



# PetroBlock TFLP 0,6/1kV Power cable

Flame retardant cable for power, control and lighting. Screened cable for outdoor and underground installation. The PetroBlock barrier provides excellent protection against moisture, hydrocarbons and other chemicals and solvents in the ground.



## TFLP 0,6/1kV

HFXLPE/LSTPE/AL/PA/PVC

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

### Application

Fixed installation outdoor and underground for power, control and lighting systems in harsh environments both in EX- and safe areas.

### Standards applied

- |                   |                   |
|-------------------|-------------------|
| IEC 60502-1       | - Design          |
| IEC 60228 class 2 | - Conductor       |
| IEC 60092-351     | - Insulation      |
| IEC 60092-359     | - Sheath          |
| IEC 60332-1       | - Flame Retardant |

### Construction

	Code Letter	
<b>Conductor</b>		Annealed stranded copper, IEC 60228 class 2, stranded circular copper SCC (single core cables 1,5 ... 300 mm <sup>2</sup> , multicore cables 1,5 ... 35 mm <sup>2</sup> ), sector shaped copper SSC (3 and 4 core cables above 35 mm <sup>2</sup> )
<b>Insulation</b>	<b>T</b>	Crosslinked Polyethylene, IEC 60092-351 (HFXLPE)
<b>Lay up / Shielding</b>		Cores laid up in concentric layers
<b>Inner covering</b>	<b>F</b>	Flame retardant and halogen-free thermoplastic compound
<b>Armour/screen</b>	<b>L</b>	The PetroBlock barrier. Aluminium foil longitudinally wrapped and laminated to a polyamide sheath. A flexible tinned drain wire underneath the aluminium foil.
<b>Outer sheath</b>	<b>P</b>	Polyvinyl chloride (PVC), IEC 60092-359(ST2)
<b>Marking text</b>		E.g. "meter" "år" DRAKA NORSK KABEL TFLP 0,6/1kV 2 X 2,5 mm <sup>2</sup> FR P137 IEC 60332-1
<b>Outer sheath colour</b>		Black

## PetroBlock TFLP 0,6/1kV Power cable

### 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 60446:2007-05

### 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 Moisture Barrier, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	1.5	1.5	1.6	0.7	1	8 ± 0.5	11.5 ± 0.8	1.8	15 ± 0.8	290	41
3	1.5	1.5	1.6	0.7	1	8.5 ± 0.5	12 ± 0.8	1.8	15.5 ± 0.8	310	55
4	1.5	1.5	1.6	0.7	1	9.5 ± 0.5	13 ± 0.8	1.8	16.5 ± 0.8	340	69
7	1.5	1.5	1.6	0.7	1	11 ± 0.8	14.5 ± 0.8	1.8	18 ± 0.8	440	111
12	1.5	1.5	1.6	0.7	1	14.5 ± 0.8	18 ± 0.8	1.8	21.5 ± 1	580	181
19	1.5	1.5	1.6	0.7	1	17 ± 0.8	20 ± 1	1.8	23.5 ± 1	750	279
48	1.5	1.5	1.6	0.7	1.4	27.5 ± 1	31 ± 1.5	1.9	35 ± 1.5	1670	685
2	2.5	2.5	2.0	0.7	1	9 ± 0.5	13.5 ± 0.8	1.8	17 ± 0.8	350	67
3	2.5	2.5	2.0	0.7	1	9.5 ± 0.5	14 ± 0.8	1.8	17.5 ± 0.8	390	90
4	2.5	2.5	2.0	0.7	1	10 ± 0.8	14.5 ± 0.8	1.8	18 ± 0.8	430	113
7	2.5	2.5	2.0	0.7	1	12.5 ± 0.8	16.5 ± 0.8	1.8	20.5 ± 1	580	183
12	2.5	2.5	2.0	0.7	1	16 ± 0.8	20.5 ± 1	1.8	24 ± 1	780	298
19	2.5	2.5	2.0	0.7	1	19 ± 0.8	23.5 ± 1	1.8	27 ± 1	1010	459
27	2.5	2.5	2.0	0.7	1	23 ± 1	27.5 ± 1	1.8	31 ± 1.5	1330	641
3G	2.5	2.5	2.0	0.7	1	9.5 ± 0.5	14 ± 0.8	1.8	17.5 ± 0.8	390	90
4G	2.5	2.5	2.0	0.7	1	10.5 ± 0.8	14.5 ± 0.8	1.8	18.5 ± 0.8	430	113
5G	2.5	2.5	2.0	0.7	1	11 ± 0.8	15.5 ± 0.8	1.8	19 ± 0.8	480	136
3G	4	2.5	2.55	0.7	1	10.5 ± 0.8	15 ± 0.8	1.8	18.5 ± 0.8	460	129
4G	4	2.5	2.55	0.7	1	11.5 ± 0.8	16 ± 0.8	1.8	19.5 ± 0.8	530	166
5G	4	2.5	2.55	0.7	1	13 ± 0.8	17 ± 0.8	1.8	21 ± 1	610	202
3G	6	2.5	3.15	0.7	1	12 ± 0.8	16.5 ± 0.8	1.8	20 ± 1	560	192
4G	6	2.5	3.15	0.7	1	13 ± 0.8	17.5 ± 0.8	1.8	21 ± 1	660	249
5G	6	2.5	3.15	0.7	1	14.5 ± 0.8	19 ± 0.8	1.8	22.5 ± 1	750	306
3	6	2.5	3.15	0.7	1	12 ± 0.8	16.5 ± 0.8	1.8	20 ± 1	560	192

[www.draka.no](http://www.draka.no)

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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 Moisture Barrier, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
12	6	2.5	3.15	0.7	1	21 ± 1	25.5 ± 1	1.8	29 ± 1	1370	749
3G	10	2.5	4.05	0.7	1	14 ± 0.8	18 ± 0.8	1.8	22 ± 1	740	293
4G	10	2.5	4.05	0.7	1	15.5 ± 0.8	19.5 ± 0.8	1.8	23 ± 1	870	384
5G	10	2.5	4.05	0.7	1	17 ± 0.8	21 ± 1	1.8	25 ± 1	950	475
2	10	2.5	4.05	0.7	1	13 ± 0.8	17.5 ± 0.8	1.8	21 ± 1	630	203
3G	16	2.5	5.15	0.7	1	16.5 ± 0.8	21 ± 1	1.8	24.5 ± 1	1000	458
4G	16	2.5	5.15	0.7	1	18 ± 0.8	22.5 ± 1	1.8	26 ± 1	1190	603
5G	16	2.5	5.15	0.7	1	20 ± 1	24.5 ± 1	1.8	28 ± 1	1310	749
3G	25	2.5	6.4	0.9	1	20 ± 1	24 ± 1	1.8	28 ± 1	1400	715
4G	25	2.5	6.4	0.9	1	22 ± 1	26.5 ± 1	1.8	30 ± 1.5	1550	946
5G	25	2.5	6.4	0.9	1	24 ± 1	28.5 ± 1	1.8	32 ± 1.5	1900	1177
3G	35	2.5	7.6	0.9	1	22.5 ± 1	27 ± 1	1.8	30.5 ± 1.5	1560	972
4G	35	2.5	7.6	0.9	1	25 ± 1	29.5 ± 1	1.8	33 ± 1.5	2180	1291
5G	35	2.5	7.6	0.9	1.2	28 ± 1	33 ± 1.5	1.9	37 ± 1.5	2700	1608
3G	50	2.5	-	1.0	1	23 ± 1	27.5 ± 1	1.9	31.5 ± 1.5	2180	1306
4G	50	2.5	-	1.0	1	25.5 ± 1	28 ± 1	2	32 ± 1.5	2670	1720
5G	50	2.5	9.0	1.0	1.2	32.5 ± 1.5	37 ± 1.5	2.1	41.5 ± 2	3570	2251
3G	70	2.5	-	1.1	1.2	26 ± 1	31 ± 1.5	2	35 ± 1.5	2950	1856
4G	70	2.5	-	1.1	1.2	30.5 ± 1.5	35.5 ± 1.5	2.1	39.5 ± 1.5	3750	2454
5G	70	2.5	10.9	1.1	1.2	38 ± 1.5	42.5 ± 2	2.2	47 ± 2	4890	3237
4G	95	2.5	-	1.1	1.2	34 ± 1.5	37 ± 1.5	2.2	41.5 ± 2	4460	3373
5G	95	2.5	12.6	1.1	1.4	43 ± 2	46 ± 2	2.3	50.5 ± 2.5	5860	4346
3G	120	2.5	-	1.2	1.4	33 ± 1.5	38 ± 1.5	2.3	42.5 ± 2	4280	3162
4G	120	2.5	-	1.2	1.4	37.5 ± 1.5	42 ± 2	2.4	47 ± 2	5500	4195
5G	120	2.5	14.2	1.2	1.4	47.5 ± 2	52.5 ± 2.5	2.5	57.5 ± 2.5	8610	5536
4G	150	2.5	-	1.4	1.4	41.5 ± 2	46.5 ± 2	2.5	51.5 ± 2.5	6730	5255
5G	150	2.5	15.9	1.4	1.4	54 ± 2.5	59 ± 2.5	2.7	64.5 ± 3	9090	6957
4G	185	2.5	-	1.6	1.4	45.5 ± 2	50.5 ± 2.5	2.7	56 ± 2.5	8230	6463
4G	240	2.5	-	1.7	1.6	52.5 ± 2.5	55 ± 2.5	2.9	61 ± 3	10730	8589
1	240	10	20.1	1.8	1.2	26 ± 1	30.5 ± 1.5	1.8	34.5 ± 1.5	3010	2267
1	300	15	22.6	1.8	1.2	29 ± 1	33.5 ± 1.5	1.9	37 ± 1.5	3690	2841
1	400	15	26	2.0	1.2	32.5 ± 1.5	35 ± 1.5	2	39 ± 1.5	4590	3606
1	500	15	29.0	2.2	1.2	36.5 ± 1.5	40.5 ± 2	2.1	45 ± 2	5750	4631



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### Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
851000	TFLP 0,6/1kV 2X 1.5/1.5mm <sup>2</sup> FR	BLACK	7021528510003	-
851001	TFLP 0,6/1KV 3X 1,5MM2 FR P137	BLACK	7021528510010	-
851002	TFLP 0,6/1KV 4X1,5MM2 FR P137	BLACK	7021528510027	-
851003	TFLP 0,6/1KV 7X 1,5MM2 FR P137	BLACK	7021528510034	-
851006	TFLP 0,6/1KV 12X 1,5MM2 P137	BLACK	7021528510065	-
851008	TFLP 0,6/1KV 19X 1,5MM2 P137	BLACK	7021528510089	-
851019	TFLP 0,6/1KV 48X 1,5MM2 P137	BLACK	7021528510195	-
851020	TFLP 0,6/1KV 2X 2,5MM2 FR P137	BLACK	7021528510201	-
851021	TFLP 0,6/1KV 3X 2,5MM2 FR P137	BLACK	7021528510218	-
851022	TFLP 0,6/1KV 4X 2,5MM2 FR P137	BLACK	7021528510225	-
851023	TFLP 0,6/1KV 7X 2,5MM2 FR P137	BLACK	7021528510232	-
851026	TFLP 0,6/1KV 12X 2,5 FR P137	BLACK	7021528510263	-
851028	TFLP 0,6/1KV 19X 2,5 MM2 FR P137	BLACK	7021528510287	-
851030	TFLP 0,6/1KV 27X 2,5 MM2 FR P137	BLACK	7021528510300	-
851034	TFLP 0,6/1KV 3G 2,5MM2 FR P137	BLACK	7021528510348	-
851035	TFLP 0,6/1KV 4G 2,5MM2 FR P137	BLACK	7021528510355	-
851036	TFLP 0,6/1KV 5G 2,5MM2 FR P137	BLACK	7021528510362	-
851040	TFLP 0,6/1KV 3G 4 MM2 FR P137	BLACK	7021528510409	-
851041	TFLP 0,6/1KV 4G 4 MM2 FR P137	BLACK	7021528510416	-
851042	TFLP 0,6/1KV 5G 4 MM2 FR P137	BLACK	7021528510423	-
851050	TFLP 0,6/1KV 3G 6 MM2 FR P137	BLACK	7021528510508	-
851051	TFLP 0,6/1KV 4G 6 MM2 FR P137	BLACK	7021528510515	-
851052	TFLP 0,6/1KV 5G 6 MM2 FR P137	BLACK	7021528510522	-
851053	TFLP 0,6/1KV 3X 6 MM2 FR P137	BLACK	7021528510539	-
851056	TFLP 0,6/1KV 12X 6 FR P137	BLACK	7021528510560	-
851060	TFLP 0,6/1KV 3G 10 MM2 FR P137	BLACK	7021528510607	-
851061	TFLP 0,6/1KV 4G 10 MM2 FR P137	BLACK	7021528510614	-
851062	TFLP 0,6/1KV 5G 10 MM2 FR P137	BLACK	7021528510621	-
851063	TFLP 0,6/1KV 2X 10 MM2 FR P137	BLACK	7021528510638	-
851070	TFLP 0,6/1KV 3G 16 MM2 FR P137	BLACK	7021528510706	-
851071	TFLP 0,6/1KV 4G 16 MM2 FR P137	BLACK	7021528510713	-
851072	TFLP 0,6/1KV 5G 16 MM2 FR P137	BLACK	7021528510720	-
851080	TFLP 0,6/1KV 3G 25 MM2 FR P137	BLACK	7021528510805	-
851081	TFLP 0,6/1KV 4G 25 MM2 FR P137	BLACK	7021528510812	-
851082	TFLP 0,6/1KV 5G 25 MM2 FR P137	BLACK	7021528510829	-
851090	TFLP 0,6/1KV 3G 35 MM2 FR P137	BLACK	7021528510904	-
851091	TFLP 0,6/1KV 4G 35 MM2 FR P137	BLACK	7021528510911	-
851092	TFLP 0,6/1KV 5G 35 MM2 FR P137	BLACK	7021528510928	-
851100	TFLP 0,6/1KV 3G 50MM2 FV P137	BLACK	7021528511000	-
851101	TFLP 0,6/1KV 4G 50 MM2 FV P137	BLACK	7021528511017	-
851102	TFLP 0,6/1KV 5G 50 MM2 FR P137	BLACK	7021528511024	-
851110	TFLP 0,6/1KV 3G70 MM2 FV P137	BLACK	7021528511109	-
851111	TFLP 0,6/1KV 4G 70 MM2 FV P137	BLACK	7021528511116	-
851112	TFLP 0,6/1KV 5G 70 MM2 FR P137	BLACK	7021528511123	-
851121	TFLP 0,6/1KV 4G 95 MM2 FV P137	BLACK	7021528511215	-
851122	TFLP 0,6/1KV 5G 95 MM2 FR P137	BLACK	7021528511222	-
851130	TFLP 0,6/1KV 3G 120MM2 FV P137	BLACK	7021528511307	-
851131	TFLP 0,6/1KV 4G 120MM2 FV P137	BLACK	7021528511314	-
851132	TFLP 0,6/1KV 5G 120MM2 FR P137	BLACK	7021528511321	-
851141	TFLP 0,6/1KV 4G 150MM2 FV P137	BLACK	7021528511413	-
851144	TFLP 0,6/1KV 5G 150MM2 FR P137	BLACK	7021528511444	-
851151	TFLP 0,6/1KV 4G 185MM2 FV P137	BLACK	7021528511512	-
851161	TFLP 0,6/1KV 4G 240MM2 FV P137	BLACK	7021528511611	-
851192	TFLP 0,6/1KV 1X240 MM2 P137	BLACK	7021528511925	-
851193	TFLP 0,6/1KV 1X300 MM2 P137	BLACK	7021528511932	-
851194	TFLP 0,6/1KV 1X400 MM2 P137	BLACK	7021528511949	-
851195	TFLP 0,6/1KV 1X500 MM2 P137	BLACK	7021528511956	-

## PetroBlock TFLP 0,6/1kV Power cable

### 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	Current rating NEN 62.75, Ampere	Short circuit rating 1 second, Ampere
2	1.5	1.5	SCC	12.1	15.43	0.099	-	210
3	1.5	1.5	SCC	12.1	15.43	0.099	-	210
4	1.5	1.5	SCC	12.1	15.43	0.099	-	210
7	1.5	1.5	SCC	12.1	15.43	0.099	-	210
12	1.5	1.5	SCC	12.1	15.43	0.099	-	210
19	1.5	1.5	SCC	12.1	15.43	0.099	-	210
48	1.5	1.5	SCC	12.1	15.43	0.099	-	210
2	2.5	2.5	SCC	7.41	9.45	0.093	-	350
3	2.5	2.5	SCC	7.41	9.45	0.093	-	350
4	2.5	2.5	SCC	7.41	9.45	0.093	-	350
7	2.5	2.5	SCC	7.41	9.45	0.093	-	350
12	2.5	2.5	SCC	7.41	9.45	0.093	-	350
19	2.5	2.5	SCC	7.41	9.45	0.093	-	350
27	2.5	2.5	SCC	7.41	9.45	0.093	-	350
3G	2.5	2.5	SCC	7.41	9.45	0.093	-	350
4G	2.5	2.5	SCC	7.41	9.45	0.093	-	350
5G	2.5	2.5	SCC	7.41	9.45	0.093	-	350
3G	4	2.5	SCC	4.61	5.88	0.086	-	560
4G	4	2.5	SCC	4.61	5.88	0.086	-	560
5G	4	2.5	SCC	4.61	5.88	0.086	-	560
3G	6	2.5	SCC	3.08	3.93	0.082	-	840
4G	6	2.5	SCC	3.08	3.93	0.082	-	840
5G	6	2.5	SCC	3.08	3.93	0.082	-	840
3	6	2.5	SCC	3.08	3.93	0.082	-	840
12	6	2.5	SCC	3.08	3.93	0.082	-	840
3G	10	2.5	SCC	1.83	2.33	0.079	-	1400
4G	10	2.5	SCC	1.83	2.33	0.079	-	1400
5G	10	2.5	SCC	1.83	2.33	0.079	-	1400
2	10	2.5	SCC	1.83	2.33	0.079	-	1400
3G	16	2.5	SCC	1.15	1.47	0.075	-	2240
4G	16	2.5	SCC	1.15	1.47	0.075	-	2240
5G	16	2.5	SCC	1.15	1.47	0.075	-	2240
3G	25	2.5	SCC	0.727	0.927	0.075	-	3500
4G	25	2.5	SCC	0.727	0.927	0.075	-	3500
5G	25	2.5	SCC	0.727	0.927	0.075	-	3500
3G	35	2.5	SCC	0.524	0.668	0.073	-	4900
4G	35	2.5	SCC	0.524	0.668	0.073	-	4900
5G	35	2.5	SCC	0.524	0.668	0.073	-	4900
3G	50	2.5	SSC	0.387	0.493	0.072	-	7000
4G	50	2.5	SSC	0.387	0.493	0.072	-	7000
5G	50	2.5	SSC	0.387	0.493	0.080	-	7000
3G	70	2.5	SSC	0.268	0.342	0.064	-	9800
4G	70	2.5	SSC	0.268	0.342	0.064	-	9800
5G	70	2.5	SCC	0.268	0.342	0.071	-	9800
4G	95	2.5	SSC	0.193	0.246	0.062	-	13300
5G	95	2.5	SCC	0.193	0.246	0.069	-	13300
3G	120	2.5	SSC	0.153	0.195	0.063	-	16800
4G	120	2.5	SSC	0.153	0.195	0.063	-	16800
5G	120	2.5	SCC	0.153	0.195	0.070	-	16800
4G	150	2.5	SSC	0.124	0.158	0.063	-	21000
5G	150	2.5	SCC	0.124	0.158	0.070	-	21000
4G	185	2.5	SSC	0.0991	0.1264	0.063	-	25900
4G	240	2.5	SSC	0.0754	0.0961	0.063	-	33600
1	240	10	SCC	0.0754	0.0766	0.087	-	42000
1	300	15	SCC	0.0601	0.0766	0.091	-	42000
1	400	15	SCC	0.047	0.0599	0.085	-	56000



## PetroBlock TFLP 0,6/1kV Power cable

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	Current rating NEN 62.75, Ampere	Short circuit rating 1 second, Ampere
1	500	15	SCC	0.0366	0.0466	0.087	-	70000

### Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
20 x D	12 x D	50 N /mm <sup>2</sup>	-10°C