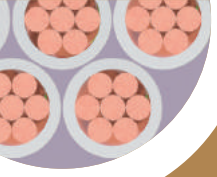
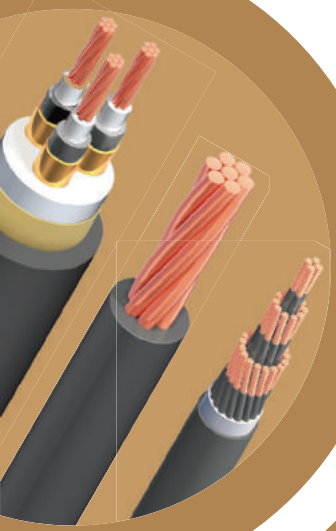
www.kumhwacable.com

KUMHWA CABLE

Cable & Wire Corporation





A strong competitor in recession
with superior technology and perfect quality

CEO Message

We, Kumhwa Cable, established in May 1st, 1999., has come this far with the goal and hard work of making the best products. We send our deepest gratitude to all the customers who helped us out in every way. From establishment to date, all the executives and staff members worked as a unified body for the best quality, and we are trying to satisfy the customers by continuing with production innovation and improvement of management system through equipment investment, and to produce high-quality products. "Quality Kumhwa" is our slogan, and with this, we will do our best in order to meet with the expectations of our customers. We ask for your continuous support and interest. Kumhwa Cables will continue to work harder and develop further.

Kumhwa Cable Co., Ltd.
Chairman **Byung Wook, Park**

Reference Glossary

ACSR	Aluminum Conductor Steel Reinforced
AL	Aluminum
AW	Aluminum-clad
AWA	Aluminum Wire Armour
CTS	Copper Tape Screened
CU	Copper
CVV	Copper Conductor PVC insulated PVC sheathed
-S	Cu Tape Screened
-SB	Cu Braided Screened
GV	PVC insulated Grounding Wire
HFIX	Halogen Free XLPE Insulated Wire
HIV	Heat-Resistant Indoor PVC Insulated Wire
IV	Indoor PVC Insulated Wire
OC	Outdoor weather proof Cross-linked polyethylene
OW	Outdoor weather proof Wire
PVC	Polyvinyl chloride
SAC	Spaced Aerial Cable
SWA	Steel Wire Armour
TFR	Tray flame Retardant
VCTF	PVC Insulated PVC Sheathed Flexible Code
XLPE	Cross-linked polyethylene

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OVERHEAD POWER LINE

0.6/1kV AL/XLPE

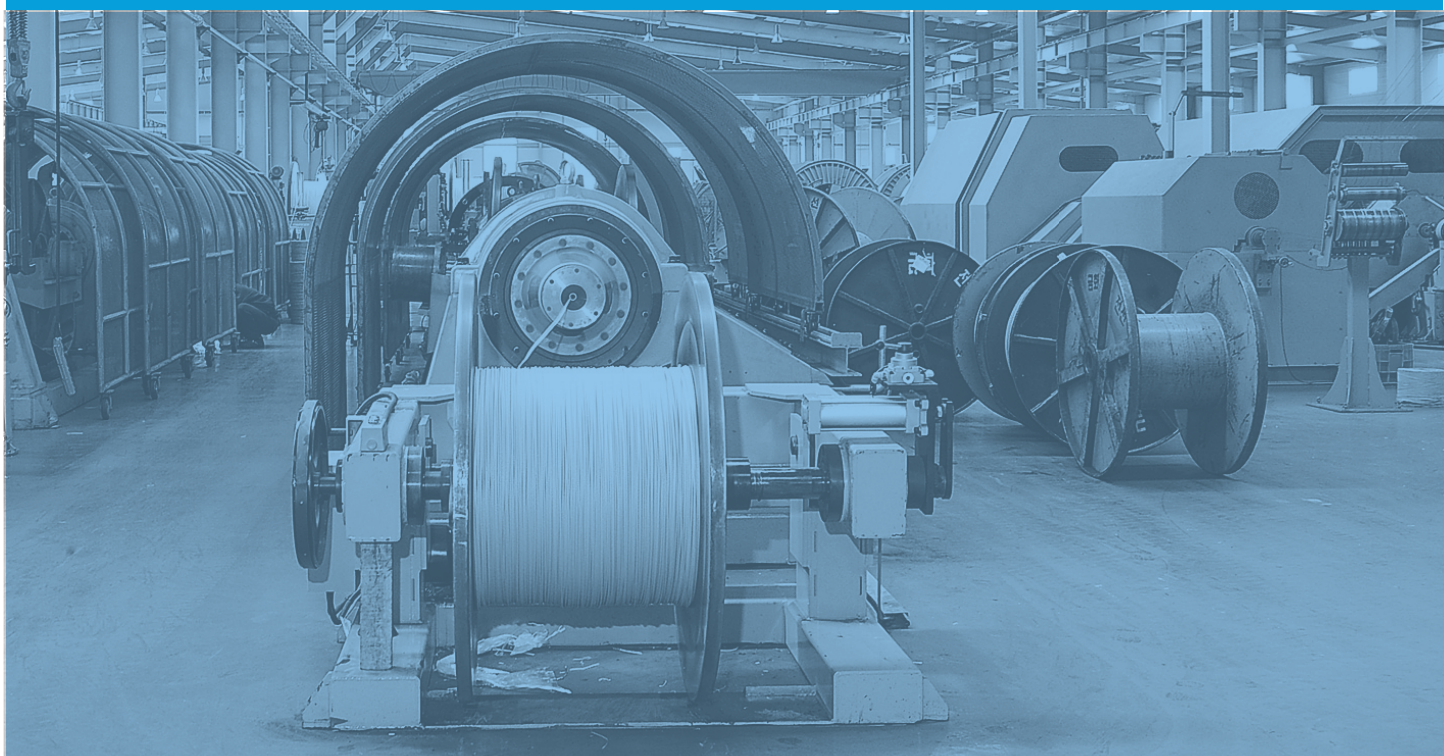
12kV ACSR(AW)XLPE

22.9kV ACSR(AW)XLPE

36kV ACSR(AW)XLPE

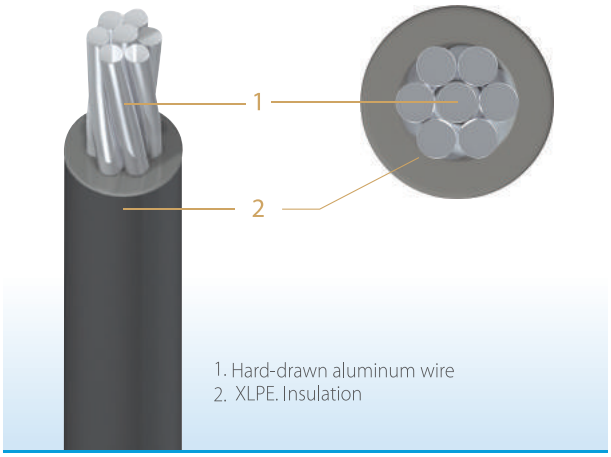
15kV AL/XLPE/XLPE

35kV AL/XLPE/XLPE



0.6/1kV Al Conductor XLPE Insulated Cable

AL/XLPE



1. Hard-drawn aluminum wire
2. XLPE. Insulation

APPLICATION

For used overhead distribution line on pole and steel tower.

CLASSIFICATION

Conductor : AL wire
Insulation : XLPE(black)
Max. Conductor Temperature : 90℃

REFERENCE STANDARD

AS/ZNS 3560.1 / IEC 60502-1

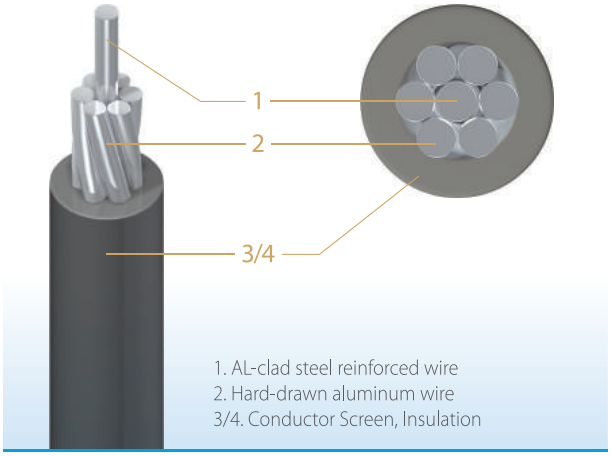
SINGLE CORE

Nominal Cross Sectional Area	Number & Diameter of Wire	Conductor Diameter	Nominal Insulation Thickness	Minimum Breaking Load of Conductor	Approx. Overall Diameter	Max. Conductor Resistance at 20℃	Approx. Weight
mm^2	mm	mm	mm	kn	mm	Ω / km	kg/ km
25	7	5.8 ~ 6.1	1.3	3.5	8.4	1.2	95
35	7	6.8 ~ 7.2	1.3	4.9	9.4	0.868	120
50	7	8.0 ~ 8.4	1.5	7.0	11.0	0.641	160
70	19	9.6 ~ 10.1	1.5	9.8	12.6	0.443	230
95	19	11.3 ~ 11.9	1.7	12.3	14.9	0.320	330
120	37	12.8 ~ 13.5	1.7	14.4	16.3	0.253	400

12-36kV Al Conductor Al-Clad Steel Reinforced Outdoor Weatherproof XLPE Insulated Cable

ACSR(AW)/XLPE

ACSR/AW-OC



1. AL-clad steel reinforced wire
2. Hard-drawn aluminum wire
3/4. Conductor Screen, Insulation

APPLICATION

For used overhead distribution line on pole and steel tower.

CLASSIFICATION

Conductor : AL wire and AL-clad steel wire
Conductor Screen : Semi-conducting Tape with compound or Semi-conducting compound
Insulation : XLPE(black)
Max. Conductor Temperature : 90℃

REFERENCE STANDARD

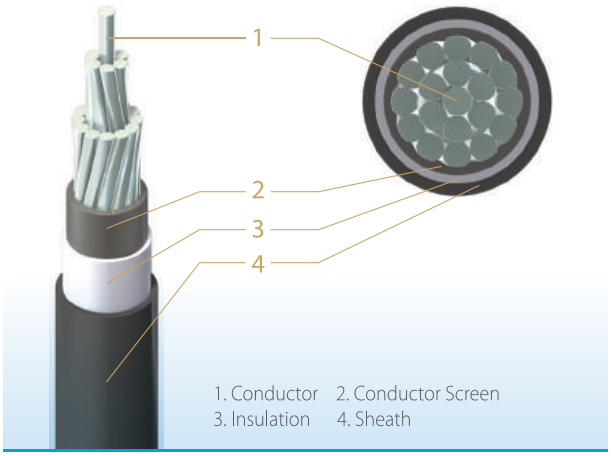
KEPCO ES-6145-0020 / KEPCO ES-6145-0006

Voltage	Nominal Cross Sectional Area	Conductor			Conductorin Screen (min)	Thickness of Insulation
		Minimum Number of Wire	Number of Wire (ST)	Diameter of Conductor (approx)		
	mm²	No		mm	mm	mm
12kV	32	6/SB	1/2.6	7.2	0.13	1.5
	58	6/SB	1/3.5	9.7	0.13	1.5
	95	6/SB	1/3.5	12	0.13	2
	160	18/SB	1/3.2	15.4	0.13	2
	240	18/SB	1/4.0	18.9	0.13	2.5
22.9kV	32	6/SB	1/2.6	7.2	0.13	2.5
	58	6/SB	1/3.5	9.7	0.13	2.5
	95	6/SB	1/3.5	12	0.13	3
	160	18/SB	1/3.2	15.4	0.13	3.5
	240	18/SB	1/4.0	18.9	0.13	3.5
36kV	32	6/SB	1/2.6	7.2	0.13	-
	58	6/SB	1/3.5	9.7	0.13	-
	95	6/SB	1/3.5	12	0.13	5.5
	160	18/SB	1/3.2	15.4	0.13	5.5
	240	18/SB	1/4.0	18.9	0.13	5.5

Voltage	Nominal Cross Sectional Area	Overall Diameter (approx)	Max. DC.Conductor Resistance at 20℃	Max. Conductor Tensile Load	Cable Weight	AC Test Voltage
	mm²	mm	Ω / km	A	kg/km	kV / min
12kV	32	11.6	0.877	1,090	192	15kV / 5min
	58	14.1	0.484	1,900	309	
	95	17.5	0.302	2,360	450	
	160	20.5	0.183	3,080	663	
	240	25.5	0.123	4,500	990	
22.9kV	32	13.2	0.877	1,090	210	25kV / 5min
	58	15.7	0.484	1,900	330	
	95	19	0.302	2,360	530	
	160	23.4	0.183	3,080	730	
	240	27	0.123	4,500	1,040	
36kV	32	-	0.877	1,090	-	38kV / 5min
	58	-	0.484	1,900	-	
	95	24.5	0.302	2,360	650	
	160	28	0.183	3,080	895	
	240	31.5	0.123	4,500	1,210	

15-35kV Al Conductor XLPE Insulated and Sheathed spaced Aeriar Cable

AL/XLPE/XLPE SAC



APPLICATION

For used overhead distribution line on pole and steel tower.

CLASSIFICATION

Conductor : Hard-drawn AL wire
Conductor Screen : Semi-conducting Tape
Insulation : XLPE(natural)
Sheath : XLPE(black)
Max. Conductor Temperature : 90℃

REFERENCE STANDARD / CERTIFICATION

ICEA-S-66-524 / MEA

Voltage	Nominal Cross Sectional Area	Minimum Number of Wire	Diameter of Conductor (approx)	Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)
	mm²	No	mm	mm	mm	mm
15kV	25	6	5.9	1.91	1.91	14.6
	35	6	6.95	1.91	1.91	15.6
	50	6	8.33	1.91	1.91	17
	70	12	9.73	1.91	1.91	18.5
	95	15	11.5	1.91	1.91	20
	120	15	13	1.91	1.91	21.5
	150	15	14.3	1.91	1.91	23.5
	185	30	16	1.91	1.91	25
	240	30	18.5	1.91	1.91	27.5
35kV	25	6	5.9	4.445	3.175	22
	35	6	6.95	4.445	3.175	23
	50	6	8.33	4.445	3.175	24.5
	70	12	9.73	4.445	3.175	25
	95	15	11.5	4.445	3.175	27.5
	120	15	13	4.445	3.175	29.5
	150	15	14.3	4.445	3.175	30.5
	185	30	16	4.445	3.175	32
	240	30	18.5	4.445	3.175	34.5

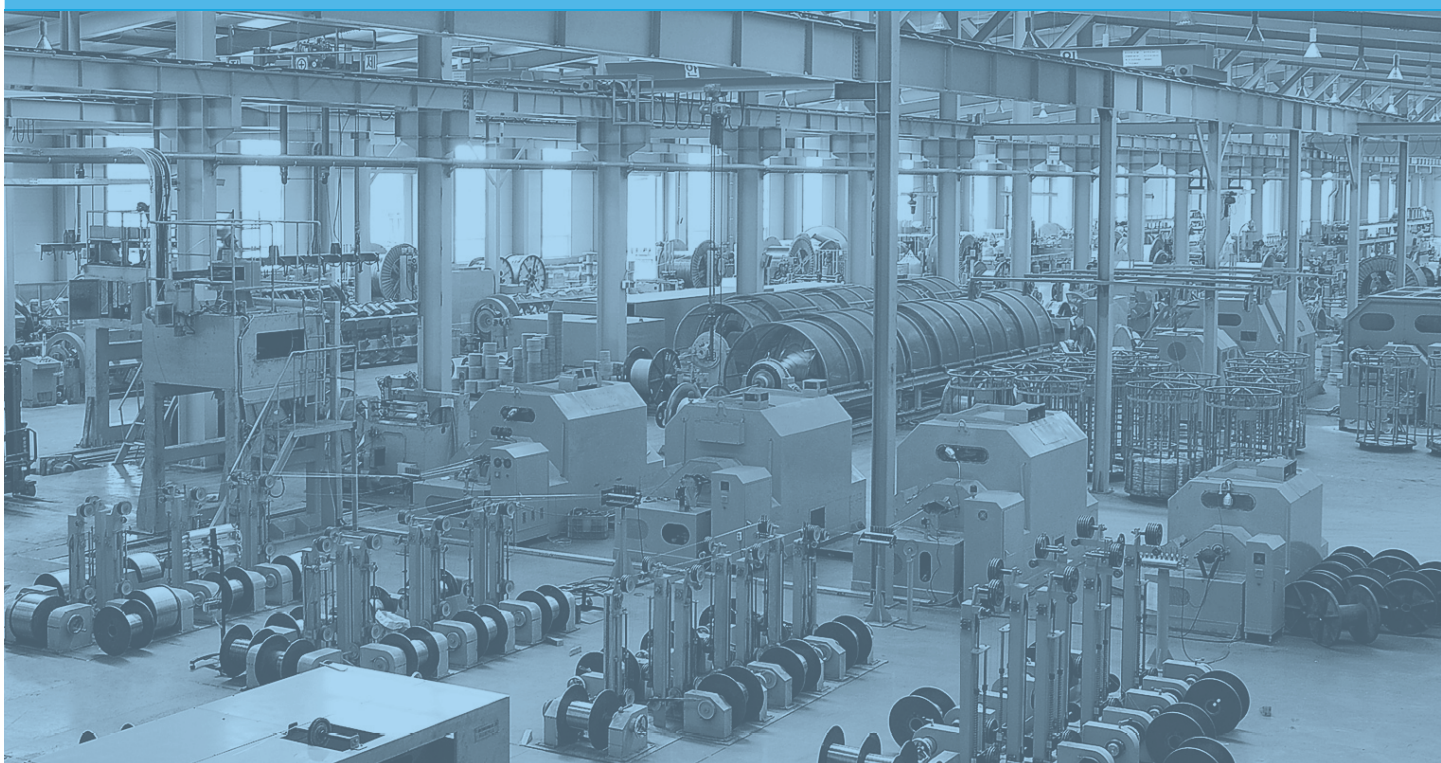
Voltage	Nominal Cross Sectional Area	Max. DC.Conductor Resistance at 20℃	Allowbale ampacities in free air at 40℃ ambient	Cable Weight	Max. Voltage Rating (Phase to Phase)	AC Test Voltage
	mm²	Ω / km	A	kg/km	kV	kV / min
15kV	25	1.2	120	210	15kV	27kV / 5min
	35	0.868	151	252		
	50	0.641	187	311		
	70	0.443	234	383		
	95	0.32	281	476		
	120	0.253	324	565		
	150	0.206	375	664		
	185	0.164	433	782		
	240	0.125	525	965		
35kV	25	1.2	118	393	35kV	49kV / 5min
	35	0.868	148	443		
	50	0.641	184	517		
	70	0.443	227	599		
	95	0.32	276	711		
	120	0.253	318	831		
	150	0.206	367	933		
	185	0.164	425	1,073		
	240	0.125	515	1,293		

POWER CABLE

0.6/1kV CU/XLPE/PVC

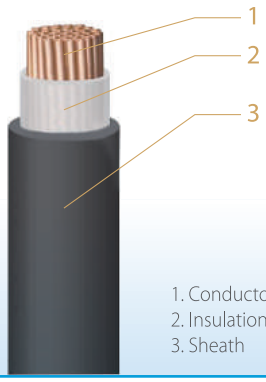
6/10(12)kV CU/XLPE/PVC/A(S)WA/PVC

18/30(36)kV CU/XLPE/PVC/A(S)WA/PVC

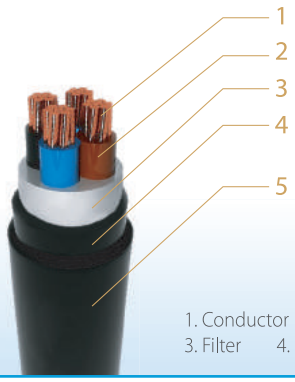


0.6/1kV XLPE Insulated Unarmoured Cable IEC 60502-1

CU/XLPE/PVC CV



1. Conductor
2. Insulation
3. Sheath



1. Conductor 2. Insulation
3. Filter 4. Binder Tape 5. Sheath

APPLICATION

It is used for 0.6/1kV power distribution line, having excellent electrical, physical and chemical characteristics.

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard(KS)

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : XLPE(natural)
Sheath : PVC(ST2)
Max. Conductor Temperature : 90℃
Max. Voltage(Phase to Phase) Rating : 1kV
AC Test Voltage : 35kV/5min

SINGLE CORE

Nominal Cross Sectional Area	Conductor Class No.	Outer Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Max. Conductor Resistance at 20℃	Test Voltage	Approx. Weight
mm^2	mm	mm	mm	No	mm	Ω / km	V/5min	kg/km
1.5	7/0.53	1.59	0.7	1.4	6.2	12.1	3500	55
2.5	7/0.67	2.01	0.7	1.4	6.6	7.41	3500	70
4	7/0.85	2.55	0.7	1.4	7.1	4.61	3500	90
6	7/1.04	3.12	0.7	1.4	7.7	3.08	3500	110
10	7/1.35	4.05	0.7	1.4	8.6	1.83	3500	155
16	C. C.	4.7	0.7	1.4	9.5	1.15	3500	215
25	C. C.	5.9	0.9	1.4	11.3	0.727	3500	315
35	C. C.	6.9	0.9	1.4	12.3	0.524	3500	415
50	C. C.	8.1	1	1.4	13.1	0.387	3500	560
70	C. C.	9.8	1.1	1.4	15.6	0.268	3500	745
95	C. C.	11.4	1.1	1.5	17.2	0.193	3500	995
120	C. C.	12.9	1.2	1.5	18.6	0.153	3500	1245
150	C. C.	14.4	1.4	1.6	20.7	0.124	3500	1535
185	C. C.	15.9	1.6	1.6	22.8	0.0991	3500	1910
240	C. C.	18.3	1.7	1.7	25.9	0.0754	3500	2425
300	C. C.	20.5	1.8	1.8	29.2	0.0601	3500	3030
400	C. C.	23.2	2	1.9	32	0.047	3500	3950
500	C. C.	26.4	2.2	2	36	0.0366	3500	4790
630	C. C.	30.2	2.4	2.2	41	0.0283	3500	6520

TWO CORE

Nominal Cross Sectional Area	Number & Diameter of Wire	Outer Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Max. Conductor Resistance at 20℃	Test Voltage	Approx. Weight
mm²	mm	mm	mm	No	mm	Ω / km	V/5min	kg/km
1.5	7/0.53	1.59	0.7	1.8	11	12.1	3500	125
2.5	7/0.67	2.01	0.7	1.8	12	7.41	3500	155
4	7/0.85	2.55	0.7	1.8	13	4.61	3500	200
6	7/1.04	3.12	0.7	1.8	14	3.08	3500	250
10	7/1.35	4.05	0.7	1.8	17	1.83	3500	355
16	C. C.	4.7	0.7	1.8	18.5	1.15	3500	480
25	C. C.	5.9	0.9	1.8	22	0.727	3500	710
35	C. C.	6.9	0.9	1.8	24	0.524	3500	925
50	C. C.	8.1	1	1.9	27	0.387	3500	1250
70	C. C.	9.8	1.1	2	31	0.268	3500	1660
95	C. C.	11.4	1.1	2.1	35	0.193	3500	2215
120	C. C.	12.9	1.2	2.3	38	0.153	3500	2735
150	C. C.	14.4	1.4	2.4	43	0.124	3500	3420
185	C. C.	15.9	1.6	2.6	47	0.0991	3500	4255
240	C. C.	18.3	1.7	2.8	53	0.0754	3500	5435
300	C. C.	20.5	1.8	3	58	0.0601	3500	6735

THREE CORE

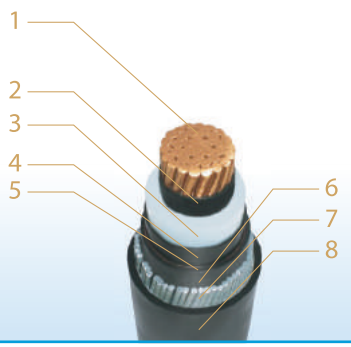
Nominal Cross Sectional Area	Number & Diameter of Wire	Outer Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Max. Conductor Resistance at 20℃	Test Voltage	Approx. Weight
mm²	mm	mm	mm	No	mm	Ω / km	V/5min	kg/km
1.5	7/0.53	1.59	0.7	1.8	11.5	12.1	3500	145
2.5	7/0.67	2.01	0.7	1.8	12.5	7.41	3500	185
4	7/0.85	2.55	0.7	1.8	13.5	4.61	3500	245
6	7/1.04	3.12	0.7	1.8	14.5	3.08	3500	320
10	7/1.35	4.05	0.7	1.8	18	1.83	3500	460
16	C. C.	4.7	0.7	1.8	19.5	1.15	3500	640
25	C. C.	5.9	0.9	1.8	23	0.727	3500	960
35	C. C.	6.9	0.9	1.8	25	0.524	3500	1265
50	C. C.	8.1	1	1.9	29	0.387	3500	1710
70	C. C.	9.8	1.1	2	33	0.268	3500	2315
95	C. C.	11.4	1.1	2.1	37	0.193	3500	3095
120	C. C.	12.9	1.2	2.3	41	0.153	3500	3855
150	C. C.	14.4	1.4	2.4	46	0.124	3500	4825
185	C. C.	15.9	1.6	2.6	50	0.0991	3500	6005
240	C. C.	18.3	1.7	2.8	57	0.0754	3500	7635
300	C. C.	20.5	1.8	3	62	0.0601	3500	9545

FOUR CORE

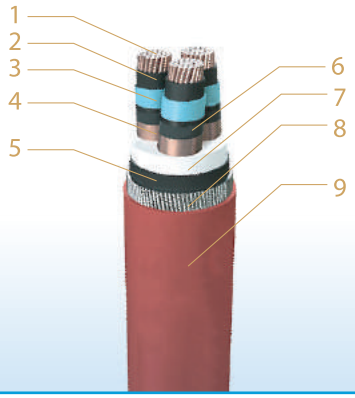
Nominal Cross Sectional Area	Number & Diameter of Wire	Outer Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Max. Conductor Resistance at 20℃	Test Voltage	Approx. Weight
mm²	mm	mm	mm	No	mm	Ω / km	V/5min	kg/km
1.5	7/0.53	1.59	0.7	1.8	12.5	12.1	3500	175
2.5	7/0.67	2.01	0.7	1.8	13.5	7.41	3500	220
4	7/0.85	2.55	0.7	1.8	14.5	4.61	3500	295
6	7/1.04	3.12	0.7	1.8	16	3.08	3500	395
10	7/1.35	4.05	0.7	1.8	20	1.83	3500	580
16	C. C.	4.7	0.7	1.8	22	1.15	3500	810
25	C. C.	5.9	0.9	1.8	26	0.727	3500	1230
35	C. C.	6.9	0.9	1.8	28	0.524	3500	1650
50	C. C.	8.1	1	1.9	32	0.387	3500	2230
70	C. C.	9.8	1.1	2	36	0.268	3500	3010
95	C. C.	11.4	1.1	2.1	42	0.193	3500	4050
120	C. C.	12.9	1.2	2.3	46	0.153	3500	5060
150	C. C.	14.4	1.4	2.4	51	0.124	3500	6315
185	C. C.	15.9	1.6	2.6	56	0.0991	3500	7895
240	C. C.	18.3	1.7	2.8	63	0.0754	3500	10025
300	C. C.	20.5	1.8	3	70	0.0601	3500	12560

6/10(12)kV XLPE Insulated Armoured Cable IEC 60502-2

CU/XLPE/CTS/PVC/A(S)WA/PVC CV/A(S)WA



1. Copper Conductor
2. Insulation Screen
3. Insulation
4. Insulation Screen
5. Metallic screen
6. PVC bedding
7. AL Wire Armour
8. PVC Sheath



1. Copper Conductor
2. Conductor Screen
3. XLPE Insulation
4. Metallic Screen
5. PVC bedding
6. Insulation Screen
7. Filter
8. Steel Wire Armour(SWA)
9. PVC Sheath

APPLICATION

It is used for 6/10kV power distribution line, having excellent electrical, physical and chemical characteristics.

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-2
Korea Electric Power Corporation Standard(KS)

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : XLPE(natural) **Metallic Shield :** Copper Tape
Bedding : PVC **Sheath :** PVC(ST2)
Armour : AL wire(1Core), Steel Wire(multi-Core)
Max. Conductor Temperature : 90℃
Max. Voltage(Phase to Phase) Rating : 10kV
AC Test Voltage : 21kV/5min

6/10(12)KV CU/XLPE/PVC/AWA/PVC (1 CORE)

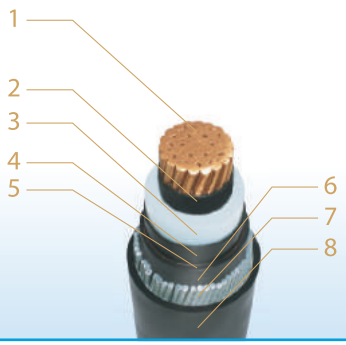
Conductor			Insulation Thickness	Separation sheath Thickness	Dia. of Aluminium wire	Outer Sheath Thickness	Approx. Overall Diameter	Max. Resistance at 20℃	A.C. Test Voltage
Nominal Cross Sectional Area	Construction	Overall Dia.							
mm²	Shape	mm	mm	mm	mm	mm	mm	Ω / km	kV/5m
35	C. C.	6.9	3.4	1	1.6	1.7	27	0.524	21
50	C. C.	8.1	3.4	1	1.6	1.8	28	0.387	21
70	C. C.	9.8	3.4	1	1.6	1.9	30	0.268	21
95	C. C.	11.4	3.4	1	1.6	1.9	32	0.193	21
120	C. C.	12.9	3.4	1	1.6	2	34	0.153	21
150	C. C.	14.4	3.4	1	2	2.1	36	0.124	21
185	C. C.	15.9	3.4	1.2	2	2.1	38	0.0991	21
240	C. C.	18.3	3.4	1.2	2	2.2	41	0.0754	21
300	C. C.	20.5	3.4	1.2	2	2.3	43	0.0601	21
400	C. C.	23.2	3.4	1.2	2.5	2.4	47	0.047	21
500	C. C.	26.4	3.4	1.4	2.5	2.5	51	0.0366	21
630	C. C.	30.2	3.4	1.4	2.5	2.7	54	0.0283	21

6/10(12)KV CU/XLPE/PVC/SWA/PVC (3 CORE)

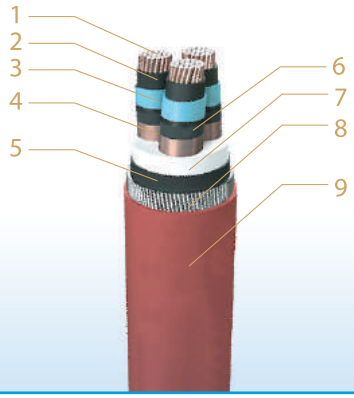
Conductor			Insulation Thickness	Separation sheath Thickness	Dia. of Aluminium wire	Outer Sheath Thickness	Approx. Overall Diameter	Max. Resistance at 20℃	A.C. Test Voltage
Nominal Cross Sectional Area	Construction	Overall Dia.							
mm²	Shape	mm	mm	mm	mm	mm	mm	Ω / km	kV/5m
35	C. C.	6.9	3.4	1.4	2.5	2.5	50	0.524	21
50	C. C.	8.1	3.4	1.4	2.5	2.6	53	0.387	21
70	C. C.	9.8	3.4	1.4	2.5	2.7	57	0.268	21
95	C. C.	11.4	3.4	1.6	2.5	2.9	61	0.193	21
120	C. C.	12.9	3.4	1.6	2.5	3.0	65	0.153	21
150	C. C.	14.4	3.4	1.6	2.5	3.1	68	0.124	21
185	C. C.	15.9	3.4	1.6	2.5	3.2	72	0.0991	21
240	C. C.	18.3	3.4	1.8	3.15	3.5	79	0.0754	21
300	C. C.	20.5	3.4	1.8	3.15	3.6	84	0.0601	21

300/500V Code Code Wire 60227 KS C 53 (70℃)

CU/XLPE/CTS/PVC/A(S)WA/PVC CV/A(S)WA



1. Copper Conductor
2. Insulation Screen
3. Insulation
4. Insulation Screen
5. Metallic screen
6. PVC bedding
7. AL Wire Armour
8. PVC Sheath



1. Copper Conductor
2. Conductor Screen
3. XLPE Insulation
4. Metallic Screen
5. PVC bedding
6. Insulation Screen
7. Filter
8. Steel Wire Armour(SWA)
9. PVC Sheath

APPLICATION

It is used for 18/30kV power distribution line, having excellent electrical, physical and chemical characteristics.

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-2
Korea Electric Power Corporation Standard(KS)

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : XLPE(natural) **Metallic Shield :** Copper Tape
Bedding : PVC **Sheath :** PVC(ST2)
Armour : AL wire(1Core), Steel Wire(multi-Core)
Max. Conductor Temperature : 90℃
Max. Voltage(Phase to Phase) Rating : 30kV
AC Test Voltage : 66kV/5min

18/30(36)KV CU/XLPE/PVC/AWA/PVC (1 CORE)

Conductor			Insulation Thickness	Separation sheath Thickness	Dia. of Aluminium wire	Outer Sheath Thickness	Approx. Overall Diameter	Max. Resistance at 20℃	A.C. Test Voltage
Nominal Cross Sectional Area	Construction	Overall Dia.							
mm²	Shape	mm	mm	mm	mm	mm	mm	Ω / km	kV/5m
70	C. C.	9.8	8.0	1.2	2	2.2	41	0.268	66.0
95	C. C.	11.4	8.0	1.2	2	2.3	43	0.193	66.0
120	C. C.	12.9	8.0	1.2	2	2.3	45	0.153	66.0
150	C. C.	14.4	8.0	1.2	2.5	2.4	47	0.124	66.0
185	C. C.	15.9	8.0	1.2	2.5	2.5	49	0.0991	66.0
240	C. C.	18.3	8.0	1.4	2.5	2.6	52	0.0754	66.0
300	C. C.	20.5	8.0	1.4	2.5	2.6	54	0.0601	66.0
400	C. C.	23.2	8.0	1.4	2.5	2.7	57	0.047	66.0
500	C. C.	26.4	8.0	1.6	2.5	2.9	61	0.0366	66.0
630	C. C.	30.2	8.0	1.6	2.5	3.0	65	0.0283	66.0

18/30(36)KV CU/XLPE/PVC/SWA/PVC (3 CORE)

Conductor			Insulation Thickness	Separation sheath Thickness	Dia. of Aluminium wire	Outer Sheath Thickness	Approx. Overall Diameter	Max. Resistance at 20℃	A.C. Test Voltage
Nominal Cross Sectional Area	Construction	Overall Dia.							
mm²	Shape	mm	mm	mm	mm	mm	mm	Ω / km	kV/5m
70	C. C.	9.8	8.0	1.8	3.15	3.5	81	0.268	66.0
95	C. C.	11.4	8.0	1.8	3.15	3.6	84	0.193	66.0
120	C. C.	12.9	8.0	1.8	3.15	3.8	88	0.153	66.0
150	C. C.	14.4	8.0	1.8	3.15	3.9	91	0.124	66.0

CONTROL CABLE

0.6/1kV CU/PVC/PVC

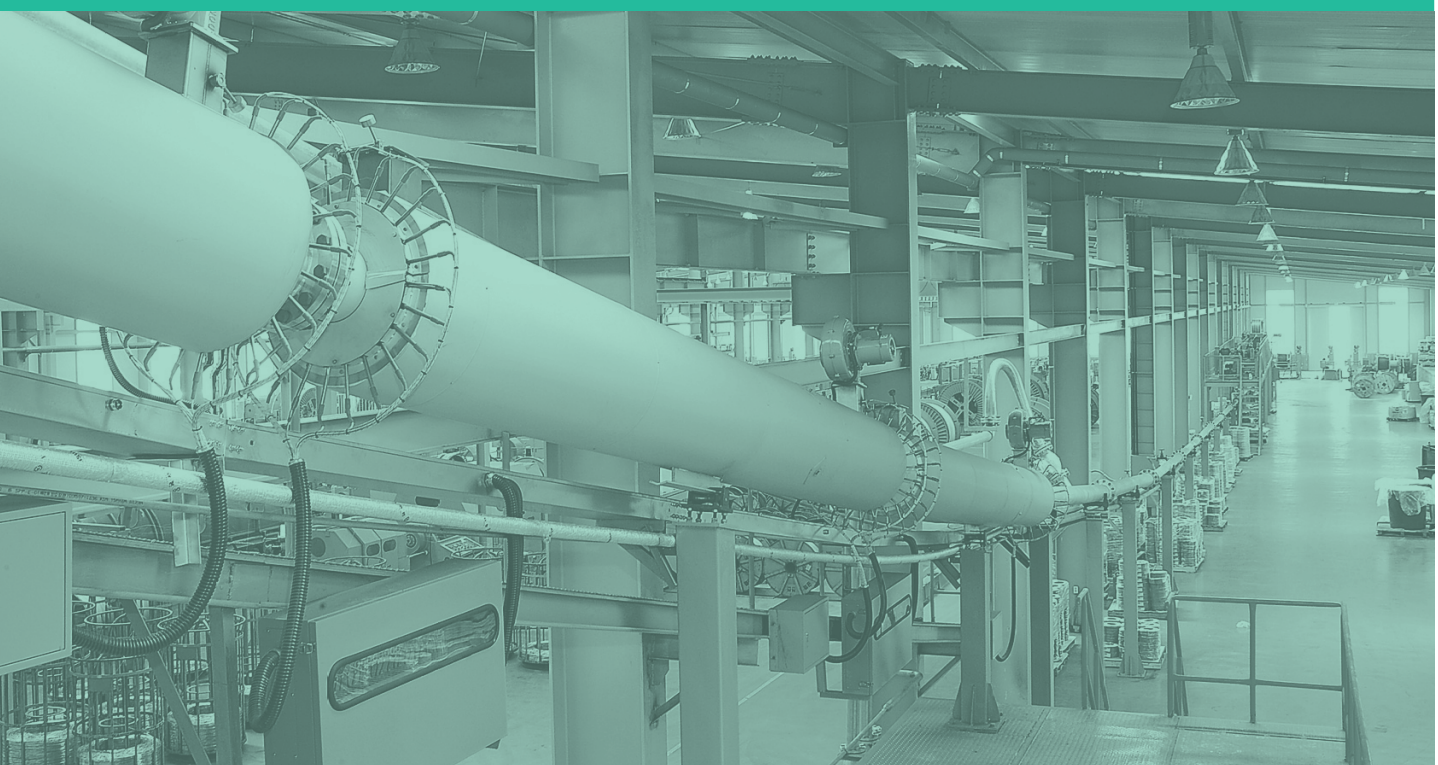
0.6/1kV TFR-CU/PVC/PVC

0.6/1kV CU/PVC/CTS/PVC

0.6/1kV TFR-CU/PVC/CTS/PVC

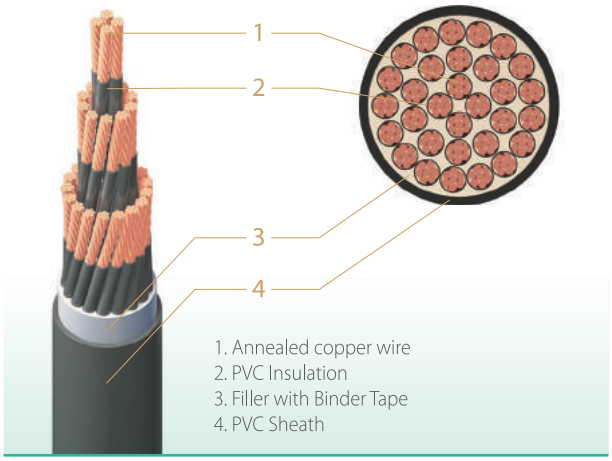
0.6/1kV CU/PVC/SB/PVC

0.6/1kV TFR-CU/PVC/CTS/PVC



0.6/1kV PVC Insulated Control Cable

CU/PVC/PVC — CVV



APPLICATION

For installation in ground, outdoors, indoors and in cable ducts for power stations, industry, and distribution networks.

CLASSIFICATION

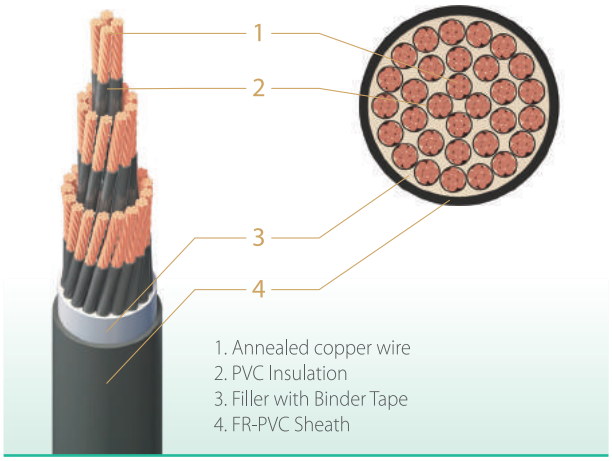
Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : PVC(ST1)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard Certificate(KS)
Korea Safety Certificate(KC)

0.6/1kV Tray Flame-Retardant PVC Insulated Control Cable

TFR-CU/PVC/PVC — TFR-CVV



APPLICATION

Use in control circuits that require flame resistance

CLASSIFICATION

Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : FR-PVC(ST2)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Collective Standard, Group Standard Certificate(KEWIC)
Korea Safety Certificate(KC)

KS C IEC 60502-1

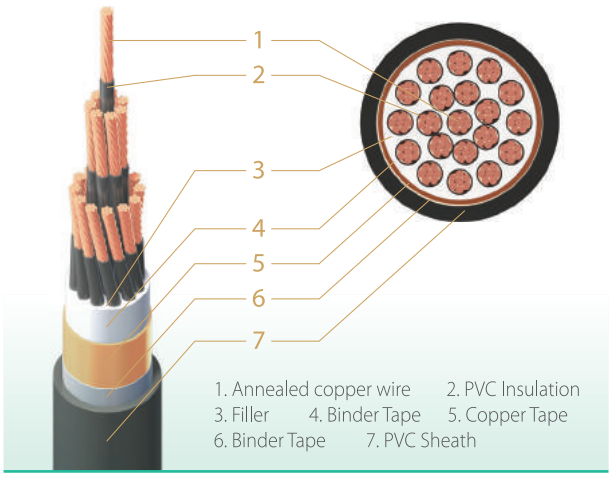
No. of Cores	Conductor			Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)	Max. Conductior Resistance at 20℃	Test Voltage	Cable Weight (approx)
	Nominal Cross Sectional Area	Conductor grade	Diameter of Conductor(approx)						
	mm^2		mm	mm	mm	mm	Ω / km	kV/5min	kg/km
2	1.5	2	1.59	0.8	1.8	11.0	12.1	3.5	150
	2.5	2	2.01	0.8	1.8	12.0	7.41	3.5	190
	4	2	2.55	1.0	1.8	14.0	4.61	3.5	250
	6	2	3.12	1.0	1.8	15.0	3.08	3.5	310
	10	2	4.05	1.0	1.8	17.0	1.83	3.5	420
3	1.5	2	1.59	0.8	1.8	11.5	12.1	3.5	190
	2.5	2	2.01	0.8	1.8	12.5	7.41	3.5	230
	4	2	2.55	1.0	1.8	14.5	4.61	3.5	320
	6	2	3.12	1.0	1.8	16.0	3.08	3.5	410
	10	2	4.05	1.0	1.8	18.0	1.83	3.5	560

KS C IEC 60502-1

No. of Cores	Conductor			Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)	Max. Conductior Resistance at 20℃	Test Voltage	Cable Weight (approx)
	Nominal Cross Sectional Area	Conductor grade	Diameter of Conductor(approx)						
	mm^2		mm	mm	mm	mm	Ω / km	kV/5min	kg/km
4	1.5	2	1.59	0.8	1.8	12.5	12.1	3.5	230
	2.5	2	2.01	0.8	1.8	13.5	7.41	3.5	280
	4	2	2.55	1.0	1.8	16.0	4.61	3.5	400
	6	2	3.12	1.0	1.8	17.0	3.08	3.5	510
	10	2	4.05	1.0	1.8	19.5	1.83	3.5	710
5	1.5	2	1.59	0.8	1.8	13.5	12.1	3.5	270
	2.5	2	2.01	0.8	1.8	14.5	7.41	3.5	340
	4	2	2.55	1.0	1.8	17.0	4.61	3.5	490
	6	2	3.12	1.0	1.8	18.5	3.08	3.5	620
	10	2	4.05	1.0	1.8	21.0	1.83	3.5	870
6	1.5	2	1.59	0.8	1.8	14.5	12.1	3.5	310
	2.5	2	2.01	0.8	1.8	15.5	7.41	3.5	390
	4	2	2.55	1.0	1.8	18.5	4.61	3.5	570
	6	2	3.12	1.0	1.8	21.0	3.08	3.5	730
	10	2	4.05	1.0	1.8	23.0	1.83	3.5	1020
7	1.5	2	1.59	0.8	1.8	14.5	12.1	3.5	330
	2.5	2	2.01	0.8	1.8	15.5	7.41	3.5	420
	4	2	2.55	1.0	1.8	18.5	4.61	3.5	620
	6	2	3.12	1.0	1.8	21.0	3.08	3.5	800
	10	2	4.05	1.0	1.8	23.0	1.83	3.5	1140
8	1.5	2	1.59	0.8	1.8	15.5	12.1	3.5	380
	2.5	2	2.01	0.8	1.8	16.5	7.41	3.5	490
	4	2	2.55	1.0	1.8	20.0	4.61	3.5	720
	6	2	3.12	1.0	1.8	22.0	3.08	3.5	920
	10	2	4.05	1.0	1.8	25.0	1.83	3.5	1310
10	1.5	2	1.59	0.8	1.8	18.0	12.1	3.5	460
	2.5	2	2.01	0.8	1.8	19.5	7.41	3.5	590
	4	2	2.55	1.0	1.8	23.0	4.61	3.5	870
	6	2	3.12	1.0	1.8	26.0	3.08	3.5	1130
	10	2	4.05	1.0	1.8	29.0	1.83	3.5	1610
12	1.5	2	1.59	0.8	1.8	18.5	12.1	3.5	530
	2.5	2	2.01	0.8	1.8	20.0	7.41	3.5	680
	4	2	2.55	1.0	1.8	24.0	4.61	3.5	1020
	6	2	3.12	1.0	1.8	27.0	3.08	3.5	1320
	10	2	4.05	1.0	1.8	30.0	1.83	3.5	1890
15	1.5	2	1.59	0.8	1.8	19.5	12.1	3.5	630
	2.5	2	2.01	0.8	1.8	22.0	7.41	3.5	830
	4	2	2.55	1.0	1.8	26.0	4.61	3.5	1240
	6	2	3.12	1.0	1.8	29.0	3.08	3.5	1620
20	1.5	2	1.59	0.8	1.8	22.0	1.83	3.5	810
	2.5	2	2.01	0.8	1.8	24.0	12.1	3.5	1060
	4	2	2.55	1.0	1.8	29.0	7.41	3.5	1610
	6	2	3.12	1.0	1.8	32.0	4.61	3.5	2100
30	1.5	2	1.59	0.8	1.8	26.0	12.1	3.5	1150
	2.5	2	2.01	0.8	1.8	28.0	7.41	3.5	1520
	4	2	2.55	1.0	1.8	35.0	4.61	3.5	2350

0.6/1kV Control Cable with Copper Tape Shield

CU/PVC/CTS/PVC CVV-S



APPLICATION

Used in control circuits of power plants, substation units and etc., to prevent distortion of signals caused by inductive power reactions created together in the power lines.

CLASSIFICATION

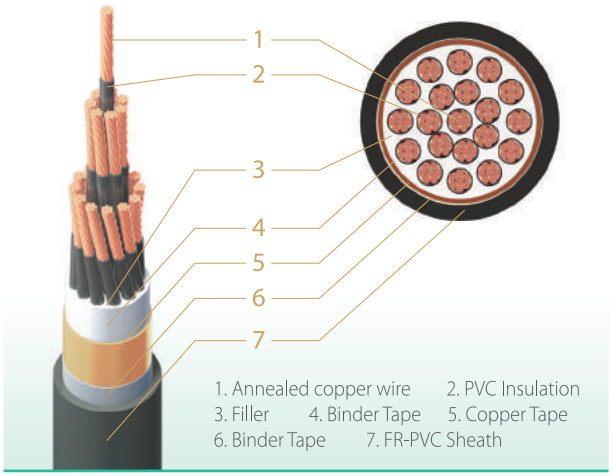
Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : PVC(ST1)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard Certificate(KS)
Korea Safety Certificate(KC)

0.6/1kV Flame-Retardant Control Cable with Copper Tape Shield

CU/PVC/CTS/PVC TFR-CVV-S



APPLICATION

It is used in the plant, subsystem, and other control circuits to prevent distortion of the signal caused by inductive power reactions created together in the power line, and has excellent flame resistance performance.

CLASSIFICATION

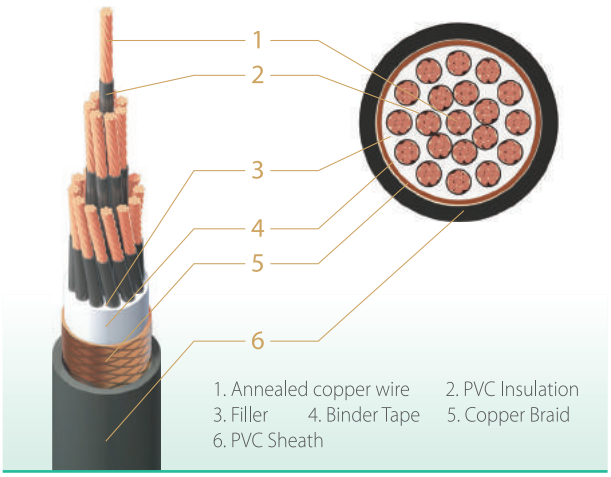
Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : PVC(ST2)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard Certificate(KS)
Korea Safety Certificate(KC)

0.6/1kV Control Cable with Copper Braid Shield

CU/PVC/SB/PVC CVV-SB



1. Annealed copper wire 2. PVC Insulation
3. Filler 4. Binder Tape 5. Copper Braid
6. PVC Sheath

APPLICATION

Used in the control circuit under 0.6 / 1 kV of power plant, substation, etc. It prevents distortion of the signal caused by induced voltages generated from other voltage lines, and it is highly flexible.

CLASSIFICATION

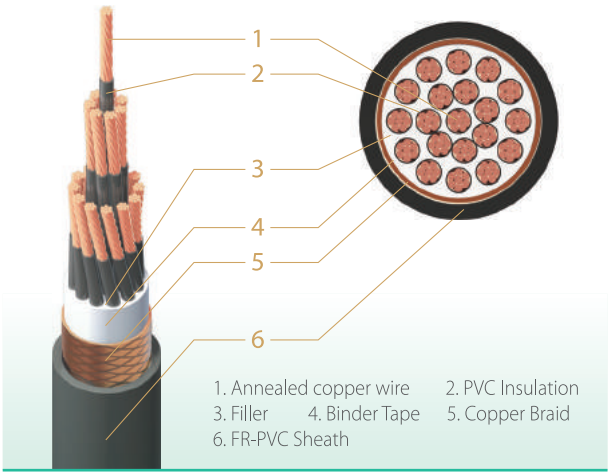
Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : PVC(ST1)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard Certificate(KS)
Korea Safety Certificate(KC)

0.6/1kV Tray Flame-Retardant Control Cable with Copper Braid Shield

CU/PVC/SB/PVC TFR-CVV-SB



1. Annealed copper wire 2. PVC Insulation
3. Filler 4. Binder Tape 5. Copper Braid
6. FR-PVC Sheath

APPLICATION

It prevents distortion of the signal caused by induced voltages generated from other voltage lines.
It has highly flexible and excellent flame resistance.

CLASSIFICATION

Conductor : KS C IEC 60228 Class 2
Insulation : PVC
Sheath : PVC(ST2)
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60502-1
Korea Electric Power Corporation Standard Certificate(KS)
Korea Safety Certificate(KC)

KS C IEC 60502-1 (CVV-S, SB, TFR CVV-S, SB)

· Applicable Standard : IEC60502-1

No. of Cores	Conductor			Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)	Max. Conductior Resistance at 20℃	Test Voltage	Cable Weight (approx)
	Nominal Cross Sectional Area	Conductor grade	Diameter of Conductor(approx)						
	mm²		mm	mm	mm	mm	Ω / km	kV/5min	kg/km
2	1.5	2	1.59	0.8	1.8	12.0	12.1	3.5	170
	2.5	2	2.01	0.8	1.8	13.0	7.41	3.5	200
	4	2	2.55	1.0	1.8	14.5	4.61	3.5	280
	6	2	3.12	1.0	1.8	16.0	3.08	3.5	340
	10	2	4.05	1.0	1.8	17.5	1.83	3.5	460
3	1.5	2	1.59	0.8	1.8	12.5	12.1	3.5	200
	2.5	2	2.01	0.8	1.8	13.5	7.41	3.5	250
	4	2	2.55	1.0	1.8	15.5	4.61	3.5	350
	6	2	3.12	1.0	1.8	17.0	3.08	3.5	440
	10	2	4.05	1.0	1.8	18.5	1.83	35	600

KS C IEC 60502-1 (CVV-S, SB, TFR CVV-S, SB)

· Applicable Standard : IEC60502-1

No. of Cores	Conductor			Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)	Max. Conductior Resistance at 20℃	Test Voltage	Cable Weight (approx)
	Nominal Cross Sectional Area	Conductor grade	Diameter of Conductor(approx)						
	mm^2		mm	mm	mm	mm	Ω / km	kV/5min	kg/km
4	1.5	2	1.59	0.8	1.8	13.5	12.1	3.5	250
	2.5	2	2.01	0.8	1.8	14.5	7.41	3.5	310
	4	2	2.55	1.0	1.8	16.5	4.61	3.5	430
	6	2	3.12	1.0	1.8	18	3.08	3.5	550
	10	2	4.05	1.0	1.8	20.5	1.83	3.5	760
5	1.5	2	1.59	0.8	1.8	14.5	12.1	3.5	290
	2.5	2	2.01	0.8	1.8	15.5	7.41	3.5	360
	4	2	2.55	1.0	1.8	18	4.61	3.5	520
	6	2	3.12	1.0	1.8	19.5	3.08	3.5	660
	10	2	4.05	1.0	1.8	22.5	1.83	3.5	920
6	1.5	2	1.59	0.8	1.8	15.5	12.1	3.5	330
	2.5	2	2.01	0.8	1.8	16.5	7.41	3.5	420
	4	2	2.55	1.0	1.8	19.5	4.61	3.5	620
	6	2	3.12	1.0	1.8	21.5	3.08	3.5	780
	10	2	4.05	1.0	1.8	24.5	1.83	3.5	1090
7	1.5	2	1.59	0.8	1.8	15.5	12.1	3.5	360
	2.5	2	2.01	0.8	1.8	16.5	7.41	3.5	460
	4	2	2.55	1.0	1.8	19.5	4.61	3.5	670
	6	2	3.12	1.0	1.8	21.5	3.08	3.5	860
	10	2	4.05	1.0	1.8	24.5	1.83	3.5	1200
8	1.5	2	1.59	0.8	1.8	16.5	12.1	3.5	410
	2.5	2	2.01	0.8	1.8	17.5	7.41	3.5	520
	4	2	2.55	1.0	1.8	21.5	4.61	3.5	780
	6	2	3.12	1.0	1.8	23.5	3.08	3.5	990
	10	2	4.05	1.0	1.8	26.5	1.83	3.5	1400
10	1.5	2	1.59	0.8	1.8	18.5	12.1	3.5	500
	2.5	2	2.01	0.8	1.8	20.5	7.41	3.5	640
	4	2	2.55	1.0	1.8	24.5	4.61	3.5	950
	6	2	3.12	1.0	1.8	26.5	3.08	3.5	1220
	10	2	4.05	1.0	1.8	30.5	1.83	3.5	1720
12	1.5	2	1.59	0.8	1.8	18.5	12.1	3.5	570
	2.5	2	2.01	0.8	1.8	20.5	7.41	3.5	730
	4	2	2.55	1.0	1.8	25.5	4.61	3.5	1090
	6	2	3.12	1.0	1.8	27.5	3.08	3.5	1400
	10	2	4.05	1.0	1.8	31.5	1.83	3.5	2000
15	1.5	2	1.59	0.8	1.8	20.5	12.1	3.5	680
	2.5	2	2.01	0.8	1.8	22.5	7.41	3.5	890
	4	2	2.55	1.0	1.8	27.5	4.61	3.5	1330
20	2.5	2	2.01	0.8	1.8	25	12.1	3.5	1130
	4	2	2.55	1.0	1.8	30	7.41	3.5	1710
	6	2	3.12	1.0	1.8	33	4.61	3.5	2230
30	1.5	2	1.59	0.8	1.8	26	12.1	3.5	1230
	2.5	2	2.01	0.8	1.8	29	7.41	3.5	1620
	4	2	2.55	1.0	1.8	36	4.61	3.5	2480

INSULATED WIRE

0.6/1kV TFR-GV

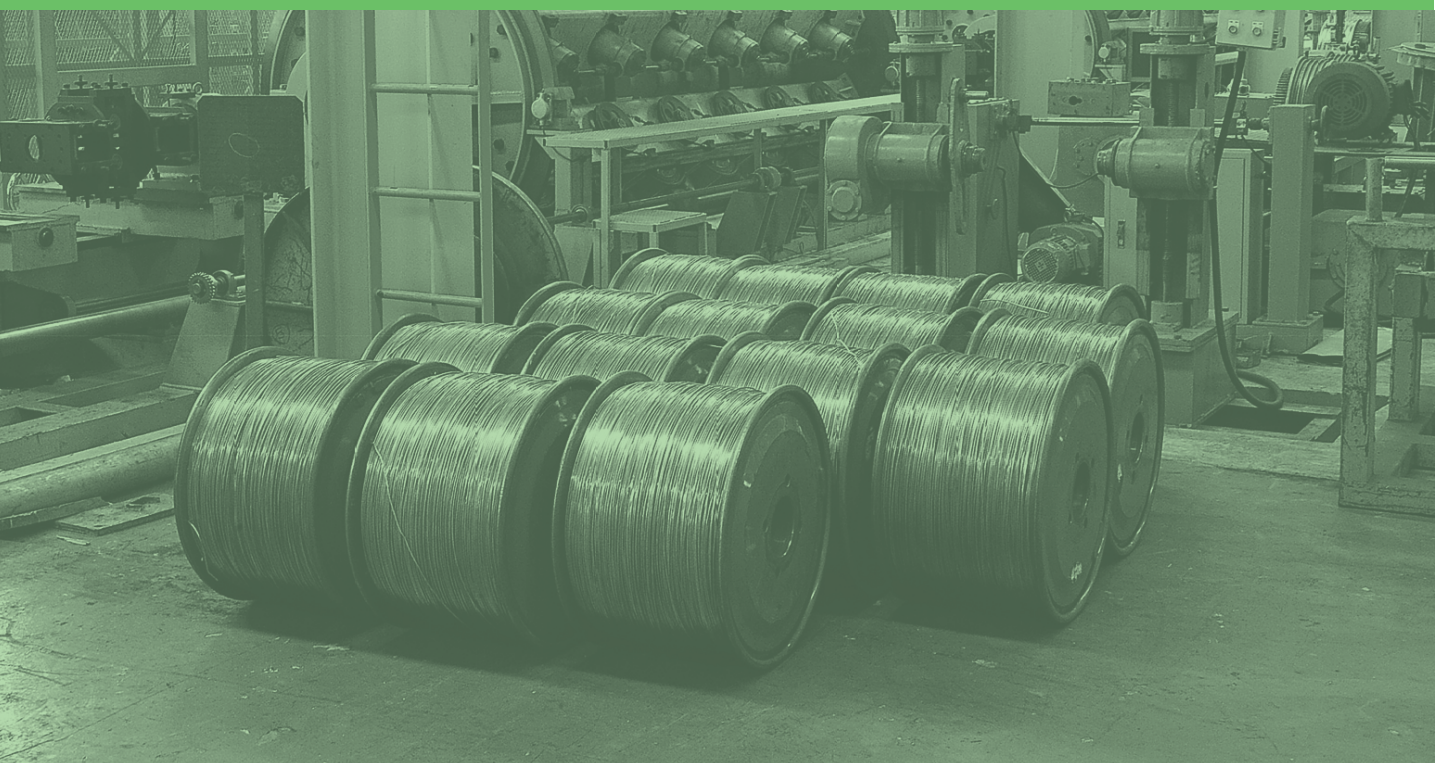
450/750V IV

300/500V HIV

450/750V OW

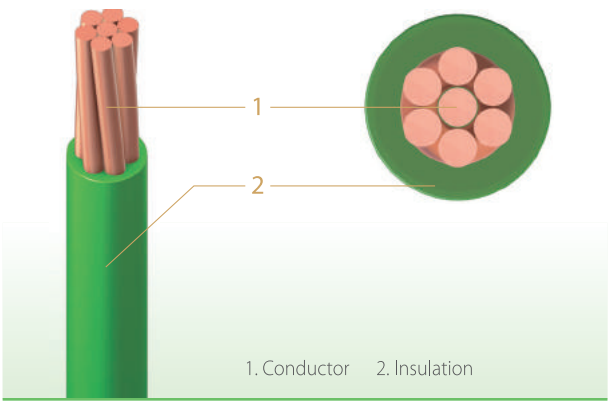
450/750V HFIX

300/500V VCTF



0.6/1kV Tray Flame Retardant Grounding Wire

CU/PVC TFR-GV



APPLICATION

It is used mainly in earthing of electric apparatus and equipment.

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : FR-PVC
Max. Voltage(Phase to Phase) Rating : 1kV
AC Test Voltage : 3.5kV/5min

REFERENCE STANDARD / CERTIFICATION

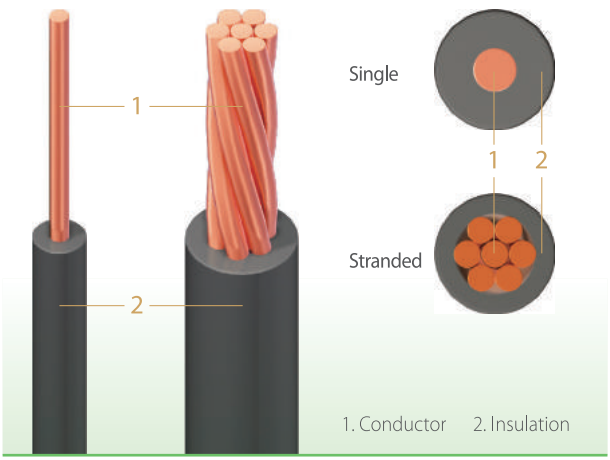
KS C IEC 60502-1
Korea Electric Power Corporation Standard(KS)

COLLECTIVE STANDARD [KEWIC]

Nominal Cross Sectional Area	Conductor Grade	Diameter of Conductor (approx)	Thickness of Insulation	Overall Diameter (approx)	Max. DC. Conductor Resistance at 20℃	Test Voltage	Cable Weight (approx)	Standard Length
mm^2		mm	mm	mm	Ω / km	V/5min	kg/km	m
1.5	2	1.59	2.2	6.5	12.1	3500	65	300
2.4	2	2.01	2.2	7.0	7.41	3500	80	300
4	2	2.55	2.4	8.0	4.61	3500	105	300
6	2	3.12	2.4	8.5	3.08	3500	135	300
10	2	4.05	2.4	9.5	1.83	3500	185	300
16	2	4.7	2.4	10.0	1.15	3500	240	300
25	2	5.9	2.6	12.0	0.727	3500	350	300
35	2	6.9	2.6	13.0	0.524	3500	440	300
50	2	8.1	2.8	14.5	0.387	3500	615	300
70	2	9.8	2.8	16.0	0.268	3500	800	300
95	2	11.4	3.1	18.5	0.193	3500	1080	300
120	2	12.9	3.1	20.0	0.153	3500	1330	300
150	2	14.4	3.4	22.0	0.124	3500	1640	300
185	2	15.9	3.7	25.0	0.0991	3500	2040	300
240	2	18.3	4.0	28.0	0.0754	3500	2595	300
300	2	20.5	4.3	30.0	0.0601	3500	3235	300
400	2	23.2	4.6	34.0	0.047	3500	4200	300
500	2	26.4	4.9	38.0	0.0366	3500	5060	300
630	2	30.2	5.0	42.0	0.0283	3500	6740	300

450/750V Instrument Wire KS IEC 60227-01 (70℃)

CU/PVC IV



APPLICATION

It is used for fixed lines with a rated voltage of 450/750 or lower, and is an insulated wire with good durability.

CLASSIFICATION

Conductor : Hard-drawn copper wire
Insulation : PVC/C
Max. Conductor Temperature : 70℃
Max. Voltage(Phase to Phase) Rating : 0.75kV
AC Test Voltage : 2.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60227-3
Korea Electric Power Corporation Standard(KS)

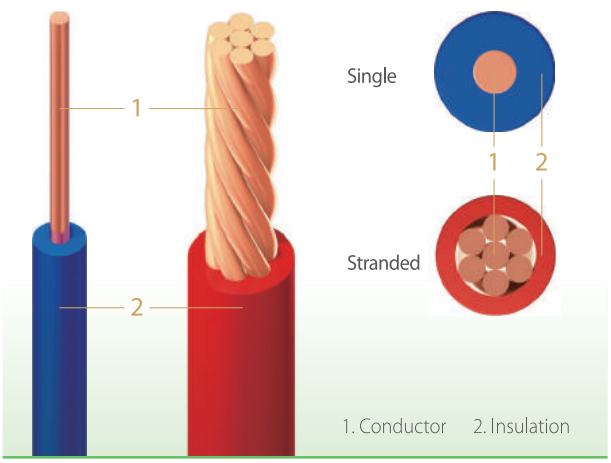
KS C IEC 60227-3 (60227 KS IEC 01)

Nominal Cross Sectional Area	Conductor Grade	Diameter of Conductor (approx)	Thickness of Insulation	Overall Diameter (approx)	Max. DC. Conductor Resistance at 20℃	Test Voltage	Min. Insulation Resistance (70℃)	Cable Weight (approx)	Standard Length
mm²		mm	mm	mm	Ω / km	V/5min	MΩ / km	kg/km	m
1.5	1	1.38	0.7	3.2	12.1	2500	0.011	20	300
1.5	2	1.59	0.7	3.3	12.1	2500	0.010	20	300
2.5	1	1.78	0.8	3.9	7.41	2500	0.009	40	300
2.5	2	2.01	0.8	4.0	7.41	2500	0.009	40	300
4	1	2.25	0.8	4.4	4.61	2500	0.0085	50	300
4	2	2.55	0.8	4.6	4.61	2500	0.0077	50	300
6	1	2.76	0.8	5.0	3.08	2500	0.0070	70	300
6	2	3.12	0.8	5.2	3.08	2500	0.0065	70	300
10	1	3.57	1.0	6.4	1.83	2500	0.0070	120	300
10	2	4.05	1.0	6.7	1.83	2500	0.0065	120	300
16	2	4.7	1.0	7.8	1.15	2500	0.0050	170	300
25	C.C	5.9	1.2	9.7	0.727	2500	0.0050	260	300
35	C.C	7	1.2	10.9	0.524	2500	0.0043	350	300
50	C.C	8.5	1.0	12.8	0.387	2500	0.0043	480	300
70	C.C	9.8	1.4	14.6	0.268	2500	0.0035	670	300
95	C.C	11.5	1.6	17.1	0.193	2500	0.0035	920	300
120	C.C	13	1.6	18.8	0.153	2500	0.0032	1160	300
150	C.C	14.6	1.8	20.9	0.124	2500	0.0032	1430	300
185	C.C	16.1	2.0	23.3	0.0991	2500	0.0032	1780	300
240	C.C	18.5	2.0	26.6	0.0754	2500	0.0032	2320	300
300	C.C	20.5	2.4	29.6	0.0601	2500	0.0030	2930	300
400	C.C	24.1	2.6	33.2	0.047	2500	0.0028	3730	300

* C.C : Class 2 Circular Compression strand

300/500V Heat Resistant Wire KS IEC 60227-07 (90℃)

CU/PVC HIV



APPLICATION

A vinyl insulated wire used for wiring of general electrical work or electrical equipment less than 300/500V, insulated with resin coated with an energy-resistant heating exchanger.

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : PVC/E
Max. Conductor Temperature : 90℃
Max. Voltage(Phase to Phase) Rating : 0.5kV
AC Test Voltage : 2.5kV/5min

REFERENCE STANDARD / CERTIFICATION

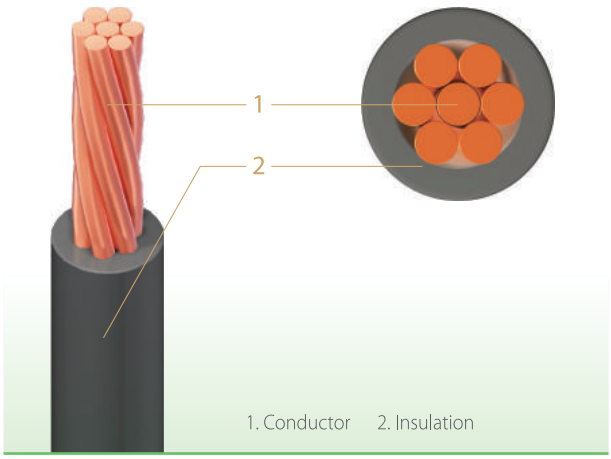
KS C IEC 60227-3
Korea Electric Power Corporation Standard(KS)

KS C IEC 60227-3 (60227 KS IEC 07)

Nominal Cross Sectional Area	Conductor Grade	Diameter of Conductor (approx)	Thickness of Insulation	Overall Diameter (Approx)	Max. DC. Conductor Resistance at 20℃	Test Voltage	Min. Insulation Resistance (70℃)	Cable Weight (Approx)	Standard Length
mm²		mm	mm	mm	Ω / km	V/5min	MΩ / km	kg/km	m
1.5	1	1.38	0.7	3.2	12.1	2500	0.011	20	300
1.5	2	1.59	0.7	3.3	12.1	2500	0.010	25	300
2.5	1	1.78	0.8	3.9	7.41	2500	0.009	35	300
2.5	2	2.01	0.8	4.0	7.41	2500	0.009	35	300

450/750V Outdoor Weather Proof Wire KS C 3313

CU/PVC OW



APPLICATION

It is an insulated wire that is used in low voltage overhead power line. It is insulated with PVC and have weather proof and good durability.

CLASSIFICATION

Conductor : Hard-drawn copper wire
Insulation : PVC/C
Max. Conductor Temperature : 70℃
Max. Voltage(Phase to Phase) Rating : 0.5kV
AC Test Voltage : 2.5kV/5min

REFERENCE STANDARD / CERTIFICATION

KS C 3313
Korea Electric Power Corporation Standard(KS)

STRANDED CONDUCTOR KS C 3313

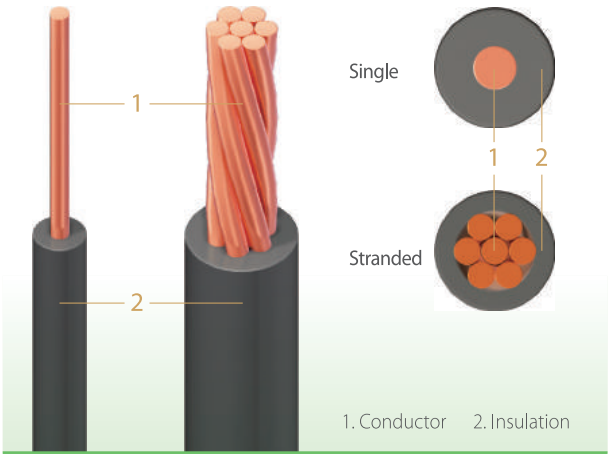
Conductor			Thickness of Insulation	Overall Diameter (approx)	Max. DC. Conductor Resistance at 20℃	Test Voltage	Tensile Load	Cable Weight (approx)	Standard Length
Nominal Cross Sectional Area	Conductor Grade	Diameter of Conductor (approx)							
mm²		mm	mm	mm	Ω / km	kV	kgf	kg/km	m
14	2	4.8	1	6.8	1.35	2500	574	160	300
22	2	6	1.2	8.4	0.849	2500	888	250	300
30	2	6.9	1.2	9.3	0.642	2500	1170	320	300
38	2	7.8	1.4	11	0.502	2500	1480	410	300
50	2	9	1.4	12	0.394	2500	1970	520	300
60	2	10	1.4	13	0.313	2500	2410	630	300
80	2	11.5	1.5	14.5	0.237	2500	3160	820	300
100	2	13	1.5	16	0.185	2500	4020	1030	300

SINGLE CONDUCTOR KS C 3313

Conductor		Thickness of Insulation	Overall Diameter (approx)	Max. DC. Conductor Resistance at 20℃	Test Voltage	Tensile Load	Cable Weight (Approx)	Standard Length
Nominal Cross Sectional Area	Diameter of Conductor (approx)							
mm²	mm	mm	mm	Ω / km	kV/1min	kgf	kg/km	m
2	3.142	0.4	2.8	5.83	2500	131	32	300
2.6	5.3	0.5	3.6	3.45	2500	218	54	300
3.2	8.042	0.6	4.4	2.28	2500	326	81	300
4	12.57	1.0	6.0	1.46	2500	489	135	300
5	19.6	1.2	7.4	0.932	2500	745	210	300

450/750V Halogen Free Cross-Linked Polyolefin Insulated Wire KS C 3341(90℃)

CU/XLPO HFIX



APPLICATION

It is chiefly used for indoor distribution line under 450/750V grade.

CLASSIFICATION

Conductor : Annealed copper wire
Insulation : Halogen Free XLPO
Max. Conductor Temperature : 90℃
Max. Voltage(Phase to Phase) Rating : 750V
AC Test Voltage : 2.5kV/5min

REFERENCE STANDARD / CERTIFICATION

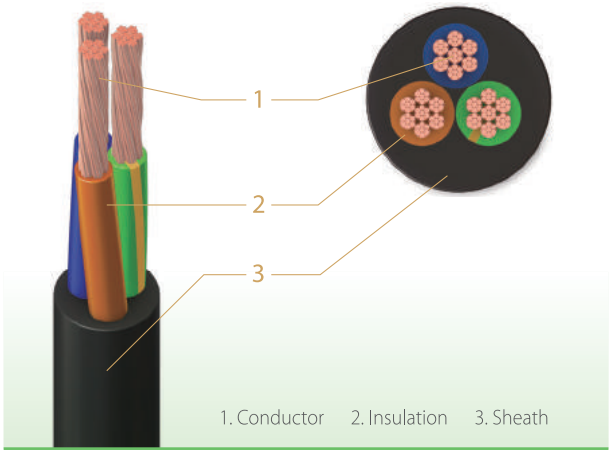
KS C IEC 60227-3
Korea Electric Power Corporation Standard(KS)

KS C 3341

Nominal Cross Sectional Area	Conductor Grade	Thickness of Insulation	Overall Diameter (approx)		Min. Insulation Resistance (20℃)	Test Voltage
			Min. Low	Max. Low		
mm²		mm	mm		MΩ / km	V/5min
1.5	1	0.7	2.6	3.3	12.100	2.5
1.5	2	0.7	2.7	3.4	12.100	2.5
2.5	1	0.8	3.2	4.0	7.410	2.5
2.5	2	0.8	3.3	4.1	7.410	2.5
4	1	0.8	3.6	4.6	4.610	2.5
4	2	0.8	3.8	4.7	4.610	2.5
6	1	0.8	4.1	5.2	3.080	2.5
6	2	0.8	4.3	5.4	3.080	2.5
10	1	1.0	5.3	6.6	1.830	2.5
10	2	1.0	5.6	7.0	1.830	2.5
16	2	1.0	6.4	8.0	1.150	2.5
25	2	1.2	8.1	10.1	0.727	2.5
35	2	1.2	9.0	11.3	0.524	2.5
50	2	1.4	10.6	13.2	0.387	2.5
70	2	1.4	12.1	15.1	0.268	2.5
95	2	1.6	14.1	17.6	0.193	2.5
120	2	1.6	15.6	19.4	0.153	2.5
150	2	1.8	17.3	21.6	0.124	2.5
185	2	2.0	19.3	24.1	0.0991	2.5
240	2	2.2	22.0	27.5	0.1754	2.5
300	2	2.4	24.5	30.6	0.0601	2.5

300/500V Code Code Wire 60227 KS C 53 (70℃)

CU/PVC/PVC VCTF



APPLICATION

Used for wiring electrical, electronic and small electrical appliances of rated voltage of 300/500V or less.

CLASSIFICATION

Conductor : Annealed copper wire set
Insulation : PVC/D
Sheath : PVC/ST5

REFERENCE STANDARD / CERTIFICATION

KS C IEC 60227-5
Korea Electric Power Corporation Standard(KS)

VCTF GENERAL STANDARD KS C IEC 60227-5(60227 KS IEC 53) 300/500V(70℃)

Nominal Cross Sectional Area	Thickness of Insulation	Thickness of Sheath	Overall Diameter (approx)		Min. Insulation Resistance (70℃)
			Min. Low	Max. Low	
mm²	mm	mm	mm		MΩ / km
2 x 0.75	0.6	0.8	5.7 or 3.7x6.0	7.2 or 4.5x7.2	0.011
2 x 1.0	0.6	0.8	5.9 or 3.9x6.2	7.5 or 4.7x7.5	0.010
2 x 1.5	0.7	0.8	6.8 or 4.2x7.0	8.6 or 5.2x8.6	0.010
2 x 2.5	0.8	1.0	8.4	10.6	0.009
3 x 0.75	0.6	0.8	6	7.6	0.011
3 x 1.0	0.6	0.8	6.3	8.0	0.010
3 x 1.5	0.7	0.9	7.4	9.4	0.010
3 x 2.5	0.8	1.1	9.2	11.4	0.009
4 x 0.75	0.6	0.8	6.6	8.3	0.011
4 x 1.0	0.6	0.9	7.1	9.0	0.010
4 x 1.5	0.7	1.0	8.4	10.5	0.010
4 x 2.5	0.8	1.1	10.1	12.5	0.009

CLASS 5 SINGLE OR MULTI CORE CABLE CONDUCTOR

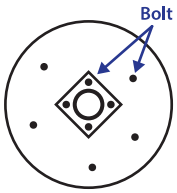
Nominal Cross Sectional Area	Overall Diameter (approx)	Min. Insulation Resistance	
		Plating	Not Plating
mm²	mm	MΩ / km	
0.5	0.21	39	40.1
0.75	0.21	26	26.7
1	0.21	19.5	20
1.5	0.26	13.3	13.7
2.5	0.26	7.98	8.21
4	0.31	4.95	5.09
6	0.31	3.3	3.39
10	0.41	1.91	1.95
16	0.41	1.21	1.24
25	0.41	0.78	0.795
35	0.51	0.554	0.565

Nominal Cross Sectional Area	Overall Diameter (approx)	Min. Insulation Resistance	
		Plating	Not Plating
mm²	mm	MΩ / km	
50	0.51	0.386	0.393
70	0.51	0.272	0.277
95	0.51	0.206	0.21
120	0.51	0.161	0.164
150	0.51	0.129	0.132
185	0.51	0.106	0.108
240	0.51	0.0801	0.0817
300	0.51	0.0641	0.0654
400	0.51	0.0486	0.0495
500	0.61	0.0384	0.0391
630	0.61	0.0287	0.0292

SAFETY-RELATED INSTRUCTION

The safety precautions shown below are intended to ensure the safe and accurate use of the product to prevent unexpected hazards and damage in advance. Safety precautions are divided into the following, depending on the degree of risk, damage caused by misuse, and urgency of the occurrence.

PRECAUTION

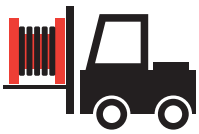


- Pulling the cable, Tighten all the bolts on both sides of drum to prevent damage to the drum.
- Pulling the cable, Tighten bolts after stop pulling if drum shakes.

Don't drop the drum

Getting off the drum, Use the folk lift or hoist crane, hydraulic power gate.

Don't lift drum lying



Move after place the drum on between the folks

Lifting/moving/pulling the drum, if excessive force is applied to the drum, not only cable but also drum may be damaged.

To prevent decolorization of color that cable must be keep in shady location.

- Regarding the products you have now, indoor storage is the best way to delay decolorization.
- If you have only outdoor storage, you can use black covers for protection.

Otherwise, cable decolorization progressed in a short period of time.

WARNING

It may be the cause of electric shock.

- Do not connect cable in power connection.
- Do not connect cable with wet hands.

It may be the cause of damage to a cable.

- Do not keep the drums around the fire.

It may be the cause of damage to a cable.

- Do not drop a drum from the stand(pile-up stand).
- Use an A-frame carrier or a crane when loading and unloading drums.

Cable is entangled, so it is not untied.

- Do not lay drum down.
- Pile up drums after making them stand.

It may be the cause of damage to a cable.

- When you having a drum on the crane, keep sufficient length to the extent that an angle of the wire may be under 60 degree.

It may be the cause of damage to a cable.

- In case of processing the terminal of cable, keep water from percolating.

R : Bending Radius
T : Pulling Tension

It may be the cause of disconnection or Breakdown of a cable.

- Keep the permissible pulling tension and radius of curvature.

It may be the cause of damage to a cable.

- When you pulling a cable please open the cable inner-end access.

Comply with the instructions as below.

- Do not handle the cable in an enclose place, work with the cable in a well-ventilated area.
- Contacted with the cable, put on mask and gloves and do not rub around your face and eyes with your hands.
- If you skin is contacted with the cable, it should be washed with the running water.