

NEK606 BFOU P105 0.6/1kV Cable



Product Group: ASH

APPLICATION

A fire-resistant, 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

Mica Tape+ 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 ●

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 60228, IEC 60092-360

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

Resistance: IEC 60331-1 OR 2

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 S2-2001 & IEC 60445

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



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

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
ASHNB0110	1	10	4	9.9	14.3	355
ASHNB0116	1	16	6	11.0	15.1	435
ASHNB0125	1	25	10	12.7	17.4	596
ASHNB0135	1	35	10	13.8	18.7	740
ASHNB0150	1	50	10	15.0	20.7	895
ASHNB0170	1	70	10	16.3	22.2	1150
ASHNB0195	1	95	10	18.7	24.9	1470
ASHNB01120	1	120	10	20.2	26.6	1770
ASHNB01150	1	150	10	21.8	28.4	2080
ASHNB01185	1	185	10	24.2	31.0	2585
ASHNB01240	1	240	10	26.9	33.9	3230
ASHNB01300	1	300	16	30.9	38.7	4000
ASHNB02015	2	1.5	6	10.1	14.8	345
ASHNB02025	2	2.5	6	11.3	16.0	410
ASHNB02040	2	4	10	13.1	17.8	510
ASHNB02060	2	6	10	13.7	18.6	590
ASHNB0210	2	10	10	16.7	22.4	800
ASHNB0216	2	16	10	18.9	25.1	1035
ASHNB0225	2	25	10	22.4	28.5	1395
ASHNB0235	2	35	10	24.6	30.7	1740
ASHNB0250	2	50	10	27.1	33.6	2150
ASHNB03015	3	1.5	6	10.7	15.5	380
ASHNB03025	3	2.5	6	12.0	16.7	460
ASHNB03040	3	4	10	14.0	18.7	570
ASHNB03060	3	6	10	14.6	20.3	685
ASHNB0310	3	10	10	17.8	23.5	920
ASHNB0316	3	16	10	20.2	26.4	1210
ASHNB0325	3	25	10	24.1	30.3	1690
ASHNB0335	3	35	10	26.5	33.1	2160
ASHNB0350	3	50	10	29.1	36.1	2690
ASHNB0370	3	70	16	32.1	40.1	3600
ASHNB0395	3	95	25	37.1	45.5	4715
ASHNB03120	3	120	25	40.8	49.6	5795
ASHNB03150	3	150	35	44.6	53.4	6830
ASHNB03185	3	185	35	49.8	59.0	8515
ASHNB03240	3	240	35	56.5	66.1	10860
ASHNB03300	3	300	35	63.8	74.0	13135
ASHNB04015	4	1.5	6	11.7	16.4	435
ASHNB04025	4	2.5	10	13.1	17.8	525
ASHNB04040	4	4	10	15.3	20.8	680
ASHNB04060	4	6	10	16.0	21.7	815
ASHNB0410	4	10	10	19.5	25.3	1100
ASHNB0416	4	16	10	22.2	28.4	1465
ASHNB0425	4	25	10	26.5	32.7	2065

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.

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
ASHNB0435	4	35	10	29.1	35.7	2660
ASHNB0450	4	50	16	32.1	39.7	3420
ASHNB0470	4	70	25	35.4	43.4	4490
ASHNB0495	4	95	25	41.0	49.4	5900
ASHNB04120	4	120	35	45.0	53.8	7260
ASHNB04150	4	150	35	49.3	58.1	8590
ASHNB04185	4	185	35	55.5	65.1	10890
ASHNB04240	4	240	35	62.5	72.7	13860
ASHNB05015	5	1.5	10	13.0	17.8	515
ASHNB05025	5	2.5	10	14.4	19.1	615
ASHNB05040	5	4	10	16.6	22.4	800
ASHNB05060	5	6	10	17.6	23.4	965
ASHNB0510	5	10	10	21.5	27.3	1320
ASHNB0516	5	16	10	24.7	30.9	1800
ASHNB0525	5	25	10	29.3	35.9	2555
ASHNB07015	7	1.5	10	14.2	18.9	590
ASHNB07025	7	2.5	10	15.7	21.2	720
ASHNB12015	12	1.5	10	18.7	24.7	935
ASHNB12025	12	2.5	10	20.9	26.8	1155
ASHNB19015	19	1.5	10	22.1	28.2	1250
ASHNB19025	19	2.5	10	24.8	30.9	1590
ASHNB27015	27	1.5	10	26.8	33.4	1760
ASHNB27025	27	2.5	16	30.1	37.1	2310
ASHNB37015	37	1.5	16	30.3	37.8	2305
ASHNB37025	37	2.5	16	34.0	41.5	2915

ELECTRICAL CHARACTERISTICS - SINGLE CORE

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	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 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		
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 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		
3	1.5	12.2	15.6	0.115	0.138	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

ELECTRICAL CHARACTERISTICS - 4 CORE

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		
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 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		
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 CONDUCTOR TEMPERATURE AND 45°C AMBIENT TEMPERATURE IEC 60092-352