
COPPER CONDUCTOR CABLES

◆ BUILDING WIRES AND CABLES ◆

TIS 11 Part 4-2553 : Sheathed Cables for Fixed Wiring

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300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Solid and Stranded annealed copper Multi - core	Classification	:Maximum conductor temperature 70°C :Circuit voltage not exceeding 300/500 Volts 300 Volts between Line-to-Earth 500 Volts between Line-to-Line
Insulation	: Polyvinyl chloride (PVC/C)	Testing voltage	: 2,000 Volts
Core identification		Reference standard	:TIS 11 Part 4-2553, Table 1
2 Cores	:Blue and Brown	APPLICATION	
3 Cores	:Brown, Black and Grey or Blue, Brown and Green/Yellow	For installation exposed, or in raceway, wet or dry location.	
4 Cores	:Blue, Brown, Black and Grey or Blue, Brown and Green/Yellow		
5 Cores	:Blue, Brown, Black, Grey and Black or Blue,Brown,Black,Grey and Green/Yellow		
Inner sheath	:Black polyvinyl chloride (PVC)		
Outer sheath	:Black polyvinyl chloride (PVC/ST4)		

Number of core	Nominal cross sectional area (mm ²)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath thickness nominal (mm)	Overall diameter		Conductor resistance at 20 °C maximum (Ω-km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	cable weight approx. (kg/km)	Standard length (m)
						Minimum (mm)	Maximum (mm)					
2	1.5	1	0.7	0.4	1.2	7.6	10.0	12.1	0.011	19	120	100/C
	1.5	2	0.7	0.4	1.2	7.8	10.5	12.1	0.010	19	130	100/C
	2.5	1	0.8	0.4	1.2	8.6	11.5	7.41	0.010	26	160	100/C
	2.5	2	0.8	0.4	1.2	9.0	12.0	7.41	0.009	26	180	100/C
	4	1	0.8	0.4	1.2	9.6	12.5	4.61	0.0085	34	210	100/C
	4	2	0.8	0.4	1.2	10.0	13.0	4.61	0.0077	34	220	100/C
	6	1	0.8	0.4	1.2	10.5	13.5	3.08	0.0070	44	270	100/C
	6	2	0.8	0.4	1.2	11.0	14.0	3.08	0.0065	44	190	100/C
	10	1	1.0	0.6	1.4	13.0	16.5	1.83	0.0070	60	420	500/D
	10	2	1.0	0.6	1.4	13.5	17.5	1.83	0.0065	60	460	500/D
	16	2	1.0	0.6	1.4	15.5	20.0	1.15	0.0052	80	650	500/D
	25	2	1.2	0.8	1.4	18.5	24.0	0.727	0.0050	107	950	500/D
35	2	1.2	1.0	1.6	21.0	27.5	0.524	0.0044	131	1,300	500/D	

Class of conductor 1:Solid
2:Strand

C: Packing in coil
D: Packing in drum

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Solid and Stranded annealed copper Multi - core	Classification	:Maximum conductor temperature 70°C :Circuit voltage not exceeding 300/500 Volts 300 Volts between Line-to-Earth 500 Volts between Line-to-Line
Insulation	: Polyvinyl chloride (PVC/C)	Testing voltage	: 2,000 Volts
Core identification		Reference standard	:TIS 11 Part 4-2553, Table 1
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3 Cores	:Brown, Black and Grey or Blue, Brown and Green/Yellow	For installation exposed, or in raceway, wet or dry location.	
4 Cores	:Blue, Brown, Black and Grey or Blue, Brown and Green/Yellow		
5 Cores	:Blue, Brown, Black, Grey and Black or Blue,Brown,Black,Grey and Green/Yellow		
Inner sheath	:Black polyvinyl chloride (PVC)		
Outer sheath	:Black polyvinyl chloride (PVC/ST4)		

Number of core	Nominal cross sectional area (mm ²)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath thickness nominal (mm)	Overall diameter		Conductor resistance at 20 °C maximum (Ω-km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	cable weight approx. (kg/km)	Standard length (m)
						Minimum (mm)	Maximum (mm)					
3	1.5	1	0.7	0.4	1.2	8.0	10.5	12.1	0.011	17	140	100/C
	1.5	2	0.7	0.4	1.2	8.2	11.0	12.1	0.010	17	150	100/C
	2.5	1	0.8	0.4	1.2	9.2	12.0	7.41	0.010	22	190	100/C
	2.5	2	0.8	0.4	1.2	9.4	12.5	7.41	0.009	22	210	100/C
	4	1	0.8	0.4	1.2	10.0	13.0	4.61	0.0085	29	250	100/C
	4	2	0.8	0.4	1.2	10.5	13.5	4.61	0.0077	29	270	100/C
	6	1	0.8	0.4	1.4	11.5	14.5	3.08	0.0070	37	340	100/C
	6	2	0.8	0.4	1.4	12.0	15.5	3.08	0.0065	37	370	100/C
	10	1	1.0	0.6	1.4	14.0	17.5	1.83	0.0070	52	520	500/D
	10	2	1.0	0.6	1.4	14.5	19.0	1.83	0.0065	52	570	500/D
	16	2	1.0	0.8	1.4	16.5	27.5	1.15	0.0052	69	810	500/D
	25	2	1.2	0.8	1.6	20.5	26.0	0.727	0.0050	92	1,200	500/D
35	2	1.2	1.0	1.6	22.0	29.0	0.524	0.0040	113	1,600	500/D	

Class of conductor 1:Solid
2:Strand

C: Packing in coil
D: Packing in drum



300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



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Conductor	: Solid and Stranded annealed copper Multi - core	Classification	:Maximum conductor temperature 70°C :Circuit voltage not exceeding 300/500 Volts 300 Volts between Line-to-Earth 500 Volts between Line-to-Line
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Core identification		Reference standard	:TIS 11 Part 4-2553, Table 1
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4 Cores	:Blue, Brown, Black and Grey or Blue, Brown and Green/Yellow		
5 Cores	:Blue, Brown, Black, Grey and Black or Blue,Brown,Black,Grey and Green/Yellow		
Inner sheath	:Black polyvinyl chloride (PVC)		
Outer sheath	:Black polyvinyl chloride (PVC/ST4)		

Number of core	Nominal cross sectional area (mm ²)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath thickness nominal (mm)	Overall diameter		Conductor resistance at 20 °C maximum (Ω-km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	cable weight approx. (kg/km)	Standard length (m)
						Minimum (mm)	Maximum (mm)					
4	1.5	1	0.7	0.4	1.2	8.6	11.5	12.1	0.011	17	160	100/C
	1.5	2	0.7	0.4	1.2	9.0	12.0	12.1	0.010	17	180	100/C
	2.5	1	0.8	0.4	1.2	10.0	13.0	7.41	0.010	22	230	100/C
	2.5	2	0.8	0.4	1.2	10.0	13.5	7.41	0.009	22	250	100/C
	4	1	0.8	0.4	1.4	11.5	14.5	4.61	0.0085	29	320	100/C
	4	2	0.8	0.4	1.4	12.0	15.0	4.61	0.0077	29	340	100/C
	6	1	0.8	0.6	1.4	12.5	16.0	3.08	0.0070	37	440	500/D
	6	2	0.8	0.6	1.4	13.0	17.0	3.08	0.0065	37	470	500/D
	10	1	1.0	0.6	1.4	15.5	19.0	1.83	0.0070	52	660	500/D
	10	2	1.0	0.6	1.4	16.0	20.5	1.83	0.0065	52	700	500/D
	16	2	1.0	0.8	1.4	18.0	23.5	1.15	0.0052	69	1,000	500/D
	25	2	1.2	1.0	1.6	22.5	28.5	0.727	0.0050	92	1,600	500/D
35	2	1.2	1.0	1.6	24.5	32.0	0.524	0.0044	113	2,000	500/D	

Class of conductor 1:Solid
2:Strand

C: Packing in coil
D: Packing in drum



300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED



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Inner sheath	:Black polyvinyl chloride (PVC)		
Outer sheath	:Black polyvinyl chloride (PVC/ST4)		

Number of core	Nominal cross sectional area (mm ²)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath thickness nominal (mm)	Overall diameter		Conductor resistance at 20 °C maximum (Ω-km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	cable weight approx. (kg/km)	Standard length (m)
						Minimum (mm)	Maximum (mm)					
5	1.5	1	0.7	0.7	1.2	9.4	12.0	12.1	0.011	17	200	100/C
	1.5	2	0.7	0.7	1.2	9.8	12.5	12.1	0.010	17	220	100/C
	2.5	1	0.8	0.8	1.2	11.0	14.0	7.41	0.010	22	280	100/C
	2.5	2	0.8	0.8	1.2	11.0	14.5	7.41	0.009	22	310	100/C
	4	1	0.8	0.8	1.4	12.5	16.0	4.61	0.0085	29	410	100/C
	4	2	0.8	0.8	1.4	13.0	17.0	4.61	0.0077	29	430	100/C
	6	1	0.8	0.8	1.4	13.5	17.5	3.08	0.0070	37	530	500/D
	6	2	0.8	0.8	1.4	14.5	18.5	3.08	0.0065	37	570	500/D
	10	1	1.0	1.0	1.4	17.0	21.0	1.83	0.0070	52	800	500/D
	10	2	1.0	1.0	1.4	17.5	22.0	1.83	0.0065	52	870	500/D
	16	2	1.0	1.0	1.6	20.5	26.0	1.15	0.0052	69	1,300	500/D
	25	2	1.2	1.2	1.6	24.5	31.5	0.727	0.0050	92	1,900	500/D
35	2	1.2	1.2	1.6	27.0	35.0	0.524	0.0044	113	2,500	500/D	

Class of conductor 1:Solid
2:Strand

C: Packing in coil
D: Packing in drum