FG7R / FG7OR

Italian Standard
Power and Control Cable

CABLE STRUCTURE

Conductor	Electrolytic annealed, class 5 stranded plain copper wires (tinned conductor on request)
Insulation	Rubber based HEPR or equivalent compound, type G7
Inner Covering	In need, PVC compound for only multi-core cables above 16mm^2
Sheath	Flame retardant PVC compound, Rz type (EN 50363-0, CEI 20-11)
Color	Light Grey

MAIN CHARACTERISTICS

Construction	CEI 20-13, CEI UNEL 35375,CEI UNEL 35377
General Requirements	CEI 20-48
Guide to Use	CEI 20-67
Electrical Tests	EN 50395
Non - electrical Tests	EN 50396
Conductor Resistance	CEI 20-29, IEC 60228
Flame Retardant	CEI 20-22 II ,CEI 20-35, IEC 60332-1

OPERATING CHARACTERISTICS

Rated Voltage	600/1000 V (U_0/U)
AC Test Voltage	4 kV
Operating Temperature	(Without mechanical shocks)
In Flexing Use	-0˚C to +90˚C
In Fixed Use	-15˚C to +90˚C
Conductor Short-Circuit Temp.	250˚C (Max. 5 sec)
Min. Installation Temp.	0˚C
Min. Bending Radius	CEI UNEL 35375,CEI UNEL 35377
Current Carrying Capacities	CEI 20-21, VDE 0298-4 Tab.13 , IEC 60364-5-52 Tab. B.52.12 & Tab. C.52.1

APPLICATIONS

These rubber insulated cables are suitable for both indoor and outdoor use as power and control cable. They are mostly used in industrial facilities, construction sites and residential areas.
They can be used in dry, damp and wet places also allowed for direct and indirect underground laying.

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
1x1,5	6,00	55	24	13,30
1x2,5	6,20	65	25	7,98
1x4	6,80	85	27	4,95
1x6	7,30	105	29	3,30
1x10	8,60	160	34	1,91
1x16	9,70	220	39	1,21
1x25	11,60	320	46	0,78
1x35	12,80	415	51	0,554
1x50	14,80	575	59	0,386
1x70	17,00	810	68	0,272
1x95	18,50	995	74	0,206
1x120	20,60	1260	82	0,161
1x150	23,10	1590	92	0,129
1x185	25,90	1990	104	0,106
1x240	28,50	2450	114	0,0801
1x300	31,50	3190	126	0,0641
1x400	36,60	4230	146	0,0486
1x500	40,50	5360	162	0,0384
1x630	44,00	6600	176	0,0287
2x1,5	11,50	205	46	13,30
2x2,5	12,40	240	50	7,98
2x4	13,60	310	54	4,95
2x6	14,60	370	58	3,30
2x10	17,30	540	69	1,91
2x16	19,40	720	78	1,21
2x25	23,10	1050	92	0,780
2x35	25,60	1325	102	0,554
2x50	29,80	1850	119	0,39
3x1,5	10,20	140	41	13,30
3x2,5	11,20	180	45	7,98
3x4	12,50	280	50	4,95
3x6	13,80	315	55	3,30

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
3x10	16,20	470	65	1,91
3x16	18,70	660	75	1,21
3x25	24,80	1270	99	0,78
3x35	27,10	1650	108	0,554
3x50	32,20	2350	129	0,386
3x70	36,60	3170	146	0,272
3x95	40,10	3890	160	0,206
3x120	45,00	4960	180	0,161
3x150	50,10	6210	200	0,129
3x16+10	20,60	1369	82	1,21
3x25+16	26,20	877	105	0,78
3x35+16	29,00	1742	116	0,554
3x50+25	33,50	2560	134	0,386
3x70+35	38,30	3520	153	0,272
3x95+50	42,70	4470	171	0,206
3x120+70	48,10	5730	192	0,161
3x150+70	50,00	6250	200	0,129
4x1,5	11,00	170	44	13,30
4x2,5	12,10	220	48	7,98
4x4	13,50	290	54	4,95
4x6	14,70	370	59	3,30
4x10	17,90	580	72	1,91
4x16	20,60	830	82	1,21
4x25	26,80	1560	107	0,78
4x35	29,30	1850	117	0,554
4x50	34,70	2614	139	0,386
4x70	40,80	4050	163	0,272
5x1,5	11,90	200	48	13,30
5x2,5	13,10	260	52	7,98
5x4	14,70	355	59	4,95
5x6	16,10	460	64	3,30
5x10	19,60	720	78	1,91

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
5x16	22,60	1030	90	1,21
5x25	29,60	1880	118	0,78
5x35	33,60	2550	134	0,554
5x50	39,50	3500	158	0,386
5x70	46,90	5020	188	0,272
7x1,5	12,70	245	51	13,30
7x2,5	14,00	325	56	7,98
10x1,5	15,60	330	62	13,30
10x2,5	17,40	445	70	7,98
12x1,5	16,10	375	64	13,30
12x2,5	18,10	510	72	7,98
16x1,5	17,70	475	71	13,30
16x2,5	19,80	650	79	7,98
19x1,5	18,70	535	75	13,30
19x2,5	20,80	740	83	7,98
24x1,5	21,50	660	86	13,30
24x2,5	24,20	920	97	7,98