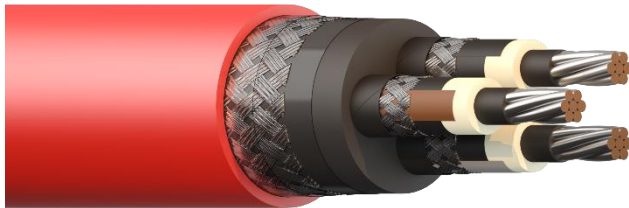


FlexFlame RFOU 10kV P3/P10/P103 Power cable



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

RFOU 6/10(12) kV
EPR/EPR/TCWB/EVA

RFOU 10kV NEK 606 Code P103
 RFOU M 10kV NEK 606 Code P3/P10/P103

Operating temperature : 90°C
 Operating Voltage : 6/10(12) 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 10kV 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	
Conductor		Tinned stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	R	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semiconductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	F	Flame retardant and halogen-free extruded compound
Tape over inner covering		PET tape
Armour/screen	O	Tinned annealed copper wire braid
Tape over armour/screen		PET tape
Outer sheath	U	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 6/10(12)KV P3/P10/P103 3x 95/50 mm2 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red

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Range and dimensions

Number of elements	Cross section core, mm ²	Electrical Cross section braid, mm ²	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 ²	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	35	11	7.2	3.4	1.5	21.5 ± 1.5	0.3	17.8	1.7	26 ± 1.5	1320	633
1	50	11	8.5	3.4	1.5	22.5 ± 1.0	0.3	20.4	1.9	28 ± 1.5	1525	782
1	70	16	10.3	3.4	1.5	24.5 ± 1.5	0.3	25.4	1.8	30 ± 2.0	1820	1032
1	95	16	12.1	3.4	1.5	26.5 ± 1.5	0.3	22.6	1.9	32.0 ± 2.0	2210	1325
1	120	20	13.5	3.4	1.5	27.5 ± 1.5	0.3	28	1.9	34 ± 2.0	2435	1497
1	150	15	14.7	3.4	1.5	28.5 ± 1.5	0.3	25.4	2.0	35 ± 2.0	2600	1793
1	185	18	16.8	3.4	1.5	30 ± 1.5	0.3	30.5	2.0	36.5 ± 2.0	3265	2171
1	240	21	19.1	3.4	1.5	33 ± 1.5	0.3	30.5	2.1	39 ± 2.0	4030	2823
1	300	29	21.6	3.4	1.5	36 ± 2	0.4	40.7	2.2	41.5 ± 2.5	4910	3572
1	400	35	24.2	3.4	1.5	38 ± 1.5	0.4	49.8	2.4	45.5 ± 2.5	5875	4321
3	16	32	5.2	3.4	1.8	39.5 ± 1.5	0.4	49.8	2.4	46 ± 2.5	3550	1358
3	25	31	6.3	3.4	1.8	42 ± 1.5	0.4	45.2	2.5	49.5 ± 2.5	4015	1589
3	35	35	7.2	3.4	1.8	43.5 ± 2.0	0.4	54.3	2.6	51.5 ± 3	4550	1916
3	50	31	8.5	3.4	1.6	47 ± 2.0	0.4	54.3	2.8	55 ± 3	5000	2124
3	70	35	10.3	3.4	1.8	50 ± 2.0	0.4	54.3	2.8	58.5 ± 3	6040	2949
3	95	50	12.1	3.4	1.8	54.5 ± 2.0	0.5	77.7	3.0	63 ± 3	7970	4204
3	120	60	13.5	3.4	1.8	57.5 ± 2.0	0.5	77.7	3.1	66.5 ± 3.0	8473	4570
3	150	75	14.7	3.4	1.8	60 ± 2	0.6	101.8	3.1	70.5 ± 3	9782	5572
3	185	45	16.8	3.4	1.8	64.5 ± 2.5	0.5	77.7	3.3	74 ± 3.5	11245	6534
3	300	55	21.6	3.4	1.8	75 ± 3.0	0.5	84.8	3.7	85.0 ± 4	16050	9718

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 10KV 1X 35/11mm ² P3/P10/P103 RD	RED	7021528040029	1061000
20080191	RFOU M 10KV 1X 50/11mm ² P3/P10/P103 RD	RED	7021528040036	1061001
20113313	RFOU M 10KV 1X 70/16mm ² P3/P10/P103 RD	RED	7021528040043	1061002
20091031	RFOU M 10KV 1X 95/16mm ² P3/P10/P103 RD	RED	7021528040050	1061003
20076157	RFOU M 10KV 1X 120/20mm ² P3/P10/P103 RD	RED	7021528040067	1061004
20195583	RFOU M 10KV 1X 150/15mm ² P3/P10/P103 RD	RED	7021528040074	1061005
20098204	RFOU M 10KV 1X 185/18mm ² P3/P10/P103 RD	RED	7021528040081	1061006
20077819	RFOU M 10KV 1X 240/21mm ² P3/P10/P103 RD	RED	7021528040098	1061007
20076156	RFOU M 10KV 1X 300/29mm ² P3/P10/P103 RD	RED	7021528040104	1061008
	RFOU M 10KV 1X 400/35mm ² P3/P10/P103 RD	RED	7021528040111	1061022
20168234	RFOU M 10KV 3X 16/32mm ² P3/P10/P103 RD	RED	7021528040203	1061009
20175564	RFOU M 10KV 3X 25/31mm ² P3/P10/P103 RD	RED	7021528040210	1061010
20151690	RFOU M 10KV 3X 35/35mm ² P3/P10/P103 RD	RED	7021528040227	1061011
20203807	RFOU M 10KV 3X 50/31mm ² P3/P10/P103 RD	RED	7021528040234	1061012
20076430	RFOU M 10KV 3X 70/35mm ² P3/P10/P103 RD	RED	7021528040241	1061013
20076152	RFOU M 10KV 3X 95/50mm ² P3/P10/P103 RD	RED	7021528040258	1061014
20086406	RFOU M 10KV 3X 120/60mm ² P3/P10/P103 RD	RED	7021528040265	1061015

Subject to change without prior notice

FlexFlame RFOU 10kV P3/P10/P103 Power cable

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20076162	RFOU M 10KV 3X 150/75mm ² P3/P10/P103 RD	RED	7021528040272	1061016
20077823	RFOU M 10KV 3X 185/45mm ² P3/P10/P103 RD	RED	7021528040289	1061017
	RFOU M 10KV 3X 300/55mm ² P3/P10/P103 RD	RED	7021528040302	1061019

Electrical values power cables

Number of elements	Cross section core, mm ²	Electrical Cross section braid, mm ²	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	35	11	STCC	0.529	0.675	0.138	0.166	270	157	4900
1	50	11	STCC	0.391	0.499	0.132	0.158	300	196	7000
1	70	16	STCC	0.270	0.344	0.125	0.150	340	242	9800
1	95	16	STCC	0.195	0.249	0.119	0.142	380	293	13300
1	120	20	STCC	0.154	0.196	0.116	0.139	410	339	16800
1	150	15	STCC	0.126	0.161	0.111	0.133	450	389	21000
1	185	18	STCC	0.100	0.128	0.108	0.130	480	444	25900
1	240	21	STCC	0.0762	0.0972	0.104	0.125	540	522	33600
1	300	29	STCC	0.0607	0.0774	0.104	0.124	590	601	42000
1	400	35	STCC	0.0475	0.0606	0.090	0.118	660	690 dc / 670 ac	56000
3	16	32	STCC	1.16	1.48	0.128	0.154	220	67	2240
3	25	31	STCC	0.734	0.936	0.119	0.143	250	89	3500
3	35	35	STCC	0.529	0.675	0.114	0.137	270	110	4900
3	50	31	STCC	0.391	0.499	0.108	0.130	300	137	7000
3	70	35	STCC	0.270	0.344	0.103	0.124	340	169	9800
3	95	50	STCC	0.195	0.249	0.098	0.118	380	205	13300
3	120	60	STCC	0.154	0.196	0.095	0.114	410	237	16800
3	150	75	STCC	0.126	0.161	0.092	0.111	450	272	21000
3	185	45	STCC	0.100	0.128	0.092	0.111	480	311	25900
3	300	55	STCC	0.0607	0.0774	0.084	0.101	590	421	42000

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 ²) of conductors	-20°C