

XAI 12/20kV Armoured Cable IEC 60092-354



Eland Product Group: ASH

APPLICATION

A flame-retardant and halogen-free medium voltage cable designed for fixed installation, suitable for conditions on vessels of any size. For use in a wide range of temperatures, saline atmospheres and where UV radiation is present, according to the IEC60092 series.

CHARACTERISTICS

Voltage Rating

12/20kV

Maximum Operating Voltage U_{max}

24kV

Temperature Rating

+90°C

Minimum Bending Radius

4 or 5x diameter depending on overall diameter

CONSTRUCTION

Conductor

Flexible Copper

Conductor Screen

HF (Halogen Free) extruded compound

Insulation

HEPR HF (Hard Ethylene Propylene Rubber Halogen Free) Compound

Insulation Screen

HF (Halogen Free) extruded compound

Core Screen

Plain copper tape

Bedding

Fiberglass Tape + Fiberglass Ropes (+ HEPR layer for multicores)

Inner Sheath

SHF1 compound

Armour

Plain copper wire braid

Outer Sheath

SHF1 compound

Core Identification

1 core: ○ Off White

3 core: ○ Off White (coloured or numbered tapes)

Outer Sheath Colour

● Red

CABLE THIRD-PARTY ACCREDITATIONS

We supply DNV approved products

Cables are tested and certified by Det Norske Veritas (Norway)

We supply Lloyds Register approved products

Cables are tested and certified by Lloyds Register (UK)

We supply ABS approved products

Cables are tested and certified by American Bureau of Shipping (USA)

STANDARDS

IEC 60092-354, IEC 60092-360

Flame Retardant: IEC 60332-1-2, IEC 60332-3-22 Cat A

Halogen Content & Corrosivity: IEC 60754-1 & 2, IEC 60684-2

Smoke Density: IEC 61034-1 & 2

UV Resistance: UL 1581 & 1200

Ozone Resistance: IEC 60092-360

Impact & Cold Resistance: CSA C 22.2 N° 0.3-09 & N° 38-18

Temperature Range: IEC 60092-360

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



SCIENCE
BASED
TARGETS

BUSINESS
AMBIITION FOR 1.5°C



REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL DIAMETER UNDER ARMOUR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ASHIM20KV0135	1	35	7.5	5.5	25.6	31	1520
ASHIM20KV0150	1	50	8.4	5.5	26.0	32	1640
ASHIM20KV0170	1	70	10.0	5.5	28.2	34	1970
ASHIM20KV0195	1	95	11.8	5.5	29.9	36	2430
ASHIM20KV01120	1	120	13.2	5.5	31.2	38	2720
ASHIM20KV01150	1	150	14.6	5.5	33.2	40	3100
ASHIM20KV01185	1	185	16.5	5.5	35.1	42	3620
ASHIM20KV01240	1	240	19.0	5.5	37.3	45	4300
ASHIM20KV01300	1	300	21.8	5.5	40.9	48	5050
ASHIM20KV0335	3	35	7.5	5.5	51.0	59	4920
ASHIM20KV0350	3	50	8.4	5.5	53.5	61	5480
ASHIM20KV0370	3	70	10.0	5.5	57.2	65	6360
ASHIM20KV0395	3	95	11.8	5.5	62.4	71	7800
ASHIM20KV03120	3	120	13.2	5.5	65.2	74	8820
ASHIM20KV03150	3	150	14.6	5.5	68.2	78	10040
ASHIM20KV03185	3	185	16.5	5.5	72.3	82	11500

ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE μF/km	NOMINAL INDUCTANCE μH/km	IMPEDANCE Ω/km				MAXIMUM CURRENT IN FREE AIR Amps	SHORT CIRCUIT FOR 1S @ 90°C/250°C KA
		20°C	90°C	50 HZ	60 HZ			20°C 50 HZ	20°C 60 HZ	90°C 50 HZ	90°C 60 HZ		
1	35	0.524	0.668	0.133	0.159	0.175	422	0.54	0.55	0.68	0.69	145	5.01
1	50	0.387	0.494	0.128	0.154	0.187	409	0.41	0.42	0.51	0.52	179	7.15
1	70	0.268	0.342	0.120	0.145	0.208	383	0.29	0.30	0.36	0.37	231	10.0
1	95	0.193	0.246	0.114	0.136	0.232	362	0.22	0.24	0.27	0.28	283	13.6
1	120	0.153	0.195	0.110	0.132	0.250	350	0.19	0.20	0.22	0.24	331	17.2
1	150	0.124	0.158	0.107	0.128	0.268	340	0.16	0.18	0.19	0.20	384	21.5
1	185	0.0991	0.1264	0.102	0.123	0.293	325	0.14	0.16	0.16	0.18	441	26.5
1	240	0.0754	0.0962	0.098	0.117	0.325	311	0.12	0.14	0.14	0.15	524	34.3
1	300	0.0601	0.0767	0.093	0.112	0.360	296	0.11	0.13	0.12	0.14	608	42.9
3	35	0.524	0.668	0.127	0.152	0.175	403	0.54	0.55	0.68	0.69	130	5.01
3	50	0.387	0.494	0.122	0.147	0.187	390	0.41	0.41	0.51	0.51	159	7.15
3	70	0.268	0.342	0.115	0.138	0.208	367	0.29	0.30	0.36	0.37	203	10.0
3	95	0.193	0.246	0.109	0.131	0.232	348	0.22	0.23	0.27	0.28	246	13.6
3	120	0.153	0.195	0.106	0.127	0.250	336	0.19	0.20	0.22	0.23	286	17.2
3	150	0.124	0.158	0.102	0.123	0.268	326	0.16	0.17	0.19	0.20	330	21.5
3	185	0.0991	0.1264	0.099	0.118	0.293	314	0.14	0.15	0.16	0.17	377	26.5

Maximum current rate based on 90°C conductor temperature and 45°C ambient temperature IEC 60092-352

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.