Flame retardant armoured instrumentation cable
ST/1311/18
Rev. 0
12/11/2017

FB-XLPE/OS/PVC/SWA/PVC - 300/500 V

## Overall screen

Suitable for standard FIELDBUS FOUNDATION- PROFIBUS PA

Cable construction


## Conductors

Insulation
Insulation colours
Cabling
Wrapping
Overall screen

## Binder

Inner sheath
Armour
Outer sheath
Outer sheath colour
Printed marking
: stranded plain annealed copper wires (7 wires)
: XLPE
: orange - blue
: the insulated cores are twisted to form a pair
: polyester tape
: aluminium backed polyester tape, aluminium in continuous contact with stranded tinned copper drain wire, size 0.5 mm 2
: polyester tape
: PVC
: single layer of galvanized steel wires
: PVC
: blue or grey
: CAVICEL ITALY - P/N - nºf pairs x size AWG - 300/500 V - BATCH *****/**

## Cable configuration

| P/N | $\mathbf{N}^{\circ}$ of pairs <br> $\mathbf{x}$ <br> Size <br> [AWG] | Under armour <br> diameter <br> $\mathbf{\pm 1 0 \%}$ <br> $[\mathrm{mm}]$ | Nom. outer <br> diameter <br> $\mathbf{\pm 1 0 \%}$ <br> $[\mathrm{mm}]$ | Approx,Net <br> Weight <br> $[k g / k m]$ |
| :---: | :---: | :---: | :---: | :---: |
| 103311 | $1 \times 2 \times 18$ | 7.6 | 12.4 | 270 |

## Mechanical and installation characteristics

| Operating temperature (after installation) | $-20^{\circ} \mathrm{C} \div+80^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Operating temperature (during installation) | $-5^{\circ} \mathrm{C} \div+65^{\circ} \mathrm{C}$ |
| Bending radius at minimum installation temperature | 12 times the outer diameter (mm) |

## Electrical characteristics

| Voltage rating | 300/500 V r.m.s. |
| :---: | :---: |
| Dielectric test | $\begin{aligned} & 2000 \text { V r.m.s. for } 1^{\prime} \\ & 1000 \text { V r.m.s. for } 1^{\prime} \text { (core - core) } \\ & \text { (coreen) } \end{aligned}$ |
| Conductors resistance (Loop) | $\leq 44 \mathrm{Ohm} / \mathrm{km}$ (at $20^{\circ} \mathrm{C}$ in d.c.) |
| Insulation resistance | $\geq 1000$ Mohmxkm (at $20^{\circ} \mathrm{C}$ ) |
| Characteristic impedance (at 31.25 kHz ) | 100 ( $\pm 20 \%$ ) ohm |

## General standards

| For the construction | EN 50288-7 (as far as applicable) |
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## Behaviour under fire conditions

| Flame retardant | IEC 60332-1-2 |
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