NEK606 RFOU P101 0.6/1kV Cable

Eland Product Group: ASH

APPLICATION

A flame-retardant and halogen-free power 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
0.6/1kV

Maximum Operating Voltage U_{max}
1.2kV

Temperature Rating
+90°C

Minimum Bending Radius
4 x Overall Diameter

CONSTRUCTION

Conductor
Class 2 Tinned Copper

Insulation
EPR HF (Ethylene Propylene Rubber Halogen Free) Compound

Bedding & Fillers
Fiberglass Tape + Fiberglass Fillers (Extruded)

Inner Sheath
Extruded Compound (Type SHF2)

Armour
TCWB (Tinned Copper Wire Braid)

Outer Sheath
Type SHF2 H-M Compound

Core Identification
1 core: ● Black
2 cores: ● Blue ● Brown
3 cores: ● Brown ● Black ● Grey
4 cores: ● Blue ● Brown ● Black ● Grey
5 cores: ● Blue, ● Brown, ● Black, ● Grey, ● Green/Yellow
7 core+: ○ White and Numbered

Outer Sheath Colour
● Black

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
Core Identification: HD 308 S2 & IEC 60445

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

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

ISO/IEC 17025 Accredited Testing Laboratory
IECEE CBTL Accredited Testing Laboratory

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 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®.

RoHS
REACH

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL BRAID CROSS SECTION mm²	NOMINAL DIAMETER UNDER ARMOUR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ASHNR0110	1	10	4	9.3	13.7	330
ASHNR0116	1	16	6	10.3	14.4	405
ASHNR0125	1	25	6	12.0	16.7	565
ASHNR0135	1	35	10	13.1	18.0	710
ASHNR0150	1	50	10	14.4	20.1	855
ASHNR0170	1	70	10	16.0	21.9	1120
ASHNR0195	1	95	10	18.1	24.2	1430
ASHNR01120	1	120	10	19.6	26.0	1730
ASHNR01150	1	150	10	21.3	27.8	2035
ASHNR01185	1	185	10	23.7	30.4	2535
ASHNR01240	1	240	10	26.4	33.3	3175
ASHNR01300	1	300	16	30.4	38.2	3940
ASHNR02015	2	1.5	4	9.5	13.7	290
ASHNR02025	2	2.5	6	10.5	15.3	370
ASHNR02040	2	4	6	12.1	16.8	460
ASHNR02060	2	6	10	13.1	18.1	555
ASHNR0210	2	10	10	15.5	21.2	730
ASHNR0216	2	16	10	17.5	23.6	950
ASHNR0225	2	25	10	21.0	27.1	1300
ASHNR0235	2	35	10	23.2	29.3	1620
ASHNR0250	2	50	10	26.0	32.5	2045
ASHNR03015	3	1.5	6	10.1	14.8	350
ASHNR03025	3	2.5	6	11.2	15.9	415
ASHNR03040	3	4	10	12.9	17.6	520
ASHNR03060	3	6	10	14.0	18.9	640
ASHNR0310	3	10	10	16.S	22.2	850
ASHNR0316	3	16	10	18.7	24.9	1115
ASHNR0325	3	25	10	22.6	28.0	1570
ASHNR0335	3	35	10	25.0	31.5	2040
ASHNR0350	3	so	10	28.0	35.0	2565
ASHNR0370	3	70	16	31.4	39.4	3500
ASHNR0395	3	95	25	36.0	44.4	4565
ASHNR03120	3	120	25	39.6	48.4	5625
ASHNR03150	3	150	25	43.4	52.2	6660
ASHNR03185	3	185	35	48.6	57.8	8325
ASHNR03240	3	240	35	55.3	64.9	10640
ASHNR03300	3	300	35	62.6	72.8	12895
ASHNR04015	4	1.5	6	11.0	15.7	400
ASHNR04025	4	2.5	6	12.2	16.9	480
ASHNR04040	4	4	10	14.1	18.8	610
ASHNR04060	4	6	10	15.3	21.0	765
ASHNR0410	4	10	10	18.1	23.8	1010
ASHNR0416	4	16	10	20.5	26.7	1345
ASHNR0425	4	25	10	24.8	31.0	2135

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ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL BRAID CROSS SECTION mm²	NOMINAL DIAMETER UNDER ARMOUR mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
ASHNR0435	4	35	10	27.5	34.0	2515
ASHNR0450	4	50	16	30.8	38.4	3265
ASHNR0470	4	70	16	34.6	42.6	4360
ASHNR0495	4	95	25	39.7	48.1	5715
ASHNR04120	4	120	25	43.7	52.5	7060
ASHNR04150	4	150	35	48.0	56.8	8370
ASHNR04185	4	185	35	54.2	63.8	10645
ASHN04240	4	240	35	61.1	71.3	13590
ASHN04300	4	300	35	69.3	79.S	16335
ASHNR05015	5	1.5	6	12.2	16.9	470
ASHNR05025	5	2.5	10	13.3	18.1	560
ASHNR05040	5	4	10	15.3	21.0	720
ASHNR05060	5	6	10	16.8	22.6	905
ASHNR0510	5	10	10	19.8	25.6	1200
ASHNR0516	5	16	10	22.8	29.0	1635
ASHNR0525	5	25	10	27.4	34.0	2385
ASHNR07015	7	1.5	10	13.3	18.0	535
ASHNR07025	7	2.5	10	14.5	20.1	650
ASHNR12015	12	1.5	10	17.4	23.4	845
ASHNR12025	12	2.5	10	19.2	25.2	1035
ASHNR19015	19	1.5	10	20.5	26.7	1130
ASHNR19025	19	2.5	10	22.8	29.0	1415
ASHNR27015	27	1.5	10	24.9	31.5	1580
ASHNR27025	27	2.5	10	27.7	34.2	1990
ASHNR37015	37	1.5	16	28.1	35.1	1990
ASHNR37025	37	2.5	16	31.2	38.8	2610

ELECTRICAL CHARACTERISTICS - SINGLE CORE

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE µF/km	NOMINAL NDUCTANCE µH/km	IMPENDANCE 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	10	1.84	2.35	0.115	0.138	0.207	367	1.84	1.85	2.35	2.35	69	1.43
1	16	1.16	1.48	0.105	0.126	0.247	335	1.16	1.17	1.48	1.48	92	2.29
1	25	0.734	0.936	0.102	0.123	0.291	325	0.74	0.74	0.94	0.94	123	3.58
1	35	0.529	0.675	0.098	0.118	0.328	313	0.54	0.54	0.68	0.68	153	5.01
1	50	0.391	0.499	0.096	0.115	0.355	305	0.4	0.41	0.51	0.51	188	7.15
1	70	0.27	0.344	0.091	0.109	0.413	290	0.28	0.29	0.36	0.36	243	10
1	95	0.195	0.249	0.089	0.107	0.47	284	0.21	0.22	0.26	0.27	298	13.6
1	120	0.154	0.196	0.086	0.104	0.514	275	0.18	0.18	0.21	0.22	348	17.2
1	150	0.126	0.161	0.085	0.102	0.556	272	0.15	0.16	0.18	0.19	404	21.5
1	185	0.1	0.128	0.084	0.101	0.61	269	0.13	0.14	0.15	0.16	464	26.5
1	240	0.0762	0.0972	0.082	0.099	0.681	262	0.11	0.13	0.13	0.14	552	34.3
1	300	0.0607	0.0774	0.08	0.096	0.762	256	0.1	0.11	0.11	0.12	640	42.9

ELECTRICAL CHARACTERISTICS - 2 CORE

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE µF/km	NOMINAL NDUCTANCE µH/km	IMPENDANCE 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		
2	1.5	12.2	15.6	0.115	0.138	0.13	367	12.2	12.2	15.6	15.6	23	0.21
2	2.5	7.56	9.64	0.107	0.128	0.143	340	7.56	7.56	9.64	9.64	31	0.36
2	4	4.7	5.99	0.098	0.118	0.156	313	4.7	4.7	6	6	43	0.57
2	6	3.11	3.97	0.093	0.112	0.167	297	3.11	3.11	3.97	3.97	55	0.86
2	10	1.84	2.35	0.087	0.105	0.182	278	1.84	1.84	2.35	2.35	75	1.43
2	16	1.16	1.48	0.082	0.099	0.196	262	1.16	1.16	1.48	1.48	100	2.29

ELECTRICAL CHARACTERISTICS - 3 CORE

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE µF/km	NOMINAL NDUCTANCE µH/km	IMPENDANCE 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		
3	1.5	12.2	15.6	0.115	23	0.21	367	12.2	12.2	15.6	15.6	20	0.21
3	2.5	7.56	9.64	0.107	0.128	0.143	340	7.56	7.56	9.64	9.64	28	0.36
3	4	4.7	5.99	0.098	0.118	0.156	313	4.7	4.7	6	6	37	0.57
3	6	3.11	3.97	0.093	0.112	0.167	297	3.11	3.11	3.97	3.97	47	0.86
3	10	1.84	2.35	0.087	0.105	0.182	278	1.84	1.84	2.35	2.35	65	1.43
3	16	1.16	1.48	0.082	0.099	0.196	262	1.16	1.17	1.48	1.48	87	2.29
3	25	0.734	0.936	0.081	0.097	0.203	257	0.74	0.74	0.94	0.94	110	3.58
3	35	0.529	0.675	0.078	0.093	0.213	248	0.54	0.54	0.68	0.68	137	5.01
3	50	0.391	0.499	0.077	0.093	0.218	247	0.4	0.4	0.5	0.51	167	7.15
3	70	0.27	0.344	0.075	0.09	0.227	238	0.28	0.28	0.35	0.36	214	10
3	95	0.195	0.249	0.074	0.089	0.232	236	0.21	0.21	0.26	0.26	259	13.6
3	120	0.154	0.196	0.073	0.087	0.238	231	0.17	0.18	0.21	0.21	301	17.2
3	150	0.126	0.161	0.072	0.087	0.24	231	0.14	0.15	0.18	0.18	347	21.5
3	185	0.1	0.128	0.072	0.086	0.242	229	0.12	0.13	0.15	0.15	397	26.5
3	240	0.0762	0.0972	0.071	0.086	0.246	227	0.1	0.11	0.12	0.13	468	34.3
3	300	0.0607	0.0774	0.071	0.085	0.249	225	0.09	0.1	0.1	0.11	540	42.9

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ELECTRICAL CHARACTERISTICS - 4 CORE

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE µF/km	NOMINAL NDUCTANCE µH/km	IMPENDANCE 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		
4	1.5	12.2	15.6	0.121	20	0.21	384	12.2	12.2	15.6	15.6	20	0.21
4	2.5	7.56	9.64	0.114	0.137	0.133	357	7.56	7.56	9.64	9.64	28	0.36
4	4	4.7	5.99	0.104	0.124	0.144	330	4.7	4.7	6	6	37	0.57
4	6	3.11	3.97	0.099	0.118	0.153	314	3.11	3.11	3.97	3.97	47	0.86
4	10	1.84	2.35	0.093	0.111	0.166	295	1.84	1.84	2.35	2.35	65	1.43
4	16	1.16	1.48	0.088	0.105	0.177	279	1.16	1.17	1.48	1.48	87	2.29
4	25	0.734	0.936	0.086	0.103	0.183	274	0.74	0.74	0.94	0.94	110	3.58
4	35	0.529	0.675	0.083	0.1	0.191	265	0.54	0.54	0.68	0.68	137	5.01
4	50	0.391	0.499	0.083	0.099	0.196	264	0.4	0.4	0.51	0.51	167	7.15
4	70	0.27	0.344	0.08	0.096	0.203	255	0.28	0.29	0.35	0.36	214	10
4	95	0.195	0.249	0.079	0.095	0.207	253	0.21	0.22	0.26	0.27	259	13.6
4	120	0.154	0.196	0.078	0.093	0.211	248	0.17	0.18	0.21	0.22	301	17.2
4	150	0.126	0.161	0.078	0.093	0.213	248	0.15	0.16	0.18	0.19	347	21.5
4	185	0.1	0.128	0.077	0.093	0.215	246	0.13	0.14	0.15	0.16	397	26.5
4	240	0.0762	0.0972	0.077	0.092	0.218	244	0.11	0.12	0.12	0.13	468	34.3
4	300	0.0607	0.0774	0.076	0.091	0.22	242	0.1	0.11	0.11	0.12	540	42.9

ELECTRICAL CHARACTERISTICS - MULTI CORE

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	MAX. CONDUCTOR RESISTANCE Ω/km		MAX. REACTANCE Ω/km		NOMINAL CAPACITANCE µF/km	NOMINAL NDUCTANCE µH/km	IMPENDANCE 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		
5	1.5	12.2	15.6	0.125	20	0.21	399	12.2	12.2	15.6	15.6	12	0.21
7	1.5	12.2	15.6	0.159	0.191	0.091	506	12.2	12.2	15.6	15.6	11	0.21
12	1.5	12.2	15.6	0.188	0.225	0.076	597	12.2	12.2	15.6	15.6	9	0.21
19	1.5	12.2	15.6	0.202	0.243	0.064	645	12.2	12.2	15.6	15.6	8	0.21
27	1.5	12.2	15.6	0.221	0.265	0.065	695	12.2	12.2	15.6	15.6	7	0.21
37	1.5	12.2	15.6	0.228	0.273	0.062	726	12.2	12.2	15.6	15.6	6	0.21
5	2.5	7.56	9.64	0.117	0.14	0.129	372	7.56	7.56	9.64	9.64	17	0.36
7	2.5	7.56	9.64	0.15	0.18	0.097	479	7.56	7.56	9.64	9.64	15	0.36
12	2.5	7.56	9.64	0.179	0.215	0.081	571	7.56	7.56	9.64	9.64	12	0.36
19	2.5	7.56	9.64	0.194	0.233	0.051	618	7.56	7.56	9.64	9.64	11	0.36
27	2.5	7.56	9.64	0.21	0.252	0.054	668	7.56	7.56	9.64	9.64	10	0.36
37	2.5	7.56	9.64	0.207	0.248	0.066	699	7.56	7.56	9.64	9.64	9	0.36

MAXIMUM CURRENT RATE BASED ON 90°C CDNDUCTDR TEMPERATURE AND 45°C AMBIENT TEMPERATURE IEC 60092-352