



NEK606 RFOU P103 6/10kV Cable



Eland Product Group: ASH

APPLICATION

A flame-retardant and halogen-free medium voltage cable designed for fixed installation in conditions where oil and gas rigs are usually working. Suitable for use in extreme temperatures, saline atmospheres, and where UV radiation, hydrocarbons, oils and drilling fluids and muds are present, meeting the requirements of NEK606.

CHARACTERISTICS

Voltage Rating

6/10kV

Maximum Operating Voltage U_{max}
12kV

Temperature Rating
+90°C

Minimum Bending Radius
4 or 5 x depending on Overall Diameter

CONSTRUCTION

Conductor

Class 2 Annealed Tinned Copper

Semiconductors

HF (Halogen Free) extruded compound

Insulation

HEPR HF (Hard Ethylene Propylene Rubber Halogen Free) Compound

Screen

TCWB (Tinned Copper Wire Braid)

Bedding & Fillers

Fiberglass Tape + Fiberglass Fillers (Extruded) HEPR sheathed when 3 cores

Inner Sheath

SHF2 extruded compound

Armour

TCWB (Tinned Copper Wire Braid)

Outer Sheath

SHF2 H-M 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

NEK 606, 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

Mineral / Hydraulic Oils & Muds Resistant: NEK 606

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 1.5°C
AMBITION FOR**



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 BRAID CROSS SECTION mm ²	NOMINAL DIAMETER UNDER ARMOUR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ASHNR10KV0125	1	25	10	22.0	27.4	1140
ASHNR10KV0135	1	35	10	23.1	30.4	1360
ASHNR10KV0150	1	50	10	24.0	31.3	1505
ASHNR10KV0170	1	70	10	25.6	33.1	1810
ASHNR10KV0195	1	95	10	27.3	34.8	2125
ASHNR10KV01120	1	120	10	28.8	36.5	2460
ASHNR10KV01150	1	150	16	30.0	38.5	2855
ASHNR10KV01185	1	185	16	32.0	40.6	3345
ASHNR10KV01240	1	240	16	34.6	43.3	4030
ASHNR10KV01300	1	300	25	38.1	47.3	4795
ASHNR10KV0325	3	25	35	44.5	52.5	3465
ASHNR10KV0335	3	35	35	46.9	56.7	4065
ASHNR10KV0350	3	50	35	49.5	59.5	4645
ASHNR10KV0370	3	70	35	53.0	63.4	5695
ASHNR10KV0395	3	95	35	57.5	68.3	6780
ASHNR10KV03120	3	120	35	60.3	71.3	7745
ASHNR10KV03150	3	150	35	63.5	74.7	8765
ASHNR10KV03185	3	185	35	67.8	79.4	10360

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	25	0.734	0.936	0.135	0.162	0.228	431	0.75	0.75	0.95	0.95	117	3.58
1	35	0.529	0.675	0.128	0.154	0.249	409	0.54	0.55	0.69	0.69	145	5.01
1	50	0.391	0.499	0.124	0.149	0.266	396	0.41	0.42	0.51	0.52	179	7.15
1	70	0.27	0.344	0.115	0.137	0.301	365	0.29	0.3	0.36	0.37	231	10
1	95	0.195	0.249	0.108	0.13	0.338	344	0.22	0.23	0.27	0.28	283	13.6
1	120	0.154	0.196	0.107	0.128	0.367	339	0.19	0.2	0.22	0.23	331	17.2
1	150	0.126	0.161	0.102	0.122	0.396	325	0.16	0.18	0.19	0.2	384	21.5
1	185	0.1	0.128	0.098	0.117	0.435	311	0.14	0.15	0.16	0.17	441	26.5
1	240	0.0762	0.0972	0.093	0.112	0.487	297	0.12	0.14	0.13	0.15	524	34.3
1	300	0.0607	0.0774	0.089	0.107	0.544	284	0.11	0.12	0.12	0.13	608	42.9
3	25	0.734	0.936	0.118	0.142	0.228	377	0.74	0.75	0.94	0.95	105	3.58
3	35	0.529	0.675	0.113	0.136	0.249	360	0.54	0.55	0.68	0.69	130	5.01
3	50	0.391	0.499	0.11	0.131	0.266	349	0.41	0.41	0.51	0.52	159	7.15
3	70	0.27	0.344	0.103	0.124	0.301	329	0.29	0.3	0.36	0.37	203	10
3	95	0.195	0.249	0.098	0.118	0.338	313	0.22	0.23	0.27	0.28	246	13.6
3	120	0.154	0.196	0.095	0.114	0.367	303	0.18	0.19	0.22	0.23	286	17.2
3	150	0.126	0.161	0.093	0.111	0.396	295	0.16	0.17	0.19	0.2	330	21.5
3	185	0.1	0.128	0.089	0.107	0.435	285	0.13	0.15	0.16	0.17	377	26.5

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.