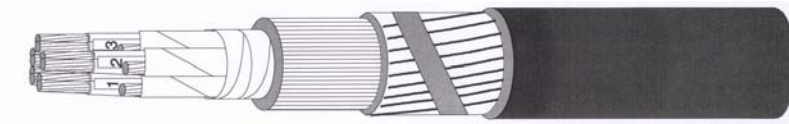




## TFSI(i) 250V Instr. cable, above ground

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



### TFSI(i) 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	
<b>Conductor</b>		Annealed stranded circular copper, IEC 60228 class 2
<b>Insulation</b>	<b>T</b>	Crosslinked Polyethylene, IEC 60092-351 (HFXLPE)
<b>Pair / Triple / Quad twisting</b>		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.
<b>Inner covering</b>	<b>F</b>	Flame retardant and halogen-free thermoplastic compound
<b>Armour/screen</b>	<b>S</b>	Concentric copper conductor.
<b>Outer sheath</b>	<b>I</b>	Flame retardant halogen-free thermoplastic compound, SHF1
<b>Marking text</b>		"meter" "år" DRAKA NORSK KABEL TFSI(i) 250V 10 PAIR 0,75 mm <sup>2</sup> S100 IEC 60092-376 IEC 60332-1
<b>Outer sheath colour</b>		Grey or Blue

#### Core identification instrumentation cables

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



# TFSI(i) 250V Instr. cable, above ground

## Range and dimensions

Number of elements	No of cores in element	Cross section core, mm <sup>2</sup>	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)
1	2	0.75	1.1	0.5	1.1	6.5 ± 0.5	0.61	1	10 ± 0.8	155	49
1	2	0.75	1.1	0.5	1.1	6.5 ± 0.5	0.61	1	10 ± 0.8	155	49
2	2	0.75	1.1	0.5	1.1	10 ± 0.8	0.61	1.2	14 ± 0.8	235	67
2	2	0.75	1.1	0.5	1.1	10 ± 0.8	0.61	1.2	14 ± 0.8	235	67
4	2	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	16 ± 0.8	310	104
4	2	0.75	1.1	0.5	1.1	11.5 ± 0.8	0.61	1.2	16 ± 0.8	310	104
10	2	0.75	1.1	0.5	1.2	18 ± 0.8	0.61	1.5	22.5 ± 1	630	241
10	2	0.75	1.1	0.5	1.2	18 ± 0.8	0.61	1.5	22.5 ± 1	630	241
16	2	0.75	1.1	0.5	1.4	21 ± 1	0.61	1.6	26 ± 1	880	351
16	2	0.75	1.1	0.5	1.4	21 ± 1	0.61	1.6	26 ± 1	880	351
1	3	0.75	1.1	0.5	1.1	6.5 ± 0.5	0.61	1.1	10.5 ± 0.8	170	56
1	3	0.75	1.1	0.5	1.1	6.5 ± 0.5	0.61	1.1	10.5 ± 0.8	170	56
2	3	0.75	1.1	0.5	1.1	11 ± 0.8	0.61	1.2	15 ± 0.8	270	81
2	3	0.75	1.1	0.5	1.1	11 ± 0.8	0.61	1.2	15 ± 0.8	270	81
4	3	0.75	1.1	0.5	1.1	13 ± 0.8	0.61	1.3	17.5 ± 0.8	390	140
4	3	0.75	1.1	0.5	1.1	13 ± 0.8	0.61	1.3	17.5 ± 0.8	390	140
10	3	0.75	1.1	0.5	1.2	20.5 ± 1	0.61	1.6	25 ± 1	770	311
10	3	0.75	1.1	0.5	1.2	20.5 ± 1	0.61	1.6	25 ± 1	770	311
16	3	0.75	1.1	0.5	1.4	24 ± 1	0.61	1.7	29 ± 1	1090	463
16	3	0.75	1.1	0.5	1.4	24 ± 1	0.61	1.7	29 ± 1	1090	463
1	2	1.5	1.6	0.6	1.1	8 ± 0.5	0.61	1.1	12 ± 0.8	200	65
1	2	1.5	1.6	0.6	1.1	8 ± 0.5	0.61	1.1	12 ± 0.8	200	65
2	2	1.5	1.6	0.6	1.1	12.5 ± 0.8	0.61	1.3	17 ± 0.8	320	99
2	2	1.5	1.6	0.6	1.1	12.5 ± 0.8	0.61	1.3	17 ± 0.8	320	99
4	2	1.5	1.6	0.6	1.1	15 ± 0.8	0.61	1.3	19 ± 0.8	460	176
4	2	1.5	1.6	0.6	1.1	15 ± 0.8	0.61	1.3	19 ± 0.8	460	176
10	2	1.5	1.6	0.6	1.2	23 ± 1	0.61	1.6	28 ± 1	930	401
10	2	1.5	1.6	0.6	1.2	23 ± 1	0.61	1.6	28 ± 1	930	401
16	2	1.5	1.6	0.6	1.4	27.5 ± 1	1.02	1.8	33.5 ± 1.5	1450	704
16	2	1.5	1.6	0.6	1.4	27.5 ± 1	1.02	1.8	33.5 ± 1.5	1450	704
1	3	1.5	1.6	0.6	1.1	8.5 ± 0.5	0.61	1.1	12 ± 0.8	220	79
1	3	1.5	1.6	0.6	1.1	8.5 ± 0.5	0.61	1.1	12 ± 0.8	220	79
2	3	1.5	1.6	0.6	1.1	14 ± 0.8	0.61	1.3	18.5 ± 0.8	390	135
2	3	1.5	1.6	0.6	1.1	14 ± 0.8	0.61	1.3	18.5 ± 0.8	390	135
4	3	1.5	1.6	0.6	1.1	16.5 ± 0.8	0.61	1.4	21 ± 1	560	232
4	3	1.5	1.6	0.6	1.1	16.5 ± 0.8	0.61	1.4	21 ± 1	560	232
10	3	1.5	1.6	0.6	1.2	26 ± 1	1.02	1.8	32.5 ± 1.5	1300	638
10	3	1.5	1.6	0.6	1.2	26 ± 1	1.02	1.8	32.5 ± 1.5	1300	638
16	3	1.5	1.6	0.6	1.4	31 ± 1.5	0.83	1.9	37 ± 1.5	1910	1008



## TFSI(i) 250V Instr. cable, above ground

Number of elements	No of cores in element	Cross section core, mm <sup>2</sup>	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	31 ± 1.5	0.83	1.9	37 ± 1.5	1910	1008

### 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)
Shielded pair 0,75 mm <sup>2</sup>	75	0,64	24,5	13,1
Shielded triple 0,75 mm <sup>2</sup>	75	0,64	24,5	13,1
Shielded pair 1,5 mm <sup>2</sup>	80	0,60	12,1	24,8
Shielded triple 1,5 mm <sup>2</sup>	80	0,60	12,1	24,8
Shielded pair 2,5 mm <sup>2</sup>	95	0,57	7,41	38,5
Shielded triple 2,5 mm <sup>2</sup>	95	0,57	7,41	38,5

### Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
856000	TFSI(I) 1PAIR 0.75mm <sup>2</sup> S100	GREY	7021528560008	-
856001	TFSI(I) 1PAIR 0.75mm <sup>2</sup> S100	BLUE	7021528560015	-
856006	TFSI(I) 2PAIR 0.75mm <sup>2</sup> S100	GREY	7021528560060	-
856007	TFSI(I) 2PAIR 0.75mm <sup>2</sup> S100	BLUE	7021528560077	-
856018	TFSI(I) 4PAIR 0.75mm <sup>2</sup> S100	GREY	7021528560183	-
856019	TFSI(I) 4PAIR 0.75mm <sup>2</sup> S100	BLUE	7021528560190	-
856033	TFSI(I) 10PAIR 0.75mm <sup>2</sup> S100	GREY	7021528560336	-
856034	TFSI(I) 10PAIR 0.75mm <sup>2</sup> S100	BLUE	7021528560343	-
856042	TFSI(I) 16PAIR 0.75mm <sup>2</sup> S100	GREY	7021528560428	-
856043	TFSI(I) 16PAIR 0.75mm <sup>2</sup> S100	BLUE	7021528560435	-
856060	TFSI(I) 1TRIP 0.75mm <sup>2</sup> S100	GREY	7021528560602	-
856061	TFSI(I) 1TRIP 0.75mm <sup>2</sup> S100	BLUE	7021528560619	-
856066	TFSI(I) 2TRIP 0.75mm <sup>2</sup> S100	GREY	7021528560664	-
856067	TFSI(I) 2TRIP 0.75mm <sup>2</sup> S100	BLUE	7021528560671	-
856078	TFSI(I) 4TRIP 0.75mm <sup>2</sup> S100	GREY	7021528560787	-
856079	TFSI(I) 4TRIP 0.75mm <sup>2</sup> S100	BLUE	7021528560794	-
856093	TFSI(I) 10TRIP 0.75mm <sup>2</sup> S100	GREY	7021528560930	-
856094	TFSI(I) 10TRIP 0.75mm <sup>2</sup> S100	BLUE	7021528560947	-
856102	TFSI(I) 16TRIP 0.75mm <sup>2</sup> S100	GREY	7021528561029	-
856103	TFSI(I) 16TRIP 0.75mm <sup>2</sup> S100	BLUE	7021528561036	-
856200	TFSI(I) 1PAIR 1.5mm <sup>2</sup> S100	GREY	7021528562002	-
856201	TFSI(I) 1PAIR 1.5mm <sup>2</sup> S100	BLUE	7021528562019	-
856206	TFSI(I) 2PAIR 1.5mm <sup>2</sup> S100	GREY	7021528562064	-
856207	TFSI(I) 2PAIR 1.5mm <sup>2</sup> S100	BLUE	7021528562071	-
856218	TFSI(I) 4PAIR 1.5mm <sup>2</sup> S100	GREY	7021528562187	-
856219	TFSI(I) 4PAIR 1.5mm <sup>2</sup> S100	BLUE	7021528562194	-
856233	TFSI(I) 10PAIR 1.5mm <sup>2</sup> S100	GREY	7021528562330	-
856234	TFSI(I) 10PAIR 1.5mm <sup>2</sup> S100	BLUE	7021528562347	-
856242	TFSI(I) 16PAIR 1.5mm <sup>2</sup> S100	GREY	7021528562422	-
856243	TFSI(I) 16PAIR 1.5mm <sup>2</sup> S100	BLUE	7021528562439	-
856260	TFSI(I) 1TRIP 1.5mm <sup>2</sup> S100	GREY	7021528562606	-
856261	TFSI(I) 1TRIP 1.5mm <sup>2</sup> S100	BLUE	7021528562613	-
856266	TFSI(I) 2TRIP 1.5mm <sup>2</sup> S100	GREY	7021528562668	-
856267	TFSI(I) 2TRIP 1.5mm <sup>2</sup> S100	BLUE	7021528562675	-
856278	TFSI(I) 4TRIP 1.5mm <sup>2</sup> S100	GREY	7021528562781	-
856279	TFSI(I) 4TRIP 1.5mm <sup>2</sup> S100	BLUE	7021528562798	-
856293	TFSI(I) 10TRIP 1.5mm <sup>2</sup> S100	GREY	7021528562934	-
856294	TFSI(I) 10TRIP 1.5mm <sup>2</sup> S100	BLUE	7021528562941	-
856302	TFSI(I) 16TRIP 1.5mm <sup>2</sup> S100	GREY	7021528563023	-



## TFSI(i) 250V Instr. cable, above ground

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
856303	TFSI(I) 16TRIP 1.5mm <sup>2</sup> S100	BLUE	7021528563030	-

### 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 <sup>2</sup>	-10°C