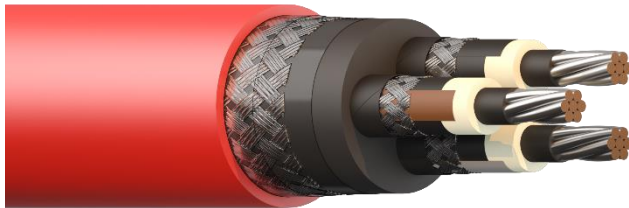


## FlexFlame RFOU 18/30kV P20/P22/P113 Power cable



**Flame retardant halogen-free medium voltage (MV) cable.**

**RFOU 18/30(36) kV**  
**EPR/EPR/TCWB/EVA**

RFOU 30kV      NEK 606 Code P113  
RFOU M 30kV    NEK 606 Code P20/P22/P113

Operating temperature      : 90°C  
Operating Voltage             : 18/30(36) kV

### Standards applied

IEC 60092-354	- 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

### Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes.  
RFOU M 30kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

### Construction

	Code Letter	
<b>Conductor</b>		Tinned stranded and compressed copper (STCC), IEC 60228 class 2
<b>Conductor screen semiconductive</b>		Semiconductive layer (EP-rubber)
<b>Insulation</b>	<b>R</b>	EP-rubber, IEC 60092-360 (EPR)
<b>Insulation screen semiconductive</b>		Semiconductive layer (EP-rubber)
<b>Metallic screen</b>		Tinned copper wire braid
<b>Lay up</b>		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
<b>Inner covering</b>	<b>F</b>	Flame retardant and halogen-free extruded compound
<b>Tape over inner covering</b>		PET tape
<b>Armour/screen</b>	<b>O</b>	Tinned annealed copper wire braid
<b>Tape over armour/screen</b>		PET tape
<b>Outer sheath</b>	<b>U</b>	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
<b>Marking text (example)</b>		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 18/30(36)KV P20/P22/P113 3x 120/60 mm <sup>2</sup> IEC 60332-3-22 Production no. <Production order number>
<b>Manufacturing unit</b>		DRAKA 04 = Draka Industrial Cable, Germany
<b>Outer sheath colour</b>		Red

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### Range and dimensions

Number of elements	Cross section core, mm <sup>2</sup>	Cross section screen, mm <sup>2</sup>	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Mechanical cross-section of the braid, mm <sup>2</sup>	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	70	30	10.3	8.0	1.5	33.5 ± 2	0.4	45.2	2.2	40 ± 3	2950	1350
1	95	30	12.1	8.0	1.5	35 ± 2	0.4	40.7	2.3	42 ± 3	3380	1591
1	120	20	13.5	8.0	1.5	37 ± 2.5	0.4	40.7	2.3	44 ± 3	3620	1753
1	150	30	14.7	8.0	1.5	38 ± 2	0.4	49.8	2.4	45.5 ± 3	4040	2075
1	240	40	19.1	8.0	1.5	42 ± 2	0.4	54.3	2.5	50 ± 3	5370	3165
1	300	35	21.6	8.0	1.5	45 ± 2	0.4	54.3	2.6	53 ± 3.5	5960	3530
1	400	35	24.2	8.0	1.6	48 ± 2.5	0.4	54.3	2.7	57.5 ± 3.5	7220	4457
1	630	30	31	8.0	1.8	55 ± 3	0.4	54.3	3.0	63 ± 3.5	10370	7059
3	50	45	8.5	8.0	1.8	66.5 ± 2.5	0.5	84.8	3.5	76 ± 3.5	8880	2857
3	300	60	21.6	8.0	2.0	95 ± 3	0.6	112	4.5	107 ± 5	21300	10226

### Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 30KV 1x 70/30mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043044	-
20195582	RFOU M 30KV 1x 95/30mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043051	-
20099892	RFOU M 30KV 1x 120/20mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043068	-
20195581	RFOU M 30KV 1x 150/30mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043075	-
20271658	RFOU M 30KV 1x 240/40mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043099	-
20077940	RFOU M 30KV 1x 300/35mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043105	-
	RFOU M 30KV 1x 400/35mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043112	-
	RFOU M 30KV 1x 630/30mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043136	-
	RFOU M 30KV 3x 50/45mm <sup>2</sup> P20/P22/P113 RD	RED	7021528043235	-
	RFOU M 30KV 3x 300/60mm <sup>2</sup> P20/P22/P113 RD	RED	-	-

### Electrical values power cables

Number of elements	Cross section core, mm <sup>2</sup>	Cross section screen, mm <sup>2</sup>	Conductor type 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	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	70	30	STCC	0.270	0.344	0.145	0.174	190	242	9800
1	95	30	STCC	0.195	0.249	0.138	0.165	210	293	13300
1	120	20	STCC	0.154	0.193	0.133	0.160	190	339	16800
1	150	30	STCC	0.126	0.161	0.129	0.154	250	389	21000
1	240	40	STCC	0.0762	0.0972	0.120	0.143	290	522	33600
1	300	35	STCC	0.0607	0.0774	0.115	0.135	270	601	42000
1	400	35	STCC	0.0475	0.0606	0.111	0.134	360	690 dc / 670 ac	56000
1	630	30	STCC	0.0286	0.0359	0.104	0.125	414	890 dc / 780 ac	88200
3	50	45	STCC	0.391	0.499			180	137	7000
3	300	60	STCC	0.0607	0.0774			270	420	42000

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### 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
15 x D	9 x D	50 N x total cross section (mm <sup>2</sup> ) of conductors	-20°C