1.4479	0.2638	0.0829	1.4503
	25	0.9335	0.2602	0.0817	0.9371
	35	0.6632	0.2500	0.0785	0.6678