

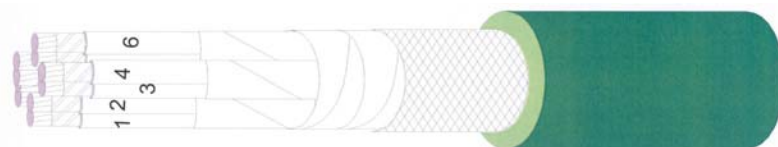


## Shipline FR, BXOI 250V Instrumentation cable

**Fire resistant and flame retardant halogen-free instrumentation cable. Braided**

### BXOI 250V

MGT/HFXLPE/TCWB/PO



**Operating temperature : 90°C**  
**Operating Voltage : 250V**

#### Application

Armoured fire resistant cable for fixed installation in ships where cable protection is required. Recommended for instrumentation, communication, control, alarm, emergency and critical systems. Can be installed and operated both indoors and outdoors.

<u>Standards applied</u>	
IEC 60092-376	- 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 60331-21	- Fire Resistant
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

#### Construction

	Code Letter	
<b>Conductor</b>		Annealed stranded circular copper, IEC 60228 class 2
<b>Insulation</b>	<b>B</b>	Mica-tape + HFXLPE, IEC 60092-351 (HFXLPE)
<b>Pair / Triple / Quad twisting</b>		Numbered cores twisted together and wrapped with polyester tape. Pairs are twisted together and wrapped with polyester tape. The pairs are twisted with different lay length to reduce mutual interference. Pairs are identified by numbered tape.
<b>Inner covering</b>	<b>X</b>	PET tape
<b>Armour/screen</b>	<b>O</b>	Tinned copper wire braid
<b>Tape over armour/screen</b>		Additional tape may be applied
<b>Outer sheath</b>	<b>I</b>	Flame retardant halogen-free thermoplastic compound, SHF1
<b>Marking text</b>		E.g. "meter" "är" DRAKA 01 BXOI 250V 10 PAIR 0,75 mm2 IEC 60092-376 IEC 60331-21 IEC 60332-3-22 ShipLine
<b>Manufacturing unit</b>		DRAKA 01 = Draka Norsk Kabel, DRAKA 02 = Draka Kabel BV Amsterdam, DRAKA 03 = Draka Kabel BV Emmen
<b>Outer sheath colour</b>		Green



## Shipline FR, BXOI 250V Instrumentation cable

### Core identification instrumentation cables

The pairs have the following number identification according to IEC 60092-376	Core no.
Pair no.1	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

### Range and dimensions

Number of elements	No of cores in element	Cross section core, mm <sup>2</sup>	Conductor Diameter, mm	Insulation Thickness, mm	Diameter Braid Wire, 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	0.7	0.2	1	8.5 ± 0.5	95	44
1	4	0.75	1.1	0.7	0.2	1.1	10 ± 0.8	130	58
2	2	0.75	1.1	0.7	0.2	1.2	13 ± 0.8	170	73
4	2	0.75	1.1	0.7	0.2	1.2	15.5 ± 0.8	240	108
7	2	0.75	1.1	0.7	0.3	1.3	18.5 ± 0.8	390	198
10	2	0.75	1.1	0.7	0.3	1.5	23.5 ± 1	550	265
14	2	0.75	1.1	0.7	0.3	1.6	26 ± 1	700	345
19	2	0.75	1.1	0.7	0.3	1.7	28 ± 1	870	440
24	2	0.75	1.1	0.7	0.3	1.9	32.5 ± 1.5	1090	535
1	2	1.5	1.6	0.7	0.2	1	9.5 ± 0.5	115	58
1	4	1.5	1.6	0.7	0.2	1.1	11 ± 0.8	165	86
2	2	1.5	1.6	0.7	0.2	1.2	15 ± 0.8	220	108
4	2	1.5	1.6	0.7	0.3	1.3	18 ± 0.8	370	211
7	2	1.5	1.6	0.7	0.3	1.5	21.5 ± 1	550	312
10	2	1.5	1.6	0.7	0.3	1.7	27.5 ± 1	800	453
14	2	1.5	1.6	0.7	0.3	1.7	30 ± 1.5	980	564
19	2	1.5	1.6	0.7	0.3	1.9	32.5 ± 1.5	1250	729
24	2	1.5	1.6	0.7	0.4	2.2	38.5 ± 1.5	1710	1023

### 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/quad 0,75 mm <sup>2</sup>	55	0.75	24.5	15.31
Unshielded pair/quad 1,5 mm <sup>2</sup>	65	0.67	12.1	27.69

### Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
839800	BXOI 250V 1PAIR 0.75mm <sup>2</sup>	GREEN	7021528398007	1065000	-	-
839801	BXOI 250V 1QUAD 0.75mm <sup>2</sup>	GREEN	7021528398014	1065001	-	-
839802	BXOI 250V 2PAIR 0.75mm <sup>2</sup>	GREEN	7021528398021	1065002	-	-
839804	BXOI 250V 4PAIR 0.75mm <sup>2</sup>	GREEN	7021528398045	1065003	-	-
839806	BXOI 250V 7PAIR 0.75mm <sup>2</sup>	GREEN	7021528398069	1065004	-	-
839808	BXOI 250V 10PAIR 0.75mm <sup>2</sup>	GREEN	7021528398083	1065005	-	-
839810	BXOI 250V 14PAIR 0.75mm <sup>2</sup>	GREEN	7021528398106	1065006	-	-
839812	BXOI 250V 19PAIR 0.75mm <sup>2</sup>	GREEN	7021528398120	1065007	-	-
839814	BXOI 250V 24PAIR 0.75mm <sup>2</sup>	GREEN	7021528398144	1065008	-	-
839840	BXOI 250V 1PAIR 1.5mm <sup>2</sup>	GREEN	7021528398403	1065040	-	-
839841	BXOI 250V 1QUAD 1.5mm <sup>2</sup>	GREEN	7021528398410	1065041	-	-



## Shipline FR, BXOI 250V Instrumentation cable

Part number	Description	Sheath Colour	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
839842	BXOI 250V 2PAIR 1.5mm <sup>2</sup>	GREEN	7021528398427	1065042	-	-
839844	BXOI 250V 4PAIR 1.5mm <sup>2</sup>	GREEN	7021528398441	1065043	-	-
839846	BXOI 250V 7PAIR 1.5mm <sup>2</sup>	GREEN	7021528398465	1065044	-	-
839848	BXOI 250V 10PAIR 1.5mm <sup>2</sup>	GREEN	7021528398489	1065045	-	-
839850	BXOI 250V 14PAIR 1.5mm <sup>2</sup>	GREEN	7021528398502	1065046	-	-
839852	BXOI 250V 19PAIR 1.5mm <sup>2</sup>	GREEN	7021528398526	1065047	-	-
839854	BXOI 250V 24PAIR 1.5mm <sup>2</sup>	GREEN	7021528398540	1065048	-	-

### 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 <sup>2</sup>	-10°C