

## Instrumentation Cable - 101

## CPR EU 305/2011

**CU, G16 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

### Technical Specifications n° 101/18 of 12/01/2018 Rev. 0

|                    |  |
|--------------------|--|
| <b>Type:</b>       | F-Cu/G16/IS/OS/M16 0,6/1KV - F-Cu/G16/OS/M16 0,6/1KV FG16XHOHM16 0,6/1 KV - FG16XOHM16 0,6/1KV |
| <b>Conductor:</b>  | Flexible plain copper conductor according to IEC60228 cl.5                                     |
| <b>Insulation:</b> | EPR G16 type extruded compound   |
|                    | Temperature range -15 +90° C   |
|                    | Temperature laying -5 +70° C   |

| SIZE                 | THICKNESS      |
|----------------------|----------------|
| 0,75 mm <sup>2</sup> | 0,70 ± 0,02 mm |
| 1,0 mm <sup>2</sup>  | 0,70 ± 0,02 mm |
| 1,5 mm <sup>2</sup>  | 0,70 ± 0,02 mm |
| 2,5 mm <sup>2</sup>  | 0,70 ± 0,02 mm |

|  |   |
|--|---|
| <b>Laying up:</b>                      | Twisted to pair, Blue - Black numbered (or to be agreed)  |
| <b>Pair screen:<br/>(if necessary)</b> | Applied over the single pair/triad will be wrapped with polyester tape and shielded with Aluminium/Mylar tape 100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 mm size 0,5sqmm, over the screen will be placed a further Mylar tape.   |
| <b>Overall screen:</b>                 | Applied over total assembly will be wrapped with polyester tape and shielded with Aluminium/Mylar tape 100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 size 0,5sqmm.  |
| <b>Outer sheath:</b>                   | M16 LSZH extruded compound<br>Colour: Blue/Black (or to be agreed)  |
| <b>Marking:</b>                        | On the outer sheath "Sensitherm – FG16XHOHM16 0,6/1 KV Siz. IEC 60332.3<br>WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001 m"  |
| <b>Performance:</b>                    | <ul style="list-style-type: none"> <li>- Test voltage core to core 3,5 KV</li> <li>- Flame retardant according to IEC 60332-3-24, CEI 20-22/3</li> <li>- Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2</li> <li>- Low smoke density emiss. IEC 61034 1/2</li> <li>- Hydrocarbon and UV resistant</li> <li>- Cable for intrinsically safe application</li> <li>- Inductance &lt;math&gt;\leq 0,90\text{ mH/Km}&lt;/math&gt;</li> <li>- Capacitance &lt;math&gt;= 0,200\ \mu\text{F/Km}&lt;/math&gt;</li> <li>- This cable is suitable to be used in ATEX area following the EN60079-14 prescription</li> <li>- EN50575 tested for approval</li> </ul> |

| ITEM        |         |                           | THICKNESS<br>OUTER<br>SHEATH MM | OVERAL<br>DIAMETER<br>MM | WEIGHT<br>KG/KM | BENDING<br>RADIUS<br>MM |
|-------------|---------|---------------------------|---------------------------------|--------------------------|-----------------|-------------------------|
| FG16OHM16   | 0,6/1KV | 1x2x0,75 mm <sup>2</sup>  | 1,8                             | 8,8                      | 110             | 70                      |
| FG16XHOHM16 | 0,6/1KV | 2x2x0,75 mm <sup>2</sup>  | 1,8                             | 12,9                     | 200             | 100                     |
| FG16XHOHM16 | 0,6/1KV | 3x2x0,75 mm <sup>2</sup>  | 1,8                             | 13,6                     | 250             | 110                     |
| FG16XHOHM16 | 0,6/1KV | 4x2x0,75 mm <sup>2</sup>  | 1,8                             | 14,7                     | 300             | 120                     |
| FG16XHOHM16 | 0,6/1KV | 5x2x0,75 mm <sup>2</sup>  | 1,8                             | 16,1                     | 360             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 6x2x0,75 mm <sup>2</sup>  | 1,8                             | 17,4                     | 400             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 7x2x0,75 mm <sup>2</sup>  | 1,8                             | 17,6                     | 450             | 140                     |
| FG16XHOHM16 | 0,6/1KV | 12x2x0,75 mm <sup>2</sup> | 2,0                             | 23                       | 700             | 180                     |
| FG16XHOHM16 | 0,6/1KV | 16x2x0,75 mm <sup>2</sup> | 2,0                             | 25,6                     | 910             | 200                     |
| FG16XHOHM16 | 0,6/1KV | 24x2x0,75 mm <sup>2</sup> | 2,0                             | 30                       | 1250            | 240                     |
| FG16OHM16   | 0,6/1KV | 1x2x1 mm <sup>2</sup>     | 1,8                             | 9                        | 120             | 70                      |
| FG16XHOHM16 | 0,6/1KV | 2x2x1 mm <sup>2</sup>     | 1,8                             | 13,5                     | 220             | 110                     |
| FG16XHOHM16 | 0,6/1KV | 3x2x1 mm <sup>2</sup>     | 1,8                             | 14                       | 270             | 110                     |
| FG16XHOHM16 | 0,6/1KV | 4x2x1 mm <sup>2</sup>     | 1,8                             | 15,5                     | 330             | 120                     |
| FG16XHOHM16 | 0,6/1KV | 5x2x1 mm <sup>2</sup>     | 1,8                             | 16,8                     | 400             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 6x2x1 mm <sup>2</sup>     | 1,8                             | 18,4                     | 250             | 140                     |
| FG16XHOHM16 | 0,6/1KV | 7x2x1 mm <sup>2</sup>     | 1,8                             | 18,6                     | 500             | 140                     |
| FG16XHOHM16 | 0,6/1KV | 12x2x1 mm <sup>2</sup>    | 2,0                             | 24                       | 800             | 190                     |
| FG16XHOHM16 | 0,6/1KV | 16x2x1 mm <sup>2</sup>    | 2,0                             | 27                       | 1030            | 210                     |
| FG16XHOHM16 | 0,6/1KV | 24x2x1 mm <sup>2</sup>    | 2,0                             | 32,5                     | 1420            | 250                     |
| FG16OHM16   | 0,6/1KV | 1x2x1,5 mm <sup>2</sup>   | 1,8                             | 9,5                      | 130             | 80                      |
| FG16XHOHM16 | 0,6/1KV | 2x2x1,5 mm <sup>2</sup>   | 1,8                             | 14,4                     | 250             | 120                     |
| FG16XHOHM16 | 0,6/1KV | 3x2x1,5 mm <sup>2</sup>   | 1,8                             | 15                       | 320             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 4x2x1,5 mm <sup>2</sup>   | 1,8                             | 16,5                     | 390             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 5x2x1,5 mm <sup>2</sup>   | 1,8                             | 18                       | 470             | 140                     |
| FG16XHOHM16 | 0,6/1KV | 6x2x1,5 mm <sup>2</sup>   | 1,8                             | 19,6                     | 530             | 160                     |
| FG16XHOHM16 | 0,6/1KV | 7x2x1,5 mm <sup>2</sup>   | 1,8                             | 19,8                     | 600             | 160                     |
| FG16XHOHM16 | 0,6/1KV | 12x2x1,5 mm <sup>2</sup>  | 2,0                             | 26                       | 950             | 210                     |
| FG16XHOHM16 | 0,6/1KV | 16x2x1,5 mm <sup>2</sup>  | 2,0                             | 29                       | 1240            | 230                     |
| FG16XHOHM16 | 0,6/1KV | 24x2x1,5 mm <sup>2</sup>  | 2,0                             | 35                       | 1720            | 280                     |
| FG16XHM16   | 0,6/1KV | 1x2x2,5 mm <sup>2</sup>   | 1,8                             | 10,6                     | 170             | 80                      |
| FG16XHOHM16 | 0,6/1KV | 2x2x2,5 mm <sup>2</sup>   | 1,8                             | 16                       | 320             | 130                     |
| FG16XHOHM16 | 0,6/1KV | 3x2x2,5 mm <sup>2</sup>   | 1,8                             | 16,8                     | 400             | 140                     |
| FG16XHOHM16 | 0,6/1KV | 6x2x2,5 mm <sup>2</sup>   | 2,0                             | 23                       | 720             | 180                     |

|             |         |                           |     |      |      |     |
|-------------|---------|---------------------------|-----|------|------|-----|
| FG16XHOHM16 | 0,6/1KV | 7x2x2,5 mm <sup>2</sup>   | 2,0 | 22,4 | 810  | 180 |
| FG16XHOHM16 | 0,6/1KV | 12x2x2,5 mm <sup>2</sup>  | 2,0 | 29   | 1260 | 230 |
| FG16XHOHM16 | 0,6/1KV | 16x2x2,5 mm <sup>2</sup>  | 2,0 | 32,6 | 1650 | 260 |
| FG16XHOHM16 | 0,6/1KV | 24x2x2,5 mm <sup>2</sup>  | 2,0 | 40   | 2300 | 320 |
| FG16OHM16   | 0,6/1KV | 1x3x0,75 mm <sup>2</sup>  | 1,8 | 9    | 130  | 70  |
| FG16XHOHM16 | 0,6/1KV | 2x3x0,75 mm <sup>2</sup>  | 1,8 | 15   | 250  | 120 |
| FG16XHOHM16 | 0,6/1KV | 3x3x0,75 mm <sup>2</sup>  | 1,8 | 15,8 | 310  | 130 |
| FG16XHOHM16 | 0,6/1KV | 4x3x0,75 mm <sup>2</sup>  | 1,8 | 17,3 | 380  | 140 |
| FG16XHOHM16 | 0,6/1KV | 5x3x0,75 mm <sup>2</sup>  | 1,8 | 18,9 | 460  | 150 |
| FG16XHOHM16 | 0,6/1KV | 6x3x0,75 mm <sup>2</sup>  | 1,8 | 21   | 520  | 170 |
| FG16XHOHM16 | 0,6/1KV | 7x3x0,75 mm <sup>2</sup>  | 1,8 | 20,6 | 590  | 170 |
| FG16XHOHM16 | 0,6/1KV | 12x3x0,75 mm <sup>2</sup> | 2,0 | 27   | 930  | 210 |
| FG16XHOHM16 | 0,6/1KV | 16x3x0,75 mm <sup>2</sup> | 2,0 | 30,2 | 1210 | 240 |
| FG16XHOHM16 | 0,6/1KV | 24x3x0,75 mm <sup>2</sup> | 2,0 | 36   | 1660 | 290 |
| FG16OHM16   | 0,6/1KV | 1x3x1 mm <sup>2</sup>     | 1,8 | 9,6  | 140  | 80  |
| FG16XHOHM16 | 0,6/1KV | 2x3x1 mm <sup>2</sup>     | 1,8 | 15,8 | 280  | 130 |
| FG16XHOHM16 | 0,6/1KV | 3x3x1 mm <sup>2</sup>     | 1,8 | 16,7 | 350  | 140 |
| FG16XHOHM16 | 0,6/1KV | 4x3x1 mm <sup>2</sup>     | 1,8 | 18,2 | 430  | 150 |
| FG16XHOHM16 | 0,6/1KV | 5x3x1 mm <sup>2</sup>     | 1,8 | 20   | 520  | 160 |
| FG16XHOHM16 | 0,6/1KV | 5x3x1 mm <sup>2</sup>     | 1,8 | 20   | 520  | 160 |
| FG16XHOHM16 | 0,6/1KV | 6x3x1 mm <sup>2</sup>     | 1,8 | 21,8 | 590  | 170 |
| FG16XHOHM16 | 0,6/1KV | 7x3x1 mm <sup>2</sup>     | 1,8 | 22   | 670  | 180 |
| FG16XHOHM16 | 0,6/1KV | 12x3x1 mm <sup>2</sup>    | 2,0 | 29   | 1030 | 230 |
| FG16XHOHM16 | 0,6/1KV | 16x3x1 mm <sup>2</sup>    | 2,0 | 32,4 | 1380 | 260 |
| FG16XHOHM16 | 0,6/1KV | 24x3x1 mm <sup>2</sup>    | 2,0 | 38   | 1860 | 300 |
| FG16OHM16   | 0,6/1KV | 1x3x1,5 mm <sup>2</sup>   | 1,8 | 10   | 160  | 80  |
| FG16XHOHM16 | 0,6/1KV | 2x3x1,5 mm <sup>2</sup>   | 1,8 | 16,8 | 330  | 140 |
| FG16XHOHM16 | 0,6/1KV | 3x3x1,5 mm <sup>2</sup>   | 1,8 | 17,8 | 420  | 150 |
| FG16XHOHM16 | 0,6/1KV | 4x3x1,5 mm <sup>2</sup>   | 1,8 | 19,5 | 510  | 160 |
| FG16XHOHM16 | 0,6/1KV | 5x3x1,5 mm <sup>2</sup>   | 1,8 | 21,4 | 630  | 170 |
| FG16XHOHM16 | 0,6/1KV | 6x3x1,5 mm <sup>2</sup>   | 2,0 | 24   | 740  | 190 |
| FG16XHOHM16 | 0,6/1KV | 7x3x1,5 mm <sup>2</sup>   | 2,0 | 23,8 | 840  | 180 |
| FG16XHOHM16 | 0,6/1KV | 12x3x1,5 mm <sup>2</sup>  | 2,0 | 31   | 1290 | 250 |
| FG16XHOHM16 | 0,6/1KV | 16x3x1,5 mm <sup>2</sup>  | 2,0 | 34,8 | 1690 | 270 |
| FG16XHOHM16 | 0,6/1KV | 24x3x1,5 mm <sup>2</sup>  | 2,0 | 43   | 2360 | 340 |
| FG16OHM16   | 0,6/1KV | 1x3x2,5 mm <sup>2</sup>   | 1,8 | 11   | 210  | 90  |

|             |         |                          |     |    |      |     |
|-------------|---------|--------------------------|-----|----|------|-----|
| FG16XHOHM16 | 0,6/1KV | 2x3x2,5 mm <sup>2</sup>  | 1,8 | 19 | 420  | 150 |
| FG16XHOHM16 | 0,6/1KV | 3x3x2,5 mm <sup>2</sup>  | 1,8 | 20 | 540  | 160 |
| FG16XHOHM16 | 0,6/1KV | 4x3x2,5 mm <sup>2</sup>  | 1,8 | 22 | 670  | 180 |
| FG16XHOHM16 | 0,6/1KV | 6x3x2,5 mm <sup>2</sup>  | 2,0 | 27 | 980  | 210 |
| FG16XHOHM16 | 0,6/1KV | 12x3x2,5 mm <sup>2</sup> | 2,0 | 35 | 1750 | 280 |

**Weight and diameter:** Are theoretical + / - 10%

**Overall screen:** Applied over total assembly will be wrapped with polyester tape and shielded with Aluminium / Mylar tape 100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 size 0,5sqmm.

**Intended use:** Instrumentation cable in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.