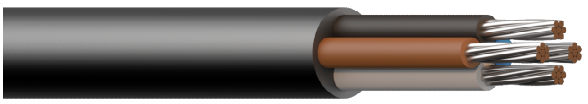
Halogen-free, unarmoured, mud resistant power cable, RU 0,6/1(1,2)kV, P18



Flame retardant halogen-free power cable.
Mud resistant

RU 0,6/1(1,2)kV

EPR/EVA

NEK TS 606 CodeP18

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power,control and lighting in both EX- and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids. Meets the OIL & MUD resistance requirement in NEK TS 606:2009. These cables are double-insulated and Single core cables are used as battery cables.

Standards applied

IEC 60092-353	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1-2	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text		E.g. "meter" "year" DRAKA 01 RU 0,6/1KV P18 3 x 2,5 mm2 IEC 60332-3-22
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel,
Outer sheath colour		Black

Core identification power cables

Single core – Black
Two cores - Blue – Brown
Three cores - Brown - Black – Grey
Four cores - Blue - Brown - Black – Grey
Five cores - Blue - Brown - Black - Grey – Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue – Brown
Three cores + earth (4G) - Yellow/green - Brown - Black - Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black - Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	25	6.45	1.2	1.1	11.5 ± 0.8	340	231
1	50	9.0	1.4	1.2	14.5 ± 0.8	610	434
1	70	10.9	1.4	1.3	16.5 ± 0.8	820	632
1	95	12.60	1.6	1.4	19 ± 0.8	1110	847
1	120	14.20	1.6	1.4	20.5 ± 1	1370	1082
1	150	15.90	1.8	1.5	23 ± 1	1710	1357
1	185	17.70	2.0	1.6	25.5 ± 1	2090	1664
1	240	20.15	2.2	1.7	28.5 ± 1	2680	2165
1	300	22.60	2.4	1.8	31.5 ± 1.5	3370	2757
2	1.5	1.6	1.0	1.1	9.5 ± 0.5	135	28
3	1.5	1.6	1.0	1.1	10 ± 0.8	160	42
4	1.5	1.6	1.0	1.1	11 ± 0.8	190	56
5	1.5	1.6	1.0	1.2	12 ± 0.8	240	70
7	1.5	1.6	1.0	1.2	12.5 ± 0.8	280	98
12	1.5	1.6	1.0	1.4	16.5 ± 0.8	460	168
19	1.5	1.6	1.0	1.5	19.5 ± 0.8	680	266
24	1.5	1.6	1.0	1.6	25 ± 1	890	335
3G	1.5	1.6	1.0	1.1	10 ± 0.8	160	42
4G	1.5	1.6	1.0	1.1	11 ± 0.8	190	56
5G	1.5	1.6	1.0	1.2	12 ± 0.8	240	70
7G	1.5	1.6	1.0	1.2	12.5 ± 0.8	280	98
2	2.5	2.0	1.0	1.1	10.5 ± 0.8	170	46
3	2.5	2.0	1.0	1.1	11 ± 0.8	205	69
4	2.5	2.0	1.0	1.2	12 ± 0.8	250	92
5	2.5	2.0	1.0	1.2	13.5 ± 0.8	320	115
7	2.5	2.0	1.0	1.3	14 ± 0.8	390	161
3G	2.5	2.0	1.0	1.1	11 ± 0.8	205	69
4G	2.5	2.0	1.0	1.2	12 ± 0.8	255	92
5G	2.5	2.0	1.0	1.2	13.5 ± 0.8	320	115
2	4	2.55	1.0	1.1	11.5 ± 0.8	220	74
3	4	2.55	1.0	1.2	12 ± 0.8	275	110
4	4	2.55	1.0	1.2	13.5 ± 0.8	340	147
3G	4	2.55	1.0	1.2	12 ± 0.8	275	110
4G	4	2.55	1.0	1.2	13.5 ± 0.8	340	147
5G	4	2.55	1.0	1.3	15 ± 0.8	410	184
2	6	3.15	1.0	1.2	12.5 ± 0.8	290	110
3	6	3.15	1.0	1.2	13.5 ± 0.8	360	164
4	6	3.15	1.0	1.3	15 ± 0.8	450	219
3G	6	3.15	1.0	1.2	13.5 ± 0.8	360	164
4G	6	3.15	1.0	1.3	15 ± 0.8	450	219
5G	6	3.15	1.0	1.3	16.5 ± 0.8	550	273
2	10	4.05	1.0	1.2	14.5 ± 0.8	410	182
3	10	4.05	1.0	1.3	15.5 ± 0.8	530	272

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
4G	10	4.05	1.0	1.3	17.5 ± 0.8	660	363
5G	10	4.05	1.0	1.4	19 ± 0.8	820	453
2	16	5.15	1.0	1.3	17 ± 0.8	600	292
3	16	5.15	1.0	1.4	18.5 ± 0.8	780	438
4	16	5.15	1.0	1.4	20 ± 1	950	585
3G	16	5.15	1.0	1.4	18.5 ± 0.8	780	438
4G	16	5.15	1.0	1.4	20 ± 1	980	584
5G	16	5.15	1.0	1.5	22.5 ± 1	1200	730
2	25	6.45	1.2	1.4	20.5 ± 1	900	463
3	25	6.45	1.2	1.5	22.5 ± 1	1170	694
4	25	6.45	1.2	1.6	24.5 ± 1	1420	924
4G	25	6.45	1.2	1.6	25 ± 1	1500	925
2	35	7.65	1.2	1.5	23 ± 1	1150	629
3	35	7.65	1.2	1.6	25 ± 1	1520	943
4G	35	7.65	1.2	1.7	28 ± 1	1950	1257
5G	35	7.65	1.2	1.8	31 ± 1.5	2370	1571
3	50	9.0	1.4	1.7	29.5 ± 1	2090	1306
5G	50	9.0	1.4	2	36.5 ± 1.5	3310	2177
3	70	10.85	1.4	1.9	34 ± 1.5	2900	1900
5G	70	10.85	1.4	2.1	42 ± 2	4550	3167

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	831701	RU 0.6/1kV 1X 25mm² P18	BLACK	-	7021528317015	-
	831703	RU 0.6/1kV 1X 50mm² P18	BLACK	-	7021528317039	1061403
	831704	RU 0,6/1KV 1X 70 MM2 P18	BLACK	-	7021528317046	-
	831705	RU 0.6/1kV 1X 95mm² P18	BLACK	-	7021528317053	-
	831706	RU 0.6/1kV 1X 120mm² P18	BLACK	-	7021528317060	-
	831707	RU 0.6/1kV 1X 150mm² P18	BLACK	-	7021528317077	1061407
	831708	RU 0.6/1kV 1X 185mm² P18	BLACK	-	7021528317084	-
	831709	RU 0.6/1kV 1X 240mm² P18	BLACK	-	7021528317091	-
	831710	RU 0.6/1kV 1X 300mm² P18	BLACK	-	7021528317107	-
	831715	RU 0.6/1kV 2X 1.5mm² P18	BLACK	-	7021528317152	-
20115552		RU 0.6/1kV 3X 1.5mm² P18	BLACK	-	7021528317183	-
20130984		RU 0.6/1kV 4X 1.5mm² P18	BLACK	-	7021528317213	-
	831724	RU 0.6/1kV 5X 1.5mm² P18	BLACK	-	7021528317244	-
	831725	RU 0.6/1kV 7X 1.5mm² P18	BLACK	-	7021528317251	-
	831726	RU 0.6/1kV 12X 1.5mm² P18	BLACK	-	7021528317268	-
	831728	RU 0.6/1kV 19X 1.5mm² P18	BLACK	-	7021528317282	-
	831729	RU 0,6/1KV 24X 1,5 MM2 P18	BLACK	-	7021528317299	-
20109463		RU 0.6/1kV 3G 1.5mm² P18	BLACK	-	7021528317169	-
	831719	RU 0.6/1kV 4G 1.5mm² P18	BLACK	-	7021528317190	-
	831720	RU 0.6/1kV 5G 1.5mm² P18	BLACK	-	7021528317206	-
	831723	RU 0.6/1kV 7G 1.5mm² P18	BLACK	-	7021528317237	-
	831733	RU 0.6/1kV 2X 2.5mm² P18	BLACK	-	7021528317336	-
20115556		RU 0.6/1kV 3X 2.5mm² P18	BLACK	-	7021528317367	-
	831739	RU 0,6/1KV 4X 2,5 MM2 P18	BLACK	-	7021528317398	-
	831741	RU 0.6/1kV 5X 2.5mm² P18	BLACK	-	7021528317411	-
	831743	RU 0.6/1kV 7X 2.5mm² P18	BLACK	-	7021528317435	-
20109464		RU 0.6/1kV 3G 2.5mm² P18	BLACK	-	7021528317343	1061434
20128690		RU 0.6/1kV 4G 2.5mm² P18	BLACK	-	7021528317374	1061437
	831740	RU 0.6/1kV 5G 2.5mm² P18	BLACK	-	7021528317404	-

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	831751	RU 0.6/1kV 2X 4mm² P18	BLACK	-	7021528317510	-
	831753	RU 0.6/1kV 3X 4mm² P18	BLACK	-	7021528317534	-
	831755	RU 0,6/1KV 4X 4 MM2 P18	BLACK	-	7021528317558	-
20109465		RU 0.6/1kV 3G 4mm² P18	BLACK	-	7021528317527	-
	831754	RU 0.6/1kV 4G 4mm² P18	BLACK	-	7021528317541	-
	831756	RU 0,6/1KV 5G 4mm² P18	BLACK	-	7021528317565	-
	831759	RU 0,6/1KV 2X 6 MM2 P18	BLACK	-	7021528317596	-
	831761	RU 0.6/1kV 3X 6mm² P18	BLACK	-	7021528317619	-
	831762	RU 0.6/1kV 4X 6mm² P18	BLACK	-	7021528317626	-
20109466		RU 0.6/1kV 3G 6mm² P18	BLACK	-	7021528317602	-
	831764	RU 0.6/1kV 4G 6mm² P18	BLACK	-	7021528317640	1061461
	831763	RU 0.6/1kV 5G 6mm² P18	BLACK	-	7021528317633	-
	831766	RU 0,6/1KV 2X 10 MM2 P18	BLACK	-	7021528317664	-
	831767	RU 0.6/1kV 3X 10mm² P18	BLACK	-	7021528317671	-
	831769	RU 0.6/1kV 4G 10mm² P18	BLACK	-	7021528317695	-
	831770	RU 0.6/1kV 5G 10mm² P18	BLACK	-	7021528317701	-
	831772	RU 0.6/1kV 2X 16mm² P18	BLACK	-	7021528317725	-
	831773	RU 0.6/1kV 3X 16mm² P18	BLACK	-	7021528317732	-
	831774	RU 0,6/1KV 4X 16 MM2 P18	BLACK	-	7021528317749	-
	831775	RU 0.6/1kV 3G 16mm² P18	BLACK	-	7021528317756	-
20109467		RU 0.6/1kV 4G 16mm² P18	BLACK	-	7021528317763	-
	831777	RU 0.6/1kV 5G 16mm² P18	BLACK	-	7021528317770	-
	831779	RU 0.6/1kV 2X 25mm² P18	BLACK	-	7021528317794	-
	831780	RU 0.6/1kV 3X 25mm² P18	BLACK	-	7021528317800	-
	831781	RU 0,6/1KV 4X 25 MM2 P18	BLACK	-	7021528317817	-
	831782	RU 0.6/1kV 4G 25mm² P18	BLACK	-	7021528317824	-
	831785	RU 0,6/1KV 2X 35 MM2 P18	BLACK	-	7021528317855	-
	831786	RU 0.6/1kV 3X 35mm² P18	BLACK	-	7021528317862	-
	831788	RU 0.6/1kV 4G 35mm² P18	BLACK	-	7021528317886	-
	831789	RU 0.6/1kV 5G 35mm² P18	BLACK	-	7021528317893	-
	831792	RU 0.6/1kV 3X 50mm² P18	BLACK	-	7021528317923	-
	831796	RU 0.6/1kV 5G 50mm² P18	BLACK	-	7021528317961	-
	831798	RU 0.6/1kV 3X 70mm² P18	BLACK	-	7021528317985	-
	831799	RU 0.6/1kV 5G 70mm² P18	BLACK	-	7021528317992	-

Electrical values power cables

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	25	0.734	0.499	0.094	0.113	127	3500
1	50	0.391	0.499	0.09	0.108	196	7000
1	70	0.27	0.344	0.085	0.102	242	9800
1	95	0.195	0.249	0.085	0.102	293	13300
1	120	0.154	0.196	0.083	0.1	339	16800
1	150	0.126	0.161	0.082	0.099	389	21000
1	185	0.1	0.128	0.082	0.098	444	25900
1	240	0.0762	0.0972	0.081	0.098	522	33600
1	300	0.0607	0.0774	0.08	0.096	601	42000
2	1.5	12.2	15.6	0.11	0.132	20	210
3	1.5	12.2	15.6	0.11	0.132	16	210
4	1.5	12.2	15.6	0.11	0.132	16	210
5	1.5	12.2	15.6	0.11	0.132	13.5	210
7	1.5	12.2	15.6	0.11	0.132	12	210

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
12	1.5	12.2	15.6	0.11	0.132	10	210
19	1.5	12.2	15.6	0.11	0.132	8.5	210
24	1.5	12.2	15.6	0.11	0.132	8	210
3G	1.5	12.2	15.6	0.11	0.132	20	210
4G	1.5	12.2	15.6	0.11	0.132	16	210
5G	1.5	12.2	15.6	0.11	0.132	16	210
7G	1.5	12.2	15.6	0.11	0.132	12.5	210
2	2.5	7.56	9.64	0.103	0.123	26	350
3	2.5	7.56	9.64	0.103	0.123	21	350
4	2.5	7.56	9.64	0.103	0.123	21	350
5	2.5	7.56	9.64	0.103	0.123	17.5	350
7	2.5	7.56	9.64	0.103	0.123	15.5	350
3G	2.5	7.56	9.64	0.103	0.123	26	350
4G	2.5	7.56	9.64	0.103	0.123	21	350
5G	2.5	7.56	9.64	0.103	0.123	21	350
2	4	4.7	5.99	0.096	0.115	34	560
3	4	4.7	5.99	0.096	0.115	28	560
4	4	4.7	5.99	0.096	0.115	28	560
3G	4	4.7	5.99	0.096	0.115	34	560
4G	4	4.7	5.99	0.096	0.115	28	560
5G	4	4.7	5.99	0.096	0.115	28	560
2	6	3.11	3.97	0.09	0.108	44	840
3	6	3.11	3.97	0.09	0.108	36	840
4	6	3.11	3.97	0.09	0.108	36	840
3G	6	3.11	3.97	0.09	0.108	44	840
4G	6	3.11	3.97	0.09	0.108	36	840
5G	6	3.11	3.97	0.09	0.108	36	840
2	10	1.84	2.35	0.084	0.101	61	1400
3	10	1.84	2.35	0.084	0.101	50	1400
4G	10	1.84	2.35	0.084	0.101	50	1400
5G	10	1.84	2.35	0.084	0.101	50	1400
2	16	1.16	1.48	0.08	0.096	80	2240
3	16	1.16	1.48	0.08	0.096	67	2240
4	16	1.16	1.48	0.08	0.096	67	2240
3G	16	1.16	1.48	0.08	0.096	80	2240
4G	16	1.16	1.48	0.08	0.096	67	2240
5G	16	1.16	1.48	0.08	0.096	67	2240
2	25	0.734	0.936	0.079	0.095	108	3500
3	25	0.734	0.936	0.079	0.095	89	3500
4	25	0.734	0.936	0.079	0.095	89	3500
4G	25	0.734	0.936	0.079	0.095	89	3500
2	35	0.529	0.675	0.076	0.092	133	4900
3	35	0.529	0.675	0.076	0.092	110	4900
4G	35	0.529	0.675	0.076	0.092	110	4900
5G	35	0.529	0.675	0.076	0.092	110	4900
3	50	0.391	0.499	0.076	0.092	137	7000
5G	50	0.391	0.499	0.076	0.092	137	7000
3	70	0.27	0.344	0.074	0.088	169	9800
5G	70	0.27	0.344	0.074	0.088	169	9800

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm²	-20°C