

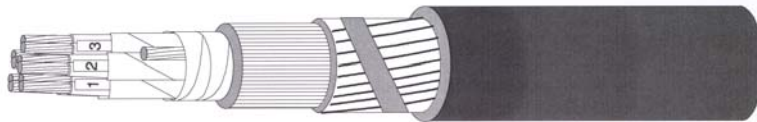


TFSI(c) 250V Instr. cable, above ground

Flame retardant cable for instrumentation and telecommunication. Overall screened pairs/triples.

TFSI(c) 250V

XLPE/LSTPE/CWS/PO



Operating temperature : 90°C
Operating Voltage : 250V

Application

Fixed installation indoor, outdoor and above ground for instrumentation and telecommunication systems both in EX- and safe areas.

Standards applied

IEC 60092-376	- Design
IEC 60228 class 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- Sheath
IEC 60332-1	- Flame Retardant

Construction

	Code Letter	
Conductor		Annealed stranded circular copper, IEC 60228 class 2
Insulation	T	Crosslinked Polyethylene, IEC 60092-351 (HFXLPE)
Pair / Triple / Quad twisting		Color coded cores twisted together and wrapped with polyester tape. Pairs/Triples are laid up collectively and screened by aluminium backed polyester tape with tinned copper drain wire. Pairs/triples are identified by numbered tape or by numbers printed directly on the insulated conductors.
Inner covering	F	Flame retardant and halogen-free thermoplastic compound
Armour/screen	S	Concentric copper conductor.
Outer sheath	I	Flame retardant halogen-free thermoplastic compound, SHF1
Marking text		"meter" "år" DRAKA NORSK KABEL TFSI(c) 250V 16 PAIR 1,5 mm2 S105 IEC 60092-376 IEC 60332-1
Outer sheath colour		Grey or Blue

Core identification instrumentation cables

Pair	Black - Light Blue
Triple	Black - Light Blue - Brown
Quad	Black - Light Blue - Brown - Grey



TFSI(c) 250V Instr. cable, above ground

Range and dimensions

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Bedding, mm	Diameter bedding, 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	2	0.75	1.1	0.5	1.1	10 ± 0.8	0.61	1.2	14 ± 0.8	230	63
2	2	0.75	1.1	0.5	1.1	10 ± 0.8	0.61	1.2	14 ± 0.8	230	63
4	2	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	16 ± 0.8	295	91
4	2	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	16 ± 0.8	295	91
10	2	0.75	1.1	0.5	1.2	17.5 ± 0.8	0.61	1.4	22 ± 1	570	201
10	2	0.75	1.1	0.5	1.2	17.5 ± 0.8	0.61	1.4	22 ± 1	570	201
16	2	0.75	1.1	0.5	1.4	20 ± 1	0.61	1.5	24.5 ± 1	760	285
16	2	0.75	1.1	0.5	1.4	20 ± 1	0.61	1.5	24.5 ± 1	760	285
24	2	0.75	1.1	0.5	1.6	24.5 ± 1	0.61	1.7	29.5 ± 1	1070	397
24	2	0.75	1.1	0.5	1.6	24.5 ± 1	0.61	1.7	29.5 ± 1	1070	397
2	3	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	15.5 ± 0.8	270	77
2	3	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	15.5 ± 0.8	270	77
4	3	0.75	1.1	0.5	1.1	13 ± 0.8	0.61	1.3	17.5 ± 0.8	370	127
4	3	0.75	1.1	0.5	1.1	13 ± 0.8	0.61	1.3	17.5 ± 0.8	370	127
10	3	0.75	1.1	0.5	1.2	20 ± 1	0.61	1.5	24.5 ± 1	750	271
10	3	0.75	1.1	0.5	1.2	20 ± 1	0.61	1.5	24.5 ± 1	750	271
16	3	0.75	1.1	0.5	1.4	22.5 ± 1	0.61	1.6	27.5 ± 1	990	397
16	3	0.75	1.1	0.5	1.4	22.5 ± 1	0.61	1.6	27.5 ± 1	990	397
24	3	0.75	1.1	0.5	1.6	27.5 ± 1	1.02	1.8	34 ± 1.5	1490	662
24	3	0.75	1.1	0.5	1.6	27.5 ± 1	1.02	1.8	34 ± 1.5	1490	662
2	2	1.5	1.6	0.6	1.1	12.5 ± 0.8	0.61	1.2	16.5 ± 0.8	310	93
2	2	1.5	1.6	0.6	1.1	12.5 ± 0.8	0.61	1.2	16.5 ± 0.8	310	93
4	2	1.5	1.6	0.6	1.1	14.5 ± 0.8	0.61	1.3	19 ± 0.8	430	156
4	2	1.5	1.6	0.6	1.1	14.5 ± 0.8	0.61	1.3	19 ± 0.8	430	156
10	2	1.5	1.6	0.6	1.2	22.5 ± 1	0.61	1.6	27 ± 1	850	342
10	2	1.5	1.6	0.6	1.2	22.5 ± 1	0.61	1.6	27 ± 1	850	342
16	2	1.5	1.6	0.6	1.4	25.5 ± 1	0.61	1.7	30.5 ± 1.5	1170	509
16	2	1.5	1.6	0.6	1.4	25.5 ± 1	0.61	1.7	30.5 ± 1.5	1170	509
24	2	1.5	1.6	0.6	1.8	32 ± 1.5	0.83	2	38 ± 1.5	1930	909
24	2	1.5	1.6	0.6	1.8	32 ± 1.5	0.83	2	38 ± 1.5	1930	909
2	3	1.5	1.6	0.6	1.1	14 ± 0.8	0.61	1.3	18.5 ± 0.8	390	129
2	3	1.5	1.6	0.6	1.1	14 ± 0.8	0.61	1.3	18.5 ± 0.8	390	129
4	3	1.5	1.6	0.6	1.1	16.5 ± 0.8	0.61	1.4	21 ± 1	540	212
4	3	1.5	1.6	0.6	1.1	16.5 ± 0.8	0.61	1.4	21 ± 1	540	212
10	3	1.5	1.6	0.6	1.2	25.5 ± 1	0.61	1.7	30.5 ± 1.5	1140	482
10	3	1.5	1.6	0.6	1.2	25.5 ± 1	0.61	1.7	30.5 ± 1.5	1140	482



TFSI(c) 250V Instr. cable, above ground

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Bedding, mm	Diameter bedding, 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)
16	3	1.5	1.6	0.6	1.4	29 ± 1	0.83	1.9	35 ± 1.5	1770	910
16	3	1.5	1.6	0.6	1.4	29 ± 1	0.83	1.9	35 ± 1.5	1770	910
24	3	1.5	1.6	0.6	1.8	36 ± 1.5	0.83	2.1	42.5 ± 2	2490	1245
24	3	1.5	1.6	0.6	1.8	36 ± 1.5	0.83	2.1	42.5 ± 2	2490	1245

Electrical values instrumentation cables

Type	Capacitance, approx. (nF/km)	Inductance, approx. (mH/km)	Resistance at 20°C, max. (Ohm/km)	L/R ratio, (microH/Ohm)
Unshielded pair 0,75 mm ²	70	0,64	24,5	13,1
Unshielded triple 0,75 mm ²	70	0,64	24,5	13,1
Unshielded pair 1,5 mm ²	75	0,60	12,1	24,8
Unshielded triple 1,5 mm ²	75	0,60	12,1	24,8
Unshielded pair 2,5 mm ²	85	0,57	7,41	38,5
Unshielded triple 2,5 mm ²	85	0,57	7,41	38,5

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
856606	TFSI(C) 2PAIR 0.75mm ² S105	GREY	7021528566062	-
856607	TFSI(C) 2PAIR 0.75mm ² S105	BLUE	7021528566079	-
856618	TFSI(C) 4PAIR 0.75mm ² S105	GREY	7021528566185	-
856619	TFSI(C) 4PAIR 0.75mm ² S105	BLUE	7021528566192	-
856633	TFSI(C) 10PAIR 0.75mm ² S105	GREY	7021528566338	-
856634	TFSI(C) 10PAIR 0.75mm ² S105	BLUE	7021528566345	-
856642	TFSI(C) 16PAIR 0.75mm ² S105	GREY	7021528566420	-
856643	TFSI(C) 16PAIR 0.75mm ² S105	BLUE	7021528566437	-
856648	TFSI(C) 24PAIR 0.75mm ² S105	GREY	7021528566482	-
856649	TFSI(C) 24PAIR 0.75mm ² S105	BLUE	7021528566499	-
856666	TFSI(C) 2TRIP 0.75mm ² S105	GREY	7021528566666	-
856667	TFSI(C) 2TRIP 0.75mm ² S105	BLUE	7021528566673	-
856678	TFSI(C) 4TRIP 0.75mm ² S105	GREY	7021528566789	-
856679	TFSI(C) 4TRIP 0.75mm ² S105	BLUE	7021528566796	-
856693	TFSI(C) 10TRIP 0.75mm ² S105	GREY	7021528566932	-
856694	TFSI(C) 10TRIP 0.75mm ² S105	BLUE	7021528566949	-
856702	TFSI(C) 16TRIP 0.75mm ² S105	GREY	7021528567021	-
856703	TFSI(C) 16TRIP 0.75mm ² S105	BLUE	7021528567038	-
856708	TFSI(C) 24TRIP 0.75mm ² S105	GREY	7021528567083	-
856709	TFSI(C) 24TRIP 0.75mm ² S105	BLUE	7021528567090	-
856806	TFSI(C) 2PAIR 1.5mm ² S105	GREY	7021528568066	-
856807	TFSI(C) 2PAIR 1.5mm ² S105	BLUE	7021528568073	-
856818	TFSI(C) 4PAIR 1.5mm ² S105	GREY	7021528568189	-
856819	TFSI(C) 4PAIR 1.5mm ² S105	BLUE	7021528568196	-
856833	TFSI(C) 10PAIR 1.5mm ² S105	GREY	7021528568332	-
856834	TFSI(C) 10PAIR 1.5mm ² S105	BLUE	7021528568349	-
856842	TFSI(C) 16PAIR 1.5mm ² S105	GREY	7021528568424	-
856843	TFSI(C) 16PAIR 1.5mm ² S105	BLUE	7021528568431	-
856848	TFSI(C) 24PAIR 1.5mm ² S105	GREY	7021528568486	-
856849	TFSI(C) 24PAIR 1.5mm ² S105	BLUE	7021528568493	-
856866	TFSI(C) 2TRIP 1.5mm ² S105	GREY	7021528568660	-
856867	TFSI(C) 2TRIP 1.5mm ² S105	BLUE	7021528568677	-
856878	TFSI(C) 4TRIP 1.5mm ² S105	GREY	7021528568783	-
856879	TFSI(C) 4TRIP 1.5mm ² S105	BLUE	7021528568790	-
856893	TFSI(C) 10TRIP 1.5mm ² S105	GREY	7021528568936	-



TFSI(c) 250V Instr. cable, above ground

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
856894	TFSI(C) 10TRIP 1.5mm ² S105	BLUE	7021528568943	-
856902	TFSI(C) 16TRIP 1.5mm ² S105	GREY	7021528569025	-
856903	TFSI(C) 16TRIP 1.5mm ² S105	BLUE	7021528569032	-
856908	TFSI(C) 24TRIP 1.5mm ² S105	GREY	7021528569087	-
856909	TFSI(C) 24TRIP 1.5mm ² S105	BLUE	7021528569094	-

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
12 x D	8 x D	50 N /mm ²	-10°C