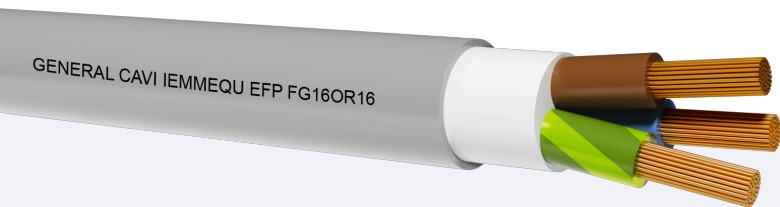


FG16R16 / FG16OR16 0,6/1 kV

CPR Cca-s3,d1,a3

Model Product: P10-P11 - 20211103

general
CAVI s.p.a.

Class 5 flexible copper conductor.
Elastomeric mixture insulation (G16 quality).
Not fibrous and not hygroscopic filler
Outer Sheath PVC R16 type.

STANDARDS

CEI 20-13 IEC 60502-1 CEI UNEL 35318-35322-35016
EN 50575:2014+A1:2016(EN 50399/EN 60332-1-2/EN
60754-2)

Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 2) CPR
UE 305/11

COMMON FEATURES

For electrical power system in constructions and other civil engineering bulginnings, in order to limit fire and smoke production and spread, in accordance with the CPR. Power and control use outdoor and indoor applications, even wet. Suitable for fixed installations at open air, in tube or canals, masonry, metals structures, overhead wire and for direct or indirect underground wiring. Power and control use outdoor applications, even wet AD7. Special features good resistance to industrial oils and greases. Additional Special Features: Good behavior at low temperatures. UV resistant.

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):
Power cables, = 4 D / Control cables = 6 D
Maximum pulling stress: 50 N/mm²

PACKING

100m rings in thermoplastic film up to section 5x6mm². Drums to agree.

Flexible or rigid power control cable for fixed installations
not propagating fire and with low corrosive gas emission.
G16 quality HEPR insulated. CPR UE 305/11

Nominal voltage U0: 600V(AC) 1800V(DC)

Nominal voltage U: 1000V(AC) 1800V(DC)

Test voltage: 4000 V

Maximum voltage Um: 1200V(AC) 1800V(DC)

Maximum operating temperature: 90

Maximum short circuit temperature for sections up to 240mm²: 250

Maximum short circuit temperature for sections over 240mm²: 220

Minimum installation and laying temperature: 0°C

Min. operating temperature (without mechanical shocks): -15°C

Minimum installation and laying temperature: 0°C

CORE COLOURS

Single core: black

Two cores: blue-brown

Three cores: brown-black-gray (or blue-brown-Y/G)

Four cores: blue-brown-black-gray (or Y/G instead blue)

Five cores: Y/G-blue-brown-black-gray (or black instead Y/G)

Multicores: black with numbers

SHEATH COLOUR

Light grey RAL 7035

INK MARKING

GENERALCAVI - Cca-s3,d1,a3 - IEMMEQU EFP - year - FG16(O)R16-0,61/kV
- form x sect. - inner work order - progressive length

FG16R16 / FG16OR16 0,6/1 kV

CPR Cca-s3,d1,a3

Model Product: P10-P11 - 20211103



FG16(O)R16 0,6/1kV

Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Maximum outer diameter	Approx cable weight	Electric resistance at 20°C	Current carrying capacities	
							30° In pipe	20°C In ground
(N°)	(mm²)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(A)	(A)
Single core								
1x	4	2.6	0.7	9.30	82	4.95	37	35
1x	6	3.4	0.7	9.90	101	3.3	48	44
1x	10	4.4	0.7	10.9	152	1.91	66	59
1x	16	5.7	0.7	11.4	211	1.21	88	77
1x	25	6.9	0.9	13.2	301	0.78	117	100
1x	35	8.1	0.9	14.6	396	0.554	144	121
1x	50	9.8	1	16.4	556	0.386	175	150
1x	70	11.6	1.1	17.3	761	0.272	222	184
1x	95	13.3	1.1	20.4	991	0.206	269	217
1x	120	15.1	1.2	22.4	1219	0.161	312	259
1x	150	16.8	1.4	24.8	1517	0.129	355	287
1x	185	18.6	1.6	27.2	1821	0.106	417	323
1x	240	21.4	1.7	30.4	2366	0.0801	490	379
1x	300	23.9	1.8	33.0	2947	0.0641	-	429
1x	400	27.5	2	37.7	3870	0.0486	-	541
1x	500*	28.5	2.1	45.0	4790	0.0384	-	599
1x	630*	32.8	2.3	51.1	6470	0.0287	-	683
Two cores								
2x	1.5	1.6	0.7	12.0	125	13.3	22	23
2x	2.5	2	0.7	13.0	151	7.98	30	30
2x	4	2.6	0.7	14.2	207	4.95	40	39
2x	6	3.4	0.7	15.4	256	3.3	51	49
2x	10	4.4	0.7	17.3	395	1.91	66	69
2x	16	5.7	0.7	19.4	576	1.21	91	86
2x	25	6.9	0.9	23.0	806	0.78	119	111
2x	35	8.1	0.9	25.7	1052	0.554	146	136
2x	50	9.8	1.0	29.3	1465	0.386	175	168
2x	70	11.6	1.1	33.1	2044	0.272	221	207
2x	95	13.3	1.1	37.4	2917	0.206	265	245
2x	120	15.1	1.2	41.5	3678	0.161	305	284
2x	150	16.8	1.4	46.1	4028	0.129	-	324
2x	185*	18.6	1.6	48.8	4500	0.106	-	-
2x	240*	21.4	1.7	57,7	5852	0.0801	-	-
Three cores								

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Model Product: P10-P11 - 20211103



Cores number (N°)	Cross section (mm²)	Approx conductor diameter (mm)	Insulation medium thickness (mm)	Maximum outer diameter (mm)	Approx cable weight (kg/km)	Electric resistance at 20°C (Ohm/km)	Current carrying capacities	
							30° In pipe (A)	20°C In ground (A)
3x	1.5	1.6	0.7	12.5	139	13.3	19.5	19
3x	2.5	2.0	0.7	13.6	185	7.98	26	25
3x	4	2.6	0.7	14.9	246	4.95	35	32
3x	6	3.4	0.7	16.2	313	3.3	44	41
3x	10	4.4	0.7	18.2	503	1.91	60	55
3x	16	5.7	0.7	20.6	609	1.21	80	72
3x	25	6.9	0.9	24.5	991	0.78	105	93
3x	35	8.1	0.9	27.3	1370	0.554	128	114
3x	50	9.8	1.0	31.2	1941	0.386	154	141
3x	70	11.6	1.1	35.6	2680	0.272	194	174
3x	95	13.3	1.1	40.4	3487	0.206	233	206
3x	120	15.1	1.2	44.4	4406	0.161	268	238
3x	150	16.8	1.4	49.5	5440	0.129	300	272
3x	185	18.6	1.6	55.2	6750	0.106	340	306
3x	240	21.4	1.7	61.9	8778	0.0801	398	360
3x	300	22.5	1.8	68.0	11000	0.0641	-	429
Four cores								
4x	1.5	1.6	0.7	13.4	171	13.3	19.5	19
4x	2.5	2.0	0.7	14.6	222	7.98	26	25
4x	4	2.6	0.7	16.0	297	4.95	35	32
4x	6	3.4	0.7	17.5	392	3.30	44	41
4x	10	4.4	0.7	19.8	611	1.91	60	55
4x	16	5.7	0.7	22.4	886	1.21	80	72
4x	25	6.9	0.9	26.8	1255	0.78	105	93
4x	35*	8.1	0.9	30.5	1826	0.554	130	114
4x	50*	9.8	1.0	33.5	2588	0.386	155	141
4x	70*	11.6	1.1	38.5	3573	0.272	194	174
4x	95*	13.3	1.1	43.5	4649	0.206	235	206
4x	120*	15.1	1.2	48.3	5875	0.161	267	238
4x	150*	16.8	1.4	54.0	7255	0.129	-	272
4x	185*	18.6	1.6	58.8	9000	0.106	-	306
4x	240*	21.4	1.7	67.0	11700	0.0801	-	360
4x	3x35+1x25	8.1	0.9	29.2	1611	0.554	130	114
4x	3x50+1x25	9.8	1.0	32.4	2142	0.386	155	141
4x	3x70+1x35	11.6	1.1	37.0	3037	0.272	194	174
4x	3x95+1x50	13.3	1.1	42.0	4047	0.206	235	206

FG16R16 / FG16OR16 0,6/1 kV

CPR Cca-s3,d1,a3

Model Product: P10-P11 - 20211103



Cores number (N°)	Cross section (mm²)	Approx conductor diameter (mm)	Insulation medium thickness (mm)	Maximum outer diameter (mm)	Approx cable weight (kg/km)	Electric resistance at 20°C (Ohm/km)	Current carrying capacities	
							30° In pipe (A)	20°C In ground (A)
4x	3x120+1x70	15.1	1.2	46.9	5327	0.161	267	238
4x	3x150+1x95	16.8	1.4	52.5	6635	0.129	-	272
4x	3x185+1x95	18.6	1.6	57.3	7833	0.106	-	306
4x	3x240+1x150	21.4	1.7	65.5	10476	0.0801	-	360
4x	3x300+1x150	22.5	1.8	70.8	12000	0.0641	-	429
Five cores								
5G	1.5	1.6	0.7	14.4	204	13.3	14	19
5G	2.5	2.0	0.7	15.6	266	7.98	26	21
5G	4	2.6	0.7	17.3	361	4.95	35	32
5G	6	3.4	0.7	18.9	471	3.30	44	41
5G	10	4.4	0.7	21.5	756	1.91	60	55
5G	16	5.7	0.7	24.4	1119	1.21	80	72
5G	25	6.9	0.9	29.3	1597	0.78	105	93
5G	35	8.1	0.9	32.8	2140	0.554	130	114
5G	50	9.8	1.0	38.2	3004	0.386	155	141
5G	70*	11.6	1.1	44.6	4466	0.272	194	174
5G	95*	13.3	1.1	49.3	5811	0.206	235	206
5G	120*	15.5	1.2	55.0	7343	0.161	267	238
Multicores								
7x	1.5	1.6	0.7	15.4	247	13.3	11.5	16
7x	2.5	2.0	0.7	16.8	343	7.98	15.5	21
10x	1.5	1.6	0.7	18.7	353	13.3	11.5	16
10x	2.5	2.0	0.7	20.6	492	7.98	15.5	24
12x	1.5	1.6	0.7	19.3	380	13.3	9.5	12.5
12x	2.5	2.0	0.7	21.3	537	7.98	12.0	25
16x	1.5	1.6	0.7	21.1	549	13.3	9.5	19
16x	2.5	2.0	0.7	23.3	848	7.98	12.0	25
19x	1.5	1.6	0.7	22.1	612	13.3	8.0	19
19x	2.5	2.0	0.7	24.5	1049	7.98	10.5	25
24x	1.5	1.6	0.7	25.4	733	13.3	8.0	19
24x	2.5	2.0	0.7	28.3	1140	1.98	10.5	25

Three, four, five and multicores cables can be produced also with Y/G core. Current carrying capacities for single core cables are calculated on 3 close cables, for two core cables with two charged conductors and for three core cables with three charged conductors.

Current Carrying capacities at 20°C according to UNEL 35026 with underground laying standard CEI 64-8-61 (ground temp=20°C, depth=0.8m, ground resistivity=1.5 k m/W.).

The sections marked with (*) appear in the UNEL tables, not subject to the IMQ EFP mark, but comply with EU Regulation 305/11 (CPR)