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◀HAR▶H07RN-F 5G1,5



ELASTOMERIC SINGLE CORE & MULTICORE H07RN-F CABLE

A 450/750 volt elastomeric insulated and sheathed flexible trailing cable in single core and multicore. The mechanical and chemical characteristics of the rubber compound provides good abrasion resistance and the ability to withstand many oils and chemicals. The construction and performance enables the product to be used in arduous and low temperature conditions.

Single core and large cross section multicore cables are used for energy distribution for both temporary and fixed applications.

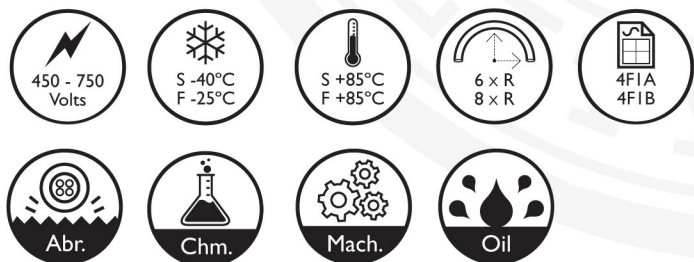
CONSTRUCTION

Plain copper class 5 conductor ethylene propylene rubber (EPR) insulation with HAR colour code designation. Cores twisted together with polychloroprene (PCP) black sheath overall.

TECHNICAL DATA

BS 7919 BS EN 50525-2-21

Nominal Voltage	450/750v 1kv (for fixed installation)
Test Voltage	3000v
Operating Temperature Static	-40°C to +85°C
Operating Temperature Flexing	-25°C to +85°C
Bending Radius	Diameter less than 25mm 6 x Diameter greater than 25mm 8 x
Current Rating Table	4F1A & 4F1B



H07RN-F DIMENSIONS

Cores x mm ²	Nom OD mm	Weight kg / km	Cores x mm ²	Nom OD mm	Weight kg / km
1 x 1.5	6.9	51	5 x 1.0	11.4	190
1 x 2.5	7.4	75	5 x 1.5	12.8	220
1 x 4.0	7.9	115	5 x 2.5	14.8	330
1 x 6.0	9.1	140	5 x 4.0	17.6	520
1 x 10.0	10.8	212	5 x 6.0	21.2	716
1 x 16.0	12.2	305	5 x 10.0	26.9	1190
1 x 25.0	14.1	425	5 x 16.0	30.7	1558
1 x 35.0	15.9	540	5 x 25.0	37.2	2260
1 x 50.0	18.5	720	5 x 35.0	41.5	3295
1 x 70.0	21.2	960	5 x 50.0	48.8	4235
1 x 95.0	23.9	1220	7 x 1.5	13.4	440
1 x 120.0	25.8	1510	7 x 2.5	14.4	490
1 x 150.0	28.8	1822	12 x 1.5	14.2	540
1 x 185.0	31.5	2170	12 x 2.5	16.6	754
1 x 240.0	35.1	2804	19 x 1.5	24.4	755
1 x 300.0	38.8	3400	19 x 2.5	27.4	1110
1 x 400.0	43.6	4310			
1 x 500.0	47.8	5340			
1 x 630.0	51.5	6980			
2 x 1.0	5.9	105			
2 x 1.5	6.6	130			
2 x 2.5	7.8	189			
2 x 4.0	9.6	296			
2 x 6.0	11.8	380			
2 x 10.0	14.5	650			
2 x 16.0	16.5	860			
3 x 1.0	9.5	130			
3 x 1.5	10.5	160			
3 x 2.5	12.2	225			
3 x 4.0	14.4	335			
3 x 6.0	16.6	450			
3 x 10.0	22.2	750			
3 x 16.0	24.9	1012			
4 x 1.0	10.8	160			
4 x 1.5	12.4	190			
4 x 2.5	13.9	275			
4 x 4.0	16.2	428			
4 x 6.0	19.1	578			
4 x 10.0	24.8	960			
4 x 16.0	27.8	1312			
4 x 25.0	33.4	1740			
4 x 35.0	37.5	2334			
4 x 50.0	43.9	3040			
4 x 70.0	49.8	4110			
4 x 95.0	48.8	5350			

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ELASTOMERIC SINGLE CORE & MULTICORE H07RN-F CABLE

Table 4F1A

60°C thermosetting insulated flexible cables with sheath,
non-armoured (Copper Conductors)

CURRENT-CARRYING CAPACITY (amperes):

Ambient temperature : 30°C
Conductor operating temperature: 60°C

Conductor Cross sectional area	Single-phase a.c. or d.c.	Three-phase a.c.	Single-phase a.c. or d.c.
	1 Two core cable, with or without protective conductor	1 Three core, four core or five core cable	2 Single core cables
1	2	3	4
(mm ²)	(A)	(A)	(A)
4	30	27	-
6	39	34	-
10	51	47	-
16	73	63	-
25	97	83	-
35	-	102	140
50	-	124	175
70	-	158	216
95	-	192	258
120	-	222	302
150	-	255	347
185	-	291	394
240	-	343	471
300	-	394	541
400	-	-	644
500	-	-	738
630	-	-	861

NOTES:

1. The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface. If the cable is to be wound on a drum on load the ratings should be reduced in accordance with NOTE 2 below and for cables which may be covered, NOTE 3 below

2. Flexible cables wound on reeling drums.

The current ratings of cables used on reeling drums are to be reduced by the following factors:

a) Radial type drum
ventilated: 85%
unventilated: 75%

b) Ventilated cylindrical type drum
1 layer of cable: 85%
2 layers of cable: 65%
3 layers of cable: 45%
4 layers of cable: 35%

A radial type drum is one where spiral layers of cable are accommodated between closely spaced flanges; if fitted with solid flanges the ratings given above should be reduced and the drum is described as non-ventilated. If the flanges have suitable apertures the drum is described as ventilated.

A ventilated cylindrical cable drum is one where layers of cable are accommodated between widely spaced flanges and the drum and end flanges have suitable ventilating apertures.

3. Where cable may be covered over or coiled up whilst on load, or the air movement over the cable restricted, the current rating should be reduced.

It is not possible to specify the amount of reduction but the table of rating factors for reeling drums can be used as a guide.

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ELASTOMERIC SINGLE CORE & MULTICORE H07RN-F CABLE

Table 4F1B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature: 60°C

Conductor Cross sectional area	Two core cable d.c.	Two core cable, Single-phase a.c.			1 Three core, four core or five core cable, Three-phase a.c.			2 Single core cables, touching			
								d.c.	Single-phase a.c.*		
1	2	3			4			5	6		
(mm ²)	(mV/A/m)	(mV/A/m)			(mV/A/m)			(mV/ A/m)	(mV/A/m)		
4	12	12			10			-	-		
6	7.8	7.8			6.7			-	-		
10	4.6	4.6			4.0			-	-		
16	2.9	2.9			2.5			-	-		
		r	x	y	r	x	y				
25	1.80	1.80	0.175	1.85	1.55	0.150	1.55	-	-	-	-
35	-	-	-	-	1.10	0.145	1.15	1.31	1.31	0.21	1.32
50	-	-	-	-	0.83	0.140	0.84	0.91	0.91	0.21	0.93
70	-	-	-	-	0.57	0.135	0.58	0.64	0.64	0.20	0.67
95	-	-	-	-	0.42	0.135	0.44	0.49	0.49	0.195	0.53
120	-	-	-	-	0.33	0.135	0.36	0.38	0.38	0.190	0.43
150	-	-	-	-	0.27	0.130	0.30	0.31	0.31	0.190	0.36
185	-	-	-	-	0.22	0.130	0.26	0.25	0.25	0.190	0.32
240	-	-	-	-	0.170	0.130	0.21	0.190	0.195	0.185	0.27
300	-	-	-	-	0.135	0.125	0.185	0.150	0.155	0.180	0.24
400	-	-	-	-	-	-	-	0.115	0.120	0.175	0.21
500	-	-	-	-	-	-	-	0.090	0.099	0.170	0.20
630	-	-	-	-	-	-	-	0.068	0.079	0.170	0.185

NOTE: * A larger voltage drop will result if the cables are spaced

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