



Specialist in **custom design** cables and sensors **SINCE 1999**

We protect industrial plants with  
special cables **CPR approved**

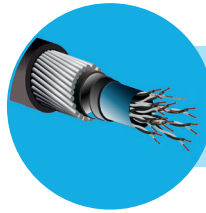


**QUALITY SYSTEM CERTIFIED ISO 9001 BY IMQ**  
OUR PRODUCTION IS SUSTAINABLE FOR THE ENVIROMENT

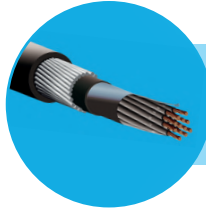




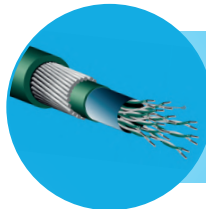
# Summary



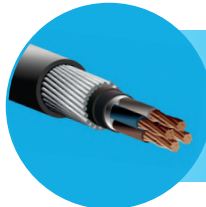
**INSTRUMENTATION CABLE - 1**  
SHIELDED AND ARMoured



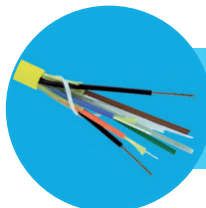
**CONTROL CABLES - 2**  
SHIELDED AND ARMoured



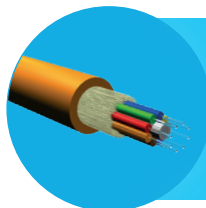
**THERMOCOUPLE CABLES - 3**  
EXTENSION AND COMPENSATING  
SHIELDED AND ARMoured



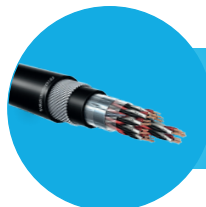
**POWER CABLES - 4**  
LOW VOLTAGE  
SHIELDED AND ARMoured



**HYBRID CABLES - 5**  
COPPER AND FIBER OPTIC



**EXTREME APPLICATIONS - 6**  
MUD RESISTANT CABLES  
GAS TIGHT CABLES  
ARTIC CABLES TRCU - EAC



**THE CONSTRUCTION - 7**  
PRODUCTS REGULATION "CPR"



# Sensitherm



Special cables on demand since 1999 - CPR UE 305/2011 COMPLIANCE

# Extreme applications

## MUD

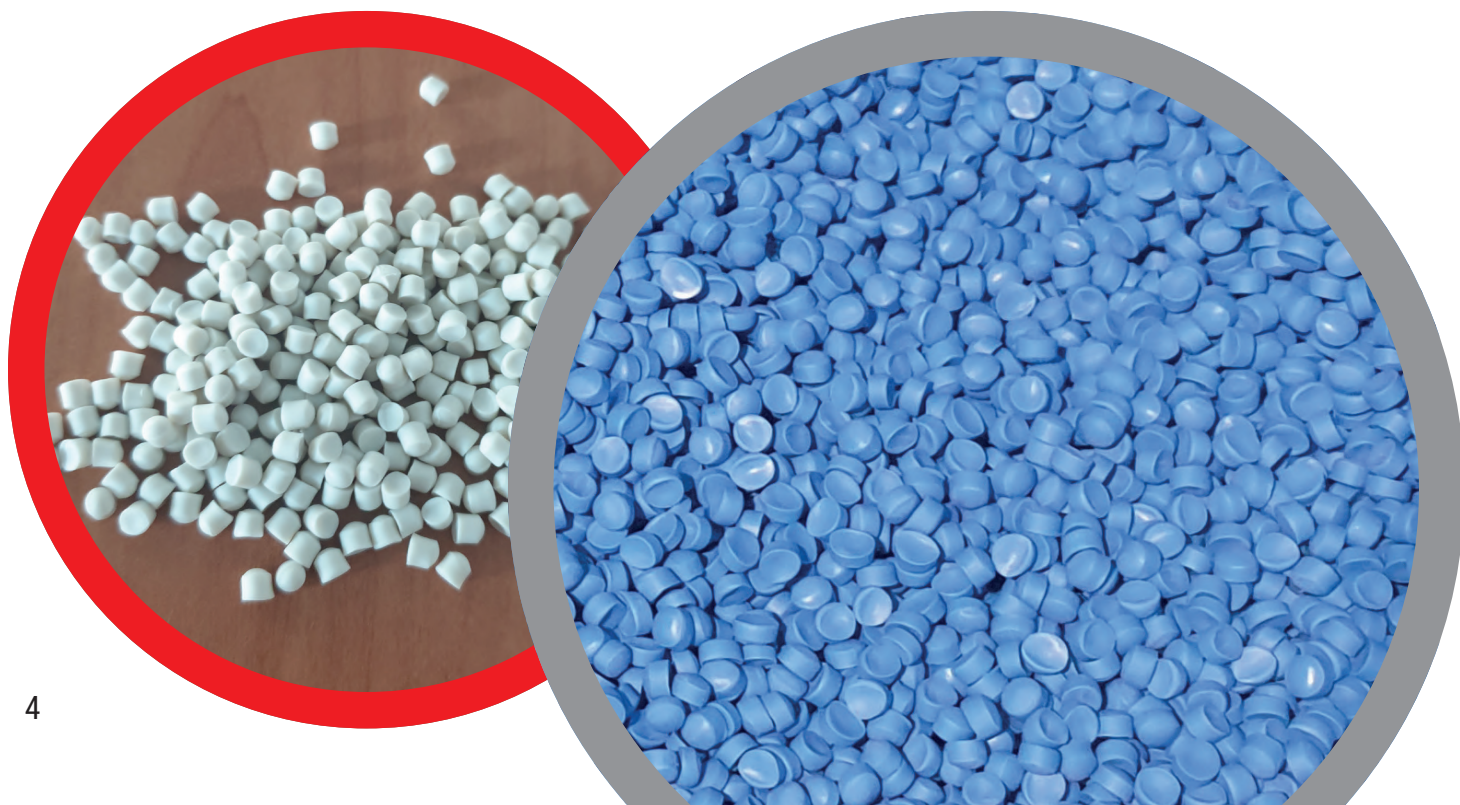
**Compound type SHF2 acc. to IEC 60092-360**

**Thermoset, crosslinked by Dry Silane procedure  
to be resistant to organic fluids**

**Conforming to NEK 606:2016 requisitions**

- ✓ Resistance to oils as per IRM 902 e 903 along 7 days at 100°C
- ✓ Resistance (mud water based) to calcium bromide along 56 days at 70°C
- ✓ Resistance to water absorption as per IEC 60811 along 7 days at 70°C

Cables fit for offshore applications on platforms, (floating prod. storage and offloading unit), drilling pumps...and where organic fluids are present in petrochemical environments



# GAS TIGHT

**Gelly filled cable according to IEC 60079-14 annexe E  
To prevent gas and vapour migration all along the cable  
inbetween cores interstices  
Fit for use in explosion proof and hazardous areas ATEX**

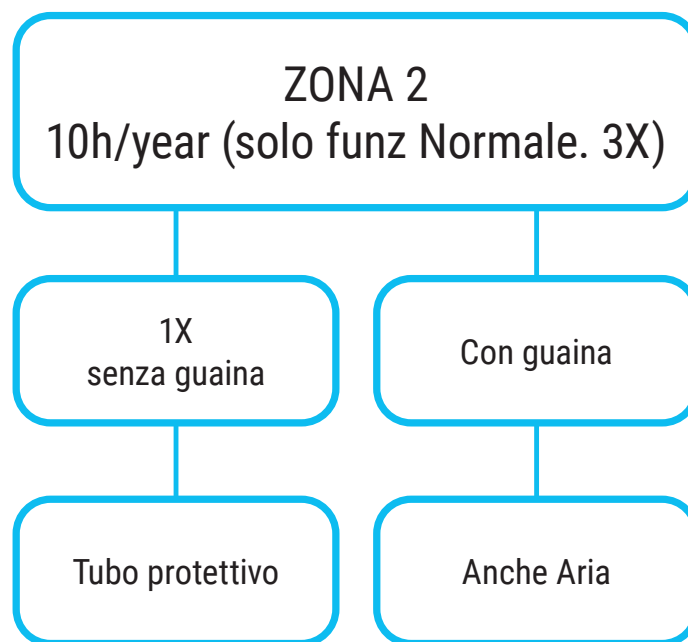
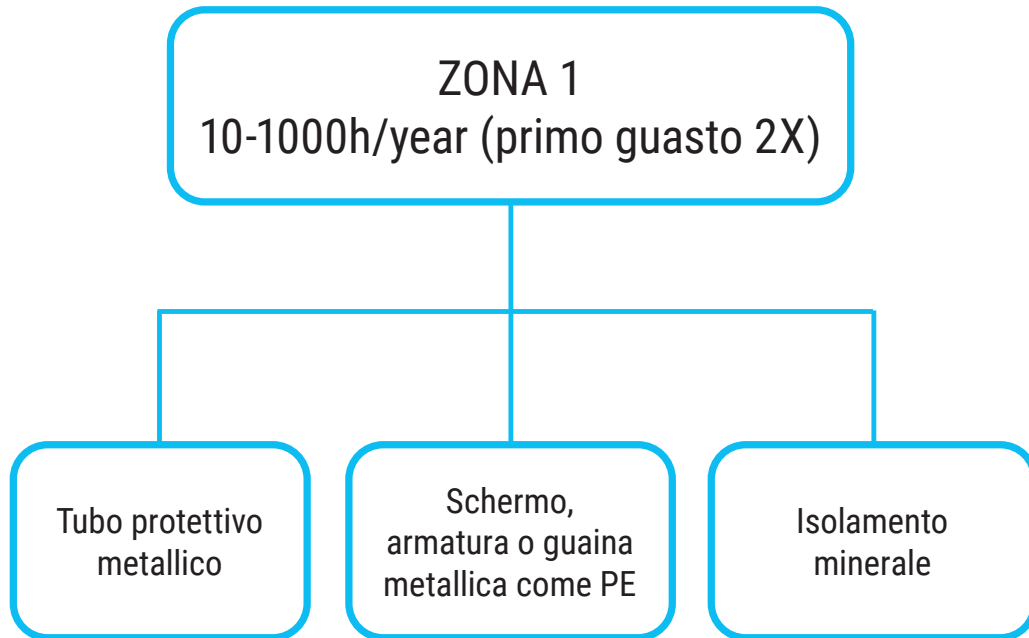
✓ In-house testing equipment to release immediate test report

Cables suitable for use in gas plants with high risk of gas dispersion, when buffered cable glands are not provided



# ATEX

## Conduttore - Tipi di cavi - GAS



# I CAVI negli impianti ATEX:

La norma ATEX EN60079-14 per quanto riguarda i cavi li considera degli elementi passivi, quindi vengono date delle indicazioni costruttive in funzione del tipo di impiantistica scelta dal progettista, ma non definisce una certificazione o metodo di prova od omologazione specifica, quindi possiamo dire che non esiste una certificazione "ATEX" per i cavi.

Le prescrizioni generali e principali per i cavi utilizzati in zona ATEX prevedono che la guaina deve essere di tipo robusto ed estruso in modo compatto e solidale al cavo interno detto "a compressione" (non a tubo) ed di forma esterna quanto più circolare possibile, questo per permettere al pressacavo di serrare in modo compatto il cavo sia sull'esterno della guaina che al suo interno.

Le guaine devono essere resistenti ai raggi UV ed agli agenti chimici presenti nell'impianto, se questo non fosse possibile il cavo deve essere posato all'interno di una tubazione idonea seguendo le prescrizioni nella norma EN60079-14. Negli impianti particolarmente gravosi dove i rischi di danni meccanici e di agenti chimici sono elevati bisogna utilizzare cavi armati e schermati.

Per quanto riguarda la protezione alla propagazione dell'incendio nella norma è prescritto che i cavi devono essere antifiamma secondo norme IEC60332.3-22, altrimenti vanno posati in cunicoli riempiti di sabbia.

Per quanto riguarda la posa di cavi in impianti dove può essere presente anche solo in caso di guasto del gas tossico e/o corrosivo e che vanno dal campo in zona sicura (sala controllo o aree tecniche presidiate), è indispensabile fare in modo che l'eventuale gas non possa percorrere il cavo al suo interno "effetto camino" ed entrare nei locali presidiati causando una intossicazione o incendio/esplosione, per fare questo esistono due metodi, quello più utilizzato è l'uso di pressacavi tamponati detti a tre pezzi che una volta installati vengono riempiti con un'apposita resina bloccante oppure esistono dei pressacavi tamponati ancora più performanti per situazioni gravose.

Altrimenti come previsto dall'annex "E" della norma EN60079-14 bisogna usare dei cavi tamponati al suo interno che non permettono secondo un test ben preciso la possibilità all'aria/gas di circolare.

Per quanto riguarda l'impiantistica EEx-d siccome i segnali o alimentazioni che percorrono la zona pericolosa all'interno del cavo non sono protetti (es. da una barriera S.I. in zona sicura), è estremamente importante proteggere il cavo meccanicamente da danni causati dall'esterno questo può essere fatto mettendo i cavi all'interno di tubazioni conduit oppure armando il cavo con ferro zincato.

Per quanto riguarda l'impiantistica EEx-I invece i segnali che sono all'interno dei cavi sono protetti dalle barriere a sicurezza intrinseca poste in sala controllo, quindi se anche il cavo accidentalmente si rompesse non potrebbe causare alcun danno e accensione di miscele esplosive.

Di conseguenza quando vengono utilizzati cavi armati o con protezioni meccaniche (es. in tubo) è solo per motivi d'impiantistica e per non rischiare di perdere i segnali in caso di danneggiamento del cavo.

Mentre invece per i cavi negli impianti a sicurezza intrinseca è fondamentale fare attenzione ed eventuali concatenamenti di energia fra le coppie o campi magnetici indotti che potrebbero arrivare da altri cavi esterni.

Per questo è indispensabile utilizzare cavi opportunamente schermati (solitamente in nastri di Alluminio/PET più drenaggio) possibilmente anche sulle singole coppie più totale delle coppie e mettere tutti gli schermi a terra in un solo punto su di una barra di terra apposita in sala controllo e segregare le circuitazioni in modo da tenere i cavi con segnali a S.I. distanti o in canaline separate da tutti gli altri cavi contenenti altre circuitazioni. Inoltre è vietato mettere all'interno dei cavi per circuitazioni EEx-I altri segnali non EEx-i.

Solitamente un cavo di qualità per le circuitazioni a Sicurezza intrinseca dovrebbe avere dei valori di Capacità più bassi possibile  $\leq 200\text{pF/mt}$  in quanto il cavo potrebbe agire come un condensatore accumulando energia al suo interno che sommata all'energia erogata dalla barriera potrebbe causare l'innescò in zona pericolosa e dovrebbe avere valori di induttanza altrettanto bassi  $\leq 1\text{microH/mt}$  in quanto l'induttanza generata dalle singole coppie del cavo potrebbero creare dei campi induttivi che potrebbero concatenare un'energia nelle coppie adiacenti che sommata all'energia generate dalla barriera potrebbero generare l'innescò in zona pericolosa ed un grado d'isolamento del cavo di almeno 500V.

Per l'impiantistica EEx-e vigono le stesse regole degli impianti EEx-d.

# Extremes climates

## Desert

UV and weathering resistant cables according to ISO 4892 and with armouring for direct burial

## Artic

Cables resistant to artic temperatures up to  $-52^{\circ}\text{C}$  as per IEC 60811

Cold bending test  $-35^{\circ}\text{C}$

Wiht laying minimum temperature  $-15^{\circ}\text{C}$

**Cables are EAC TRCU certified and have technical passport 004/2011 for Russia**





# Fire behaviours

## Flame retardancy test:

acc.to IEC 60332-1 | CEI 20-35 | EN50265-2-1

acc.to IEC 60332-3-24 | CEI 20-22/3 | EN50266-2-4

acc.to IEC 60332-3-22 | CEI 20-22/2 | EN50265-2-2

## Low smoke and halogen free:

acc.to IEC 60754-2 | CEI 20-37/2 | EN50267-2-2

## Low smoke density emission:

acc.to IEC 61034 | EN50268

## Fire resistant test:

according to IEC 60331-11

according to IEC 60331-21

according to IEC 60331-23

according to CEI EN 50200 (PH30-PH60-PH90-PH120)

according to BS6387

according to BS8434-2 (water spray)

## Class Cca s1b-d1-a1:

according to CPR EU 305/2011 | EN 50575:2014 A1

## Class B2ca s1b-d1a1:

according to CPR EU 305/2011 | EN 50575:2014 A1

## Class ECA:





according to CPR EU 305/2011 | EN 50575:2014 A1

**CPR**  
 PRODOTTI DA  
 COSTRUZIONE



Il Comitato Elettrotecnico Italiano ha emesso, in data 1° settembre 2016, la Norma CEI UNEL 35016 che fissa, sulla base delle prescrizioni normative installative CENELEC e CEI, le quattro classi di reazione al fuoco per i cavi elettrici in relazione al Regolamento Prodotti da Costruzione (UE 305/2011), che consentono di rispettare le prescrizioni installative nell'attuale versione della Norma CEI 64-8. Norma CEI UNEL si applica a tutti i cavi elettrici, siano essi per il trasporto di energia o di trasmissione dati con conduttori metallici o dielettrici, per installazioni permanenti negli edifici e opere di ingegneria civile con lo scopo di supportare progettisti ed utilizzatori nella scelta del cavo adatto per ogni tipo di installazione.

## CPR tabella di correlazione

LUOGHI DI IMPIEGO	LIVELLO DI RISCHIO	DESIGNAZIONE CPR	CLASSE DI PRESTAZIONE
 <p>Aerostazioni, stazioni ferroviarie, stazioni marittime, metropolitane in tutto o in parte sotterranee. Gallerie stradali di lunghezza superiore a 500 m, ferroviarie superiori a 1000 m.</p>	ALTO	FG180M16 0,6/1Kv	B2ca-s1a, d1, a1
 <p>Strutture sanitarie, locali di spettacolo e di intrattenimento in genere, palestre e centri sportivi. Alberghi, pensioni, motel, villaggi, residenze turistico-alberghiere. Scuole di ogni ordine, grado e tipo. Locali adibiti ad esposizione e/o vendita all'ingrosso o al dettaglio. Aziende ed uffici con oltre 300 persone presenti; biblioteche ed archivi, musei, gallerie, esposizioni e mostre. Edifici destinati ad uso civile, con altezza antincendio superiore a 24 m.</p>	MEDIO	FG160M16 0,6/1Kv	Cca-s1b, d1, a1
 <p>Edifici destinati ad uso civile, con altezza antincendio inferiore a 24 m, sale d'attesa, bar, ristoranti, studi medici.</p>	BASSO (posa a fascio)	FG160R16 0,6/1Kv	Cca-s3, d1, a3
 <p>Altre attività: installazioni non previste negli edifici di cui sopra e dove non esiste rischio di incendio e pericolo per persone e/o cose.</p>	BASSO (posa singola)	FR20R 4501750V	Eca

### ESEMPIO DI CLASSIFICAZIONE

**Cca**

#### PROPAGAZIONE INCENDIO

- Lunghezza di propagazione della fiamma:  $FS \leq 2,0$  m
- Quantità totale di calore rilasciato:  $THR_{1200s} \leq 30$  MJ
- Valore del picco di calore rilasciato: Picco HRR  $\leq 60$  KW
- Tasso di incremento dell'incendio:  $FIGRA \leq 300$  Ws<sup>-1</sup>
- Altezza di bruciatura:  $H \leq 425$ mm

**s1b**

#### FUMI

- Quantità totale di fumo emesso:  $TSP_{1200s} \leq 50$  m<sup>2</sup>
- Valore del picco del fumo emesso: picco SPR  $\leq 0,25$  m<sup>2</sup>/s
- Trasmittanza:  $\geq 60$  % < 80 %

**d1**

#### GOCCE

- Assenza di gocce/particelle ardenti persistenti: oltre i 10 s entro 1200 s

**a1**

#### ACIDITÀ

- Conduttività:  $< 2,5$   $\mu$  S/mm e pH > 4,3



# I requisiti considerati rilevanti per i cavi

## A) SICUREZZA IN CASO DI INCENDIO (Requisito n. 2 – Allegato 1 del Regolamento CPR)

Le opere di costruzione devono essere concepite e realizzate in modo che, in caso di incendio:

1. La generazione e la propagazione del fuoco e del fumo al loro interno siano limitate
2. La propagazione del fuoco a opere di costruzione vicine sia limitata
3. Gli occupanti possano abbandonare le opere di costruzione o essere soccorsi in altro modo
4. Si tenga conto della sicurezza delle squadre di soccorso

## B) IGIENE, SALUTE E AMBIENTE (Requisito n. 3 – Allegato 1 del Regolamento CPR)

Le opere di costruzione devono essere concepite e realizzate in modo da non rappresentare, durante il loro intero ciclo di vita, una minaccia per l'igiene o la salute e la sicurezza.

La conformità dei cavi al requisito di igiene, salute e ambiente si ritiene implicitamente assolto dal rispetto della Direttiva RoHS (2011/65/UE e successivi adeguamenti) e del Regolamento REACH (1907/2006/CE).

## Il Regolamento Prodotti da Costruzione per i Cavi

### ? I CAVI ELETTRICI RICADONO NEL REGOLAMENTO CPR?

Tutti i cavi elettrici per energia, controllo e telecomunicazioni di qualsiasi tensione e tipo di conduttore sono richiamati dalla tabella 1 dell'allegato IV del Regolamento CPR che definisce i vari livelli di prestazione con l'obiettivo di limitare la generazione la propagazione dell'incendio e le emissioni di fumo, riconoscendo l'importanza del loro comportamento ed il loro ruolo in caso di incendio.

### ? COSA COMPORTA PER I CAVI RICADERE NELLO SCOPO DELLA CPR?

Con l'emissione di un cavo sul mercato occorrerà che il produttore rediga la Dichiarazione di Prestazione (DoP: Declaration of performance) di quel cavo come da allegato III del Regolamento CPR e che sia in possesso dei requisiti necessari per poter porre la marcatura CE assumendosi la responsabilità della conformità del prodotto a quanto dichiarato. La DoP dovrà accompagnare ogni cavo immesso sul mercato fino all'utilizzatore finale, il quale dovrà esibirla alle autorità competenti qualora esse lo richiedano (art. 7 del Regolamento CPR) potrà essere fornita informata cartacea o su supporto elettronico.

### ? COSA SI INTENDE PER INGEGNERIA CIVILE?

Si definiscono opere di ingegneria civile i lavori di costruzione, manutenzione, riparazione, demolizione, conservazione, risanamento, ristrutturazione o equipaggiamento, la trasformazione, il rinnovamento o lo smantellamento di opere fisse, permanenti o temporanee, in muratura, in cemento armato, in metallo, in legno o in altri materiali, comprese le parti strutturali delle linee elettriche e le parti strutturali degli impianti elettrici, le opere stradali, ferroviarie, idrauliche, marittime, idroelettriche e, solo per la parte che comporta lavori edili o di ingegneria civile, le opere di bonifica, di sistemazione forestale e di sterro. Sono, inoltre, lavori di costruzione edile o di ingegneria civile gli scavi ed il montaggio e lo smontaggio di elementi prefabbricati utilizzati per la realizzazione di lavori edili o di ingegneria civile. (Testo unico sulla salute e sicurezza sul lavoro art. 89, comma 1, lettera a).

### ? QUALI CAVI SONO INCLUSI SOTTO LA CPR? – Fonte Europacable –

Cavi per installazioni permanenti nelle costruzioni che rientrano nell'ambito di due tipologie di prodotti:

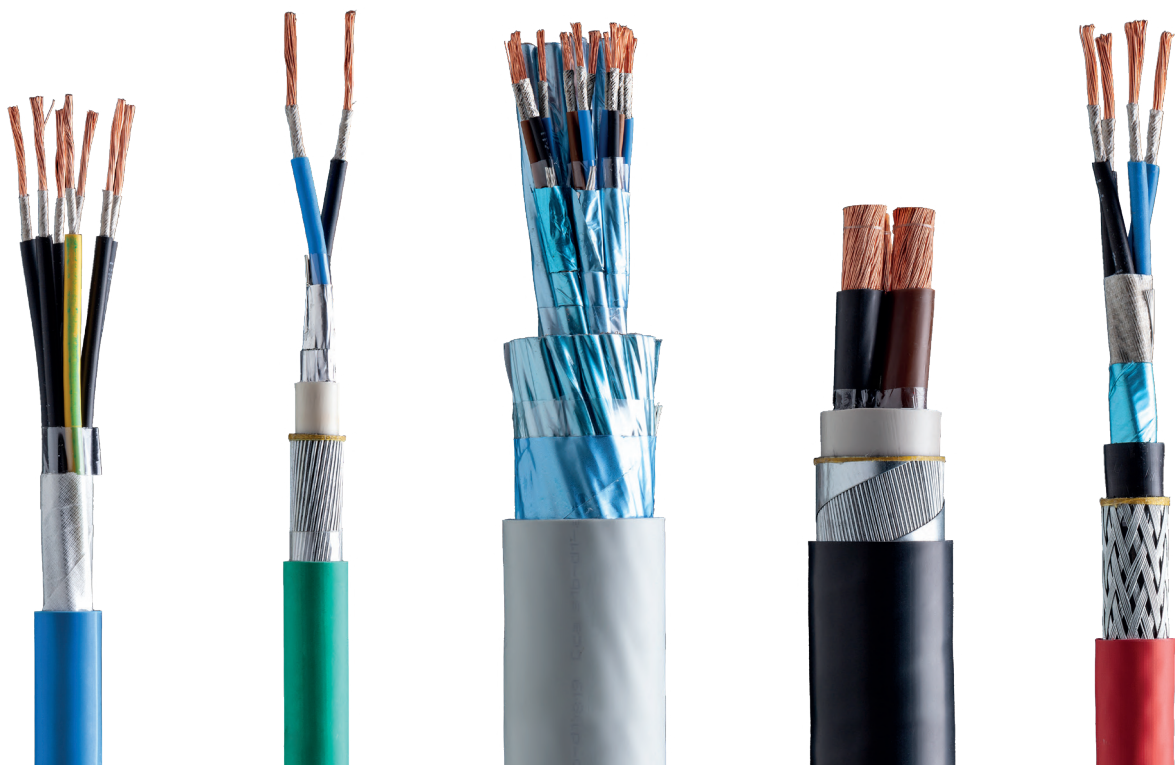
- Cavi destinati ad essere utilizzati per la fornitura di energia elettrica e delle comunicazioni in edifici e altre opere di ingegneria civile soggetti a requisiti prestazionali di reazione al fuoco;
- E in futuro cavi soggetti a requisiti prestazionali di resistenza al fuoco destinati ad essere utilizzati per la fornitura di energia elettrica, delle comunicazioni e rilevazione/allarme incendio in edifici e altre opere di ingegneria civile dove è essenziale assicurare la continuità nella fornitura di energia e/o segnale per la sicurezza dell'installazione.





 **Sensitherm** 

Special cables on demand since 1999 - CPR UE 305/2011 COMPLIANCE



# CPR approved special cables

## **INSTRUMENTATION CABLE - 101 CPR EU 305/2011 12**

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

## **INSTRUMENTATION CABLE - 102 CPR EU 305/2011 20**

CU, G16 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR,  
M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE

## **MULTICORE POWER CABLE - 103 CPR EU 305/2011 36**

CU, G16 INSULATION, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE

## **INSTRUMENTATION CABLE - 104 CPR EU 305/2011 42**

CU, G16 INSULATION, INDIVIDUAL ALUMINIUM SCREEN AND COPPER WIRE BRAID OVERALL SCREEN, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE

## **CONTROL AND POWER CABLE - 105 CPR EU 305/2011 44**

CU, G16 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE

## **CONTROL AND POWER CABLE - 106 CPR EU 305/2011 48**

CU, G16 INSULATION, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE

## **CONTROL AND POWER CABLE - 107 CPR EU 305/2011 51**

CU, G16 INSULATION, R16 INNER SHEATH, STEEL WIRE ARMOUR, R16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3

## **INSTRUMENTATION CABLE - 108 CPR EU 305/2011 57**

CU, PVC INSULATED, INDIVIDUAL AND OVERALL SCREEN, PVC BEDDING, SWA, PVC OUTER SHEATH  
IEC 60332.1 IEC 60332.3 – HALOGEN FREE

## **FIRE RESISTANT CABLE - 110 CPR EU 305/2011 60**

F Conductor, FR-HEPR G18 INSULATION, M16 OUTER SHEATH. EN50200 PH 120,  
IEC 60502-1, IEC 60332.3 – HALOGEN FREE

## **POWER AND CONTROL CABLE - 111 CPR EU 305/2011 63**

F Conductor, FR-HEPR G18 INSULATION, M16 OUTER SHEATH.  
IEC 60502-1, IEC 60332.3 – HALOGEN FREE – CPR B2ca s1a d0 a1

## **FIRE RESISTANT INSTRUMENTATION CABLE - 112 CPR EU 305/2011 66**

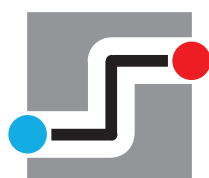
Conductor, MGT, G18 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 OUTER SHEATH.  
EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE

## **FIRE RESISTANT INSTRUMENTATION CABLE - 113 CPR EU 305/2011 70**

Conductor, MGT, G18 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH,  
STEEL WIRE ARMOUR, M16 OUTER SHEATH. EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE

## **CONTROL AND POWER CABLE - 114 CPR EU 305/2011 82**

CU, G16 INSULATION, OVERALL SCREEN PCWB, R16 INNER SHEATH, SWB ARMOUR, R16 OUTER SHEATH.  
IEC 60332.1 - IEC 60332.3 – OIL RESISTANT – CPR Cca s3, d1, a3



# Sensitherm



Special cables on demand since 1999 - CPR UE 305/2011 COMPLIANCE

# Instrumentation Cable – 101-1

# CPR EU 305/2011

**Conductor, G16 INSULATION, OVERALL SCREEN, M16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 101-1/23 10/11/2023 Rev. 0

**Type:** FG16OHM16 0,6/1 KV - FG16XOHM16 0,6/1Kv

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

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

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

**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.

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

**Marking:** On the outer sheath "Sensitherm – FG16XHOHM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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 emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Cable for intrinsically safe application
- Inductance <math>\leq 0,90\text{ mH/Km}</math>
- Capacitance <math>\leq 0,200\text{ }\mu\text{F/Km}</math>
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval
- CPR approved Cca s1b,d1,a1

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM			THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1011900501	1011501501	FG16OHM16	0,6/1KV	1x2x0,75 mm <sup>2</sup>	1,8	8,8	110	88
1011900502	1011501502	FG16XOHM16	0,6/1KV	2x2x0,75 mm <sup>2</sup>	1,8	12,3	190	129
1011900503	1011501503	FG16XOHM16	0,6/1KV	3x2x0,75 mm <sup>2</sup>	1,8	12,9	240	136
1011900504	1011501504	FG16XOHM16	0,6/1KV	4x2x0,75 mm <sup>2</sup>	1,8	14	280	147
1011900505	1011501505	FG16XOHM16	0,6/1KV	5x2x0,75 mm <sup>2</sup>	1,8	15,3	340	161
1011900506	1011501506	FG16XOHM16	0,6/1KV	6x2x0,75 mm <sup>2</sup>	1,8	16,5	380	174
1011900507	1011501507	FG16XOHM16	0,6/1KV	7x2x0,75 mm <sup>2</sup>	1,8	16,7	430	176
1011900508	1011501508	FG16XOHM16	0,6/1KV	12x2x0,75 mm <sup>2</sup>	2,0	21,9	670	230
1011900509	1011501509	FG16XOHM16	0,6/1KV	16x2x0,75 mm <sup>2</sup>	2,0	24,3	860	256
1011900510	1011501510	FG16XOHM16	0,6/1KV	24x2x0,75 mm <sup>2</sup>	2,0	28,5	1190	300
1011900511	1011501511	FG16OHM16	0,6/1KV	1x2x1 mm <sup>2</sup>	1,8	9	120	90
1011900512	1011501512	FG16XOHM16	0,6/1KV	2x2x1 mm <sup>2</sup>	1,8	12,8	210	135
1011900513	1011501513	FG16XOHM16	0,6/1KV	3x2x1 mm <sup>2</sup>	1,8	13,3	260	140
1011900514	1011501514	FG16XOHM16	0,6/1KV	4x2x1 mm <sup>2</sup>	1,8	14,7	310	155
1011900515	1011501515	FG16XOHM16	0,6/1KV	5x2x1 mm <sup>2</sup>	1,8	17,7	380	168
1011900516	1011501516	FG16XOHM16	0,6/1KV	6x2x1 mm <sup>2</sup>	1,8	17,5	240	184
1011900517	1011501517	FG16XOHM16	0,6/1KV	7x2x1 mm <sup>2</sup>	1,8	17,7	480	186
1011900518	1011501518	FG16XOHM16	0,6/1KV	12x2x1 mm <sup>2</sup>	2,0	22,8	760	240
1011900519	1011501519	FG16XOHM16	0,6/1KV	16x2x1 mm <sup>2</sup>	2,0	25,7	980	270
1011900520	1011501520	FG16XOHM16	0,6/1KV	24x2x1 mm <sup>2</sup>	2,0	30,9	1350	325
1011900521	1011501521	FG16OHM16	0,6/1KV	1x2x1,5 mm <sup>2</sup>	1,8	9,5	130	95
1011900522	1011501522	FG16XOHM16	0,6/1KV	2x2x1,5 mm <sup>2</sup>	1,8	13,7	240	144
1011900523	1011501523	FG16XOHM16	0,6/1KV	3x2x1,5 mm <sup>2</sup>	1,8	14,3	300	150
1011900524	1011501524	FG16XOHM16	0,6/1KV	4x2x1,5 mm <sup>2</sup>	1,8	15,7	370	165
1011900525	1011501525	FG16XOHM16	0,6/1KV	5x2x1,5 mm <sup>2</sup>	1,8	17,1	450	180
1011900526	1011501526	FG16XOHM16	0,6/1KV	6x2x1,5 mm <sup>2</sup>	1,8	18,6	500	196
1011900527	1011501527	FG16XOHM16	0,6/1KV	7x2x1,5 mm <sup>2</sup>	1,8	18,8	670	198
1011900528	1011501528	FG16XOHM16	0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	24,7	900	260
1011900529	1011501529	FG16XOHM16	0,6/1KV	16x2x1,5 mm <sup>2</sup>	2,0	27,6	1180	290
1011900530	1011501530	FG16XOHM16	0,6/1KV	24x2x1,5 mm <sup>2</sup>	2,0	33,3	1630	350
1011900531	1011501531	FG16XHM16	0,6/1KV	1x2x2,5 mm <sup>2</sup>	1,8	10,6	170	106
1011900532	1011501532	FG16XOHM16	0,6/1KV	2x2x2,5 mm <sup>2</sup>	1,8	15,2	300	160

1011900533	1011501533	FG16XOHM16	0,6/1KV	3x2x2,5 mm <sup>2</sup>	1,8	16	380	168
1011900534	1011501534	FG16XOHM16	0,6/1KV	4x2x2,5 mm <sup>2</sup>	1,8	17,5	480	184
1011900535	1011501535	FG16XOHM16	0,6/1KV	5x2x2,5 mm <sup>2</sup>	1,8	19,6	600	206
1011900536	1011501536	FG16XOHM16	0,6/1KV	6x2x2,5 mm <sup>2</sup>	2,0	21,9	680	230
1011900537	1011501537	FG16XOHM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	2,0	22,2	770	234
1011900538	1011501538	FG16XOHM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	27,6	1200	290
1011900539	1011501539	FG16XOHM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	2,0	31	1570	326
1011900540	1011501540	FG16XOHM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	2,0	38	2200	400
1011900541	1011501541	FG16OHM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	1,8	9	130	90
1011900542	1011501542	FG16XOHM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	1,8	14,3	240	150
1011900543	1011501543	FG16XOHM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	1,8	15	290	158
1011900544	1011501544	FG16XOHM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	1,8	16,4	360	173
1011900545	1011501545	FG16XOHM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	1,8	18	440	189
1011900546	1011501546	FG16XOHM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	1,8	20	500	210
1011900547	1011501547	FG16XOHM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	1,8	20,5	560	216
1011900548	1011501548	FG16XOHM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	2,0	25,7	880	270
1011900549	1011501549	FG16XOHM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	2,0	28,7	1150	302
1011900550	1011501550	FG16XOHM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	2,0	33,3	1580	350
1011900551	1011501551	FG16OHM16	0,6/1KV	1x3x1 mm <sup>2</sup>	1,8	9,6	140	96
1011900552	1011501552	FG16XOHM16	0,6/1KV	2x3x1 mm <sup>2</sup>	1,8	14	270	148
1011900553	1011501553	FG16XOHM16	0,6/1KV	3x3x1 mm <sup>2</sup>	1,8	14,5	330	153
1011900554	1011501554	FG16XOHM16	0,6/1KV	4x3x1 mm <sup>2</sup>	1,8	16,2	410	170
1011900555	1011501555	FG16XOHM16	0,6/1KV	5x3x1 mm <sup>2</sup>	1,8	19	500	200
1011900556	1011501556	FG16XOHM16	0,6/1KV	6x3x1 mm <sup>2</sup>	1,8	20,7	560	218
1011900557	1011501557	FG16XOHM16	0,6/1KV	7x3x1 mm <sup>2</sup>	1,8	20,9	640	220
1011900558	1011501558	FG16XOHM16	0,6/1KV	12x3x1 mm <sup>2</sup>	2,0	27,6	980	290
1011900559	1011501559	FG16XOHM16	0,6/1KV	16x3x1 mm <sup>2</sup>	2,0	30,8	1310	324
1011900560	1011501560	FG16XOHM16	0,6/1KV	24x3x1 mm <sup>2</sup>	2,0	36,1	1770	380
1011900561	1011501561	FG16XOHM16	0,6/1KV	27x3x1 mm <sup>2</sup>	2,0	40	1940	430
1011900562	1011501562	FG16OHM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	1,8	10	160	100
1011900563	1011501563	FG16XOHM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	1,8	16	310	168
1011900564	1011501564	FG16XOHM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	1,8	16,9	400	178
1011900565	1011501565	FG16XOHM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	1,8	18,5	490	195
1011900566	1011501566	FG16XOHM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	1,8	20,3	600	214
1011900567	1011501567	FG16XOHM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	2,0	22,8	700	240



1011900568	1011501568	FG16XOHM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	2,0	23,6	800	248
1011900569	1011501569	FG16XOHM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	29,5	1230	310
1011900570	1011501570	FG16XOHM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	2,0	33	1600	348
1011900571	1011501571	FG16XOHM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	2,0	40,9	2240	430
1011900572	1011501572	FG16OHM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	1,8	11	210	110
1011900573	1011501573	FG16XOHM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	1,8	18,01	400	190
1011900574	1011501574	FG16XOHM16	0,6/1KV	3x3x2,5 mm <sup>2</sup>	1,8	19	510	200
1011900575	1011701575	FG16XOHM16	0,6/1KV	4x3x2,5 mm <sup>2</sup>	1,8	20,9	640	220
1011900576	1011501576	FG16XOHM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	2,0	25,7	930	270
1011900577	1011501577	FG16XOHM16	0,6/1KV	12x3x2,5 mm <sup>2</sup>	2,0	33,3	1140	350

**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.

# Instrumentation Cable – 101-2

# CPR EU 305/2011

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

Technical Specifications n° 101-2/23 10/11/2023 Rev. 0

**Type:** FG16XHOHM16 0,6/1 KV - FG16OHM16 0,6/1Kv

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

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

**Laying up:** Twisted to pair, Blue - Black numbered (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.

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

**Marking:** On the outer sheath "Sensitherm – FG16XHOHM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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 emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- 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)
- EN50575 tested for approval
- CPR approved Cca s1b,d1,a1

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM			THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1012900501	1012501501	FG160HM16	0,6/1KV	1x2x0,75 mm <sup>2</sup>	1,8	8,8	110	88
1012900502	1012501502	FG16XHOHM16	0,6/1KV	2x2x0,75 mm <sup>2</sup>	1,8	12,9	200	129
1012900503	1012501503	FG16XHOHM16	0,6/1KV	3x2x0,75 mm <sup>2</sup>	1,8	13,6	250	136
1012900504	1012501504	FG16XHOHM16	0,6/1KV	4x2x0,7 5mm <sup>2</sup>	1,8	14,7	300	147
1012900505	1012501505	FG16XHOHM16	0,6/1KV	5x2x0,75 mm <sup>2</sup>	1,8	16,1	360	161
1012900506	1012501506	FG16XHOHM16	0,6/1KV	6x2x0,75 mm <sup>2</sup>	1,8	17,4	400	174
1012900507	1012501507	FG16XHOHM16	0,6/1KV	7x2x0,75 mm <sup>2</sup>	1,8	17,6	450	176
1012900508	1012501508	FG16XHOHM16	0,6/1KV	12x2x0,75 mm <sup>2</sup>	2,0	23	700	230
1012900509	1012501509	FG16XHOHM16	0,6/1KV	16x2x0,75 mm <sup>2</sup>	2,0	25,6	910	256
1012900510	1012501510	FG16XHOHM16	0,6/1KV	24x2x0,75 mm <sup>2</sup>	2,0	30	1250	300
1012900511	1012501511	FG160HM16	0,6/1KV	1x2x1 mm <sup>2</sup>	1,8	9	120	90
1012900512	1012501512	FG16XHOHM16	0,6/1KV	2x2x1 mm <sup>2</sup>	1,8	13,5	220	135
1012900513	1012501513	FG16XHOHM16	0,6/1KV	3x2x1 mm <sup>2</sup>	1,8	14	270	140
1012900514	1012501514	FG16XHOHM16	0,6/1KV	4x2x1 mm <sup>2</sup>	1,8	15,5	330	155
1012900515	1012501515	FG16XHOHM16	0,6/1KV	5x2x1 mm <sup>2</sup>	1,8	16,8	400	168
1012900516	1012501516	FG16XHOHM16	0,6/1KV	6x2x1 mm <sup>2</sup>	1,8	18,4	250	184
1012900517	1012501517	FG16XHOHM16	0,6/1KV	7x2x1 mm <sup>2</sup>	1,8	18,6	500	186
1012900518	1012501518	FG16XHOHM16	0,6/1KV	12x2x1 mm <sup>2</sup>	2,0	24	800	240
1012900519	1012501519	FG16XHOHM16	0,6/1KV	16x2x1 mm <sup>2</sup>	2,0	27	1030	270
1012900520	1012501520	FG16XHOHM16	0,6/1KV	24x2x1 mm <sup>2</sup>	2,0	32,5	1420	325
1012900521	1012501521	FG160HM16	0,6/1KV	1x2x1,5 mm <sup>2</sup>	1,8	9,5	130	95
1012900522	1012501522	FG16XHOHM16	0,6/1KV	2x2x1,5 mm <sup>2</sup>	1,8	14,4	250	144
1012900523	1012501523	FG16XHOHM16	0,6/1KV	3x2x1,5 mm <sup>2</sup>	1,8	15	320	150
1012900524	1012501524	FG16XHOHM16	0,6/1KV	4x2x1,5 mm <sup>2</sup>	1,8	16,5	390	165
1012900525	1012501525	FG16XHOHM16	0,6/1KV	5x2x1,5 mm <sup>2</sup>	1,8	18	470	180
1012900526	1012501526	FG16XHOHM16	0,6/1KV	6x2x1,5 mm <sup>2</sup>	1,8	19,6	530	196
1012900527	1012501527	FG16XHOHM16	0,6/1KV	7x2x1,5 mm <sup>2</sup>	1,8	19,8	600	198
1012900528	1012501528	FG16XHOHM16	0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	26	950	260
1012900529	1012501529	FG16XHOHM16	0,6/1KV	16x2x1,5 mm <sup>2</sup>	2,0	29	1240	290
1012900530	1012501530	FG16XHOHM16	0,6/1KV	24x2x1,5 mm <sup>2</sup>	2,0	35	1720	350
1012900531	1012501531	FG16XHM16	0,6/1KV	1x2x2,5 mm <sup>2</sup>	1,8	10,6	170	106
1012900532	1012501532	FG16XHOHM16	0,6/1KV	2x2x2,5 mm <sup>2</sup>	1,8	16	320	160

1012900533	1012501533	FG16XHOHM16	0,6/1KV	3x2x2,5 mm <sup>2</sup>	1,8	16,8	400	168
1012900534	1012501534	FG16XHOHM16	0,6/1KV	4x2x2,5 mm <sup>2</sup>	1,8	18,4	500	184
1012900535	1012501535	FG16XHOHM16	0,6/1KV	5x2x2,5 mm <sup>2</sup>	1,8	20,6	630	206
1012900536	1012501536	FG16XHOHM16	0,6/1KV	6x2x2,5 mm <sup>2</sup>	2,0	23	720	230
1012900537	1012501537	FG16XHOHM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	2,0	23,4	810	234
1012900538	1012501538	FG16XHOHM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	29	1260	290
1012900539	1012501539	FG16XHOHM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	2,0	32,6	1650	326
1012900540	1012501540	FG16XHOHM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	2,0	40	2300	400
1012900541	1012501541	FG16OHM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	1,8	9	130	90
1012900542	1012501542	FG16XHOHM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	1,8	15	250	150
1012900543	1012501543	FG16XHOHM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	1,8	15,8	310	158
1012900544	1012501544	FG16XHOHM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	1,8	17,3	380	173
1012900545	1012501545	FG16XHOHM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	1,8	18,9	460	189
1012900546	1012501546	FG16XHOHM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	1,8	21	520	210
1012900547	1012501547	FG16XHOHM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	1,8	21,6	590	216
1012900548	1012501548	FG16XHOHM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	2,0	27	930	270
1012900549	1012501549	FG16XHOHM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	2,0	30,2	1210	302
1012900550	1012501550	FG16XHOHM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	2,0	35	1660	350
1012900551	1012501551	FG16OHM16	0,6/1KV	1x3x1 mm <sup>2</sup>	1,8	9,6	140	96
1012900552	1012501552	FG16XHOHM16	0,6/1KV	2x3x1 mm <sup>2</sup>	1,8	14,8	280	148
1012900553	1012501553	FG16XHOHM16	0,6/1KV	3x3x1 mm <sup>2</sup>	1,8	15,3	350	153
1012900554	1012501554	FG16XHOHM16	0,6/1KV	4x3x1 mm <sup>2</sup>	1,8	17	430	170
1012900555	1012501555	FG16XHOHM16	0,6/1KV	5x3x1 mm <sup>2</sup>	1,8	20	520	200
1012900556	1012501556	FG16XHOHM16	0,6/1KV	6x3x1 mm <sup>2</sup>	1,8	21,8	590	218
1012900557	1012501557	FG16XHOHM16	0,6/1KV	7x3x1 mm <sup>2</sup>	1,8	22	670	220
1012900558	1012501558	FG16XHOHM16	0,6/1KV	12x3x1 mm <sup>2</sup>	2,0	29	1030	290
1012900559	1012501559	FG16XHOHM16	0,6/1KV	16x3x1 mm <sup>2</sup>	2,0	32,4	1380	324
1012900560	1012501560	FG16XHOHM16	0,6/1KV	24x3x1 mm <sup>2</sup>	2,0	38	1860	380
1012900561	1012501561	FG16XHOHM16	0,6/1KV	27x3x1 mm <sup>2</sup>	2,0	42	2040	430
1012900562	1012501562	FG16OHM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	1,8	10	160	100
1012900563	1012501563	FG16XHOHM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	1,8	16,8	330	168
1012900564	1012501564	FG16XHOHM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	1,8	17,8	420	178
1012900565	1012501565	FG16XHOHM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	1,8	19,5	510	195
1012900566	1012501566	FG16XHOHM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	1,8	21,4	630	214
1012900567	1012501567	FG16XHOHM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	2,0	24	740	240

1012900568	1012501568	FG16XHOHM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	2,0	24,8	840	248
1012900569	1012501569	FG16XHOHM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	31	1290	310
1012900570	1012501570	FG16XHOHM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	2,0	34,8	1690	348
1012900571	1012501571	FG16XHOHM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	2,0	43	2360	430
1012900572	1012501572	FG16OHM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	1,8	11	210	110
1012900573	1012501573	FG16XHOHM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	1,8	19	420	190
1012900574	1012501574	FG16XHOHM16	0,6/1KV	3x3x2,5 mm <sup>2</sup>	1,8	20	540	200
1012900575	1012701575	FG16XHOHM16	0,6/1KV	4x3x2,5 mm <sup>2</sup>	1,8	22	670	220
1012900576	1012501576	FG16XHOHM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	2,0	27	980	270
1012900577	1012501577	FG16XHOHM16	0,6/1KV	12x3x2,5 mm <sup>2</sup>	2,0	35	1750	350

**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.

# Instrumentation Cable – 102-1

# CPR EU 305/2011

**Conductor, G16 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH**

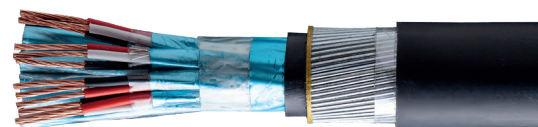
**IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 102-1/23 of 10/11/2023 Rev. 0

**Type:** FG16XOHM16AM16 0,6/1KV, FG16OHM16AM16 0M6/1Kv

**Conductor:** Flexible metal conductor according to IEC 60228

**Insulation:** EPR G16 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

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

**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: Blue/Black/Green (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16XOHM16AM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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, CE I20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- CPR approved Cca s1b,d1,a1
- Cable for intrinsically safe application
- Inductance <= 0,90 mH/Km
- Capacitance /= 0,200 µF/Km
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETE R MM	WEIGHT KG/KM	BENDING RADIUS MM
1021900501	1021501501	FG16OHM16AM16 0,6/1KV 1x2x0,75 mm <sup>2</sup>	7	1,8	11,8	230	160
1021900502	1021501502	FG16XOHM16AM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	11,4	1,8	15,1	350	220
1021900503	1021501503	FG16XOHM16AM16 0,6/1KV 3x2x0,75 mm <sup>2</sup>	12	1,8	15,5	410	230
1021900504	1021501504	FG16XOHM16AM16 0,6/1KV 4x2x0,75 mm <sup>2</sup>	13,2	1,8	16,6	480	250
1021900505	1021501505	FG16XOHM16AM16 0,6/1KV 5x2x0,75 mm <sup>2</sup>	14,5	1,8	18,4	560	280
1021900506	1021501506	FG16XOHM16AM16 0,6/1KV 6x2x0,75 mm <sup>2</sup>	16	1,8	19,1	630	290
1021900507	1021501507	FG16XOHM16AM16 0,6/1KV 7x2x0,75 mm <sup>2</sup>	16,2	1,8	19,7	670	310
1021900508	1021501508	FG16XOHM16AM16 0,6/1KV 12x2x0,75 mm <sup>2</sup>	21,4	2,0	24	1000	360
1021900509	1021501509	FG16XOHM16AM16 0,6/1KV 16x2x0,75 mm <sup>2</sup>	23,6	2,0	27,2	1270	420
1021900510	1021501510	FG16XOHM16AM16 0,6/1KV 24x2x0,75 mm <sup>2</sup>	30	2,0	31,3	1700	470
1021900511	1021501511	FG16OHM16AM16 0,6/1KV 1x2x1 mm <sup>2</sup>	7,6	1,8	12,4	250	170
1021900512	1021501512	FG16XOHM16AM16 0,6/1KV 2x2x1 mm <sup>2</sup>	12	1,8	15,5	380	230
1021900513	1021501513	FG16XOHM16AM16 0,6/1KV 3x2x1 mm <sup>2</sup>	12,7	1,8	16,1	450	250
1021900514	1021501514	FG16XOHM16AM16 0,6/1KV 4x2x1 mm <sup>2</sup>	14	1,8	17,5	520	270
1021900515	1021501515	FG16XOHM16AM16 0,6/1KV 5x2x1 mm <sup>2</sup>	15,4	1,8	19,1	620	300
1021900516	1021501516	FG16XOHM16AM16 0,6/1KV 6x2x1 mm <sup>2</sup>	17	1,8	20,2	690	310
1021900517	1021501517	FG16XOHM16AM16 0,6/1KV 7x2x1 mm <sup>2</sup>	16,8	1,8	20,6	750	320
1021900518	1021501518	FG16XOHM16AM16 0,6/1KV 12x2x1 mm <sup>2</sup>	23	2,0	25,8	1110	390
1021900519	1021501519	FG16XOHM16AM16 0,6/1KV 16x2x1 mm <sup>2</sup>	25	2,0	28,5	1410	430
1021900520	1021501520	FG16XOHM16AM16 0,6/1KV 24x2x1 mm <sup>2</sup>	31,4	2,0	33,1	1900	500
1021900521	1021501521	FG16OHM16AM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	8	1,8	12,8	280	180
1021900522	1021501522	FG16XOHM16AM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	12,8	1,8	16,4	420	250
1021900523	1021501523	FG16XOHM16AM16 0,6/1KV 3x2x1,5 mm <sup>2</sup>	13,8	1,8	17	500	260
1021900524	1021501524	FG16XOHM16AM16 0,6/1KV 4x2x1,5 mm <sup>2</sup>	15	1,8	18,4	600	280
1021900525	1021501525	FG16XOHM16AM16 0,6/1KV 5x2x1,5 mm <sup>2</sup>	16,6	1,8	20,2	710	310
1021900526	1021501526	FG16XOHM16AM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	18	1,8	21	790	330
1021900527	1021501527	FG16XOHM16AM16 0,6/1KV 7x2x1,5 mm <sup>2</sup>	18,4	1,8	21,8	860	340
1021900528	1021501528	FG16XOHM16AM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	24,6	2,0	27,4	1320	420
1021900529	1021501529	FG16XOHM16AM16 0,6/1KV 16x2x1,5 mm <sup>2</sup>	27	2,0	30,4	1670	460
1021900530	1021501530	FG16XOHM16AM16 0,6/1KV 24x2x1,5 mm <sup>2</sup>	34	2,0	34,6	2270	530
1021900531	1021501531	FG16XHM16AM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	9	1,8	13,8	326	220
1021900532	1021501532	FG16XOHM16AM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	14,4	1,8	17,8	510	280
1021900533	1021501533	FG16XOHM16AM16 0,6/1KV 3x2x2,5 mm <sup>2</sup>	15,6	1,8	19,1	620	300
1021900534	1021501534	FG16XOHM16AM16 0,6/1KV 4x2x2,5 mm <sup>2</sup>	17	1,8	20,2	750	310
1021900535	1021501535	FG16XOHM16AM16 0,6/1KV 5x2x2,5 mm <sup>2</sup>	18,6	1,8	22,6	910	350
1021900536	1021501536	FG16XOHM16AM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	21	1,8	23,4	1000	360

1021900537	1021501537	FG16XOHM16AM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	21,5	2,0	24,3	1130	380
1021900538	1021501538	FG16XOHM16AM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	27,3	2,0	30	1680	460
1021900539	1021501539	FG16XOHM16AM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	31	2,0	33,5	2170	520
1021900540	1021501540	FG16XOHM16AM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	38	2,0	39,6	3000	600
1021900541	1021501541	FG16OHM16AM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	7,6	1,8	12,4	260	170
1021900542	1021501542	FG16XOHM16AM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	13,5	1,8	17	430	270
1021900543	1021501543	FG16XOHM16AM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	14,5	1,8	18,2	510	280
1021900544	1021501544	FG16XOHM16AM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	15,8	1,8	19,8	600	290
1021900545	1021501545	FG16XOHM16AM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	17,3	1,8	21,7	710	320
1021900546	1021501546	FG16XOHM16AM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	19,2	1,8	22	790	340
1021900547	1021501547	FG16XOHM16AM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	19,5	2,0	22,6	860	350
1021900548	1021501548	FG16XOHM16AM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	25,8	2,0	28,2	1290	440
1021900549	1021501549	FG16XOHM16AM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	28,5	2,0	31,6	1660	490
1021900550	1021501550	FG16XOHM16AM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	35,6	2,0	33	2230	500
1021900551	1021501551	FG16OHM16AM16	0,6/1KV	1x3x1 mm <sup>2</sup>	8	1,8	13,2	290	180
1021900552	1021501552	FG16XOHM16AM16	0,6/1KV	2x3x1 mm <sup>2</sup>	14,3	1,8	18	480	280
1021900553	1021501553	FG16XOHM16AM16	0,6/1KV	3x3x1 mm <sup>2</sup>	15,2	1,8	19	570	300
1021900554	1021501554	FG16XOHM16AM16	0,6/1KV	4x3x1 mm <sup>2</sup>	16,6	1,8	20,4	670	310
1021900555	1021501555	FG16XOHM16AM16	0,6/1KV	5x3x1 mm <sup>2</sup>	18,4	1,8	22	780	340
1021900556	1021501556	FG16XOHM16AM16	0,6/1KV	6x3x1 mm <sup>2</sup>	20	2,0	23,7	890	370
1021900557	1021501557	FG16XOHM16AM16	0,6/1KV	7x3x1 mm <sup>2</sup>	20,2	2,0	24	990	370
1021900558	1021501558	FG16XOHM16AM16	0,6/1KV	12x3x1 mm <sup>2</sup>	27	2,0	30,4	1500	460
1021900559	1021501559	FG16XOHM16AM16	0,6/1KV	16x3x1 mm <sup>2</sup>	30	2,0	33	1870	500
1021900560	1021501560	FG16XOHM16AM16	0,6/1KV	24x3x1 mm <sup>2</sup>	37	2,0	40	2600	600
1021900561	1021501561	FG16OM16AM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	8,5	1,8	13,3	320	180
1021900562	1021501562	FG16XOHM16AM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	15,4	1,8	19	530	300
1021900563	1021501563	FG16XOHM16AM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	16,6	1,8	19,7	640	310
1021900564	1021501564	FG16XOHM16AM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	18	1,8	21,1	770	320
1021900565	1021501565	FG16XOHM16AM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	19,8	1,8	23,3	910	360
1021900566	1021501566	FG16XOHM16AM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	22	1,8	24,8	1040	380
1021900567	1021501567	FG16XOHM16AM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	22,2	2,0	25,6	1180	390
1021900568	1021501568	FG16XOHM16AM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	30	2,0	31,2	1740	480
1021900569	1021501569	FG16XOHM16AM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	33	2,0	35,2	2290	520
1021900570	1021501570	FG16XOHM16AM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	41	2,0	42,8	3080	630
1021900571	1021501571	FG16OHM16AM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	9,5	1,8	14,4	380	210
1021900572	1021501572	FG16XOHM16AM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	17,6	1,8	20,6	650	320
1021900573	1021501573	FG16XOHM16AM16	0,6/1KV	3x3x2,5 mm <sup>2</sup>	18,6	1,8	21,7	810	340
1021900574	1021501574	FG16XOHM16AM16	0,6/1KV	4x3x2,5 mm <sup>2</sup>	20,4	1,8	23,5	980	360



1021900575	1021501575	FG16XOHM16AM16	0,6/1KV	5x3x2,5 mm <sup>2</sup>	22,5	1,8	25,8	1160	390
1021900576	1021501576	FG16XOHM16AM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	25	2,0	27,6	1330	420
1021900577	1021501577	FG16XOHM16AM16	0,6/1KV	12x3x2,5 mm <sup>2</sup>	33,5	2,0	35	2290	530

**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.

# Instrumentation Cable – 102-2

# CPR EU 305/2011

**Conductor, G16 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

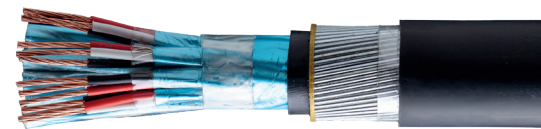
## Technical Specifications n° 102-2/23 of 10/15/2023 Rev. 0

**Type:** FG16XHOHM16AM16 0,6/1KV, FG16OHM16AM16 0M6/1Kv

**Conductor:** Flexible metal conductor according to IEC 60228

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

**Laying up:** Twisted to pair, Blue - Black numbered (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: Blue/Black/Green (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16XHOHM16AM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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, CE I20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- CPR approved Cca s1b,d1,a1
- 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)
- EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1022900501	1022501501	FG16OHM16AM16 0,6/1KV 1x2x0,75 mm <sup>2</sup>	7	1,8	11,8	230	160
1022900502	1022501502	FG16XHOHM16AM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	11,4	1,8	16,4	380	220
1022900503	1022501503	FG16XHOHM16AM16 0,6/1KV 3x2x0,75 mm <sup>2</sup>	12	1,8	16,8	450	230
1022900504	1022501504	FG16XHOHM16AM16 0,6/1KV 4x2x0,75 mm <sup>2</sup>	13,2	1,8	18	520	250
1022900505	1022501505	FG16XHOHM16AM16 0,6/1KV 5x2x0,75 mm <sup>2</sup>	14,5	1,8	20	610	280
1022900506	1022501506	FG16XHOHM16AM16 0,6/1KV 6x2x0,75 mm <sup>2</sup>	16	1,8	20,8	680	290
1022900507	1022501507	FG16XHOHM16AM16 0,6/1KV 7x2x0,75 mm <sup>2</sup>	16,2	1,8	21,4	730	310
1022900508	1022501508	FG16XHOHM16AM16 0,6/1KV 12x2x0,75 mm <sup>2</sup>	21,4	2,0	26	1080	360
1022900509	1022501509	FG16XHOHM16AM16 0,6/1KV 16x2x0,75 mm <sup>2</sup>	23,6	2,0	29,6	1380	420
1022900510	1022501510	FG16XHOHM16AM16 0,6/1KV 24x2x0,75 mm <sup>2</sup>	30	2,0	34	1840	470
1022900511	1022501511	FG16OHM16AM16 0,6/1KV 1x2x1 mm <sup>2</sup>	7,6	1,8	12,4	250	170
1022900512	1022501512	FG16XHOHM16AM16 0,6/1KV 2x2x1 mm <sup>2</sup>	12	1,8	16,8	410	230
1022900513	1022501513	FG16XHOHM16AM16 0,6/1KV 3x2x1 mm <sup>2</sup>	12,7	1,8	17,5	490	250
1022900514	1022501514	FG16XHOHM16AM16 0,6/1KV 4x2x1 mm <sup>2</sup>	14	1,8	19	570	270
1022900515	1022501515	FG16XHOHM16AM16 0,6/1KV 5x2x1 mm <sup>2</sup>	15,4	1,8	20,8	670	300
1022900516	1022501516	FG16XHOHM16AM16 0,6/1KV 6x2x1 mm <sup>2</sup>	17	1,8	22	750	310
1022900517	1022501517	FG16XHOHM16AM16 0,6/1KV 7x2x1 mm <sup>2</sup>	16,8	1,8	22,4	810	320
1022900518	1022501518	FG16XHOHM16AM16 0,6/1KV 12x2x1 mm <sup>2</sup>	23	2,0	28	1210	390
1022900519	1022501519	FG16XHOHM16AM16 0,6/1KV 16x2x1 mm <sup>2</sup>	25	2,0	31	1540	430
1022900520	1022501520	FG16XHOHM16AM16 0,6/1KV 24x2x1 mm <sup>2</sup>	31,4	2,0	36	2070	500
1022900521	1022501521	FG16OHM16AM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	8	1,8	12,8	280	180
1022900522	1022501522	FG16XHOHM16AM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	12,8	1,8	17,8	460	250
1022900523	1022501523	FG16XHOHM16AM16 0,6/1KV 3x2x1,5 mm <sup>2</sup>	13,8	1,8	18,5	550	260
1022900524	1022501524	FG16XHOHM16AM16 0,6/1KV 4x2x1,5 mm <sup>2</sup>	15	1,8	20	650	280
1022900525	1022501525	FG16XHOHM16AM16 0,6/1KV 5x2x1,5 mm <sup>2</sup>	16,6	1,8	22	770	310
1022900526	1022501526	FG16XHOHM16AM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	18	1,8	23	860	330
1022900527	1022501527	FG16XHOHM16AM16 0,6/1KV 7x2x1,5 mm <sup>2</sup>	18,4	1,8	23,7	940	340
1022900528	1022501528	FG16XHOHM16AM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	24,6	2,0	29,8	1440	420
1022900529	1022501529	FG16XHOHM16AM16 0,6/1KV 16x2x1,5 mm <sup>2</sup>	27	2,0	33	1820	460
1022900530	1022501530	FG16XHOHM16AM16 0,6/1KV 24x2x1,5 mm <sup>2</sup>	34	2,0	37,6	2470	530
1022900531	1022501531	FG16XHM16AM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	9	1,8	13,8	326	220
1022900532	1022501532	FG16XHOHM16AM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	14,4	1,8	19,4	560	280

1022900533	1022501533	FG16XHOHM16AM16	0,6/1KV	3x2x2,5 mm <sup>2</sup>	15,6	1,8	20,8	670	300
1022900534	1022501534	FG16XHOHM16AM16	0,6/1KV	4x2x2,5 mm <sup>2</sup>	17	1,8	22	810	310
1022900535	1022501535	FG16XHOHM16AM16	0,6/1KV	5x2x2,5 mm <sup>2</sup>	18,6	1,8	24,6	990	350
1022900536	1022501536	FG16XHOHM16AM16	0,6/1KV	6x2x2,5 mm <sup>2</sup>	21	1,8	25,4	1090	360
1022900537	1022501537	FG16XHOHM16AM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	21,5	2,0	26,4	1230	380
1022900538	1022501538	FG16XHOHM16AM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	27,3	2,0	32,4	1830	460
1022900539	1022501539	FG16XHOHM16AM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	31	2,0	36,5	2360	520
1022900540	1022501540	FG16XHOHM16AM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	38	2,0	43	3260	600
1022900541	1022501541	FG16OHM16AM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	7,6	1,8	12,4	260	170
1022900542	1022501542	FG16XHOHM16AM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	13,5	1,8	18,5	470	270
1022900543	1022501543	FG16XHOHM16AM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	14,5	1,8	19,2	550	280
1022900544	1022501544	FG16XHOHM16AM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	15,8	1,8	20,8	650	290
1022900545	1022501545	FG16XHOHM16AM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	17,3	1,8	22,8	770	320
1022900546	1022501546	FG16XHOHM16AM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	19,2	1,8	24	860	340
1022900547	1022501547	FG16XHOHM16AM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	19,5	2,0	24,6	940	350
1022900548	1022501548	FG16XHOHM16AM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	25,8	2,0	30,7	1400	440
1022900549	1022501549	FG16XHOHM16AM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	28,5	2,0	34,4	1800	490
1022900550	1022501550	FG16XHOHM16AM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	35,6	2,0	36	2420	500
1022900551	1022501551	FG16OHM16AM16	0,6/1KV	1x3x1 mm <sup>2</sup>	8	1,8	13,2	290	180
1022900552	1022501552	FG16XHOHM16AM16	0,6/1KV	2x3x1 mm <sup>2</sup>	14,3	1,8	19,6	520	280
1022900553	1022501553	FG16XHOHM16AM16	0,6/1KV	3x3x1 mm <sup>2</sup>	15,2	1,8	20,6	620	300
1022900554	1022501554	FG16XHOHM16AM16	0,6/1KV	4x3x1 mm <sup>2</sup>	16,6	1,8	22,2	730	310
1022900555	1022501555	FG16XHOHM16AM16	0,6/1KV	5x3x1 mm <sup>2</sup>	18,4	1,8	24	850	340
1022900556	1022501556	FG16XHOHM16AM16	0,6/1KV	6x3x1 mm <sup>2</sup>	20	2,0	25,8	970	370
1022900557	1022501557	FG16XHOHM16AM16	0,6/1KV	7x3x1 mm <sup>2</sup>	20,2	2,0	26	1080	370
1022900558	1022501558	FG16XHOHM16AM16	0,6/1KV	12x3x1 mm <sup>2</sup>	27	2,0	33	1640	460
1022900559	1022501559	FG16XHOHM16AM16	0,6/1KV	16x3x1 mm <sup>2</sup>	30	2,0	36	2030	500
1022900560	1022501560	FG16XHOHM16AM16	0,6/1KV	24x3x1 mm <sup>2</sup>	37	2,0	43	2840	600
1022900561	1022501561	FG16OM16AM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	8,5	1,8	13,3	320	180
1022900562	1022501562	FG16XHOHM16AM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	15,4	1,8	20,6	580	300
1022900563	1022501563	FG16XHOHM16AM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	16,6	1,8	21,4	700	310
1022900564	1022501564	FG16XHOHM16AM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	18	1,8	23	840	320
1022900565	1022501565	FG16XHOHM16AM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	19,8	1,8	25,4	990	360
1022900566	1022501566	FG16XHOHM16AM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	22	1,8	27	1130	380
1022900567	1022501567	FG16XHOHM16AM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	22,2	2,0	27,8	1280	390
1022900568	1022501568	FG16XHOHM16AM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	30	2,0	34	1890	480
1022900569	1022501569	FG16XHOHM16AM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	33	2,0	37	2490	520
1022900570	1022501570	FG16XHOHM16AM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	41	2,0	45	3350	630

1022900571	1022501571	FG16OHM16AM16	0,6/1KV 1x3x2,5 mm <sup>2</sup>	9,5	1,8	14,4	380	210
1022900572	1022501572	FG16XHOHM16AM16	0,6/1KV 2x3x2,5 mm <sup>2</sup>	17,6	1,8	22,4	710	320
1022900573	1022501573	FG16XHOHM16AM16	0,6/1KV 3x3x2,5 mm <sup>2</sup>	18,6	1,8	23,6	880	340
1022900574	1022501574	FG16XHOHM16AM16	0,6/1KV 4x3x2,5 mm <sup>2</sup>	20,4	1,8	25,6	1060	360
1022900575	1022501575	FG16XHOHM16AM16	0,6/1KV 5x3x2,5 mm <sup>2</sup>	22,5	1,8	28	1260	390
1022900576	1022501576	FG16XHOHM16AM16	0,6/1KV 6x3x2,5 mm <sup>2</sup>	25	2,0	30	1450	420
1022900577	1022501577	FG16XHOHM16AM16	0,6/1KV 12x3x2,5 mm <sup>2</sup>	33,5	2,0	38	2490	530

**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.

# Instrumentation Cable – 102-3

# CPR EU 305/2011

**Conductor, G16 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH**

**IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

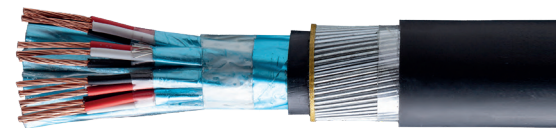
Technical Specifications n° 102-3/23 of 10/11/2023 Rev. 0

**Type:** FG16XOHM16FM16 0,6/1KV, FG16OHM16FM16 0M6/1Kv

**Conductor:** Flexible metal conductor according to IEC 60228

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

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

**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 round wires plus wrapping polyester tape (SWA)

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

**Marking:** On the outer sheath "Sensitherm – FG16XOHM16FM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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, CE I20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- CPR approved Cca s1b,d1,a1
- Cable for intrinsically safe application
- Inductance <math>\leq 0,90 \text{ mH/Km}</math>
- Capacitance <math>= 0,200 \text{ }\mu\text{F/Km}</math>
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1023900501	1023501501	FG16OHM16FM16 0,6/1KV 1x2x0,75 mm <sup>2</sup>	7	1,8	11,8	230	160
1023900502	1023501502	FG16XOHM16FM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	11,4	1,8	15,6	360	220
1023900503	1023501503	FG16XOHM16FM16 0,6/1KV 3x2x0,75 mm <sup>2</sup>	12	1,8	16	430	230
1023900504	1023501504	FG16XOHM16FM16 0,6/1KV 4x2x0,75 mm <sup>2</sup>	13,2	1,8	17,1	490	250
1023900505	1023501505	FG16XOHM16FM16 0,6/1KV 5x2x0,75 mm <sup>2</sup>	14,5	1,8	19	580	280
1023900506	1023501506	FG16XOHM16FM16 0,6/1KV 6x2x0,75 mm <sup>2</sup>	16	1,8	19,8	640	290
1023900507	1023501507	FG16XOHM16FM16 0,6/1KV 7x2x0,75 mm <sup>2</sup>	16,2	1,8	20,3	690	310
1023900508	1023501508	FG16XOHM16FM16 0,6/1KV 12x2x0,75 mm <sup>2</sup>	21,4	2,0	24,7	1030	360
1023900509	1023501509	FG16XOHM16FM16 0,6/1KV 16x2x0,75 mm <sup>2</sup>	23,6	2,0	28,1	1310	420
1023900510	1023501510	FG16XOHM16FM16 0,6/1KV 24x2x0,75 mm <sup>2</sup>	30	2,0	32,3	1750	470
1023900511	1023501511	FG16OHM16FM16 0,6/1KV 1x2x1 mm <sup>2</sup>	7,6	1,8	12,4	250	170
1023900512	1023501512	FG16XOHM16FM16 0,6/1KV 2x2x1 mm <sup>2</sup>	12	1,8	16	390	230
1023900513	1023501513	FG16XOHM16FM16 0,6/1KV 3x2x1 mm <sup>2</sup>	12,7	1,8	16,6	470	250
1023900514	1023501514	FG16XOHM16FM16 0,6/1KV 4x2x1 mm <sup>2</sup>	14	1,8	18	540	270
1023900515	1023501515	FG16XOHM16FM16 0,6/1KV 5x2x1 mm <sup>2</sup>	15,4	1,8	19,8	640	300
1023900516	1023501516	FG16XOHM16FM16 0,6/1KV 6x2x1 mm <sup>2</sup>	17	1,8	20,9	710	310
1023900517	1023501517	FG16XOHM16FM16 0,6/1KV 7x2x1 mm <sup>2</sup>	16,8	1,8	21,3	770	320
1023900518	1023501518	FG16XOHM16FM16 0,6/1KV 12x2x1 mm <sup>2</sup>	3	2,0	26,6	1150	390
1023900519	1023501519	FG16XOHM16FM16 0,6/1KV 16x2x1 mm <sup>2</sup>	25	2,0	29,5	1460	430
1023900520	1023501520	FG16XOHM16FM16 0,6/1KV 24x2x1 mm <sup>2</sup>	31,4	2,0	34,2	1960	500
1023900521	1023501521	FG16OHM16FM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	8	1,8	12,8	280	180
1023900522	1023501522	FG16XOHM16FM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	12,8	1,8	16,9	440	250
1023900523	1023501523	FG16XOHM16FM16 0,6/1KV 3x2x1,5 mm <sup>2</sup>	13,8	1,8	17,6	520	260
1023900524	1023501524	FG16XOHM16FM16 0,6/1KV 4x2x1,5 mm <sup>2</sup>	15	1,8	19	620	280
1023900525	1023501525	FG16XOHM16FM16 0,6/1KV 5x2x1,5 mm <sup>2</sup>	16,6	1,8	20,1	730	310
1023900526	1023501526	FG16XOHM16FM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	18	1,8	21,9	820	330
1023900527	1023501527	FG16XOHM16FM16 0,6/1KV 7x2x1,5 mm <sup>2</sup>	18,4	1,8	22,5	890	340
1023900528	1023501528	FG16XOHM16FM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	24,6	2,0	28,3	1370	420
1023900529	1023501529	FG16XOHM16FM16 0,6/1KV 16x2x1,5 mm <sup>2</sup>	27	2,0	31,4	1730	460
1023900530	1023501530	FG16XOHM16FM16 0,6/1KV 24x2x1,5 mm <sup>2</sup>	34	2,0	35,7	2350	530
1023900531	1023501531	FG16XHM16FM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	9	1,8	13,8	326	220
1023900532	1023501532	FG16XOHM16FM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	14,4	1,8	18,4	530	280
1023900533	1023501533	FG16XOHM16FM16 0,6/1KV 3x2x2,5 mm <sup>2</sup>	15,6	1,8	19,8	640	300
1023900534	1023501534	FG16XOHM16FM16 0,6/1KV 4x2x2,5 mm <sup>2</sup>	17	1,8	20,9	770	310
1023900535	1023501535	FG16XOHM16FM16 0,6/1KV 5x2x2,5 mm <sup>2</sup>	18,6	1,8	23,4	940	350
1023900536	1023501536	FG16XOHM16FM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	21	1,8	24,1	1030	360

1023900537	1023501537	FG16XOHM16FM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	21,5	2,0	25,1	1170	380
1023900538	1023501538	FG16XOHM16FM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	27,3	2,0	30,8	1740	460
1023900539	1023501539	FG16XOHM16FM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	31	2,0	34,7	2240	520
1023900540	1023501540	FG16XOHM16FM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	38	2,0	40,9	3100	600
1023900541	1023501541	FG16OHM16FM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	7,6	1,8	12,4	260	170
1023900542	1023501542	FG16XOHM16FM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	13,5	1,8	17,6	450	270
1023900543	1023501543	FG16XOHM16FM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	14,5	1,8	18,2	520	280
1023900544	1023501544	FG16XOHM16FM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	15,8	1,8	19,8	620	290
1023900545	1023501545	FG16XOHM16FM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	17,3	1,8	21,7	730	320
1023900546	1023501546	FG16XOHM16FM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	19,2	1,8	22,8	820	340
1023900547	1023501547	FG16XOHM16FM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	19,5	2,0	16	890	350
1023900548	1023501548	FG16XOHM16FM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	25,8	2,0	29,2	1330	440
1023900549	1023501549	FG16XOHM16FM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	28,5	2,0	32,7	1710	490
1023900550	1023501550	FG16XOHM16FM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	35,6	2,0	34,2	2300	500
1023900551	1023501551	FG16OHM16FM16	0,6/1KV	1x3x1 mm <sup>2</sup>	8	1,8	13,2	290	180
1023900552	1023501552	FG16XOHM16FM16	0,6/1KV	2x3x1 mm <sup>2</sup>	14,3	1,8	18,6	490	280
1023900553	1023501553	FG16XOHM16FM16	0,6/1KV	3x3x1 mm <sup>2</sup>	15,2	1,8	19,6	590	300
1023900554	1023501554	FG16XOHM16FM16	0,6/1KV	4x3x1 mm <sup>2</sup>	16,6	1,8	21,1	690	310
1023900555	1023501555	FG16XOHM16FM16	0,6/1KV	5x3x1 mm <sup>2</sup>	18,4	1,8	22,8	810	340
1023900556	1023501556	FG16XOHM16FM16	0,6/1KV	6x3x1 mm <sup>2</sup>	20	2,0	24,5	920	370
1023900557	1023501557	FG16XOHM16FM16	0,6/1KV	7x3x1 mm <sup>2</sup>	20,2	2,0	24,7	1020	370
1023900558	1023501558	FG16XOHM16FM16	0,6/1KV	12x3x1 mm <sup>2</sup>	27	2,0	31,35	1560	460
1023900559	1023501559	FG16XOHM16FM16	0,6/1KV	16x3x1 mm <sup>2</sup>	30	2,0	34,2	1930	500
1023900560	1023501560	FG16XOHM16FM16	0,6/1KV	24x3x1 mm <sup>2</sup>	37	2,0	40,9	2700	600
1023900561	1023501561	FG16OM16FM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	8,5	1,8	13,3	320	180
1023900562	1023501562	FG16XOHM16FM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	15,4	1,8	19,6	550	300
1023900563	1023501563	FG16XOHM16FM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	16,6	1,8	20,3	660	310
1023900564	1023501564	FG16XOHM16FM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	18	1,8	21,8	800	320
1023900565	1023501565	FG16XOHM16FM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	19,8	1,8	24,1	940	360
1023900566	1023501566	FG16XOHM16FM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	22	1,8	25,7	1070	380
1023900567	1023501567	FG16XOHM16FM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	22,2	2,0	26,4	1220	390
1023900568	1023501568	FG16XOHM16FM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	30	2,0	32,3	1800	480
1023900569	1023501569	FG16XOHM16FM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	33	2,0	35,2	2370	520
1023900570	1023501570	FG16XOHM16FM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	41	2,0	42,8	3180	630
1023900571	1023501571	FG16OHM16FM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	9,5	1,8	14,4	380	210
1023900572	1023501572	FG16XOHM16FM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	17,6	1,8	21,3	670	320
1023900573	1023501573	FG16XOHM16FM16	0,6/1KV	3x3x2,5 mm <sup>2</sup>	18,6	1,8	22,4	840	340
1023900574	1023501574	FG16XOHM16FM16	0,6/1KV	4x3x2,5 mm <sup>2</sup>	20,4	1,8	24,3	1000	360



1023900575	1023501575	FG16XOHM16FM16	0,6/1KV	5x3x2,5 mm <sup>2</sup>	22,5	1,8	26,6	1200	390
1023900576	1023501576	FG16XOHM16FM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	25	2,0	28,5	1380	420
1023900577	1023501577	FG16XOHM16FM16	0,6/1KV	12x3x2,5 mm <sup>2</sup>	33,5	2,0	36,1	2370	530

**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.

# Instrumentation Cable – 102-4

# CPR EU 305/2011

**Conductor, G16 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

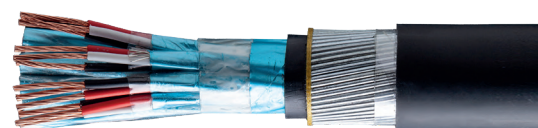
Technical Specifications n° 102-4/23 of 10/11/2023 Rev. 0

**Type:** FG16XHOHM16FM16 0,6/1KV, FG16OHM16FM16 0M6/1Kv

**Conductor:** Flexible metal conductor according to IEC 60228

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

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

**Laying up:** Twisted to pair, Blue - Black numbered (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 round wires plus wrapping polyester tape (SWA)

**Outer sheath:** M16 LSZH extruded compound

**Colour:** Blue/Black/Green (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16XHOHM16FM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-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 120-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- CPR approved Cca s1b,d1,a1
- 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)
- EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	$\varnothing$ OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1024900501	1024501501	FG16OHM16FM16 0,6/1KV 1x2x0,75 mm <sup>2</sup>	7	1,8	11,8	230	160
1024900502	1024501502	FG16XHOHM16FM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	11,4	1,8	16,4	380	220
1024900503	1024501503	FG16XHOHM16FM16 0,6/1KV 3x2x0,75 mm <sup>2</sup>	12	1,8	16,8	450	230
1024900504	1024501504	FG16XHOHM16FM16 0,6/1KV 4x2x0,75 mm <sup>2</sup>	13,2	1,8	18	520	250
1024900505	1024501505	FG16XHOHM16FM16 0,6/1KV 5x2x0,75 mm <sup>2</sup>	14,5	1,8	20	610	280
1024900506	1024501506	FG16XHOHM16FM16 0,6/1KV 6x2x0,75 mm <sup>2</sup>	16	1,8	20,8	680	290
1024900507	1024501507	FG16XHOHM16FM16 0,6/1KV 7x2x0,75 mm <sup>2</sup>	16,2	1,8	21,4	730	310
1024900508	1024501508	FG16XHOHM16FM16 0,6/1KV 12x2x0,75 mm <sup>2</sup>	21,4	2,0	26	1080	360
1024900509	1024501509	FG16XHOHM16FM16 0,6/1KV 16x2x0,75 mm <sup>2</sup>	23,6	2,0	29,6	1380	420
1024900510	1024501510	FG16XHOHM16FM16 0,6/1KV 24x2x0,75 mm <sup>2</sup>	30	2,0	34	1840	470
1024900511	1024501511	FG16OHM16FM16 0,6/1KV 1x2x1 mm <sup>2</sup>	7,6	1,8	12,4	250	170
1024900512	1024501512	FG16XHOHM16FM16 0,6/1KV 2x2x1 mm <sup>2</sup>	12	1,8	16,8	410	230
1024900513	1024501513	FG16XHOHM16FM16 0,6/1KV 3x2x1 mm <sup>2</sup>	12,7	1,8	17,5	490	250
1024900514	1024501514	FG16XHOHM16FM16 0,6/1KV 4x2x1 mm <sup>2</sup>	14	1,8	19	570	270
1024900515	1024501515	FG16XHOHM16FM16 0,6/1KV 5x2x1 mm <sup>2</sup>	15,4	1,8	20,8	670	300
1024900516	1024501516	FG16XHOHM16FM16 0,6/1KV 6x2x1 mm <sup>2</sup>	17	1,8	22	750	310
1024900517	1024501517	FG16XHOHM16FM16 0,6/1KV 7x2x1 mm <sup>2</sup>	16,8	1,8	22,4	810	320
1024900518	1024501518	FG16XHOHM16FM16 0,6/1KV 12x2x1 mm <sup>2</sup>	23	2,0	28	1210	390
1024900519	1024501519	FG16XHOHM16FM16 0,6/1KV 16x2x1 mm <sup>2</sup>	25	2,0	31	1540	430
1024900520	1024501520	FG16XHOHM16FM16 0,6/1KV 24x2x1 mm <sup>2</sup>	31,4	2,0	36	2070	500
1024900521	1024501521	FG16OHM16FM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	8	1,8	12,8	280	180
1024900522	1024501522	FG16XHOHM16FM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	12,8	1,8	17,8	460	250
1024900523	1024501523	FG16XHOHM16FM16 0,6/1KV 3x2x1,5 mm <sup>2</sup>	13,8	1,8	18,5	550	260
1024900524	1024501524	FG16XHOHM16FM16 0,6/1KV 4x2x1,5 mm <sup>2</sup>	15	1,8	20	650	280
1024900525	1024501525	FG16XHOHM16FM16 0,6/1KV 5x2x1,5 mm <sup>2</sup>	16,6	1,8	22	770	310
1024900526	1024501526	FG16XHOHM16FM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	18	1,8	23	860	330
1024900527	1024501527	FG16XHOHM16FM16 0,6/1KV 7x2x1,5 mm <sup>2</sup>	18,4	1,8	23,7	940	340
1024900528	1024501528	FG16XHOHM16FM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	24,6	2,0	29,8	1440	420
1024900529	1024501529	FG16XHOHM16FM16 0,6/1KV 16x2x1,5 mm <sup>2</sup>	27	2,0	33	1820	460
1024900530	1024501530	FG16XHOHM16FM16 0,6/1KV 24x2x1,5 mm <sup>2</sup>	34	2,0	37,6	2470	530
1024900531	1024501531	FG16XHM16FM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	9	1,8	13,8	326	220

1024900532	1024501532	FG16XHOHM16FM16	0,6/1KV	2x2x2,5 mm <sup>2</sup>	14,4	1,8	19,4	560	280
1024900533	1024501533	FG16XHOHM16FM16	0,6/1KV	3x2x2,5 mm <sup>2</sup>	15,6	1,8	20,8	670	300
1024900534	1024501534	FG16XHOHM16FM16	0,6/1KV	4x2x2,5 mm <sup>2</sup>	17	1,8	22	810	310
1024900535	102401535	FG16XHOHM16FM16	0,6/1KV	5x2x2,5 mm <sup>2</sup>	18,6	1,8	24,6	990	350
1024900536	1024501536	FG16XHOHM16FM16	0,6/1KV	6x2x2,5 mm <sup>2</sup>	21	1,8	25,4	1090	360
1024900537	1024501537	FG16XHOHM16FM16	0,6/1KV	7x2x2,5 mm <sup>2</sup>	21,5	2,0	26,4	1230	380
1024900538	1024501538	FG16XHOHM16FM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	27,3	2,0	32,4	1830	460
1024900539	1024501539	FG16XHOHM16FM16	0,6/1KV	16x2x2,5 mm <sup>2</sup>	31	2,0	36,5	2360	520
1024900540	1024501540	FG16XHOHM16FM16	0,6/1KV	24x2x2,5 mm <sup>2</sup>	38	2,0	43	3260	600
1024900541	1024501541	FG16OHM16FM16	0,6/1KV	1x3x0,75 mm <sup>2</sup>	7,6	1,8	12,4	260	170
1024900542	1024501542	FG16XHOHM16FM16	0,6/1KV	2x3x0,75 mm <sup>2</sup>	13,5	1,8	18,5	470	270
1024900543	1024501543	FG16XHOHM16FM16	0,6/1KV	3x3x0,75 mm <sup>2</sup>	14,5	1,8	19,2	550	280
1024900544	1024501544	FG16XHOHM16FM16	0,6/1KV	4x3x0,75 mm <sup>2</sup>	15,8	1,8	20,8	650	290
1024900545	1024501545	FG16XHOHM16FM16	0,6/1KV	5x3x0,75 mm <sup>2</sup>	17,3	1,8	22,8	770	320
1024900546	1024501546	FG16XHOHM16FM16	0,6/1KV	6x3x0,75 mm <sup>2</sup>	19,2	1,8	24	860	340
1024900547	1024501547	FG16XHOHM16FM16	0,6/1KV	7x3x0,75 mm <sup>2</sup>	19,5	2,0	24,6	940	350
1024900548	1024501548	FG16XHOHM16FM16	0,6/1KV	12x3x0,75 mm <sup>2</sup>	25,8	2,0	30,7	1400	440
1024900549	1024501549	FG16XHOHM16FM16	0,6/1KV	16x3x0,75 mm <sup>2</sup>	28,5	2,0	34,4	1800	490
1024900550	1024501550	FG16XHOHM16FM16	0,6/1KV	24x3x0,75 mm <sup>2</sup>	35,6	2,0	36	2420	500
1024900551	1024501551	FG16OHM16FM16	0,6/1KV	1x3x1 mm <sup>2</sup>	8	1,8	13,2	290	180
1024900552	1024501552	FG16XHOHM16FM16	0,6/1KV	2x3x1 mm <sup>2</sup>	14,3	1,8	19,6	520	280
1024900553	1024501553	FG16XHOHM16FM16	0,6/1KV	3x3x1 mm <sup>2</sup>	15,2	1,8	20,6	620	300
1029400554	1024501554	FG16XHOHM16FM16	0,6/1KV	4x3x1 mm <sup>2</sup>	16,6	1,8	22,2	730	310
1029400555	1024501555	FG16XHOHM16FM16	0,6/1KV	5x3x1 mm <sup>2</sup>	18,4	1,8	24	850	340
1029400556	1024501556	FG16XHOHM16FM16	0,6/1KV	6x3x1 mm <sup>2</sup>	20	2,0	25,8	970	370
1029400557	1024501557	FG16XHOHM16FM16	0,6/1KV	7x3x1 mm <sup>2</sup>	20,2	2,0	26	1080	370
1029400558	1024501558	FG16XHOHM16FM16	0,6/1KV	12x3x1 mm <sup>2</sup>	27	2,0	33	1640	460
1029400559	1024501559	FG16XHOHM16FM16	0,6/1KV	16x3x1 mm <sup>2</sup>	30	2,0	36	2030	500
1029400560	1024501560	FG16XHOHM16FM16	0,6/1KV	24x3x1 mm <sup>2</sup>	37	2,0	43	2840	600
1029400561	1024501561	FG16OM16FM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	8,5	1,8	13,3	320	180
1029400562	1024501562	FG16XHOHM16FM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	15,4	1,8	20,6	580	300
1029400563	1024501563	FG16XHOHM16FM16	0,6/1KV	3x3x1,5 mm <sup>2</sup>	16,6	1,8	21,4	700	310
1029400564	1024501564	FG16XHOHM16FM16	0,6/1KV	4x3x1,5 mm <sup>2</sup>	18	1,8	23	840	320
1029400565	1024501565	FG16XHOHM16FM16	0,6/1KV	5x3x1,5 mm <sup>2</sup>	19,8	1,8	25,4	990	360
1029400566	1024501566	FG16XHOHM16FM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	22	1,8	27	1130	380
1029400567	1024501567	FG16XHOHM16FM16	0,6/1KV	7x3x1,5 mm <sup>2</sup>	22,2	2,0	27,8	1280	390
1029400568	1024501568	FG16XHOHM16FM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	30	2,0	34	1890	480
1029400569	1024501569	FG16XHOHM16FM16	0,6/1KV	16x3x1,5 mm <sup>2</sup>	33	2,0	37	2490	520

1029400570	1024501570	FG16XHOHM16FM16	0,6/1KV	24x3x1,5 mm <sup>2</sup>	41	2,0	45	3350	630
1029400571	1024501571	FG16OHM16FM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	9,5	1,8	14,4	380	210
1029400572	1024501572	FG16XHOHM16FM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	17,6	1,8	22,4	710	320
1029400573	1024501573	FG16XHOHM16FM16	0,6/1KV	3x3x2,5 mm <sup>2</sup>	18,6	1,8	23,6	880	340
1029400574	1024501574	FG16XHOHM16FM16	0,6/1KV	4x3x2,5 mm <sup>2</sup>	20,4	1,8	25,6	1060	360
1029400575	1024501575	FG16XHOHM16FM16	0,6/1KV	5x3x2,5 mm <sup>2</sup>	22,5	1,8	28	1260	390
1029400576	1024501576	FG16XHOHM16FM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	25	2,0	30	1450	420
1029400577	1024501577	FG16XHOHM16FM16	0,6/1KV	12x3x2,5 mm <sup>2</sup>	33,5	2,0	38	2490	530

**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.

# Multicore Power Cable – 103-1

# CPR EU 305/2011

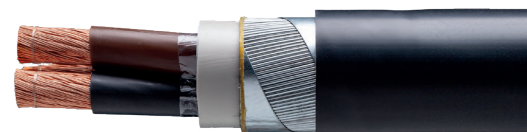
**CU, G16 INSULATION, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 103-1/23 of 10/11/2023 Rev. 0

**Type:** FG160M16AM16 0,6/1KV

**Conductor:** Flexible copper conductor according to IEC 60228 cl.5

**Insulation:** EPR G16 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,50 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,7 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm
35 mm <sup>2</sup>	0,90 ± 0,02 mm
50 mm <sup>2</sup>	1,00 ± 0,02 mm
70 mm <sup>2</sup>	1,10 ± 0,02 mm
95 mm <sup>2</sup>	1,10 ± 0,02 mm
120 mm <sup>2</sup>	1,20 ± 0,02 mm

**Laying up:** Twisted to core, UNEL (or to be agreed)

**Inner sheath:** M16 LSZH extruded compound

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

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

**Marking:** On the outer sheath "Sensitherm – FG160M16AM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001 m"

**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60 332-3-22, CEI 20-22/2
- Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial

This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)

- EN50575 tested for approval, Cca s1b,d1,a1

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1031900501	1031703501	FG160M16AM16 0,6/1KV 2x1,5 mm <sup>2</sup>	7,9	1,8	13	250	190
1031900502	1031703502	FG160M16AM16 0,6/1KV 3x1,5 mm <sup>2</sup>	8,4	1,8	13,4	290	190
1031900503	1031703503	FG160M16AM16 0,6/1KV 4x1,5 mm <sup>2</sup>	9	1,8	14,2	330	200
1031900504	1031703504	FG160M16AM16 0,6/1KV 5x1,5 mm <sup>2</sup>	10	1,8	15	380	210
1031900505	1031703505	FG160M16AM16 0,6/1KV 6x1,5 mm <sup>2</sup>	10,6	1,8	15,9	430	230
1031900506	1031703506	FG160M16AM16 0,6/1KV 7x1,5 mm <sup>2</sup>	10,8	1,8	16	450	230
1031900507	1031703507	FG160M16AM16 0,6/1KV 10x1,5 mm <sup>2</sup>	13,6	1,8	18,6	600	270
1031900508	1031703508	FG160M16AM16 0,6/1KV 12x1,5 mm <sup>2</sup>	14,2	1,8	19,4	650	280
1031900509	1031703509	FG160M16AM16 0,6/1KV 16x1,5 mm <sup>2</sup>	15,8	1,8	20,8	800	300
1031900510	1031703510	FG160M16AM16 0,6/1KV 20x1,5 mm <sup>2</sup>	17,6	2,0	22,8	990	330
1031900511	1031703511	FG160M16AM16 0,6/1KV 24x1,5 mm <sup>2</sup>	20	2,0	24,7	1080	360
1031900512	1031703512	FG160M16AM16 0,6/1KV 48x1,5 mm <sup>2</sup>	26	2,0	31	1940	450
1031900513	1031703513	FG160M16AM16 0,6/1KV 2x2,5 mm <sup>2</sup>	9	1,8	14	300	200
1031900514	1031703514	FG160M16AM16 0,6/1KV 3x2,5 mm <sup>2</sup>	9,4	1,8	14,4	350	210
1031900515	1031703515	FG160M16AM16 0,6/1KV 4x2,5 mm <sup>2</sup>	10,2	1,8	15,2	410	220
1031900516	1031703516	FG160M16AM16 0,6/1KV 5x2,5 mm <sup>2</sup>	11,2	1,8	16,3	460	230
1031900517	1031703517	FG160M16AM16 0,6/1KV 6x2,5 mm <sup>2</sup>	12,4	1,8	17,3	520	250
1031900518	1031703518	FG160M16AM16 0,6/1KV 7x2,5 mm <sup>2</sup>	12,2	1,8	17,7	570	260
1031900519	1031703519	FG160M16AM16 0,6/1KV 10x2,5 mm <sup>2</sup>	15,8	1,8	21	800	300
1031900520	1031703520	FG160M16AM16 0,6/1KV 12x2,5 mm <sup>2</sup>	16	1,8	21,1	840	310
1031900521	1031703521	FG160M16AM16 0,6/1KV 16x2,5 mm <sup>2</sup>	18,2	2,0	23	1100	330
1031900522	1031703522	FG160M16AM16 0,6/1KV 20x2,5 mm <sup>2</sup>	20,6	2,0	25,2	1310	360
1031900523	1031703523	FG160M16AM16 0,6/1KV 24x2,5 mm <sup>2</sup>	23	2,0	27,9	1450	400
1031900524	1031703524	FG160M16AM16 0,6/1KV 48x2,5 mm <sup>2</sup>	29	2,0	33	2660	480
1031900525	1031703525	FG160M16AM16 0,6/1KV 2x4 mm <sup>2</sup>	9,8	1,8	15	360	220
1031900526	1031703526	FG160M16AM16 0,6/1KV 3x4 mm <sup>2</sup>	10,3	1,8	15,5	430	220
1031900527	1031703527	FG160M16AM16 0,6/1KV 4x4 mm <sup>2</sup>	11,5	1,8	16,5	500	240
1031900528	1031703528	FG160M16AM16 0,6/1KV 5x4 mm <sup>2</sup>	12,5	1,8	17,5	590	250

1031900529	1031703529	FG160M16AM16	0,6/1KV	7x4 mm <sup>2</sup>	13,7	1,8	19,1	770	280
1031900530	1031703530	FG160M16AM16	0,6/1KV	2x6 mm <sup>2</sup>	11,2	1,8	16,5	440	240
1031900531	1031703531	FG160M16AM16	0,6/1KV	3x6 mm <sup>2</sup>	11,8	1,8	16,6	530	250
1031900532	1031703532	FG160M16AM16	0,6/1KV	4x6 mm <sup>2</sup>	13	1,8	18	650	260
1031900533	1031703533	FG160M16AM16	0,6/1KV	5x 6 mm <sup>2</sup>	14,6	2,0	20	750	290
1031900534	1031703534	FG160M16AM16	0,6/1KV	2x10 mm <sup>2</sup>	14,8	1,8	20,2	640	290
1031900535	1031703535	FG160M16AM16	0,6/1KV	3x10 mm <sup>2</sup>	15,8	1,8	20,8	800	300
1031900536	1031703536	FG160M16AM16	0,6/1KV	4x10 mm <sup>2</sup>	18	1,8	22,8	1020	330
1031900537	1031703537	FG160M16AM16	0,6/1KV	5x10 mm <sup>2</sup>	20	2,0	24,8	1200	360
1031900538	1031703538	FG160M16AM16	0,6/1KV	2x16 mm <sup>2</sup>	18	1,8	22,7	870	330
1031900539	1031703539	FG160M16AM16	0,6/1KV	3x16mm <sup>2</sup>	19	2,0	24,3	1150	350
1031900540	1031703540	FG160M16AM16	0,6/1KV	4x16 mm <sup>2</sup>	21	2,0	26	1430	380
1031900541	1031703541	FG160M16AM16	0,6/1KV	5x16 mm <sup>2</sup>	23	2,0	28,1	1700	410
1031900542	1031703542	FG160M16AM16	0,6/1KV	2x25 mm <sup>2</sup>	22	2,0	25,2	1260	360
1031900543	1031703543	FG160M16AM16	0,6/1KV	3x25 mm <sup>2</sup>	22	2,0	27,1	1550	390
1031900544	1031703544	FG160M16AM16	0,6/1KV	4x25 mm <sup>2</sup>	24,5	2,0	29,1	1940	420
1031900545	1031703545	FG160M16AM16	0,6/1KV	5x25 mm <sup>2</sup>	27	2,0	32	2330	460
1031900546	1031703546	FG160M16AM16	0,6/1KV	3x35 mm <sup>2</sup>	25	2,0	29,1	1980	420
1031900547	1031703547	FG160M16AM16	0,6/1KV	3½x35 mm <sup>2</sup>	27	2,0	32	2500	460
1031900548	1031703548	FG160M16AM16	0,6/1KV	5x35 mm <sup>2</sup>	34	2,0	38,8	3000	560
1031900549	1031703549	FG160M16AM16	0,6/1KV	3x50 mm <sup>2</sup>	29	2,0	33	2620	480
1031900550	1031703550	FG160M16AM16	0,6/1KV	3½x50 mm <sup>2</sup>	31	2,0	35,9	3320	520
1031900551	1031703551	FG160M16AM16	0,6/1KV	3x70 mm <sup>2</sup>	33	2,0	36,9	3420	530
1031900552	1031703552	FG160M16AM16	0,6/1KV	3½x70 mm <sup>2</sup>	36	2,0	40,6	4360	590
1031900553	1031703553	FG160M16AM16	0,6/1KV	3x95 mm <sup>2</sup>	36	2,0	40,7	4400	590
1031900554	1031703554	FG160M16AM16	0,6/1KV	3½x95 mm <sup>2</sup>	41	2,0	44,6	5630	650
1031900555	1031703555	FG160M16AM16	0,6/1KV	3x120 mm <sup>2</sup>	42	2,0	45,6	5340	660
1031900556	1031703556	FG160M16AM16	0,6/1KV	3½x120 mm <sup>2</sup>	44	2,0	48,5	6870	700
1031900557	1031703557	FG160M16AM16	0,6/1KV	5 G 50 mm <sup>2</sup>	35	2,0	38,8	3880	560

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

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



# Multicore Power Cable – 103-2

# CPR EU 305/2011

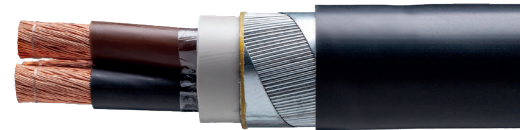
**CU, G16 INSULATION, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 103-2/23 of 10/11/2023 Rev. 0

**Type:** FG16OM16FM16 0,6/1 KV

**Conductor:** Flexible copper conductor according to IEC 60228 cl.5

**Insulation:** EPR G16 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,50 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,7 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm
35 mm <sup>2</sup>	0,90 ± 0,02 mm
50 mm <sup>2</sup>	1,00 ± 0,02 mm
70 mm <sup>2</sup>	1,10 ± 0,02 mm
95 mm <sup>2</sup>	1,10 ± 0,02 mm
120 mm <sup>2</sup>	1,20 ± 0,02 mm

**Laying up:** Twisted to core, UNEL (or to be agreed)

**Inner sheath:** M16 LSZH extruded compound

**Armour:** Galvanized steel round wires plus wrapping polyester tape (SWA)

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

**Marking:** On the outer sheath "Sensitherm – FG16OM16FM16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001 m"

**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60 332-3-22, CEI 20-22/2
- Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial

This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)  
 - EN50575 tested for approval, Cca s1b,d1,a1

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1032900501	1032703501	FG160M16FM16 0,6/1KV 2x1,5 mm <sup>2</sup>	7,9	1,8	13,4	260	190
1032900502	1032703502	FG160M16FM16 0,6/1KV 3x1,5 mm <sup>2</sup>	8,4	1,8	13,8	300	190
1032900503	1032703503	FG160M16FM16 0,6/1KV 4x1,5 mm <sup>2</sup>	9	1,8	14,6	340	200
1032900504	1032703504	FG160M16FM16 0,6/1KV 5x1,5 mm <sup>2</sup>	10	1,8	15,5	390	210
1032900505	1032703505	FG160M16FM16 0,6/1KV 6x1,5 mm <sup>2</sup>	10,6	1,8	16,4	440	230
1032900506	1032703506	FG160M16FM16 0,6/1KV 7x1,5 mm <sup>2</sup>	10,8	1,8	16,5	460	230
1032900507	1032703507	FG160M16FM16 0,6/1KV 10x1,5 mm <sup>2</sup>	13,6	1,8	19,2	620	270
1032900508	1032703508	FG160M16FM16 0,6/1KV 12x1,5 mm <sup>2</sup>	14,2	1,8	20	670	280
1032900509	1032703509	FG160M16FM16 0,6/1KV 16x1,5 mm <sup>2</sup>	15,8	1,8	21,5	830	300
1032900510	1032703510	FG160M16FM16 0,6/1KV 20x1,5 mm <sup>2</sup>	17,6	2,0	23,5	1020	330
1032900511	1032703511	FG160M16FM16 0,6/1KV 24x1,5 mm <sup>2</sup>	20	2,0	25,5	1110	360
1032900512	1032703512	FG160M16FM16 0,6/1KV 48x1,5 mm <sup>2</sup>	26	2,0	32	2000	450
1032900513	1032703513	FG160M16FM16 0,6/1KV 2x2,5 mm <sup>2</sup>	9	1,8	14,4	310	200
1032900514	1032703514	FG160M16FM16 0,6/1KV 3x2,5 mm <sup>2</sup>	9,4	1,8	14,8	360	210
1032900515	1032703515	FG160M16FM16 0,6/1KV 4x2,5 mm <sup>2</sup>	10,2	1,8	15,7	420	220
1032900516	1032703516	FG160M16FM16 0,6/1KV 5x2,5 mm <sup>2</sup>	11,2	1,8	16,8	480	230
1032900517	1032703517	FG160M16FM16 0,6/1KV 6x2,5 mm <sup>2</sup>	12,4	1,8	17,8	560	250
1032900518	1032703518	FG160M16FM16 0,6/1KV 7x2,5 mm <sup>2</sup>	12,2	1,8	18,2	610	260
1032900519	1032703519	FG160M16FM16 0,6/1KV 10x2,5 mm <sup>2</sup>	15,8	1,8	21,6	830	300
1032900520	1032703520	FG160M16FM16 0,6/1KV 12x2,5 mm <sup>2</sup>	16	1,8	21,8	870	310
1032900521	1032703521	FG160M16FM16 0,6/1KV 16x2,5 mm <sup>2</sup>	18,2	2,0	23,8	1140	330
1032900522	1032703522	FG160M16FM16 0,6/1KV 20x2,5 mm <sup>2</sup>	20,6	2,0	26	1350	360
1032900523	1032703523	FG160M16FM16 0,6/1KV 24x2,5 mm <sup>2</sup>	23	2,0	28,8	1500	400
1032900524	1032703524	FG160M16FM16 0,6/1KV 48x2,5 mm <sup>2</sup>	29	2,0	34	2740	480
1032900525	1032703525	FG160M16FM16 0,6/1KV 2x4 mm <sup>2</sup>	9,8	1,8	15,4	370	220
1032900526	1032703526	FG160M16FM16 0,6/1KV 3x4 mm <sup>2</sup>	10,3	1,8	16	440	220
1032900527	1032703527	FG160M16FM16 0,6/1KV 4x4 mm <sup>2</sup>	11,5	1,8	17	520	240
1032900528	1032703528	FG160M16FM16 0,6/1KV 5x4 mm <sup>2</sup>	12,5	1,8	18	610	250

1032900529	1032703529	FG160M16FM16	0,6/1KV 7x4 mm <sup>2</sup>	13,7	1,8	19,7	790	280
1032900530	1032703530	FG160M16FM16	0,6/1KV 2x6 mm <sup>2</sup>	11,2	1,8	17	450	240
1032900531	1032703531	FG160M16FM16	0,6/1KV 3x6 mm <sup>2</sup>	11,8	1,8	17,5	550	250
1032900532	1032703532	FG160M16FM16	0,6/1KV 4x6 mm <sup>2</sup>	13	1,8	18,6	670	260
1032900533	1032703533	FG160M16FM16	0,6/1KV 5x 6 mm <sup>2</sup>	14,6	2,0	20,6	780	290
1032900534	1032703534	FG160M16FM16	0,6/1KV 2x10 mm <sup>2</sup>	14,8	1,8	20,8	660	290
1032900535	1032703535	FG160M16FM16	0,6/1KV 3x10 mm <sup>2</sup>	15,8	1,8	21,4	830	300
1032900536	1032703536	FG160M16FM16	0,6/1KV 4x10 mm <sup>2</sup>	18	1,8	23,5	1050	330
1032900537	1032703537	FG160M16FM16	0,6/1KV 5x10 mm <sup>2</sup>	20	2,0	25,6	1240	360
1032900538	1032703538	FG160M16FM16	0,6/1KV 2x16 mm <sup>2</sup>	18	1,8	23,4	900	330
1032900539	1032703539	FG160M16FM16	0,6/1KV 3x16mm <sup>2</sup>	19	2,0	25	1190	350
1032900540	1032703540	FG160M16FM16	0,6/1KV 4x16 mm <sup>2</sup>	21	2,0	26,8	1470	380
1032900541	1032703541	FG160M16FM16	0,6/1KV 5x16 mm <sup>2</sup>	23	2,0	29	1760	410
1032900542	1032703542	FG160M16FM16	0,6/1KV 2x25 mm <sup>2</sup>	22	2,0	26	1300	360
1032900543	1032703543	FG160M16FM16	0,6/1KV 3x25 mm <sup>2</sup>	22	2,0	28	1600	390
1032900544	1032703544	FG160M16FM16	0,6/1KV 4x25 mm <sup>2</sup>	24,5	2,0	30	2000	420
1032900545	1032703545	FG160M16FM16	0,6/1KV 5x25 mm <sup>2</sup>	27	2,0	33	2400	460
1032900546	1032703546	FG160M16FM16	0,6/1KV 3x35 mm <sup>2</sup>	25	2,0	30	2040	420
1032900547	1032703547	FG160M16FM16	0,6/1KV 3½x35 mm <sup>2</sup>	27	2,0	33	2580	460
1032900548	1032703548	FG160M16FM16	0,6/1KV 5x35 mm <sup>2</sup>	34	2,0	40	3100	560
1032900549	1032703549	FG160M16FM16	0,6/1KV 3x50 mm <sup>2</sup>	29	2,0	34	2700	480
1032900550	1032703550	FG160M16FM16	0,6/1KV 3½x50 mm <sup>2</sup>	31	2,0	37	3420	520
1032900551	1032703551	FG160M16FM16	0,6/1KV 3x70 mm <sup>2</sup>	33	2,0	38	3530	530
1032900552	1032703552	FG160M16FM16	0,6/1KV 3½x70 mm <sup>2</sup>	36	2,0	42	4500	590
1032900553	1032703553	FG160M16FM16	0,6/1KV 3x95 mm <sup>2</sup>	36	2,0	42	4540	590
1032900554	1032703554	FG160M16FM16	0,6/1KV 3½x95 mm <sup>2</sup>	41	2,0	46	5800	650
1032900555	1032703555	FG160M16FM16	0,6/1KV 3x120 mm <sup>2</sup>	42	2,0	47	5500	660
1032900556	1032703556	FG160M16FM16	0,6/1KV 3½x120 mm <sup>2</sup>	44	2,0	50	7080	700
1032900557	1032703557	FG160M16FM16	0,6/1KV 5 G 50 mm <sup>2</sup>	35	2,0	40	3990	560

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

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

# Instrumentation Cable - 104

# CPR EU 305/2011

**Conductor, G16 INSULATION, INDIVIDUAL ALUMINIUM SCREEN AND COPPER WIRE BRAID OVERALL SCREEN, M16 OUTER SHEATH**

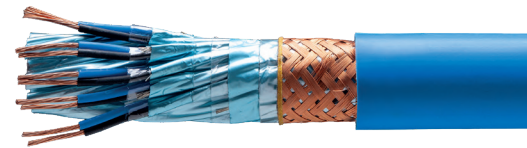
**IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 104/23 of 10/11/2023 Rev. 0

**Type:** FG16XOHH2M16 0,6/1KV - FG16XHOH2M16 0,6/1 KV

**Conductor:** Flexible metal conductor according to IEC 60228

**Insulation:** EPR G16 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,0 mm <sup>2</sup>	0,7 ± 0,02 mm
1,5 mm <sup>2</sup>	0,7 ± 0,02 mm

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

**Pair screen: (if required)** 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 copper wire braid 60% coverage.

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

**Marking:** On the outer sheath "Sensitherm – FG16XHOH2M16 0,6/1 KV Siz. IEC 60332.3 WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001 m"

**Performance:**

- Test voltage core to core 3,5KV
- 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 emiss. IEC 61034 1/
- Hydrocarbon and UV resistant
- Cable for intrinsically safe application
- Inductance <math>\leq 0,90\text{mH/Km}</math>
- Capacitance <math>\leq 0,200\mu\text{F/Km}</math>
- This cable is suitable to be used in ATEX area following the EN 60079-14 prescription (excluding annex E)
- EN50575 tested for approval
- CPR approved Cca s1b,d1,a1

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
104900501	104501501	FG16XOHH2M16 0,6/1KV 1x2x1 mm <sup>2</sup>	1,8	10	160	120
104900502	104501502	FG16XHOH2M16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	14	270	160
104900503	104501503	FG16XHOH2M16 0,6/1KV 5x2x1 mm <sup>2</sup>	1,8	18	510	210
104900504	104501504	FG16XHOH2M16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	19	590	220
104900505	104501505	FG16XHOH2M16 0,6/1KV 7x2x1 mm <sup>2</sup>	1,8	20	650	240
104900506	104501506	FG16XHOH2M16 0,6/1KV 12x2x1 mm <sup>2</sup>	1,8	25	1000	300
104900507	104501507	FG16XOHH2M16 0,6/1KV 1x3x1 mm <sup>2</sup>	1,8	10,4	190	120
104900508	104501508	FG16XHOH2M16 0,6/1KV 2x3x1 mm <sup>2</sup>	1,8	16,5	350	190
104900509	104501509	FG16XHOH2M16 0,6/1KV 5x3x1 mm <sup>2</sup>	1,8	21	670	250
104900510	104501510	FG16XHOH2M16 0,6/1KV 6x3x1 mm <sup>2</sup>	1,8	23	770	270
104900511	104501511	FG16XHOH2M16 0,6/1KV 7x3x1 mm <sup>2</sup>	1,8	23,4	850	270
104900512	104501512	FG16XOHH2M16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	10	170	120
104900513	104501513	FG16XOHH2M16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	10,5	200	130
104900514	104501514	FG16XHOH2M16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	14,8	310	180
104900515	104501515	FG16XHOH2M16 0,6/1KV 3x2x1,5 mm <sup>2</sup>	1,8	15,8	380	190
104900516	104501516	FG16XHOH2M16 0,6/1KV 7x2x1,5 mm <sup>2</sup>	1,8	20,2	730	250
104900517	104501517	FG16XHOH2M16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	1,8	26	1120	310
104900518	104501518	FG16XHOH2M16 0,6/1KV 3x3x1,5 mm <sup>2</sup>	1,8	18	520	220
104900519	104501519	FG16XHOH2M16 0,6/1KV 7x3x1,5 mm <sup>2</sup>	1,8	25	960	300

**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.

# Control and Power Cable – 105-1      CPR EU 305/2011

**CU, G16 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH.**

**IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 105-1/23 of 10/11/2023 Rev. 0

**Type:**                    **FG16OHM16AM16 0,6/1Kv**

**Conductor:**            Flexible copper conductor according to IEC60228 cl.5

**Insulation:**            EPR G16 type extruded compound  
 Temperature range -30 +90° C  
 Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,70 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm

**Laying up:**            Twisted to cores UNEL color (or to be agreed)

**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: Grey/Black/Green (or to be agreed)

**Marking:**             On the outer sheath "Sensitherm – FG16OHM16AM16 0,6/1 KV Siz. IEC 60332.3  
 WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001mt"

- Performance:**
- Test voltage core to core 3,5KV
  - Flame retardant according to IEC60332-3-22, CEI20-22/2
  - Low smoke and Halogen free as per IEC60754-2, CEI20-37/2
  - Low smoke density emiss. IEC61034 1/2
  - Hydrocarbon and UV resistant
  - Rodent resistant
  - Fit for direct burial
  - This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
  - EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1051900501	1051703501	FG160HM16AM16 0,6/1KV 4x1,5 mm <sup>2</sup>	9,3	1,8	14,5	360	205
1051900502	1051703502	FG160HM16AM16 0,6/1KV 5x1,5 mm <sup>2</sup>	10,1	1,8	15,3	400	220
1051900503	1051703503	FG160HM16AM16 0,6/1KV 6x1,5 mm <sup>2</sup>	10,8	1,8	16,2	450	230
1051900504	1051703504	FG160HM16AM16 0,6/1KV 7x1,5 mm <sup>2</sup>	11,2	1,8	16,1	460	230
1051900505	1051703505	FG160HM16AM16 0,6/1KV 10x1,5 mm <sup>2</sup>	13,6	1,8	18,6	600	260
1051900506	1051703506	FG160HM16AM16 0,6/1KV 12x1,5 mm <sup>2</sup>	14,6	1,8	19,8	710	280
1051900507	1051703507	FG160HM16AM16 0,6/1KV 16x1,5 mm <sup>2</sup>	15,8	1,8	21,1	840	300
1051900508	1051703508	FG160HM16AM16 0,6/1KV 20x1,5 mm <sup>2</sup>	17,6	2,0	24,8	990	330
1051900509	1051703509	FG160HM16AM16 0,6/1KV 24x1,5 mm <sup>2</sup>	20	2,0	27,2	1140	360
1051900510	1051703510	FG160HM16AM16 0,6/1KV 4x2,5 mm <sup>2</sup>	10,3	1,8	15,3	430	220
1051900511	1051703511	FG160HM16AM16 0,6/1KV 5x2,5 mm <sup>2</sup>	11,4	1,8	16,5	490	230
1051900512	1051703512	FG160HM16AM16 0,6/1KV 6x2,5 mm <sup>2</sup>	12,2	1,8	17	540	240
1051900513	1051703513	FG160HM16AM16 0,6/1KV 7x2,5 mm <sup>2</sup>	12,4	1,8	17,5	590	210
1051900514	1051703514	FG160HM16AM16 0,6/1KV 10x2,5 mm <sup>2</sup>	15,6	1,8	21	800	290
1051900515	1051703515	FG160HM16AM16 0,6/1KV 12x2,5 mm <sup>2</sup>	16,5	2,0	21,6	910	300
1051900516	1051703516	FG160HM16AM16 0,6/1KV 16x2,5 mm <sup>2</sup>	18	2,0	23,3	1000	330
1051900517	1051703517	FG160HM16AM16 0,6/1KV 24x2,5 mm <sup>2</sup>	22,8	2,0	28,6	1530	390
1051900518	1051703518	FG160HM16AM16 0,6/1KV 2x4 mm <sup>2</sup>	10	1,8	15,1	380	210
1051900519	1051703519	FG160HM16AM16 0,6/1KV 3x4 mm <sup>2</sup>	10,5	1,8	15,2	450	220
1051900520	1051703520	FG160HM16AM16 0,6/1KV 4x4 mm <sup>2</sup>	11,6	1,8	16,5	530	230
1051900521	1051703521	FG160HM16AM16 0,6/1KV 5x4 mm <sup>2</sup>	12,8	1,8	17,8	610	250
1051900522	1051703522	FG160HM16AM16 0,6/1KV 7x4 mm <sup>2</sup>	14	2,0	19,4	780	280
1051900523	1051703523	FG160HM16AM16 0,6/1KV 2x6 mm <sup>2</sup>	11,4	1,8	16,5	470	230
1051900524	1051703524	FG160HM16AM16 0,6/1KV 3x6 mm <sup>2</sup>	12	1,8	17,2	560	230
1051900525	1051703525	FG160HM16AM16 0,6/1KV 4x6 mm <sup>2</sup>	14,8	1,8	18,6	710	270
1051900526	1051703526	FG160HM16AM16 0,6/1KV 5x6 mm <sup>2</sup>	17	2,0	20,4	810	290
1051900527	1051703527	FG160HM16AM16 0,6/1KV 2x10 mm <sup>2</sup>	17,5	2,0	21,3	700	310
1051900528	1051703528	FG160HM16AM16 0,6/1KV 3x10 mm <sup>2</sup>	17,8	2,0	21,3	870	310
1051900529	1051703529	FG160HM16AM16 0,6/1KV 2x16 mm <sup>2</sup>	19	2,0	23,3	910	340
1051900530	1051703530	FG160HM16AM16 0,6/1KV 3x16 mm <sup>2</sup>	19,6	2,0	24	1160	350
1051900531	1051703531	FG160HM16AM16 0,6/1Kv 2x25 mm <sup>2</sup>	20,2	2,0	24,3	1200	350
1051900532	1051703532	FG160HM16AM16 0,6/1Kv 3x25 mm <sup>2</sup>	21	2,0	25,7	1570	370

**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.

# Control and Power Cable – 105-2      CPR EU 305/2011

**CU, G16 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 105-2/23 of 10/11/2023 Rev. 0

**Type:** FG16OHM16FM16 0,6/1 KV  
**Conductor:** Flexible copper conductor according to IEC60228 cl.5  
**Insulation:** EPR G16 type extruded compound  
 Temperature range -30 +90° C  
 Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,70 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm

**Laying up:** Twisted to cores UNEL color (or to be agreed)

**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 round wires plus wrapping polyester tape (SWA)

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

**Marking:** On the outer sheath "Sensitherm – FG16OHM16FM16 0,6/1 KV Siz. IEC 60332.3  
 WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001mt"

**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60332-3-22, CEI20-22/2
- Low smoke and Halogen free as per IEC60754-2, CEI20-37/2
- Low smoke density emiss. IEC61034 1/2
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval



CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1051900501	1051703501	FG16OHM16FM16 0,6/1Kv 4x1,5 mm <sup>2</sup>	9,3	1,8	14,9	368	205
1052900502	1052703502	FG16OHM16FM16 0,6/1Kv 5x1,5 mm <sup>2</sup>	10,1	1,8	15,8	410	220
1052900503	1052703503	FG16OHM16FM16 0,6/1Kv 6x1,5 mm <sup>2</sup>	10,8	1,8	16,7	440	230
1052900504	1052703504	FG16OHM16FM16 0,6/1Kv 7x1,5 mm <sup>2</sup>	11,2	1,8	16,6	480	230
1052900505	1052703505	FG16OHM16FM16 0,6/1Kv 10x1,5 mm <sup>2</sup>	13,6	1,8	19,2	620	260
1052900506	1052703506	FG16OHM16FM16 0,6/1Kv 12x1,5 mm <sup>2</sup>	14,6	1,8	20,4	730	280
1052900507	1052703507	FG16OHM16FM16 0,6/1Kv 16x1,5 mm <sup>2</sup>	15,8	1,8	21,8	870	300
1052900508	1052703508	FG16OHM16FM16 0,6/1Kv 20x1,5 mm <sup>2</sup>	17,6	2,0	25,6	1020	330
1052900509	1052703509	FG16OHM16FM16 0,6/1Kv 24x1,5 mm <sup>2</sup>	20	2,0	28	1180	360
1052900510	1052703510	FG16OHM16FM16 0,6/1Kv 4x2,5 mm <sup>2</sup>	10,3	1,8	15,8	440	220
1052900511	1052703511	FG16OHM16FM16 0,6/1Kv 5x2,5 mm <sup>2</sup>	11,4	1,8	17	510	230
1052900512	1052703512	FG16OHM16FM16 0,6/1Kv 6x2,5 mm <sup>2</sup>	12,2	1,8	17,6	560	240
1052900513	1052703513	FG16OHM16FM16 0,6/1Kv 7x2,5 mm <sup>2</sup>	12,4	1,8	18	610	210
1052900514	1052703514	FG16OHM16FM16 0,6/1Kv 10x2,5 mm <sup>2</sup>	15,6	1,8	21,6	830	290
1052900515	1052703515	FG16OHM16FM16 0,6/1Kv 12x2,5 mm <sup>2</sup>	16,5	2,0	22,3	940	300
1052900516	1052703516	FG16OHM16FM16 0,6/1Kv 16x2,5 mm <sup>2</sup>	18	2,0	24	1140	330
1052900517	1052703517	FG16OHM16FM16 0,6/1Kv 24x2,5 mm <sup>2</sup>	22,8	2,0	29,5	1580	390
1052900518	1052703518	FG16OHM16FM16 0,6/1Kv 2x4 mm <sup>2</sup>	10	1,8	15,6	390	210
1052900519	1052703519	FG16OHM16FM16 0,6/1Kv 3x4 mm <sup>2</sup>	10,5	1,8	16	470	220
1052900520	1052703520	FG16OHM16FM16 0,6/1Kv 4x4 mm <sup>2</sup>	11,6	1,8	17,2	550	230
1052900521	1052703521	FG16OHM16FM16 0,6/1Kv 5x4 mm <sup>2</sup>	12,8	1,8	18,3	630	250
1052900522	1052703522	FG16OHM16FM16 0,6/1Kv 7x4 mm <sup>2</sup>	14	2,0	20	810	280
1052900523	1052703523	FG16OHM16FM16 0,6/1Kv 2x6 mm <sup>2</sup>	11,4	1,8	17	480	230
1052900524	1052703524	FG16OHM16FM16 0,6/1Kv 3x6 mm <sup>2</sup>	12	1,8	17,7	580	230
1052900525	1052703525	FG16OHM16FM16 0,6/1Kv 4x6 mm <sup>2</sup>	14,8	1,8	19,2	730	270
1052900526	1052703526	FG16OHM16FM16 0,6/1Kv 5x6 mm <sup>2</sup>	17	2,0	21	840	290
1052900527	1052703527	FG16OHM16FM16 0,6/1Kv 2x10 mm <sup>2</sup>	17,5	2,0	22	720	310
1052900528	1052703528	FG16OHM16FM16 0,6/1Kv 3x10 mm <sup>2</sup>	17,8	2,0	22	900	310
1052900529	1052703529	FG16OHM16FM16 0,6/1Kv 2x16 mm <sup>2</sup>	19	2,0	24	940	340
1052900530	1052703530	FG16OHM16FM16 0,6/1Kv 3x16 mm <sup>2</sup>	19,6	2,0	24,8	1200	350
1052900531	1052703531	FG16OHM16FM16 0,6/1Kv 2x25 mm <sup>2</sup>	20,2	2,0	25	1240	350
1052900532	1052703532	FG16OHM16FM16 0,6/1Kv 3x25 mm <sup>2</sup>	21	2,0	26,5	1620	370

**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.

# Control and Power Cable - 106

# CPR EU 305/2011

## Cca s1b-d1-a1

**CU, G16 INSULATION, M16 OUTER SHEATH.**  
**IEC 60332.1 IEC 60332.3 - HALOGEN FREE**

Technical Specifications n° 106/23 of 10/11/2023 Rev. 0

**Type:** FG16OM16 0,6/1 KV

**Conductor:** Flexible tinned and/or plain copper conductor according to IEC 60228 cl.5

**Insulation:** EPR G16 type extruded compound  
 Temperature range -30 +90° C  
 Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,50 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,7 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm
35 mm <sup>2</sup>	0,90 ± 0,02 mm
50 mm <sup>2</sup>	1,00 ± 0,02 mm
70 mm <sup>2</sup>	1,10 ± 0,02 mm
95 mm <sup>2</sup>	1,10 ± 0,02 mm
120 mm <sup>2</sup>	1,20 ± 0,02 mm

**Laying up:** Twisted to core, UNEL (or to be agreed)

**Inner sheath:** Extruded compound (if required)

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

**Marking:** On the outer sheath "Sensitherm – FG16OM16 0,6/1 KV Siz. IEC 60332.3  
 WWW/YY (Batch/Num.) Cca s1b-d1-a1 0001 m CE"

**Performance:**

- Test voltage core to core 3,5 KV
- Flame retardant according to IEC60 332-3-22, CEI 20-22/2
- Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2
- Low smoke density emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Cable for intrinsically safe application
- Inductance  $\leq$  0,90 mH/Km
- Capacitance  $\leq$  0,200  $\mu$ F/Km

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
106900501	106703501	FG160M16 0,6/1KV 2x1,5 mm <sup>2</sup>	1,8	9,5	260	80
106900502	106703502	FG160M16 0,6/1KV 3x1,5 mm <sup>2</sup>	1,8	9,9	300	80
106900503	106703503	FG160M16 0,6/1KV 4x1,5 mm <sup>2</sup>	1,8	10,7	340	85
106900504	106703504	FG160M16 0,6/1KV 5x1,5 mm <sup>2</sup>	1,8	11,5	390	90
106900505	106703505	FG160M16 0,6/1KV 6x1,5 mm <sup>2</sup>	1,8	12,2	440	100
106900506	106703506	FG160M16 0,6/1KV 7x1,5 mm <sup>2</sup>	1,8	12,4	460	100
106900507	106703507	FG160M16 0,6/1KV 10x1,5 mm <sup>2</sup>	1,8	15,2	380	120
106900508	106703508	FG160M16 0,6/1KV 12x1,5 mm <sup>2</sup>	1,8	15,8	420	120
106900509	106703509	FG160M16 0,6/1KV 16x1,5 mm <sup>2</sup>	1,8	17,8	550	145
106900510	106703510	FG160M16 0,6/1KV 20x1,5 mm <sup>2</sup>	2,0	19,6	650	160
106900511	106703511	FG160M16 0,6/1KV 24x1,5 mm <sup>2</sup>	2,0	21,7	780	175
106900512	106703512	FG160M16 0,6/1KV 48x1,5 mm <sup>2</sup>	2,0	28	1380	220
106900513	106703513	FG160M16 0,6/1KV 2x2,5 mm <sup>2</sup>	1,8	10,4	160	85
106900514	106703514	FG160M16 0,6/1KV 3x2,5 mm <sup>2</sup>	1,8	10,9	200	85
106900515	106703515	FG160M16 0,6/1KV 4x2,5 mm <sup>2</sup>	1,8	11,8	240	100
106900516	106703516	FG160M16 0,6/1KV 5x2,5 mm <sup>2</sup>	1,8	13	300	100
106900517	106703517	FG160M16 0,6/1KV 6x2,5 mm <sup>2</sup>	1,8	13,8	340	110
106900518	106703518	FG160M16 0,6/1KV 7x2,5 mm <sup>2</sup>	1,8	14	380	120
106900519	106703519	FG160M16 0,6/1KV 10x2,5 mm <sup>2</sup>	1,8	17,6	520	145
106900520	106703520	FG160M16 0,6/1KV 12x2,5 mm <sup>2</sup>	1,8	18	590	145
106900521	106703521	FG160M16 0,6/1KV 16x2,5 mm <sup>2</sup>	2,0	20	750	160
106900522	106703522	FG160M16 0,6/1KV 20x2,5 mm <sup>2</sup>	2,0	22	910	175
106900523	106703523	FG160M16 0,6/1KV 24x2,5 mm <sup>2</sup>	2,0	24,5	1080	200
106900524	106703524	FG160M16 0,6/1KV 48x2,5 mm <sup>2</sup>	2,0	32	1980	260
106900525	106703525	FG160M16 0,6/1KV 2x 4 mm <sup>2</sup>	1,8	11,4	200	90

106900526	106703526	FG160M16	0,6/1KV	3x4 mm <sup>2</sup>	1,8	11,9	260	90
106900527	106703527	FG160M16	0,6/1KV	4x4 mm <sup>2</sup>	1,8	13	320	100
106900528	106703528	FG160M16	0,6/1KV	5x4 mm <sup>2</sup>	1,8	14,5	400	115
106900529	106703529	FG160M16	0,6/1KV	7x4 mm <sup>2</sup>	1,8	15,7	510	130
106900530	106703530	FG160M16	0,6/1KV	2x6 mm <sup>2</sup>	1,8	13	270	100
106900531	106703531	FG160M16	0,6/1KV	3x6 mm <sup>2</sup>	1,8	13,8	350	110
106900532	106703532	FG160M16	0,6/1KV	4x6 mm <sup>2</sup>	1,8	15	440	120
106900533	106703533	FG160M16	0,6/1KV	5x 6 mm <sup>2</sup>	2,0	16,4	520	130
106900534	106703534	FG160M16	0,6/1KV	2x10 mm <sup>2</sup>	1,8	16,8	420	135
106900535	106703535	FG160M16	0,6/1KV	3x10 mm <sup>2</sup>	1,8	18	550	140
106900536	106703536	FG160M16	0,6/1KV	4x10 mm <sup>2</sup>	1,8	19,4	700	155
106900537	106703537	FG160M16	0,6/1KV	5x10 mm <sup>2</sup>	2,0	21,5	840	170
106900538	106703538	FG160M16	0,6/1KV	2x16 mm <sup>2</sup>	1,8	19	580	150
106900539	106703539	FG160M16	0,6/1KV	3x16 mm <sup>2</sup>	2,0	20,5	780	160
106900540	106703540	FG160M16	0,6/1KV	4x16 mm <sup>2</sup>	2,0	22,5	990	180
106900541	106703541	FG160M16	0,6/1KV	5x16 mm <sup>2</sup>	2,0	24,6	1200	200
106900542	106703542	FG160M16	0,6/1KV	3x25 mm <sup>2</sup>	2,0	24	1100	200
106900543	106703543	FG160M16	0,6/1KV	4x25 mm <sup>2</sup>	2,0	26,5	1400	210
106900544	106703544	FG160M16	0,6/1KV	5x25 mm <sup>2</sup>	2,0	29	1700	230
106900545	106703545	FG160M16	0,6/1KV	3x35 mm <sup>2</sup>	2,0	26,6	1480	210
106900546	106703546	FG160M16	0,6/1KV	3½x35 mm <sup>2</sup>	2,0	29	1650	230
106900547	106703547	FG160M16	0,6/1Kv	5x35 mm <sup>2</sup>	2,0	32,4	2200	260
106900548	106703548	FG160M16	0,6/1KV	3x50 mm <sup>2</sup>	2,0	30,6	1990	240
106900549	106703549	FG160M16	0,6/1KV	3½x50 mm <sup>2</sup>	2,0	32	2200	260
106900550	106703550	FG160M16	0,6/1KV	3x70 mm <sup>2</sup>	2,0	35	2650	280
106900551	106703551	FG160M16	0,6/1KV	3½x70 mm <sup>2</sup>	2,0	38	3000	300
106900552	106703552	FG160M16	0,6/1KV	3x95 mm <sup>2</sup>	2,0	39	3400	310
106900553	106703553	FG160M16	0,6/1KV	3½x95 mm <sup>2</sup>	2,0	43	4000	340
106900554	106703554	FG160M16	0,6/1KV	3x120 mm <sup>2</sup>	2,0	43	4300	340
106900555	106703555	FG160M16	0,6/1KV	3½x120 mm <sup>2</sup>	2,0	46,5	4700	370

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

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

# Control and Power Cable – 107-1

# CPR EU 305/2011

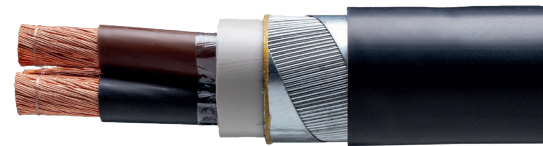
**CU, G16 INSULATION, R16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, R16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3**

Technical Specifications n° 107-1/23 of 10/11/2023 Rev. 0

**Type:** FG16OR16AR16 0,6/1KV

**Conductor:** Flexible copper conductor according to IEC 60228 cl.5

**Insulation:** EPR G16 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,50 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,7 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm
35 mm <sup>2</sup>	0,90 ± 0,02 mm
50 mm <sup>2</sup>	1,00 ± 0,02 mm
70 mm <sup>2</sup>	1,10 ± 0,02 mm
95 mm <sup>2</sup>	1,10 ± 0,02 mm
120 mm <sup>2</sup>	1,20 ± 0,02 mm

**Laying up:** Twisted to core, UNEL (or to be agreed)

**Inner sheath:** R16 PVC extruded compound

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

**Outer sheath:** R16 PVC extruded compound  
Colour: Grey/Black (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16OR16AR16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s3-d1-a3 001 m"

**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60 332-3-22, CEI 20-22/2
- Low smoke and fume as per IEC 60754-2, CEI 20-37/2

- HCL emission  $\leq$  18%
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- 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)
- EN50575 tested for approval
- CPR approved cables Cca s3,d1,a3

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	$\varnothing$ OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1071900501	1071703501	FG16OR16AR16 0,6/1KV 2x1,5 mm <sup>2</sup>	7,9	1,8	13	250	190
1071900502	1071703502	FG16OR16AR16 0,6/1KV 3x1,5 mm <sup>2</sup>	8,4	1,8	13,4	290	190
1071900503	1071703503	FG16OR16AR16 0,6/1KV 4x1,5 mm <sup>2</sup>	9	1,8	14,2	330	200
1071900504	1071703504	FG16OR16AR16 0,6/1KV 5x1,5 mm <sup>2</sup>	10	1,8	15	380	210
1071900505	1071703505	FG16OR16AR16 0,6/1KV 6x1,5 mm <sup>2</sup>	10,6	1,8	15,9	430	220
1071900506	1071703506	FG16OR16AR16 0,6/1KV 7x1,5 mm <sup>2</sup>	10,8	1,8	16	450	220
1071900507	1071703507	FG16OR16AR16 0,6/1KV 10x1,5 mm <sup>2</sup>	13,6	1,8	18,6	600	260
1071900508	1071703508	FG16OR16AR16 0,6/1KV 12x1,5mm <sup>2</sup>	14,2	1,8	19,4	650	270
1071900509	1071703509	FG16OR16AR16 0,6/1KV 16x1,5mm <sup>2</sup>	15,8	1,8	20,8	800	290
1071900510	1071703510	FG16OR16AR16 0,6/1KV 19x1,5mm <sup>2</sup>	17,6	2,0	23,8	970	340
1071900511	1071703511	FG16OR16AR16 0,6/1KV 20x1,5mm <sup>2</sup>	18	2,0	24,2	990	340
1071900512	1071703512	FG16OR16AR16 0,6/1KV 24x1,5 mm <sup>2</sup>	20	2,0	24,7	1080	350
1071900513	1071703513	FG16OR16AR16 0,6/1KV 48x1,5 mm <sup>2</sup>	26	2,0	31	1940	440
1071900514	1071703514	FG16OR16AR16 0,6/1KV 2x2,5 mm <sup>2</sup>	9	1,8	14	300	200
1071900515	1071703515	FG16OR16AR16 0,6/1KV 3x2,5 mm <sup>2</sup>	9,4	1,8	14,4	360	200
1071900516	1071703516	FG16OR16AR16 0,6/1KV 4x2,5 mm <sup>2</sup>	10,2	1,8	15,2	410	220
1071900517	1071703517	FG16OR16AR16 0,6/1KV 5x2,5 mm <sup>2</sup>	11,2	1,8	16,3	460	230
1071900518	1071703518	FG16OR16AR16 0,6/1KV 6x2,5 mm <sup>2</sup>	12,4	1,8	17,2	540	240
1071900519	1071703519	FG16OR16AR16 0,6/1KV 7x2,5 mm <sup>2</sup>	12,2	1,8	17,6	590	240
1071900520	1071703520	FG16OR16AR16 0,6/1KV 10x2,5 mm <sup>2</sup>	15,8	1,8	21	800	300
1071900521	1071703521	FG16OR16AR16 0,6/1KV 12x2,5 mm <sup>2</sup>	16	1,8	21,1	840	300
1071900522	1071703522	FG16OR16AR16 0,6/1KV 16x2,5 mm <sup>2</sup>	18,2	2,0	23	1110	330
1071900523	1071703523	FG16OR16AR16 0,6/1KV 20x2,5 mm <sup>2</sup>	20,6	2,0	25,2	1310	350
1071900524	1071703524	FG16OR16AR16 0,6/1KV 24x2,5 mm <sup>2</sup>	23	2,0	28	1450	400
1071900525	1071703525	FG16OR16AR16 0,6/1KV 48x2,5 mm <sup>2</sup>	29	2,0	33	2660	460
1071900526	1071703526	FG16OR16AR16 0,6/1KV 2x4 mm <sup>2</sup>	9,8	1,8	15	360	210

1071900527	1071703527	FG16OR16AR16	0,6/1KV	3x4 mm <sup>2</sup>	10,3	1,8	15,5	430	210
1071900528	1071703528	FG16OR16AR16	0,6/1KV	4x4 mm <sup>2</sup>	11,5	1,8	16,5	500	220
1071900529	1071703529	FG16OR16AR16	0,6/1KV	5x4 mm <sup>2</sup>	12,5	1,8	16,9	590	230
1071900530	1071703530	FG16OR16AR16	0,6/1KV	7x4 mm <sup>2</sup>	13,7	1,8	19,1	770	260
1071900531	1071703531	FG16OR16AR16	0,6/1KV	2x6 mm <sup>2</sup>	11,2	1,8	16,5	440	220
1071900532	1071703532	FG16OR16AR16	0,6/1KV	3x6 mm <sup>2</sup>	11,8	1,8	17	530	230
1071900533	1071703533	FG16OR16AR16	0,6/1KV	4x6 mm <sup>2</sup>	13	1,8	18	650	250
1071900534	1071703534	FG16OR16AR16	0,6/1KV	5x6 mm <sup>2</sup>	14,6	2,0	20	760	280
1071900535	1071703535	FG16OR16AR16	0,6/1KV	2x10 mm <sup>2</sup>	14,8	1,8	20,1	640	280
1071900536	1071703536	FG16OR16AR16	0,6/1KV	3x10 mm <sup>2</sup>	15,8	1,8	20,8	800	290
1071900537	1071703537	FG16OR16AR16	0,6/1KV	4x10 mm <sup>2</sup>	18	1,8	22,8	1020	320
1071900538	1071703538	FG16OR16AR16	0,6/1KV	5x10 mm <sup>2</sup>	20	2,0	24,8	1200	350
1071900539	1071703539	FG16OR16AR16	0,6/1KV	2x16 mm <sup>2</sup>	18	1,8	22,7	870	320
1071900540	1071703540	FG16OR16AR16	0,6/1KV	3x16 mm <sup>2</sup>	19	2,0	24,3	1150	340
1071900541	1071703541	FG16OR16AR16	0,6/1KV	4x16 mm <sup>2</sup>	21	2,0	26	1420	370
1071900542	1071703542	FG16OR16AR16	0,6/1KV	5x16 mm <sup>2</sup>	23	2,0	28,1	1700	400
1071900543	1071703543	FG16OR16AR16	0,6/1KV	3x25 mm <sup>2</sup>	22	2,0	27,1	1550	380
1071900544	1071703544	FG16OR16AR16	0,6/1KV	4x25 mm <sup>2</sup>	24,5	2,0	29,1	1940	410
1071900545	1071703545	FG16OR16AR16	0,6/1KV	5x25 mm <sup>2</sup>	27	2,0	32	2330	450
1071900546	1071703546	FG16OR16AR16	0,6/1KV	3x35 mm <sup>2</sup>	25	2,0	29,1	1980	410
1071900547	1071703547	FG16OR16AR16	0,6/1KV	3½x35 mm <sup>2</sup>	27	2,0	32	2500	450
1071900548	1071703548	FG16OR16AR16	0,6/1KV	5x35 mm <sup>2</sup>	34	2,0	38,8	3000	550
1071900549	1071703549	FG16OR16AR16	0,6/1KV	3x50 mm <sup>2</sup>	29	2,0	33	2620	470
1071900550	1071703550	FG16OR16AR16	0,6/1KV	3½x50 mm <sup>2</sup>	31	2,0	35,9	3320	360
1071900551	1071703551	FG16OR16AR16	0,6/1KV	3x70 mm <sup>2</sup>	33	2,0	36,9	3420	520
1071900552	1071703552	FG16OR16AR16	0,6/1KV	3½x70 mm <sup>2</sup>	36	2,0	40,8	4360	570
1071900553	1071703553	FG16OR16AR16	0,6/1KV	3x95 mm <sup>2</sup>	36	2,0	38,7	4400	540
1071900554	1071703554	FG16OR16AR16	0,6/1KV	3½x95 mm <sup>2</sup>	41	2,0	44,6	5630	630
1071900555	1071703555	FG16OR16AR16	0,6/1KV	3x120 mm <sup>2</sup>	42	2,0	45,6	5340	640
1071900556	1071703556	FG16OR16AR16	0,6/1KV	3½x120 mm <sup>2</sup>	44	2,0	48,5	6870	680
1071900557	1071703557	FG16OR16AR16	0,6/1KV	5 G 50 mm <sup>2</sup>	35	2,0	38,8	3400	540

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

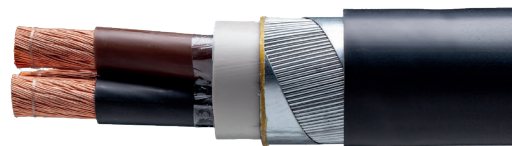
**Intended use:** Control and power cable in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.

# Control and Power Cable – 107-2      CPR EU 305/2011

**CU, G16 INSULATION, R16 INNER SHEATH, STEEL WIRE ARMOUR, R16 OUTER SHEATH.  
IEC 60332.1 IEC 60332.3**

Technical Specifications n° 107-2/23 of 10/11/2023 Rev. 0

**Type:** FG16OR16FR16 0,6/1 KV  
**Conductor:** Flexible copper conductor according to IEC 60228 cl.5  
**Insulation:** EPR G16 type extruded compound  
 Temperature range -30 +90° C  
 Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,50 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,7 ± 0,02 mm
6 mm <sup>2</sup>	0,70 ± 0,02 mm
10 mm <sup>2</sup>	0,70 ± 0,02 mm
16 mm <sup>2</sup>	0,70 ± 0,02 mm
25 mm <sup>2</sup>	0,90 ± 0,02 mm
35 mm <sup>2</sup>	0,90 ± 0,02 mm
50 mm <sup>2</sup>	1,00 ± 0,02 mm
70 mm <sup>2</sup>	1,10 ± 0,02 mm
95 mm <sup>2</sup>	1,10 ± 0,02 mm
120 mm <sup>2</sup>	1,20 ± 0,02 mm

**Laying up:** Twisted to core, UNEL (or to be agreed)  
**Inner sheath:** R16 PVC extruded compound  
**Armour:** Galvanized steel round wires plus wrapping polyester tape (SWA)  
**Outer sheath:** R16 PVC extruded compound  
 Colour: Grey/Black (or to be agreed)  
**Marking:** On the outer sheath "Sensitherm – FG16OR16FR16 0,6/1 KV Siz. IEC 60332.3  
 WWW/YY (Batch/Num.) Cca s3-d1-a3 001 m"  
**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60 332-3-22, CEI 20-22/2
- Low smoke and fume as per IEC 60754-2, CEI 20-37/2
- HCL emission < /= 18%
- Hydrocarbon and UV resistant



- Rodent resistant
- Fit for direct burial
- 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)
- EN50575 tested for approval
- CPR approved cables Cca s3,d1,a3

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	Ø OVER INNER SHEATH MM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1072900501	1072703501	FG16OR16FR16 0,6/1KV 2x1,5 mm <sup>2</sup>	7,9	1,8	13,4	260	190
1072900502	1072703502	FG16OR16FR16 0,6/1KV 3x1,5 mm <sup>2</sup>	8,4	1,8	13,8	300	190
1072900503	1072703503	FG16OR16FR16 0,6/1KV 4x1,5 mm <sup>2</sup>	9	1,8	14,6	340	200
1072900504	1072703504	FG16OR16FR16 0,6/1KV 5x1,5 mm <sup>2</sup>	10	1,8	15,5	390	220
1072900505	1072703505	FG16OR16FR16 0,6/1KV 6x1,5 mm <sup>2</sup>	10,6	1,8	16,4	440	230
1072900506	1072703506	FG16OR16FR16 0,6/1KV 7x1,5 mm <sup>2</sup>	10,8	1,8	16,5	460	230
1072900507	1072703507	FG16OR16FR16 0,6/1KV 10x1,5 mm <sup>2</sup>	13,6	1,8	19,2	620	270
1072900508	1072703508	FG16OR16FR16 0,6/1KV 12x1,5mm <sup>2</sup>	14,2	1,8	20	670	280
1072900509	1072703509	FG16OR16FR16 0,6/1KV 16x1,5mm <sup>2</sup>	15,8	1,8	21,5	830	300
1072900510	1072703510	FG16OR16FR16 0,6/1KV 19x1,5mm <sup>2</sup>	17,6	2,0	24,5	1000	350
1072900511	1072703511	FG16OR16FR16 0,6/1KV 20x1,5mm <sup>2</sup>	18	2,0	25	1020	360
1072900512	1072703512	FG16OR16FR16 0,6/1KV 24x1,5 mm <sup>2</sup>	20	2,0	25,5	1110	360
1072900513	1072703513	FG16OR16FR16 0,6/1KV 48x1,5 mm <sup>2</sup>	26	2,0	32	2000	450
1072900514	1072703514	FG16OR16FR16 0,6/1KV 2x2,5 mm <sup>2</sup>	9	1,8	14,4	310	200
1072900515	1072703515	FG16OR16FR16 0,6/1KV 3x2,5 mm <sup>2</sup>	9,4	1,8	14,8	360	210
1072900516	1072703516	FG16OR16FR16 0,6/1KV 4x2,5 mm <sup>2</sup>	10,2	1,8	15,7	420	220
1072900517	1072703517	FG16OR16FR16 0,6/1KV 5x2,5 mm <sup>2</sup>	11,2	1,8	16,8	480	240
1072900518	1072703518	FG16OR16FR16 0,6/1KV 6x2,5 mm <sup>2</sup>	12,4	1,8	17,8	560	250
1072900519	1072703519	FG16OR16FR16 0,6/1KV 7x2,5 mm <sup>2</sup>	12,2	1,8	18,2	610	260
1072900520	1072703520	FG16OR16FR16 0,6/1KV 10x2,5 mm <sup>2</sup>	15,8	1,8	21,6	830	300
1072900521	1072703521	FG16OR16FR16 0,6/1KV 12x2,5 mm <sup>2</sup>	16	1,8	21,8	870	310
1072900522	1072703522	FG16OR16FR16 0,6/1KV 16x2,5 mm <sup>2</sup>	18,2	2,0	23,8	1140	340
1072900523	1072703523	FG16OR16FR16 0,6/1KV 20x2,5 mm <sup>2</sup>	20,6	2,0	26	1350	370
1072900524	1072703524	FG16OR16FR16 0,6/1KV 24x2,5 mm <sup>2</sup>	23	2,0	28,8	1500	410
1072900525	1072703525	FG16OR16FR16 0,6/1KV 48x2,5 mm <sup>2</sup>	29	2,0	34	2740	480
1072900526	1072703526	FG16OR16FR16 0,6/1KV 2x4 mm <sup>2</sup>	9,8	1,8	15,4	370	220
1072900527	1072703527	FG16OR16FR16 0,6/1KV 3x4 mm <sup>2</sup>	10,3	1,8	16	440	220
1072900528	1072703528	FG16OR16FR16 0,6/1KV 4x4 mm <sup>2</sup>	11,5	1,8	17	520	240
1072900529	1072703529	FG16OR16FR16 0,6/1KV 5x4 mm <sup>2</sup>	12,5	1,8	18	610	260

1072900530	1072703530	FG16OR16FR16	0,6/1KV 7x4 mm <sup>2</sup>	13,7	1,8	19,7	790	280
1072900531	1072703531	FG16OR16FR16	0,6/1KV 2x6 mm <sup>2</sup>	11,2	1,8	17	450	240
1072900532	1072703532	FG16OR16FR16	0,6/1KV 3x6 mm <sup>2</sup>	11,8	1,8	17,5	550	250
1072900533	1072703533	FG16OR16FR16	0,6/1KV 4x6 mm <sup>2</sup>	13	1,8	18,6	670	270
1072900534	1072703534	FG16OR16FR16	0,6/1KV 5x6 mm <sup>2</sup>	14,6	2,0	20,6	780	290
1072900535	1072703535	FG16OR16FR16	0,6/1KV 2x10 mm <sup>2</sup>	14,8	1,8	20,8	660	290
1072900536	1072703536	FG16OR16FR16	0,6/1KV 3x10 mm <sup>2</sup>	15,8	1,8	21,4	830	300
1072900537	1072703537	FG16OR16FR16	0,6/1KV 4x10 mm <sup>2</sup>	18	1,8	23,5	1050	330
1072900538	1072703538	FG16OR16FR16	0,6/1KV 5x10 mm <sup>2</sup>	20	2,0	25,6	1240	360
1072900539	1072703539	FG16OR16FR16	0,6/1KV 2x16 mm <sup>2</sup>	18	1,8	23,4	900	330
1072900540	1072703540	FG16OR16FR16	0,6/1KV 3x16 mm <sup>2</sup>	19	2,0	25	1190	360
1072900541	1072703541	FG16OR16FR16	0,6/1KV 4x16 mm <sup>2</sup>	21	2,0	26,8	1470	380
1072900542	1072703542	FG16OR16FR16	0,6/1KV 5x16 mm <sup>2</sup>	23	2,0	29	1760	410
1072900543	1072703543	FG16OR16FR16	0,6/1KV 3x25 mm <sup>2</sup>	22	2,0	28	1600	390
1072900544	1072703544	FG16OR16FR16	0,6/1KV 4x25 mm <sup>2</sup>	24,5	2,0	30	2000	430
1072900545	1072703545	FG16OR16FR16	0,6/1KV 5x25 mm <sup>2</sup>	27	2,0	33	2400	460
1072900546	1072703546	FG16OR16FR16	0,6/1KV 3x35 mm <sup>2</sup>	25	2,0	30	2040	430
1072900547	1072703547	FG16OR16FR16	0,6/1KV 3½x35 mm <sup>2</sup>	27	2,0	33	2580	460
1072900548	1072703548	FG16OR16FR16	0,6/1KV 5x35 mm <sup>2</sup>	34	2,0	40	3100	560
1072900549	1072703549	FG16OR16FR16	0,6/1KV 3x50 mm <sup>2</sup>	29	2,0	34	2700	480
1072900550	1072703550	FG16OR16FR16	0,6/1KV 3½x50 mm <sup>2</sup>	31	2,0	37	3420	520
1072900551	1072703551	FG16OR16FR16	0,6/1KV 3x70 mm <sup>2</sup>	33	2,0	38	3530	540
1072900552	1072703552	FG16OR16FR16	0,6/1KV 3½x70 mm <sup>2</sup>	36	2,0	42	4500	590
1072900553	1072703553	FG16OR16FR16	0,6/1KV 3x95 mm <sup>2</sup>	36	2,0	39,9	4540	560
1072900554	1072703554	FG16OR16FR16	0,6/1KV 3½x95 mm <sup>2</sup>	41	2,0	46	5800	650
1072900555	1072703555	FG16OR16FR16	0,6/1KV 3x120 mm <sup>2</sup>	42	2,0	47	5500	670
1072900556	1072703556	FG16OR16FR16	0,6/1KV 3½x120 mm <sup>2</sup>	44	2,0	50	7080	700
1072900557	1072703557	FG16OR16FR16	0,6/1KV 5 G 50 mm <sup>2</sup>	35	2,0	40	3500	560

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

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

# Instrumentation Cable - 108

# CPR ECA

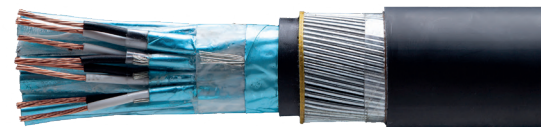
**CU, PVC INSULATED, INDIVIDUAL AND OVERALL SCREEN, PVC BEDDING, SWA, PVC OUTER SHEATH**

Technical Specifications n° 108/23 of 10/11/2023 Rev. 0

**Type:** FR2XOHRFR 450/750V - FR2XHOHRFR 450/750V  
FR2XOHRAR 450/750V - FR2XHOHRAR 450/750V

**Conductor:** Flexible plain copper conductor according to IEC60228 cl.5 size

**Insulation:** PVC extruded compound R2 type extruded Thickness: 0,6mm  
Temperature range -25 + 80° C  
Temperature laying -5 + 70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
0,75 mm <sup>2</sup>	0,60 ± 0,02 mm

**Laying up:** Twisted to pair, color Blue - Black numbered, triad Blue – Brown – Black ( or to be agreed )

**Pair/Triad screen:** Applied over the single pair/triad will be wrapped with polyester tape and shielded with Aluminum/Mylar tape 100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 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 Aluminum/Mylar tape 100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 size 0,5sqmm.

**Bedding:** PVC, Polyvinylchloride Low Smoke and Fume extruded compound  
Thickness: 1,0mm

**Armour:** SWA, Galvanized steel round wires or SWB Galvanized steel braid wires

**Outer sheath:** PVC, Polyvinylchloride Low Smoke and Fume extruded compound  
Colour: Blu/Black/Grey (or to be agreed)

**Marking:** On the outer sheath " manufacturer's name year & description cable " with ink-jet printer.

**Performance:**

- Conductor resistance 26 ohm/Km (+5% for multipair)
- Test voltage core to core 3 kv
- Flame retardant according to IEC60332-3-24, CEI20-22/3
- Low smoke and fume as per IEC60754-2, CEI20-37
- HCL emission <math>\leq 22\%</math>
- Hydrocarbon UV resistant
- Inductance <math>\leq 0,90 \text{ mH/Km}</math>
- Capacitance <math>\leq 0,25 \text{ microF/Km}</math>

## Technical Specifications n° 108-1/23 - Overall screen SWB

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	SHEATH THICKNESS	EXT. DIAM MM	W. KG/KM	ARMOUR DIAM.	BENDING RADIUS
1081900501	1081501501	FR2XOHRAR 450/750V 1x2x0,75	1,2	10	170	0,30	151
1081900502	1081501502	FR2XOHRAR 450/750V 1x3x0,75	1,2	10,3	200	0,30	157
1081900503	1081501503	FR2XOHRAR 450/750V 2x2x0,75	1,4	13,8	280	0,90	210
1081900504	1081501504	FR2XOHRAR 450/750V 4x2x0,75	1,6	15,6	400	0,90	238
1081900505	1081501505	FR2XOHRAR 450/750V 6x2x0,75	1,8	18,2	530	0,90	277

Weight and diameter are theoretical +/- 10%

## Technical Specifications n° 108-2/23 - Individual & Overall screen SWB

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	SHEATH THICKNESS	EXT. DIAM MM	W. KG/KM	ARMOUR DIAM.	BENDING RADIUS
1082900501	1082501501	FR2XOHRAR 450/750V 1x2x0,75	1,2	10	170	0,30	151
1082900502	1082501502	FR2XOHRAR 450/750V 1x3x0,75	1,2	10,3	200	0,30	157
1082900503	1082501503	FR2XHOHRAR 450/750V 2x2x0,75	1,4	14,5	290	0,90	210
1082900504	1082501504	FR2XHOHRAR 450/750V 4x2x0,75	1,6	16,5	410	0,90	238
1082900505	1082501505	FR2XHOHRAR 450/750V 6x2x0,75	1,8	19,2	540	0,90	277

Weight and diameter are theoretical +/- 10%

## Technical Specifications n° 108-3/23 - Overall screen SWA

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	SHEATH THICKNESS	EXT. DIAM MM	W. KG/KM	EXT. DIAM M MM	BENDING RADIUS
1083900501	1083501501	FR2XOHRFR 450/750V 1x2x0,75	1,2	10,3	170	0,30	151
1083900502	1083501502	FR2XOHRFR 450/750V 1x3x0,75	1,2	10,6	200	0,30	157
1083900503	1083501503	FR2XOHRFR 450/750V 2x2x0,75	1,4	14,3	290	0,90	210
1083900504	1083501504	FR2XOHRFR 450/750V 4x2x0,75	1,6	16,2	410	0,90	238
1083900505	1083501505	FR2XOHRFR 450/750V 6x2x0,75	1,8	18,8	540	0,90	277

Weight and diameter are theoretical +/- 10%

## Technical Specifications n° 108-4/23 - Individual & Overall screen SWA

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH BLUE	ITEM	SHEATH THICKNESS	EXT. DIAM MM	W. KG/KM	ARMOUR DIAM.	BENDING RADIUS
1084900501	1084501501	FR2XOHRFR 450/750V 1x2x0,75	1,2	10,3	170	0,30	151
1084900502	1084501502	FR2XOHRFR 450/750V 1x3x0,75	1,2	10,6	200	0,30	157
1084900503	1084501503	FR2XHOHRFR 450/750V 2x2x0,75	1,4	15	300	0,90	210
1084900504	1084501504	FR2XHOHRFR 450/750V 4x2x0,75	1,6	17	420	0,90	238
1084900505	1084501505	FR2XHOHRFR 450/750V 6x2x0,75	1,8	19,8	560	0,90	277

Weight and diameter are theoretical +/- 10%

# Fire resistant Cable - 110

# CPR EU 305/2011

**F Conductor, FR-HEPR G18 INSULATION, M16 OUTER SHEATH.  
EN50200 PH 120, IEC 60502-1, IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 110/23 of 10/11/2023 Rev. 0

**Type:** FTG180M16 0,6/1KV

**Conductor:** Flexible plain or tinned copper conductor according to IEC60228 cl.5

**Insulation:** Mica glass tape plus FR-HEPR G18 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	1,0 ± 0,02 mm
2,5 mm <sup>2</sup>	1,0 ± 0,02 mm
4,0 mm <sup>2</sup>	1,0 ± 0,02 mm
6,0 mm <sup>2</sup>	1,0 ± 0,02 mm
10 mm <sup>2</sup>	1,0 ± 0,02 mm
16 mm <sup>2</sup>	1,0 ± 0,02 mm

**Laying up:** Twisted to cores, UNEL 00722 color ( or to be agreed )

**Outer sheath:** M16 LSZH extruded compound

**Marking:** On the outer sheath "Sensitherm – FTG180M16 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 ½
- Fire resistant EN50200 PH120
- Hydrocarbon and UV resistant
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval, **B2ca s1a, d1, a1**

CODE OUTER SHEATH RED	CODE OUTER SHEATH BLUE	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
110300001	110501501	FTG180M16 0,6/1KV 2x1,5 mm <sup>2</sup>	1,8	10,4	160	150
110300002	110501502	FTG180M16 0,6/1KV 2x2,5 mm <sup>2</sup>	1,8	12	180	162
110300003	110501503	FTG180M16 0,6/1KV 2x4 mm <sup>2</sup>	1,8	13,0	240	182
110300004	110501504	FTG180M16 0,6/1KV 2x6 mm <sup>2</sup>	1,8	14	300	202
110300005	110501505	FTG180M16 0,6/1KV 2x10 mm <sup>2</sup>	2,0	16,2	420	238
110300006	110501506	FTG180M16 0,6/1KV 2x16 mm <sup>2</sup>	2,0	17,5	580	280
110300007	110501507	FTG180M16 0,6/1KV 3x1,5 mm <sup>2</sup>	1,8	11,6	200	162
110300008	110501508	FTG180M16 0,6/1KV 3x2,5 mm <sup>2</sup>	1,8	13	240	176
110300009	110501509	FTG180M16 0,6/1KV 3x4 mm <sup>2</sup>	1,8	13,6	310	190
110300010	110501510	FTG180M16 0,6/1KV 3x6 mm <sup>2</sup>	1,8	15,2	390	213
110300011	110501511	FTG180M16 0,6/1KV 3x10 mm <sup>2</sup>	2,0	17,7	550	248
110300012	110501512	FTG180M16 0,6/1KV 3x16 mm <sup>2</sup>	2,0	20,2	780	294
110300013	110501513	FTG180M16 0,6/1KV 4x1,5 mm <sup>2</sup>	1,8	12,5	230	175
110300014	110501514	FTG180M16 0,6/1KV 4x2,5 mm <sup>2</sup>	1,8	13,6	300	190
110300015	110501515	FTG180M16 0,6/1KV 4x4 mm <sup>2</sup>	1,8	14,8	380	207
110300016	110501516	FTG180M16 0,6/1KV 4x6 mm <sup>2</sup>	1,8	16,5	490	231
110300017	110501517	FTG180M16 0,6/1KV 4x10 mm <sup>2</sup>	2,0	19,5	700	273
110300018	110501518	FTG180M16 0,6/1KV 4x16 mm <sup>2</sup>	2,0	23	990	322
110300019	110501519	FTG180M16 0,6/1KV 5x1,5 mm <sup>2</sup>	1,8	13,5	280	189
110300020	110501520	FTG180M16 0,6/1KV 5x2,5 mm <sup>2</sup>	1,8	14,8	350	208
110300021	110501521	FTG180M16 0,6/1KV 5x4 mm <sup>2</sup>	1,8	16,2	450	227
110300022	110501522	FTG180M16 0,6/1KV 5x6 mm <sup>2</sup>	2,0	18,2	580	255
110300023	110501523	FTG180M16 0,6/1KV 5x10 mm <sup>2</sup>	2,0	21,4	840	300
110300024	110501524	FTG180M16 0,6/1KV 5x16 mm <sup>2</sup>	2,0	25	1200	350
110300025	110501525	FTG180M16 0,6/1KV 7x1,5 mm <sup>2</sup>	1,8	14,6	340	204
110300026	110501526	FTG180M16 0,6/1KV 10x1,5 mm <sup>2</sup>	1,8	18,2	470	255
110300027	110501527	FTG180M16 0,6/1KV 12x1,5 mm <sup>2</sup>	1,8	18,8	530	263
110300028	110501528	FTG180M16 0,6/1KV 14x1,5 mm <sup>2</sup>	2,0	19,8	600	277
110300029	110501529	FTG180M16 0,6/1KV 19x1,5 mm <sup>2</sup>	2,0	21,8	760	305
110300030	110501530	FTG180M16 0,6/1KV 24x1,5 mm <sup>2</sup>	2,0	25,4	950	356
110300031	110501531	FTG180M16 0,6/1KV 27x1,5 mm <sup>2</sup>	2,0	26	1040	364
110300032	110501532	FTG180M16 0,6/1KV 7x2,5 mm <sup>2</sup>	1,8	16	440	224

110300033	110501533	FTG180M16 0,6/1KV	10x2,5 mm <sup>2</sup>	1,8	20	610	280
110300034	110501534	FTG180M16 0,6/1KV	12x2,5 mm <sup>2</sup>	2,0	21	700	294
110300035	110501535	FTG180M16 0,6/1KV	14x2,5 mm <sup>2</sup>	2,0	21,8	790	305
110300036	110501536	FTG180M16 0,6/1KV	19x2,5 mm <sup>2</sup>	2,0	24	1020	336
110300037	110501537	FTG180M16 0,6/1KV	24x2,5 mm <sup>2</sup>	2,0	28	1260	392

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



# Power and Control Cable - 111

# CPR EU 305/2011

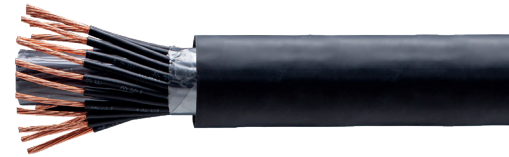
**F Conductor, FR-HEPR G18 INSULATION, M16 OUTER SHEATH.  
IEC 60502-1, IEC 60332.3 – HALOGEN FREE – CPR B2ca s1a d0 a1**

Technical Specifications n° 111/23 of 10/11/2023 Rev. 0

**Type:** FG180M16 0,6/1KV

**Conductor:** Flexible plain or tinned copper conductor according to IEC60228 cl.5

**Insulation:** FR-HEPR G18 type extruded compound  
Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	1,0 ± 0,02 mm
2,5 mm <sup>2</sup>	1,0 ± 0,02 mm
4,0 mm <sup>2</sup>	1,0 ± 0,02 mm
6,0 mm <sup>2</sup>	1,0 ± 0,02 mm
10 mm <sup>2</sup>	1,0 ± 0,02 mm
16 mm <sup>2</sup>	1,0 ± 0,02 mm
25 mm <sup>2</sup>	1,0 ± 0,02 mm

**Laying up:** Twisted to cores, UNEL 00722 color ( or to be agreed )

**Outer sheath:** M16 LSZH extruded compound

**Marking:** On the outer sheath "Sensitherm – FG180M16 0,6/1 KV Siz. IEC 60332.3 WWW/YY (Batch/Num.)  
B2ca s1a-d0-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 ½
- Hydrocarbon and UV resistant
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription and outdoor applications (excluding annex E)
- EN50575 tested for approval, **B2ca s1a, d0, a1**

CODE OUTER SHEATH BLACK	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
111900501	FG180M16 0,6/1KV 2x1,5 mm <sup>2</sup>	1,8	10,7	155,8	150
111900502	FG180M16 0,6/1KV 2x2,5 mm <sup>2</sup>	1,8	12	173,6	162
111900503	FG180M16 0,6/1KV 2x4 mm <sup>2</sup>	1,8	13,0	233	182
111900504	FG180M16 0,6/1KV 2x6 mm <sup>2</sup>	1,8	14	291,6	202
111900505	FG180M16 0,6/1KV 2x10 mm <sup>2</sup>	2,0	16,8	410,6	238
111900506	FG180M16 0,6/1KV 2x16 mm <sup>2</sup>	2,0	18	568	280
111900507	FG180M16 0,6/1KV 2x25 mm <sup>2</sup>	2,0	22,6	780	310
111900508	FG180M16 0,6/1KV 3x1,5 mm <sup>2</sup>	1,8	11,6	193,7	162
111900509	FG180M16 0,6/1KV 3x2,5 mm <sup>2</sup>	1,8	13	230,4	176
111900510	FG180M16 0,6/1KV 3x4 mm <sup>2</sup>	1,8	13,6	299,5	190
111900511	FG180M16 0,6/1KV 3x6 mm <sup>2</sup>	1,8	15,2	377,4	213
111900512	FG180M16 0,6/1KV 3x10 mm <sup>2</sup>	2,0	17,7	535,9	248
111900513	FG180M16 0,6/1KV 3x16 mm <sup>2</sup>	2,0	21	762	294
111900514	FG180M16 0,6/1KV 4x1,5 mm <sup>2</sup>	1,8	12,5	221,6	175
111900515	FG180M16 0,6/1KV 4x2,5 mm <sup>2</sup>	1,8	13,6	300	190
111900516	FG180M16 0,6/1KV 4x4 mm <sup>2</sup>	1,8	14,8	380	207
111900517	FG180M16 0,6/1KV 4x6 mm <sup>2</sup>	1,8	16,5	490	231
111900518	FG180M16 0,6/1KV 4x10 mm <sup>2</sup>	2,0	19,5	700	273
111900519	FG180M16 0,6/1KV 4x16 mm <sup>2</sup>	2,0	23	990	322
111900520	FG180M16 0,6/1KV 5x1,5 mm <sup>2</sup>	1,8	13,5	280	189
111900521	FG180M16 0,6/1KV 5x2,5 mm <sup>2</sup>	1,8	14,8	350	208
111900522	FG180M16 0,6/1KV 5x4 mm <sup>2</sup>	1,8	16,2	450	227
111900523	FG180M16 0,6/1KV 5x6 mm <sup>2</sup>	2,0	18,2	580	255
111900524	FG180M16 0,6/1KV 5x10 mm <sup>2</sup>	2,0	21,4	840	300
111900525	FG180M16 0,6/1KV 5x16 mm <sup>2</sup>	2,0	25	1200	350
111900526	FG180M16 0,6/1KV 7x1,5 mm <sup>2</sup>	1,8	14,6	340	204
111900527	FG180M16 0,6/1KV 10x1,5 mm <sup>2</sup>	1,8	18,2	470	255
111900528	FG180M16 0,6/1KV 12x1,5 mm <sup>2</sup>	1,8	18,8	530	263
111900529	FG180M16 0,6/1KV 14x1,5 mm <sup>2</sup>	2,0	19,8	600	277
111900530	FG180M16 0,6/1KV 19x1,5 mm <sup>2</sup>	2,0	21,8	760	305
111900531	FG180M16 0,6/1KV 24x1,5 mm <sup>2</sup>	2,0	25,5	950	356
111900532	FG180M16 0,6/1KV 27x1,5 mm <sup>2</sup>	2,0	26	1040	364
111900533	FG180M16 0,6/1KV 7x2,5 mm <sup>2</sup>	1,8	16	440	224
111900534	FG180M16 0,6/1KV 10x2,5 mm <sup>2</sup>	1,8	20	610	280

111900535	FG180M16 0,6/1KV	12x2,5 mm <sup>2</sup>	2,0	21	700	294
111900536	FG180M16 0,6/1KV	14x2,5 mm <sup>2</sup>	2,0	21,8	745,2	305
111900537	FG180M16 0,6/1KV	19x2,5 mm <sup>2</sup>	2,0	24	959,2	336
111900538	FG180M16 0,6/1KV	24x2,5 mm <sup>2</sup>	2,0	26,5	1183,2	392

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

# Fire Resistant Instrumentation Cable – 112-1

B2ca s1a-d1-a1

CPR EU 305/2011

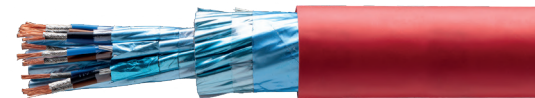
**Conductor, MGT, G18 INSULATION, OVERALL SCREEN, M16 OUTER SHEATH.  
EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 112-1/23 10/11/2023 Rev. 0

**Type:** FTG18XOHM16 0,6/1 KV - FTG18OHM16 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



tutte le immagini sono inserite a scopo illustrativo

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 pair, Blue - Black numbered (or to be agreed)

**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.

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

**Marking:** On the outer sheath "Sensitherm – FTG18XOHM16 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 emiss. IEC 61034 1/2
- Hydrocarbon and UV resistant
- Fire resistant EN50200 PH120
- Cable for intrinsically safe application
- Inductance <= 0,90 mH/Km
- Capacitance /= 0,200 µF/Km
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)

CODE OUTER SHEATH RED	CODE OUTER SHEATH BLACK	ITEM	THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1121300001	1121900501	FTG18OHM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	10,5	150	168
1121300002	1121900502	FTG18OHM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	10,8	180	172
1121300003	1121900503	FTG18OHM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	12,2	230	195
1121300004	1121900504	FTG18OHM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	14,6	320	234
1121300005	1121900505	FTG18OHM16 0,6/1KV 1x2x10 mm <sup>2</sup>	2,0	16	440	256
1121300006	1121900506	FTG18OHM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	10,8	180	172
1121300007	1121900507	FTG18OHM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	11,8	230	188
1121300008	1121900508	FTG18OHM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	13,8	320	221
1121300009	1121900509	FTG18OHM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	15,5	410	248
1121300010	1121900510	FTG18OHM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	19	590	304
1121300011	1121900511	FTG18XOHM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	1,8	13,9	240	256
1121300012	1121900512	FTG18XOHM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	15,2	290	284
1121300013	1121900513	FTG18XOHM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	1,8	16,9	340	344
1121300014	1121900514	FTG18XOHM16 0,6/1KV 2x3x1,5 mm <sup>2</sup>	1,8	18,6	400	313
1121300015	1121900515	FTG18XOHM16 0,6/1KV 2x3x2,5 mm <sup>2</sup>	2,0	20,7	490	348
1121300016	1121900516	FTG18XOHM16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	20,4	520	344
1121300017	1121900517	FTG18XOHM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	2,0	21,4	620	360
1121300018	1121900518	FTG18XOHM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	2,0	24,1	820	406
1121300019	1121900519	FTG18XOHM16 0,6/1KV 6x3x1 mm <sup>2</sup>	2,0	24,7	740	416
1121300020	1121900520	FTG18XOHM16 0,6/1KV 6x3x1,5 mm <sup>2</sup>	2,0	26,2	860	440
1121300021	1121900521	FTG18XOHM16 0,6/1KV 6x3x2,5 mm <sup>2</sup>	2,0	28,9	1110	486
1121300022	1121900522	FTG18XOHM16 0,6/1KV 12x2x1 mm <sup>2</sup>	2,0	26,4	960	448
1121300023	1121900523	FTG18XOHM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	2,0	27,4	1120	486
1121300024	1121900524	FTG18XOHM16 0,6/1KV 12x2x2,5 mm <sup>2</sup>	2,0	32	1430	540
1121300025	1121900525	FTG18XOHM16 0,6/1KV 12x3x1,5 mm <sup>2</sup>	2,0	36	1530	608
1121300026	1121900526	FTG18OHM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	11,6	220	180
1121300027	1121900527	FTG18OHM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	12,8	280	200
1121300028	1121900528	FTG18OHM16 0,6/1KV 1x4x4 mm <sup>2</sup>	1,8	14,2	360	230
1121300029	1121900529	FTG18OHM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	16,2	470	260
1121300030	1121900530	FTG18XOHM16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	14	260	240

**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.

# Fire Resistant Instrumentation Cable – 112-2

B2ca s1a-d1-a1

CPR EU 305/2011

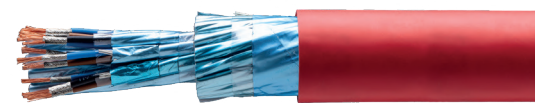
Conductor, MGT, G18 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 OUTER SHEATH.  
EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE

Technical Specifications n° 112-2/23 10/11/2023 Rev. 0

**Type:** FTG18XHOHM16 0,6/1KV - FTG18OHM16 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



tutte le immagini sono inserite a scopo illustrativo

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 pair, Blue - Black numbered (or to be agreed)
- Pair screen:** 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.  
**(if necessary)**
- 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.
- Outer sheath:** M16 LSZH extruded compound  
Colour: Red/Black (or to be agreed)
- Marking:** On the outer sheath "Sensitherm – FTG18XHOHM16 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 emiss. IEC 61034 1/2
  - Hydrocarbon and UV resistant
  - Fire resistant EN50200 PH120
  - Cable for intrinsically safe application
  - Inductance <math>\leq 0,90 \text{ mH/Km}</math>
  - Capacitance <math>= 0,200 \text{ }\mu\text{F/Km}</math>
  - This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)

CODE OUTER SHEATH RED	CODE OUTER SHEATH BLACK	ITEM			THICKNESS OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1122300001	1122900501	FTG18OHM16	0,6/1KV	1x2x1,5 mm <sup>2</sup>	1,8	10,5	150	168
1122300002	1122900502	FTG18OHM16	0,6/1KV	1x2x2,5 mm <sup>2</sup>	1,8	10,8	180	172
1122300003	1122900503	FTG18OHM16	0,6/1KV	1x2x4 mm <sup>2</sup>	1,8	12,2	230	195
1122300004	1122900504	FTG18OHM16	0,6/1KV	1x2x6 mm <sup>2</sup>	2,0	14,6	320	234
1122300005	1122900505	FTG18OHM16	0,6/1KV	1x2x10 mm <sup>2</sup>	2,0	16	440	256
1122300006	1122900506	FTG18OHM16	0,6/1KV	1x3x1,5 mm <sup>2</sup>	1,8	10,8	180	172
1122300007	1122900507	FTG18OHM16	0,6/1KV	1x3x2,5 mm <sup>2</sup>	1,8	11,8	230	188
1122300008	1122900508	FTG18OHM16	0,6/1KV	1x3x4 mm <sup>2</sup>	1,8	13,8	320	221
1122300009	1122900509	FTG18OHM16	0,6/1KV	1x3x6 mm <sup>2</sup>	2,0	15,5	410	248
1122300010	1122900510	FTG18OHM16	0,6/1KV	1x3x10 mm <sup>2</sup>	2,0	19	590	304
1122300011	1122900511	FTG18XHOHM16	0,6/1KV	2x2x0,75 mm <sup>2</sup>	1,8	14,6	250	256
1122300012	1122900512	FTG18XHOHM16	0,6/1KV	2x2x1,5 mm <sup>2</sup>	1,8	16	310	284
1122300013	1122900513	FTG18XHOHM16	0,6/1KV	2x2x2,5 mm <sup>2</sup>	1,8	17,8	360	344
1122300014	1122900514	FTG18XHOHM16	0,6/1KV	2x3x1,5 mm <sup>2</sup>	1,8	19,6	420	313
1122300015	1122900515	FTG18XHOHM16	0,6/1KV	2x3x2,5 mm <sup>2</sup>	2,0	21,8	520	348
1122300016	1122900516	FTG18XHOHM16	0,6/1KV	6x2x1 mm <sup>2</sup>	1,8	21,5	550	344
1122300017	1122900517	FTG18XHOHM16	0,6/1KV	6x2x1,5 mm <sup>2</sup>	2,0	22,5	650	360
1122300018	1122900518	FTG18XHOHM16	0,6/1KV	6x2x2,5 mm <sup>2</sup>	2,0	25,4	860	406
1122300019	1122900519	FTG18XHOHM16	0,6/1KV	6x3x1 mm <sup>2</sup>	2,0	26	780	416
1122300020	1122900520	FTG18XHOHM16	0,6/1KV	6x3x1,5 mm <sup>2</sup>	2,0	27,6	910	440
1122300021	1122900521	FTG18XHOHM16	0,6/1KV	6x3x2,5 mm <sup>2</sup>	2,0	30,4	1170	486
1122300022	1122900522	FTG18XHOHM16	0,6/1KV	12x2x1 mm <sup>2</sup>	2,0	27,8	1010	448
1122300023	1122900523	FTG18XHOHM16	0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	28,8	1180	486
1122300024	1122900524	FTG18XHOHM16	0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	33,7	1510	540
1122300025	1122900525	FTG18XHOHM16	0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	38	1610	608
1122300026	1122900526	FTG18OHM16	0,6/1KV	1x4x1,5 mm <sup>2</sup>	1,8	11,6	220	180
1122300027	1122900527	FTG18OHM16	0,6/1KV	1x4x2,5 mm <sup>2</sup>	1,8	12,8	280	200
1122300028	1122900528	FTG18OHM16	0,6/1KV	1x4x4 mm <sup>2</sup>	1,8	14,2	360	230
1122300029	1122900529	FTG18OHM16	0,6/1KV	1x4x6 mm <sup>2</sup>	2,0	16,2	470	260
1122300030	1122900530	FTG18XHOHM16	0,6/1KV	2x2x1 mm <sup>2</sup>	1,8	14,8	270	240

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

# Fire Resistant Instrumentation Cable – 113-1

B2ca s1a-d1-a1

CPR EU 305/2011

**Conductor, MGT, G18 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH.**

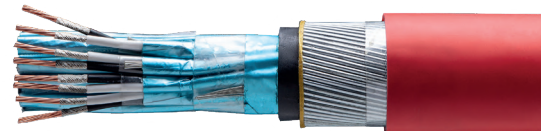
**EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 113-1/23 10/11/2023 Rev. 0

**Type:** FTG18XOHM16AM16 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



tutte le immagini sono inserite a scopo illustrativo

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)

**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: Blue/Black (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FTG18XOHM16AM16 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 emiss. 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
1131900501	1131300001	FTG18OHM16AM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	13,8	320	220
1131900502	1131300002	FTG18OHM16AM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	14	370	230
1131900503	1131300003	FTG18OHM16AM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	15	430	240
1131900504	1131300004	FTG18OHM16AM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	17,5	520	280
1131900505	1131300005	FTG18OHM16AM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	14,4	350	230
1131900506	1131300006	FTG18OHM16AM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	15,7	430	250
1131900507	1131300007	FTG18OHM16AM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	16,5	520	270
1131900508	1131300008	FTG18OHM16AM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	18,4	640	300
1131900509	1131300009	FTG18OHM16AM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	21,3	860	350
1131900510	1131300010	FTG18OHM16AM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	15	410	240
1131900511	1131300011	FTG18OHM16AM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	16,5	520	270
1131900512	1131300012	FTG18OHM16AM16 0,6/1KV 1x4x4 mm <sup>2</sup>	2,0	17,5	620	280
1131900513	1131300013	FTG18OHM16AM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	19,4	770	320
1131900514	1131300014	FTG18OHM16AM16 0,6/1KV 1x5x2,5 mm <sup>2</sup>	2,0	17,5	580	280
1131900515	1131300015	FTG18OHM16AM16 0,6/1KV 1x5x4 mm <sup>2</sup>	2,0	19	720	320
1131900516	1131300016	FTG18OHM16AM16 0,6/1KV 6x1 mm <sup>2</sup>	1,8	16,5	460	270
1131900517	1131300017	FTG18XOHM16AM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	1,8	17	440	290
1131900518	1131300018	FTG18XOHM16AM16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	17,5	460	300
1131900519	1131300019	FTG18XOHM16AM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	18,8	520	320
1131900520	1131300020	FTG18XOHM16AM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	1,8	20,2	610	350
1131900521	1131300021	FTG18XOHM16AM16 0,6/1KV 2x3x0,75 mm <sup>2</sup>	2,0	19,3	520	330
1131900522	1131300022	FTG18XOHM16AM16 0,6/1KV 2x3x1,5 mm <sup>2</sup>	1,8	21,5	660	370
1131900523	1131300023	FTG18XOHM16AM16 0,6/1KV 2x3x2,5 mm <sup>2</sup>	2,0	23,4	790	400
1131900524	1131300024	FTG18XOHM16AM16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	23,7	870	400
1131900525	1131300025	FTG18XOHM16AM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	2,0	24,8	980	430
1131900526	1131300026	FTG18XOHM16AM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	2,0	27	1200	464
1131900527	1131300027	FTG18XOHM16AM16 0,6/1KV 6x3x1 mm <sup>2</sup>	2,0	37,6	1120	480
1131900528	1131300028	FTG18XOHM16AM16 0,6/1KV 6x3x1,5 mm <sup>2</sup>	2,0	29	1280	490
1131900529	1131300029	FTG18XOHM16AM16 0,6/1KV 6x3x2,5 mm <sup>2</sup>	2,0	31,6	1580	540
1131900530	1131300030	FTG18XOHM16AM16 0,6/1KV 12x2x1 mm <sup>2</sup>	2,0	28,5	1400	490

1131900531	1131300031	FTG18XOHM16AM16 0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	31	1600	520
1131900532	1131300032	FTG18XOHM16AM16 0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	34,5	2000	590
1131900533	1131300033	FTG18XOHM16AM16 0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	37,3	2150	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.

# Fire Resistant Instrumentation Cable – 113-2

B2ca s1a-d1-a1

CPR EU 305/2011

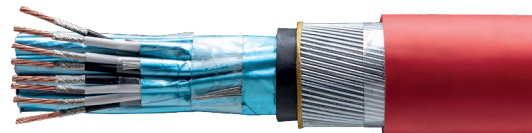
**Conductor, MGT, G18 INSULATION, INDIVIDUAL (IF REQUIRED) AND OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE BRAID ARMOUR, M16 OUTER SHEATH. EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

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



tutte le immagini sono inserite a scopo illustrativo

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	FTG18OHM16AM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	13,8	320	220
1132900502	1132300002	FTG18OHM16AM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	14	370	230
1132900503	1132300003	FTG18OHM16AM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	15	430	240
1132900504	1132300004	FTG18OHM16AM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	17,5	520	280
1132900505	1132300005	FTG18OHM16AM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	14,4	350	230
1132900506	1132300006	FTG18OHM16AM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	15,7	430	250
1132900507	1132300007	FTG18OHM16AM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	16,5	520	270
1132900508	1132300008	FTG18OHM16AM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	18,4	640	300
1132900509	1132300009	FTG18OHM16AM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	21,3	860	350
1132900510	1132300010	FTG18OHM16AM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	15	410	240
1132900511	1132300011	FTG18OHM16AM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	16,5	520	270
1132900512	1132300012	FTG18OHM16AM16 0,6/1KV 1x4x4 mm <sup>2</sup>	2,0	17,5	620	280
1132900513	1132300013	FTG18OHM16AM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	19,4	770	320
1132900514	1132300014	FTG18OHM16AM16 0,6/1KV 1x5x2,5 mm <sup>2</sup>	2,0	17,5	580	280
1132900515	1132300015	FTG18OHM16AM16 0,6/1KV 1x5x4 mm <sup>2</sup>	2,0	19	720	320
1132900516	1132300016	FTG18OHM16AM16 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.

# Fire Resistant Instrumentation Cable – 113-3

B2ca s1a-d1-a1

CPR EU 305/2011

**Conductor, MGT, G18 INSULATION, OVERALL SCREEN, M16 INNER SHEATH, STEEL WIRE ARMOUR, M16 OUTER SHEATH.**

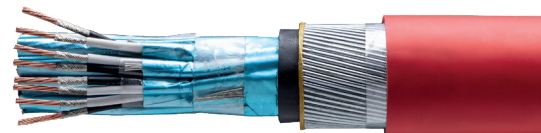
**EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 113-3/23 10/11/2023 Rev. 0

**Type:** FTG18XOHM16FM16 0,6/1Kv - FTG18OHM16FM16 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



tutte le immagini sono inserite a scopo illustrativo

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)

**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 round wires plus wrapping polyester tape (SWA)

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

**Marking:** On the outer sheath "Sensitherm – FTG18XOHM16FM16 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 emiss. 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
1133900501	1133300001	FTG18OHM16FM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	13,8	320	220
1133900502	1133300002	FTG18OHM16FM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	14	370	230
1133900503	1133300003	FTG18OHM16FM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	15	430	240
1133900504	1133300004	FTG18OHM16FM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	17,5	520	280
1133900505	1133300005	FTG18OHM16FM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	14,4	350	230
1133900506	1133300006	FTG18OHM16FM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	15,7	430	250
1133900507	1133300007	FTG18OHM16FM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	16,5	520	270
1133900508	1133300008	FTG18OHM16FM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	18,4	640	300
1133900509	1133300009	FTG18OHM16FM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	21,3	860	350
1133900510	1133300010	FTG18OHM16FM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	15	410	240
1133900511	1133300011	FTG18OHM16FM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	16,5	520	270
1133900512	1133300012	FTG18OHM16FM16 0,6/1KV 1x4x4 mm <sup>2</sup>	2,0	17,5	620	280
1133900513	1133300013	FTG18OHM16FM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	19,4	770	320
1133900514	1133300014	FTG18OHM16FM16 0,6/1KV 1x5x2,5 mm <sup>2</sup>	2,0	17,5	580	280
1133900515	1133300015	FTG18OHM16FM16 0,6/1KV 1x5x4 mm <sup>2</sup>	2,0	19	720	320
1133900516	1133300016	FTG18OHM16FM16 0,6/1KV 6x1 mm <sup>2</sup>	1,8	16,5	460	270
1133900517	1133300017	FTG18XOHM16FM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	1,8	17	440	290
1133900518	1133300018	FTG18XOHM16FM16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	17,5	460	300
1133900519	1133300019	FTG18XOHM16FM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	18,8	520	320
1133900520	1133300020	FTG18XOHM16FM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	1,8	20,2	610	350
1133900521	1133300021	FTG18XOHM16FM16 0,6/1KV 2x3x0,75 mm <sup>2</sup>	2,0	19,3	520	330
1133900522	1133300022	FTG18XOHM16FM16 0,6/1KV 2x3x1,5 mm <sup>2</sup>	1,8	21,5	660	370
1133900523	1133300023	FTG18XOHM16FM16 0,6/1KV 2x3x2,5 mm <sup>2</sup>	2,0	23,4	790	400
1133900524	1133300024	FTG18XOHM16FM16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	23,7	870	400
1133900525	1133300025	FTG18XOHM16FM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	2,0	24,8	980	430
1133900526	1133300026	FTG18XOHM16FM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	2,0	27	1200	464
1133900527	1133300027	FTG18XOHM16FM16 0,6/1KV 6x3x1 mm <sup>2</sup>	2,0	37,6	1120	480
1133900528	1133300028	FTG18XOHM16FM16 0,6/1KV 6x3x1,5 mm <sup>2</sup>	2,0	29	1280	490
1133900529	1133300029	FTG18XOHM16FM16 0,6/1KV 6x3x2,5 mm <sup>2</sup>	2,0	31,6	1580	540
1133900530	1133300030	FTG18XOHM16FM16 0,6/1KV 12x2x1 mm <sup>2</sup>	2,0	28,5	1400	490
1133900531	1133300031	FTG18XOHM16FM16 0,6/1KV 12x2x1,5 mm <sup>2</sup>	2,0	31	1600	520

1133900532	1133300032	FTG18XOHM16FM16 0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	34,5	2000	590
1133900533	1133300033	FTG18XOHM16FM16 0,6/1KV	12x3x1,5 mm <sup>2</sup>	2,0	37,3	2150	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.



# Fire Resistant Instrumentation Cable – 113-4

B2ca s1a-d1-a1

CPR EU 305/2011

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

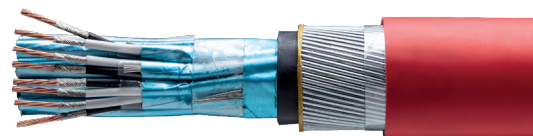
**EN50200 PH120, IEC 60332.1 IEC 60332.3 – HALOGEN FREE**

Technical Specifications n° 113-4/23 10/11/2023 Rev. 0

**Type:** FTG18XHOHM16FM16 0,6/1Kv - FTG18OHM16FM16 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



tutte le immagini sono inserite a scopo illustrativo

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 round wires plus wrapping polyester tape (SWA)

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

**Marking:** On the outer sheath "Sensitherm – FTG18XHOHM16FM16 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 emiss. 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
1134900501	1134300001	FTG18OHM16FM16 0,6/1KV 1x2x1,5 mm <sup>2</sup>	1,8	13,8	320	220
1134900502	1134300002	FTG18OHM16FM16 0,6/1KV 1x2x2,5 mm <sup>2</sup>	1,8	14	370	230
1134900503	1134300003	FTG18OHM16FM16 0,6/1KV 1x2x4 mm <sup>2</sup>	1,8	15	430	240
1134900504	1134300004	FTG18OHM16FM16 0,6/1KV 1x2x6 mm <sup>2</sup>	2,0	17,5	520	280
1134900505	1134300005	FTG18OHM16FM16 0,6/1KV 1x3x1,5 mm <sup>2</sup>	1,8	14,4	350	230
1134900506	1134300006	FTG18OHM16FM16 0,6/1KV 1x3x2,5 mm <sup>2</sup>	1,8	15,7	430	250
1134900507	1134300007	FTG18OHM16FM16 0,6/1KV 1x3x4 mm <sup>2</sup>	1,8	16,5	520	270
1134900508	1134300008	FTG18OHM16FM16 0,6/1KV 1x3x6 mm <sup>2</sup>	2,0	18,4	640	300
1134900509	1134300009	FTG18OHM16FM16 0,6/1KV 1x3x10 mm <sup>2</sup>	2,0	21,3	860	350
1134900510	1134300010	FTG18OHM16FM16 0,6/1KV 1x4x1,5 mm <sup>2</sup>	1,8	15	410	240
1134900511	1134300011	FTG18OHM16FM16 0,6/1KV 1x4x2,5 mm <sup>2</sup>	1,8	16,5	520	270
1134900512	1134300012	FTG18OHM16FM16 0,6/1KV 1x4x4 mm <sup>2</sup>	2,0	17,5	620	280
1134900513	1134300013	FTG18OHM16FM16 0,6/1KV 1x4x6 mm <sup>2</sup>	2,0	19,4	770	320
1134900514	1134300014	FTG18OHM16FM16 0,6/1KV 1x5x2,5 mm <sup>2</sup>	2,0	17,5	580	280
1134900515	1134300015	FTG18OHM16FM16 0,6/1KV 1x5x4 mm <sup>2</sup>	2,0	19	720	320
1134900516	1134300016	FTG18OHM16FM16 0,6/1KV 6x1 mm <sup>2</sup>	1,8	16,5	460	270
1134900517	1134300017	FTG18XHOHM16FM16 0,6/1KV 2x2x0,75 mm <sup>2</sup>	1,8	17,8	460	290
1134900518	1134300018	FTG18XHOHM16FM16 0,6/1KV 2x2x1 mm <sup>2</sup>	1,8	18,4	480	300
1134900519	1134300019	FTG18XHOHM16FM16 0,6/1KV 2x2x1,5 mm <sup>2</sup>	1,8	19,8	540	320
1134900520	1134300020	FTG18XHOHM16FM16 0,6/1KV 2x2x2,5 mm <sup>2</sup>	1,8	21,3	640	350
1134900521	1134300021	FTG18XHOHM16FM16 0,6/1KV 2x3x0,75 mm <sup>2</sup>	2,0	20,4	550	330
1134900522	1134300022	FTG18XHOHM16FM16 0,6/1KV 2x3x1,5 mm <sup>2</sup>	1,8	22,7	700	370
1134900523	1134300023	FTG18XHOHM16FM16 0,6/1KV 2x3x2,5 mm <sup>2</sup>	2,0	24,6	830	400
1134900524	1134300024	FTG18XHOHM16FM16 0,6/1KV 6x2x1 mm <sup>2</sup>	1,8	25	920	400
1134900525	1134300025	FTG18XHOHM16FM16 0,6/1KV 6x2x1,5 mm <sup>2</sup>	2,0	26,2	1030	430
1134900526	1134300026	FTG18XHOHM16FM16 0,6/1KV 6x2x2,5 mm <sup>2</sup>	2,0	28,6	1270	464
1134900527	1134300027	FTG18XHOHM16FM16 0,6/1KV 6x3x1 mm <sup>2</sup>	2,0	29	1180	480
1134900528	1134300028	FTG18XHOHM16FM16 0,6/1KV 6x3x1,5 mm <sup>2</sup>	2,0	30,6	1350	490

1134900529	113400029	FTG18XHOHM16FM16 0,6/1KV	6x3x2,5 mm <sup>2</sup>	2,0	33,4	1670	540
1134900530	1134300030	FTG18XHOHM16FM16 0,6/1KV	12x2x1 mm <sup>2</sup>	2,0	30	1480	490
1134900531	1134300031	FTG18XHOHM16FM16 0,6/1KV	12x2x1,5 mm <sup>2</sup>	2,0	32,5	1700	520
1134900532	1134300032	FTG18XHOHM16FM16 0,6/1KV	12x2x2,5 mm <sup>2</sup>	2,0	36,5	2140	590
1134900533	1134300033	FTG18XHOHM16FM16 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.

# Control and Power Cable – 114-1

# CPR EU 305/2011

**CU, G16 INSULATION, OVERALL SCREEN PCWB, R16 INNER SHEATH, STEEL WIRE BRAID ARMOUR SWB, R16 OUTER SHEATH.**

**IEC 60332.1 - IEC 60332.3 – OIL RESISTANT – CPR Cca s3, d1, a3**

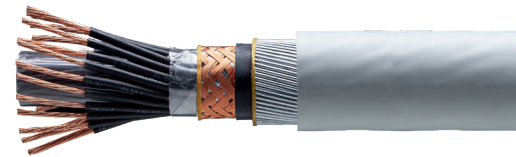
Technical Specifications n° 114-1/23 of 10/11/2023 Rev. 0

**Type:** FG16OH2R16AR16 0,6/1Kv

**Conductor:** Flexible metal conductor according to IEC60228 cl.5

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,70 ± 0,02 mm

**Laying up:** Twisted to cores UNEL color (or to be agreed)

**Overall screen:** Applied over total assembly will be wrapped with polyester tape and shielded with copper wire braid 60% coverage.

**Inner sheath:** R16 PVC extruded compound

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

**Outer sheath:** R16 PVC extruded compound OIL Resistant  
Colour: Grey/Black (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16OH2R16AR16 0,6/1 KV Siz. IEC 60332.3  
WWW/YY (Batch/Num.) Cca s3-d1-a3 0001mt"

**Performance:**

- Test voltage core to core 3,5KV
- Flame retardant according to IEC60332-3-24, CEI20-22/3
- Hydrocarbon and UV resistant
- Rodent resistant
- Fit for direct burial
- This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
- EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1141900501	1141703501	FG160H2R16AR16 0,6/1Kv 2X1,5 mm <sup>2</sup>	1,8	13	310	190
1141900502	1141703502	FG160H2R16AR16 0,6/1Kv 3X1,5 mm <sup>2</sup>	1,8	13,6	370	190
1141900503	1141703503	FG160H2R16AR16 0,6/1Kv 4X1,5 mm <sup>2</sup>	1,8	14,2	420	200
1141900504	1141703504	FG160H2R16AR16 0,6/1Kv 5X1,5 mm <sup>2</sup>	1,8	15,3	460	220
1141900505	1141703505	FG160H2R16AR16 0,6/1Kv 7X1,5 mm <sup>2</sup>	1,8	16,3	590	230
1141900506	1141703506	FG160H2R16AR16 0,6/1Kv 9X1,5 mm <sup>2</sup>	2,0	18,4	680	270
1141900507	1141703507	FG160H2R16AR16 0,6/1Kv 12X1,5 mm <sup>2</sup>	2,0	20,2	850	290
1141900508	1141703508	FG160H2R16AR16 0,6/1Kv 24X1,5 mm <sup>2</sup>	2,0	26,2	1360	380
1141900509	1141703509	FG160H2R16AR16 0,6/1Kv 2X2,5 mm <sup>2</sup>	1,8	14	370	200
1141900510	1141703510	FG160H2R16AR16 0,6/1Kv 3X2,5 mm <sup>2</sup>	1,8	14,5	470	210
1141900511	1141703511	FG160H2R16AR16 0,6/1Kv 4X2,5 mm <sup>2</sup>	1,8	16	550	230
1141900512	1141703512	FG160H2R16AR16 0,6/1Kv 5X2,5 mm <sup>2</sup>	1,8	16,5	580	240
1141900513	1141703513	FG160H2R16AR16 0,6/1Kv 7X2,5 mm <sup>2</sup>	1,8	18,2	740	260
1141900514	1141703514	FG160H2R16AR16 0,6/1Kv 9X2,5 mm <sup>2</sup>	2,0	19,8	870	280
1141900515	1141703515	FG160H2R16AR16 0,6/1Kv 12X2,5 mm <sup>2</sup>	2,0	22	1070	320

**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.

# Control and Power Cable – 114-2

# CPR EU 305/2011

**CU, G16 INSULATION, OVERALL SCREEN PCWB, R16 INNER SHEATH, STEEL WIRE ARMOUR SWA, R16 OUTER SHEATH.**

**IEC 60332.1 - IEC 60332.3 – OIL RESISTANT – CPR Cca s3, d1, a3**

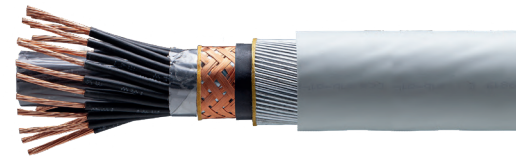
Technical Specifications n° 114-2/23 of 10/11/2023 Rev. 0

**Type:** FG16OH2R16FR16 0,6/1 KV

**Conductor:** Flexible metal conductor according to IEC60228 cl.5

**Insulation:** EPR G16 type extruded compound

Temperature range -30 +90° C  
 Temperature laying 0 +70° C



tutte le immagini sono inserite a scopo illustrativo

SIZE	THICKNESS
1,5 mm <sup>2</sup>	0,70 ± 0,02 mm
2,5 mm <sup>2</sup>	0,70 ± 0,02 mm
4 mm <sup>2</sup>	0,70 ± 0,02 mm

**Laying up:** Twisted to cores UNEL color (or to be agreed)

**Overall screen:** Applied over total assembly will be wrapped with polyester tape and shielded with copper wire braid 60% coverage.

**Inner sheath:** R16 PVC extruded compound

**Armour:** Galvanized steel round wires plus wrapping polyester tape (SWA)

**Outer sheath:** R16 PVC extruded compound OIL Resistant  
 Colour: Grey/Black (or to be agreed)

**Marking:** On the outer sheath "Sensitherm – FG16OH2R16FR16 0,6/1 KV Siz. IEC 60332.3  
 WWW/YY (Batch/Num.) Cca s3-d1-a3 0001mt"

- Performance:**
- Test voltage core to core 3,5KV
  - Flame retardant according to IEC60332-3-24, CEI20-22/3
  - Hydrocarbon and UV resistant
  - Rodent resistant
  - Fit for direct burial
  - This cable is suitable to be used in ATEX area following the EN60079-14 prescription (excluding annex E)
  - EN50575 tested for approval

CODE OUTER SHEATH BLACK	CODE OUTER SHEATH GREY	ITEM	THICK. OUTER SHEATH MM	OVERAL DIAMETER MM	WEIGHT KG/KM	BENDING RADIUS MM
1142900501	1142703501	FG160H2R16FR16 0,6/1Kv 2X1,5 mm <sup>2</sup>	1,8	13,4	320	190
1142900502	1142703502	FG160H2R16FR16 0,6/1Kv 3X1,5 mm <sup>2</sup>	1,8	14	380	190
1142900503	1142703503	FG160H2R16FR16 0,6/1Kv 4X1,5 mm <sup>2</sup>	1,8	14,6	430	200
1142900504	1142703504	FG160H2R16FR16 0,6/1Kv 5X1,5 mm <sup>2</sup>	1,8	15,8	480	220
1142900505	1142703505	FG160H2R16FR16 0,6/1Kv 7X1,5 mm <sup>2</sup>	1,8	16,8	610	230
1142900506	1142703506	FG160H2R16FR16 0,6/1Kv 9X1,5 mm <sup>2</sup>	2,0	19	700	270
1142900507	1142703507	FG160H2R16FR16 0,6/1Kv 12X1,5 mm <sup>2</sup>	2,0	20,8	880	290
1142900508	1142703508	FG160H2R16FR16 0,6/1Kv 24X1,5 mm <sup>2</sup>	2,0	27	1400	380
1142900509	1142703509	FG160H2R16FR16 0,6/1Kv 2X2,5 mm <sup>2</sup>	1,8	14,4	380	200
1142900510	1142703510	FG160H2R16FR16 0,6/1Kv 3X2,5 mm <sup>2</sup>	1,8	15	490	210
1142900511	1142703511	FG160H2R16FR16 0,6/1Kv 4X2,5 mm <sup>2</sup>	1,8	16,5	570	230
1142900512	1142703512	FG160H2R16FR16 0,6/1Kv 5X2,5 mm <sup>2</sup>	1,8	17	600	240
1142900513	1142703513	FG160H2R16FR16 0,6/1Kv 7X2,5 mm <sup>2</sup>	1,8	18,8	760	260
1142900514	1142703514	FG160H2R16FR16 0,6/1Kv 9X2,5 mm <sup>2</sup>	2,0	20,4	900	280
1142900515	1142703515	FG160H2R16FR16 0,6/1Kv 12X2,5 mm <sup>2</sup>	2,0	22,6	1100	320

**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.

# Types of shields

Aluminum/Mylar tape plus drain conductor for single pair shielding and/or for total shielding of the stranded cable.  
Copper tape.  
Shield in bare or tinned copper braid.

## SCHIELDING

The shield is used to protect the cable from internal (single pair/triad shield) or external (total shield) interference.

### SINGLE PAIR/TERNA INTERNAL SHIELD

- Internal interference is transmitted via capacitive or electromagnetic induction, when pulsating direct current signals or alternating current signals are transmitted in the various pairs/triples of the cable.
- To avoid this interference (which in the case of intrinsically safe signals could even be dangerous), the individual elements of the cable are wrapped with Aluminium/Mylar tapes with a tinned copper drain conductor which runs in contact with the Aluminum part of the tape and is used to ground the screen itself which will take place on a specially provided ground bar and in a single point which is usually in the switchboard in a safe area.

### TOTAL SCREENING OF THE CABLE AGAINST EXTERNAL INTERFERENCE:

- In the case of interference generated from outside, the type and material of the screen must be suitable for the type of interference;
- In the case of electrostatic interference (ex. induced by a power line) this coupling causes a disturbance signal which is superimposed on the signal transmitted in the conductors.
- To eliminate this risk, the cable is wrapped around the whole with Aluminium/Mylar tapes with a tinned copper drainage conductor which runs in contact with the Aluminum part of the tape and serves to ground the shield itself which will take place on a bar of earth affixed and in a single point which is usually in the switchboard in a safe area.
- In the case of high intensity electrostatic discharges which usually originate outside the cable, the screen that lends itself best is that of Aluminium/Mylar tape + copper braid where the aluminum and the braid are in contact with each other.
- In the case of particular cables where a low impedance is required (data cables, computers) or a low resistance value of the shield (power supply to motors from inverters) or for mobile cables, copper braid shielding is recommended as it is mechanically more resistant.





# Armor

**ARMOR** The main function of the armor is to mechanically protect the cable from shocks, abrasions, crushing, rodents and to give greater tensile strength to the cable during laying operations. This cable protection is also essential in ATEX explosion risk plants, especially for the EExd version where accidental breaking of the cable in the dangerous area could cause dangerous sparks. The reinforcement is also used in "general purpose" systems for outdoor installation when it is preferable to save on assembly systems. The solutions are various according to the application.

## SWB

- Braided armor of galvanized iron wires.
- Light armor which gives the cable a good tensile strength and good protection against rodents (over 80% coverage), furthermore it allows for a small bending radius and good flexibility.

## SWA

- Armor bundle of galvanized iron wires.
- Heavy armor suitable for heavy use with excellent resistance to traction, rodents (over 90% coverage), crushing, has a moderate radius of curvature and flexibility.
- It is usually made with a bundle of wires with an elementary diameter of 0.9mm to 2.00mm with heavy PET tape wrapped over it.
- In case of even heavier use, a galvanized iron tape can be wrapped over the bundle of wires.

## DSTA

- Double tape armor of galvanized iron.
- Heavy armor with excellent resistance to crushing, shocks and rodents (over 120% coverage).
- It is not suitable where tensile strength is required or where a tight bend radius and some flexibility are needed.



## SWACS

Steel Wires +  
Counterspiral Steel  
Tape Armour



## SWA

Single Layer of  
Galv. Steel  
Wire Armour



## STA

Steel  
Tape Armour



## SWB

Steel Wire Braid

# Distributori autorizzati:

Germania

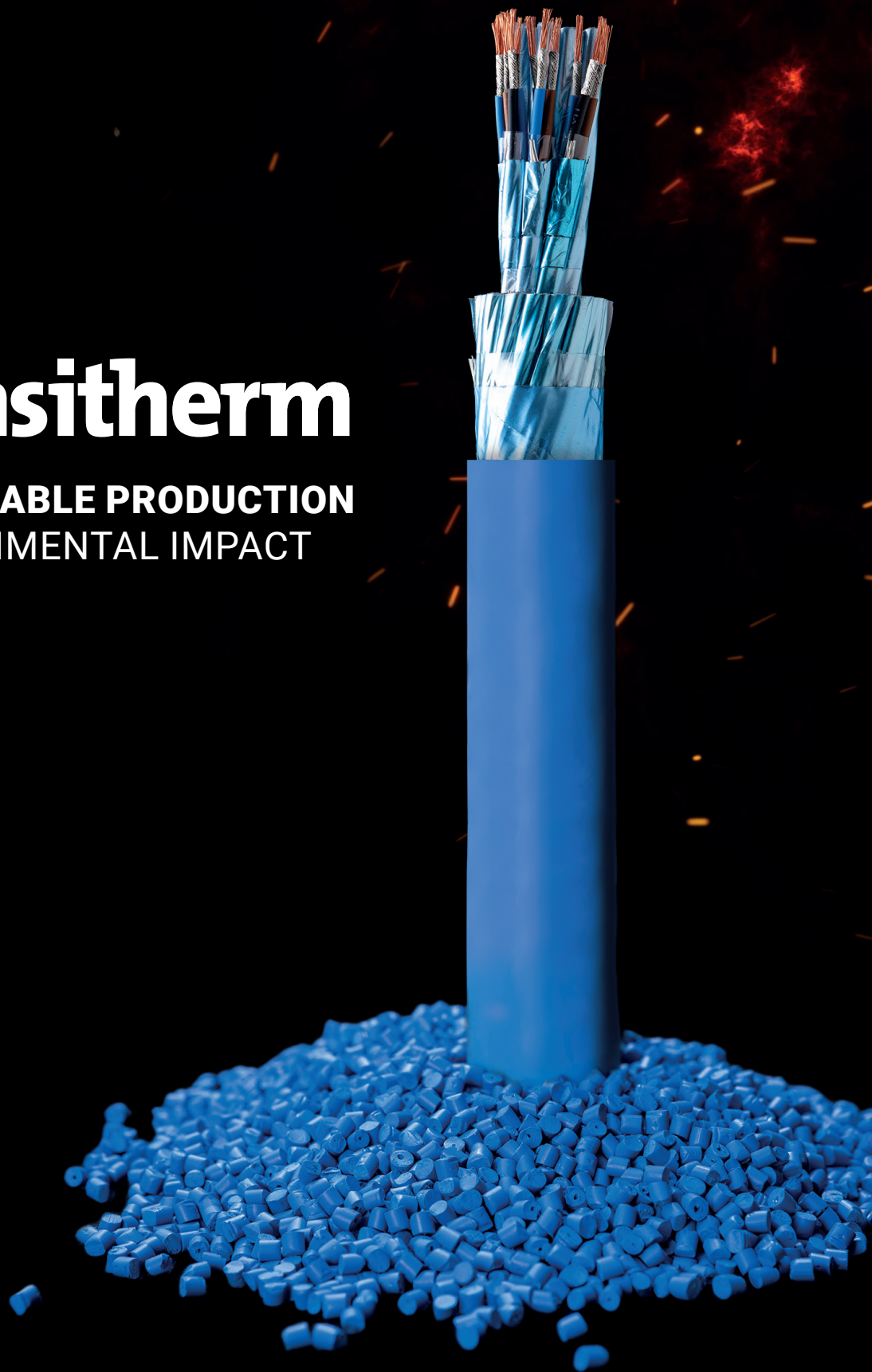
**BOTEC** *special cables* ) ( **KABEL** *express delivery*

 [www.botec-kabel.de](http://www.botec-kabel.de)  +49(0)7145-804462





**100% SUSTAINABLE PRODUCTION  
ZERO ENVIRONMENTAL IMPACT**



**SENSITHERM Srl**

Via E. Berlinguer 15, Fraz. Colnago, 20872 Cornate D'Adda (MB) - IT -  
Tel. +39 039.6885.425 / .507 - email: [sensitherm@sensitherm.com](mailto:sensitherm@sensitherm.com)

[www.sensitherm.com](http://www.sensitherm.com)

