

# FG16M16AM16

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

## Application

Single-core LSZH shielded power 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 schools, offices, theaters, hospitals). The armouring makes it ideal for heavy-duty industrial applications in DC circuits. Must be protected from UV if stored or installed outdoors. Buried laying (direct and with protection) is allowed.

## Marking

<meters> CE 0987 SPECIALCAVI BALDASSARI FG16M16AM16 <formation> 0,6/1kV IEC 60332-3-24 CCA-S1A,D0,A1 <lot> <year>



The product render is for illustration only.  
 Copyright Specialcavi Baldassari S.r.l. (C.F. 01387320466) – all rights reserved.

## Manufacturing characteristics

- Conductor:** bare copper class 5 flexible, according to CEI 20-29 EN IEC 60228
- Insulation:** hard grade ethylene propylene rubber (HEPR) compound, G16 type, according to CEI 20-11
- Armour:** galvanized steel braiding (braid wire nominal diameter  $\geq 0,24\text{mm}$ )
- Outer sheath:** LSZH thermoplastic compound, M16 type, according to CEI 20-11
- Outer sheath colour:** green, based on RAL 6024
- Cable geometry:** round

### On request

- Custom cores and outer sheath colouring
- Aluminium braid armour for applications in A.C.

## Reaction to fire - EN 13501-6

Reaction to fire according to EN 13501-6: Class  
**Cca**

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

Rubber insulated cables with rated voltage between 1 kV and 30 kV: CEI 20-13 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-a

### Maximum voltage:

- $U_0/U$  1800/1800V D.C.

### Minimum insulation resistance:

- >200M $\Omega$ 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

 <b>FIXED LAYING</b> ✓	 <b>INDOOR LAYING</b> ✓	 <b>LAYING IN AIR WITH PROTECTION</b> ✓	 <b>MAXIMUM TENSILE STRENGTH DURING INSTALLATION</b> 0,050 kN copper cross-section of conductors
 <b>MOBILE LAYING</b> ✗	 <b>OUTDOOR LAYING</b> yes, with UV protection	 <b>DIRECTLY BURIED LAYING</b> ✓	 <b>WITH RODENT PROTECTION</b> ✓
 <b>OCCASIONAL MOBILE LAYING W/O STRESS</b> ✗	 <b>LAYING IN FREE AIR</b> ✓	 <b>BURIED LAYING WITH PROTECTION</b> ✓	 <b>MINIMUM BENDING RADIUS</b> 14 times the outer diameter

# FG16M16AM16

Nominal cross section conductor [mm <sup>2</sup> ]	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

## FG16M16AM16

Article code	Formation [n° x mm <sup>2</sup> ]	Diameter under armour approx [mm]	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
GMAZ100001	1 X 10,00	5,8	9,7	201	Black
GMAZ160001	1 X 16,00	6,8	10,7	277	Black
GMAZ250001	1 X 25,00	8,6	12,7	404	Black
GMAZ350001	1 X 35,00	9,8	13,9	514	Black
GMAZ500001	1 X 50,00	11,5	15,8	688	Black
GMAZ700001	1 X 70,00	13,8	18,4	957	Black
GMAZ950001	1 X 95,00	15,6	20,3	1211	Black
GMAZ1200001	1 X 120,00	18,0	23,0	1541	Black
GMAZ1500001	1 X 150,00	19,8	24,7	1878	Black
GMAZ1850001	1 X 185,00	21,2	26,3	2224	Black
GMAZ2400001	1 X 240,00	24,4	29,9	2908	Black