



# NEK606 RFOU P102 3.6/6kV 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

3.6/6.6kV

### Maximum Operating Voltage $U_{max}$

7.2kV

### 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<sup>®</sup>

### 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](http://www.elandcables.com/company/about-us/esg-sustainability)



SCIENCE  
BASED  
TARGETS

BUSINESS  
AMBITION 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<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL BRAID CROSS SECTION mm <sup>2</sup>	NOMINAL DIAMETER UNDER ARMOUR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ASHNR6KV0125	1	25	10	20.6	25.8	1045
ASHNR6KV0135	1	35	10	21.7	28.7	1260
ASHNR6KV0150	1	50	10	22.6	29.6	1400
ASHNR6KV0170	1	70	10	24.2	31.5	1700
ASHNR6KV0195	1	95	10	25.9	33.4	2025
ASHNR6KV01120	1	120	10	27.4	34.9	2340
ASHNR6KV01150	1	150	10	28.6	36.3	2645
ASHNR6KV01185	1	185	16	30.6	39.1	3230
ASHNR6KV01240	1	240	16	33.4	42.1	3930
ASHNR6KV01300	1	300	25	37.3	46.5	4725
ASHNR6KV0325	3	25	25	40.1	47.7	2955
ASHNR6KV0335	3	35	25	43.4	53.0	3705
ASHNR6KV0350	3	50	35	45.4	55.2	4190
ASHNR6KV0370	3	70	35	48.8	58.8	5085
ASHNR6KV0395	3	95	35	53.2	63.6	6300
ASHNR6KV03120	3	120	35	56.8	67.4	7290
ASHNR6KV03150	3	150	35	59.4	70.2	8180
ASHNR6KV03185	3	185	35	64.3	75.5	9850

## ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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	0.131	0.157	0.289	426	0.75	0.75	0.95	0.95	117	3.58
1	35	0.529	0.675	0.124	0.149	0.317	395	0.54	0.55	0.69	0.69	145	5.01
1	50	0.391	0.499	0.12	0.144	0.34	382	0.41	0.42	0.51	0.52	179	7.15
1	70	0.27	0.344	0.113	0.135	0.388	358	0.29	0.3	0.36	0.37	231	10
1	95	0.195	0.249	0.106	0.127	0.438	338	0.22	0.23	0.27	0.28	283	13.6
1	120	0.154	0.196	0.103	0.124	0.477	328	0.19	0.2	0.22	0.23	331	17.2
1	150	0.126	0.161	0.098	0.118	0.516	313	0.16	0.17	0.19	0.2	384	21.5
1	185	0.1	0.128	0.096	0.115	0.569	305	0.14	0.15	0.16	0.17	441	26.5
1	240	0.0762	0.0972	0.092	0.11	0.617	292	0.12	0.13	0.13	0.15	524	34.3
1	300	0.0607	0.0774	0.089	0.107	0.647	284	0.11	0.12	0.12	0.13	608	42.9
3	25	0.734	0.936	0.11	0.134	0.289	355	0.74	0.75	0.94	0.95	105	3.58
3	35	0.529	0.675	0.106	0.128	0.317	339	0.54	0.54	0.68	0.69	130	5.01
3	50	0.391	0.499	0.103	0.124	0.34	328	0.4	0.41	0.51	0.51	159	7.15
3	70	0.27	0.344	0.098	0.117	0.388	311	0.29	0.29	0.36	0.36	203	10
3	95	0.195	0.249	0.093	0.112	0.438	296	0.22	0.22	0.27	0.27	246	13.6
3	120	0.154	0.196	0.09	0.108	0.477	287	0.18	0.19	0.22	0.22	286	17.2
3	150	0.126	0.161	0.088	0.105	0.516	280	0.15	0.16	0.18	0.19	330	21.5
3	185	0.1	0.128	0.085	0.102	0.569	271	0.13	0.14	0.15	0.16	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.