DIMENSIONS

H07Z-K

Nominal Cross Sectional Area mm²	Nominal Thickness Of Insulation mm	Nominal Overall Diameter		Minimum Resistance Of Insulation At 900c Mohms/km	Nominal Weight kg/km
		Lower limit mm	Upper limit mm		
1.5	0.7	2.8	3.5	0.010	19.3
2.5	0.8	3.4	4.3	0.009	30.9
4	0.8	3.9	4.9	0.007	44.9
6	0.8	4.4	5.5	0.006	64.2
10	1	5.7	7.1	0.0056	108.2
16	1	6.7	8.4	0.0046	163.4
25	1.2	8.4	10.6	0.0044	248.1
35	1.2	9.7	12.1	0.0038	340.6
50	1.4	11.5	14.4	0.0037	484.2
70	1.4	13.2	16.6	0.0032	671
95	1.6	15.1	18.8	0.0032	895.8
120	1.6	16.7	20.9	0.0029	1111.1
150	1.8	18.6	23.3	0.0029	1389.2
185	2	20.6	25.8	0.0029	1724.1
240	2.2	23.5	29.4	0.0028	2225.4

Colour Codes

COLOUR	Black	Blue	Grey	Green/Yellow	Orange	Red	Pink	Yellow	Violet	Brown	White
CODE	BK	BL	GR	GY	OR	RD	PK	YW	VI	BR	WH

CONDUCTORS

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

Nominal Cross Sectional Area mm²	Maximum Diameter Of Wires In Conductor mm	Maximum Resistance Of Conductor At 20ºC
		Plain Wires ohms/km
0.5	0.21	39
0.75	0.21	26
1	0.21	19.5
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21
25	0.41	0.78
35	0.41	0.554
50	0.41	0.386
70	0.51	0.272
95	0.51	0.206
120	0.51	0.161
150	0.51	0.129
185	0.51	0.106
240	0.51	0.0801

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

Nominal Cross Sectional Area mm²	Reference Method A (Enclosed In Conduit In Thermally Insulating Wall Etc) Amps		Reference Method B (Enclosed In Conduit On A Wall Or In A Trunking Etc) Amps		Reference Method C (Clipped Direct) Amps		Reference Method F (In Free Air Or On A Perforated Cable Tray Etc Horizontal Or Vertical Etc) Touching Amps			Reference Method G (In Free Air) Spaced By One Cable Diameter Amps	
										2 Cables Single-Phase AC or DC or 3 Cables Three-Phase AC flat	
	2 Cables Single-Phase AC or DC	3 or 4 Cables Three-Phase AC	2 Cables Single-Phase AC or DC	3 or 4 Cables Three-Phase AC	2 Cables Single-Phase AC or DC flat or touching	3 or 4 Cables Three-Phase AC flat and touching or trefoil	2 Cables Single-Phase AC or DC flat	3 Cables Three-Phase AC flat	3 Cables Three-Phase AC trefoil	Horizontal	Vertical
1	14	13	17	15	19	17.5	-	-	-	-	-
1.5	19	17	23	20	25	23	-	-	-	-	-
2.5	26	23	31	28	34	31	-	-	-	-	-
4	35	31	42	37	46	41	-	-	-	-	-
6	45	40	54	48	59	54	-	-	-	-	-
10	61	54	75	66	81	74	-	-	-	-	-
16	81	73	100	88	109	99	-	-	-	-	-
25	106	95	133	117	143	130	161	141	135	182	161
35	131	117	164	144	176	161	200	176	169	226	201
50	158	141	198	175	228	209	242	216	207	275	246
70	200	179	253	222	293	268	310	279	268	353	318
95	241	216	306	269	355	326	377	342	328	430	389
120	278	249	354	312	413	379	437	400	383	500	454
150	318	285	393	342	476	436	504	464	444	577	527
185	362	324	449	384	545	500	575	533	510	661	605
240	424	380	528	450	644	590	679	634	607	781	719

Ambient temperature: 30ºC
Conductor operating temperature: 90ºC

1. Where a conductor operates at a temperature exceeding 70ºC it must be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see also Regulation 512.1.2).
2. Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70ºC, the current ratings given in the equivalent table for 70ºC thermoplastic insulated cables (Table 4D1A) must be used (see Regulation 523.1).

The above table is in accordance with Table 4E1A of the 17th Edition of IEE Wiring Regulations.

Voltage Drop

Nominal Cross Sectional Area mm²	2 Cables DC mV/A/m	2 Cables Single-Phase AC mV/A/m									3 Or 4 Cables Three-Phase AC mV/A/m											
		Reference Methods A and B (enclosed in conduit or trunking)			Reference Methods C, F and G (clipped direct, on tray or in free air)						Reference Methods A and B (enclosed in conduit or trunking)			Reference Methods C, F and G (clipped direct, on tray or in free air)								
					Cable Touching			Cable Spaced						Cables touching, Trefoil			Cables touching, Flat			Cables spaced*, Flat		
1	46	46			46			46			40			40			40			40		
1.5	31	31			31			31			27			27			27			27		
2.5	19	19			19			19			16			16			16			16		
4	12	12			12			12			10			10			10			10		
6	7.9	7.9			7.9			7.9			6.8			6.8			6.8			6.8		
10	4.7	4.7			4.7			4.7			4			4			4			4		
16	2.9	2.9			2.9			2.9			2.5			2.5			2.5			2.5		
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
25	1.85	1.850	0.310	1.900	1.850	0.190	1.85	1.850	0.280	1.850	1.600	0.270	1.650	1.600	0.165	1.600	1.600	0.190	1.600	1.600	0.270	1.650
35	1.35	1.350	0.290	1.350	1.350	0.180	1.35	1.350	0.270	1.350	1.150	0.250	1.150	1.150	0.155	1.150	1.150	0.180	1.150	1.150	0.260	1.200
50	0.99	1.000	0.290	1.050	0.990	0.180	1.000	0.990	0.270	1.000	0.870	0.250	0.900	0.860	0.155	0.870	0.860	0.180	0.870	0.860	0.260	0.890
70	0.68	0.700	0.280	0.750	0.680	0.175	0.710	0.680	0.260	0.730	0.600	0.240	0.650	0.590	0.150	0.610	0.590	0.175	0.620	0.590	0.250	0.650
95	0.49	0.510	0.270	0.580	0.490	0.170	0.520	0.490	0.260	0.560	0.440	0.230	0.500	0.430	0.145	0.450	0.430	0.170	0.460	0.430	0.250	0.490
120	0.39	0.410	0.260	0.480	0.390	0.165	0.430	0.390	0.250	0.470	0.350	0.230	0.420	0.340	0.140	0.370	0.340	0.165	0.380	0.340	0.240	0.420

Conductor operating temperature: 90ºC

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

* Spacings larger than one cable diameter will result in a larger voltage drop.

The above table is in accordance with Table 4E1B of the 17th Edition of IEE Wiring Regulations.

For cables having conductors of 16mm2 or less cross-sectional area their inductances can be ignored and (mV/A/m)r values only are tabulated.

For cables having conductors greater than 16mm2, cross-sectional area the impedance values are given as (mV/A/m)z, together with the resistive component (mV/A/m)r and the reactive component (mV/A/m)x.

The above paragraph is extracted from Appendix 4 of the 17th Edition of IEE Wiring Regulations.

DE-RATING FACTORS

Ambient Temperature	25ºC	30ºC	35ºC	40ºC	45ºC	50ºC	55ºC	60ºC	65ºC	70ºC	85ºC	90ºC	95ºC
De-Rating Factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	-	-	-