

H07BN4-F Flexible Rubber Cable



APPLICATION

Flexible rubber cable with high temperature resistance suitable for most industrial applications such as connecting equipment. The mains supply and generally for use in arduous industrial environments where good flexibility and resistance mechanical abrasion is essential.

CHARACTERISTICS

Voltage Rating U_0/U

450/750V

The use of up to 1kV in alternative current is authorised for protected static installations and for the connection of motors in lifting appliances

Operating Temperature

Fixed: -40°C to +90°C

Flexed: - 15°C to +90°C

Minimum Bending Radius

Up to 25mm² - Flexed: 6 x overall diameter

Above 25mm² - Flexed: 8 x overall diameter

STANDARDS

EN 50525-2-21, HD22.12, EN 60228, CEI 20-19 part 12

Flame Retardant according to IEC/EN 60332-1-2

CONSTRUCTION

Conductor

Class 5 flexible tinned copper conductor

Insulation

EPR (Ethylene Propylene Rubber)

Sheath

HOFR CSP (Heat and Oil Resistant and Flame Retardant Chlorosulphonated Polyethylene)

Sheath Colour

Black; customization is available

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL THICKNESS OF INSULATION	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm ²	mm	mm	kg/km
1	10	1.2	10.7	200
1	16	1.2	12.1	270
1	25	1.4	14.25	380
1	35	1.4	16.1	510
1	50	1.6	18.55	680
1	70	1.6	21	930
1	95	1.8	23.4	1200
1	120	1.8	25.7	1460
1	150	2	28.3	1800
1	185	2.2	31	2200
1	240	2.4	34.5	2800
1	300	2.6	35.6	3350
1	400	2.8	42.1	4400
1	500	3	46.7	5400
1	630	3	51.3	6900

CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
mm ²	mm	Metal-Coated Wires
10	0.41	1.95
16	0.41	1.24
25	0.41	0.795
35	0.41	0.565
50	0.41	0.393
70	0.51	0.277
95	0.51	0.21
120	0.51	0.164
150	0.51	0.132
185	0.51	0.108
240	0.51	0.0817
300	0.51	0.0654
400	0.51	0.0495
500	0.61	0.0391
630	0.61	0.0292

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA	DC OR SINGLE-PHASE AC (1 TWO CORE CABLE WITH OR WITHOUT PROTECTIVE CONDUCTOR)	THREE-PHASE AC (1 THREE CORE, FOUR CORE OR FIVE CORE CABLE)	SINGLE-PHASE AC OR DC (2 SINGLE CORE CABLES TOUCHING)
mm ²	Amps	Amps	Amps
10	76	66	-
16	103	89	-
25	136	119	-
35	-	146	200
50	-	177	250
70	-	225	310
95	-	273	369
120	-	316	432
150	-	363	497
185	-	414	564
240	-	487	673
300	-	560	773
400	-	-	924
500	-	-	1062
630	-	-	1242

Ambient temperature: 30°C

Conductor operating temperature: 90°C

Voltage Drop

NOMINAL CROSS SECTIONAL AREA	1 TWO CORE OR 2 SINGLE CORE CABLES DC	SINGLE-PHASE AC (TWO CORE CABLE)			THREE-PHASE AC (1 THREE CORE, FOUR CORE OR FIVE CORE CABLE)			SINGLE-PHASE AC* (2 SINGLE CORE CABLES TOUCHING)		
mm ²	mV/A/m	mV/A/m			mV/A/m			mV/A/m		
10	5.1		5.1			4.4			-	
16	3.2		3.2			2.7			-	
		r	x	z	r	x	z	r	x	z
25	2.03	2.03	0.175	2.04	1.73	0.15	1.73	-	-	-
35	1.42	-	-	-	1.22	0.15	1.23	1.44	0.21	1.46
50	1	-	-	-	0.91	0.145	0.93	1	0.21	1.02
70	0.71	-	-	-	0.62	0.14	0.64	0.71	0.2	0.73
95	0.54	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.42	-	-	-	0.37	0.135	0.39	0.42	0.19	0.46
150	0.34	-	-	-	0.29	0.13	0.32	0.34	0.19	0.39
185	0.27	-	-	-	0.24	0.13	0.27	0.27	0.19	0.33
240	0.21	-	-	-	0.188	0.13	0.23	0.21	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.18	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.1	-	-	-	-	-	-	0.107	0.17	0.2
630	0.074	-	-	-	-	-	-	0.085	0.17	0.19

Conductor operating temperature: 90°C

r = Resistive Component
x = Reactive Component
z = Impedance Value

1. The voltage drop figures given above are based on a conductor operating temperature of 90°C and are therefore not accurate when the operating temperature is in excess of 90°C. The case of the 180°C cables with a conductor temperature of 150°C the above resistive values should be increased by a factor of 1.2.

2. A larger voltage drop will result if the cables are spaced.

DE-RATING FACTORS

90°C Thermosetting Insulated Cables

AMBIENT TEMPERATURE	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C
DE-RATING FACTOR	0.95	0.91	0.86	0.82	0.76	0.7	0.64	0.57	0.5	0.4	0.28

GUOWANG CABLE