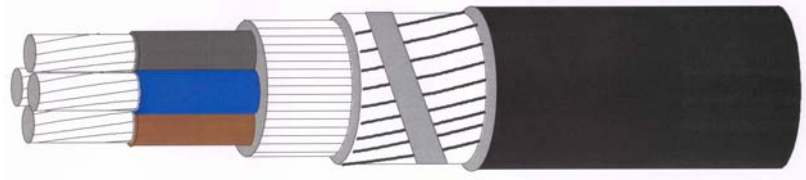




TFSI 0,6/1kV Power cable, above ground

Flame retardant cable for power, control and lighting.

TFSI 0,6/1kV HFXLPE/LSTPE/CWS/PO



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

Standards applied

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

Application

Fixed installation indoor, outdoor and above ground for power, control and lighting systems both in EX- and safe areas.

Construction

	Code Letter	
Conductor		Annealed stranded copper, IEC 60228 class 2, stranded circular copper SCC (single core cables 1,5 ... 300 mm ² , multicore cables 1,5 ... 35 mm ²), sector shaped copper SSC (3 and 4 core cables above 35 mm ²)
Insulation	T	Crosslinked Polyethylene, IEC 60092-351 (HFXLPE)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	F	Flame retardant and halogen-free thermoplastic compound
Armour/screen	S	Concentric copper conductor. Sized to be earth conductor.
Outer sheath	I	Flame retardant halogen-free thermoplastic compound, SHF1
Marking text		E.g. "meter" "year" DRAKA 01 TFSI 0,6/1KV 3 x 25FR/16 mm ² P105 IEC 60332-1
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel
Outer sheath colour		Black



TFSI 0,6/1kV Power cable, above ground

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 ²	Cross section screen, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Wire diameter concentric conductor, 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	0.6	1.8	13.5 ± 0.8	240	59
3	1.5	1.5	1.6	0.7	1	8.5 ± 0.5	0.6	1.8	14 ± 0.8	260	73
7	1.5	1.5	1.6	0.7	1	11 ± 0.8	0.61	1.8	16.5 ± 0.8	360	136
12	1.5	1.5	1.6	0.7	1	14.5 ± 0.8	0.6	1.8	20 ± 1	420	207
19	1.5	1.5	1.6	0.7	1	17 ± 0.8	0.6	1.8	22.5 ± 1	610	323
30	1.5	1.5	1.6	0.7	1.2	21.5 ± 1	0.6	1.8	26.5 ± 1	850	477
48	1.5	1.5	1.6	0.7	1.4	27.5 ± 1	0.81	1.9	33.5 ± 1.5	1310	765
2	2.5	2.5	2.0	0.7	1	9 ± 0.5	0.61	1.8	14 ± 0.8	265	77
3	2.5	2.5	2.0	0.7	1	9.5 ± 0.5	0.61	1.8	14.5 ± 0.8	310	100
4	2.5	2.5	2.0	0.7	1	10.5 ± 0.8	0.61	1.8	15.5 ± 0.8	360	123
7	2.5	2.5	2.0	0.7	1.1	12.5 ± 0.8	0.60	1.8	18.0 ± 0.8	470	199
12	2.5	2.5	2.0	0.7	1	16 ± 0.8	0.6	1.8	21.5 ± 1	700	334
19	2.5	2.5	2.0	0.7	1.2	19.5 ± 0.8	0.6	1.8	25.0 ± 1.5	980	495
2	4	4	2.55	0.7	1	10 ± 0.8	0.61	1.8	15.5 ± 0.8	350	112
3	4	4	2.55	0.7	1	10.5 ± 0.8	0.61	1.8	16 ± 0.8	390	149
4	4	4	2.55	0.7	1.1	12 ± 0.8	0.6	1.8	17 ± 0.8	420	186
2	6	6	3.15	0.7	1	11 ± 0.8	0.61	1.8	16.5 ± 0.8	450	171
3	6	6	3.15	0.7	1	12 ± 0.8	0.61	1.8	17.5 ± 0.8	510	227
4	6	6	3.15	0.7	1	13 ± 0.8	0.61	1.8	18.5 ± 0.8	590	285
2	10	10	4.05	0.7	1.1	13 ± 0.8	0.8	1.8	19 ± 0.8	580	275
3	10	10	4.05	0.7	1	14 ± 0.8	0.81	1.8	19.5 ± 0.8	710	366
4	10	10	4.05	0.7	1	15.5 ± 0.8	0.81	1.8	21.5 ± 1	840	457

TFSI 0,6/1kV Power cable, above ground

Number of elements	Cross section core, mm ²	Cross section screen, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Wire diameter concentric conductor, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	16	16	5.15	0.7	1	15.5 ± 0.8	1	1.8	21.5 ± 1	870	444
3	16	16	5.15	0.7	1	16.5 ± 0.8	1	1.8	22.5 ± 1	1020	590
4	16	16	5.15	0.7	1	18 ± 0.8	0.61	1.8	24.5 ± 1	1200	736
2	25	16	6.4	0.9	1	18.5 ± 0.8	1	1.8	24.5 ± 1	1160	615
3	25	16	6.4	0.9	1	19.5 ± 0.8	1	1.8	26 ± 1	1380	846
4	25	16	6.4	0.9	1	22 ± 1	1	1.8	28 ± 1	1660	1077
3	35	16	7.6	0.9	1	22.5 ± 1	1	1.8	28.5 ± 1	1750	1103
4	35	16	7.6	0.9	1	25 ± 1	1	1.8	31 ± 1.5	2120	1420
3	50	25	0	1.0	1	22.5 ± 1	0.83	1.8	28.5 ± 1	1960	1481
4	50	25	0	1.0	1	25 ± 1	0.83	1.9	31 ± 1.5	2450	1895
3	70	35	-	1.1	1.2	26 ± 1	0.83	2	32 ± 1.5	2740	2121
4	70	35	-	1.1	1.2	30.5 ± 1.5	0.83	2.1	37 ± 1.5	3480	2719
3	95	50	-	1.1	1.2	2.5 ± 0.5	0.83	2.1	37 ± 1.5	3680	2918
4	95	50	-	1.1	1.2	34 ± 1.5	0.83	2.2	40.5 ± 2	4610	3746
3	120	70	-	1.2	1.2	33 ± 1.5	0.83	2.2	39.5 ± 1.5	4530	3722
4	120	70	-	1.2	1.4	37.5 ± 1.5	0.83	2.4	44.5 ± 2	5790	4756
3	150	70	-	1.4	1.4	37.5 ± 1.5	0.83	2.4	44.5 ± 2	5570	4502
4	150	70	-	1.4	1.4	42 ± 2	0.83	2.5	49 ± 2	7010	5794
3	185	95	-	1.6	1.4	41 ± 2	1.37	2.4	46 ± 2	6960	5765
4	185	95	-	1.6	1.4	46 ± 2	1.36	2.6	54.5 ± 2.5	8840	7359
3	240	120	-	1.7	1.6	46 ± 2	1.745	2.6	51.5 ± 2.5	8920	7486
4	240	120	-	1.7	1.6	52 ± 2.5	1.62	2.9	61.5 ± 3	11430	9587
1	240	50	20.1	1.7	1	25.5 ± 1	0.83	1.8	31.5 ± 1.5	3170	2616
1	300	50	22.6	1.8	1	28.5 ± 1	0.83	1.9	34.5 ± 1.5	3780	3136
1	400	70	26	2	1.2	32.5 ± 1.5	0.83	2	38.5 ± 1.5	4900	4106
1	500	95	29.0	2.2	1.2	35.5 ± 1.5	1.37	2.3	43.5 ± 2	6450	5461
1	630	120	32.8	2.4	1.4	40.5 ± 2	1.745	2.4	49.5 ± 2	7990	6848

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
850500	TFSI 0,6/1KV 2X 1.5 /1.5 P105	BLACK	7021528505009	-
850501	TFSI 0,6/1KV 3X 1.5 /1.5 P105	BLACK	7021528505016	-
850510	TFSI 0,6/1KV 7X 1.5 /1.5 P105	BLACK	7021528505108	-
850511	TFSI 0,6/1KV 12X 1,5 FR/1,5MM2 P105	BLACK	7021528505115	-
850512	TFSI 0,6/1KV 19X1.5 /1.5 P105	BLACK	7021528505122	-
850516	TFSI 0,6/1KV 30X1.5 /1.5 P105	BLACK	7021528505160	-
850519	TFSI 0,6/1KV 48X1.5 /1.5 P105	BLACK	7021528505191	-
850520	TFSI 0,6/1KV 2X2,5 FR/2,5 P105	BLACK	7021528505207	-
850521	TFSI 0,6/1KV 3X2,5 FR/2,5 P105	BLACK	7021528505214	-
850522	TFSI 0,6/1KV 4X2,5 FR/2,5 P105	BLACK	7021528505221	-
850530	TFSI 0,6/1KV 7X 2,5FR/2,5 P105	BLACK	7021528505306	-
850531	TFSI 0,6/1KV 12X 2,5 FR/2,5MM2 P105	BLACK	7021528505313	-

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TFSI 0,6/1kV Power cable, above ground

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
850532	TFSI 0,6/1KV 19X2,5 FR/2,5P105	BLACK	7021528505320	-
850540	TFSI 0,6/1KV 2X 4 FR/4MM2 P105	BLACK	7021528505405	-
850541	TFSI 0,6/1KV 3X 4 FR/4MM2 P105	BLACK	7021528505412	-
850542	TFSI 0,6/1KV 4X 4 FR/4MM2 P105	BLACK	7021528505429	-
850550	TFSI 0,6/1KV 2X 6 FR/6MM2 P105	BLACK	7021528505504	-
850551	TFSI 0,6/1KV 3X 6 FR/6MM2 P105	BLACK	7021528505511	-
850552	TFSI 0,6/1KV 4X 6FR/6MM2 P105	BLACK	7021528505528	-
850560	TFSI 0,6/1KV 2X 10 FR/10MM2 P105	BLACK	7021528505603	-
850561	TFSI 0,6/1KV 3X 10 FR/10MM2 P105	BLACK	7021528505610	-
850562	TFSI 0,6/1KV 4X 10 FR/10 P105	BLACK	7021528505627	-
850570	TFSI 0,6/1KV 2X 16 FR/16MM2 P105	BLACK	7021528505702	-
850571	TFSI 0,6/1KV 3X 16 FR/16 P105	BLACK	7021528505719	-
850572	TFSI 0,6/1KV 4X 16 FR/16MM2 P105	BLACK	7021528505726	-
850579	TFSI 0,6/1KV 2X 25 FR/16 P105	BLACK	7021528505795	-
850580	TFSI 0,6/1KV 3X 25 FR/16MM2 P105	BLACK	7021528505801	-
850581	TFSI 0,6/1KV 4X 25 FR/16 P105	BLACK	7021528505818	-
850590	TFSI 0,6/1KV 3X35FR/16MM2 P105	BLACK	7021528505900	-
850591	TFSI 0,6/1KV 4X 35 FR/16 P105	BLACK	7021528505917	-
850600	TFSI 0,6/1KV 3X50FV/25MM2 P105	BLACK	7021528506006	-
850601	TFSI 0,6/1KV 4X50FV/25MM2 P105	BLACK	7021528506013	-
850610	TFSI 0,6/1KV 3X70FV/35MM2 P105	BLACK	7021528506105	-
850611	TFSI 0,6/1KV 4X70FV/35MM2 P105	BLACK	7021528506112	-
850620	TFSI 0,6/1KV 3X95FV/50MM2 P105	BLACK	7021528506204	-
850621	TFSI 0,6/1KV 4X 95 FV/50 P105	BLACK	7021528506211	-
850630	TFSI 0,6/1KV 3X 120 FV/70 P105	BLACK	7021528506303	-
850631	TFSI 0,6/1KV 4X 120 FV/70 P105	BLACK	7021528506310	-
850640	TFSI 0,6/1kv 3X 150 FV/70 P105	BLACK	7021528506402	-
850641	TFSI 0,6/1kv 4X 150 FV/70 P105	BLACK	7021528506419	-
850650	TFSI 0,6/1KV 3X185 FV/95 P105	BLACK	7021528506501	-
850652	TFSI 0,6/1KV 4X 185 FV/95 P105	BLACK	7021528506525	-
850660	TFSI 0,6/1KV 3X240 FV/120 P105	BLACK	7021528506600	-
850662	TFSI 0,6/1KV 4X240 FV/120 P105	BLACK	7021528506624	-
850686	TFSI 0,6/1KV 1X240 FR/50 P105	BLACK	7021528506860	-
850687	TFSI 0,6/1KV 1X300 FR/50 P105	BLACK	7021528506877	-
850688	TFSI 0,6/1KV 1X400 FR/70 P105	BLACK	7021528506884	-
850689	TFSI 0,6/1KV 1X500 FR/95 P105	BLACK	7021528506891	-
850690	TFSI 0,6/1KV 1X630/120MM2 P105	BLACK	7021528506907	-

Electrical values power cables

Number of elements	Cross section core, mm ²	Cross section screen, 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	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
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
30	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
2	4	4	SCC	4.61	5.88	0.086	-	560
3	4	4	SCC	4.61	5.88	0.086	-	560
4	4	4	SCC	4.61	5.88	0.086	-	560
2	6	6	SCC	3.08	3.93	0.082	-	840

**TFSI 0,6/1kV Power cable, above ground**

Number of elements	Cross section core, mm ²	Cross section screen, 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	Current rating NEN 62.75, Ampere	Short circuit rating 1 second, Ampere
3	6	6	SCC	3.08	3.93	0.082	-	840
4	6	6	SCC	3.08	3.93	0.082	-	840
2	10	10	SCC	1.83	2.33	0.079	-	1400
3	10	10	SCC	1.83	2.33	0.079	-	1400
4	10	10	SCC	1.83	2.33	0.079	-	1400
2	16	16	SCC	1.15	1.47	0.075	-	2240
3	16	16	SCC	1.15	1.47	0.075	-	2240
4	16	16	SCC	1.15	1.47	0.075	-	2240
2	25	16	SCC	0.727	0.927	0.075	-	4900
3	25	16	SCC	0.727	0.927	0.075	-	4900
4	25	16	SCC	0.727	0.927	0.075	-	4900
3	35	16	SCC	0.524	0.668	0.073	-	4900
4	35	16	SCC	0.524	0.668	0.073	-	4900
3	50	25	SSC	0.387	0.493	0.072	-	7000
4	50	25	SSC	0.387	0.493	0.072	-	7000
3	70	35	SSC	0.268	0.342	0.064	-	9800
4	70	35	SSC	0.268	0.342	0.064	-	9800
3	95	50	SSC	0.193	0.246	0.062	-	13300
4	95	50	SSC	0.193	0.246	0.062	-	13300
3	120	70	SSC	0.153	0.195	0.063	-	16800
4	120	70	SSC	0.153	0.195	0.063	-	16800
3	150	70	SSC	0.124	0.158	0.063	-	21000
4	150	70	SSC	0.124	0.158	0.063	-	21000
3	185	95	SSC	0.0991	0.1264	0.063	-	25900
4	185	95	SSC	0.0991	0.1264	0.063	-	25900
3	240	120	SSC	0.0754	0.0961	0.063	-	33600
4	240	120	SSC	0.0754	0.0961	0.063	-	33600
1	240	50	SCC	0.0754	0.0961	0.087	-	33600
1	300	50	SCC	0.0601	0.0766	0.086	-	42000
1	400	70	SCC	0.047	0.0766	0.086	-	42000
1	500	95	SCC	0.0366	0.0467	0.085	-	70000
1	630	120	SCC	0.0283	0.0361	0.084	-	88200

Installation recommendations

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