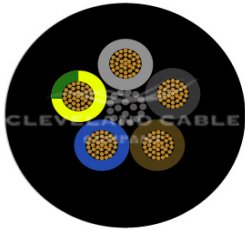


H07RN-F FLEXIBLE MAINS AND CONTROL CABLE BS EN 50525-2-21



APPLICATION

Flexible EPR cable with high resistance to mechanical stress. Able to withstand water and weather. For use on Work sites, mobile power supplies, ports and harbors, water treatment plants, sewage and drains, hot and cold areas and harsh industrial environments. For use in portable power supplies, site equipment, industrial machinery, and audio visual equipment. Can be cut to size for patch leads with a choice of fittings.

CONSTRUCTION

Conductor: Class 5 flexible stranded copper conductor to BS EN 60228

Insulation: EPR (Ethylene Propylene Rubber) to BS 50363

Sheath: PCP (Polychloroprene)
To BS EN 50363

CABLE STANDARDS

BS EN 50525-2-21

BS EN 60811-2-1

BS EN/IEC 60332-1-2

CHARACTERISTICS

Voltage Rating: 450/750 Volts

Temperature Limits: Fixed: -25°C to +60°C,
Can be supplied up to 90°C

Minimum Bending Radius: As per
manufacturer datasheet

CORE IDENTIFICATION

2 Core: Brown Blue

3 Core: Brown Blue G/Y

4 Core: Brown Blue Grey G/Y

5 Core: Brown Black Grey Blue
G/Y

Cable with 6 core and above

Black with White Numbers plus G/Y

Should not be installed below 0°C

H07RN-F FLEXIBLE MAINS AND CONTROL CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL MEAN DIAMETER (MM)	
					LOWER LIMIT	UPPER LIMIT
3182P	1	32/0.20	2	95	6.1	8
3183P1	1	32/0.20	3	115	6.5	8.5
3184P1	1	32/0.20	4	140	7.1	9.3
3182P1/5	1.5	30/0.25	2	132	7.6	9.8
3183P1/5	1.5	30/0.25	3	165	8	10.4
3184P1/5	1.5	30/0.25	4	200	9	11.6
3185P1/5	1.5	30/0.25	5	240	11.2	14.4
3187P1/5	1.5	30/0.25	7	385	14.6	18.2
3180/12P1/5	1.5	30/0.25	12	520	17.6	22.4
3180/19P1/5	1.5	30/0.25	19	700	21	26
3180/27P1/5	1.5	30/0.25	27	920	25.3	30
3180/37P1/5	1.5	30/0.25	37	1260	29	34.2
3182P2/5	2.5	50/0.25	2	193	9	11.6
3183P2/5	2.5	50/0.25	3	235	9.6	12.4
3184P2/5	2.5	50/0.25	4	290	10.7	13.8
3185P2/5	2.5	50/0.25	5	345	13.3	17
3187P2/5	2.5	50/0.25	7	520	17.2	21
3180/12P2/5	2.5	50/0.25	12	810	20.6	26.2
3181P4	4	50/0.25	1	94	7.2	9
3182P4	4	56/0.30	2	275	11.8	15.1
3183P4	4	56/0.30	3	320	12.7	16.2
3184P4	4	56/0.30	4	395	14	17.9
3185P4	4	56/0.30	5	485	15.6	19.9
3187P4	4	56/0.30	7	773	19.8	24.4
6381P6	6	84/0.30	1	130	7.9	9.8
6382P6	6	84/0.30	2	350	13.1	16.8
6383P6	6	84/0.30	3	495	14.1	18
6384P6	6	84/0.30	4	610	15.7	20
6385P6	6	84/0.30	5	760	17.5	22.9
6387P6	6	84/0.30	7	904	21.6	26.9
6381P10	10	80/0.40	1	230	17.7	22.6
6383P10	10	80/0.40	3	880	19.1	24.2
6384P10	10	80/0.40	4	1060	20.9	26.5
6385P10	10	80/0.40	5	1300	22.9	29.1
6381P16	16	126/0.40	1	320	10.8	13.4
6382P16	16	126/0.40	2	850	20.2	25.7
6383P16	16	126/0.40	3	1090	21.8	27.6
6384P1	16	126/0.40	4	1345	23.8	30.1
6385P16	16	126/0.40	5	1680	26.4	33.3

H07RN-F FLEXIBLE MAINS AND CONTROL CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL MEAN DIAMETER (MM)	
					LOWER LIMIT	UPPER LIMIT
6381P25	25	196/0.40	1	450	12.7	15.8
6382P25	25	196/0.40	2	1210	24.3	30.7
6383P25	25	196/0.40	3	1394	26.1	33
6384P22	5	196/0.40	4	1995	28.9	36.6
6385P25	25	196/0.40	5	2470	32	40.4
6381P35	35	276/0.4	1	605	14.3	17.9
6383P35	35	276/0.40	3	1850	29.3	37.1
6384P35	35	276/0.40	4	2645	32.5	41.1
6385P35	35	276/0.40	5	2930	34	43
6381P50	50	396/0.40	1	825	16.5	20.6
6383P50	50	396/0.40	3	2890	34.1	42.9
6384P50	50	396/0.40	4	3635	37.7	47.5
6385P50	50	396/0.40	5	4450	39.03	49.18
6381P70	70	360/0.50	1	1090	18.6	23.3
6383P70	70	360/0.50	3	3850	38.4	48.3
6384P70	70	360/0.50	4	4830	42.7	54
6385P70	70	360/0.50	5	5938	48.5	55
6381P95	95	475/0.50	1	1405	20.8	26
6383P95	95	475/0.50	3	4185	43.3	50
6384P95	95	475/0.50	4	6320	48.5	61
6385P95	95	475/0.50	5	6695	54	64.5
6381P120	120	608/0.50	1	1745	22.8	28.6
6383P120	120	608/0.50	3	5080	47.4	60
6384P120	120	608/0.50	4	6500	53	66
6385P120	120	608/0.50	5	7542	57.9	68.5
6381P150	150	756/0.50	1	1824	25.2	31.4
6383P150	150	756/0.50	3	6267	52	66
6384P150	150	756/0.50	4	8031	58	73
6381P185	185	925/0.50	1	2202	27.6	34.4
6383P185	185	925/0.50	3	7661	57	72
6384P185	185	925/0.50	4	9830	64	80
6381P240	240	1221/0.50	1	2847	30.6	38.3
6383P240	240	1221/0.50	3	9692	65	82
6384P240	240	1221/0.50	4	12444	72	91
6381P300	300	1525/0.50	1	3495	33.5	41.9
6381P400	400	2257/0.50	1	4880	45.5	56.5
6381P500	500	1769/0.60	1	5301	41.3	52
6381P630	630	2257/0.60	1	7460	45.5	56.5

H07RN-F CURRENT – CARRYING CAPACITY (AMPERES)

CONDUCTOR CROSS – SECTIONAL AREA MM ²	60°C CONDUCTOR OPERATING TEMPERATURE (60°C STANDARD STOCK CABLE)			85°C CONDUCTOR OPERATING TEMPERATURE (90°C CABLE - SPECIAL ORDER)		
	SINGLE-PHASE AC OR DC *1MM – 2.5MM AC ONLY		THREE-PHASE AC	SINGLE-PHASE AC OR DC		THREE-PHASE AC
	2 CORE CABLE WITH OR WITHOUT PROTECTIVE CONDUCTOR	2 SINGLE CORE CABLES	3, 4 OR 5 CORE CABLE	2 CORE CABLE WITH OR WITHOUT PROTECTIVE CONDUCTOR	2 SINGLE CORE CABLES TOUCHING	3, 4 OR 5 CORE CABLE
1	2	3	4	5	6	7
(MM ²)	(A)	(A)	(A)	(A)	(A)	(A)
1*	10	-	10	-	-	-
1.5*	16	-	16	-	-	-
2.5*	25	-	20	-	-	-
4	30	-	26	41	-	36
6	39	-	34	53	-	47
10	51	-	47	73	-	64
16	73	-	63	99	-	86
25	97	-	83	131	-	114
35	-	140	102	-	192	140
50	-	175	124	-	240	170
70	-	216	158	-	297	216
95	-	258	192	-	354	262
120	-	302	222	-	414	303
150	-	347	255	-	476	348
185	-	394	291	-	540	397
240	-	471	343	-	645	467
300	-	541	394	-	741	537
400	-	644	-	-	885	-
500	-	738	-	-	1017	-
630	-	861	-	-	1190	-

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

H07RN-F - VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA MM²	2 CORE CABLE DC mV/A/m	TWO CORE CABLE SINGLE-PHASE AC mV/A/m			1 X THREE CORE, FOUR CORE OR FIVE CORE CABLE, THREE PHASE AC			2 X SINGLE CORE CABLES TOUCHING			
								DC mV/A/m	SINGLE PHASE AC * mV/A/m		
1	46	46			40			-	-		
1.5	32	32			27			-	-		
2.5	19	19			16			-	-		
4	12	12			10			-	-		
6	7.8	7.8			6.7			-	-		
10	4.6	4.6			4			-	-		
16	2.9	2.9			2.5			-	-		
		R	X	Z	R	X	Z		R	X	Z
25	1.8	1.8	0.175	1.85	1.55	0.15	1.55	-	-	-	-
35	-	-	-	-	1.10	0.15	1.15	1.31	1.31	0.21	1.32
50	-	-	-	-	0.83	0.145	0.84	0.91	0.91	0.21	0.93
70	-	-	-	-	0.57	0.14	0.58	0.64	0.64	0.2	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	0.19	0.43
150	-	-	-	-	0.27	0.13	0.3	0.31	0.31	0.19	0.36
185	-	-	-	-	0.22	0.13	0.26	0.25	0.25	0.19	0.32
240	-	-	-	-	0.17	0.13	0.21	0.19	0.195	0.185	0.27
300	-	-	-	-	0.135	0.125	0.185	0.15	0.155	0.18	0.24
400	-	-	-	-	-	-	-	0.115	0.12	0.175	0.21
500	-	-	-	-	-	-	-	0.09	0.099	0.17	0.2
630	-	-	-	-	-	-	-	0.068	0.079	0.17	0.185

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT

X = REACTIVE COMPONENT

Z = IMPEDANCE VALUE

* A LARGER VOLTAGE DROP WILL RESULT IF THE CABLES ARE SPACED APART

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.