

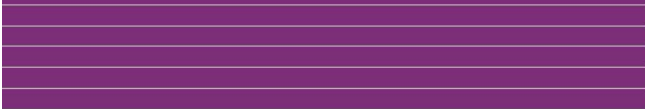
송배전선 / Aluminium Wire

강심 알루미늄연선 (ACSR)
Aluminum Conductor Steel Reinforced Wire

알루미늄 피복강심 알루미늄 연선 (ACSR/AW)
Aluminum Conductor Aluminum-Clad Steel Reinforced Wire

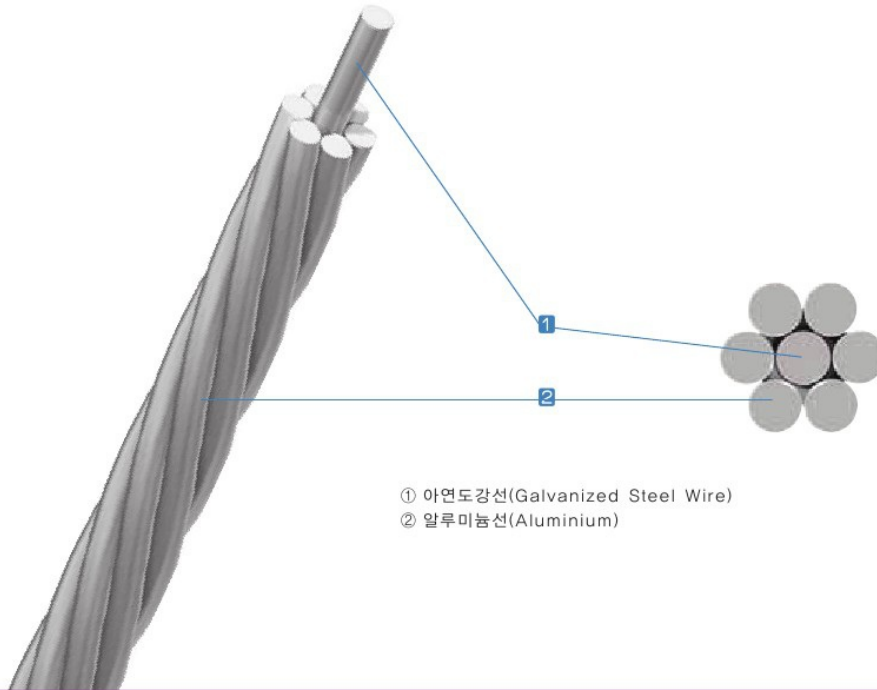
강심 알루미늄 가교폴리에틸렌 절연전선 (ACSR-OC)
Aluminum Conductor Steel Reinforced XLPE Insulated Wire

알루미늄 피복강심 가교폴리에틸렌 절연전선 (ACSR/AW-OC)
Aluminum Conductor Aluminum-Clad Steel Reinforced XLPE Insulated Wire



강심 알루미늄연선

(ACSR) Hard-Drawn Copper Solid Wire for Electrical Purpose



- ① 아연도강선(Galvanized Steel Wire)
- ② 알루미늄선(Aluminium)

■ 용도

- 가공 전선로에 사용한다.

■ USE

- This wire is used for voltage overhead transmission linet

■ 구조

- 1.도체 : 전강심알루미늄연선
- 2.적용규격 : KS C 3103
- 3.제품인증 : 한국산업규격(KS)

■ CONSTRUCTION

1. Conductor: Annealed copper wire
2. Standard: KS C 3103
3. Certificate: Korean Industrial Standards

▶ KS C : 3113

공칭단면적 Nominal Sectional Area mm ²	소선/소선지름		완성품 바깥지름(약) Overall Diameter mm	인장하중 Tensile Road kgf	허용전류 A			계산중량 Weight kg/km	도체저항 Conductor Resistance at 20℃ Ω/km	표준길이 Standard Length m
	알루미늄 Aluminum	알복강선 mm			40℃	30℃	20℃			
19	6/2.0	1/2.0	6.0	698	112	124	135	76.12	1.52	1000
32	6/2.6	1/2.6	7.8	1,140	155	172	188	128.6	0.899	1000
58	6/3.5	1/3.5	10.5	1,980	222	248	271	233.1	0.497	1000
*65	12/3.6	7/2.6	13.0	5,415	-	-	-	465.0	0.4565	1000
80	6/4.2	1/4.2	12.6	2,770	-	-	-	335.5	0.345	1000
95	6/4.5	1/4.5	13.5	3,180	296	308	362	385.2	0.301	1300
*97	12/3.2	7/3.2	16.0	10,600	310	348	381	708.9	0.301	1300
*120	12/3.2	7/3.5	17.5	9,590	355	398	436	845.9	0.25	1300
120	30/2.3	7/2.3	16.1	5,550	355	398	436	573.9	0.233	1300
160	30/2.6	7/2.6	18.2	6,990	410	461	505	732.8	0.182	1300
200	30/2.9	7/2.9	20.3	8,620	473	532	583	911.7	0.147	1400
240	30/3.2	7/3.2	22.4	10,210	536	603	662	1,110	0.12	1400
330	26/4.0	7/3.1	26.3	10,930	643	825	796	1,320	0.0888	1000
410	26/4.5	7/3.5	28.5	13,890	749	845	929	1,673	0.0702	1000
*480	45/3.7	7/2.47	29.61	11,800	807	910	1001	1,599	0.05994	1000
520	54/3.5	7/3.5	31.5	15,600	851	960	1057	1,969	0.0559	1000
610	54/3.8	7/3.8	34.2	18,150	947	1070	1177	2,320	0.0474	1000

* : 한국전력공사의 규격입니다.

알루미늄 피복강심 알루미늄 연선

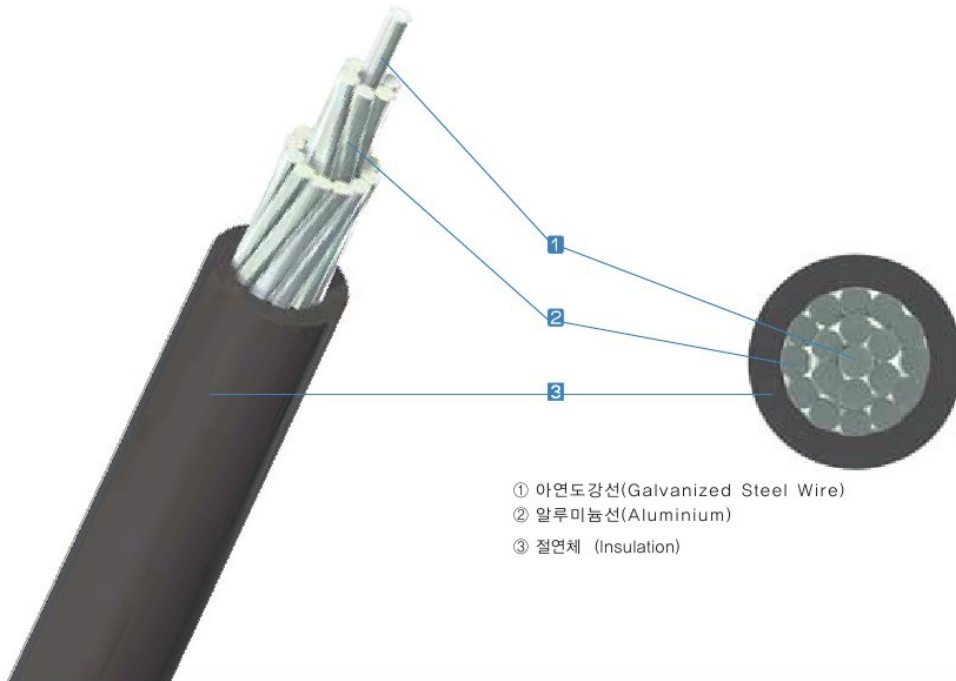
(ACSR/AW) Aluminum Conductor Aluminum-Clad Steel Reinforced Wire Purpose

공칭단면적 Nominal Sectional Area mm ²	소선수/지름 Number & Diameter of Wires mm		계산단면적 Calculated Sectional Area mm ²		인장하중 Minl Tensile Road kgf	바깥지름 Overall Diameter mm		전기저항 Max Conductor Resistance at 20℃ Ω/km	계산중량 Weight kg/km	길이 Length m
	AL	AW	AL	AW		AL	AW			
520	54/3.5	7/3.5	519.5	67.35	15,600	31.5	10.5	0.0536	1.848	1,000 (2,000)
480	45/3.7	7/2.47	483.84	33.54	11,800	29.61	7.41	0.0586	1.544	"
410	26/4.5	7/3.5	413.4	67.35	13,890	28.5	10.56	0.0665	1.578	"
330	26/4.0	7/3.1	326.8	52.84	10,930	25.3	9.3	0.0842	1.239	"
240	30/3.2	7/3.2	241.3	56.29	10,210	22.4	9.6	0.111	1.024	"
160	30/2.6	7/2.6	159.3	37.16	6,990	18.2	7.8	0.169	676.4	"
120	12/3.5	7/3.5	115.45	67.35	9,590	17.5	10.5	0.210	737.0	"
97	12/3.2	7/3.2	96.5	56.29	10,600	16.0	9.6	0.295	608.0	"
95	6/4.5	1/4.5	95.40	15.90	3,180	13.5	4.5	0.285	362	"
65	12/2.6	7/2.6	63.71	37.17	5,415	13.0	7.8	0.380	401	"
58	6/3.5	1/3.5	57.73	9.621	1,980	10.5	3.5	0.471	299.7	1,000
32	6/2.6	1/2.6	31.85	5.309	1,140	7.8	2.6	0.852	120.8	1,000

※ AL : Aluminum. AW : Aluminum-Clad Steel

강심 알루미늄 가교폴리에틸렌 절연전선

(ACSR-OC) Aluminum Conductor Steel Reinforced XLPE Insulated wire



- ① 아연도강선(Galvanized Steel Wire)
- ② 알루미늄선(Aluminium)
- ③ 절연체 (Insulation)

■ 용도

고압 가공 전선로에 사용한다.

■ USE

This wire is used for high voltage overhead transmission lines

■ 구조

- 1.도체 : 강심알루미늄 가교폴리에틸렌 절연전선
- 2.적용규격 : 한전규격 또는 KS C 3101
- 3.제품인증 : 한국산업규격(KS)

■ CONSTRUCTION

- 1. Conductor:
- 2. Standard:KS C 3101
- 3. Certificate:Korean Industrial Standards

배 표	공칭단면적 Nominal Sectional Area mm ²	도체 Conductor			절연두께 XLPE Insulation Thickness mm	계산 외경 의 외경 Approx Outer Diameter mm	최대도체 저항 Max Conductor Resistance at 20°C Ω/Km	시험전압 Test Voltage KV/1min	인장 하중 Tensile Load kgf	계산 중량 Weight Kg/Km	최소절연 저항 Min Insulation Resistance at 20°C MΩ · km	표준 길이 Standard Length m
		구 성		외경 Diameter of Wire mm								
		AL	ST mm									
6.6 KV	32	6/SB	1/2.6	7.2	2.0	11.2	0.928	12,000	1,090	185	1,500	900
	59	6/SB	1/3.5	9.7	2.5	14.7	0.512	12,000	1,900	325	1,500	600
	95	6/SB	1/3.5	12.0	2.5	17.0	0.323	12,000	2,360	455	1,000	300
22.9 KV	32	6/SB	1/2.6	7.2	3.0	13.2	0.928	25,000	1,090	215	2,000	900
	58	6/SB	1/3.5	9.7	3.0	15.7	0.512	25,000	1,900	340	1,500	600
	95	6/SB	13.5	12.0	3.5	19.0	0.313	25,000	2,360	540	1,500	600
	160	18/SB	1/3.2	15.4	4.0	23.4	0.186	25,000	3,080	740	1,500	600

※ SB압축연선도체 (Smooth Body)

참 고		기 호(Marking)	적용규격(SPEC)	구조(Construction/Specification)
Aluminium conductor steel reinforced outdoor XLPE insulated wire	고 압	ACSR-OC	ESB 121-200-202*	Zincked steel/Aluminium XLPE insulated higher power transmission Cable.
	특고압		ESB 121-230-275*	

알루미늄 피복강심 가교폴리에틸렌 절연전선

(ACSR-AW-OC) ACSR/AW Outdoor XLPE Insulated wire



- ① 강심알루미늄선
알루미늄피복강심 알루미늄선
- ② 전기용 경알루미늄선
- ③ 절연체

■ 용도

고압 가공 전선로에 사용한다.

■ 구조

- 1.도체 : 전기용 경알루미늄선, 강심 알루미늄선, 알루미늄 피복강심 알루미늄연선
- 2.절연체 : XLPE
- 3.절연체색상 : 흑색
- 4.적용규격 : ES 6145-0006~8
- 5.제품인증 : 한국전력인증

■ USE

This wire is used for high voltage overhead transmission lines

■ CONSTRUCTION

- 1.Conductor : Hard-Drawn aluminum wire or Aluminium strand conductors steel reinforced or Aluminium stranded Conductor Aluminium clad steel Wire reinforced
- 2.Insulation : XLPE
- 3.Color of insulation : Black
- 4.Standard : ES 6145-0006~8
- 5.Certificate : Korea Electric power corporation

▶ 알루미늄 피복 강심 알루미늄 절연전선 (ACSR/AW-OC)

ACSR/AW Outdoor XLPE Insulated wires

전압 Voltage	단면적 Nominal Sectional Area mm ²	도체 Conductor			절연 두께 Insulation Thickness mm	완성 외경 Overall Diameter mm	도체 저항 Max. Conductor Resistance at 20°C Ω/km	시험 전압 Test Voltage kV	절연 저항 Min. Insulation Resistance at 20°C MΩ/km	인장 하중 Conductor Min. Tensile Road kgf	개산 중량 Weight kg/km	표준 길이 Standard Length m
		소선수 No. & Dia. of Wire (Al) No/mm	소선수 No. & Dia. of Wire (St) No/mm	외경 Outer Diameter mm								
6.6kV	32	6/SB	1/2.6	7.2	2.0	11.2	0.877	12	1,500	1,090	180	900
	58	6/SB	1/3.5	9.7	2.5	14.7	0.484	12	1,500	1,900	315	600
	95	6/SB	1/3.5	12.0	2.5	17.0	0.302	12	1,500	2,360	445	300
22.9kV	32	6/SB	1/2.6	7.2	3.0	13.2	0.877	25	2,000	1,090	210	900
	58	6/SB	1/3.5	9.7	3.0	15.7	0.484	25	1,500	1,900	330	600
	95	6/SB	1/3.5	12.0	3.5	19.0	0.302	25	1,500	2,360	530	600
	160	18/SB	1/3.2	15.4	4.0	23.4	0.183	25	1,500	3,080	730	600

▶ (특)고압강심 알루미늄 절연전선(ACSR-OC)

ACSR Outdoor XLPE Insulated wires

전압 Voltage	단면적 Nominal Sectional Area mm ²	도체 Conductor			절연 두께 Insulation Thickness mm	완성 외경 Overall Diameter mm	도체 저항 Max. Conductor Resistance at 20°C Ω/km	시험 전압 Test Voltage kV	절연 저항 Min. Insulation Resistance at 20°C MΩ/km	인장 하중 Conductor Min. Tensile Road kgf	개산 중량 Weight kg/km	표준 길이 Standard Length m
		소선수 No. & Dia. of Wire (Al) No/mm	소선수 No. & Dia. of Wire (St) No/mm	외경 Outer Diameter mm								
6.6kV	32	6/SB	1/2.6	7.2	2.0	11.2	0.928	12	1,500	1,090	185	900
	58	6/SB	1/3.5	9.7	2.5	14.7	0.512	12	1,500	1,900	325	600
	95	6/SB	1/3.5	12.0	2.5	17.0	0.313	12	1,500	2,360	455	300
22.9kV	32	6/SB	1/2.6	7.2	3.0	13.2	0.928	25	2,000	1,090	215	900
	58	6/SB	1/3.5	9.7	3.0	15.7	0.512	25	1,500	1,900	340	600
	95	6/SB	1/3.5	12.0	3.5	19.0	0.313	25	1,500	2,360	540	600
	160	18/SB	1/3.2	15.4	4.0	23.4	0.186	25	1,500	3,080	740	600