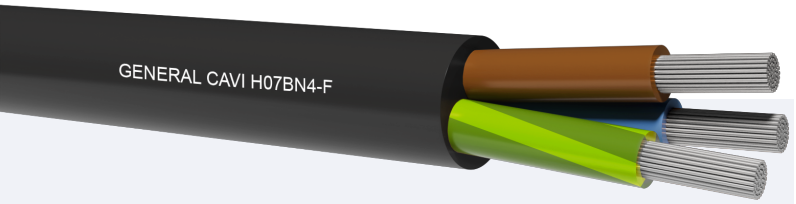
HARMONIZED

H07BN4-F

CPR Eca

Model Product: 274-275 - 20250218



HEAVY HEAT RESISTANT CSP OR OTHER EQUIVALENT SYNTHETIC ELASTOMER SHEATHED CABLES FOR MAXIMUM CONDUCTOR TEMPERATURE OF 90°C

Flexible conductor bare or tinned copper, class 5.
Special EI7 compounds insulation.
Special compounds sheath, EM7.

STANDARDS

CEI EN 50525-2-21 CEI 20-107/2-21 CEI 20-19/12 (CENELEC HD 22.12 S2) BS 7919 NF C 32-102-12 VDE 0282-12
EN 50575:2014 + EN 50575/A1:2016

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

- Nominal voltage U0: 450 V
- Nominal voltage U: 750 V
- Test voltage: 2500 V
- Maximun operating temperature: +90°C
- Maximun short circuit temperature: +250°C
- Minimum installation and laying temperature: -20°C
- Min. operating temperature (without mechanical shocks): -35°C

COMMON FEATURES

In dry, humid, or moist rooms, in open air, in workshop having an explosive atmosphere, for medium mechanical stresses (like for industrial and agricultural workshop appliances, large boiling installations, heating plates, inspection lamps, electrical tools such as drills, circular saws, domestic electric tools and alsofor trasportable motors or machines on buildings sites or agricultural workings etc, also for fixed installations, (like on rought-cast in
temporary buildings huts, for accomodation purposes; suitable for the wiring of constructional components in lifting appliances, machinery etc. Use up to 1000V a.c. is permitted for fixed and protected installation (in conduit or appliances) and also for motor connections of hosting motors and similar. Maximum conductor temperature: 90°C. While high temperature use, skin contact must be avoided. Black sheath is required for permanent outdoor use.Supply of electricity and communications in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):
Fixed installation D <8 D = 3D <3D 12 = D <20 = 4D D> 20 = 4D
Free Movement D <8 D = 4D <12 = 4D D <D 5D = 20> 20 = 6D

Maximum pulling stress: 15 N/mm2 section of copper dynamic applications, for fixed 50 N/mm2

CORE COLOURS

Single core: black

Two cores: blue-brown

Three cores: Brown - Black - Gray (o Y/G, Blue and Brown)

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

Five cores: Y/G-blue-brown-black-gray (black no Y/G)

Multicores: black with numbers and Y/G

SHEATH COLOUR

Black

INK MARKING

year GENERAL CAVI - IEMMEQU <HAR> - H07BN4-F

NOTE

Special features :
OZONE RESISTANT" according to the standards CEI EN 60811-2-1 (Test method A) and CEI EN 50396 (Test method B).RI (Hydrocarbon Resistant) CEI 20-34 / 0-1 and PQA to OIL & GAS specifications.

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Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	External diameter		Approx cable weight	Electric resistance at 20°C	Mobile service Current carrying capacities	Current carrying air free
				Minimum	maximum				
(N°)	(mm²)	(mm)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(A)	(A)
Single core									
1x	1.5	1.6	0.8	5.7	7.1	50	13.3	16	24
1x	2.5	2	0.9	6.3	7.9	65	7.98	25	33
1x	4	2.6	1	7.2	9.0	89	4.95	30	45
1x	6	3.4	1	7.9	9.8	115	3.30	38	58
1x	10	4.4	1.2	9.5	11.9	190	1.91	53	80
1x	16	5.7	1.2	10.8	13.4	259	1.21	71	107
1x	25	6.9	1.4	12.7	15.8	375	0.780	94	135
1x	35	8.1	1.4	14.3	17.9	492	0.554	117	169
1x	50	9.8	1.6	16.5	20.6	675	0.386	148	207
1x	70	11.6	1.6	18.6	23.3	908	0.272	185	268
1x	95	13.3	1.8	20.8	26.0	1171	0.206	222	328
1x	120	15.1	1.8	22.8	28.6	1445	0.161	260	383
1x	150	16.8	2.0	25.2	31.4	1783	0.129	300	444
1x	185	18.6	2.2	27.6	34.4	2125	0.106	341	510
1x	240	21.4	2.4	30.6	38.3	2733	0.0801	407	607
1x	300	23.9	2.6	33.5	41.9	3348	0.0641	468	703
1x	400	27.5	2.8	37.4	46.8	3870	0.0486	553	823
1x	500	35.0	3.0	41.3	52.0	4233	0.0384	634	946
1x	630	39.0	3.0	45.5	57.0	6800	0.0287	742	1088
Two cores									
2X	1	1.3	0.8	7.7	10.0	90	19.5	10	19
2x	1.5	1.6	0.8	8.5	11.0	109	13.3	18	27
2x	2.5	2	0.9	10.2	13.1	158	7.98	27	37
2x	4	2.6	1.0	11.8	15.1	217	4.95	34	50
2x	6	3.4	1.0	13.1	16.8	282	3.3	43	64
2x	10	4.4	1.2	17.7	22.6	539	1.91	60	88
2x	16	5.7	1.2	20.2	25.7	722	1.21	79	119
2x	25	6.9	1.4	24.3	30.7	1043	0.78	105	161
Three cores									
3G	1	1.3	0.8	8.3	10.7	110	19.5	10	18
3G	1.5	1.6	0.8	9.2	11.9	134	13.3	16	24
3G	2.5	2.0	0.9	10.9	14.0	196	7.98	25	33
3G	4	2.6	1.0	12.7	16.2	271	4.95	29	45
3G	6	3.4	1.0	14.1	18.0	355	3.30	36	58
3G	10	4.4	1.2	19.1	24.2	674	1.91	51	80

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Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	External diameter		Approx cable weight	Electric resistance at 20°C	Mobile service Current carrying capacities	Current carrying air free
				Minimum	maximum				
(N°)	(mm²)	(mm)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(A)	(A)
3G	16	5.7	1.2	21.8	27.6	913	1.21	67	107
3G	25	6.9	1.4	26.1	33.0	1324	0.780	89	135
3G	35	8.1	1.4	29.3	37.1	1754	0.554	110	169
3G	50	9.8	1.6	34.1	42.9	2409	0.386	138	207
3G	70	11.6	1.6	38.4	48.3	3211	0.272	172	268
3G	95	13.3	1.8	43.3	54	4210	0.206	204	328
3G	120	15.1	1.8	47.4	60	5205	0.161	238	383
3G	150	16.8	2.0	52	66	6389	0.129	273	444
3G	185	18.6	2.2	57	72	7591	0.106	309	510
3G	240	21.4	2.4	65	82	9944	0.0801	365	607
3G	300	23.9	2.6	72	90	11545	0.0641	415	703
Four cores									
4G	1	1.3	0.8	9.2	11.9	136	19.5	10	18
4G	1.5	1.6	0.8	10.2	13.1	166	13.3	16	24
4G	2.5	2.0	0.9	12.1	15.5	241	7.98	20	33
4G	4	2.6	1.0	14.0	17.9	336	4.95	30	45
4G	6	3.4	1.0	15.7	20.0	449	3.30	37	58
4G	10	4.4	1.2	20.9	26.5	833	1.91	52	80
4G	16	5.7	1.2	23.8	30.1	1138	1.21	69	107
4G	25	6.9	1.4	28.9	36.6	1714	0.78	92	135
4G	35	8.1	1.4	32.5	41.1	2204	0.554	114	169
4G	50	9.8	1.6	37.7	47.5	3029	0.386	143	207
4G	70	11.6	1.6	42.7	54	4121	0.272	178	268
4G	95	13.3	1.8	48.4	61	5361	0.206	210	328
4G	120	15.1	1.8	53	66	6546	0.161	246	383
4G	150	16.8	2.0	58	73	8095	0.129	282	444
4G	185	18.6	2.2	64	80	9652	0.106	319	510
4G	240	21.4	2.4	72	91	12614	0.0801	377	607
4G	300	23.9	2.6	80	101	17045	0.0641	430	703
Five cores									
5G	1	1.3	0.8	10.2	13.1	168	19.5	10	18
5G	1.5	1.6	0.8	11.2	14.4	206	13.3	16	24
5G	2.5	2.0	0.9	13.3	17	297	7.98	20	33
5G	4	2.6	1.0	15.6	19.9	422	4.95	30	45
5G	6	3.4	1.0	17.5	22.2	567	3.30	38	58
5G	10	4.4	1.2	22.9	29.1	1010	1.91	54	80

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Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	External diameter		Approx cable weight	Electric resistance at 20°C	Mobile service Current carrying capacities	Current carrying air free
				Minimum	maximum				
(N°)	(mm²)	(mm)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(A)	(A)
5G	16	5.7	1.2	26.4	33.3	1400	1.21	71	107
5G	25	6.9	1.4	32	40.4	2096	0.780	94	135
5G	35	8.1	1.6	35.7	47.1	2700	0.554	114	169
5G	50	9.8	1.8	41.8	53.0	3750	0.386	143	207
5G	70	11.6	1.8	47.5	60.0	5040	0.272	178	268
Multicores									
7G	1.5	1.6	0.8	13.4	17.2	315	13.3	16	24
7G	2.5	2.0	0.9	15.7	20	445	7.98	20	33
7G	4*	2.6	1.0	18.2	23.2	618	4.95	25	45
10G	1.5	1.6	0.8	15.95	20.2	420	13.3	16	24
12G	1.5	1.6	0.8	17.6	22.4	493	13.3	16	24
12G	2.5	2.0	0.9	20.6	26.2	702	7.98	20	33
12G	4*	2.6	1.0	24.4	30.9	1004	4.95	25	45
19G	1.5	1.6	0.8	20.7	26.3	710	13.4	16	24
19G	2.5	2.0	0.9	24.4	30.9	1030	7.98	20	33
24G	1.5	1.6	0.8	24.3	30.7	898	13.3	16	24
24G	2.5	2.0	0.9	28.8	36.4	1312	7.98	20	33
36G	1.5*	1.6	0.8	27.8	35.2	1246	13.3	16	24
36G	2.5*	2.0	0.9	33.2	41.8	1851	7.98	20	33

Current carrying capacities for unipolar cables are calculated on 3 spanned cables. Cables marked by (*) require a minimum quantity.
Special bending radius
At the entrance to a portable device or a mobile device
mechanical stress with D <8 = 6D D <12 = 6D D <20 = 6D D> 20 = 8D
Festoons eg. gantry crane for D <8 = 6D D <12 = 6D D <20 = 6D D> 20 = 8D
Winding repeated D <8 = 6D D <12 = 6D D <20 = 6D D> 20 = 8D
Diverted to pulley D <8 = 8D D <12 = 8D D <20 = 8D D> 20 = 8D