

# Fire Resistant Instrumentation Cable – 113-2

B2ca s1a-d1-a1      CPR EU 305/2011      EN50200 PH120

**Conductor, MGT, G18 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH.**

**EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 113-2/23    10/11/2023 Rev. 0

**Type:**                      FTG18XHOHM16AM16 0,6/1Kv - FTG18OHM16AM16 0,6/1Kv

**Conductor:**                Flexible metal conductor according to IEC60228

**Insulation:**                Mica glass tape plus FR-HEPR G18 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +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
4,0 mm <sup>2</sup>	0,70 ± 0,02 mm
6,0 mm <sup>2</sup>	0,70 ± 0,02 mm
10,0 mm <sup>2</sup>	0,70 ± 0,02 mm

**Laying up:**                Twisted to cores, Blue - Black numbered, UNEL (or to be agreed)

**Pair screen:  
(if necessary)**             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.

**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.

**Inner sheath**                M16 LSZH extruded compound

**Armour**                      Galvanized steel wires braid (SWB)

**Outer sheath:**             M16 LSZH extruded compound  
Colour: Red/Black (or to be agreed)

**Marking:**                    On the outer sheath "Sensitherm – FTG18XHOHM16AM16 0,6/1 KV Siz. IEC 60332.3 EN50200 PH120 WWW/YY (Batch/Num.) B2ca s1a-d1-a1 0001 m"

**Performance:**            - Test voltage core to core 3,5 KV  
- Flame retardant according to IEC 60332-3-24, CEI 20-22/3

- Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2
- Low smoke density emission IEC 61034 1/2
- Hydrocarbon and UV resistant
- Fire resistant EN50200 PH120
- Cable for intrinsically safe application
- Inductance  $\leq$  0,90 mH/Km
- Capacitance  $\leq$  0,200  $\mu$ F/Km
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH RED	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1132900501	1132300001	FTG180HM16AM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	13,8	320	220
1132900502	1132300002	FTG180HM16AM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	14	370	230
1132900503	1132300003	FTG180HM16AM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	15	430	240
1132900504	1132300004	FTG180HM16AM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	17,5	520	280
1132900505	1132300005	FTG180HM16AM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	14,4	350	230
1132900506	1132300006	FTG180HM16AM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	15,7	430	250
1132900507	1132300007	FTG180HM16AM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	16,5	520	270
1132900508	1132300008	FTG180HM16AM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	18,4	640	300
1132900509	1132300009	FTG180HM16AM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	21,3	860	350
1132900510	1132300010	FTG180HM16AM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	15	410	240
1132900511	1132300011	FTG180HM16AM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	16,5	520	270
1132900512	1132300012	FTG180HM16AM16 0,6/1KV 1x4x4 mm <sup>2</sup>	2,0	17,5	620	280
1132900513	1132300013	FTG180HM16AM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	19,4	770	320
1132900514	1132300014	FTG180HM16AM16 0,6/1KV 1x5x2,5 mm <sup>2</sup>	2,0	17,5	580	280
1132900515	1132300015	FTG180HM16AM16 0,6/1KV 1x5x4 mm <sup>2</sup>	2,0	19	720	320
1132900516	1132300016	FTG180HM16AM16 0,6/1KV 6x1 mm <sup>2</sup>	1,8	16,5	460	270
1132900517	1132300017	FTG18XHOHM16AM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	1,8	17,8	460	290
1132900518	1132300018	FTG18XHOHM16AM16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	18,4	480	300
1132900519	1132300019	FTG18XHOHM16AM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	19,8	540	320
1132900520	1132300020	FTG18XHOHM16AM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	1,8	21,3	640	350
1132900521	1132300021	FTG18XHOHM16AM16 0,6/1KV 2x3x0,75 mm <sup>2</sup>	2,0	20,4	550	330
1132900522	1132300022	FTG18XHOHM16AM16 0,6/1KV 2x3x1,5 mm <sup>2</sup>	1,8	22,7	700	370
1132900523	1132300023	FTG18XHOHM16AM16 0,6/1KV 2x3x2,5 mm <sup>2</sup>	2,0	24,6	830	400
1132900524	1132300024	FTG18XHOHM16AM16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	25	920	400
1132900525	1132300025	FTG18XHOHM16AM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	2,0	26,2	1030	430
1132900526	1132300026	FTG18XHOHM16AM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	2,0	28,6	1270	464
1132900527	1132300027	FTG18XHOHM16AM16 0,6/1KV 6x3x1 mm <sup>2</sup>	2,0	29	1180	480
1132900528	1132300028	FTG18XHOHM16AM16 0,6/1KV 6x3x1,5 mm <sup>2</sup>	2,0	30,6	1350	490
1132900529	1132300029	FTG18XHOHM16AM16 0,6/1KV 6x3x2,5 mm <sup>2</sup>	2,0	33,4	1670	540

1132900530	1132300030	FTG18XHOHM16AM16 0,6/1KV	12x2x1 mm <sup>2</sup>	2,0	30	1480	490
1132900531	1132300031	FTG18XHOHM16AM16 0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	32,5	1700	520
1132900532	1132300032	FTG18XHOHM16AM16 0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	36,5	2140	590
1132900533	1132300033	FTG18XHOHM16AM16 0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	38,8	2270	640

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

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