



Flame retardant halogen-free instrumentation cable. Unbraided. Shielded.

TI(c) 250V

HFXLPE/PO

Operating temperature : 90°C
 Operating Voltage : 250V

Application

Unarmoured shielded cable for fixed installation in ships where cable protection is not required. Suitable for use on instrumentation and communication systems. Can be installed and operated both indoors and outdoors.

Standards applied

IEC 60092-376 (2003-05)	- Design
IEC 60228 class 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Annealed stranded circular copper, IEC 60228 class 2
Insulation	T	Crosslinked Polyethylene, IEC 60092-351 (HFXLPE)
Pair / Triple / Quad twisting		Numbered white cores are twisted in pairs/triples. (The two pair cable is stranded into a star quad) All the pairs are twisted with different lay length to reduce mutual interference.
Lay up / Shielding		Collective shield by laminated aluminium backed PETP-tape with a multistranded tinned copper drainwire.
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	I	Flame retardant halogen-free thermoplastic compound, SHF1
Marking text		E.g. "meter" "år" DRAKA 01 TI(c) 250V 4 PAIR 0,75 mm ² IEC 60092-376 IEC 60332-3-22 ShipLine
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel, DRAKA 02 = Draka Kabel BV Amsterdam, DRAKA 03 = Draka Kabel BV Emmen
Outer sheath colour		Grey

Core identification instrumentation cables

The pairs have the following number identification according to IEC 60092-376

Pair no. 1	Core no. 1 - 2
Pair no. 2	3 - 4
Pair no. 3	5 - 6
Pair no. 4	7 - 8
Pair no. 5	etc - etc

The two pair cable may also be built up as a star quad

1 - 3 - 2 - 4

The triple cable has the following number identification

1 - 2 - 3

Range and dimensions

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	2	0.5	0.9	0.4	1	8.5 ± 0.5	70	23
4	2	0.5	0.9	0.4	1.1	10 ± 0.8	110	41
7	2	0.5	0.9	0.4	1.1	11.5 ± 0.8	160	70
10	2	0.5	0.9	0.4	1.2	14.5 ± 0.8	220	98
14	2	0.5	0.9	0.4	1.3	16 ± 0.8	285	136
19	2	0.5	0.9	0.4	1.3	17.5 ± 0.8	360	183
24	2	0.5	0.9	0.4	1.4	20 ± 1	450	230
2	2	0.75	1.1	0.5	1.1	10 ± 0.8	100	33
4	2	0.75	1.1	0.5	1.1	11.5 ± 0.8	145	61
7	2	0.75	1.1	0.5	1.2	14 ± 0.8	225	103
10	2	0.75	1.1	0.5	1.3	17.5 ± 0.8	310	144
14	2	0.75	1.1	0.5	1.4	19.5 ± 0.8	410	200
19	2	0.75	1.1	0.5	1.5	21 ± 1	530	270
24	2	0.75	1.1	0.5	1.6	24.5 ± 1	660	340

Electrical values instrumentation cables

Type	Capacitance, approx. (nF/km)	Inductance, approx. (mH/km)	Resistance at 20°C, max. (Ohm/km)
Unshielded pair 0,5 mm ²	70	0,60	40.4
Unshielded triple 0,5 mm ²	70	0,60	40.4
Unshielded pair 0,75 mm ²	65	0,60	26.0
Unshielded triple 0,75 mm ²	65	0,60	26.0

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
832200	TI(C) 250V 2PAIR 0.5mm ²	GREY	7021528322002	-	-	-
832202	TI(C) 250V 4PAIR 0.5mm ²	GREY	7021528322026	1045882	-	-
832204	TI(C) 250V 7PAIR 0.5mm ²	GREY	7021528322040	1045883	-	-
832206	TI(C) 250V 10PAIR 0.5mm ²	GREY	7021528322064	1045884	-	-
832208	TI(C) 250V 14PAIR 0.5mm ²	GREY	7021528322088	1045885	-	-
832210	TI(C) 250V 19PAIR 0.5mm ²	GREY	7021528322101	1045886	-	-
832212	TI(C) 250V 24PAIR 0.5mm ²	GREY	7021528322125	1045887	-	-
832250	TI(C) 250V 2PAIR 0.75mm ²	GREY	7021528322507	-	-	-
832252	TI(C) 250V 4PAIR 0.75mm ²	GREY	7021528322521	1045902	-	-
832254	TI(C) 250V 7PAIR 0.75mm ²	GREY	7021528322545	1045903	-	-
832256	TI(C) 250V 10PAIR 0.75mm ²	GREY	7021528322569	1045904	-	-
832258	TI(C) 250V 14PAIR 0.75mm ²	GREY	7021528322583	1045905	-	-
832260	TI(C) 250V 19PAIR 0.75mm ²	GREY	7021528322606	1045906	-	-
832262	TI(C) 250V 24PAIR 0.75mm ²	GREY	7021528322620	1045907	-	-

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm ²	-10°C