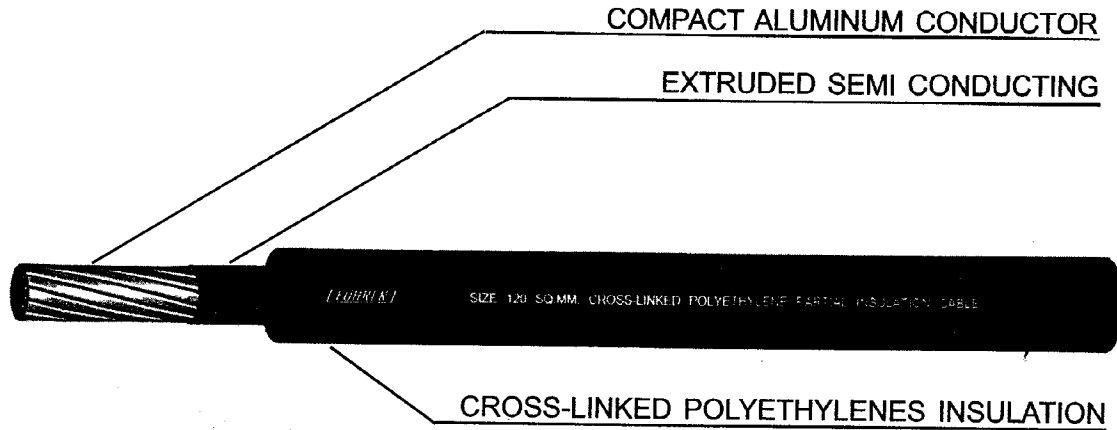


# ALUMINIUM CONDUCTOR CABLES

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## High Voltage Power Cables

	PAGE
25 KV CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE	53-54
35 KV CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE	55-56
25 KV ALL ALUMINIUM SPACED AERIAL CABLE	57-58
35 KV ALL ALUMINIUM SPACED AERIAL CABLE	59-60

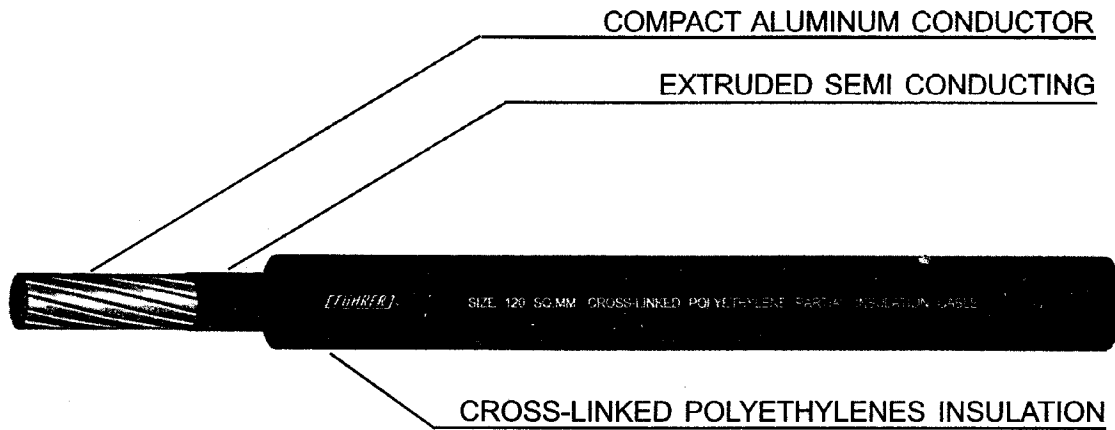
**CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE****CABLE STRUCTURE**

<b>NUMBER OF CORE</b>	:	Single core
<b>CONDUCTOR</b>	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>
<b>CONDUCTOR SHIELD</b>	:	Semi conducting cross-linked polyethylene
<b>INSULATION</b>	:	Track resistant cross-linked polyethylene Colour : Black
<b>CLASSIFICATION</b>	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 25 Kv.( Phase to Phase )
<b>TESTING VOLTAGE</b>	:	11KV for 5 minutes
<b>REFERENCE</b>	:	ICEA S-66-524 /MEA/PEA

PIC 25 KV

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Minimum Thickness of conductor shield & insulation (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω/Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MO-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	2.27	11.50	0.868	5,591	1,038	146	160	1,000/D
	50	7	8.28	2.36	13.00	0.641	7,313	990	178	215	1,000/D
	70	18	9.80	2.49	14.70	0.443	10,420	901	222	300	1,000/D
	95	18	11.45	2.58	16.60	0.320	14,098	832	274	380	1,000/D
	120	18	12.95	2.63	18.20	0.253	18,518	776	319	460	1,000/D
	150	18	14.20	2.62	19.50	0.206	22,457	728	363	560	1,000/D
	185	34	15.98	2.71	21.40	0.164	28,974	676	421	680	1,000/D
	240	34	18.47	2.82	24.10	0.125	37,506	630	503	880	1,000/D

D: Packing in drum.

**CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE****CABLE STRUCTURE**

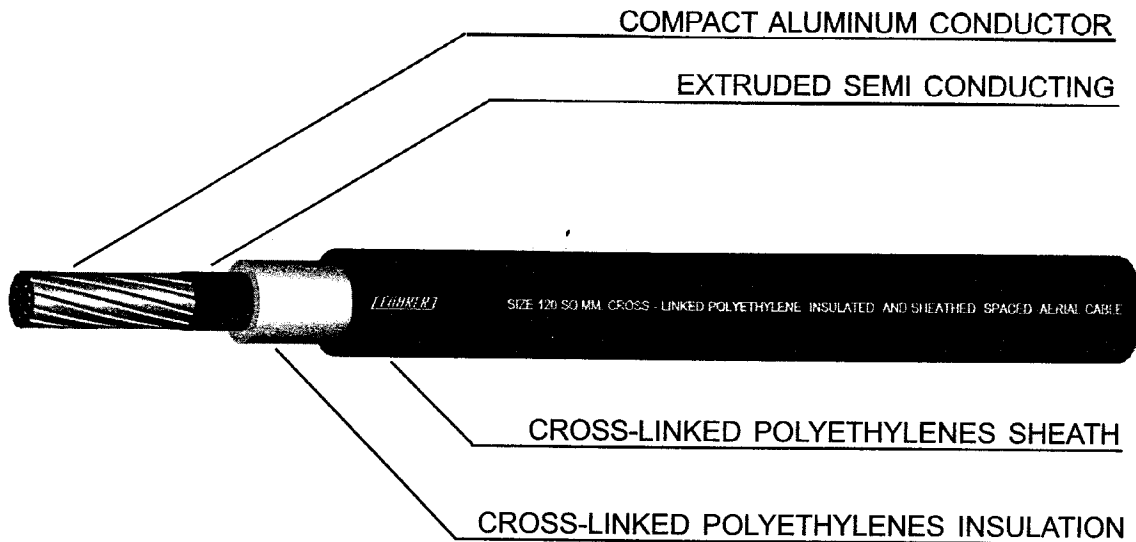
<b>NUMBER OF CORE</b>	: Single core
<b>CONDUCTOR</b>	: Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>
<b>CONDUCTOR SHIELD</b>	: Semi conducting cross-linked polyethylene
<b>INSULATION</b>	: Track resistant cross-linked polyethylene Colour : Black
<b>CLASSIFICATION</b>	: Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 35 Kv.( Phase to Phase )
<b>TESTING VOLTAGE</b>	: 17KV for 5 minutes
<b>REFERENCE</b>	: ICEA S-66-524 /MEA/PEA

STANDARD  
ICEA S-66-524/MEA/PEA

PIC 35 KV

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Minimum Thickness of conductor shield & insulation (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	3.25	13.56	0.868	5,591	1,506	148	200	1,000/D
	50	7	8.28	3.40	15.18	0.641	7,313	1,429	180	215	1,000/D
	70	18	9.80	3.60	17.10	0.443	10,420	1,309	224	300	1,000/D
	95	18	11.45	3.70	18.95	0.320	14,098	1,213	275	380	1,000/D
	120	18	12.95	3.80	20.65	0.253	18,518	1,139	319	460	1,000/D
	150	18	14.20	3.80	21.90	0.206	22,457	1,069	363	560	1,000/D
	185	34	15.98	3.90	23.88	0.164	28,974	990	420	680	1,000/D
	240	34	18.47	3.95	26.47	0.125	37,506	901	501	880	1,000/D

D: Packing in drum.

**ALUMINUM STRANDED CONDUCTOR CROSS-LINKED POLYETHYLENE INSULATED  
AND SHEATHED SPACED AERIAL CABLE****CABLE STRUCTURE**

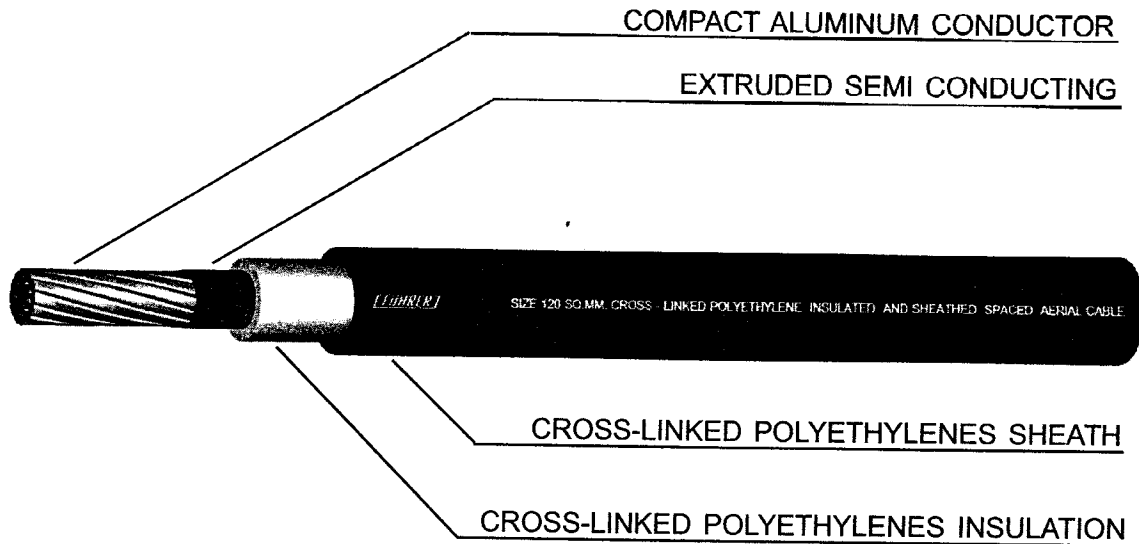
<b>NUMBER OF CORE</b>	:	Single core
<b>CONDUCTOR</b>	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>
<b>CONDUCTOR SHIELD</b>	:	Semi conducting cross-linked polyethylene
<b>INSULATION</b>	:	Cross-linked polyethylene Colour : Natural
<b>SHEATH</b>	:	Track resistant cross-linked polyethylene Colour : Black
<b>CLASSIFICATION</b>	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 25 Kv.( Phase to Phase )
<b>TESTING VOLTAGE</b>	:	38KV for 5 minutes
<b>REFERENCE</b>	:	ICEA S-66-524 /MEA/PEA

STANDARD  
ICEA S-66-524/MEA/PEA

SAC 25 KV

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Thickness of insulation (mm)	Thickness of sheath (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.5°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	3.175	3.175	20.88	0.868	5,591	2,500	149	390	1,000/D
	50	7	8.28	3.175	3.175	22.20	0.641	7,313	2,250	186	440	1,000/D
	70	18	9.80	3.175	3.175	23.72	0.443	10,420	2,050	229	540	1,000/D
	95	18	11.45	3.175	3.175	25.37	0.320	14,098	1,850	279	640	1,000/D
	120	18	12.95	3.175	3.175	26.87	0.253	18,518	1,700	321	740	1,000/D
	150	18	14.20	3.175	3.175	28.12	0.206	22,457	1,600	371	850	1,000/D
	185	34	15.98	3.175	3.175	29.90	0.164	28,974	1,500	429	990	1,000/D
	240	34	18.47	3.175	3.175	32.39	0.125	37,506	1,300	520	1,190	1,000/D

D: Packing in drum.

**ALUMINUM STRANDED CONDUCTOR CROSS-LINKED POLYETHYLENE INSULATED  
AND SHEATHED SPACED AERIAL CABLE****CABLE STRUCTURE**

<b>NUMBER OF CORE</b>	:	Single core
<b>CONDUCTOR</b>	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>
<b>CONDUCTOR SHIELD</b>	:	Semi conducting cross-linked polyethylene
<b>INSULATION</b>	:	Cross-linked polyethylene Colour : Natural
<b>SHEATH</b>	:	Track resistant cross-linked polyethylene Colour : Black
<b>CLASSIFICATION</b>	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 35 Kv.( Phase to Phase )
<b>TESTING VOLTAGE</b>	:	49KV for 5 minutes
<b>REFERENCE</b>	:	ICEA S-66-524 /MEA/PEA



STANDARD  
ICEA S-66-524/MEA/PEA

**SAC 35 KV**

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Thickness of insulation (mm)	Thickness of sheath (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp. ckt. in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	4.445	3.175	23.42	0.868	5,591	2,900	148	490	1,000/D
	50	7	8.28	4.445	3.175	14.93	0.641	7,313	2,600	184	530	1,000/D
	70	18	9.80	4.445	3.175	26.26	0.443	10,420	2,400	227	630	1,000/D
	95	18	11.45	4.445	3.175	27.91	0.320	14,098	2,100	276	750	1,000/D
	120	18	12.95	4.445	3.175	29.41	0.253	18,518	2,000	318	850	1,000/D
	150	18	14.20	4.445	3.175	30.66	0.206	22,457	1,800	367	960	1,000/D
	185	34	15.98	4.445	3.175	32.44	0.164	28,974	1,700	125	1,100	1,000/D
	240	34	18.47	4.445	3.175	34.93	0.125	37,506	1,500	515	1,400	1,000/D

D: Packing in drum.