

FG18M16 FG18OM16 0,6/1 kV

CPR B2ca-s1a,d1,a1

Model Product: A50-A51 - 20220222

general
CAVI s.p.a.

Class 5 flexible copper conductor.
Elastomeric mixture insulation (G18 quality).
Not fibrous and not hygroscopic filler
LSZH thermoplastic sheath, M16.

STANDARDS

CEI 20-38 IEC 60502-1 CEI UNEL 35312+V1-35316
EN 50575:2014 + EN 50575/A1:2016(EN 50399/EN
60332-1-2/EN 60754)

Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 3)

Power cables, rubber insulated (G18), thermoplastic sheathed, with special requirements of reaction to fire performance according to the Construction Products Regulation (CPR) Cables with flexible conductors for fixed installation -

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

Nominal voltage U: 1kV(AC)1,8kV(DC)

Test voltage: 4000 V

Maximum voltage Um: 1,2kV(AC)1,8kV(DC)

Maximum operating temperature: 90°C

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

Maximum short circuit temperature for sections over 240mm²: +220°C

Minimum installation and laying temperature: 0°C

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

Minimum installation and laying temperature: 0°C

COMMON FEATURES

For electrical power system in constructions and other civil engineering bulgnings, 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. The most important property of this kind of cable is its protection against smokes, toxic and corrosive gases in case of fire. Power and control use outdoor applications, even wet AD6.

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):
Power flexible cables, class 5 = 4D Control= 6D

Maximum pulling stress: During installation= 50 N/mm² Static stress = 15 N/mm²

PACKING

Drums to agree.

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

Black

INK MARKING

GENERALCAVI -B2ca-s1a,d1,a1- IEMMEQU EFP - year - FG18(O)M16-0,6/1 kV- form x sect. - inner work order - progressive length

NOTE

Special features on request:RI (Hydrocarbon Resistant) CEI 20-34 / 0-1
PQA to OIL & GAS specifications
*NO EFP IMQ



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Cores number (N°)	Cross section (mm²)	Approx conductor diameter (mm)	Insulation medium thickness (mm)	Max external production 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)
Single core								
1x	4*	2.6	1.0	9.06	116	4.95	37	35
1x	6*	3.4	1.0	9.52	139	3.30	48	44
1x	10	3.9	1.0	10.50	185	1.91	66	59
1x	16	5.0	1.0	11.53	247	1.21	88	77
1x	25	6.4	1.2	13.02	342	0.780	117	100
1x	35	7.7	1.2	14.72	455	0.554	144	121
1x	50	9.2	1.4	16.48	612	0.386	175	150
1x	70	11.0	1.4	19.26	835	0.272	222	184
1x	95	12.5	1.6	21.52	1090	0.206	269	217
1x	120	14.2	1.6	23.48	1332	0.161	312	259
1x	150	15.8	1.8	25.44	1628	0.129	355	287
1x	185	17.5	2.0	27.19	1953	0.106	417	323
1x	240	20.1	2.2	30.38	2485	0.0801	490	379
1x	300	22.5	2.4	33.99	3078	0.0641	607	429
1x	400*	27.5	2.8	38.52	4064	0.0486	703	541
1x	500*	35.0	3.0	44.50	5165	0.0384	832	565
1x	630*	39.0	3.0	49.23	6799	0.0287	946	645
Two cores								
2x	1.5	1.5	1.0	13.4	178	13.3	22	23
2x	2.5	2.0	1.0	14.4	209	7.98	30	30
2x	4	2.5	1.0	15.6	273	4.95	40	39
2x	6	3.0	1.0	16.8	326	3.3	51	49
2x	10	3.9	1.0	18.7	459	1.91	69	66
Three cores								
3x	1.5	1.5	1.0	14.1	212	13.3	19.5	19
3x	2.5	2.0	1.0	15.1	263	7.98	26	25
3x	4	2.5	1.0	16.4	334	4.95	35	32
3x	6	3.0	1.0	17.7	409	3.3	44	41
3x	10	3.9	1.0	19.8	575	1.91	60	55
Four cores								
4x	1.5	1.5	1.0	16.3	241	13.3	19.5	19
4x	2.5	2.0	1.0	17.6	295	7.98	26	25
4x	4	2.5	1.0	19.2	385	4.95	35	32
4x	6	3.0	1.0	20.8	491	3.3	44	41
4x	10	3.9	1.0	23.4	700	1.91	60	55



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							30° In pipe (A)	20°C In ground (A)
Five cores								
5G	1.5	1.5	1.0	16.3	278	13.3	19.5	19
5G	2.5	2.0	1.0	17.6	345	7.98	26	25
5G	4	2.5	1.0	19.2	457	4.95	35	32
5G	6	3.0	1.0	20.8	572	3.3	44	41
5G	10	3.9	1.0	23.4	835	1.91	60	56
Multicores								
7G	1.5	1.5	1.0	17.5	342	13.4	19.5	19
7G	2.5	2.0	1.0	19.0	436	7.98	26	25
10G	1.5	1.5	1.0	21.6	445	13.4	19.5	19
10G	2.5	2.0	1.0	23.5	575	8.06	26	25
12G	1.5	1.5	1.0	22.3	516	13.4	19.5	19
14G	1.5	1.5	1.0	23.3	597	13.4	19.5	19
14G	2.5	2.0	1.0	24.2	774	8.06	26	25
19G	1.5	1.5	1.0	25.7	735	13.4	19.5	19
19G	2.5	2.0	1.0	26.4	968	8.06	26	25
24G	1.5	1.5	1.0	29.8	903	13.5	19.5	19
24G	2.5	2.0	1.0	32.6	1195	8.10	26	25
27G	1.5	1.5	1.0	32.8	984	13.5	19	19