



Flame retardant halogen-free instrumentation cable. Braided. Individual pair shielded.

TXOI(I) 250V

HFXLPE/TCWB/PO

Operating temperature : 90°C
 Operating Voltage : 250V

Application

Armoured cable for fixed installation in ships where cable protection is required. Suitable for use on instrumentation and communication systems. Can be installed and operated both indoors and outdoors.

Standards applied

| | |
|-------------------|-------------------|
| 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 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 together and wrapped with polyester tape. Pairs/Quads are laid up and individually shielded by aluminium backed polyester tape with tinned copper drain wire. Each pair/quad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/quads. Pairs/quads are identified by numbers printed on the insulated cores. |
| Lay up / Shielding | | Individually shielded pairs are laid up in concentric layers and wrapped with a PETP tape. |
| Inner covering | X | No inner covering. Two tapes substitutes the extruded covering. All tapes are halogen-free. |
| Armour/screen | O | Tinned copper wire braid |
| Tape over armour/screen | | Additional tape may be applied |
| Outer sheath | I | Flame retardant halogen-free thermoplastic compound, SHF1 |
| Marking text | | E.g. "meter" "year" DRAKA NORSK KABEL TXOI(i) 250V 2 PAIR 0,75 mm2 IEC 60092-376 IEC 60332-3-22 ShipLine |
| Outer sheath colour | | Grey |

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 ² | 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) |
|--------------------|------------------------|-------------------------------------|------------------------|--------------------------|-------------------------|----------------------------|---------------------------|---------------------------------|--------------------------------|
| 2 | 2 | 0.75 | 1.1 | 0.5 | 0.2 | 1.1 | 10.5 ± 0.8 | 150 | 81 |
| 4 | 2 | 0.75 | 1.1 | 0.5 | 0.2 | 1.2 | 12.5 ± 0.8 | 225 | 124 |
| 7 | 2 | 0.75 | 1.1 | 0.5 | 0.3 | 1.3 | 15.5 ± 0.8 | 380 | 226 |

Electrical values instrumentation cables

| Type | Capacitance, approx. (nF/km) | Inductance, approx. (mH/km) | Resistance at 20°C, max. (Ohm/km) |
|--------------------------------------|------------------------------|-----------------------------|-----------------------------------|
| Shielded pair 0,5 mm ² | 75 | 0.63 | 40.4 |
| Shielded triple 0,5 mm ² | 75 | 0.63 | 40.4 |
| Shielded quad 0,5 mm ² | 65 | 0.51 | 40.4 |
| Shielded pair 0,75 mm ² | 70 | 0.64 | 26.0 |
| Shielded triple 0,75 mm ² | 70 | 0.64 | 26.0 |
| Shielded quad 0,75 mm ² | 60 | 0.51 | 26.0 |

Ordering information

| Part number | Description | Sheath Colour | EAN No. DNK | EL No. |
|-------------|--|---------------|---------------|--------|
| 832482 | TXOI(I) 250V 2PAIR 0.75mm ² | GREY | 7021528324822 | - |
| 832484 | TXOI(I) 250V 4PAIR 0.75mm ² | GREY | 7021528324846 | - |
| 832486 | TXOI(I) 250V 7PAIR 0.75mm ² | GREY | 7021528324860 | - |

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 |