

## Technical Datasheet

### H 07 BN4 – F

FLAME RETARDANT, FLEXIBLE EPR RUBBER INSULATED AND HOFR CSP SHEATED CABLES  
(Heat and Oil Resistant and Flame Retardant)

	<p>1- Flexible bare or tinned copper class 5 EN 60228</p> <p>2- EPR Type EI7 according to EN 50363</p> <p>3- Rubber filler (size over 6 mm<sup>2</sup>)</p> <p>4- HOFR Rubber type EM7 according to EN 50363</p>
--	--

<b>Standard</b>	<b>Approvals</b>	<b>Packaging</b>	
EN 50525-2-21 			

<b>MARKING</b>
<b>ICC "Size mm<sup>2</sup>" H07BN4-F 450/750 IMMEQU &lt;HAR&gt; MADE IN ITALY CE</b>

<b>CHARACTERISTICS</b>	
Operating temperature:	-40°C ÷ +90° C on the conductor
Rated voltage U <sub>0</sub> /U:	450/750 V
Max. temperature in case of short circuit:	250° C on the conductor (max duration 5 seconds)
Min. bending radius:	Mobile installation: 4 x outer diameter of the cable
	Fixed installation: 3 x outer diameter of the cable

Size	Max diameter of wires	Insulation thickness*	Sheath thickness*	Outer diameter	Max conductor resistance at 20°C	Indicative cable weight
mm <sup>2</sup>	mm	mm	mm	mm	ohms/km	kg/km
1x1.5	0.26	0.8	1.4	5.9	13.3	55
1x2.5	0.26	0.9	1.4	6.6	7.98	70
1x4	0.31	1.0	1.5	7.5	4.95	95
1x6	0.31	1.0	1.6	8.3	3.3	120
1x10	0.41	1.2	1.8	10.0	1.91	195
1x16	0.41	1.2	1.9	11.1	1.21	265
1x25	0.41	1.4	2.0	12.9	0.78	385
1x35	0.41	1.4	2.2	14.5	0.554	510
1x50	0.41	1.6	2.4	16.8	0.386	685
1x70	0.51	1.6	2.6	19.1	0.272	940
1x95	0.51	1.8	2.8	21.3	0.206	1245
1x120	0.51	1.8	3.0	23.4	0.161	1535
1x150	0.51	2.0	3.2	25.7	0.129	1880
1x185	0.51	2.2	3.4	28.1	0.106	2315
1x240	0.51	2.4	3.5	31.2	0.0801	2995
1x300	0.51	2.6	3.6	33.8	0.0641	3665

Size	Max diameter of wires	Insulation thickness*	Sheath thickness*	Outer diameter	Max conductor resistance at 20°C	Indicative cable weight
mm <sup>2</sup>	mm	mm	mm	mm	ohms/km	kg/km
2x1	0.21	0.8	1.3	7.9	19.5	90
2x1.5	0.26	0.8	1.5	8.8	13.3	115
2x2.5	0.26	0.9	1.7	10.4	7.98	160
2x4	0.31	1.0	1.8	12.0	4.95	225
2x6	0.31	1.0	2.0	13.5	3.3	295
2x10	0.41	1.2	3.1	18.1	1.91	540
2x16	0.41	1.2	3.3	20.2	1.21	725
2x25	0.41	1.4	3.6	23.7	0.78	1050
2x35	0.41	1.4	3.8	26.3	0.554	1350
2x50	0.41	1.6	4.2	30.6	0.386	1830
2x70	0.51	1.6	4.6	35.0	0.272	2490
2x95	0.51	1.8	5.0	39.1	0.206	3270
3G1	0.21	0.8	1.4	8.7	19.5	110
3G1.5	0.26	0.8	1.6	9.6	13.3	140
3G2.5	0.26	0.9	1.8	11.3	7.98	205
3G4	0.31	1.0	1.9	13.1	4.95	285
3G6	0.31	1.0	2.1	14.7	3.3	375
3G10	0.41	1.2	3.3	19.8	1.91	695
3G16	0.41	1.2	3.5	22.0	1.21	940
3G25	0.41	1.4	3.8	25.9	0.78	1365
3G35	0.41	1.4	4.1	29.0	0.554	1790
3G50	0.41	1.6	4.5	33.6	0.386	2420
3G70	0.51	1.6	4.8	38.1	0.272	3290
3G95	0.51	1.8	5.3	42.8	0.206	4370
3G120	0.51	1.8	5.6	46.9	0.161	5355
3G150	0.51	2.0	6.0	51.6	0.129	6560
4G1	0.21	0.8	1.5	9.6	19.5	135
4G1.5	0.26	0.8	1.7	10.6	13.3	170
4G2.5	0.26	0.9	1.9	12.5	7.98	250
4G4	0.31	1.0	2.0	14.4	4.95	345
4G6	0.31	1.0	2.3	16.4	3.3	470
4G10	0.41	1.2	3.4	21.6	1.91	850
4G16	0.41	1.2	3.6	24.0	1.21	1160
4G25	0.41	1.4	4.1	28.7	0.78	1725
4G35	0.41	1.4	4.4	32.1	0.554	2255
4G50	0.41	1.6	4.8	37.2	0.386	3045
4G70	0.51	1.6	5.2	42.4	0.272	4175
4G95	0.51	1.8	5.9	48.0	0.206	5590
4G120	0.51	1.8	6.0	52.1	0.161	6800

Size	Max diameter of wires	Insulation thickness*	Sheath thickness*	Outer diameter	Max conductor resistance at 20°C	Indicative cable weight
<i>mm<sup>2</sup></i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>mm</i>	<i>ohms/km</i>	<i>kg/km</i>
5G1	0.21	0.8	1.6	10.7	19.5	165
5G1.5	0.26	0.8	1.8	11.7	13.3	210
5G2.5	0.26	0.9	2.0	13.8	7.98	305
5G4	0.31	1.0	2.2	16.1	4.95	430
5G6	0.31	1.0	2.5	18.3	3.3	585
5G10	0.41	1.2	3.6	23.9	1.91	1040
5G16	0.41	1.2	3.9	26.8	1.21	1435
5G25	0.41	1.4	4.4	32.0	0.78	2125
5G35	0.41	1.4	4.8	35.9	0.554	2795
5G50	0.41	1.6	5.2	41.6	0.386	3770
5G70	0.51	1.6	5.7	47.6	0.272	5185
5G95	0.51	1.8	6.3	53.5	0.206	6905

Size	Current Rating (A) Current Ratings for Heavy Duty Rubber Insulated According EN 50565-1						
	NUMBER OF CORES						
	1		2	3		4	5
mm <sup>2</sup>	2 cores loaded	3 cores loaded	2 cores loaded	2 cores loaded	3 cores loaded	3 cores loaded	3 cores loaded
	4	34	30	34	35	29	30
6	43	38	43	44	36	37	38
10	60	53	60	62	51	52	54
16	79	71	79	82	67	69	71
25	104	94	105	109	89	92	94
35	129	117	-	135	110	114	-
50	162	148	-	169	138	143	-
70	202	185	-	211	172	178	-
95	240	222	-	250	204	210	-
120	280	260	-	292	238	246	-
150	321	300	-	335	273	NA	-
185	363	341	-	NA	NA	NA	-
240	433	407	-	NA	NA	NA	-
300	497	468	-	NA	NA	NA	-
Notes: Ambient Air Temperature 30°C The tabulated ratings are for cable run in free air Single core cables are bunched (2 cables touching side by side and 3 cables in trefoil)							
Temperature correction factors:							
Ambient air temperature °C	30	35	40	45	50	55	
Correction factor	1,0	0,91	0,82	0,71	0,58	0,41	