SUPER CABLE®

TECHNICAL DATA

ELECTRIC WIRE & CABLE 2018

มอก.11-2553

อ้างอิงตามมาตรฐาน IEC60227

เล่มที่ 1	ข้อกำหนดทั่วไป	อ้างอิงจากมาตรฐาน IEC 60227-1
เล่มที่ 2	วิธีทดสอบ	อ้างอิงจากมาตรฐาน IEC 60227-2
เล่มที่ 3	สายไฟฟ้าไม่มีเปลือกสำหรับงานติดตั้งยึดกับที่	อ้างอิงจากมาตรฐาน IEC 60227-3
เล่มที่ 4	สายไฟฟ้ามีเปลือกสำหรับงานติดตั้งยึดกับที่	อ้างอิงจากมาตรฐาน IEC 60227-4
เล่มที่ 5	สายอ่อน	อ้างอิงจากมาตรฐาน IEC 60227-5
เล่มที่ 101	สายไฟฟ้ามีเปลือกสำหรับงานทั่วไป	อ้างอิงจากมาตรฐาน มอก.11-2531

ชนิดของวัสดุฉนวน จากพอลิไวนิลคลอไรด์ (PVC)

จะจำเพาะมากขึ้น แบ่งออกเป็น 3 ชนิด	เปลือก
- PVC/C สำหรับสายไฟฟ้าใช้งานยึดติดกับที่	PVC/ST4
- PVC/D สำหรับสายไฟฟ้าอ่อน (Flexible cable)	PVC/ST5
- PVC/E สำหรับสายทนความร้อนที่ใช้ภายในอาคาร	PVC/ST10

สีแกนของสายไฟฟ้า

- สายดิน (G) : สีเขียวแถบเหลือง
- สายนิวทรัล (N) : สีฟ้า
- สายแกนเดียว : ไม่กำหนดสี
- สาย 2 แกน : สีฟ้า และ น้ำตาล
- สาย 3 แกน : สีน้ำตาล ดำ เทา หรือ สีฟ้า น้ำตาล เขียวแถบเหลือง
- สาย 4 แกน : สีฟ้า น้ำตาล ดำ เทา หรือ สีน้ำตาล ดำ เทา เขียวแถบเหลือง
- สาย 5 แกน : สีฟ้า น้ำตาล ดำ เทา ดำ หรือ สีฟ้า น้ำตาล ดำ เทา เขียวแถบเหลือง

อุณหภูมิของสายไฟฟ้า

กำหนดอุณหภูมิในการใช้งานของสายไฟฟ้าให้ครอบคลุมทั้ง 70 °C และ 90 °C

แรงดันสายไฟฟ้า

กำหนดแรงดันไฟฟ้าใช้งานเป็นค่า U_o/U ไว้ไม่เกิน 450/750 โวลต์ โดย

U_o หมายถึง ค่ารากของกำลังสองเฉลี่ย (r.m.s.) ของแรงดันไฟฟ้าวัดเทียบกับดิน

U หมายถึง ค่ารากของกำลังสองเฉลี่ย (r.m.s.) ของแรงดันไฟฟ้าระหว่างตัวนำ

ดัดแปลงจาก มาตรฐานการติดตั้งทางไฟฟ้าสำหรับประเทศไทย พ.ศ. 2556

SUPER CABLE®

"Full amount of copper and full length of wires"

Sahasang Group Co., Ltd. was established in 1970 as an electrical equipment wholesaler. For over 40 years, we have been entrusted and value our clients as our first priority. We maintain and continuously build long - term relationship with our customers.

In 2009, **S.Super Cable Co., Ltd. (SSC)** was recognized as a new establishment under Sahasang Group Co., Ltd., positioning as a premium wires and cable manufacturing brand. SSC has committed to produce high quality and premium-grade products to our clients. With a sudden entrance of the brand, SSC's goal is to trade high quality products and seeks to be the leader in local and international markets to meet customers' needs and wants. S.Super Cable aims to provide finest products with new PVC, full amount of copper and full length of wires that differentiated itself from the market.

Our manufacturing located at 99/3 Moo 2 Tambol Homkred, Amphoe Sampran, Nakhonpathom 73110.

We rigorously test our cable to prevailing industry standard. SSC's has achieved

ISO 9001:2015 (QUALITY MANAGEMENT SYSTEM)

ISO 14001:2015 (ENVIRONMENTAL MANAGEMENT SYSTEM)

certifications from the TUV-NORD (Thailand) Ltd.

Aiming to enhance our customer requirement as well providing the utmost satisfaction, we obtained **TIS 11-2553** from the Thailand Industrial Standards Institute (TISI) and also Electric Lab Solutions (ELS). SSC values in our employees, products, services, processes and addressed the needs of all parties concerned.

Vision

To be one of the leading manufacturer in electrical wire industry and provide significant services that meet the client's satisfaction in Thailand and ASEAN countries.

Mission

To produce and trade high quality products that meets the international standard and maximizes the customer satisfaction.

To be able to compete with the dominant brands in the market.

To ensure that 'loyalty' to our customer is first priority.

To enhance the top performing and maintain the quality workforce.

ประวัติบริษัท

บริษัท สหแสงกรุ๊ป จำกัด ก่อตั้งขึ้นในปีพ.ศ. 2513 โดยดำเนินธุรกิจขายส่งอุปกรณ์ไฟฟ้ามากว่า 40 ปี เราได้รับความเชื่อถือ และไว้วางใจจากลูกค้าด้วยดีตลอดมา ฐานลูกค้าของเรามีทั้งกลุ่มร้านค้า โรงงานอุตสาหกรรม กลุ่มอสังหาริมทรัพย์และก่อสร้าง รัฐวิสาหกิจ หน่วยงานราชการและเอกชน วิศวกร และสถาปนิก ตลอดจนผู้บริโภคโดยตรง ซึ่งเราให้ความสำคัญพร้อมทั้งรักษาความสัมพันธ์ระยะยาวกับลูกค้าของเราเสมอมา

ต่อมาในปีพ.ศ. 2552 บริษัท **เอส. ซุปเปอร์ เคเบิ้ล จำกัด** (เอส. ซุปเปอร์) ได้ก่อตั้งขึ้นภายใต้บริษัทในเครือ สหแสงกรุ๊ป โดยเป็นผู้ผลิตสายไฟฟ้าคุณภาพสูงแบรนด์ เอส. ซุปเปอร์ เคเบิ้ล ชนิดตัวนำทองแดง และตัวนำอลูมิเนียมทั้งสายไฟแรงต่ำใช้ภายในอาคาร สายไฟแรงดันต่ำ สายคอนโทรล สายอ่อน สายไฟเปลือยไร้ฉนวนหุ้ม ตลอดจนสายไฟชนิดพิเศษต่างๆ

เอส. ซุปเปอร์ เคเบิ้ล มีเป้าหมายในการเป็นผู้นำตลาดทั้งในประเทศและต่างประเทศซึ่งสามารถตอบสนองความต้องการของลูกค้า ด้วยการจำหน่ายสายไฟฟ้าคุณภาพสูง ด้วยปณิธาน

" สายไฟมาตรฐานสากล พีวีซีใหม่ ทองแดงเต็ม จำนวนเมตรครบ"

เอส. ซุปเปอร์ เคเบิ้ล

ตั้งอยู่ที่ 99/3 หมู่ 2 ตำบล หอมเกร็ด อำเภอ สามพราน จังหวัด นครปฐม 73100
สายไฟฟ้า เอส. ซุปเปอร์ได้การรับรองมาตรฐาน
ISO 9001:2015 (QUALITY MANAGEMENT SYSTEM)
ISO 14001:2015 (ENVIRONMENTAL MANAGEMENT SYSTEM)
จากบริษัท ทูฟ นอร์ด (ประเทศไทย) จำกัด และ มอก. 11-2553 ,มอก.293-2541 จากสำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม กระทรวงอุตสาหกรรม รวมถึงมีห้องทดลองคุณภาพสายไฟ (Electric Lab Solutions) เพื่อให้มั่นใจได้ว่าสายไฟฟ้า เอส. ซุปเปอร์ มีคุณภาพสูงตามมาตรฐานสากล

วิสัยทัศน์

" เป็นหนึ่งในผู้ผลิตชั้นนำของอุตสาหกรรมสายไฟฟ้า และใส่ใจพันธมิตร คิดสรรสร้าง เน้นคุณภาพและบริการ เพื่อตอบสนองความพึงพอใจของลูกค้าทั้งภายในประเทศและประเทศในกลุ่มอาเซียน"

ภารกิจ

- ทางบริษัทฯผลิตและจำหน่ายสายไฟฟ้าคุณภาพสูงที่มีคุณสมบัติตรงตามมาตรฐานสากลและตอบสนองความพึงพอใจของลูกค้า
- เลือกใช้ทองแดง อะลูมิเนียม พีวีซีใหม่ ที่มีคุณภาพดี
- ทางบริษัทใช้เครื่องจักรที่ทันสมัยและมีประสิทธิภาพสูงในการผลิตสายไฟฟ้า
- มีระบบการตรวจสอบคุณภาพสินค้าในทุกๆขั้นตอน
- กระบวนการในการจัดส่งสินค้าตรงตามเวลาที่กำหนด
- เพิ่มประสิทธิภาพการทำงานของพนักงานให้ดียิ่งขึ้น

TIS. 11-2553 ; Thai Industrial Standards Institute (TISI)

ISO 9001:2015 (QUALITY MANAGEMENT SYSTEM)

ISO 14001:2015 (ENVIRONMENTAL MANAGEMENT SYSTEM)

TUV NORD (Thailand) Ltd.

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SUPER CABLE

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คู่มือการอ่านข้อมูลสายไฟ

1

60227 IEC 01 (THW)
450/750 V. 70°C SOLID OR STRANDED CONDUCTOR
PVC INSULATED, SINGLE CORE

SUPER CABLE

2

3

APPLICATION
- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts
REFERENCE STANDARD : TIS 11-2553 PART 3, TABLE 1

CABLE STRUCTURE
CONDUCTOR : Annealed Solid or Stranded Copper CLASS 1 & 2 Size 1.5 - 400 mm²
INSULATION : Polyvinyl chloride type PVC/C
CORE IDENTIFICATION : Single core, color as request

CLASSIFICATION
Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

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Technical Data

TIS 11-2553 PART 3, TABLE 1

Nominal cross sectional area	Conductor type	Number of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter (approx.) minimum	Overall diameter (approx.) maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.56	0.7	2.7	3.3	12.1	0.010	21	22	100/C
1.5	2	7	1.56	0.7	2.7	3.3	12.1	0.010	21	22	100/C
2.5	1	1	1.74	0.8	3.2	3.9	7.41	0.010	29	32	100/C
2.5	2	7	2.01	0.8	3.6	4.0	7.41	0.009	29	35	100/C
4	1	1	2.21	0.8	3.8	4.4	4.61	0.0085	37	47	100/C
4	2	7	2.52	0.8	3.8	4.6	4.61	0.0077	37	50	100/C
6	1	1	2.78	0.8	4.1	5.0	3.08	0.0070	48	65	100/C
6	2	7	3.08	0.8	4.3	5.2	3.08	0.0065	48	70	100/C
10	1	1	3.62	1.0	5.3	6.4	1.83	0.0070	67	110	100/C
10	2	7	3.99	1.0	5.6	6.7	1.83	0.0065	67	120	100/C
16	2	7	5.04	1.0	6.7	7.8	1.15	0.0050	92	180	100/C
25	2	7	6.33	1.2	8.1	9.7	0.727	0.0050	127	280	100/C
35	2	19	7.47	1.2	9.0	10.9	0.524	0.0043	157	370	100/C
50	2	19	8.80	1.4	10.6	12.8	0.387	0.0043	191	500	1,000/D
70	2	19	10.55	1.4	12.1	14.6	0.268	0.0035	244	700	1,000/D
95	2	19	12.45	1.6	14.1	17.1	0.193	0.0035	297	1,000	1,000/D
120	2	37	14.00	1.6	15.6	18.6	0.153	0.0032	345	1,200	1,000/D
150	2	37	15.54	1.8	17.3	20.9	0.124	0.0032	397	1,500	1,000/D
185	2	37	17.43	2.0	19.3	23.3	0.0991	0.0032	453	1,900	1,000/D
240	2	61	19.96	2.2	22.0	26.6	0.0754	0.0032	535	2,500	1,000/D
300	2	61	22.41	2.4	24.5	29.6	0.0601	0.0030	617	3,100	1,000/D
400	2	61	25.29	2.6	27.5	33.2	0.0470	0.0028	741	3,900	1,000/D

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Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในรางเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามเรอยท่อฝังดินหรือฝังดินโดยตรง

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B2

ความหมาย

1. ชื่อสายไฟฟ้า, พิกัดที่เกี่ยวข้อง และ ส่วนประกอบ
2. ภาพโครงสร้างสายไฟฟ้า และ หน้าตัดสายไฟฟ้า
3. ลักษณะการใช้งาน,แรงดันไฟฟ้า ที่ใช้ในการทดสอบ, มาตรฐานอ้างอิง , โครงสร้างของสายไฟฟ้า,พิกัดต่าง ๆของสายไฟฟ้า เช่น อุณหภูมิ, แรงดันไฟฟ้า

คู่มือการอ่านข้อมูลสายไฟ

ความหมาย

4 ข้อมูลของสายไฟฟ้า ประกอบด้วย

Number of wires	=	จำนวนเส้นลวดในแต่ละตัวนำไฟฟ้า
Conductor type	=	ประเภทของลวดตัวนำ
Nominal cross sectional area	=	ขนาดพื้นที่หน้าตัดระบุของตัวนำไฟฟ้า
Diameter (approx)	=	ขนาดเส้นผ่านศูนย์กลางตัวนำ (โดยประมาณ)
Nominal insulation thickness	=	ค่าความหนาเฉลี่ยของฉนวน ต้องมีค่าไม่ต่ำกว่าค่าที่กำหนด
Overall diameter	=	เส้นผ่านศูนย์กลางเบ็ดเสร็จของสายไฟฟ้าสำเร็จรูป มอก. กำหนดไว้ 2 ลักษณะ คือ 1.ต้องไม่เกินค่าทีกำหนด (Maximum) 2.ต้องอยู่ระหว่างค่าที่กำหนด (Minimum , Maximum)
Maximum conductor resistance at 20 °c	=	ความต้านทานตัวนำไฟฟ้าสูงสุดที่ 20 °c ของตัวนำไฟฟ้าต้องไม่มากกว่าค่าที่กำหนด
Minimum insulation resistance at 70 °c	=	ความต้านทานต่ำสุดของฉนวนที่ 70 °c (ต้องไม่ต่ำกว่าที่มอก.กำหนด)
Current rating in free air	=	พิกัดกระแสในการเดินสายในอากาศ (พิกัดกระแสของการติดตั้ง) ต้องไม่มากกว่าค่าที่กำหนด

5 ประเภทของตัวนำ , ประเภทของบรรจุภัณฑ์ , สีของสายไฟ

CONVERSION TABLE

Conversion table AWG / MCM (kcmil) to the metric cross-section area

Conductor cross-section area AWG / MCM (kcmil)		Theoretical cross-section area mm²	Advised cross-section area mm²
AWG	20	0.51	0.5
	18	0.82	1.0
	16	1.31	1.5
	14	2.08	2.5
	12	3.31	4.0
	10	5.27	6.0
	8	8.40	10.0
	6	13.30	16.0
	4	21.20	25.0
	3	26.70	25.0
	2	33.60	35.0
	1	42.40	50.0
	1/0	53.40	50.0
	2/0	67.50	70.0
	3/0	85.00	95.0
	4/0	107.02	120.0
MCM (kcmil)	250	126.70	120.0
	300	152.00	150.0
	350	177.40	185.0
	400	202.70	240.0
	500	253.40	240.0
	600	304.00	300.0
	700	354.70	400.0
	750	380.00	400.0
	800	405.40	400.0
	900	456.00	500.0
	1,000	506.70	500.0
	1,250	633.40	630.0
	1,500	760.10	800.0

Note : The conductor cross-section area is expressed as an AWG (American Wire Gauge) and for large sizes in MCM (a thousand circular mils) or kcmil (kilo-circular mils)

CONVERSION TABLE

Length	mils x 0.0254 = mm (millimeters) inches x 25.4 = mm feet x 0.3048 = m (meters) miles x 1.609344 = km (kilometers)
Area	circular mils x 0.0005067 = mm^2 (square millimeters) sq. in. x 645.16 = mm^2 sq. ft. x 0.092903 = m^2 (square meters) sq. yd. x 0.836127 = m^2 sq. mi. x 2.58999 = km^2 (square kilometers)
Volume	cu. in. x 16.387 = cm^3 (cubic centimeters) cu. ft. x 0.028317 = m^3 (cubic meters) gallons x 4.54609 = l (liters)
Mass	pounds x 0.45359 = kg (kilograms) tons (2000 lbs.) x 0.907185 = t (metric tons)
Mass per unit length	lb/1000 ft x 1.48816 = kg/km (kilograms per kilometer) lb/mi x 0.28185 = kg/km mm^2 x 8.89 = kg/km (for copper) mm^2 x 2.70 = kg/km (for aluminium) mm^2 x 7.83 = kg/km (for steel)
Force or Tension	pounds (force) x 4.448 = N (newtons) mass (kg) x 9.8066 = N (Weight at or near sea level)
Force per unit area (Stress, pressure, tensile strength, etc.)	lbf/in^2 = (psi) x 6.895 = kPa (kilopascals) lbf/in^2 x 0.006895 = MPa (megapascals) N/mm^2 = Mpa
Temperature	°F to °C : °C = (°F - 32) x 5 / 9 °C to °F : °F = (°C - 9 / 5) + 32

SI Prefixes

Multiplying factor			Prefix	Symbol
1 000 000 000 000	=	10^{12}	tera	T
1 000 000 000	=	10^{9}	giga	G
1 000 000	=	10^{6}	mega	M
1 000	=	10^{3}	kilo	k
100	=	10^{2}	hecto	h
10	=	10^{1}	deca	da
0.1	=	10^{-1}	deci	d
0.01	=	10^{-2}	centi	c
0.001	=	10^{-3}	milli	m
0.000 001	=	10^{-6}	micro	μ
0.000 000 001	=	10^{-9}	nano	n
0.000 000 000 001	=	10^{-12}	pico	p
0.000 000 000 000 001	=	10^{-15}	femto	f
0.000 000 000 000 000 001	=	10^{-18}	atto	a

WIRE GAUGES

Gauge				Diameter		Sectional Area			Weight	
B.W.G.	A.W.G.	S.W.G.	mm.G.	Mil	mm.	Cir.Mil	in²	mm²	lb/1,000ft	kg/km
-	4/0	-	-	460.0	11.684	211,600	0.16620	107.20	640.5	953.0
-	3/0	-	-	409.6	10.404	167,772	0.13180	85.03	508.0	755.9
-	2/0	-	-	364.8	9.266	133,079	0.10450	67.42	402.7	599.4
-	0	-	-	324.9	8.250	105,560	0.08291	53.49	319.5	475.5
-	1	-	-	289.3	7.348	83,694	0.06573	42.41	253.3	377.0
-	2	-	-	257.6	6.544	66,358	0.05212	33.63	200.9	299.0
-	3	-	-	229.4	5.827	52,624	0.04133	26.66	159.3	237.0
-	4	-	-	204.3	5.189	41,738	0.03278	21.15	126.3	188.0
-	5	-	-	181.9	4.621	33,088	0.02599	16.77	100.2	149.1
-	6	-	-	162.0	4.115	26,244	0.02061	13.30	79.43	118.2
-	7	-	-	144.3	3.665	20,822	0.01635	10.550	63.01	93.79
-	8	-	-	128.5	3.264	16,512	0.01297	8.368	49.99	74.39
-	9	-	-	114.4	2.906	13,087	0.01028	6.632	39.62	58.96
-	10	-	-	101.9	2.588	10,384	0.008156	5.262	31.43	46.78
-	11	-	-	90.74	2.305	8,234	0.006467	4.172	24.92	37.09
-	12	-	-	80.81	2.053	6,530	0.005129	3.309	19.77	29.42
-	13	-	-	71.96	1.828	5,178	0.004067	2.624	15.67	23.33
-	14	-	-	64.08	1.628	4,106	0.003225	2.081	12.43	18.50
-	15	-	-	57.07	1.450	3,257	0.002558	1.650	9.859	14.67
-	16	-	-	50.82	1.291	2,583	0.002029	1.309	7.820	11.64
-	17	-	-	45.26	1.150	2,048	0.001608	1.037	6.197	9.219
-	18	-	-	40.30	1.024	1,624	0.001275	0.8226	4.914	7.313
-	19	-	-	35.89	0.9116	1,288	0.0010120	0.6529	3.900	5.804
-	20	-	-	31.96	0.8118	1,021	0.0008019	0.5174	3.091	4.600
-	21	-	-	28.46	0.7229	810.0	0.0006362	0.4105	2.452	3.649
-	22	-	-	25.35	0.6438	642.6	0.0005047	0.3256	1.945	2.895
-	23	-	-	22.57	0.5733	509.4	0.0004001	0.2581	1.542	2.295
-	24	-	-	20.10	0.5106	404.0	0.0003173	0.2047	1.223	1.820
-	25	-	-	17.90	0.4547	320.4	0.0002516	0.1623	0.9697	1.443
-	26	-	-	15.94	0.4049	254.1	0.0001996	0.1288	0.7693	1.145
-	27	-	-	14.20	0.3606	201.6	0.0001583	0.1021	0.6101	0.9077
-	28	-	-	12.64	0.3211	159.8	0.0001255	0.08097	0.4837	0.7198
-	29	-	-	11.26	0.2859	126.8	0.00009959	0.06425	0.3838	0.5712
-	30	-	-	10.03	0.2546	100.6	0.00007901	0.05097	0.3045	0.4531
-	31	-	-	8.928	0.22380	79.710	0.000062600	0.040390	0.24130	0.35910
-	32	-	-	7.950	0.20190	65.200	0.000049640	0.032030	0.19130	0.28470
-	33	-	-	7.080	0.17980	50.130	0.000039370	0.025400	0.15170	0.22580
-	34	-	-	6.305	0.16010	39.750	0.000031220	0.020140	0.12030	0.17900
-	35	-	-	5.615	0.14260	31.530	0.000024760	0.015970	0.09543	0.14200
35	36	-	-	5.000	0.12700	25.000	0.000019630	0.012670	0.07565	0.11260
-	37	-	-	4.453	0.11310	19.830	0.000015570	0.010050	0.06001	0.08934
-	38	-	-	3.965	0.10070	15.720	0.000012350	0.007968	0.04760	0.07084
-	39	-	-	3.531	0.08969	12.470	0.000009794	0.006319	0.03775	0.05618
-	40	-	-	3.145	0.07987	9.891	0.000007768	0.005012	0.02994	0.04456
-	41	45	-	3.800	0.07113	7.842	0.000006159	0.003973	0.02374	0.03532
-	42	-	-	2.494	0.06334	6.219	0.000004884	0.003151	0.01882	0.02801
-	43	-	-	2.221	0.05641	4.932	0.000003873	0.002495	0.01498	0.02222
-	44	-	-	1.987	0.05023	3.911	0.000003072	0.001982	0.01184	0.01762
-	45	-	-	1.761	0.04473	3.102	0.000002436	0.001572	0.009383	0.01398
-	46	-	-	1.568	0.03984	2.460	0.000001931	0.001246	0.007446	0.01108
-	47	-	-	1.397	0.03547	1.951	0.000001532	0.0009884	0.005904	0.008787
-	48	-	-	1.224	0.03159	1.547	0.000001215	0.0007838	0.004683	0.006968
-	49	-	-	1.108	0.02813	1.227	0.000009635	0.0006216	0.003713	0.005526
-	50	-	-	0.986	0.02505	0.9728	0.000007641	0.0004929	0.002945	0.004382

Note : A.W.G. - American Wire Gauge

TEMPERATURE CORRECTION FACTORS FOR CONDUCTOR RESISTANCE

Factors for correcting resistances at various temperatures of conductor to the standard reference temperature of 20°C and reciprocals of the factors for calculating resistances at other temperatures from the value at 20°C

Temperature	Correction Factor		Reciprocal of Factor	
°C	Copper	Aluminum	Copper	Aluminum
0	1.085	1.088	0.921	0.919
5	1.063	1.064	0.941	0.940
10	1.041	1.042	0.961	0.960
15	1.020	1.021	0.980	0.980
20	1.000	1.000	1.000	1.000
25	0.981	0.980	1.020	1.020
30	0.962	0.961	1.039	1.040
35	0.944	0.943	1.059	1.060
40	0.927	0.925	1.079	1.081
45	0.911	0.908	1.098	1.101
50	0.895	0.892	1.118	1.121
55	0.879	0.876	1.138	1.141
60	0.864	0.861	1.157	1.161
65	0.850	0.846	1.177	1.181
70	0.836	0.832	1.197	1.202
75	0.822	0.819	1.216	1.222
80	0.809	0.805	1.236	1.242
85	0.797	0.792	1.255	1.262
90	0.784	0.780	1.275	1.282

The correction factor is given by :

$$k = \frac{1}{k_1} = \frac{1}{1+\alpha(\theta-20)}$$

Where :

k = temperature correction factor of conductor

k_1 = reciprocal of k

α = constant mass temperature coefficient at 20°C per °C

= 0.00393 for copper (based on 100% conductivity)

= 0.00403 for aluminum (based on 61% conductivity)

θ = referred temperature, °C

CONDITION OF INSTALLATION

Minimum Bending Radius

D : Overall diameter of cable

Type of Cable \ Number of Core		Single core		Multi-core
		Round conductor	Sector shape conductor	
PVC & PE Sheath	Unshield cable	8D	12D	6D
	Shield cable	10D	12D	8D
Wire armoured cable		10D	12D	10D
Lead sheathed		10D	12D	10D
Corrugated metal armoured cable		-	-	8D
Flat tape armoured cable		-	-	8D
Al. Fiat sheathed cable		20D	20D	20D
Al. corrugated sheathed cable		15D	15D	15D
Al. solid conductor		-	-	10D
Cabtyre cable		6D	-	4D

Permissible Maximum Pulling Tension

Unit : kgf.

Pulling Tool	Material of Conductor	Permissible Maximum Pulling Tension
Pulling eye	Copper	7 x (Number of core) x (Cross-sectional area of conductor)
	Aluminium	4 x (Number of core) x (Cross-sectional area of conductor)
Cable grip	Copper & Aluminium	The same as using the pulling eye, but the maximum tension should be less than 1.5 tons

Note : When cable grip is used is should cover more than 500 mm. in length of the cable end and be bound to the cable sheath

AC/DC RESISTANCE RATIOS

The AC/DC resistance ratio of the conductor is given by the following formula.

$$k_2 = 1+\lambda_s+\lambda_p$$

Where : k_2 = AC/DC resistance ration of conductor

λ_s = skin effect factor

λ_p = proximity effect factor

The skin effect factor is given by ;

$$\lambda_s = \frac{X^4}{192 + 0.8X^4}$$

Where : $X = \sqrt{\frac{8\pi f}{R_o k_1 \times 10^4}}$

f = supply frequency (Hz)

R_o = DC resistance of conductor at 20°C (Ω/km)

k_1 = reciprocal factor of temperature correction factor

The proximity effect factor is given by ;

$$\lambda_p = \frac{X'^4}{192+0.8X'^4}\left[\frac{d_1}{S}\right]^2\left\{0.312\left[\frac{d_1}{S}\right]^2 + \frac{1.18}{\frac{X'^4}{192+0.8X'^4} + 0.27}\right\}$$

Where : $X' = \sqrt{0.8X}$

d_1 = diameter of conductor (mm)

S = distance between conductor axes (mm)

PROPERTIES OF INSULATION AND JACKET MATERIALS

RESISTANCE TO INDUSTRIAL CHEMICALS

Reagent	Relative Rating							Reagent	Relative Rating						
	BR	CR	EPR	PVC	PE	XLPE	NYLON		BR	CR	EPR	PVC	PE	XLPE	NYLON
Acetone	◎	○	◎	X	◎	◎	○	Chlorine Gas	Δ	Δ	X	X	X	X	◎
Aniline	○	X	○	○	○	○		Ozone	○		○	○	◎	◎	X
Ethanol	◎	◎	◎	Δ	○	○	○	Bromine	X	X	X	X	X	X	
Ethyleneglycol	○	◎	○	Δ	◎	◎	○	Nirtic Acid, conc.	X	X	X	X	Δ	Δ	X
Xylene	X	X	X	X	○	○	○	Nitric Acid, 10%	X	X	Δ	○	○	○	Δ
Glycerin	◎	◎	◎	○	◎	◎	○	Fuming Nitric Acid	X	X		X	X	X	
Cresol	○	Δ	○	Δ	○	○	X	Tap Water	◎	◎	◎	◎	◎	◎	◎
Chloroform	X	X	X	X	Δ	Δ	X	Sea Water	○	◎	◎	◎	◎	◎	
Acetic Acid, conc.	○	Δ	○	X	○	○	Δ	Sulfuric Acid, conc.	X	X	X		Δ	Δ	X
Acetic Acid, 10%	○	X	○	Δ	◎	◎	○	Sulfuric Acid, 10%	○	○	○	◎	○	○	○
Ethyl Acetate	○	X	Δ	X	○	○	○	Phosphoric Acid	○	Δ	○	X	◎	◎	○
Carbon Tetrachloride	X	X	X	X	X	X	Δ	Sodium Hydroxide,10%	○	○	○	○	○	○	◎
Cyclohexane	Δ	X	X		Δ	Δ		Freon	X	X		○	○	○	
Dioctyl Phthalate	◎	X		X				Formic Acid	Δ	X		○	○	○	◎
Trichloroethylene	X	X	X	Δ	Δ	Δ	Δ	JIC No.1 Oil (OF Oil)	X	Δ	X	Δ	○	○	
Trichlorobenzene	X	X	X		Δ	Δ		ASTM No.1 Oil	○	○	Δ	Δ	○	○	
Toluene	X	X	X	X	Δ	Δ	○	ASTM No.2 Oil	Δ	○	Δ	Δ	○	○	
Carbon Disulfide	X	X	X	Δ	○	○		ASTM No.3 Oil	X	Δ	X	Δ	Δ	Δ	
Phenol	○	Δ	○	X	○	○	X	Gasoline	X	Δ	X	X	○	○	○
Furfural	◎	○	◎	Δ	◎	◎		Creosote Oil	Δ	X	X	X	Δ	Δ	
Hexane	X	Δ	X	Δ	○	○		JIS No.2 Oil	X	X	X	Δ	○	○	
Benzene	X	X	X	X	Δ	Δ	○	Heavy Oil	X	X	X	Δ	Δ	Δ	
Methanol	◎	◎	◎	X	○	○	Δ	Lube Oil	X	Δ	Δ	Δ	Δ	Δ	○
Methyl Ethyl Ketone	Δ	X	Δ	X	○	○		Silicone Oil	◎	◎	◎	○	◎	◎	
Dioxane				X	○	○		Vegetable Oil	◎	◎	○		◎	◎	
Nitrobenzene	○	X	○	X	○	○		Petroleum Ether	Δ	Δ		X	◎	◎	
Formaline	○	○		○	○	○	Δ	Trans Oil	X	Δ	X	○	○	○	
Ammonia, conc.	○	Δ	○	Δ	○	○	○	Naphtha	X	X	X	○	○	○	○
Ammonia,10%		Δ	○	○	○	○	◎	Coal Tar					○	○	
Sodium Chloride	○	○	○	○	◎	◎	◎								
Hydrochloric Acid,conc.	○	○	○	Δ	○	○	X								
Hydrochloric Acid,10%	◎	○	○	○	◎	◎	○								

Where :

◎ : High Resistance

○ : Fair Resistance

X : Not Applicable

Δ : Poor Resistance, care on use

PROPERTIES OF INSULATION AND JACKET MATERIALS

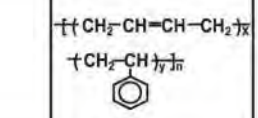
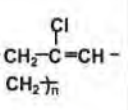
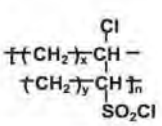
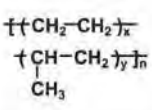
GENERAL COMPARISON DATA

Material		Polyvinyl Chloride	Low Density Polyethylene	Cross - linked Polyethylene	Polyisoprene
Designation		PVC	PE	XLPE	NR
Chemical Structure		$+CH_2-CH+_n$ (Cl)	$+CH_2-CH_2+_n$	$\sim CH_2-CH-CH_2 \sim$ $\sim CH_2-CH-CH_2 \sim$	$+CH_2-C(CH_3)=CH-CH_2+_n$
Density		1.3 - 1.5	0.91 - 0.93	0.91 - 0.93	0.93 - 0.94
Hardness (Shore)		D30 - 90	D45 - 60		30 - 90
Max. Operating Temp.	°C	60	75	90	60
Emergency Temp. Rating	°C	85	90	130	85
Short Circuit Temp. Rating	°C	120	150	250	150
Brittleness Temp	°C	~-40	<-70	<-70	-55 ~ -58
Softening Temp.	°C	$120 - 140^{-4}$	100 - 115		
Thermal Expansion	/°C	$0.7 - 2.5 \times 10^{-4}$	$1.6 - 1.8 \times 10^{-4}$	$1.6 - 1.8 \times 10^{-4}$	1.8×10^{-4}
Thermal Conductivity	Cal/cm •sec• °C	$3.0 - 4.0 \times 10^{-4}$	8.0×10^{-4}	8.0×10^{-4}	5.1×10^{-4}
Specific Heat	Cal/°C•g	0.3 - 0.5	0.55	0.55	0.52
Tensile Strength	kg/mm^2	1.5 - 2.5	1.5 - 2.0	1.8 - 3.0	0.8 - 3.0
Elongation	%	200 - 400	300 - 700	300 - 700	300 - 700
Abrasion Resistance		Excellent	Good	Excellent	Good
Voltage Breakdown	kv/mm	20 - 30	30 - 50	30 - 50	16 - 32
Volume Resistivity	Ω•cm	10^{12}-10^{15}	$>10^{16}$	$>10^{16}$	10^{15}
Dielectric Constant		5 - 7	2.2 - 2.4	2.2 - 2.4	3 - 5
Dissipation Factor (tanδ)		0.1 - 0.03	<0.0005	<0.0005	0.3 - 0.5
Weathering		Good	Inferior*	Inferior*	Poor
Ozone Resistance		Excellent	Excellent	Excellent	Poor
Flame Resistance		Self-Extinguish	Burn	Burn	Burn
Track Resistance		Inferior	Excellent	Excellent	Fair
Water Resistance		Fair	Excellent	Excellent	Fair
Acid Resistance		Excellent	Good	Good	Good
Alcari Resistance		Excellent	Excellent	Excellent	Good
Oil Resistance		Good	Excellent	Excellent	Poor
Solvent Resistance		Fair	Excellent	Excellent	Inferior

*Improved to "good" with mixture of carbon black.

PROPERTIES OF INSULATION AND JACKET MATERIALS

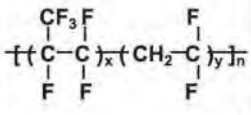
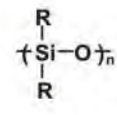
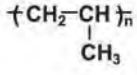
GENERAL COMPARISON DATA

Material		Sterene Butadiene Copolymer	Polychloroprence	Chlorosulphonated Polyethylene	Ethylene Propylene Copolymer
Designation		SBR	CR	CSM	EPM,EPDM
Chemical Structure					
Density		0.93 - 0.94	1.15 - 1.23	1.1	0.86 - 0.87
Hardness (Shore)		10 - 95	20 - 90	50 - 90	40 - 85
Max. Operating Temp.	°C	75	80	90	90
Emergency Temp. Rating	°C				
Short Circuit Temp. Rating	°C				
Brittleness Temp	°C	-3 - -65	-30 - -50	-20 - -50	-40 - -60
Softening Temp.	°C				
Thermal Expansion	/°C	1.8×10^{-4}	1.9×10^{-4}	1.8×10^{-4}	
Thermal Conductivity	Cal/cm •sec• °C	5.8×10^{-4}	5.6×10^{-4}	6.3×10^{-4}	
Specific Heat	Cal/°C•g		0.52		
Tensile Strength	kg/mm^2	0.4 - 3.0	0.7 - 3.0	0.5 - 2.0	0.5 - 1.5
Elongation	%	100 - 700	400 - 900	100 - 500	300 - 700
Abrasion Resistance		Good	Good	Good	Good
Voltage Breakdown	kv/mm	16 - 30	15 - 25	16 - 32	20 - 35
Volume Resistivity	Ω•cm	$10^{14} - 10^{15}$	$10^{10} - 10^{12}$	$10^{13} - 10^{14}$	$10^{14} - 10^{15}$
Dielectric Constant		3 - 5	7 - 10		3 - 5
Dissipation Factor (tanδ)		2 - 5	1.7 - 4		0.2 - 0.8
Weathering		Poor	Excellent	Good	Excellent
Ozone Resistance		Inferior	Good	Good	Excellent
Flame Resistance		Burn	Self-Extinguish	Self-Extinguish	Burn
Track Resistance		Fair	Inferior	Good	Excellent
Water Resistance		Fair	Fair	Fair	Good
Acid Resistance		Fair	Excellent	Good	Excellent
Alcari Resistance		Good	Excellent	Excellent	Excellent
Oil Resistance		Inferior	Good	Fair	Inferior*
Solvent Resistance		Inferior	Fair	Fair	Poor

*Improved to "good" with mixture of carbon black.

PROPERTIES OF INSULATION AND JACKET MATERIALS

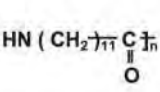
GENERAL COMPARISON DATA

Material		Hexafluoropropylene Vinylidenfluoride Copolymer	Cross - linked Polyethylene	Polyisoprene
Designation		FPM	Q	PP
Chemical Structure				
Density		1.82 - 1.85	0.97 - 1.40	0.9 - 0.915
Hardness (Shore)		60 - 90	50 - 85	R85 - 110
Max. Operating Temp.	°C	200	180	80
Emergency Temp. Rating	°C			
Short Circuit Temp. Rating	°C			150
Brittleness Temp	°C	-44 - -60	-70 - -100	
Softening Temp.	°C			
Thermal Expansion	/°C	1.6×10^{-4}	2.6×10^{-4}	$6.0 - 8.5 \times 10^{-5}$
Thermal Conductivity	Cal/cm •sec• °C	5.5×10^{-4}	5.7×10^{-4}	2.8×10^{-4}
Specific Heat	Cal/°C•g			0.46
Tensile Strength	kg/mm	1.5 - 2.5	0.3 - 1.0	2.0 - 4.0
Elongation	%	200 - 600	50 - 300	200 - 700
Abrasion Resistance		Good	Fair	Excellent
Voltage Breakdown	kv/mm	24	20 - 40	20 - 32
Volume Resistivity	Ω•cm	$10^{12} - 10^{14}$	$10^{14} - 10^{15}$	$>10^{16}$
Dielectric Constant		6 - 7	3 - 4	2.0 - 2.2
Dissipation Factor (tanδ)			0.1 - 1.0	0.0002 - 0.0006
Weathering		Good	Good	Inferior*
Ozone Resistance		Good	Excellent	Excellent
Flame Resistance		Self-Extinguish	Burn	Burn
Track Resistance		Fair	Excellent	Excellent
Water Resistance		Excellent	Fair	Excellent
Acid Resistance		Excellent	Poor	Excellent
Alcari Resistance		Excellent	Good	Excellent
Oil Resistance		Excellent	Fair	Excellent
Solvent Resistance		Excellent	Fair	Excellent

*Improved to "good" with mixture of carbon black.

PROPERTIES OF INSULATION AND JACKET MATERIALS

GENERAL COMPARISON DATA

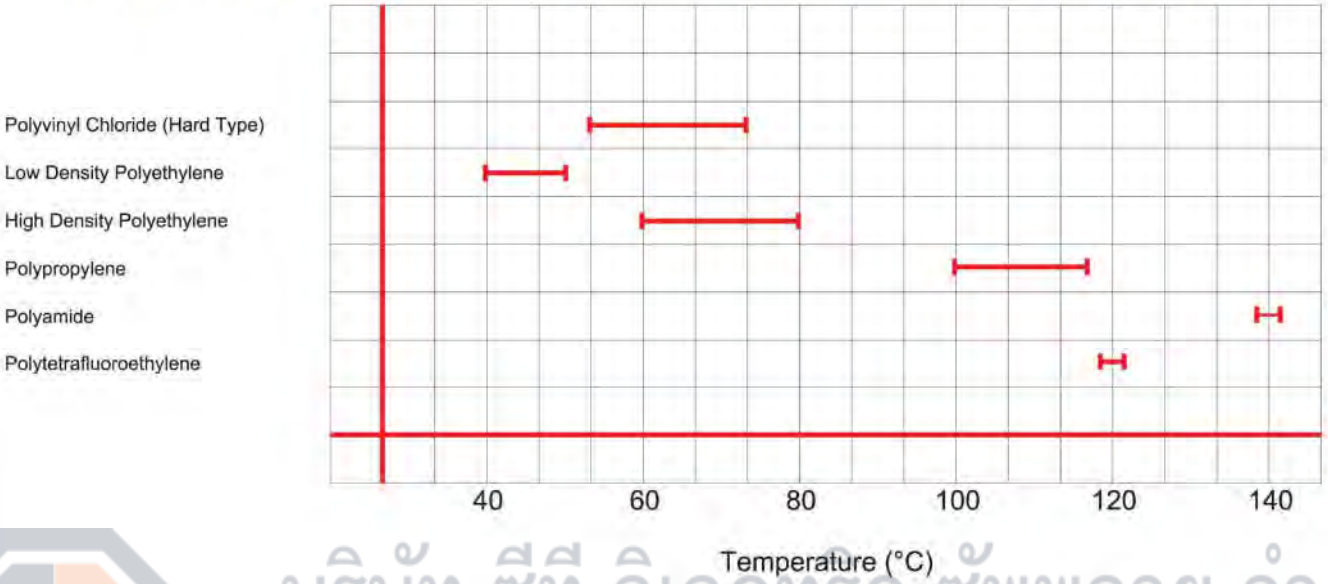
Material		Polytetra Fluoroethylene	Polychloro Trifluoroethylene	Polyamide
Designation		PTFE	PCTFE	Nylon(12)
Chemical Structure				
Density		2.13 - 2.2	2.1	1.01 - 1.02
Hardness (Shore)		D50 - 65	R110 - 115	R100 - 110
Max. Operating Temp.	°C	260	180	90
Emergency Temp. Rating	°C			
Short Circuit Temp. Rating	°C	310		120
Brittleness Temp	°C	<-70	<-70	-70
Softening Temp.	°C		210	170 - 180
Thermal Expansion	/°C	10×10^{-5}	$4.5 - 7.0 \times 10^{-5}$	12×10^{-5}
Thermal Conductivity	Cal/cm •sec• °C	6×10^{-4}	6×10^{-4}	$5.9 - 8.3 \times 10^{-4}$
Specific Heat	Cal/°C•g	0.25	0.22	0.62
Tensile Strength	kg/mm^2	1.4 - 2.1	2.8 - 3.5	5.0 - 6.0
Elongation	%	200	10 - 100	180 - 285
Abrasion Resistance		Excellent	Excellent	Excellent
Voltage Breakdown	kv/mm	15 - 30	10 - 20	20 - 30
Volume Resistivity	Ω•cm	10^{18}	$1.2 - 10^{18}$	$10^{14} - 10^{15}$
Dielectric Constant		2.0	2.24 - 2.8	3.5 - 4.5
Dissipation Factor (tanδ)		<0.0002	0.0012 - 0.0036	0.03 - 0.06
Weathering		Excellent	Excellent	Inferior*
Ozone Resistance		Excellent	Excellent	Good
Flame Resistance		No Burn	No Burn	Burn
Track Resistance		Excellent	Excellent	Good
Water Resistance		Excellent	Excellent	Excellent
Acid Resistance		Excellent	Excellent	Good
Alcari Resistance		Excellent	Excellent	Excellent
Oil Resistance		Excellent	Excellent	Excellent
Solvent Resistance		Excellent	Excellent	Good

*Improved to "good" with mixture of carbon black.

PROPERTIES OF INSULATION AND JACKET MATERIALS

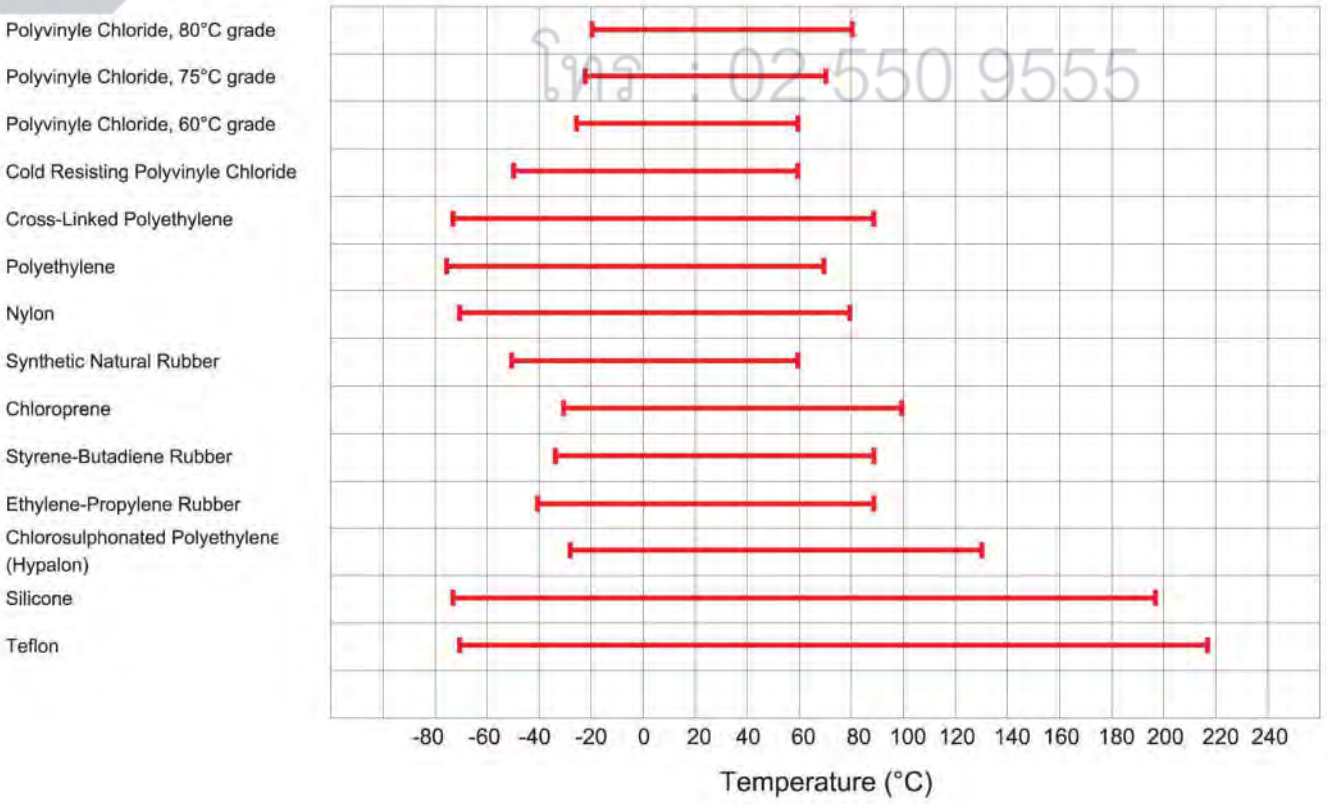
THERMAL PROPERTIES

Deflection temperature of plastics under load [ASTM D648]



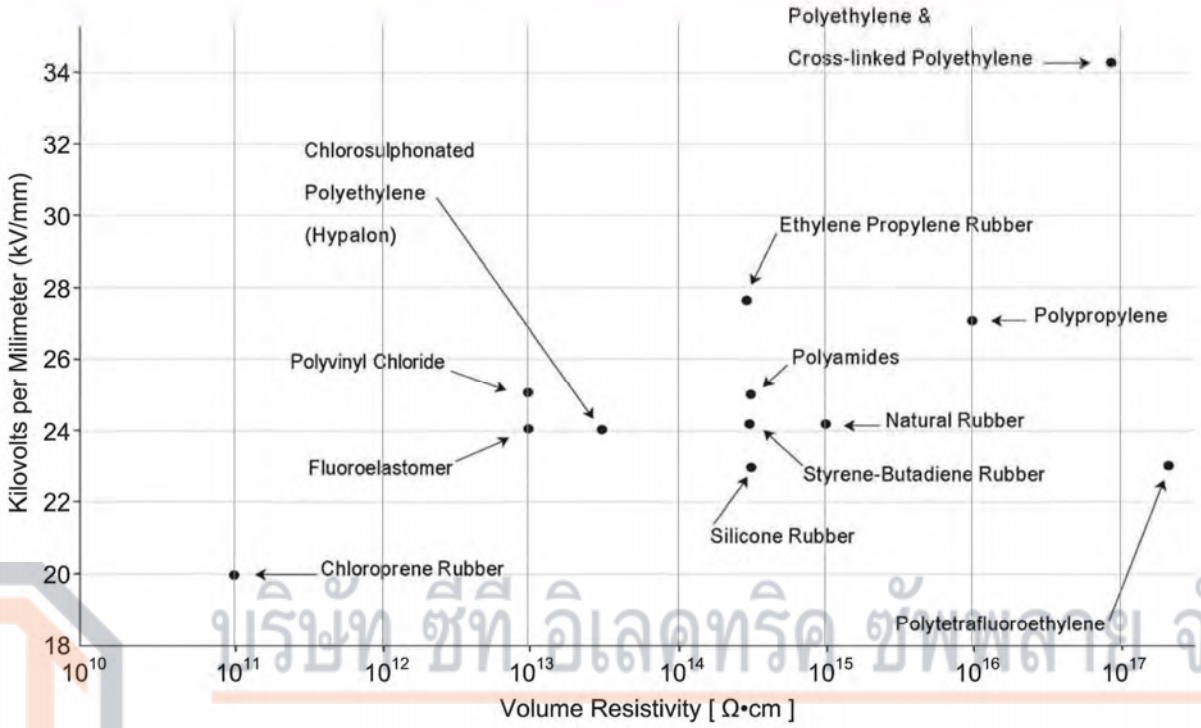
OPERATING TEMPERATURE

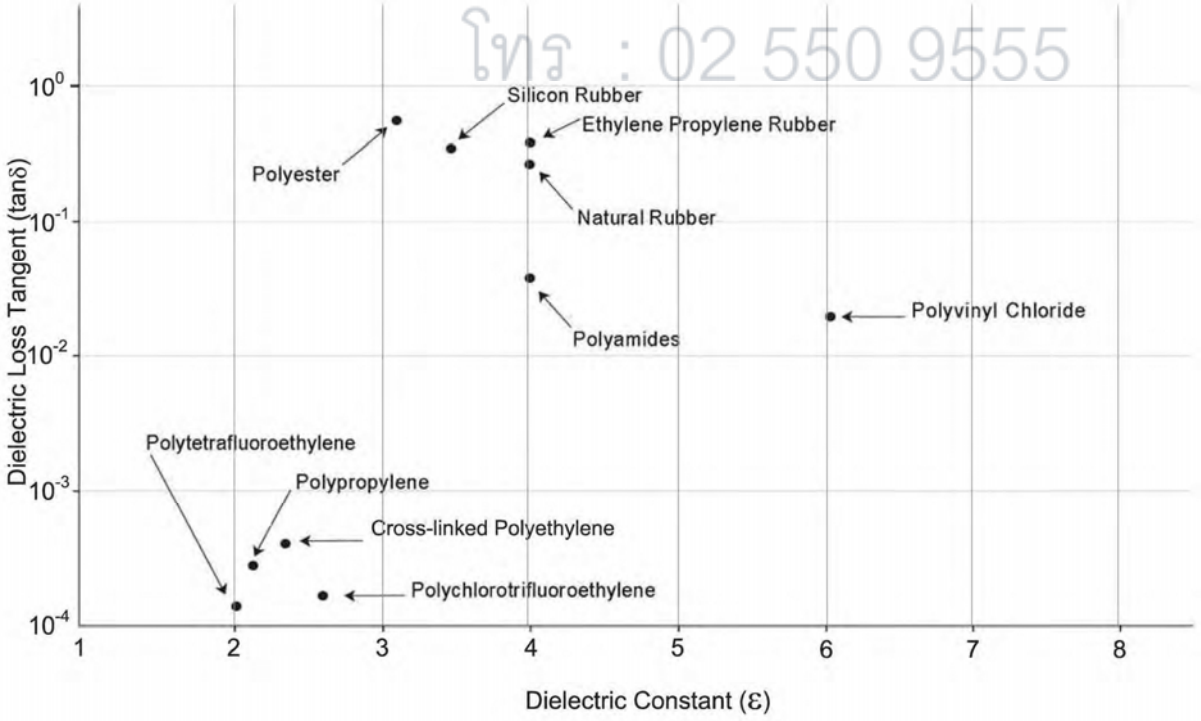
[Max. point : Max. Continuous Operating Temperature
Min. point : Brittleness Temperature]



PROPERTIES OF INSULATION AND JACKET MATERIALS

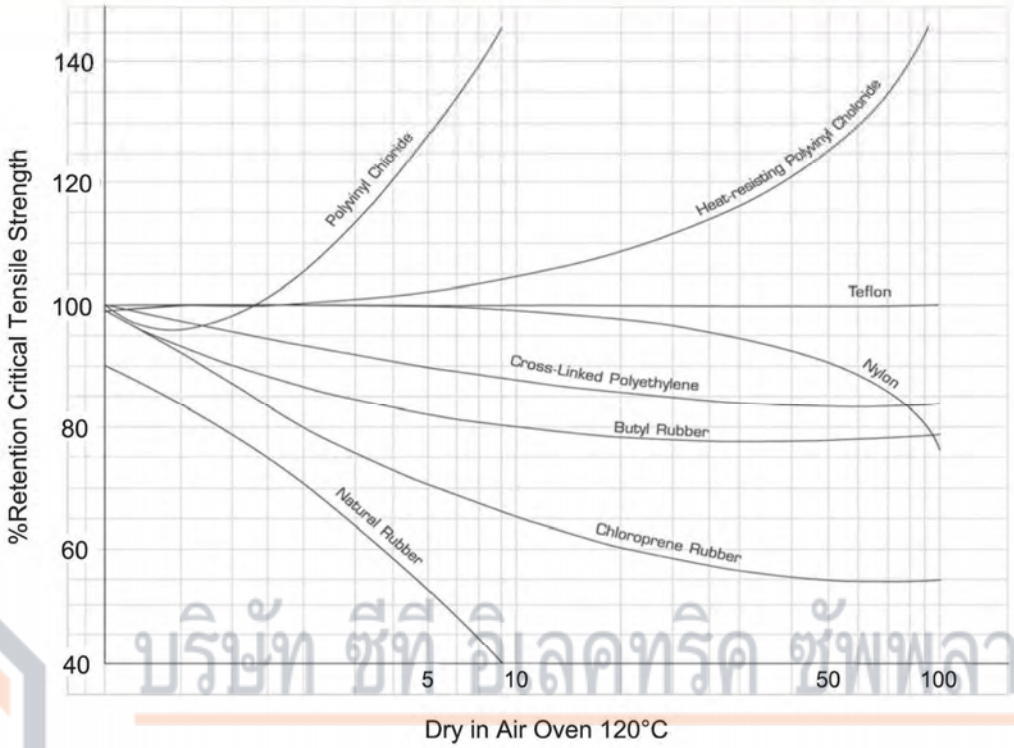
ELECTRICAL PROPERTIES

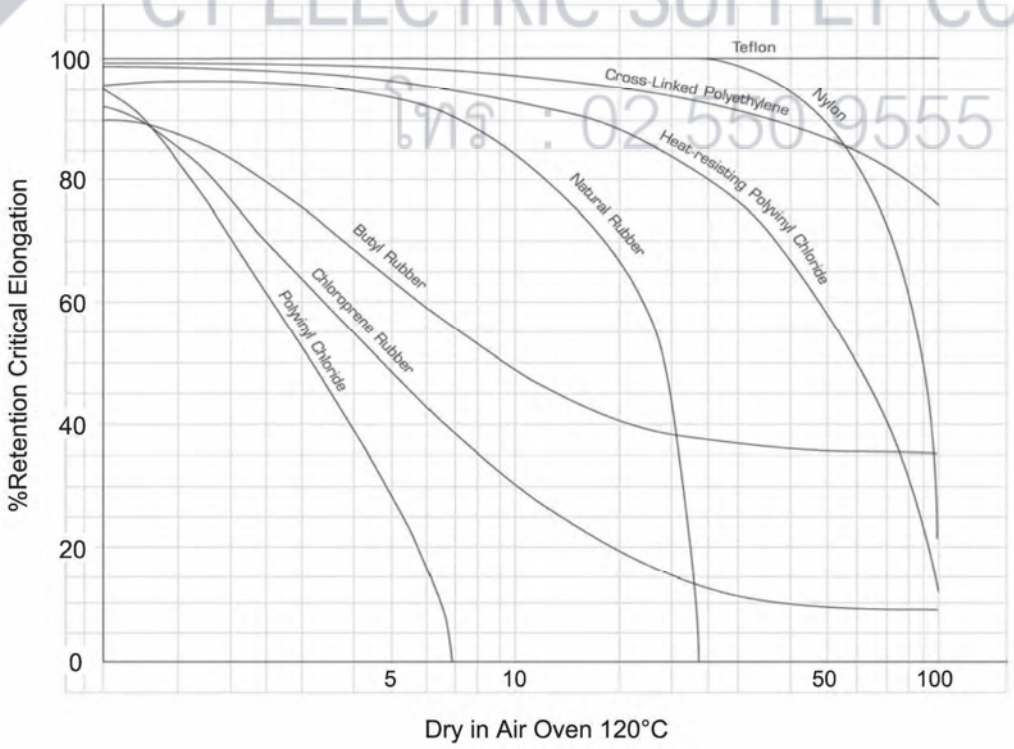




PROPERTIES OF INSULATION AND JACKET MATERIALS

LONG - TIME HEAT AGING CURVES





SYMBOLS OF ELECTRICAL UNITS

Electrical Unit		Symbol
CURRENT	(AMPERE)	A
VOLTAGE	(VOLT)	V (kV)
RESISTANCE	(OHM)	Ω (kΩ, MΩ)
ELECTRIC POWER	(WATT)	W (kW, MW.)
ELECTRIC ENERGY	(WATT HOUR)	Wh (kWh.)
HORSE POWER		HP
POWER FACTOR	(COS ∅)	P.F.
FREQUENCY	(HERTZ)	Hz
CAPACITANCE	(FARAD)	F(μF, pF.)
APPARENT POWER	(VOLTAMPERE)	VA (kVA)
DIRECT CURRENT		DC
ALTERNATING CURRENT		AC
EFFICIENCY		Eff.
MAXIMUM VALUES	(VOLTAMPERE)	Em, Im
AVERAGE VALUES	(VOLTAMPERE)	Eav , Iav
EFFECTIVE VALUES	(VOLTAMPERE)	E, I
INSTANTANEOUS VALUES	(VOLTAMPERE)	e, i

ELECTRICAL FORMULAS

Electrical formulas for determining Ampere, Kilowatt, Kilovolt Ampere and Horse Power

Direct Current	Alternating Current	
	Single Phase	Three Phase
$A = \frac{kW \times 1,000}{V}$	$A = \frac{kW \times 1,000}{V \times P.F.}$	$A = \frac{kW \times 1,000}{1.73 \times V \times P.F.}$
$A = \frac{kVA \times 1,000}{V}$	$A = \frac{kVA \times 1,000}{V}$	$A = \frac{kVA \times 1,000}{1.73 \times V}$
$A = \frac{HP \times 746}{V \times (\%Eff.)}$	$A = \frac{HP \times 746}{V \times (\%Eff.) \times P.F.}$	$A = \frac{HP \times 746}{1.73 \times V \times (\%Eff.) \times P.F.}$
$kW = \frac{A \times V}{1,000}$	$kW = \frac{A \times V \times P.F.}{1,000}$	$kW = \frac{A \times V \times 1.73 \times P.F.}{1,000}$
$kVA = \frac{A \times V}{1,000}$	$kVA = \frac{A \times V}{1,000}$	$kVA = \frac{A \times V \times 1.73}{1,000}$
$HP = \frac{A \times V \times (\%Eff.)}{746}$	$HP = \frac{A \times V \times (\%Eff.) \times P.F.}{746}$	$HP = \frac{A \times V \times 1.73(\%Eff) \times P.F.}{746}$

APPROXIMATE MOTOR AMPERES PER TERMINAL

220 V ac = 4 Amperes per H.P.
3 phase 220 V ac = 2.5 Amperes per H.P.
3 phase 380 V ac = 1.41 Amperes per H.P.
3 phase 440 V ac = 1.25 Amperes per H.P.
3 phase 550 V ac = 1 Amperes per H.P.

STANDARD COEFFICIENT OF CONVERSION

Items		Description			
1. LENGTH	1 micron	= 0.001 mm	= 3.94 x 10^{-5} in		
	1 mil	= 0.0254 mm	= 0.001 in		
	1 mm	= 39.37 mils	= 0.03937 in		
	1 cm	= 0.3937 in	= 0.0328 ft		
	1 inch	= 25.4 mm	= 0.083 ft	= 0.0278 yd	= 2.54 cm
	1 feet	= 0.305 m	= 0.33 yd		
	1 yard	= 0.914 m	= 91.44 cm		
	1 meter	= 39.37 in	= 3.28 ft	= 1.094 yd	
	1 kilometer	= 3,281 ft	= 1,094 yd	= 0.6213 mile	
	1 mile	= 5,280 ft	= 1,760 yd	= 1,609 m	= 1,609 km
2. AREA	1 MCM	= 1000 CM	(Circular Mil)	= 0.5067 mm^2	= 1/1000 in^2
	1 CM	= 0.0005067 mm^2	= 0.0000007854 in^2		= 0.7854 sq.mil.
	1 mm^2	= 1973 CM	= 0.00155 in^2	= 1,550 sq.mil.	
	1 in^2	= 1273240 CM	= 645.1 mm^2	= 0.0069 ft^2	
	1 yd^2	= 1,296 in^2	= 0.83613 m^2		
	1 m^2	= 1,550 in^2	= 10.7 ft^2	= 1.195 yd^2	
	1 km^2	= 0.001562 $mile^2$			
	1 $mile^2$	= 27,880,000 ft^2	= 3,098,000 yd^2	= 2,590,000 m	= 2.59 km^2
3. VOLUME	1 cm^3	= 0.061 in^3			
	1 in^3	= 16.39 cm^3	= 0.0036 gal	= 0.0005787 ft^3	
	1 l	= 1,000 cm^3	= 61.023 in^3	= 0.2642 gal	= 0.03531 ft^3
	1 gal	= 3,785 cm^3	= 231 in^3	= 0.1337 ft^3	= 0.004951 yd^3
	1 ft^3	= 28,317 cm^3	= 1,728 in^3	= 28.32 l	= 7.48 gal
	1 yd^3	= 46,656 in^3	= 0.7646 m^3		
	1 m^3	= 61,023 in^3	= 35.31 ft^3	= 1.308 yd^3	
4. WEIGHT	1 g	= 15.43 gr	= 0.03527 oz	= 0.002205 lb	
	1 oz	= 437.5 gr	= 28.35 g	= 0.0625 lb	
	1 lb	= 7,000 gr	= 453.6 g	= 16 oz	= 0.4536 kg
	1 kg	= 15,432 gr	= 35.27 oz	= 2.205 lb	
	1 ton (short)	= 2,000 lb	= 907.2 kg	= 0.8928 ton (long)	
	1 ton (long)	= 2,240 lb	= 1.12 ton (short)	= 1.016 ton (metric)	
	1 ton (metric)	= 2,240.62 lb			
5. ENERGY	1 BTU	= 1,055 joules	= 788.1 ft-lb	= 252 g-cal	= 107.6 kg-m
		= 0.2930 watt-hr			
	1 watt-hr	= 3,600 joules	= 2,655.4 ft-lb	= 860 g-cal	= 367.1 kg-m
		= 3.413 B.t.u.	= 0.001341 hp-hr		
	1 hp-hr	= 2,684,000 joules	= 1,980,000 ft-lb	= 273,700 kg-cm	
		= 745.6 watt-hr			
	1 kw-hr	= 2,655,000 ft-lb	= 367,100 kg-m	= 1.34 hp-hr	
6. POWER	1 watt	= 44.26 ft-lb/min	= 6.199 kg-m/min	= 0.001341 hp	
	1 hp	= 33,000 ft-lb/min		= 745.6 watts	= 550 ft-lb/sec
		= 76.04 kg-m/sec			
	1 kw	= 44,256.7 ft-lb/min		= 101.979 kg-m/sec	= 1.341 hp
		= 1,000 watts			
7. TEMPERATURE	Temp °C	= 5/9 (temp °F - 32)			
	Temp °F	= (9/5 x temp °C) +32			

CONDUCTIVITY AND DENSITY OF METALS

Kind	Symbol	Conductivity at 20 °C (% IACS)	Density (g/cm³)
SILVER	Ag	108.6	10.5
STANDARD COPPER (ANNEALED)	Cu	100.0	8.89
GOLD	Au	72.5	19.30
ALUMINIUM	Al	61.0	2.70
IRON	Fe	13.0	7.78
TIN	Sn	12.2	7.29
STEEL	-	11.6	7.78

CONDUCTOR MATERIALS

Material	Specific Resistance 20°C			Temperature coefficient 20°C	Mass g per Cu.cm.
	μ Ohms per cm. cube	μ Ohms per in. cube	Ohms-per cir. mil-ft		
Annealed copper	1.724	0.6788	10.37	0.00393	8.89
Hard - drawn copper	1.79	0.695	10.77	0.00378	8.89
Annealed aluminium	2.82	1.113	17.0	0.0039	2.70
Hard - drawn aluminium	2.92	1.15	17.5	0.0038	2.70
Pure iron	10.0	3.93	60.0	0.0060	7.86
Steel wire	10.7 - 17.5	4.2 - 6.9	64 - 106	0.006 - 0.00036	7.78
Cast iron	75 - 100	29.5 - 39.4	450 - 600	0.001 - 0.00074	7.32

THE COPPER CONDUCTOR RESISTANCE

Nominal Direct Current Resistance, Ohm/1,000 Meter At 20°C

Conductor Class 1 Solid conductor for single core and multi cores cable

Nominal cross sectional area mm²	Maximum conductor resistance at 20°C Round annealed copper conductor	
	Non metal coated Ω/km	Metal coated Ω/km
0.5	36.0	36.7
0.75	24.5	24.8
1	18.1	18.2
1.5	12.1	12.2
2.5	7.41	7.6
4	4.61	4.7
6	3.1	3.1
10	1.83	1.8
16	1.2	1.2

Conductor Class 2 Stranded conductor for single core and multi cores cable

Nominal cross sectional area mm²	Minimum number of wire in conductor				Maximum conductor resistance at 20°C Round annealed copper conductor	
	Concentric Stranded		Compact round concentric stranded		Non metal coated Ω/km	Metal coated Ω/km
	Cu	Al	Cu	Al		
4	7	-	6	-	4.61	4.70
6	7	-	6	-	3.08	3.11
10	7	7	6	6	1.83	1.84
16	7	7	6	6	1.15	1.16
25	7	7	6	6	0.727	0.734
35	7	7	6	6	0.524	0.529
50	19	19	6	6	0.387	0.387
70	19	19	12	12	0.268	0.270
95	19	19	15	15	0.193	0.195
120	37	37	15	15	0.153	0.154
150	37	37	15	15	0.124	0.126
185	37	37	30	30	0.0991	0.100
240	37	37	30	30	0.0754	0.0762
300	61	61	30	30	0.0601	0.0607
400	61	61	53	53	0.0470	0.0475
500	61	61	53	53	0.0366	0.0369

THE COPPER CONDUCTOR RESISTANCE

Conductor Class 5 Flexible conductor for single core and multi cores cable

Nominal cross sectional area mm²	Maximum diameter of wires mm	Maximum conductor resistance at 20°C	
		Non metal coated Ω/km	Metal coated Ω/km
0.5	0.21	39.0	40.1
0.75	0.21	26.0	26.7
1	0.21	19.5	20.0
1.5	0.26	13.3	13.7
2.5	0.26	7.98	8.21
4	0.31	4.95	5.09
6	0.31	3.30	3.39
10	0.41	1.91	1.95
16	0.41	1.21	1.24
25	0.41	0.780	0.795
35	0.41	0.554	0.565
50	0.41	0.386	0.393
70	0.51	0.272	0.277
95	0.51	0.206	0.210
120	0.51	0.161	0.164

Conductor resistance at 20°C (R_{20})

Fomula : $$R_{20} = R_t \times k_1 \times \frac{1000}{L}$$

Where : R_{20} = Conductor resistance at 20°C (Ω /km)

R_t = Conductor resistance from measurement (Ω)

L = Cable length (m)

k_1 = Factor of temperature correction from TIS.2427-2552 Table ที่ 1

TABLES OF DIMENSIONS FOR MOTOR STARTERS

The figures are based on normal 3 phase motors for a.c. at 50 c.p.s. 1,400 - 1,450 r.p.m.

Motor ratings in HP at service voltage						Rating of motor starter	Relay setting	Max. quick-blow back-up fuse	Min. cross section of cable
220 V		380 V		440 V					
HP	Full load current A	HP	Full load current A	HP	Full load current A	A	A	A	mm^2
		0.05		0.05		15	0.15 - 0.25	1	1.5
0.05		0.1		0.1		15	0.25 - 0.4	2	1.5
		0.15		0.2		15	0.4 - 0.65	4	1.5
0.1		0.2		0.25	0.5	15	0.4 - 0.65	4	1.5
0.15		0.25	0.6	0.5	0.9	15	0.6 - 1.0	6	1.5
0.25	1.1	0.5	1.0			15	1.0 - 1.6	6	1.5
		0.75	1.5	0.75	1.2	15	1.0 - 1.6	6	1.5
0.5	1.8	1	1.9	1	1.6	15	1.5 - 2.5	15 (10)	1.5
0.75	2.5	1.5	2.6	2	3.2	15	2.5 - 4	25 (15)	1.5
1	3.2	2	3.4	2.5	3.9	15	2.5 - 4	25 (15)	1.5
1.5	4.4	2.5	4.2	3	4.5	15	4 - 6.5	25 (20)	1.5
2	5.8	3	4.9	4	6.0	15	4 - 6.5	25 (20)	1.5
2.5	7.3	4	6.3	5	7.5	15	6 - 10	35 (25)	1.5
3	8.4	5	7.8	6	8.5	15	6 - 10	35 (25)	1.5
4	11	6	9.3	7.5	11	15	9 - 14	35	1.5
5	13.5	7.5	11.5			15	9 - 14	35	1.5
		10	15	10	14	25	13 - 20	60	2.5
7.5	19.5	15	22	15	21	25	16 - 25	60	4
10	26	20	29	20	27	60	20 - 31	100	6
15	39	25	36	30	39	60	28 - 43	125	10
20	51	30	42			60	40 - 60	160	16
		35	50	35	46	60	40 - 60	160	16
		40	56	40	52	60	40 - 60	160	16
25	63	50	69	50	65	100	50 - 75	200	16
35	91	60	83	60	76	100	70 - 100	200	25
40	100	75	104	75	96	200	84 - 120	400	35
50	125	100	136	100	125	200	105 - 150	500	50
75	184	125	167	125	155	200	140 - 200	500	95
		150	200	150	180	350	175 - 250	600	120
100	245	175	235	175	215	350	175 - 250	600	120
120	295	200	268	200	240	350	210 - 300	850	150
150	370	250	335	250	300	600	280 - 400	850	240
175	425	300	400	300	360	600	350 - 500	1000	400
200	475	350	470	350	410	600	350 - 500	1000	400
225	540	400	535	400	450	600	420 - 600	1000	

*Figures in brackets apply to hand operated motor starters.

SHORT CIRCUIT RATINGS

Another important factor for the determination of the conductor size is the maximum allowable current during a short circuit when the maximum allowable conductor temperature is higher than during normal operation

The maximum permissible short circuit current of cables with copper or aluminium conductors can be calculated with the following formula :

$$I_k = \frac{S}{\sqrt{t}} . K$$

Where : I_k = Maximum permissible short circuit current (Amp.)

S = Cross-section area of conductor (sq.mm.)

t = Duration of short circuit (sec.)

K = Constant (as follows table below)

Type	Permissible operating temperature (°C)	Permissible short circuit temperature (°C)	K= Constant			
			Conductor temperature 90 °C		Conductor temperature 70 °C	
			CU	AL	CU	AL
XLPE	90	250	143	94	-	-
PVC						
≤ 300 mm²	70	160	-	-	115	76
> 300 mm²	70	140	-	-	103	68

CURRENT RATING FACTORS

The continuous current ratings given in this catalog have been calculated in accordance with the IEC 60287 (Electric Cables - Calculations of the current rating) based on the following standard operating conditions :

Ambient air temperature	40 °C
Ambient ground temperature	30 °C
Thermal resistivity of soil	1.0 K.m/W or °C.m/W
Depth of laying (For MV & HV cable laid direct in the ground)	1 m
Depth of laying (For LV cable laid direct in the ground)	0.6 m

The ratings are also based on the following standard installation conditions :

- In air, protected from solar radiation
- Single core cables laid in flat formation with S = 2d, where S = distance between cable axes, d = cable diameter
- Metallic screen bonded at a single point (for MV & HV cables)

Rating Factors

Where it is desired to depart from the standard condition, the rating correction factors given in the following tables should be applied.

Correction factors for ambient air & ground temperatures

Temperature (°C)	In air (Ambient temperature 40°C)		In ground (Ambient temperature 30°C)	
	Insulation		Insulation	
	PVC	XLPE	PVC	XLPE
11-15	1.34	1.23	1.18	1.12
16-20	1.29	1.19	1.12	1.08
21-25	1.22	1.14	1.07	1.03
26-30	1.15	1.10	1.00	1.00
31-35	1.08	1.05	0.94	0.96
36-40	1.00	1.00	0.87	0.91
41-45	0.91	0.96	0.80	0.86
46-50	0.82	0.90	0.71	0.82
51-55	0.70	0.84	0.62	0.76
56-60	0.57	0.78	0.51	0.70
61-65	-	0.71		0.65
66-70	-	0.64		0.57
71-75	-	0.55		0.49
76-80	-	0.45		0.41

CURRENT RATING FACTORS

Correction factors for depths of laying for direct buried MV&HV cables

Depth of laying m	Single - core cables		Three - core cables
	Nominal conductor size		
	≤ 185 mm²	> 185 mm²	
0.5	1.06	1.09	1.06
0.6	1.04	1.07	1.05
0.8	1.02	1.03	1.02
1	1.00	1.00	1.00
1.25	0.98	0.98	0.98
1.5	0.97	0.96	0.97
1.75	0.96	0.94	0.96
2	0.95	0.93	0.95
2.5	0.93	0.91	0.93
3	0.92	0.89	0.92

Correction factors for depths of laying for direct buried LV cables

Depth of laying m	Single - core cables		Three - core cables
	Nominal conductor size		
	≤ 185 mm²	> 185 mm²	
0.5	1.02	1.02	1.01
0.6	1.00	1.00	1.00
0.8	0.98	0.96	0.97
1	0.96	0.93	0.95
1.25	0.94	0.92	0.93
1.5	0.93	0.90	0.92
1.75	0.92	0.88	0.91
2	0.91	0.87	0.90
2.5	0.89	0.85	0.89
3	0.88	0.83	0.88

CURRENT RATING FACTORS

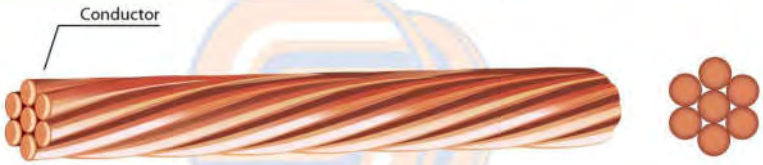
Correction factors for soil thermal resistivities for direct buried single-core cables

Nominal area of conductor mm²	Value of soil thermal resistivity k.m/W or °C.m/W							
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0
16	1.12	1.08	1.03	1.00	0.87	0.77	0.71	0.65
25	1.12	1.08	1.03	1.00	0.86	0.77	0.70	0.65
35	1.12	1.08	1.04	1.00	0.86	0.77	0.70	0.65
50	1.14	1.09	1.04	1.00	0.86	0.77	0.70	0.64
70	1.14	1.09	1.04	1.00	0.85	0.76	0.69	0.63
95	1.14	1.08	1.03	1.00	0.85	0.75	0.68	0.63
120	1.14	1.08	1.03	1.00	0.85	0.75	0.68	0.63
150	1.14	1.08	1.04	1.00	0.85	0.75	0.68	0.63
185	1.14	1.09	1.04	1.00	0.85	0.75	0.68	0.63
240	1.14	1.09	1.04	1.00	0.85	0.75	0.68	0.62
300	1.14	1.09	1.04	1.00	0.84	0.74	0.67	0.61
400	1.15	1.09	1.04	1.00	0.84	0.74	0.66	0.61
500	1.15	1.09	1.05	1.00	0.85	0.75	0.68	0.63
630	1.15	1.09	1.05	1.00	0.85	0.75	0.68	0.63
800		1.09	1.05	1.00	0.85	0.75	0.68	0.62

Correction factors for soil thermal resistivities for direct buried three-core cables

Nominal area of conductor mm²	Value of soil thermal resistivity k.m/W or °C.m/W							
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0
16	1.09	1.05	1.03	1.00	0.88	0.81	0.74	0.69
25	1.10	1.06	1.03	1.00	0.88	0.81	0.74	0.69
35	1.11	1.07	1.04	1.00	0.88	0.81	0.73	0.69
50	1.10	1.06	1.03	1.00	0.87	0.80	0.73	0.68
70	1.11	1.06	1.04	1.00	0.87	0.79	0.73	0.68
95	1.11	1.07	1.04	1.00	0.87	0.79	0.73	0.68
120	1.11	1.07	1.04	1.00	0.87	0.79	0.73	0.68
150	1.10	1.06	1.03	1.00	0.86	0.78	0.72	0.67
185	1.10	1.07	1.03	1.00	0.86	0.78	0.72	0.67
240	1.11	1.07	1.03	1.00	0.86	0.78	0.72	0.67
300	1.11	1.07	1.03	1.00	0.86	0.78	0.71	0.67
400	1.11	1.07	1.03	1.00	0.86	0.78	0.71	0.66

ASCC
ANNEALED BARE STRANDED COPPER CONDUCTOR



APPLICATION

- Use for general purpose
- For used in distribution line and grounded
- For grounding conductor from ground to air terminal
- Wiring in air or in plastic tube

REFERENCE STANDARD :

TIS 2427

CABLE STRUCTURE

CONDUCTOR : Soft drawn copper wire, concentric stranded conductor
CLASS 2 Size 6 - 500 mm²

Technical Data

Nominal cross sectional area	Number of wires	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	No.	mm	Ω/km	A	kg/km	m
6	7	3.00	3.08	65	52	1,000/D
10	7	4.00	1.83	90	86	1,000/D
16	7	5.00	1.15	125	139	1,000/D
25	7	6.30	0.727	160	219	1,000/D
35	19	7.40	0.524	200	304	1,000/D
50	19	8.70	0.387	250	414	1,000/D
70	19	10.50	0.268	310	596	500/D
95	19	12.30	0.193	380	823	500/D
120	37	13.90	0.153	440	1,043	500/D
150	37	15.40	0.124	510	1,287	500/D
185	37	17.20	0.0991	585	1,620	500/D
240	61	19.70	0.0754	700	2,121	500/D
300	61	22.00	0.0601	800	2,627	500/D
400	61	25.00	0.0470	900	3,430	500/D
500	61	28.30	0.0366	1,110	4,338	500/D

Conductor Class 2 : Stranded
D : Packing in drum

การใช้งาน

- ใช้งานทั่วไป
- ใช้สำหรับในการจ่ายไฟฟ้าและต่อลงดิน
- ใช้สำหรับเป็นตัวนำต่อลงดิน จากพื้นดินไปยังหลักล่อฟ้าที่ติดตั้งอยู่บนสุดของเสาอากาศ
- เดินลอยในอากาศหรือเดินในท่อพลาสติก

60227 IEC 01 (THW)

450/750 V. 70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1.5 - 400 mm²

INSULATION : Polyvinyl chloride type PVC/C

CORE IDENTIFICATION : Single core, color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 3, TABLE 1

Nominal cross sectional area	Conductor type	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter (approx.) minimum	Overall diameter (approx.) maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.37	0.7	2.6	3.2	12.1	0.011	21	21	100/C
1.5	2	7	1.56	0.7	2.7	3.3	12.1	0.010	21	22	100/C
2.5	1	1	1.74	0.8	3.2	3.9	7.41	0.010	29	32	100/C
2.5	2	7	2.01	0.8	3.3	4.0	7.41	0.009	29	35	100/C
4	1	1	2.21	0.8	3.6	4.4	4.61	0.0085	37	47	100/C
4	2	7	2.52	0.8	3.8	4.6	4.61	0.0077	37	50	100/C
6	1	1	2.70	0.8	4.1	5.0	3.08	0.0070	48	65	100/C
6	2	7	3.08	0.8	4.3	5.2	3.08	0.0065	48	70	100/C
10	1	1	3.52	1.0	5.3	6.4	1.83	0.0070	67	110	100/C
10	2	7	3.99	1.0	5.6	6.7	1.83	0.0065	67	120	100/C
16	2	7	5.04	1.0	6.4	7.8	1.15	0.0050	92	180	100/C
25	2	7	6.33	1.2	8.1	9.7	0.727	0.0050	127	280	100/C
35	2	7	7.47	1.2	9.0	10.9	0.524	0.0043	157	370	100/C
50	2	19	8.80	1.4	10.6	12.8	0.387	0.0043	191	500	500/D
70	2	19	10.55	1.4	12.1	14.6	0.268	0.0035	244	700	500/D
95	2	19	12.45	1.6	14.1	17.1	0.193	0.0035	297	1,000	500/D
120	2	37	14.00	1.6	15.6	18.8	0.153	0.0032	345	1,200	500/D
150	2	37	15.54	1.8	17.3	20.9	0.124	0.0032	397	1,500	500/D
185	2	37	17.43	2.0	19.3	23.3	0.0991	0.0032	453	1,900	500/D
240	2	37	19.98	2.2	22.0	26.6	0.0754	0.0032	535	2,500	500/D
300	2	61	22.41	2.4	24.5	29.6	0.0601	0.0030	617	3,100	500/D
400	2	61	25.29	2.6	27.5	33.2	0.0470	0.0028	741	3,900	500/D

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

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60227 IEC 02 (VSF)

450/750 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 3

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper CLASS 5 Size 1.5 - 240 mm²

INSULATION : Polyvinyl chloride type PVC/C

CORE IDENTIFICATION : Single core, color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 3, TABLE 3

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter (approx.)		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
					minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	5	0.26	1.58	0.7	2.8	3.4	13.30	0.010	16	24	100/C
2.5	5	0.26	2.04	0.8	3.4	4.1	7.98	0.009	25	37	100/C
4	5	0.31	2.59	0.8	3.9	4.8	4.95	0.007	30	54	100/C
6	5	0.31	3.59	0.8	4.4	5.3	3.30	0.006	39	75	100/C
10	5	0.41	4.67	1.0	5.7	6.8	1.91	0.0056	51	130	100/C
16	5	0.41	5.86	1.0	6.7	8.1	1.21	0.0046	73	185	100/C
25	5	0.41	7.31	1.2	8.4	10.2	0.780	0.0044	97	285	100/C
35	5	0.41	8.67	1.2	9.7	11.7	0.554	0.0038	140	400	100/C
50	5	0.41	10.51	1.4	11.5	13.9	0.386	0.0037	175	555	500/D
70	5	0.51	12.52	1.4	13.2	16.0	0.272	0.0032	216	765	500/D
95	5	0.51	14.38	1.6	15.1	18.2	0.206	0.0032	258	1,000	500/D
120	5	0.51	16.32	1.6	16.7	20.2	0.161	0.0029	302	1,300	500/D
150	5	0.51	18.20	1.8	18.6	22.5	0.129	0.0029	347	1,600	500/D
185	5	0.51	20.13	2.0	20.6	24.9	0.106	0.0029	394	1,900	500/D
240	5	0.51	23.16	2.2	23.5	28.4	0.0801	0.0028	471	2,500	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 02 (VSF) TWIST

450/750 V. 70°C FLEXIBLE CONDUCTOR

PVC INSULATED, 2 Cores Twist

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :

TIS 11-2553 PART 3, TABLE 3

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 1.5 - 2.5 mm²

INSULATION : Polyvinyl chloride

CORE IDENTIFICATION : 2 Cores, Grey and Grey/Black(Striped)

CLASSIFICATION

Maximum Conductor Temperature : 70°C

Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 3, TABLE 3

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
					minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	5	0.26	1.58	0.7	2.8	3.4	13.30	0.010	21	45	100/C
2.5	5	0.26	2.04	0.8	3.4	4.1	7.98	0.009	28	65	100/C

C : Packing in coil

Core Color : Grey and Grey/Black(Striped)

การใช้งาน

- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 05 (IV)

300/500 V. 70°C SOLID CONDUCTOR
PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 5

CABLE STRUCTURE

CONDUCTOR : Annealed Solid Copper
CLASS 1 Size 0.5, 0.75 & 1 mm²
INSULATION : Polyvinyl chloride type PVC/C
CORE IDENTIFICATION : Single core, color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Ling to Earth (U_0)
500 Volts between Ling to Earth (U)

Technical Data

TIS 11-2553 PART 3, TABLE 5

Nominal cross sectional area	Conductor type	Diameter (approx.)	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
				minimum	maximum					
mm²	Class	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	1	0.80	0.6	1.9	2.3	36.0	0.015	3	8.8	100/C
0.75	1	0.97	0.6	2.1	2.5	24.5	0.012	6	12.0	100/C
1	1	1.13	0.6	2.2	2.7	18.1	0.011	10	14.0	100/C

Conductor Class 1 : Solid
C : Packing in coil

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 06

300/500 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5, 0.75 & 1 mm²

INSULATION : Polyvinyl chloride type PVC/C

CORE IDENTIFICATION : Single Core, Color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 3, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°c	Current rating in free air	Cable weight (approx.)	Standard packing
					minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.6	2.1	2.5	39.0	0.013	3	9	100/C
0.75	5	0.21	1.13	0.6	2.2	2.7	26.0	0.011	6	12	100/C
1	5	0.21	1.30	0.6	2.4	2.8	19.5	0.010	10	15	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 07 (HIV)

300/500 V. 90°C SOLID CONDUCTOR
PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Solid Annealed Copper
CLASS 1 Size 0.5 - 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/E

CORE IDENTIFICATION : Single Core, Color as request

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Earth (U)

Technical Data

TIS 11-2553 PART 3, TABLE 9

Nominal cross sectional area	Conductor type	Diameter (approx.)	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
				minimum	maximum					
mm²	Class	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	1	0.80	0.6	1.9	2.3	36.0	0.015	3	8.6	100/C
0.75	1	0.97	0.6	2.1	2.5	24.5	0.013	6	11.0	100/C
1	1	1.13	0.6	2.2	2.7	18.1	0.012	10	14.0	100/C
1.5	1	1.38	0.7	2.6	3.2	12.1	0.011	16	20.0	100/C
2.5	1	1.77	0.8	3.2	3.9	7.41	0.009	25	32.0	100/C

Conductor Class 1 : Solid
C : Packing in coil

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 08 (HVSF)

300/500 V. 90°C FLEXIBLE CONDNCTOR
PVC INSULATED, SINGLE CORE

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 3, TABLE 11

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 - 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/E

CORE IDENTIFICATION : Single Core, Color as request

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 3, TABLE 11

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
					minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.6	2.1	2.5	39.0	0.013	3	9	100/C
0.75	5	0.21	1.13	0.6	2.2	2.7	26.0	0.012	6	12	100/C
1	5	0.21	1.30	0.6	2.4	2.8	19.5	0.010	10	15	100/C
1.5	5	0.26	1.57	0.7	2.8	3.4	13.3	0.009	16	21	100/C
2.5	5	0.26	2.03	0.8	3.4	4.1	7.98	0.009	25	33	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown, Black, Grey, White, Red, Green, Yellow, Green/Yellow or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 10

300/500 V. 70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, 2 CORES

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Laid on cable trays/Cable ladder
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 4, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1.5 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 4, TABLE 1

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Overall diameter minimum	Overall diameter maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating Laid on cable ladder	Cable weight (approx.)	Standard packing
mm²	mm	No.	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.37	0.7	0.4	1.2	7.6	10.0	12.1	0.0110	16	120	100/C
1.5	2	7	1.56	0.7	0.4	1.2	7.8	10.5	12.1	0.0100	16	130	100/C
2.5	1	1	1.74	0.8	0.4	1.2	8.6	11.5	7.41	0.0100	22	160	100/C
2.5	2	7	2.01	0.8	0.4	1.2	9.0	12.0	7.41	0.0090	22	180	100/C
4	1	1	2.21	0.8	0.4	1.2	9.6	12.5	4.61	0.0085	30	210	100/C
4	2	7	2.52	0.8	0.4	1.2	10.0	13.0	4.61	0.0077	30	220	100/C
6	1	1	2.70	0.8	0.4	1.2	10.5	13.5	3.08	0.0070	37	270	100/C
6	2	7	3.08	0.8	0.4	1.2	11.0	14.0	3.08	0.0065	37	190	100/C
10	1	1	3.52	1.0	0.6	1.4	13.0	16.5	1.83	0.0070	52	420	1,000/D
10	2	7	3.99	1.0	0.6	1.4	13.5	17.5	1.83	0.0065	52	460	1,000/D
16	2	7	5.04	1.0	0.6	1.4	15.5	20.0	1.15	0.0052	70	650	1,000/D
25	2	7	6.33	1.2	0.8	1.4	18.5	24.0	0.727	0.0050	88	950	500/D
35	2	7	7.47	1.2	1.0	1.6	21.0	27.5	0.524	0.0044	110	1,300	500/D

Conductor Class 1 : Solid
2 : Stranded

C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- วางบนรางเคเบิล
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 10

300/500 V.70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, 3 CORES

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Laid on cable trays/Cable ladder
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 4, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1.5 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 4, TABLE 1

Nominal cross sectional area	Conductor type	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Overall diameter minimum	Overall diameter maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating Laid on cable ladder	Cable weight (approx.)	Standard packing
mm²	mm	No.	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.37	0.7	0.4	1.2	8.0	10.5	12.1	0.0110	16	140	100/C
1.5	2	7	1.56	0.7	0.4	1.2	8.2	11.0	12.1	0.0100	16	150	100/C
2.5	1	1	1.74	0.8	0.4	1.2	9.2	12.0	7.41	0.0100	22	190	100/C
2.5	2	7	2.01	0.8	0.4	1.2	9.4	12.5	7.41	0.0090	22	210	100/C
4	1	1	2.21	0.8	0.4	1.2	10.0	13.0	4.61	0.0085	30	250	100/C
4	2	7	2.52	0.8	0.4	1.2	10.5	13.5	4.61	0.0077	30	270	100/C
6	1	1	2.70	0.8	0.4	1.4	11.5	14.5	3.08	0.0070	37	340	100/C
6	2	7	3.08	0.8	0.4	1.4	12.0	15.5	3.08	0.0065	37	370	100/C
10	1	1	3.52	1.0	0.6	1.4	14.0	17.5	1.83	0.0070	52	520	1,000/D
10	2	7	3.99	1.0	0.6	1.4	14.5	19.0	1.83	0.0065	52	570	1,000/D
16	2	7	5.04	1.0	0.8	1.4	16.5	21.5	1.15	0.0052	70	810	1,000/D
25	2	7	6.33	1.2	0.8	1.6	20.5	26.0	0.727	0.0050	88	1,200	500/D
35	2	7	7.47	1.2	1.0	1.6	22.0	29.0	0.524	0.0044	110	1,600	500/D

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

Core Color :

- Option 1 : Brown, Black, Grey
- Option 2 : Blue, Brown, Green/Yellow

การใช้งาน

- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- วางบนรางเคเบิล
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 10

300/500 V.70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, 4 CORES

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Laid on cable trays/Cable ladder
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 4, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1.5 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 4, TABLE 1

Nominal cross sectional area	Conductor type	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Overall diameter minimum	Overall diameter maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating Laid on cable ladder	Cable weight (approx.)	Standard packing
mm²	mm	No.	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.37	0.7	0.4	1.2	8.6	11.5	12.1	0.0110	16	160	100/C
1.5	2	7	1.56	0.7	0.4	1.2	9.0	12.0	12.1	0.0100	16	180	100/C
2.5	1	1	1.74	0.8	0.4	1.2	10.0	13.0	7.41	0.0100	22	230	100/C
2.5	2	7	2.01	0.8	0.4	1.2	10.0	13.5	7.41	0.0090	22	250	100/C
4	1	1	2.21	0.8	0.4	1.4	11.5	14.5	4.61	0.0085	30	320	100/C
4	2	7	2.52	0.8	0.4	1.4	12.0	15.0	4.61	0.0077	30	340	100/C
6	1	1	2.70	0.8	0.6	1.4	12.5	16.0	3.08	0.0070	37	440	100/C
6	2	7	3.08	0.8	0.6	1.4	13.0	17.0	3.08	0.0065	37	470	100/C
10	1	1	3.52	1.0	0.6	1.4	15.5	19.0	1.83	0.0070	52	660	1,000/D
10	2	7	3.99	1.0	0.6	1.4	16.0	20.5	1.83	0.0065	52	700	1,000/D
16	2	7	5.04	1.0	0.8	1.4	18.0	23.5	1.15	0.0052	70	1,000	1,000/D
25	2	7	6.33	1.2	1.0	1.6	22.5	28.5	0.727	0.0050	88	1,600	500/D
35	2	7	7.47	1.2	1.0	1.6	24.5	32.0	0.524	0.0044	110	2,000	500/D

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

Core Color :

- Option 1 : Blue, Brown, Black, Grey
- Option 2 : Brown, Black, Grey, Green/Yellow

การใช้งาน

- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- วางบนรางเคเบิล
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 10

300/500 V.70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, 5 CORES

APPLICATION

- Use for general purpose
- For installation in raceway and shall be protected water into raceway
- Laid on cable trays/Cable ladder
- Do not install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 4, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1.5 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 4, TABLE 1

Nominal cross sectional area	Conductor type	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Overall diameter minimum	Overall diameter maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating Laid on cable ladder	Cable weight (approx.)	Standard packing
mm²	mm	No.	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	1	1	1.37	0.7	0.4	1.2	9.4	12.0	12.1	0.0110	16	200	100/C
1.5	2	7	1.56	0.7	0.4	1.2	9.8	12.5	12.1	0.0100	16	220	100/C
2.5	1	1	1.74	0.8	0.4	1.2	11.0	14.0	7.41	0.0100	22	280	100/C
2.5	2	7	2.01	0.8	0.4	1.2	11.0	14.5	7.41	0.0090	22	310	100/C
4	1	1	2.21	0.8	0.6	1.4	12.5	16.0	4.61	0.0085	30	410	100/C
4	2	7	2.52	0.8	0.6	1.4	13.0	17.0	4.61	0.0077	30	430	100/C
6	1	1	2.70	0.8	0.6	1.4	13.5	17.5	3.08	0.0070	37	530	100/C
6	2	7	3.08	0.8	0.6	1.4	14.5	18.5	3.08	0.0065	37	570	100/C
10	1	1	3.52	1.0	0.6	1.4	17.0	21.0	1.83	0.0070	52	800	1,000/D
10	2	7	3.99	1.0	0.6	1.4	17.5	22.0	1.83	0.0065	52	870	1,000/D
16	2	7	5.04	1.0	0.8	1.6	20.5	26.0	1.15	0.0052	70	1,300	1,000/D
25	2	7	6.33	1.2	1.0	1.6	24.5	31.5	0.727	0.0050	88	1,900	500/D
35	2	7	7.47	1.2	1.2	1.6	27.0	35.0	0.524	0.0044	110	2,500	500/D

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

Core Color :

- Option 1 : Blue, Brown, Black, Grey, Black
- Option 2 : Blue, Brown, Black, Grey, Green/Yellow

การใช้งาน

- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย
- วางบนรางเคเบิล
- ห้ามร้อยท่อฝังดินหรือฝังดินโดยตรง

60227 IEC 52

300/300 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 2 CORES

APPLICATION

- Use for connecting portable electric appliance
- Use for wiring within electric appliance

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 & 0.75 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/300 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
300 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.5	0.6	4.6	5.9	39.0	0.012	3	40	100/C
0.75	5	0.21	1.13	0.5	0.6	4.9	6.3	26.0	0.010	6	48	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้
- ใช้งานภายในเครื่องใช้ไฟฟ้า

60227 IEC 52

300/300 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 3 CORES

APPLICATION

- Use for connecting portable electric appliance
- Use for wiring within electric appliance

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 & 0.75 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/300 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
300 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.5	0.6	4.9	6.3	39.0	0.012	3	47	100/C
0.75	5	0.21	1.13	0.5	0.6	5.2	6.7	26.0	0.010	6	58	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color :

- Option 1 : Brown, Black, Grey
- Option 2 : Blue, Brown, Green/Yellow

การใช้งาน

- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้
- ใช้งานภายในเครื่องใช้ไฟฟ้า

60227 IEC 52 (VKF)

300/300 V. 70°C FLEXIBLE CONDUCTOR

PVC INSULATED AND SHEATHED, 2 CORES FLAT TYPE

APPLICATION

- Use for connecting portable electric appliance
- Use for wiring within electric appliance

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 & 0.75 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C

Circuit Voltage does not exceed
300/300 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
300 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.5	0.6	3.0 x 4.9	3.7 x 5.9	39.0	0.012	3	28	100/C
0.75	5	0.21	1.13	0.5	0.6	3.2 x 5.2	3.8 x 6.3	26.0	0.010	6	35	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้
- ใช้งานภายในเครื่องใช้ไฟฟ้า

60227 IEC 53

300/500 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 2 CORES

APPLICATION

- Use for connecting portable electric applianec (heavy duty)
- Use for connecting lamp

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75, 1, 1.5 & 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 9

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.8	5.7	7.2	26.0	0.011	6	60	100/C
1	5	0.21	1.31	0.6	0.8	5.9	7.5	19.5	0.010	10	70	100/C
1.5	5	0.26	1.58	0.7	0.8	6.8	8.6	13.3	0.010	16	93	1,000/D
2.5	5	0.26	2.04	0.8	1.0	8.4	10.6	7.98	0.009	25	140	1,000/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ต่อเข้าดวงโคม

60227 IEC 53

300/500 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 3 CORES

APPLICATION

- Use for connecting portable electric applianec (heavy duty)
- Use for connecting lamp

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75, 1, 1.5 & 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 9

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.8	6.0	7.6	26.0	0.011	6	70	100/C
1	5	0.21	1.31	0.6	0.8	6.3	8.0	19.5	0.010	10	82	100/C
1.5	5	0.26	1.58	0.7	0.9	7.4	9.4	13.3	0.010	16	115	1,000/D
2.5	5	0.26	2.04	0.8	1.1	9.2	11.4	7.98	0.009	20	175	1,000/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color :

- Option 1 : Brown, Black, Grey
- Option 2 : Blue, Brown, Green/Yellow

การใช้งาน

- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ต่อเข้าดวงโคม

60227 IEC 53

300/500 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 4 CORES

APPLICATION

- Use for connecting portable electric applianec (heavy duty)
- Use for connecting lamp

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75, 1, 1.5 & 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 9

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.8	6.6	8.3	26.0	0.011	6	84	100/C
1	5	0.21	1.31	0.6	0.8	7.1	9.0	19.5	0.010	10	105	100/C
1.5	5	0.26	1.58	0.7	0.9	8.4	10.5	13.3	0.010	16	145	1,000/D
2.5	5	0.26	2.04	0.8	1.1	10.1	12.5	7.98	0.009	20	215	1,000/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color :

- Option 1 : Blue, Brown, Black, Grey
- Option 2 : Brown, Black, Grey, Green/Yellow

การใช้งาน

- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ต่อเข้าดวงโคม

60227 IEC 53

300/500 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 5 CORES

APPLICATION

- Use for connecting portable electric applianec (heavy duty)
- Use for connecting lamp

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75, 1, 1.5 & 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 9

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.9	7.4	9.3	26.0	0.011	6	105	100/C
1	5	0.21	1.31	0.6	0.9	7.8	9.8	19.5	0.010	10	125	100/C
1.5	5	0.26	1.58	0.7	1.1	9.3	11.6	13.3	0.010	16	175	1,000/D
2.5	5	0.26	2.04	0.8	1.2	11.2	13.9	7.98	0.009	20	265	1,000/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color :
- Option 1 : Blue, Brown, Black, Grey, Black
- Option 2 : Blue, Brown, Black, Grey, Green/Yellow

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ต่อเข้าดวงโคม

60227 IEC 53 (VKF)

300/500 V. 70°C FLEXIBLE CONDUCTOR

PVC INSULATED AND SHEATHED, 2 CORES FLAT TYPE

APPLICATION

- Use for connecting portable electric applianec (heavy duty)
- Use for connecting lamp

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 9

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75 & 1 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C

Circuit Voltage does not exceed
300/500 Volts(U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 9

Nominal cross section area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.8	3.7 x 6.0	4.5 x 7.2	26.0	0.011	6	43	100/C
1	5	0.21	1.31	0.6	0.8	3.9 x 6.2	4.7 x 7.2	19.5	0.010	10	50	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ต่อเข้าดวงโคม

60227 IEC 56

300/300 V. 90°C FLEXIBLE CONDUCTOR

PVC INSULATED AND SHEATHED, MULTI CORES ROUND TYPE

APPLICATION

- Use for connecting portable electric appliance (heavy duty)

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 11

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 & 0.75 mm²

INSULATION : Polyvinyl chloride type PVC/E

SHEATHED : Polyvinyl chloride type PVC/ST10

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
300/300 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
300 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 11

Number of cores	Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
							minimum	maximum					
	mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
2	0.5	5	0.21	0.92	0.5	0.6	4.6	5.9	39.0	0.012	3	38	100/C
	0.75	5	0.21	1.13	0.5	0.6	4.9	6.3	26.0	0.010	6	46	100/C
3	0.5	5	0.21	0.92	0.5	0.6	4.9	6.3	39.0	0.012	3	44	100/C
	0.75	5	0.21	1.13	0.5	0.6	5.2	6.7	26.0	0.010	6	55	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color :

- Option 1 : Blue, Brown
- Option 2 : Brown, Black, Grey
  or Blue, Brown, Green/Yellow

การใช้งาน

- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)

60227 IEC 56 (HVKF)

300/300 V. 90°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 2 CORES FLAT TYPE

APPLICATION

- Use for connecting portable electric appliance (heavy duty)

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 11

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 & 0.75 mm²

INSULATION : Polyvinyl chloride type PVC/E

SHEATHED : Polyvinyl chloride type PVC/ST10

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
300/300 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
300 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 11

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	0.21	0.92	0.5	0.6	3.0 x 4.9	3.7 x 5.9	39.0	0.012	3	28	100/C
0.75	5	0.21	1.13	0.5	0.6	3.2 x 5.2	3.8 x 6.3	26.0	0.010	6	35	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)

60227 IEC 57

300/500 V. 90°C FLEXIBLE CONDUCTOR

PVC INSULATED AND SHEATHED, MULTI CORES ROUND TYPE

APPLICATION

- Use for connecting portable electric appliance (heavy duty)
- Use for wiring in lamp with/without ballast
- Use in an advertisement board/an electric signs

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :

TIS 11-2553 PART 5, TABLE 13

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75, 1, 1.5 & 2.5 mm²

INSULATION : Polyvinyl chloride type PVC/E

SHEATHED : Polyvinyl chloride type PVC/ST10

CLASSIFICATION

Maximum Conductor Temperature : 90°C

Circuit Voltage does not exceed

300/500 Volts (U_0/U)

300 Volts between Line to Earth (U_0)

500 Volts between Line to Earth (U)

Technical Data

TIS 11-2553 PART 5, TABLE 13

Number of cores	Nominal cross sectional area	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter minimum	Overall diameter maximum	Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
No.	mm²	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
2	0.75	0.21	1.13	0.6	0.8	5.7	7.2	26.0	0.011	6	57	100/C
	1	0.21	1.31	0.6	0.8	5.9	7.5	19.5	0.010	10	66	100/C
	1.5	0.26	1.58	0.7	0.8	6.8	8.6	13.3	0.010	16	89	1,000/D
	2.5	0.26	2.04	0.8	1.0	8.4	10.6	7.98	0.009	25	135	1,000/D
3	0.75	0.21	1.13	0.6	0.8	6.0	7.6	26.0	0.011	6	66	100/C
	1	0.21	1.31	0.6	0.8	6.3	8.0	19.5	0.010	10	78	100/C
	1.5	0.26	1.58	0.7	0.9	7.4	9.4	13.3	0.010	16	110	1,000/D
	2.5	0.26	2.04	0.8	1.1	9.2	11.4	7.98	0.009	20	170	1,000/D
4	0.75	0.21	1.13	0.6	0.8	6.6	8.3	26.0	0.011	6	80	100/C
	1	0.21	1.31	0.6	0.9	7.1	9.0	19.5	0.010	10	99	100/C
	1.5	0.26	1.58	0.7	1.0	8.4	10.5	13.3	0.010	16	140	1,000/D
	2.5	0.26	2.04	0.8	1.1	10.1	12.5	7.98	0.009	20	205	1,000/D
5	0.75	0.21	1.13	0.6	0.9	7.4	9.3	26.0	0.011	6	99	100/C
	1	0.21	1.31	0.6	0.9	7.8	9.8	19.5	0.010	10	120	100/C
	1.5	0.26	1.58	0.7	1.1	9.3	11.6	13.3	0.010	16	170	1,000/D
	2.5	0.26	2.04	0.8	1.2	11.2	13.9	7.98	0.009	20	250	1,000/D

Conductor Class 5 : Flexible

C : Packing in coil

D : Packing in drum

Core Color :

- Option 1 : Blue, Brown
- Option 2 : Brown, Black, Grey or Blue, Brown, Green/Yellow
- Option 3 : Blue, Brown, Black, Grey or Brown, Black, Grey, Green/Yellow
- Option 4 : Blue, Brown, Black, Grey, Black or Blue, Brown, Black, Grey, Green/Yellow

การใช้งาน

- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ในวงโคมไฟฟ้าที่มี/ไม่มีบัลลาสต์
- ใช้ในป้ายโฆษณา/ป้ายไฟฟ้า

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60227 IEC 57 (HVKF)

300/500 V. 90°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 2 CORES FLAT TYPE

APPLICATION

- Use for connecting portable electric appliance (heavy duty)
- Use for wiring in lamp with/without ballast
- Use in an advertisement board/an electric signs

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 5, TABLE 13

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.75 & 1 mm²
INSULATION : Polyvinyl chloride type PVC/E
SHEATHED : Polyvinyl chloride type PVC/ST10

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 5, TABLE 13

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.75	5	0.21	1.13	0.6	0.8	3.7 x 6.0	4.5 x 7.2	39.0	0.011	6	42	100/C
1	5	0.21	1.31	0.6	0.8	3.9 x 6.2	4.7 x 7.5	19.5	0.010	10	50	100/C

Conductor Class 5 : Flexible
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้าชนิดหยิบยกได้ (ใช้งานหนัก)
- ใช้ในวงโคมไฟฟ้าที่มี/ไม่มีบัลลาสต์
- ใช้ในป้ายโฆษณา/ป้ายไฟฟ้า

VAF

300/500 V. 70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND SHEATHED, 2 CORES FLAT TYPE

APPLICATION

- Use for surface wiring
- For installation in raceway/Do not install in conduit
- Do not install direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1 - 16 mm²

INSULATION : Polyvinyl chloride type PVC/C

SHEATHED : Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 1

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on wall at 40°C	Cable weight (approx.)	Standard packing
						minimum	maximum					
mm²	Class	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1	1	1	1.12	0.6	0.9	4.0 x 6.2	4.7 x 7.4	18.1	0.0110	14	50	100/C
1.5	1	1	1.37	0.7	0.9	4.4 x 7.0	5.4 x 8.4	12.1	0.0110	17	70	100/C
2.5	1	1	1.74	0.8	1.0	5.2 x 8.4	6.2 x 9.8	7.41	0.0100	23	100	100/C
4	2	7	2.52	0.8	1.1	5.6 x 9.6	7.2 x 11.5	4.61	0.0077	32	150	100/C
6	2	7	3.09	0.8	1.1	6.4 x 10.5	8.0 x 13.0	3.08	0.0065	41	200	100/C
10	2	7	3.99	1.0	1.2	7.8 x 13.0	9.6 x 16.0	1.83	0.0065	56	310	100/C
16	2	7	5.04	1.0	1.3	9.0 x 15.5	11.0 x 18.5	1.15	0.0052	74	450	100/C

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil

Core Color : Blue, Brown

การใช้งาน
- เดินเกาะผนัง
- เดินในช่องเดินสาย ห้ามร้อยท่อ
- ห้ามฝังดินโดยตรง

VAF-G

300/500 V. 70°C SOLID OR STRANDED CONDUCTOR

PVC INSULATED AND SHEATHED, 2 CORES WITH GROUND, FLAT TYPE

APPLICATION

- Use for surface wiring
- For installation in raceway/Do not install in conduit
- Do not install direct burial in ground

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 1

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1 - 16 mm²

INSULATION : Polyvinyl chloride type PVC/C

SHEATHED : Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C

Circuit Voltage does not exceed
300/500 Volts (U_0/U)
300 Volts between Line to Earth (U_0)
500 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 1

Nominal cross sectional area	Conductor type	Phase Core		Ground Core		Nominal insulation thickness	Nominal insulation thickness	Overall diameter		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on wall at 40°C	Cable weight (approx.)	Standard packing
		Number of wires	Diameter (approx.)	Number of wires	Diameter (approx.)			minimum	maximum					
mm²	Class	No.	mm	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1/1	1	1	1.12	1	1.12	0.6	0.6	4.0 x 8.4	4.7 x 9.8	18.1	0.0110	14	75	100/C
1.5/1.5	1	1	1.37	1	1.37	0.7	0.7	4.4 x 9.8	5.4 x 11.5	12.1	0.0110	17	100	100/C
2.5/2.5	1	1	1.74	1	1.74	0.8	0.8	5.2 x 11.5	6.2 x 13.5	7.41	0.0100	23	150	100/C
4/4	2	7	2.52	7	2.52	0.8	0.8	5.8 x 13.4	7.4 x 16.5	4.61	0.0077	32	220	100/C
6/6	2	7	3.09	7	3.09	0.8	0.8	6.4 x 15.0	8.0 x 18.0	3.08	0.0065	41	290	100/C
10/10	2	7	3.99	7	3.99	1.0	1.0	7.8 x 19.0	9.6 x 22.5	1.83	0.0065	56	460	100/C
16/16	2	7	5.04	7	5.04	1.0	1.0	9.0 x 22.0	11 x 26.5	1.15	0.0052	74	650	100/C

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil

Core Color : Blue, Green/Yellow, Brown

การใช้งาน
- เดินเกาะผนัง
- เดินในช่องเดินสาย ห้ามร้อยท่อ
- ห้ามฝังดินโดยตรง

NYY

450/750 V. 70°C SOLID OR STRANDED CONDUCTOR PVC INSULATED AND SHEATHED, SINGLE CORE

APPLICATION

- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 3

CABLE STRUCTURE

CONDUCTOR : Annealed Solid or Stranded Copper
CLASS 1 & 2 Size 1 - 500 mm²

INSULATION : Polyvinyl chloride type PVC/C

SHEATHED : Polyvinyl chloride type PVC/ST4

CORE IDENTIFICATION :
Single core, color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 3

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
1	1	1	1.12	1.5	1.8	8.6	18.1	0.0207	-	21	80	100/C
1	2	7	1.29	1.5	1.8	8.8	18.1	0.0200	-	21	80	100/C
1.5	1	1	1.37	1.5	1.8	9.0	12.1	0.0184	-	26	85	100/C
1.5	2	7	1.56	1.5	1.8	9.2	12.1	0.0175	-	26	90	100/C
2.5	1	1	1.74	1.5	1.8	9.4	7.41	0.0157	-	35	100	100/C
2.5	2	7	2.01	1.5	1.8	9.8	7.41	0.0146	-	35	110	100/C
4	1	1	2.21	1.5	1.8	10.0	4.61	0.0135	-	45	120	100/C
4	2	7	2.52	1.5	1.8	10.5	4.61	0.0124	-	45	130	100/C
6	2	7	3.08	1.5	1.8	11.0	3.08	0.0107	-	57	160	100/C
10	2	7	3.99	1.5	1.8	12.0	1.83	0.0088	-	76	210	500/D
16	2	7	5.04	1.5	1.8	13.0	1.15	0.0074	-	99	280	500/D
25	2	7	6.33	1.5	1.8	14.5	0.727	0.0061	127	128	390	500/D
35	2	7	7.47	1.5	1.8	16.0	0.524	0.0053	157	154	490	500/D
50	2	19	8.80	1.5	1.8	17.0	0.387	0.0046	191	181	620	500/D
70	2	19	10.55	1.5	1.8	19.0	0.268	0.0039	244	223	850	500/D
95	2	19	12.45	1.7	1.8	21.5	0.193	0.0038	297	267	1,110	500/D
120	2	37	14.00	1.7	1.8	23.0	0.153	0.0034	345	304	1,400	500/D
150	2	37	15.54	1.9	2.0	26.0	0.124	0.0034	397	342	1,700	500/D
185	2	37	17.43	2.1	2.0	28.0	0.0991	0.0034	453	386	2,100	500/D
240	2	37	19.98	2.3	2.2	31.5	0.0754	0.0033	535	448	2,700	500/D
300	2	61	22.41	2.5	2.2	35.0	0.0601	0.0032	617	507	3,400	500/D
400	2	61	25.29	2.7	2.2	38.5	0.0470	0.0030	741	577	4,300	500/D
500	2	61	28.71	3.1	2.4	43.0	0.0366	0.0031	854	654	5,400	500/D

Conductor Class 1 : Solid
2 : Stranded
C : Packing in coil
D : Packing in drum

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NYY

450/750 V. 70°C STRANDED CONDUCTOR
PVC INSULATED AND DOUBLE SHEATHED, 2 CORES

APPLICATION
- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 4

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper
CLASS 2 Size 50 - 300 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 4

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
50	2	19	8.80	1.5	1.2	2.2	33.5	0.387	0.0046	133	181	1,800	500/D
70	2	19	10.55	1.5	1.5	2.2	38.0	0.268	0.0039	171	223	2,400	500/D
95	2	19	12.45	1.7	1.5	2.2	42.5	0.193	0.0038	207	267	3,200	500/D
120	2	37	14.00	1.7	1.5	2.4	46.5	0.153	0.0034	240	304	3,900	500/D
150	2	37	15.54	1.9	1.8	2.6	52.0	0.124	0.0034	278	342	4,800	500/D
185	2	37	17.43	2.1	1.8	2.8	57.0	0.0991	0.0034	317	386	6,000	500/D
240	2	37	19.98	2.3	2.0	3.0	64.0	0.0754	0.0033	374	448	7,500	300/D
300	2	61	22.41	2.5	2.0	3.2	70.5	0.0601	0.0032	432	507	9,500	300/D

Conductor Class 2 : Stranded
D : Packing in drum

Core Color : Blue, Brown

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NYY

450/750 V.70°C STRANDED CONDUCTOR
PVC INSULATED AND DOUBLE SHEATHED, 3 CORES

APPLICATION
- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 4

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper CLASS 2 Size 50 - 300 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C

Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 4

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
50	2	19	8.80	1.5	1.5	2.2	36.0	0.387	0.0046	133	181	2,410	500/D
70	2	19	10.55	1.5	1.5	2.2	40.5	0.268	0.0039	171	223	3,200	500/D
95	2	19	12.45	1.7	1.5	2.4	46.0	0.193	0.0038	207	267	4,300	500/D
120	2	37	14.00	1.7	1.8	2.6	50.5	0.153	0.0034	240	304	5,320	500/D
150	2	37	15.54	1.9	1.8	2.8	56.0	0.124	0.0034	278	342	6,490	500/D
185	2	37	17.43	2.1	2.0	3.0	61.5	0.0991	0.0034	317	386	8,060	300/D
240	2	37	19.98	2.3	2.0	3.2	69.0	0.0754	0.0033	374	448	10,360	300/D
300	2	61	22.41	2.5	2.2	3.4	76.0	0.0601	0.0032	432	507	12,810	200/D

Conductor Class 2 : Stranded

D : Packing in drum

Core Color : Brown, Black, Grey

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NYY

450/750 V.70°C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED, 4 CORES

APPLICATION

- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 4

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper
CLASS 2 Size 50 - 300 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 4

Nominal cross sectional area	Conductor type	Maximum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal inner sheathed thickness	Nominal outer sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
50	2	19	8.80	1.5	1.5	2.2	39.5	0.387	0.0046	133	181	2,900	500/D
70	2	19	10.55	1.5	1.5	2.4	44.5	0.268	0.0039	171	223	3,900	500/D
95	2	19	12.45	1.7	1.8	2.6	51.5	0.193	0.0038	207	267	5,500	500/D
120	2	37	14.00	1.7	1.8	2.8	56.0	0.153	0.0034	240	304	6,500	500/D
150	2	37	15.54	1.9	2.0	3.0	62.0	0.124	0.0034	278	342	8,000	300/D
185	2	37	17.43	2.1	2.0	3.2	68.0	0.0991	0.0034	317	386	10,000	300/D
240	2	37	19.98	2.3	2.2	3.4	76.5	0.0754	0.0033	374	448	13,000	200/D
300	2	61	22.41	2.5	2.2	3.8	85.0	0.0601	0.0032	432	507	16,000	200/D

Conductor Class 2 : Stranded
D : Packing in drum

Core Color : Blue, Brown, Black, Grey

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- ใช้งานทั่วไป
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NYY-G

450/750 V.70°C STRANDED CONDUCTOR

PVC INSULATED AND DOUBLE SHEATHED, 2 CORES WITH GROUND

APPLICATION

- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 5

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper
CLASS 2 Size 25/16 - 300/150 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 5

Nominal cross sectional area	Conductor type	Phase Core			Ground Core			Nominal inner sheathed thickness	Nominal outer Sheathed Thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
		Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness										
mm²	Class	No.	mm	mm	No.	mm	mm	mm	mm	mm	Ω/km	Ω/km	MΩ-km	A	A	kg/km	m
25/16	2	7	6.33	1.3	7	5.04	1.1	1.2	2.0	28.0	0.727	1.150	0.0054	86	128	1,200	500/D
35/16	2	7	7.47	1.3	7	5.04	1.1	1.2	2.0	30.0	0.524	1.150	0.0047	110	154	1,500	500/D
50/25	2	19	8.80	1.5	7	6.33	1.3	1.2	2.2	34.0	0.387	0.727	0.0046	133	181	2,000	500/D
70/35	2	19	10.55	1.5	7	7.47	1.3	1.5	2.2	38.5	0.268	0.524	0.0039	171	223	2,700	500/D
95/50	2	19	12.45	1.7	19	8.80	1.5	1.5	2.2	43.5	0.193	0.387	0.0038	207	267	3,600	500/D
120/70	2	37	14.00	1.7	19	10.55	1.5	1.5	2.4	47.5	0.153	0.268	0.0034	240	304	4,500	500/D
150/95	2	37	15.54	1.9	19	12.45	1.7	1.8	2.6	53.0	0.124	0.193	0.0034	278	342	5,500	500/D
185/95	2	37	17.43	2.1	19	12.45	1.7	1.8	2.8	57.5	0.0991	0.193	0.0034	317	386	6,500	300/D
240/120	2	37	19.98	2.3	37	14.00	1.7	2.0	3.0	64.5	0.0754	0.153	0.0033	374	448	8,500	300/D
300/150	2	61	22.41	2.5	37	15.54	1.9	2.0	3.2	71.0	0.0601	0.124	0.0032	432	507	10,500	200/D

Conductor Class 2 : Stranded
D : Packing in drum

Core Color : Blue, Brown, Green/Yellow

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NYY-G

450/750 V.70°C STRANDED CONDUCTOR

PVC INSULATED AND DOUBLE SHEATHED, 3 CORES WITH GROUND

APPLICATION

- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 5

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper
CLASS 2 Size 25/16 - 300/150 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 5

Nominal cross sectional area	Conductor type	Phase Core			Ground Core			Nominal inner sheathed thickness	Nominal outer Sheathed Thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating		Cable weight (approx.)	Standard packing
		Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness							on cable ladder at 40°C	direct burial in ground at 30°C		
mm²	Class	No.	mm	mm	No.	mm	mm	mm	mm	mm	Ω/km	Ω/km	MΩ-km	A	A	kg/km	m
25/16	2	7	6.33	1.3	7	5.04	1.1	1.2	2.0	30.5	0.727	1.150	0.0054	88	128	1,500	500/D
35/16	2	7	7.47	1.3	7	5.04	1.1	1.2	2.0	33.0	0.524	1.150	0.0047	110	154	1,900	500/D
50/25	2	19	8.80	1.5	7	6.33	1.3	1.5	2.2	38.5	0.387	0.727	0.0046	133	181	2,600	500/D
70/35	2	19	10.55	1.5	7	7.47	1.3	1.5	2.2	42.5	0.268	0.524	0.0039	171	223	3,500	500/D
95/50	2	19	12.45	1.7	19	8.80	1.5	1.5	2.4	48.5	0.193	0.387	0.0038	207	267	4,700	500/D
120/70	2	37	14.00	1.7	19	10.55	1.5	1.8	2.6	53.5	0.153	0.268	0.0034	240	304	6,000	500/D
150/95	2	37	15.54	1.9	19	12.45	1.7	1.8	2.8	59.0	0.124	0.193	0.0034	278	342	7,500	300/D
185/95	2	37	17.43	2.1	19	12.45	1.7	2.0	3.0	64.5	0.0991	0.193	0.0034	317	386	9,000	300/D
240/120	2	37	19.98	2.3	37	14.00	1.7	2.0	3.2	72.0	0.0754	0.153	0.0033	374	448	11,500	200/D
300/150	2	61	22.41	2.5	37	15.54	1.9	2.2	3.4	79.5	0.0601	0.124	0.0032	432	507	14,000	200/D

Conductor Class 2 : Stranded
D : Packing in drum

Core Color : Brown, Black, Grey, Green/Yellow

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NYY-G

450/750 V. 70°C STRANDED CONDUCTOR

PVC INSULATED AND DOUBLE SHEATHED, 4 CORES WITH GROUND

APPLICATION

- Use for general purpose
- laid on cable trays/Cable ladder
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 5

CABLE STRUCTURE

CONDUCTOR : Annealed Stranded Copper
CLASS 2 Size 25/16 - 300/150 mm²

INSULATION : Polyvinyl chloride type PVC/C

INNER SHEATHED :
Polyvinyl chloride type PVC/ST4

OUTER SHEATHED :
Polyvinyl chloride type PVC/ST4

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 5

Nominal cross sectional area	Conductor type	Phase Core			Ground Core			Nominal inner sheathed thickness	Nominal outer Sheathed Thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating on cable ladder at 40°C	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
		Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness										
mm²	Class	No.	mm	mm	No.	mm	mm	mm	mm	mm	Ω/km	Ω/km	MΩ-km	A	A	kg/km	m
25/16	2	7	6.33	1.3	7	5.04	1.1	1.2	2.0	34.0	0.727	1.150	0.0054	88	128	1,900	500/D
35/16	2	7	7.47	1.3	7	5.04	1.1	1.5	2.2	39.0	0.524	1.150	0.0047	110	154	2,400	500/D
50/25	2	19	8.80	1.5	7	6.33	1.3	1.5	2.2	43.5	0.387	0.727	0.0046	133	181	3,300	500/D
70/35	2	19	10.55	1.5	7	7.47	1.3	1.5	2.4	49.0	0.268	0.524	0.0039	171	223	4,500	500/D
95/50	2	19	12.45	1.7	19	8.80	1.5	1.8	2.6	56.5	0.193	0.387	0.0038	207	267	6,100	500/D
120/70	2	37	14.00	1.7	19	10.55	1.5	1.8	2.8	61.5	0.153	0.268	0.0034	240	304	7,500	500/D
150/95	2	37	15.54	1.9	19	12.45	1.7	2.0	3.0	68.0	0.124	0.193	0.0034	278	342	9,500	300/D
185/95	2	37	17.43	2.1	19	12.45	1.7	2.0	3.2	75.0	0.0991	0.193	0.0034	317	386	11,500	300/D
240/120	2	37	19.98	2.3	37	14.00	1.7	2.2	3.4	84.5	0.0754	0.153	0.0033	374	448	14,500	200/D
300/150	2	61	22.41	2.5	37	15.54	1.9	2.2	3.8	93.5	0.0601	0.124	0.0032	432	507	18,000	200/D

Conductor Class 2 : Stranded
D : Packing in drum

Core Color : Blue, Brown, Black, Grey, Green/Yellow

การใช้งาน
- ใช้งานทั่วไป
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VCT

450/750 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, SINGLE CORE

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CORE IDENTIFICATION :
Single core, color as request

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
4	5	0.31	2.59	0.9	1.4	8.6	4.95	0.0084	30	90	100/C
6	5	0.31	3.59	0.9	1.4	9.4	3.30	0.0071	39	120	100/C
10	5	0.41	4.67	1.1	1.8	12.0	1.91	0.0068	51	210	500/D
16	5	0.41	5.86	1.1	1.8	13.5	1.21	0.0050	73	270	500/D
25	5	0.41	7.31	1.3	2.2	16.0	0.780	0.0048	97	410	500/D
35	5	0.41	8.67	1.3	2.2	17.5	0.554	0.0041	140	550	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT

450/750 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, 2 CORES

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
4	5	0.31	2.59	0.9	1.6	14.5	4.95	0.0084	30	230	100/C
6	5	0.31	3.59	0.9	1.6	16.0	3.30	0.0071	39	320	100/C
10	5	0.41	4.67	1.1	1.8	20.0	1.91	0.0068	51	500	500/D
16	5	0.41	5.86	1.1	2.2	23.0	1.21	0.0050	73	700	500/D
25	5	0.41	7.31	1.3	2.4	27.5	0.780	0.0048	97	1,000	500/D
35	5	0.41	8.67	1.3	2.6	31.0	0.554	0.0041	140	1,400	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT

450/750 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, 3 CORES

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
4	5	0.31	2.59	0.9	1.6	15.5	4.95	0.0084	26	280	100/C
6	5	0.31	3.59	0.9	1.8	17.5	3.30	0.0071	34	390	100/C
10	5	0.41	4.67	1.1	2.0	21.5	1.91	0.0068	47	650	500/D
16	5	0.41	5.86	1.1	2.4	25.0	1.21	0.0050	63	900	500/D
25	5	0.41	7.31	1.3	2.6	30.0	0.780	0.0048	83	1,300	500/D
35	5	0.41	8.67	1.3	2.8	33.5	0.554	0.0041	102	1,700	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Brown, Black, Grey

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT

450/750 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, 4 CORES

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 7

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4 - 35 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 7

Nominal cross sectional area	Conductor type	Maximum Diameter of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	mm	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
4	5	0.31	2.59	0.9	1.8	17.0	4.95	0.0084	26	350	100/C
6	5	0.31	3.59	0.9	2.0	19.5	3.30	0.0071	34	490	100/C
10	5	0.41	4.67	1.1	2.2	24.0	1.91	0.0068	47	800	500/D
16	5	0.41	5.86	1.1	2.6	28.0	1.21	0.0050	63	1,100	500/D
25	5	0.41	7.31	1.3	2.8	33.0	0.780	0.0048	83	1,700	500/D
35	5	0.41	8.67	1.3	3.1	37.0	0.554	0.0041	102	2,200	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Black, Grey

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT-G

450/750 V. 70 °C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 2 CORES WITH GROUND

APPLICATION
- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 8

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4/4 - 35/16 mm²

INSULATION : Polyvinyl chloride type PVC/D

SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 8

Nominal cross sectional area	Conductor type	Phase Core		Ground Core		Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
		Maximum Diameter of wires	Nominal insulation thickness	Maximum Diameter of wires	Nominal insulation thickness								
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	Ω/km	mΩ-km	A	kg/km	m
4/4	5	0.31	0.9	0.31	0.9	1.6	15.5	4.95	4.95	0.0084	26	280	100/C
6/6	5	0.31	0.9	0.31	0.9	1.8	17.5	3.30	3.30	0.0071	34	400	100/C
10/10	5	0.41	1.1	0.41	1.1	2.0	21.5	1.91	1.91	0.0068	47	650	500/D
16/16	5	0.41	1.1	0.41	1.1	2.4	25.0	1.21	1.21	0.0050	63	900	500/D
25/16	5	0.41	1.3	0.41	1.1	2.6	28.5	0.780	1.21	0.0046	83	1,200	500/D
35/16	5	0.41	1.3	0.41	1.1	2.8	31.5	0.554	1.21	0.0041	102	1,500	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Green/Yellow

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT-G

450/750 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 3 CORES WITH GROUND

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 8

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4/4 - 35/16 mm²
INSULATION : Polyvinyl chloride type PVC/D
SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 8

Nominal cross sectional area	Conductor type	Phase Core		Ground Core		Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
		Maximum Diameter of wires	Nominal insulation thickness	Maximum Diameter of wires	Nominal insulation thickness								
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	Ω/km	mΩ-km	A	kg/km	m
4/4	5	0.31	0.9	0.31	0.9	1.8	17.0	4.95	4.95	0.0084	26	360	100/C
6/6	5	0.31	0.9	0.31	0.9	2.0	19.5	3.30	3.30	0.0071	34	500	100/C
10/10	5	0.41	1.1	0.41	1.1	2.2	24.0	1.91	1.91	0.0068	47	800	500/D
16/16	5	0.41	1.1	0.41	1.1	2.6	28.0	1.21	1.21	0.0050	63	1,200	500/D
25/16	5	0.41	1.3	0.41	1.1	2.8	33.0	0.780	1.21	0.0048	83	1,600	500/D
35/16	5	0.41	1.3	0.41	1.1	3.1	37.0	0.554	1.21	0.0041	102	2,100	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Brown, Black, Grey, Green/Yellow

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

VCT-G

450/750 V. 70°C FLEXIBLE CONDUCTOR
PVC INSULATED AND SHEATHED, 4 CORES WITH GROUND

APPLICATION

- Use for general purpose
- Use for connecting electric appliance
- Laid on cable trays
- install in duct in ground or direct burial in ground

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :
TIS 11-2553 PART 101, TABLE 8

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 4/4 - 35/16 mm²
INSULATION : Polyvinyl chloride type PVC/D
SHEATHED : Polyvinyl chloride type PVC/ST5

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed
450/750 Volts (U_0/U)
450 Volts between Line to Earth (U_0)
750 Volts between Line to Line (U)

Technical Data

TIS 11-2553 PART 101, TABLE 8

Nominal cross sectional area	Conductor type	Phase Core		Ground Core		Nominal sheathed thickness	Maximum Overall diameter	Maximum conductor resistance at 20°C (Phase)	Maximum conductor resistance at 20°C (Ground)	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
		Maximum Diameter of wires	Nominal insulation thickness	Maximum Diameter of wires	Nominal insulation thickness								
mm²	Class	mm	mm	mm	mm	mm	mm	Ω/km	Ω/km	mΩ-km	A	kg/km	m
4/4	5	0.31	0.9	0.31	0.9	1.8	18.5	4.95	4.95	0.0084	26	440	100/C
6/6	5	0.31	0.9	0.31	0.9	2.0	21.5	3.30	3.30	0.0071	34	600	100/C
10/10	5	0.41	1.1	0.41	1.1	2.2	26.5	1.91	1.91	0.0068	47	1,000	500/D
16/16	5	0.41	1.1	0.41	1.1	2.6	30.5	1.21	1.21	0.0050	63	1,400	500/D
25/16	5	0.41	1.3	0.41	1.1	2.8	36.5	0.780	1.21	0.0046	83	2,000	500/D
35/16	5	0.41	1.3	0.41	1.1	3.1	41.5	0.554	1.21	0.0041	102	2,600	500/D

Conductor Class 5 : Flexible
C : Packing in coil
D : Packing in drum

Core Color : Blue, Brown, Black, Grey, Green/Yellow

การใช้งาน
- ใช้งานทั่วไป
- ใช้ต่อเข้าเครื่องใช้ไฟฟ้า
- วางบนรางเคเบิล
- รอยท่อฝังดินหรือฝังดินโดยตรง

0.6/1kV CV

0.6/1kV. 90°C CROSS-LINKED POLYETHYLENE INSULATED, PVC SHEATHED POWER CABLE, SINGLE CORE

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground
- If use indoor must installation in raceway closed except for FD-0.6/1 kV-CV

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 800 mm²

INSULATION : Cross-linked polyethylene (XLPE)

SHEATHED :
Black polyvinyl chloride type PVC/ST2

CORE IDENTIFICATION :
Natural color (Translucent)

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Current rating in free' air at 40°C ambient	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
1.5	1.50	0.7	1.4	6.3	12.1	2,550	27	33	50	500/D
2.5	1.98	0.7	1.4	6.8	7.41	2,100	38	43	60	500/D
4	2.49	0.7	1.4	7.3	4.61	1,700	51	56	80	500/D
6	3.09	0.7	1.4	7.9	3.08	1,450	66	71	100	500/D
10	3.72	0.7	1.4	8.4	1.83	1,250	92	94	140	500/D
16	4.69	0.7	1.4	9.4	1.15	1,000	124	120	200	500/D
25	5.90	0.9	1.4	11.0	0.727	1,050	166	155	300	500/D
35	6.95	0.9	1.4	12.0	0.524	900	206	185	400	500/D
50	8.33	1.0	1.4	13.5	0.387	850	259	225	500	500/D
70	9.73	1.1	1.4	16.0	0.268	800	321	275	750	500/D
95	11.43	1.1	1.5	18.2	0.193	700	391	330	1,000	500/D
120	12.95	1.2	1.5	19.9	0.153	650	455	375	1,200	500/D
150	14.27	1.4	1.6	22.1	0.124	700	525	425	1,500	500/D
185	15.98	1.6	1.6	23.0	0.0991	700	602	480	1,900	500/D
240	18.47	1.7	1.7	26.5	0.0754	650	711	560	2,500	500/D
300	20.68	1.8	1.8	29.0	0.0601	600	821	635	3,100	500/D
400	23.39	2.0	1.9	32.0	0.0470	600	988	725	3,900	500/D
500	26.67	2.2	2.0	36.0	12.1	600	1,140	830	5,000	500/D
630	30.22	2.4	2.2	40.0	7.41	550	1,323	945	6,500	300/D
800	34.00	2.6	2.3	46.0	4.61	550	1,543	1,060	8,500	300/D

D : Packing in drum

การใช้งาน
- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง
- ถ้าใช้ภายในอาคารจะต้องติดตั้งในช่องเดินสายไฟที่ปิดมิดชิด ยกเว้น FD-0.6/1 kV-CV

0.6/1kV CV

0.6/1kV. 90°C CROSS-LINKED POLYETHYLENE INSULATED, PVC SHEATHED POWER CABLE, 2 CORES

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground
- If use indoor must installation in raceway closed except for FD-0.6/1 kV-CV

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Current rating in free' air at 40°C ambient	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
1.5	1.50	0.7	1.8	11.0	12.1	2,550	24	33	130	500/D
2.5	1.98	0.7	1.8	11.5	7.41	2,100	33	44	160	500/D
4	2.49	0.7	1.8	12.5	4.61	1,700	44	58	200	500/D
6	3.09	0.7	1.8	14.0	3.08	1,450	57	73	260	500/D
10	3.72	0.7	1.8	15.0	1.83	1,250	78	97	340	500/D
16	4.69	0.7	1.8	17.0	1.15	1,000	105	125	480	500/D
25	5.90	0.9	1.8	21.0	0.727	1,050	135	165	700	500/D
35	6.95	0.9	1.8	23.0	0.524	900	168	195	900	500/D
50	8.33	1.0	1.8	26.0	0.387	850	212	235	1,200	500/D
70	9.73	1.1	1.8	29.0	0.268	800	263	290	1,700	500/D
95	11.43	1.1	2.0	33.0	0.193	700	321	350	2,300	500/D
120	12.95	1.2	2.1	37.0	0.153	650	373	400	2,800	500/D
150	14.27	1.4	2.2	41.0	0.124	700	431	450	3,500	500/D
185	15.98	1.6	2.3	45.0	0.0991	700	493	505	4,300	500/D
240	18.47	1.7	2.5	51.0	0.0754	650	584	585	5,500	500/D
300	20.68	1.8	2.7	56.0	0.0601	600	674	665	7,000	300/D
400	23.39	2.0	2.9	63.0	0.0470	600	812	750	9,000	300/D

D : Packing in drum

Core Color : Blue, Brown

การใช้งาน

- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง
- ถ้าใช้ภายในอาคารจะต้องติดตั้งในช่องเดินสายไฟที่ปิดมิดชิด ยกเว้น FD-0.6/1 kV-CV

0.6/1kV CV

0.6/1kV. 90°C CROSS-LINKED POLYETHYLENE INSULATED, PVC SHEATHED POWER CABLE, 3 CORES

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground
- If use indoor must installation in raceway closed except for FD-0.6/1 kV-CV

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Current rating in free' air at 40°C ambient	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
1.5	1.50	0.7	1.8	11.5	12.1	2,550	21	28	150	500/D
2.5	1.98	0.7	1.8	12.5	7.41	2,100	29	37	190	500/D
4	2.49	0.7	1.8	13.5	4.61	1,700	38	49	240	500/D
6	3.09	0.7	1.8	14.5	3.08	1,450	49	61	320	500/D
10	3.72	0.7	1.8	16.0	1.83	1,250	68	82	440	500/D
16	4.69	0.7	1.8	18.0	1.15	1,000	91	105	650	500/D
25	5.90	0.9	1.8	22.0	0.727	1,050	116	135	950	500/D
35	6.95	0.9	1.8	24.0	0.524	900	144	165	1,300	500/D
50	8.33	1.0	1.8	27.0	0.387	850	180	200	1,600	500/D
70	9.73	1.1	1.9	31.0	0.268	800	224	245	2,300	500/D
95	11.43	1.1	2.0	36.0	0.193	700	271	295	3,100	500/D
120	12.95	1.2	2.1	39.0	0.153	650	315	335	4,000	500/D
150	14.27	1.4	2.3	44.0	0.124	700	363	380	4,900	500/D
185	15.98	1.6	2.4	49.0	0.0991	700	415	425	6,000	500/D
240	18.47	1.7	2.6	55.0	0.0754	650	490	495	8,000	500/D
300	20.68	1.8	2.8	61.0	0.0601	600	565	560	10,000	300/D
400	23.39	2.0	3.1	68.0	0.0470	600	678	630	12,500	300/D

D : Packing in drum

Core Color : Brown, Black, Grey

การใช้งาน

- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง
- ถ้าใช้ภายในอาคารจะต้องติดตั้งในช่องเดินสายไฟที่ปิดมิดชิด ยกเว้น FD-0.6/1 kV-CV

0.6/1kV CV

0.6/1kV. 90°C CROSS-LINKED POLYETHYLENE INSULATED, PVC SHEATHED POWER CABLE, 4 CORES

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground
- If use indoor must installation in raceway closed except for FD-0.6/1 kV-CV

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Current rating in free' air at 40°C ambient	Current rating direct burial in ground at 30°C	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	mm	Ω/km	MΩ-km	A	A	kg/km	m
1.5	1.50	0.7	1.8	12.0	12.1	2,550	21	28	180	500/D
2.5	1.98	0.7	1.8	13.0	7.41	2,100	29	37	230	500/D
4	2.49	0.7	1.8	14.5	4.61	1,700	38	49	300	500/D
6	3.09	0.7	1.8	16.0	3.08	1,450	49	61	400	500/D
10	3.72	0.7	1.8	17.5	1.83	1,250	68	82	550	500/D
16	4.69	0.7	1.8	20.0	1.15	1,000	91	105	800	500/D
25	5.90	0.9	1.8	24.0	0.727	1,050	116	135	1,200	500/D
35	6.95	0.9	1.8	27.0	0.524	900	144	165	1,600	500/D
50	8.33	1.0	1.9	30.0	0.387	850	180	200	2,200	500/D
70	9.73	1.1	2.0	35.0	0.268	800	224	245	3,000	500/D
95	11.43	1.1	2.1	39.0	0.193	700	271	295	4,100	500/D
120	12.95	1.2	2.3	44.0	0.153	650	315	335	5,000	500/D
150	14.27	1.4	2.4	49.0	0.124	700	363	380	6,500	500/D
185	15.98	1.6	2.6	54.0	0.0991	700	415	425	8,000	500/D
240	18.47	1.7	2.8	61.0	0.0754	650	490	495	10,500	500/D
300	20.68	1.8	3.0	68.0	0.0601	600	565	560	13,000	300/D
400	23.39	2.0	3.3	76.0	0.0470	600	678	630	16,500	300/D

D : Packing in drum

Core Color : Blue, Brown, Black, Grey

การใช้งาน

- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง
- ถ้าใช้ภายในอาคารจะต้องติดตั้งในช่องเดินสายไฟที่ปิดมิดชิด ยกเว้น FD-0.6/1 kV-CV

0.6/1kV CV-FD

0.6/1kV, 90°C CROSS-LINKED POLYETHYLENE INSULATED,
PVC SHEATHED FLAME RETARDANT POWER CABLE, SINGLE CORE

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1, IEC 60228, IEC 60332-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 800 mm²

INSULATION : Cross-linked polyethylene (XLPE)

SHEATHED :
Black polyvinyl chloride type PVC/ST2

BINDING TAPE :
Spundbond tape or polyester tape

CORE IDENTIFICATION :
Natural color (Translucent)

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
1.5	7	1.50	0.7	1.4	6.3	12.1	2,550	50	500/D
2.5	7	1.98	0.7	1.4	6.8	7.41	2,100	60	500/D
4	7	2.49	0.7	1.4	7.3	4.61	1,700	80	500/D
6	7	3.09	0.7	1.4	7.9	3.08	1,450	100	500/D
10	6	3.72	0.7	1.4	8.4	1.83	1,250	140	500/D
16	6	4.69	0.7	1.4	9.4	1.15	1,000	200	500/D
25	6	5.90	0.9	1.4	11.0	0.727	1,050	300	500/D
35	6	6.95	0.9	1.4	12.0	0.524	900	400	500/D
50	6	8.33	1.0	1.4	13.5	0.387	850	500	500/D
70	12	9.73	1.1	1.4	16.0	0.268	800	750	500/D
95	15	11.43	1.1	1.5	18.2	0.193	700	1,000	500/D
120	18	12.95	1.2	1.5	19.9	0.153	650	1,200	500/D
150	18	14.27	1.4	1.6	22.1	0.124	700	1,500	500/D
185	30	15.98	1.6	1.6	23.0	0.0991	700	1,900	500/D
240	34	18.47	1.7	1.7	26.5	0.0754	650	2,500	500/D
300	34	20.68	1.8	1.8	29.0	0.0601	600	3,100	500/D
400	53	23.39	2.0	1.9	32.0	0.0470	600	3,900	500/D
500	53	26.67	2.2	2.0	36.0	0.0366	600	5,000	500/D
630	53	30.22	2.4	2.2	40.0	0.0283	550	6,500	300/D
800	53	34.00	2.6	2.3	46.0	0.0221	550	8,500	300/D

D : Packing in drum

การใช้งาน

- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

www.ssupercable.com

0.6/1kV CV-FD

0.6/1kV, 90°C CROSS-LINKED POLYETHYLENE INSULATED,
PVC SHEATHED FLAME RETARDANT POWER CABLE, 2 CORE

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1, IEC 60228, IEC 60332-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
1.5	7	1.50	0.7	1.8	11.0	12.1	2,550	130	500/D
2.5	7	1.98	0.7	1.8	11.5	7.41	2,100	160	500/D
4	7	2.49	0.7	1.8	12.5	4.61	1,700	200	500/D
6	7	3.09	0.7	1.8	14.0	3.08	1,450	260	500/D
10	6	3.72	0.7	1.8	15.0	1.83	1,250	340	500/D
16	6	4.69	0.7	1.8	17.0	1.15	1,000	480	500/D
25	6	5.90	0.9	1.8	21.0	0.727	1,050	700	500/D
35	6	6.95	0.9	1.8	23.0	0.524	900	900	500/D
50	6	8.33	1.0	1.8	26.0	0.387	850	1,200	500/D
70	12	9.73	1.1	1.8	29.0	0.268	800	1,700	500/D
95	15	11.43	1.1	2.0	33.0	0.193	700	2,300	500/D
120	18	12.95	1.2	2.1	37.0	0.153	650	2,800	500/D
150	18	14.27	1.4	2.2	41.0	0.124	700	3,500	500/D
185	30	15.98	1.6	2.3	45.0	0.0991	700	4,300	500/D
240	34	18.47	1.7	2.5	51.0	0.0754	650	5,500	500/D
300	34	20.68	1.8	2.7	56.0	0.0601	600	7,000	300/D
400	53	23.39	2.0	2.9	63.0	0.0470	600	9,000	300/D

D : Packing in drum

Core Color : Blue, Brown

การใช้งาน
- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

0.6/1kV CV-FD

0.6/1kV, 90°C CROSS-LINKED POLYETHYLENE INSULATED,
PVC SHEATHED FLAME RETARDANT POWER CABLE, 3 CORE

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1, IEC 60228, IEC 60332-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
1.5	7	1.50	0.7	1.8	11.5	12.1	2,550	150	500/D
2.5	7	1.98	0.7	1.8	12.5	7.41	2,100	190	500/D
4	7	2.49	0.7	1.8	13.5	4.61	1,700	240	500/D
6	7	3.09	0.7	1.8	14.5	3.08	1,450	320	500/D
10	6	3.72	0.7	1.8	16.0	1.83	1,250	440	500/D
16	6	4.69	0.7	1.8	18.0	1.15	1,000	650	500/D
25	6	5.90	0.9	1.8	22.0	0.727	1,050	950	500/D
35	6	6.95	0.9	1.8	24.0	0.524	900	1,300	500/D
50	6	8.33	1.0	1.8	27.0	0.387	850	1,600	500/D
70	12	9.73	1.1	1.9	31.0	0.268	800	2,300	500/D
95	15	11.43	1.1	2.0	36.0	0.193	700	3,100	500/D
120	18	12.95	1.2	2.1	39.0	0.153	650	4,000	500/D
150	18	14.27	1.4	2.3	44.0	0.124	700	4,900	500/D
185	30	15.98	1.6	2.4	49.0	0.0991	700	6,000	500/D
240	34	18.47	1.7	2.6	55.0	0.0754	650	8,000	500/D
300	34	20.68	1.8	2.8	61.0	0.0601	600	10,000	300/D
400	53	23.39	2.0	3.1	68.0	0.0470	600	12,500	300/D

D : Packing in drum

Core Color : Brown, Black, Grey

การใช้งาน

- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

0.6/1kV CV-FD

0.6/1kV, 90°C CROSS-LINKED POLYETHYLENE INSULATED,
PVC SHEATHED FLAME RETARDANT POWER CABLE, 4 CORE

APPLICATION

- Use for general purpose
- Install in duct in ground or direct burial in ground

TESTING VOLTAGE : 3,500 Volts

REFERENCE STANDARD :
IEC 60502-1, IEC 60228, IEC 60332-1

CABLE STRUCTURE

CONDUCTOR : Concentric stranded and compacted round annealed copper
Size 1.5 - 400 mm²

INSULATION : Cross-linked polyethylene (XLPE)

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Black polyvinyl chloride type PVC/ST2

CLASSIFICATION

Maximum Conductor Temperature : 90°C
Circuit Voltage does not exceed
0.6/1 kV (U_0/U)
600 Volts between Line to Earth (U_0)
1,000 Volts between Line to Line (U)

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
1.5	7	1.50	0.7	1.8	12.0	12.1	2,550	180	500/D
2.5	7	1.98	0.7	1.8	13.0	7.41	2,100	230	500/D
4	7	2.49	0.7	1.8	14.5	4.61	1,700	300	500/D
6	7	3.09	0.7	1.8	16.0	3.08	1,450	400	500/D
10	6	3.72	0.7	1.8	17.5	1.83	1,250	550	500/D
16	6	4.69	0.7	1.8	20.0	1.15	1,000	800	500/D
25	6	5.90	0.9	1.8	24.0	0.727	1,050	1,200	500/D
35	6	6.95	0.9	1.8	27.0	0.524	900	1,600	500/D
50	6	8.33	1.0	1.9	30.0	0.387	850	2,200	500/D
70	12	9.73	1.1	2.0	35.0	0.268	800	3,000	500/D
95	15	11.43	1.1	2.1	39.0	0.193	700	4,100	500/D
120	18	12.95	1.2	2.3	44.0	0.153	650	5,000	500/D
150	18	14.27	1.4	2.4	49.0	0.124	700	6,500	500/D
185	30	15.98	1.6	2.6	54.0	0.0991	700	8,000	500/D
240	34	18.47	1.7	2.8	61.0	0.0754	650	10,500	500/D
300	34	20.68	1.8	3.0	68.0	0.0601	600	13,000	300/D
400	53	23.39	2.0	3.3	76.0	0.0470	600	16,500	300/D

D : Packing in drum

Core Color : Blue, Brown, Black, Grey

การใช้งาน
- ใช้งานทั่วไป
- ร้อยท่อฝังดินหรือฝังดินโดยตรง

CVV or CVV-S

600 V, 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED CONTROL CABLE

600 V, 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE

APPLICATION

For supervisory electrical equipment, station control circuits, outdoor, suitable installation in the dry or wet cable trenches.

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :

TIS 838-2531, Table 10

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper 2 - 48 cores Size 0.5 - 6 mm²

INSULATION : Polyvinyl chloride

FILLER : PP yarn

BINDING TAPE : Spundbond tape or polyester tape

SHEATHED : Polyvinyl chloride

CLASSIFICATION

Maximum Conductor Temperature : 70 °C

Circuit Voltage does not exceed 600 Volts

CORE IDENTIFICATION :

Identification by color and marking

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
2	0.50	16	0.20	0.95	0.6	0.9	7.5	39.0	0.0130	49	300/D
	0.75	24	0.20	1.15	0.6	1.2	8.5	26.0	0.0114	65	300/D
	1.0	32	0.20	1.30	0.6	1.2	8.7	19.5	0.0104	75	300/D
	1.5	30	0.25	1.60	0.6	1.2	9.3	13.3	0.0089	90	300/D
	2.5	50	0.25	2.10	0.7	1.2	10.5	7.98	0.0081	130	300/D
	4.0	56	0.30	2.60	0.8	1.2	12.0	4.95	0.0076	170	300/D
	6.0	84	0.30	3.40	0.8	1.4	14.0	3.30	0.0061	250	300/D
3	0.50	16	0.20	0.95	0.6	1.2	8.5	39.0	0.0130	65	300/D
	0.75	24	0.20	1.15	0.6	1.2	8.9	26.0	0.0114	80	300/D
	1.0	32	0.20	1.30	0.6	1.2	9.1	19.5	0.0104	90	300/D
	1.5	30	0.25	1.60	0.6	1.2	9.8	13.3	0.0089	110	300/D
	2.5	50	0.25	2.10	0.7	1.2	11.0	7.98	0.0081	160	300/D
	4.0	56	0.30	2.60	0.8	1.2	13.0	4.95	0.0076	230	300/D
	6.0	84	0.30	3.40	0.8	1.4	15.0	3.30	0.0061	330	300/D
4	0.50	16	0.20	0.95	0.6	1.2	9.1	39.0	0.0130	80	300/D
	0.75	24	0.20	1.15	0.6	1.2	9.6	26.0	0.0114	95	300/D
	1.0	32	0.20	1.30	0.6	1.2	9.8	19.5	0.0104	110	300/D
	1.5	30	0.25	1.60	0.6	1.2	10.5	13.3	0.0089	140	300/D
	2.5	50	0.25	2.10	0.7	1.2	12.0	7.98	0.0081	200	300/D
	4.0	56	0.30	2.60	0.8	1.4	14.5	4.95	0.0076	300	300/D
	6.0	84	0.30	3.40	0.8	1.4	16.5	3.30	0.0061	410	300/D
5	0.50	16	0.20	0.95	0.6	1.2	9.8	39.0	0.0130	90	300/D
	0.75	24	0.20	1.15	0.6	1.2	10.0	26.0	0.0114	110	300/D
	1.0	32	0.20	1.30	0.6	1.2	10.5	19.5	0.0104	130	300/D
	1.5	30	0.25	1.60	0.6	1.2	11.5	13.3	0.0089	160	300/D
	2.5	50	0.25	2.10	0.7	1.4	13.5	7.98	0.0081	250	300/D
	4.0	56	0.30	2.60	0.8	1.4	15.5	4.95	0.0076	350	300/D
	6.0	84	0.30	3.40	0.8	1.4	18.0	3.30	0.0061	500	300/D
6	0.50	16	0.20	0.95	0.6	1.2	10.5	39.0	0.0130	110	300/D
	0.75	24	0.20	1.15	0.6	1.2	11.0	26.0	0.0114	130	300/D
	1.0	32	0.20	1.30	0.6	1.2	11.5	19.5	0.0104	150	300/D
	1.5	30	0.25	1.60	0.6	1.2	12.0	13.3	0.0089	190	300/D
	2.5	50	0.25	2.10	0.7	1.4	14.5	7.98	0.0081	290	300/D
	4.0	56	0.30	2.60	0.8	1.4	17.0	4.95	0.0076	420	300/D
	6.0	84	0.30	3.40	0.8	1.4	19.5	3.30	0.0061	600	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

- ใช้ต่อเข้าเครื่องที่ใช้ในการควบคุมวงจร
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CVV or CVV-S

600 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED CONTROL CABLE

600 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
7	0.50	16	0.20	0.95	0.6	1.2	10.5	39.0	0.0130	110	300/D
	0.75	24	0.20	1.15	0.6	1.2	11.0	26.0	0.0114	140	300/D
	1.0	32	0.20	1.30	0.6	1.2	11.5	19.5	0.0104	160	300/D
	1.5	30	0.25	1.60	0.6	1.2	12.0	13.3	0.0089	210	300/D
	2.5	50	0.25	2.10	0.7	1.4	14.5	7.98	0.0081	320	300/D
	4.0	56	0.30	2.60	0.8	1.4	17.0	4.95	0.0076	460	300/D
	6.0	84	0.30	3.40	0.8	1.4	19.5	3.30	0.0061	650	300/D
8	0.50	16	0.20	0.95	0.6	1.2	11.0	39.0	0.0130	130	300/D
	0.75	24	0.20	1.15	0.6	1.2	11.5	26.0	0.0114	160	300/D
	1.0	32	0.20	1.30	0.6	1.2	12.0	19.5	0.0104	180	300/D
	1.5	30	0.25	1.60	0.6	1.4	13.5	13.3	0.0089	240	300/D
	2.5	50	0.25	2.10	0.7	1.4	16.0	7.98	0.0081	360	300/D
	4.0	56	0.30	2.60	0.8	1.4	18.5	4.95	0.0076	550	300/D
	6.0	84	0.30	3.40	0.8	1.4	21.0	3.30	0.0061	750	300/D
9	0.50	16	0.20	0.95	0.6	1.2	12.0	39.0	0.0130	150	300/D
	0.75	24	0.20	1.15	0.6	1.2	12.5	26.0	0.0114	180	300/D
	1.0	32	0.20	1.30	0.6	1.4	13.5	19.5	0.0104	220	300/D
	1.5	30	0.25	1.60	0.6	1.4	14.5	13.3	0.0089	270	300/D
	2.5	50	0.25	2.10	0.7	1.4	17.0	7.98	0.0081	410	300/D
	4.0	56	0.30	2.60	0.8	1.4	20.0	4.95	0.0076	600	300/D
	6.0	84	0.30	3.40	0.8	1.4	23.0	3.30	0.0061	850	300/D
10	0.50	16	0.20	0.95	0.6	1.2	12.5	39.0	0.0130	150	300/D
	0.75	24	0.20	1.15	0.6	1.4	14.0	26.0	0.0114	210	300/D
	1.0	32	0.20	1.30	0.6	1.4	14.5	19.5	0.0104	240	300/D
	1.5	30	0.25	1.60	0.6	1.4	15.5	13.3	0.0089	310	300/D
	2.5	50	0.25	2.10	0.7	1.4	18.0	7.98	0.0081	460	300/D
	4.0	56	0.30	2.60	0.8	1.4	21.0	4.95	0.0076	650	300/D
	6.0	84	0.30	3.40	0.8	1.8	25.0	3.30	0.0061	1,000	300/D
11	0.50	16	0.20	0.95	0.6	1.2	12.5	39.0	0.0130	170	300/D
	0.75	24	0.20	1.15	0.6	1.4	14.0	26.0	0.0114	210	300/D
	1.0	32	0.20	1.30	0.6	1.4	14.5	19.5	0.0104	250	300/D
	1.5	30	0.25	1.60	0.6	1.4	15.5	13.3	0.0089	320	300/D
	2.5	50	0.25	2.10	0.7	1.4	18.0	7.98	0.0081	480	300/D
	4.0	56	0.30	2.60	0.8	1.4	21.0	4.95	0.0076	700	300/D
	6.0	84	0.30	3.40	0.8	1.8	25.0	3.30	0.0061	1,100	300/D
12	0.50	16	0.20	0.95	0.6	1.2	13.0	39.0	0.0130	180	300/D
	0.75	24	0.20	1.15	0.6	1.4	14.5	26.0	0.0114	220	300/D
	1.0	32	0.20	1.30	0.6	1.4	15.0	19.5	0.0104	280	300/D
	1.5	30	0.25	1.60	0.6	1.4	16.0	13.3	0.0089	350	300/D
	2.5	50	0.25	2.10	0.7	1.4	19.0	7.98	0.0081	550	300/D
	4.0	56	0.30	2.60	0.8	1.4	22.0	4.95	0.0076	750	300/D
	6.0	84	0.30	3.40	0.8	1.8	26.0	3.30	0.0061	1,200	300/D
13	0.50	16	0.20	0.95	0.6	1.4	14.0	39.0	0.0130	200	300/D
	0.75	24	0.20	1.15	0.6	1.4	15.0	26.0	0.0114	250	300/D
	1.0	32	0.20	1.30	0.6	1.4	15.5	19.5	0.0104	290	300/D
	1.5	30	0.25	1.60	0.6	1.4	17.0	13.3	0.0089	370	300/D
	2.5	50	0.25	2.10	0.7	1.4	20.0	7.98	0.0081	550	300/D
	4.0	56	0.30	2.60	0.8	1.4	23.0	4.95	0.0076	850	300/D
	6.0	84	0.30	3.40	0.8	1.8	28.0	3.30	0.0061	1,200	300/D
14	0.50	16	0.20	0.95	0.6	1.4	14.0	39.0	0.0130	210	300/D
	0.75	24	0.20	1.15	0.6	1.4	15.0	26.0	0.0114	250	300/D
	1.0	32	0.20	1.30	0.6	1.4	15.5	19.5	0.0104	300	300/D
	1.5	30	0.25	1.60	0.6	1.4	17.0	13.3	0.0089	390	300/D
	2.5	50	0.25	2.10	0.7	1.4	20.0	7.98	0.0081	600	300/D
	4.0	56	0.30	2.60	0.8	1.4	23.0	4.95	0.0076	850	300/D
	6.0	84	0.30	3.40	0.8	1.8	28.0	3.30	0.0061	1,300	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

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600 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE

SUPER CABLE

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
15	0.50	16	0.20	0.95	0.6	1.4	14.5	39.0	0.0130	220	300/D
	0.75	24	0.20	1.15	0.6	1.4	15.5	26.0	0.0114	270	300/D
	1.0	32	0.20	1.30	0.6	1.4	16.0	19.5	0.0104	320	300/D
	1.5	30	0.25	1.60	0.6	1.4	17.5	13.3	0.0089	420	300/D
	2.5	50	0.25	2.10	0.7	1.4	21.0	7.98	0.0081	650	300/D
	4.0	56	0.30	2.60	0.8	1.8	25.0	4.95	0.0076	950	300/D
	6.0	84	0.30	3.40	0.8	1.8	29.0	3.30	0.0061	1,400	300/D
16	0.50	16	0.20	0.95	0.6	1.4	15.0	39.0	0.0130	230	300/D
	0.75	24	0.20	1.15	0.6	1.4	15.5	26.0	0.0114	280	300/D
	1.0	32	0.20	1.30	0.6	1.4	16.0	19.5	0.0104	340	300/D
	1.5	30	0.25	1.60	0.6	1.4	17.5	13.3	0.0089	430	300/D
	2.5	50	0.25	2.10	0.7	1.4	21.0	7.98	0.0081	650	300/D
	4.0	56	0.30	2.60	0.8	1.8	25.0	4.95	0.0076	1,000	300/D
	6.0	84	0.30	3.40	0.8	1.8	29.0	3.30	0.0061	1,400	300/D
17	0.50	16	0.20	0.95	0.6	1.4	15.5	39.0	0.0130	240	300/D
	0.75	24	0.20	1.15	0.6	1.4	16.5	26.0	0.0114	310	300/D
	1.0	32	0.20	1.30	0.6	1.4	17.0	19.5	0.0104	370	300/D
	1.5	30	0.25	1.60	0.6	1.4	18.5	13.3	0.0089	470	300/D
	2.5	50	0.25	2.10	0.7	1.4	22.0	7.98	0.0081	700	300/D
	4.0	56	0.30	2.60	0.8	1.8	27.0	4.95	0.0076	1,100	300/D
	6.0	84	0.30	3.40	0.8	1.8	31.0	3.30	0.0061	1,600	300/D
18	0.50	16	0.20	0.95	0.6	1.4	15.5	39.0	0.0130	250	300/D
	0.75	24	0.20	1.15	0.6	1.4	16.5	26.0	0.0114	310	300/D
	1.0	32	0.20	1.30	0.6	1.4	17.0	19.5	0.0104	370	300/D
	1.5	30	0.25	1.60	0.6	1.4	18.5	13.3	0.0089	470	300/D
	2.5	50	0.25	2.10	0.7	1.4	22.0	7.98	0.0081	700	300/D
	4.0	56	0.30	2.60	0.8	1.8	27.0	4.95	0.0076	1,100	300/D
	6.0	84	0.30	3.40	0.8	1.8	31.0	3.30	0.0061	1,600	300/D
19	0.50	16	0.20	0.95	0.6	1.4	15.5	39.0	0.0130	260	300/D
	0.75	24	0.20	1.15	0.6	1.4	16.5	26.0	0.0114	320	300/D
	1.0	32	0.20	1.30	0.6	1.4	17.0	19.5	0.0104	380	300/D
	1.5	30	0.25	1.60	0.6	1.4	18.5	13.3	0.0089	490	300/D
	2.5	50	0.25	2.10	0.7	1.4	22.0	7.98	0.0081	750	300/D
	4.0	56	0.30	2.60	0.8	1.8	27.0	4.95	0.0076	1,100	300/D
	6.0	84	0.30	3.40	0.8	1.8	31.0	3.30	0.0061	1,600	300/D
20	0.50	16	0.20	0.95	0.6	1.4	16.0	39.0	0.0130	270	300/D
	0.75	24	0.20	1.15	0.6	1.4	17.0	26.0	0.0114	330	300/D
	1.0	32	0.20	1.30	0.6	1.4	17.5	19.5	0.0104	400	300/D
	1.5	30	0.25	1.60	0.6	1.4	19.0	13.3	0.0089	500	300/D
	2.5	50	0.25	2.10	0.7	1.4	23.0	7.98	0.0081	800	300/D
	4.0	56	0.30	2.60	0.8	1.8	28.0	4.95	0.0076	1,200	300/D
	6.0	84	0.30	3.40	0.8	1.8	32.0	3.30	0.0061	1,700	300/D
21	0.50	16	0.20	0.95	0.6	1.4	16.5	39.0	0.0130	280	300/D
	0.75	24	0.20	1.15	0.6	1.4	17.5	26.0	0.0114	350	300/D
	1.0	32	0.20	1.30	0.6	1.4	18.0	19.5	0.0104	420	300/D
	1.5	30	0.25	1.60	0.6	1.4	19.5	13.3	0.0089	550	300/D
	2.5	50	0.25	2.10	0.7	1.4	23.0	7.98	0.0081	800	300/D
	4.0	56	0.30	2.60	0.8	1.8	28.0	4.95	0.0076	1,300	300/D
	6.0	84	0.30	3.40	0.8	1.8	32.0	3.30	0.0061	1,800	300/D
22	0.50	16	0.20	0.95	0.6	1.4	17.0	39.0	0.0130	300	300/D
	0.75	24	0.20	1.15	0.6	1.4	18.0	26.0	0.0114	370	300/D
	1.0	32	0.20	1.30	0.6	1.4	18.5	19.5	0.0104	450	300/D
	1.5	30	0.25	1.60	0.6	1.4	20.0	13.3	0.0089	550	300/D
	2.5	50	0.25	2.10	0.7	1.8	25.0	7.98	0.0081	900	300/D
	4.0	56	0.30	2.60	0.8	1.8	30.0	4.95	0.0076	1,300	300/D
	6.0	84	0.30	3.40	0.8	1.8	34.0	3.30	0.0061	1,900	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

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SUPER CABLE

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
23	0.50	16	0.20	0.95	0.6	1.4	17.0	39.0	0.0130	310	300/D
	0.75	24	0.20	1.15	0.6	1.4	18.0	26.0	0.0114	380	300/D
	1.0	32	0.20	1.30	0.6	1.4	18.5	19.5	0.0104	460	300/D
	1.5	30	0.25	1.60	0.6	1.4	20.0	13.3	0.0089	600	300/D
	2.5	50	0.25	2.10	0.7	1.8	25.0	7.98	0.0081	950	300/D
	4.0	56	0.30	2.60	0.8	1.8	30.0	4.95	0.0076	1,400	300/D
	6.0	84	0.30	3.40	0.8	1.8	34.0	3.30	0.0061	2,000	300/D
24	0.50	16	0.20	0.95	0.6	1.4	18.0	39.0	0.0130	320	300/D
	0.75	24	0.20	1.15	0.6	1.4	19.0	26.0	0.0114	400	300/D
	1.0	32	0.20	1.30	0.6	1.4	19.5	19.5	0.0104	500	300/D
	1.5	30	0.25	1.60	0.6	1.4	21.0	13.3	0.0089	600	300/D
	2.5	50	0.25	2.10	0.7	1.8	26.0	7.98	0.0081	1,000	300/D
	4.0	56	0.30	2.60	0.8	1.8	31.0	4.95	0.0076	1,400	300/D
	6.0	84	0.30	3.40	0.8	2.2	37.0	3.30	0.0061	2,100	300/D
25	0.50	16	0.20	0.95	0.6	1.4	18.0	39.0	0.0130	330	300/D
	0.75	24	0.20	1.15	0.6	1.4	19.0	26.0	0.0114	410	300/D
	1.0	32	0.20	1.30	0.6	1.4	19.5	19.5	0.0104	490	300/D
	1.5	30	0.25	1.60	0.6	1.4	21.0	13.3	0.0089	650	300/D
	2.5	50	0.25	2.10	0.7	1.8	26.0	7.98	0.0081	1,000	300/D
	4.0	56	0.30	2.60	0.8	1.8	31.0	4.95	0.0076	1,500	300/D
	6.0	84	0.30	3.40	0.8	2.2	37.0	3.30	0.0061	2,200	300/D
26	0.50	16	0.20	0.95	0.6	1.4	18.0	39.0	0.0130	340	300/D
	0.75	24	0.20	1.15	0.6	1.4	19.0	26.0	0.0114	420	300/D
	1.0	32	0.20	1.30	0.6	1.4	19.5	19.5	0.0104	500	300/D
	1.5	30	0.25	1.60	0.6	1.4	21.0	13.3	0.0089	650	300/D
	2.5	50	0.25	2.10	0.7	1.8	26.0	7.98	0.0081	1,000	300/D
	4.0	56	0.30	2.60	0.8	1.8	31.0	4.95	0.0076	1,500	300/D
	6.0	84	0.30	3.40	0.8	2.2	37.0	3.30	0.0061	2,300	300/D
27	0.50	16	0.20	0.95	0.6	1.4	18.5	39.0	0.0130	340	300/D
	0.75	24	0.20	1.15	0.6	1.4	19.5	26.0	0.0114	430	300/D
	1.0	32	0.20	1.30	0.6	1.4	20.0	19.5	0.0104	500	300/D
	1.5	30	0.25	1.60	0.6	1.4	22.0	13.3	0.0089	650	300/D
	2.5	50	0.25	2.10	0.7	1.8	27.0	7.98	0.0081	1,100	300/D
	4.0	56	0.30	2.60	0.8	1.8	32.0	4.95	0.0076	1,600	300/D
	6.0	84	0.30	3.40	0.8	2.2	38.0	3.30	0.0061	2,400	300/D
28	0.50	16	0.20	0.95	0.6	1.4	19.0	39.0	0.0130	370	300/D
	0.75	24	0.20	1.15	0.6	1.4	20.0	26.0	0.0114	460	300/D
	1.0	32	0.20	1.30	0.6	1.4	21.0	19.5	0.0104	550	300/D
	1.5	30	0.25	1.60	0.6	1.4	23.0	13.3	0.0089	700	300/D
	2.5	50	0.25	2.10	0.7	1.8	28.0	7.98	0.0081	1,100	300/D
	4.0	56	0.30	2.60	0.8	1.8	33.0	4.95	0.0076	1,700	300/D
	6.0	84	0.30	3.40	0.8	2.2	39.0	3.30	0.0061	2,500	300/D
29	0.50	16	0.20	0.95	0.6	1.4	19.0	39.0	0.0130	370	300/D
	0.75	24	0.20	1.15	0.6	1.4	20.0	26.0	0.0114	460	300/D
	1.0	32	0.20	1.30	0.6	1.4	21.0	19.5	0.0104	550	300/D
	1.5	30	0.25	1.60	0.6	1.4	23.0	13.3	0.0089	700	300/D
	2.5	50	0.25	2.10	0.7	1.8	28.0	7.98	0.0081	1,100	300/D
	4.0	56	0.30	2.60	0.8	1.8	33.0	4.95	0.0076	1,700	300/D
	6.0	84	0.30	3.40	0.8	2.2	39.0	3.30	0.0061	2,500	300/D
30	0.50	16	0.20	0.95	0.6	1.4	19.0	39.0	0.0130	370	300/D
	0.75	24	0.20	1.15	0.6	1.4	20.0	26.0	0.0114	470	300/D
	1.0	32	0.20	1.30	0.6	1.4	21.0	19.5	0.0104	550	300/D
	1.5	30	0.25	1.60	0.6	1.4	23.0	13.3	0.0089	750	300/D
	2.5	50	0.25	2.10	0.7	1.8	28.0	7.98	0.0081	1,200	300/D
	4.0	56	0.30	2.60	0.8	1.8	33.0	4.95	0.0076	1,700	300/D
	6.0	84	0.30	3.40	0.8	2.2	39.0	3.30	0.0061	2,600	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

- ใช้ต่อเข้าเครื่องที่ใช้ในการควบคุมวงจร
- ใช้ภายในและนอกอาคาร

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CVV or CVV-S

600 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED CONTROL CABLE

600 V. 70°C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE

SUPER CABLE

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
31	0.50	16	0.20	0.95	0.6	1.4	19.5	39.0	0.0130	400	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	500	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	600	300/D
	1.5	30	0.25	1.60	0.6	1.8	24.0	13.3	0.0089	850	300/D
	2.5	50	0.25	2.10	0.7	1.8	29.0	7.98	0.0081	1,300	300/D
	4.0	56	0.30	2.60	0.8	1.8	34.0	4.95	0.0076	1,800	300/D
	6.0	84	0.30	3.40	0.8	2.2	41.0	3.30	0.0061	2,700	300/D
32	0.50	16	0.20	0.95	0.6	1.4	19.5	39.0	0.0130	400	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	500	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	600	300/D
	1.5	30	0.25	1.60	0.6	1.8	24.0	13.3	0.0089	850	300/D
	2.5	50	0.25	2.10	0.7	1.8	29.0	7.98	0.0081	1,300	300/D
	4.0	56	0.30	2.60	0.8	1.8	34.0	4.95	0.0076	1,900	300/D
	6.0	84	0.30	3.40	0.8	2.2	41.0	3.30	0.0061	2,800	300/D
33	0.50	16	0.20	0.95	0.6	1.4	19.5	39.0	0.0130	400	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	500	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	600	300/D
	1.5	30	0.25	1.60	0.6	1.4	24.0	13.3	0.0089	850	300/D
	2.5	50	0.25	2.10	0.7	1.8	29.0	7.98	0.0081	1,300	300/D
	4.0	56	0.30	2.60	0.8	1.8	34.0	4.95	0.0076	1,900	300/D
	6.0	84	0.30	3.40	0.8	2.2	41.0	3.30	0.0061	2,800	300/D
34	0.50	16	0.20	0.95	0.6	1.4	20.0	39.0	0.0130	430	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	550	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	650	300/D
	1.5	30	0.25	1.60	0.6	1.8	25.0	13.3	0.0089	900	300/D
	2.5	50	0.25	2.10	0.7	1.8	30.0	7.98	0.0081	1400	300/D
	4.0	56	0.30	2.60	0.8	2.2	37.0	4.95	0.0076	2100	300/D
	6.0	84	0.30	3.40	0.8	2.2	42.0	3.30	0.0061	3000	300/D
35	0.50	16	0.20	0.95	0.6	1.4	20.0	39.0	0.0130	430	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	550	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	650	300/D
	1.5	30	0.25	1.60	0.6	1.8	25.0	13.3	0.0089	900	300/D
	2.5	50	0.25	2.10	0.7	1.8	30.3	7.98	0.0081	1,400	300/D
	4.0	56	0.30	2.60	0.8	2.2	37.0	4.95	0.0076	2,100	300/D
	6.0	84	0.30	3.40	0.8	2.2	42.0	3.30	0.0061	3,000	300/D
36	0.50	16	0.20	0.95	0.6	1.4	20.0	39.0	0.0130	440	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	550	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	650	300/D
	1.5	30	0.25	1.60	0.6	1.8	25.0	13.3	0.0089	900	300/D
	2.5	50	0.25	2.10	0.7	1.8	30.0	7.98	0.0081	1,400	300/D
	4.0	56	0.30	2.60	0.8	2.2	37.0	4.95	0.0076	2,100	300/D
	6.0	84	0.30	3.40	0.8	2.2	42.0	3.30	0.0061	3,100	300/D
37	0.50	16	0.20	0.95	0.6	1.4	20.0	39.0	0.0130	450	300/D
	0.75	24	0.20	1.15	0.6	1.4	21.0	26.0	0.0114	550	300/D
	1.0	32	0.20	1.30	0.6	1.4	22.0	19.5	0.0104	700	300/D
	1.5	30	0.25	1.60	0.6	1.8	25.0	13.3	0.0089	950	300/D
	2.5	50	0.25	2.10	0.7	1.8	30.0	7.98	0.0081	1,400	300/D
	4.0	56	0.30	2.60	0.8	2.2	37.0	4.95	0.0076	2,200	300/D
	6.0	84	0.30	3.40	0.8	2.2	42.0	3.30	0.0061	3,100	300/D
38	0.50	16	0.20	0.95	0.6	1.4	21.0	39.0	0.0130	460	300/D
	0.75	24	0.20	1.15	0.6	1.4	22.0	26.0	0.0114	600	300/D
	1.0	32	0.20	1.30	0.6	1.4	23.0	19.5	0.0104	700	300/D
	1.5	30	0.25	1.60	0.6	1.8	26.0	13.3	0.0089	950	300/D
	2.5	50	0.25	2.10	0.7	1.8	31.0	7.98	0.0081	1,500	300/D
	4.0	56	0.30	2.60	0.8	2.2	38.0	4.95	0.0076	2,200	300/D
	6.0	84	0.30	3.40	0.8	2.2	44.0	3.30	0.0061	3,300	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

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SUPER CABLE

Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
39	0.50	16	0.20	0.95	0.6	1.4	21.0	39.0	0.0130	470	300/D
	0.75	24	0.20	1.15	0.6	1.4	22.0	26.0	0.0114	600	300/D
	1.0	32	0.20	1.30	0.6	1.4	23.0	19.5	0.0104	700	300/D
	1.5	30	0.25	1.60	0.6	1.8	26.0	13.3	0.0089	1,000	300/D
	2.5	50	0.25	2.10	0.7	1.8	31.0	7.98	0.0081	1,500	300/D
	4.0	56	0.30	2.60	0.8	2.2	38.0	4.95	0.0076	2,300	300/D
	6.0	84	0.30	3.40	0.8	2.2	44.0	3.30	0.0061	3,300	300/D
40	0.50	16	0.20	0.95	0.6	1.4	21.0	39.0	0.0130	480	300/D
	0.75	24	0.20	1.15	0.6	1.4	22.0	26.0	0.0114	600	300/D
	1.0	32	0.20	1.30	0.6	1.4	23.0	19.5	0.0104	750	300/D
	1.5	30	0.25	1.60	0.6	1.8	26.0	13.3	0.0089	1,000	300/D
	2.5	50	0.25	2.10	0.7	1.8	31.0	7.98	0.0081	1,500	300/D
	4.0	56	0.30	2.60	0.8	2.2	38.0	4.95	0.0076	2,300	300/D
	6.0	84	0.30	3.40	0.8	2.2	44.0	3.30	0.0061	3,400	300/D
41	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	500	300/D
	0.75	24	0.20	1.15	0.6	1.4	23.0	26.0	0.0114	650	300/D
	1.0	32	0.20	1.30	0.6	1.8	25.0	19.5	0.0104	800	300/D
	1.5	30	0.25	1.60	0.6	1.8	27.0	13.3	0.0089	1,000	300/D
	2.5	50	0.25	2.10	0.7	1.8	33.0	7.98	0.0081	1,600	300/D
	4.0	56	0.30	2.60	0.8	2.2	40.0	4.95	0.0076	2,400	300/D
	6.0	84	0.30	3.40	0.8	2.2	46.0	3.30	0.0061	3,500	300/D
42	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	500	300/D
	0.75	24	0.20	1.15	0.6	1.4	23.0	26.0	0.0114	650	300/D
	1.0	32	0.20	1.30	0.6	1.8	25.0	19.5	0.0104	800	300/D
	1.5	30	0.25	1.60	0.6	1.8	27.0	13.3	0.0089	1,100	300/D
	2.5	50	0.25	2.10	0.7	1.8	33.0	7.98	0.0081	1,600	300/D
	4.0	56	0.30	2.60	0.8	2.2	40.0	4.95	0.0076	2,500	300/D
	6.0	84	0.30	3.40	0.8	2.2	46.0	3.30	0.0061	3,600	300/D
43	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	500	300/D
	0.75	24	0.20	1.15	0.6	1.4	23.0	26.0	0.0114	650	300/D
	1.0	32	0.20	1.30	0.6	1.8	25.0	19.5	0.0104	850	300/D
	1.5	30	0.25	1.60	0.6	1.8	27.0	13.3	0.0089	1,100	300/D
	2.5	50	0.25	2.10	0.7	1.8	33.0	7.98	0.0081	1,600	300/D
	4.0	56	0.30	2.60	0.8	2.2	40.0	4.95	0.0076	2,500	300/D
	6.0	84	0.30	3.40	0.8	2.2	46.0	3.30	0.0061	3,600	300/D
44	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	550	300/D
	0.75	24	0.20	1.15	0.6	1.4	24.0	26.0	0.0114	650	300/D
	1.0	32	0.20	1.30	0.6	1.8	26.0	19.5	0.0104	850	300/D
	1.5	30	0.25	1.60	0.6	1.8	28.0	13.3	0.0089	1,100	300/D
	2.5	50	0.25	2.10	0.7	1.8	34.0	7.98	0.0081	1,700	300/D
	4.0	56	0.30	2.60	0.8	2.2	41.0	4.95	0.0076	2,600	300/D
	6.0	84	0.30	3.40	0.8	2.6	48.0	3.30	0.0061	3,800	300/D
45	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	550	300/D
	0.75	24	0.20	1.15	0.6	1.4	24.0	26.0	0.0114	700	300/D
	1.0	32	0.20	1.30	0.6	1.8	26.0	19.5	0.0104	850	300/D
	1.5	30	0.25	1.60	0.6	1.8	28.0	13.3	0.0089	1,100	300/D
	2.5	50	0.25	2.10	0.7	1.8	34.0	7.98	0.0081	1,700	300/D
	4.0	56	0.30	2.60	0.8	2.2	41.0	4.95	0.0076	2,600	300/D
	6.0	84	0.30	3.40	0.8	2.6	48.0	3.30	0.0061	3,900	300/D
46	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	550	300/D
	0.75	24	0.20	1.15	0.6	1.4	24.0	26.0	0.0114	700	300/D
	1.0	32	0.20	1.30	0.6	1.8	26.0	19.5	0.0104	900	300/D
	1.5	30	0.25	1.60	0.6	1.8	28.0	13.3	0.0089	1,100	300/D
	2.5	50	0.25	2.10	0.7	1.8	34.0	7.98	0.0081	1,800	300/D
	4.0	56	0.30	2.60	0.8	2.2	41.0	4.95	0.0076	2,700	300/D
	6.0	84	0.30	3.40	0.8	2.6	48.0	3.30	0.0061	4,000	300/D

Conductor Class 5 : Flexible

D : Packing in drum

การใช้งาน

- ใช้ต่อเข้าเครื่องที่ใช้ในการควบคุมวงจร
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Technical Data

S.SUPER CABLE STANDAR

Number of cores	Nominal cross sectional area	Number of wires (approx.)	Diameter of conductor (approx.)	Diameter (approx.)	Nominal insulation thickness	Nominal sheathed thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Cable weight (approx.)	Standard packing
	mm²	No.	mm	mm	mm	mm	mm	Ω/km	MΩ-km	kg/km	m
47	0.50	16	0.20	0.95	0.6	1.4	22.0	39.0	0.0130	550	300/D
	0.75	24	0.20	1.15	0.6	1.4	24.0	26.0	0.0114	700	300/D
	1.0	32	0.20	1.30	0.6	1.8	26.0	19.5	0.0104	900	300/D
	1.5	30	0.25	1.60	0.6	1.8	28.0	13.3	0.0089	1,200	300/D
	2.5	50	0.25	2.10	0.7	1.8	34.0	7.98	0.0081	1,800	300/D
	4.0	56	0.30	2.60	0.8	2.2	41.0	4.95	0.0076	2,700	300/D
	6.0	84	0.30	3.40	0.8	2.6	48.0	3.30	0.0061	4,000	300/D
48	0.50	16	0.20	0.95	0.6	1.4	23.0	39.0	0.0130	550	300/D
	0.75	24	0.20	1.15	0.6	1.4	25.0	26.0	0.0114	750	300/D
	1.0	32	0.20	1.30	0.6	1.8	26.0	19.5	0.0104	900	300/D
	1.5	30	0.25	1.60	0.6	1.8	29.0	13.3	0.0089	1,200	300/D
	2.5	50	0.25	2.10	0.7	1.8	34.0	7.98	0.0081	1,800	300/D
	4.0	56	0.30	2.60	0.8	2.2	42.0	4.95	0.0076	2,800	300/D
	6.0	84	0.30	3.40	0.8	2.6	49.0	3.30	0.0061	4,100	300/D

Conductor Class 5 : Flexible

D : Packing in drum

Core Color :

- Option 1 : Core Color : Black, White, Red, Green, Orange, Blue, White/Black, Red/Black, Green/Black, Orange/Black, Blue/Black, Black/White, Red/White, Green/White, Blue/White, Black/Red, White/Red, Orange/Red, Blue/Red, Red/Green, Orange/Green
- Option 2 : Black color with marking number on the surface of insulation
- Option 3 : Upon customer request

การใช้งาน

- ใช้ต่อเข้าเครื่องที่ใช้ในการควบคุมวงจร
- ใช้ภายในและนอกอาคาร

หมายเหตุ

-For CVV-S The Overall Diameter and Cable weight shall be increase a little bit more

: สำหรับ CVV-S ขนาดเส้นผ่าศูนย์กลาง และน้ำหนักของสาย จะเพิ่มขึ้นเล็กน้อย

-If you need to change conductor to Class 1 (Solid) or Class 2 (Stranded) please contact our Sale department

: ถ้าต้องการเปลี่ยนตัวนำไฟฟ้าเป็น ประเภท 1 (เส้นเดี่ยว) หรือ ประเภท 2 (ตีเกลียว) กรุณาติดต่อฝ่ายขาย

H05V-K, H07V-K

300/500 V. FOR H05V-K , 450/750 V. FOR H07V-K

FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE

APPLICATION

Building wiring, for installation on insulator or in raceway, dry and wet location.

TESTING VOLTAGE : 2,000 Volts For H05V-K
2,500 Volts For H07V-K

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 - 35 mm²

INSULATION : Polyvinyl chloride

CORE IDENTIFICATION :
Single core ,color as request

CLASSIFICATION

Temperature range
: Flexing 5°C to 70°C
: Fiexed installation -30°C to 70°C

Circuit Voltage does not exceed
300/500 Volts (U_0/U) For H05V-K
Circuit Voltage does not exceed
450/750 Volts (U_0/U) For H07V-K

Technical Data

S.SUPER CABLE STANDARD

Nominal cross sectional area	Maximum Diameter of wires	Nominal insulation thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
H05V-K								
0.5	0.21	0.6	2.2	39.0	0.013	11	9	100/C
0.75	0.21	0.6	2.4	26.0	0.011	14	12	100/C
1	0.21	0.6	2.6	19.5	0.010	16	15	100/C
H07V-K								
1.5	0.26	0.7	3.0	13.30	0.010	21	24	100/C
2.5	0.26	0.8	3.6	7.98	0.009	28	37	100/C
4	0.31	0.8	4.3	4.95	0.007	38	54	100/C
6	0.31	0.8	5.1	3.30	0.0060	48	75	100/C
10	0.41	1.0	6.7	1.91	0.0056	69	130	100/C
16	0.41	1.0	7.8	1.21	0.0046	92	185	100/C
25	0.41	1.2	9.9	0.780	0.0047	123	285	100/C
35	0.41	1.2	11.3	0.554	0.0038	154	400	100/C
50	0.41	1.4	13.2	0.386	0.0037	196	555	500/D
70	0.51	1.4	15.6	0.272	0.0032	247	765	500/D
95	0.51	1.6	17.9	0.206	0.0032	296	1,000	500/D
120	0.51	1.6	20.0	0.161	0.0029	350	1,300	500/D
150	0.51	1.8	22.0	0.129	0.0029	405	1,600	500/D
185	0.51	2.0	23.6	0.106	0.0029	461	1,900	500/D
240	0.51	2.2	27.8	0.0801	0.0028	554	2,500	500/D

Conductor Class : 5 Flexible
C : Packing in coil
D : Packing in drum

Core Color : Single core ,color as request

การใช้งาน
- ใช้งานทั่วไป
- เดินในช่องเดินสายและต้องป้องกันน้ำเข้าช่องเดินสาย

H05V2-K, H07V2-K

300/500 V. FOR H05V2-K , 450/750 V. FOR H07V2-K

FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE

APPLICATION

Building wiring, for installation on insulator or in raceway, dry and wet location.

TESTING VOLTAGE : 2,000 Volts For H05V2-K
2,500 Volts For H07V2-K

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper
CLASS 5 Size 0.5 - 35 mm²

INSULATION : Polyvinyl chloride

CORE IDENTIFICATION :
Single core, color as request

CLASSIFICATION

Temperature range
: Flexing 5°C
: Fiexed installation -10°C to 105°C

Circuit Voltage does not exceed
300/500 Volts (U_0/U) For H05V2-K

Circuit Voltage does not exceed
450/750 Volts (U_0/U) For H07V2-K

Technical Data

S.SUPER CABLE STANDARD

Nominal cross sectional area	Maximum Diameter of wires	Nominal insulation thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
H05V2-K								
0.5	0.21	0.6	2.2	39.0	0.013	11	9	100/C
0.75	0.21	0.6	2.4	26.0	0.011	14	12	100/C
1	0.21	0.6	2.6	19.5	0.010	16	15	100/C
H07V2-K								
1.5	0.26	0.7	3.0	13.30	0.010	21	24	100/C
2.5	0.26	0.8	3.6	7.98	0.009	28	37	100/C
4	0.31	0.8	4.3	4.95	0.007	38	54	100/C
6	0.31	0.8	5.1	3.30	0.006	48	75	100/C
10	0.41	1.0	6.7	1.91	0.0056	69	130	100/C
16	0.41	1.0	7.8	1.21	0.0046	92	185	100/C
25	0.41	1.2	9.9	0.780	0.0044	123	285	100/C
35	0.41	1.2	11.3	0.554	0.0038	154	400	100/C

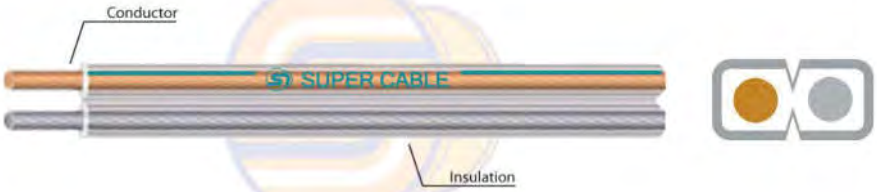
Conductor Class : 5 Flexible
C : Packing in coil

Core Color : Single core ,color as request

การใช้งาน
- ใช้งานทั่วไป
- เดินในของเดินสายและต้องป้องกันน้ำเข้าของเดินสาย

SPEAKER CABLE

300 V. 70°C FLEXIBLE CONDUCTOR, PVC INSULATED
2 CORES FLAT TYPE



APPLICATION
- Use for general purpose
- Appliances especially speaker

TESTING VOLTAGE : 2,000 Volts

REFERENCE STANDARD :
S.Super Cable Standard

CABLE STRUCTURE

CONDUCTOR : Flexible Annealed Copper & Flexible Tinned Annealed Copper CLASS 5 Size 0.5 - 2.5 mm²

INSULATION : Polyvinyl chloride

CLASSIFICATION

Maximum Conductor Temperature : 70°C
Circuit Voltage does not exceed 300 Volts

Technical Data

S.SUPER CABLE STANDARD

Nominal cross sectional area	Conductor type	Number of wires	Diameter (approx.)	Nominal insulation thickness	Overall diameter (approx.)		Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Current rating in free air	Cable weight (approx.)	Standard packing
					Lower Limit	Upper Limit					
mm²	Class	No.	mm	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
0.5	5	16	0.20	0.8	2.4 x 4.9	3.2 x 6.2	39.00	0.0160	8	23	100/C
1	5	32	0.20	0.8	2.8 x 5.6	3.6 x 7.0	19.50	0.0127	12	35	100/C
1.5	5	30	0.25	0.8	3.0 x 6.0	3.9 x 7.6	13.30	0.0111	15	46	100/C
2.5	5	50	0.25	0.8	3.5 x 7.0	4.8 x 9.4	7.98	0.0092	21	68	100/C

C : Packing in coil

Color : Clear or upon customer request

การใช้งาน
- ใช้งานทั่วไป
- เหมาะสำหรับต่ออุปกรณ์เครื่องเสียง เช่น ลำโพง

FRC

0.6/1 kV FIRE RESISTANT CABLES LOW SMOKE HALOGEN FREE, SINGLE CORE

APPLICATION

Preferably used for installation into trunking and conduit which provide flame retardant property and maintain circuit integrity in a fire.

TESTING VOLTAGE : 3,500 Volts

PEFERENCE STANDARD

Construction	Based on BS 7211 , IEC 60228
Circuit Integrity	BS6387 Cat. C,W,Z
Smoke emission	BS EN 50268-2 (IEC 61034-2)
Acid gas emission	BS EN 50267-2-2 (IEC 60754-2)
Flame propagation	BS 4066-3 Cat. C (IEC 60332-1)

CABLE STRUCTURE

CONDUCTOR : Concentric stranded or compacted stranded copper

Size 1.5 - 400 mm²

FIRE BARRIER : Mica tape

INSULATION : Low smoke & halogen free Cross-Linked polyethylene (LSHF-XLPE)

CORE IDENTIFICATION : Orang Color

(Other colors to special order)

CLASSIFICATION

Maximum Conductor Temperature : 90°C

Circuit Voltage does not exceed 600/1,000 Volts (U_0/U)

600 Volts between Line to Earth (U_0)

1,000 Volts between line to line (U)

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter of wires (approx.)	Nominal insulation thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air 40°C ambient	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	7	1.50	0.7	3.80	12.10	0.010	27	63	100/C
2.5	7	2.01	0.8	4.60	7.41	0.009	36	77	100/C
4	7	2.55	0.8	5.10	4.61	0.0077	48	97	100/C
6	7	3.12	0.8	5.70	3.08	0.0065	61	121	500/D
10	6	3.70	1.0	7.00	1.83	0.0065	82	169	300/D
16	6	4.65	1.0	7.60	1.15	0.0050	110	222	300/D
25	6	5.84	1.2	9.30	0.727	0.0050	145	322	300/D
35	6	6.89	1.2	10.50	0.542	0.0043	180	419	300/D
50	6	7.96	1.4	12.20	0.387	0.0043	220	542	300/D
70	12	9.65	1.4	13.70	0.268	0.0035	280	758	300/D
95	15	11.30	1.6	16.00	0.193	0.0035	345	1,019	300/D
120	18	12.85	1.6	17.50	0.153	0.0032	400	1,261	300/D
150	18	14.10	1.8	19.20	0.124	0.0032	460	1,545	300/D
185	30	15.95	2.0	22.00	0.0991	0.0032	530	1,913	300/D
240	34	18.35	2.2	24.40	0.0754	0.0032	630	2,477	300/D
300	34	20.40	2.4	27.10	0.0601	0.0030	725	3,071	300/D
400	53	23.25	2.6	30.40	0.0470	0.0028	840	3,881	300/D

C : Packing in coil

D : Packing in drum

Core Color : Orange or Red

LSHF

*0.6/1 kV LOW SMOKE & HALOGEN FREE FLAME RETARDANT CABLES, SINGLE CORE (NON-SHEATHED)

APPLICATION

Preferably used for fixed installation into trunking and conduit which provide flame retardant, low smoke and low toxic emission property under fire.

TESTING VOLTAGE : 2,500 Volts

PEFERENCE STANDARD

Construction	BS 7211
Smoke emission	BS EN 50268-2 (IEC 61034-2)
Acid gas emission	BS EN 50267-2-2 (IEC 60754-2)
Flame propagation	BS 4066-3 Cat. C

CABLE STRUCTURE

CONDUCTOR : Concentric stranded or compact stranded copper

Size 1.5 - 500 mm²

INSULATION : Low smoke & halogen free flame retardant cross-Linked polyethylene (LSHF-XLPE)

CORE IDENTIFICATION :

Single core ,color as request

CLASSIFICATION

Maximum Conductor Temperature : 90°C

Circuit Voltage does not exceed

*600/1,000 Volts (U_0/U) for fixed installation

450/750 Volts (U_0/U) for other installation

U_0 is Volts between Line to Earth

U is Volts between line to line

Technical Data

Nominal cross sectional area	Minimum Number of wires	Diameter of wires (approx.)	Nominal insulation thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 90°C	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	No.	mm	mm	mm	Ω/km	MΩ-km	A	kg/km	m
1.5	7/0.50	1.50	0.7	3.30	12.10	0.010	22	19	100/C
2.5	7/0.67	2.01	0.8	4.00	7.41	0.009	31	31	100/C
4	7/0.85	2.55	0.8	4.60	4.61	0.0077	42	45	100/C
6	7/1.04	3.12	0.8	5.20	3.08	0.0065	54	65	100/C
10	6	3.80	0.8	6.60	1.83	0.0065	76	100	300/D
16	6	4.80	1.0	7.10	1.15	0.0050	100	160	300/D
25	6	6.00	1.0	8.80	0.272	0.0050	140	250	300/D
35	6	7.10	1.2	9.90	0.524	0.0043	175	340	300/D
50	6	8.30	1.2	11.70	0.387	0.0043	215	460	300/D
70	12	9.90	1.4	13.50	0.268	0.0035	275	650	300/D
95	15	11.70	1.6	16.00	0.193	0.0035	345	900	300/D
120	18	13.20	1.6	17.20	0.153	0.0032	400	1,100	300/D
150	18	14.60	1.8	19.00	0.124	0.0032	460	1,400	300/D
185	30	16.30	2.0	21.50	0.0991	0.0032	535	1,800	300/D
240	34	18.70	2.2	24.20	0.0754	0.0032	640	2,300	300/D
300	34	20.90	2.4	27.00	0.0601	0.0030	735	2,900	300/D
400	53	23.50	2.6	30.00	0.0470	0.0028	855	3,700	300/D
500	53	26.70	2.8	33.50	0.0366	0.0028	995	4,700	300/D

Conductor Class 2 : Stranded

C : Packing in coil

D : Packing in drum

Core Color : Color as request

การใช้งาน

- ใช้สำหรับงานติดตั้งยึดพื้นที่ เดินทางช่อง เดินสายไฟ และร้อยท่อ ซึ่งมีคุณสมบัติในการหน่วงไฟ เกิดควันไฟต่ำ และปล่อยสารพิษออกมาน้อย เมื่อถูกเผาไหม้

AAC
ALL ALUMINUM STRANDED CONDUCTOR

APPLICATION

For aerial power transmission and distribution.

REFERENCE STANDARD :

TIS 85-2548

CABLE STRUCTURE

CONDUCTOR : Concentric stranded hard drawn aluminium

CLASS 2 Size 10 - 500 mm²

Technical Data

Nominal cross sectional area	Conductor type	Number of wires	Diameter of wires	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Breaking strength	Current rating in free air	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	Ω/km	kgf	A	kg/km	m
10	2	7	1.32	4.05	2.8633	186	80	30	3,000/D
16	2	7	1.70	5.10	1.8022	290	110	44	3,000/D
25	2	7	2.14	6.42	1.1373	440	145	70	3,000/D
35	2	7	2.52	7.56	0.8202	585	180	95	2,000/D
50	2	7	3.02	9.06	0.5711	805	225	140	2,000/D
50	2	19	1.83	9.15	0.5758	890	225	140	2,000/D
70	2	19	2.15	10.75	0.4171	1,205	270	190	1,000/D
95	2	19	2.52	12.60	0.3036	1,585	340	260	1,000/D
120	2	19	2.85	14.25	0.2374	1,980	390	330	1,000/D
150	2	37	2.25	15.75	0.1960	2,570	455	400	1,000/D
185	2	37	2.52	17.64	0.1563	3,085	550	500	1,000/D
240	2	61	2.25	20.25	0.1192	4,015	625	650	1,000/D
300	2	61	2.52	22.68	0.0949	4,820	710	850	500/D
400	2	61	2.85	25.65	0.0742	6,025	855	1,100	500/D
500	2	61	3.25	29.25	0.0571	7,695	990	1,400	500/D

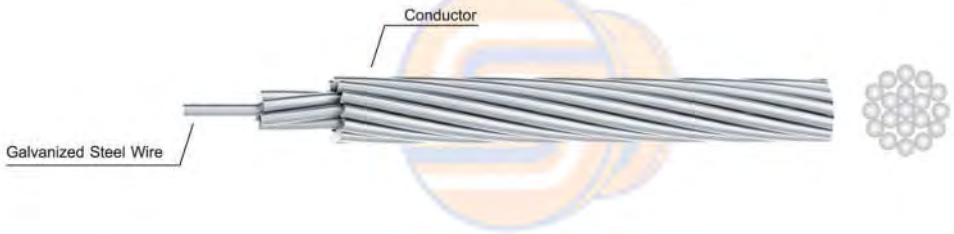
Conductor Class : 2 Stranded

D : Packing in drum

การใช้งาน

- ใช้เป็นสายส่งระบบไฟฟ้าในอากาศ

ACSR
ALUMINUM CONDUCTOR STEEL REINFORCED



APPLICATION

For aerial power transmission and distribution.

STEEL CORE :

Galvanized steel (Zinc coated), solid and concentric stranded stranded, size 2.5 - 85 mm²

REFERENCE STANDARD :

TIS 85-2548

CABLE STRUCTURE

CONDUCTOR : Concentric stranded hard drawn aluminium

Size 16 - 680 mm²

Technical Data

Nominal cross sectional area	ALUMINIUM			STEEL WIRE			Overall diameter (approx.)	Maximum conductor resistance at 20°C	Breaking strength	Current rating in free air	Cable weight (approx.)	Standard packing
	Number of wires	Diameter of wires (approx.)	Cross sectional area	Number of wires	Diameter of wires	Cross sectional area						
mm²	No.	mm	mm²	No.	mm	mm²	mm	Ω/km	kgf	A	kg/km	m
16/2.5	6	1.80	15.3	1	1.80	2.54	5.40	1.880	592	90	60	4,000/D
25/4	6	2.25	23.9	1	2.25	3.98	6.75	1.203	916	125	95	4,000/D
35/6	6	2.70	34.4	1	2.70	5.73	8.10	0.8353	1,265	145	140	3,000/D
50/8	6	3.20	48.3	1	3.20	8.04	9.60	0.5947	1,716	170	200	3,000/D
50/30	12	2.33	51.2	7	2.33	29.85	11.50	0.5644	4,380	170	380	3,000/D
70/12	26	1.85	69.9	7	1.44	11.40	11.50	0.4131	2,676	290	280	3,000/D
95/15	26	2.15	94.4	7	1.67	15.38	13.50	0.3058	3,565	350	380	3,000/D
95/55	12	3.20	96.5	7	3.20	56.30	16.00	0.2993	7,965	350	700	3,000/D
120/20	26	2.44	121.6	7	1.90	19.85	15.50	0.2375	4,555	410	490	2,000/D
120/70	12	3.60	122.1	7	3.60	71.25	18.00	0.2365	10,034	410	900	2,000/D
125/30	30	2.33	127.9	7	2.33	29.85	16.00	0.2259	5,759	425	600	2,000/D
150/25	26	2.70	148.9	7	2.10	24.25	17.00	0.1939	5,513	470	600	2,000/D
170/40	30	2.70	171.8	7	2.70	40.08	18.50	0.1683	7,675	520	800	2,000/D
185/30	26	3.00	183.8	7	2.33	29.85	18.50	0.1571	6,618	535	750	2,000/D
210/35	26	3.20	209.1	7	2.49	34.09	20.00	0.1381	7,489	590	850	1,500/D
210/50	30	3.00	212.1	7	3.00	49.48	21.00	0.1363	9,390	610	1,000	1,500/D
230/10	24	3.50	230.9	7	2.33	29.85	21.00	0.1250	7,313	630	900	1,500/D
240/40	26	3.45	243.1	7	2.68	39.49	21.00	0.1188	8,640	645	1,000	1,500/D
265/35	24	3.74	263.7	7	2.49	34.10	22.00	0.1095	8,307	680	1,000	1,000/D
300/50	26	3.86	304.3	7	3.00	49.50	24.00	0.0949	10,702	740	1,200	1,000/D
305/40	54	2.68	304.6	7	2.68	39.50	24.00	0.0949	9,942	740	1,200	1,000/D
380/50	54	3.00	381.7	7	3.00	49.50	47.00	0.0758	12,312	840	1,500	1,000/D
435/55	54	3.20	434.3	7	3.20	56.30	28.00	0.0666	13,673	900	1,700	1,000/D
490/65	54	3.40	490.3	7	3.40	63.60	30.00	0.0590	15,343	960	1,900	1,000/D
550/70	54	3.60	549.7	7	3.60	71.30	32.00	0.0526	17,096	1,020	2,100	500/D
680/85	54	4.00	678.6	19	2.40	86.00	36.00	0.0426	12,040	1,150	2,600	500/D

Conductor Class : 2 Stranded

D : Packing in drum

การใช้งาน

- ใช้เป็นสายส่งระบบไฟฟ้าในอากาศ

THWA

750 V. 70°C STRANDED ALUMINIUM CONDUCTOR, PVC INSULATED, SINGLE CORE

APPLICATION

For low voltage overhead distribution line.

TESTING VOLTAGE : 2,500 Volts

REFERENCE STANDARD :

TIS 293-2541 Table 1

CABLE STRUCTURE

CONDUCTOR : Solid and stranded hard drawn aluminium wires

CLASS 2 Size 10 - 500 mm²

INSULATION : Polyvinyl chloride

CORE IDENTIFICATION :

Single core, Black color or as request

CLASSIFICATION

Maximum Conductor Temperature :70°C

Circuit Voltage dose not exceed 750 Volts

Technical Data

TIS 293-2541, TABLE 1

Nominal cross sectional area	Conductor type	Number of wires	Diameter of wires (approx.)	Nominal insulation thickness	Overall diameter (approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 70°C	Minimum breaking strength of conductor	Current rating in free air at 40°C	Cable weight (approx.)	Standard packing
mm²	Class	No.	mm	mm	mm	Ω/km	MΩ-km	N	A	kg/km	m
10	1	1	3.49	1.1	6.0	3.08	0.0078	1,562	52	50	100/C
10	2	7	1.32	1.1	6.7	3.08	0.0070	1,769	52	55	100/C
16	1	1	4.43	1.1	7.0	1.91	0.0064	2,445	70	70	100/C
16	2	7	1.68	1.1	7.8	1.91	0.0058	2,781	70	80	100/C
25	2	7	2.12	1.3	9.6	1.20	0.0055	4,241	95	120	1,000/D
35	2	7	2.49	1.3	10.8	0.868	0.0048	5,703	117	160	1,000/D
50	2	7	2.90	1.5	12.0	0.641	0.0047	7,423	143	210	1,000/D
50	2	19	1.76	1.5	12.5	0.641	0.0047	8,114	143	210	1,000/D
70	2	19	2.12	1.5	14.3	0.443	0.0040	11,487	185	280	1,000/D
95	2	19	2.49	1.7	16.6	0.320	0.0038	15,470	226	390	1,000/D
120	2	19	2.80	1.7	18.2	0.253	0.0035	18,810	264	470	1,000/D
120	2	37	2.01	1.7	18.3	0.253	0.0034	20,114	264	470	1,000/D
150	2	37	2.23	1.9	20.3	0.206	0.0035	24,704	302	600	1,000/D
185	2	37	2.50	2.1	22.6	0.164	0.0034	30,187	352	700	1,000/D
240	2	61	2.23	2.3	25.8	0.125	0.0033	38,568	421	900	1,000/D
300	2	61	2.49	2.5	28.6	0.100	0.0032	46,901	487	1,100	1,000/D
400	2	61	2.82	2.7	32.0	0.0778	0.0031	57,948	574	1,400	1,000/D
500	2	61	3.20	3.1	36.3	0.0605	0.0031	73,194	675	1,900	1,000/D

C : Packing in coil

D : Packing in drum

การใช้งาน

- ใช้เป็นสายในระบบจำหน่ายไฟฟ้าแรงดันต่ำ

SUPER CABLE

บริษัท ซีที อิเลคทริค ซัพพลาย จำกัด
ที่อยู่ : 168/27 หมู่ที่ 3 ตำบล บางคูเวียง
อำเภอบางกรวย
จังหวัดนนทบุรี 11130
โทร : 02 550 9555
E-Mail :ct_electricsupply@hotmail.com

TIS 11-2553 TIS 293-2541 ISO 9001:2015 , ISO 14001:2015