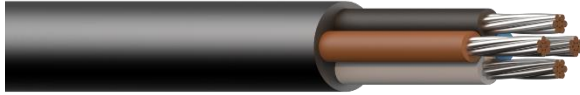


RU 1kV P18/P111 Power cable, Unarmoured

Flame retardant halogen-free power cable.

RU 0.6/1kV

EPR/EVA



RU 1kV NEK TS 606 Code P111
 RU M 1kV NEK TS 606 Code P18/P111

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

Standards applied

Application

Fixed installation for power, control and lighting in safe areas, general purposes.

RU M 1kv meets the Oil & Mud resistance requirement in NEK TS 606:2016.

These cables are double-insulated and Single core cables are used as battery cables.

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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RU M 1KV P18/P111 3 x 2,5mm ² IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

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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, mm ²	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	6	3.1	1.0	1.0	7 ± 0.5	110	54
1	10	4.0	1.0	1.0	8 ± 0.5	154	87
1	16	5.05	1.0	1.1	9 ± 0.8	221	140
1	70	10.6	1.4	1.3	16 ± 0.8	795	608
1	120	14.0	1.6	1.4	20 ± 1	1320	1060
1	240	19.85	2.2	1.7	27.5 ± 1	2570	2105
1	300	22.2	2.4	1.8	30.5 ± 1.5	3210	2644
2	1.5	1.6	1.0	1.1	9 ± 0.5	130	27
3	1.5	1.6	1.0	1.1	9.5 ± 0.8	155	40
4	1.5	1.6	1.0	1.1	10.5 ± 0.8	185	53
5	1.5	1.6	1.0	1.2	12 ± 0.8	235	67
7	1.5	1.6	1.0	1.2	12.5 ± 0.8	275	94
3G	1.5	1.6	1.0	1.1	9.5 ± 0.8	155	40
2	2.5	2.0	1.0	1.1	10 ± 0.8	165	43
3	2.5	2.0	1.0	1.1	10.5 ± 0.8	195	64
7	2.5	2.0	1.0	1.3	14 ± 0.8	370	149
3G	2.5	2.0	1.0	1.1	10.5 ± 0.8	195	64
4G	2.5	2.0	1.0	1.2	11.5 ± 0.8	245	85
5G	2.5	2.0	1.0	1.2	13 ± 0.8	300	106
2	4	2.5	1.0	1.1	11 ± 0.8	215	69
3	4	2.5	1.0	1.2	12 ± 0.8	265	104
3G	4	2.5	1.0	1.2	12 ± 0.8	265	104
4G	4	2.5	1.0	1.2	13 ± 0.8	325	138
2	6	3.1	1.0	1.2	12.5 ± 0.8	285	108
3	6	3.1	1.0	1.2	13 ± 0.8	355	162
4	6	3.1	1.0	1.3	14.5 ± 0.8	445	216
3G	6	3.1	1.0	1.2	13 ± 0.8	355	162
5G	6	3.1	1.0	1.3	16.5 ± 0.8	543	270
2	10	4.0	1.0	1.2	14 ± 0.8	405	175
3	10	4.0	1.0	1.3	15 ± 0.8	515	262
4	10	4.0	1.0	1.3	17 ± 0.8	640	350
4G	10	4.0	1.0	1.3	17 ± 0.8	640	350
2	16	5.05	1.0	1.3	16.5 ± 0.8	580	280
3	16	5.05	1.0	1.4	17.5 ± 0.8	740	420

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Number of elements	Cross section core, mm ²	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)
4	16	5.05	1.0	1.4	19.5 ± 0.8	940	559
4G	16	5.05	1.0	1.4	19.5 ± 0.8	940	559
2	25	6.3	1.2	1.4	20 ± 1	865	441
3	25	6.3	1.2	1.5	21.5 ± 1	1110	661
4	25	6.3	1.2	1.6	24 ± 1	1402	882
4G	25	6.3	1.2	1.6	24 ± 1	1420	882
2	35	7.4	1.2	1.5	22.5 ± 1	1125	606
4	35	7.4	1.2	1.7	27 ± 1	1855	1211
3	70	10.6	1.4	1.9	32 ± 1.5	2720	1828
4	70	10.6	1.4	2	36 ± 1.5	3480	2438
5G	70	10.6	1.4	2.1	40 ± 2	4300	3047
3	95	12.35	1.6	2.0	37 ± 1.5	3630	2465
4	95	12.35	1.6	2.2	41.5 ± 2	4655	3287
4	150	15.45	1.8	2.5	50.5 ± 2.5	7210	5150

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20196475	RU M 1kV 1X 6mm ² P18/P111 BK	BLACK	7021528317145	-
20214327	RU M 1kV 1X 10mm ² P18/P111 BK	BLACK	7021528317138	-
20214325	RU M 1kV 1X 16mm ² P18/P111 BK	BLACK	7021528317008	-
20214326	RU M 1KV 1X 70mm ² P18/P111 BK	BLACK	7021528317046	-
20317523	RU M 1KV 1X120mm ² P18/P111 BK	BLACK	7021528317062	-
	RU M 1kV 1X 240mm ² P18/P111 BK	BLACK	-	-
20157883	RU M 1kV 1X 300mm ² P18/P111 BK	BLACK	7021528317107	-
20153849	RU M 1kV 2X 1.5mm ² P18/P111 BK	BLACK	7021528317152	-
20115552	RU M 1kV 3X 1.5mm ² P18/P111 BK	BLACK	7021528317183	-
20130984	RU M 1kV 4X 1.5mm ² P18/P111 BK	BLACK	7021528317213	-
20153850	RU M 1kV 5X 1.5mm ² P18/P111 BK	BLACK	7021528317244	-
20153851	RU M 1kV 7X 1.5mm ² P18/P111 BK	BLACK	7021528317251	-
20109463	RU M 1kV 3G 1.5mm ² P18/P111 BK	BLACK	7021528317169	-
	RU M 1kV 4G 1.5mm ² P18/P111 BK	BLACK	7021528317190	-
20153852	RU M 1kV 2X 2.5mm ² P18/P111 BK	BLACK	7021528317336	-
20115556	RU M 1kV 3X 2.5mm ² P18/P111 BK	BLACK	7021528317367	-
20155413	RU M 1kV 7X 2.5mm ² P18/P111 BK	BLACK	7021528317435	-
20109464	RU M 1kV 3G 2.5mm ² P18/P111 BK	BLACK	7021528317343	1061434
20128690	RU M 1kV 4G 2.5mm ² P18/P111 BK	BLACK	7021528317374	1061437
20142389	RU M 1kV 5G 2.5mm ² P18/P111 BK	BLACK	7021528317404	-
20154725	RU M 1kV 2X 4mm ² P18/P111 BK	BLACK	7021528317510	-
20154726	RU M 1kV 3X 4mm ² P18/P111 BK	BLACK	7021528317534	-
20109465	RU M 1kV 3G 4mm ² P18/P111 BK	BLACK	7021528317527	-
20217825	RU M 1kV 4G 4mm ² P18/P111 BK	BLACK	7021528317545	-
20195578	RU M 1KV 2X 6mm ² P18/P111 BK	BLACK	7021528317596	-
20195579	RU M 1kV 3X 6mm ² P18/P111 BK	BLACK	7021528317619	-
20182000	RU M 1kV 4X 6mm ² P18/P111 BK	BLACK	7021528317626	-

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RU 1kV P18/P111 Power cable, Unarmoured

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20109466	RU M 1kV 3G 6mm ² P18/P111 BK	BLACK	7021528317602	-
20142388	RU M 1kV 5G 6mm ² P18/P111 BK	BLACK	7021528317633	-
20172559	RU M 1kV 2X 10mm ² P18/P111 BK	BLACK	7021528317664	-
20154727	RU M 1kV 3X 10mm ² P18/P111 BK	BLACK	7021528317671	-
20154728	RU M 1kV 4X 10mm ² P18/P111 BK	BLACK	7021528317688	-
20172600	RU M 1kV 4G 10mm ² P18/P111 BK	BLACK	7021528317695	-
20172601	RU M 1kV 2X 16mm ² P18/P111 BK	BLACK	7021528317725	-
20154729	RU M 1kV 3X 16mm ² P18/P111 BK	BLACK	7021528317732	-
20154730	RU M 1kV 4X 16mm ² P18/P111 BK	BLACK	7021528317749	-
20109467	RU M 1kV 4G 16mm ² P18/P111 BK	BLACK	7021528317763	-
20154731	RU M 1kV 2X 25mm ² P18/P111 BK	BLACK	7021528317794	-
20152382	RU M 1kV 3X 25mm ² P18/P111 BK	BLACK	7021528317800	-
20154732	RU M 1kV 4X 25mm ² P18/P111 BK	BLACK	7021528317817	-
20172602	RU M 1kV 4G 25mm ² P18/P111 BK	BLACK	7021528317824	-
20154733	RU M 1kV 2X 35mm ² P18/P111 BK	BLACK	7021528317855	-
	RU M 1kV 3X 35mm ² P18/P111 BK	BLACK	7021528317862	-
20154734	RU M 1kV 4X 35mm ² P18/P111 BK	BLACK	7021528317879	-
20154736	RU M 1kV 3X 70mm ² P18/P111 BK	BLACK	7021528317985	-
20154735	RU M 1kV 4X 70mm ² P18/P111 BK	BLACK	7021528317947	-
20221404	RU M 1kV 5G 70mm ² P18/P111 BK	BLACK	7021528317992	-
20154737	RU M 1kV 3X 95mm ² P18/P111 BK	BLACK	7021528318050	-
20154738	RU M 1kV 4X 95mm ² P18/P111 BK	BLACK	7021528318074	-
20154739	RU M 1kV 4X 150mm ² P18/P111 BK	BLACK	7021528318203	-

Electrical values power cables

Number of elements	Cross section core, mm ²	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	6	3.11	3.97	0.113	0.136	52	840
1	70	0.27	0.344	0.087	0.104	242	9800
1	120	0.154	0.196	0.081	0.097	339	16800
1	240	0,0762	0,0972	0,080	0,096	522	33600
1	300	0.0607	0.0774	0.080	0.096	601	42000
2	1.5	12.2	15.6	0.110	0.132	20	210
3	1.5	12.2	15.6	0.110	0.132	16	210
4	1.5	12.2	15.6	0.110	0.132	16	210
5	1.5	12.2	15.6	0.110	0.132	13.5	210
7	1.5	12.2	15.6	0.110	0.132	12	210
3G	1.5	12.2	15.6	0.110	0.132	20	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
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

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RU 1kV P18/P111 Power cable, Unarmoured

Number of elements	Cross section core, mm ²	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
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
3G	4	4.7	5.99	0.096	0.115	34	560
2	6	3.11	3.97	0.091	0.109	44	840
3	6	3.11	3.97	0.091	0.109	36	840
4	6	3.11	3.97	0.091	0.109	36	840
3G	6	3.11	3.97	0.091	0.109	44	840
5G	6	3.11	3.97	0.091	0.109	36	840
2	10	1.84	2.35	0.085	0.102	61	1400
3	10	1.84	2.35	0.085	0.102	50	1400
4	10	1.84	2.35	0.085	0.102	50	1400
4G	10	1.84	2.35	0.085	0.102	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
4G	16	1.16	1.48	0.08	0.096	67	2240
2	25	0.734	0.936	0.08	0.095	108	3500
3	25	0.734	0.936	0.08	0.095	89	3500
4	25	0.734	0.936	0.08	0.095	89	3500
4G	25	0.734	0.936	0.08	0.095	89	3500
2	35	0.529	0.675	0.077	0.092	133	4900
4	35	0.529	0.675	0.077	0.092	110	4900
3	70	0.27	0.344	0.074	0.089	169	9800
4	70	0.27	0.344	0.074	0.089	169	9800
3	95	0.195	0.249	0.074	0.088	205	13300
4	95	0.195	0.249	0.074	0.088	205	13300
4	150	0.126	0.161	0.072	0.087	273	21000

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

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N /mm ²	-20°C
>25 mm		6 x D		

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