



H07RN- F - 450/750 V

Eca

According to European Construction Products Regulation CPR (EU) n.305/11

Reazione al fuoco REGOLAMENTO 305/2011/UE

- **Standard:** EN 50575:2014+A1:2016 and EN 13501-6:2014
- **Class:** Eca
- **Classification (IEC UNEL 35016):** EN 13501-6:2014
- **Vertical flame spread:** EN 60332-1-2

Reference standards

CEI EN 60332-1
CEI EN 50255-2-21
CEI 20-19/4 HD 22.4 S4
CEI 20-107/2-21
2006/95/CE
2011/65/CE

Cable description

Harmonised flame retardant rubber insulated polychloroprene (neoprene) sheathed cables with high resistance to water, mineral oils, industrial greases and average mechanical stress, with good flexibility and good resistance to ozone and chemicals.

Conductor

Flexible bare copper CLASS 5

Insulation

Special elastomeric (rubber) E14 quality

Core colour

2x Brown / Light Blue
3x Yellow-Green / Brown / Light Blue
4x Yellow-Green / Black / Grey / Brown
5x Yellow-Green / Black / Light Blue / Brown / Grey
Subsequent formations with numbered cores
*Also available without G/V

Sheath

Polychloroprene (Neoprene) with high mechanical properties

Sheath colour

Black

Labeling

White ink stamping on the conduit every 1 m

Technical specifications

Rated voltage: U_o/U: 450/750 V AC - 0.6 /1 kV DC

Maximum operating temperature: 60° C

Minimum operating temperature: -40° C (in the absence of mechanical stress)

Maximum short circuit temperature: 200° C

Installation conditions

Recommended minimum bending radius: 6 times the outside diameter of the cable for mobile laying
3 times the outside diameter of the cable for fixed laying (if < or = 12mm)
4 times the external diameter of the cable for fixed laying (if > 12mm)

Maximum recommended tensile stress: 15 N/mm² section for mobile laying
50 N/mm² of section for fixed laying

Packaging

- Hanks 100 metres
- Wooden reel

Applications

Cables suitable for installation in dry, damp, wet and open areas, and in workshops with explosive atmospheres.

For supplying and connecting mobile and lifting equipment and/or similar systems.

Recommended for connections subject to medium mechanical stress: agricultural and industrial workshop equipment, heating plates, large kettles, portable lamps, power tools such as drills, motors or transportable machines on construction sites or in agricultural applications. They can also be used in temporary buildings or construction site huts.

Use is permitted up to 1,000 V AC in the case of protected fixed installation in pipes.

Mechanical protection is required when used in indirect underground installation (installation criteria for flexible cables).

UNIPOLAR						
Conductor number N	Nominal Section	Indicative conductor diameter	Average thickness Insulation	Maximum outer diameter	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum
1 x	1,5	1,5	0,8	7,1	51	13,3
	2,5	2	0,9	7,9	67	7,98
	4	2,5	1	9	92	4,95
	6	3	1	9,8	121	3,3
	10	4	1,2	11,9	186	1,91
	16	5	1,2	13,4	256	1,21
	25	5,9	1,4	15,8	368	0,780
	35	7,3	1,4	17,9	485	0,554
	50	8,9	1,6	20,6	668	0,386
	70	10,5	1,6	23,3	905	0,272
	95	12,20	1,8	26	1180	0,206
	120	13,80	1,8	28,6	1460	0,161
	150	15,40	2	31,4	1810	0,129
	185	16,9	2,2	34,4	2165	0,106
240	19,5	2,4	38,3	2750	0,0801	

BIPOLAR						
Conductor number N	Nominal section mmq	Approximate conductor diameter mm	Average insulation thickness mm	Maximum external diameter mm	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum Ω/Km
2 x	1	1,3	0,8	10	93	19,50
	1,5	1,5	0,8	11	115	13,30
	2,5	1,9	0,9	13,10	165	7,98
	4	2,5	1	15,20	225	4,95
	6	3	1	16,80	300	3,30
	10	4	1,2	22,60	550	1,91
	16	5	1,2	25,70	740	1,21
	25	6,2	1,4	30,70	1060	0,78

TRIPOLAR						
Conductor number N	Nominal section mmq	Approximate conductor diameter mm	Average insulation thickness mm	Maximum external diameter mm	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum Ω/Km
	1	1,30	0,8	10,70	120	19,5
	1,5	1,50	0,8	12	150	13,30
	2,5	2	0,9	13,50	200	7,98
	4	2,50	1	14,90	295	4,95

3 G	6	3	1	16,20	380	3,30
	10	4	1,2	18,20	675	1,91
	16	5	1,2	20,60	950	1,21
	25	6,20	1,4	24,50	1355	0,78
	35	7,40	1,4	27,30	1765	0,554
	50	8,90	1,6	31,20	2415	0,386
	70	10,50	1,6	35,60	3230	0,272
	95	12,20	1,8	40	4225	0,206
	120	13,80	1,8	44,50	5190	0,161
	150	15,40	2	49,50	6415	0,129
	185	16,50	2,2	55,20	7700	0,106

QUADRIPOLEAR						
Conductor number N	Nominal section mmq	Approximate conductor diameter mm	Average insulation thickness mm	Maximum external diameter mm	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum Ω/Km
4 G	1	1,3	0,8	11,9	145	19,5
	1,5	1,5	0,8	13,1	175	13,3
	2,5	2	0,9	15,5	255	7,98
	4	2,5	1	17,9	355	4,95
	6	3	1	20	485	3,30
	10	4	1,2	26,5	845	1,91
	16	5	1,2	30,1	1185	1,21
	25	6,20	1,4	36,6	1730	0,78

PENTAPOLAR						
Conductor number N	Nominal section mmq	Approximate conductor diameter mm	Average insulation thickness mm	Maximum external diameter mm	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum Ω/Km
5 G	1	1,3	0,8	13,1	180	19,5
	1,5	1,5	0,8	14,4	220	13,30
	2,5	2	0,9	17	310	7,98
	4	2,5	1	19,9	445	4,95
	6	3	1	22,2	605	3,30
	10	4	1,2	29,1	1035	1,91

MULTIPOLAR (numbered cores)							
Nominal section mmq		Approximate conductor diameter mm	Average insulation thickness mm	Maximum external diameter mm	Indicative weight Kg/km	Electrical resistance at 20° C. Maximum Ω/Km	
7	G	1,5	1,5	0,8	17,2	355	13,3
7	G	2,5	2	0,9	20	495	7,98
12	G	1,5	1,5	0,8	22,4	505	13,3
12	G	2,5	2	0,9	26,2	710	7,98
19	G	1,5	1,5	0,8	26,3	725	13,3
19	G	2,5	2	0,9	30,9	1035	7,98
24	G	1,5	1,5	0,8	30,7	915	13,3
24	G	2,5	2	0,9	36,4	1325	7,98