



638*P / H07RN-F

450/750V

EN 50525-2-21

Flexible rubber insulated and sheathed cables

APPLICATIONS

Heavy-duty flexible cables for medium mechanical stress in dry and wet, suitable for large boiling installations, heating plates. Inspections lamps, electrical tools such as drills circular saws. Domestic electric tools, transportable motors etc. Other industrial applications. Cable may be rated at 600/1000V when installed with mechanical protection

Standard length cable packing

1000m on drums.

Other forms of packing and delivery are available on request

CONSTRUCTION

Conductors	annealed copper stranded circular compacted conductor class 2(RM) acc. to BS EN 60228	
Separator	If needed a suitable tape separator between the conductor and insulation	
Insulation	Ethylene-propylene rubber (EPR) type EI4 in acc. to EN 50363-1	
Circuit identification	Colour coding of power conductors comply to HD 308, DIN VDE 0293- 308	
	Number of cores	
	G (earth core)	x (without earth core)
	2	Blue and brown
	3	Brown, Black, Grey Blue, Brown, Black ^a
	4	Blue, Brown, Black, Grey Green-yellow, brown, black, grey Green-yellow, Blue, Brown, Black ^a
	5	Blue, Brown, Black, Grey, Black Green-yellow, blue, brown, black, grey
	>5	Black with white numbering Green-yellow, other cores black with white numbering
	a for certain applications only	
Internal jacket	A synthetic thermosetting compound type EM3 in acc. to EN 50363-2-1	
Outer jacket	A synthetic thermosetting compound type EM2 in acc. to EN 50363-2-1	
Colour of outer jacket	Black or colours can be provided	
Flame propagation	EN 60332-1-2:2004, IEC 60332-1-2:2004	



Minimum bending radius:	For cable diameter D (mm)			
	D < 8	8 < D < 12	12 < D < 20	D > 20
For fixed installation:	3 D	3 D	4 D	4 D
At inlet of portable appliance or mobile equipment. No mechanical load on cable	4 D	4 D	5 D	6 D
Under mechanical load	6 D	6 D	6 D	8 D

Features

- Maximum conductor operating temperature: +60°C
- Maximum conductor temperature during short circuit: +250°C
- Lowest ambient temperature for fixed installation: -40°C
- Lowest ambient temperature for mobile installation: -25°C
- UV, sunlight, oil resistant

Approvals

BBJ HAR

SIZE	Number x maximum diameter of wire	Nominal thickness of insulation	Nominal thickness of jacket			Approx. O.D. of cable	Voltage drop	Approx. weight of cable	Maximum conductor resistance at 20°C
			Single	Double layer					
n x mm ²	mm	mm	mm	Internal	Outer	mm	V/A/km	kg/km	Ω/km
1 x 1*	29x0,2	0,8	1,4	—	—	5,6	—	43	20,0
1 x 1,5	28x0,26	0,8	1,4	—	—	5,9	23,73	49	13,7
1 x 2,5	45x0,26	0,9	1,4	—	—	6,6	14,22	66	8,21
1 x 4	51x0,31	1,0	1,5	—	—	7,3	8,82	89	5,09
1 x 6	76x0,31	1,0	1,6	—	—	7,9	5,88	114	3,39
1 x 10	74x0,41	1,2	1,8	—	—	9,8	3,38	178	1,95
1 x 16	116x0,41	1,2	1,9	—	—	11,5	2,16	248	1,24
1 x 25	180x0,41	1,4	2,0	—	—	12,9	1,39	356	0,795
1 x 35	254x0,41	1,4	2,2	—	—	14,7	0,99	471	0,565
1 x 50	364x0,41	1,6	2,4	—	—	16,8	0,70	657	0,393
1 x 70	514x0,51	1,6	2,6	—	—	19,3	0,51	881	0,277
1 x 95	684x0,51	1,8	2,8	—	—	21,9	0,40	1156	0,210
1 x 120	870x0,51	1,8	3,0	—	—	23,7	0,33	1411	0,164
1 x 150	1092x0,51	2,0	3,2	—	—	26,0	0,28	1762	0,132
1 x 185	1325x0,51	2,2	3,4	—	—	29,1	0,24	2145	0,108
1 x 240	1752x0,51	2,4	3,5	—	—	31,2	0,20	2720	0,0817

SIZE	Number x maximum diameter of wire	Nominal thickness of insulation	Nominal thickness of jacket			Approx. O.D. of cable	Voltage drop	Approx. weight of cable	Maximum conductor resistance at 20°C
			Single	Double layer					
				Internal	Outer				
n x mm ²	mm	mm	mm	mm	mm	V/A/km	kg/km	Ω/km	
1 x 300	2203x0,51	2,6	3,6	—	—	35,7	0,19	3321	0,0654
1 x 400	2904x0,51	2,8	3,8	—	—	38,4	0,17	4196	0,0495
1 x 500	3679x0,61	3,0	4,0	—	—	43,5	0,16	5431	0,0391
1 x 630	4880x0,61	3,0	4,1	—	—	48,4	0,15	6878	0,0292
2 x 4	51x0,31	1,0	1,8	—	—	12,1	10,18	227	5,09
2 x 6	76x0,31	1,0	2,0	—	—	13,7	6,78	301	3,39
2 x 10	74x0,41	1,2	—	1,2	1,9	18,9	3,90	559	1,95
2 x 16	116x0,41	1,2	—	1,3	2,0	21,6	2,49	765	1,24
2 x 25	180x0,41	1,4	—	1,4	2,2	25,3	1,60	1092	0,795
2 x 35	254x0,41	1,4	—	1,5	2,3	28,2	0,99	1399	0,565
2 x 50	364x0,41	1,6	—	1,7	2,5	32,4	0,79	1890	0,393
3 x 4	51x0,31	1,0	1,9	—	—	13,0	8,82	269	5,09
3 x 4 + 2,5*	51x0,31	1,0	2,0	—	—	14,9	—	332	5,09
3 x 6	76x0,31	1,0	2,1	—	—	15,0	5,87	390	3,39
3 x 6 + 4*	76x0,31	1,0	2,3	—	—	16,9	—	448	3,39
3 x 10	74x0,41	1,2	—	1,3	2,0	20,2	3,38	684	1,95
3 x 10 + 6*	74x0,41	1,2	3,4	—	—	22,1	—	765	1,95
3 x 16	116x0,41	1,2	—	1,4	2,1	23,1	2,15	944	1,24
3 x 16 + 10*	116x0,41	1,2	—	1,4	2,2	25,2	—	1064	1,24
3 x 25	180x0,41	1,4	—	1,5	2,3	27,1	1,38	1355	0,795
3 x 25 + 16*	180x0,41	1,4	—	1,6	2,5	30,0	—	1566	0,795
3 x 35	254x0,41	1,4	—	1,6	2,5	29,3	0,99	1726	0,565
3 x 35 + 16*	254x0,41	1,4	—	1,7	2,7	33,1	—	1986	0,565
3 x 35 + 25*	254x0,41	1,4	—	1,7	2,7	33,1	—	2083	0,565
3 x 50	364x0,41	1,6	—	1,8	2,7	35,2	0,69	2452	0,393
3 x 50 + 16*	364x0,41	1,6	—	1,9	2,9	39,0	—	2739	0,393
3 x 50 + 25*	364x0,41	1,6	—	1,9	2,9	39,0	—	2799	0,393
4 x 0,75*	22x0,21	0,8	1,5	—	—	9,5	—	123	26,7
4 x 4	51x0,31	1,0	2,0	—	—	14,3	8,82	340	5,09
4 x 6	76x0,31	1,0	2,3	—	—	16,3	5,87	463	3,39
4 x 10	74x0,41	1,2	—	1,4	2,0	22,1	3,38	831	1,95
4 x 16	116x0,41	1,2	—	1,4	2,2	25,3	2,15	1166	1,24
4 x 25	180x0,41	1,4	—	1,6	2,5	30,1	1,38	1711	0,795
4 x 35	254x0,41	1,4	—	1,7	2,7	32,5	0,99	2190	0,565
4 x 50	364x0,41	1,6	—	1,9	2,9	38,6	0,69	2960	0,393

SIZE	Number x maximum diameter of wire	Nominal thickness of insulation	Nominal thickness of jacket			Approx. O.D. of cable	Voltage drop	Approx. weight of cable	Maximum conductor resistance at 20°C
			Single	Double layer					
				Internal	Outer				
n x mm²	mm	mm	mm	mm	mm	V/A/km	kg/km	Ω/km	
5 x 4	51x0,31	1,0	2,2	—	—	15,9	8,82	426	5,09
5 x 6	76x0,31	1,0	2,5	—	—	18,1	5,87	579	3,39
5 x 10	74x0,41	1,2	—	1,4	2,2	24,3	3,38	1024	1,95
5 x 16	116x0,41	1,2	—	1,5	2,4	28,7	2,15	1440	1,24
5 x 25	180x0,41	1,4	—	1,7	2,7	33,3	1,38	2006	0,795
5 x 25 + 1,5*	180x0,41	1,4	—	1,7	2,7	33,4	—	2047	0,795
5 x 35	254x0,41	1,4	—	1,8	2,8	37,0	0,99	2581	0,565
5 x 50	364x0,41	1,6	—	2,1	3,1	43,3	0,69	3658	0,393

*Based on EN 50525-2-21 - as 07RN-F

** Based on EN 50525-2-21 - as 07RN-F, special colour coding

The information contained in this document, including the tables and drawings, are provided for illustrative purposes only and not a commercial offer; nor may it constitute the basis for pursuing any claim against TELE-FONIKA KABLE SA. The suitability of any product including properties, should be made by a qualified person; having already gained the appropriate permissions and documentation, to ensure compliance with any applicable law or regulation.