

FG18H2M16

CPR CLASS: EN 50575:2014+A1:2016 B2ca-s1a,d0,a1

Application

Single-core LSZH shielded energy cable, compliant with CPR EU 305/11, designed to limit the spread of fire and smoke. Suitable for high fire-risk areas with a high presence of people such as, tunnels, and subways. The shielding provides protection against electromagnetic interference. Must be protected from UV rays if stored or laid outdoor. Buried laying (direct and with protection) is allowed.

Marking

<meters> CE 0987 SPECIALCAVI BALDASSARI FG18H2M16 <formation> 0,6/1kV IEC 60332-3-24 B2CA-S1A,D0,A1 <lot> <year>



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Manufacturing characteristics

- Conductor:** bare copper class 5 flexible, according to CEI 20-29 EN IEC 60228
- Insulation:** LSZH crosslinked compound, G18 type, according to CEI 20-11
- Wrapping and protection:** polyester tape
- Screen:** bare copper braid
- Outer sheath:** LSZH thermoplastic compound, M16 type, according to CEI 20-11
- Outer sheath colour:** black, based on RAL 9005
- Cable geometry:** round

On request

- Custom cores and outer sheath colouring

Reaction to fire - EN 13501-6

Reaction to fire according to EN 13501-6: Class
B2ca

Reaction to fire according to EN 13501-6: Smoke production
s1a

Reaction to fire according to EN 13501-6: Flaming droplets/particles
d0

Reaction to fire according to EN 13501-6: Acidity
a1

Specify standards

Product standard

Energy, signalling and control LSZH cable (600/1000V): CEI 20-38 P.Q.A.

CPR standard for reaction to fire

Common test methods for cables under fire conditions - Heat release and smoke production measurement on cables during flame spread test: EN 50399

Electrical characteristics

Nominal voltage U_0 :

- 600V

Nominal voltage U :

- 1000V

Sheath operating voltage:

- 600/1000V

Test voltage:

- 3,0kV 50Hz A.C. (5 min) c-s

Maximum voltage:

- U_0/U 1800/1800V D.C.
- U_0/U 693/1200V A.C.

Minimum insulation resistance:

- >200M Ω xKm

Temperatures

Permitted cable outer temperature during assembling/handling
0°C

Operating temperature range
-30°C | +90°C

Maximum conductor temperature
+90°C













Maximum short-circuit temperature
+250°C

Product characteristics

Flame retardant	IEC 60332-1-2	✓
	IEC 60332-3-21 (Cat A F/R)	✗
	IEC 60332-3-22 (Cat A)	✗
	IEC 60332-3-23 (Cat B)	✗
	IEC 60332-3-24 (Cat C)	✓
	IEC 60332-3-25 (Cat D)	✓
Low smoke	EN IEC 61034-2	✓
Halogen Free	EN IEC 60754-1	✓
	EN IEC 60754-2	✓
	EN IEC 60754-3	✗

Oil resistant	EN IEC 60811-404	✓
Low temperature resistant	EN 60811-504+505+506	✓
UV resistant		✗
Ozone resistant		✗
Hydrocarbons resistant	ENI 181	✓
Fire resistant	IEC 60331-1 (diameter > 20 mm) or EN 50200 (diameter < 20 mm)	✗
Presence of water	HD 60364-5-54:2009	AD7
Impact resistant	HD 60364-5-54:2009	✗

Laying conditions

 FIXED LAYING ✓	 INDOOR LAYING ✓	 LAYING IN AIR WITH PROTECTION ✓	 MAXIMUM TENSILE STRENGTH DURING INSTALLATION 0,050 kN copper cross-section of conductors
 MOBILE LAYING ✗	 OUTDOOR LAYING yes, with UV protection	 DIRECTLY BURIED LAYING ✓	 WITH RODENT PROTECTION ✗
 OCCASIONAL MOBILE LAYING W/O STRESS ✗	 LAYING IN FREE AIR ✓	 BURIED LAYING WITH PROTECTION ✓	 MINIMUM BENDING RADIUS 10 times the outer diameter

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Nominal cross section conductor [mm ²]	Conductor resistance at 20°C [Ohm/Km]
10.00	1,91
16.00	1,21
25.00	0,780
35.00	0,554
50.00	0,386
70.00	0,272
95.00	0,206
120.00	0,161
150.00	0,129
185.00	0,106
240.00	0,0801

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Article code	Formation [n° x mm ²]	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
GMU100001	1 X 10,00	10,5	215	Black
GMU160001	1 X 16,00	11,6	288	Black
GMU250001	1 X 25,00	13,4	409	Black
GMU350001	1 X 35,00	14,6	523	Black
GMU500001	1 X 50,00	16,5	697	Black
GMU700001	1 X 70,00	18,7	977	Black
GMU950001	1 X 95,00	20,6	1217	Black
GMU1200001	1 X 120,00	22,2	1507	Black
GMU1500001	1 X 150,00	24,6	1872	Black
GMU1850001	1 X 185,00	26,9	2251	Black
GMU2400001	1 X 240,00	30,6	2977	Black