H07ZZ-F Flexible Mains and Control Cable - 1mm² to 630mm²



Description

Flexible cable with resistance to mechanical stress. Able to withstand water and weather. For use on work sites, mobile power supplies, for use in supplying mobile power units, UPS installations, stage lighting and audio visual equipment. Low Smoke Zero Halogen insulation and Sheath (LSZH) for internal use under Construction Products Regulations June 2017.

Key Features

Voltage Rating
1mm^2 To 16mm^2: 450/750 Volts
25mm^2 And Above: 600/1000 Volts

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexing: 6 x overall diameter

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

Temperature Limits
Fixed: -25°C to +90°C

Core Colours

1 Core - Black

2 Core - Brown, Blue

3 Core - Brown, Blue, Green Yellow

4 Core - Brown, Black, Grey, Green Yellow

5 Core - Brown, Black, Grey, Blue, Green Yellow

Cable with 6 Core and Above: Black with White Numbers plus Green Yellow

Standards

- Conforms to H07ZZ-F
- BS EN / IEC 60332
- IEC/EN 60332-1-2
- BS EN/IEC 60228
- BS EN 50525-3-21

Construction

- **Conductor**: Class 5 flexible stranded copper conductor
- **Insulation**: Low Smoke Zero Halogen (LSZH)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing.

ISO/IEC 17025 Accredited Testing Laboratory
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CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

CLEVELAND CABLE COMPANY

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis

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H07ZZ-F Flexible Mains and Control Cable - 1mm² to 630mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(Lower)	Overall Diameter(Upper)	Weight(Kg/Km)
3182ZH1	1	2	32/0.20	10	7.7	90
3183ZH1	1	3	32/0.20	10.7	8.3	110
3184ZH1	1	4	32/0.20	11..9	9.2	136
3185ZH1	1	5	32/0.20	13.1	10.2	168
3181ZH1/5	1.5	1	32/0.25	7.1	5.7	50
3182ZH1/5	1.5	2	32/0.25	11.0	8.5	109
3183ZH1/5	1.5	3	32/0.25	11.9	9.2	134
3184ZH1/5	1.5	4	32/0.25	13.1	10.2	166
3185ZH1/5	1.5	5	32/0.25	34.4	15.2	206
3187ZH1/5	1.5	7	32/0.25	17.2	13.4	315
31810ZH1/5	1.5	10	32/0.25	20.0	15.95	420
31812ZH1/5	1.5	12	32/0.25	22.4	17.6	493
31819ZH1/5	1.5	19	32/0.25	26.3	20.7	710
3181ZH2/5	2.5	1	50/0.25	7.9	6.3	65
3182ZH2/5	2.5	2	50/0.25	14	10.2	496
3183ZH2/5	2.5	3	50/0.25	14	10.9	196
3184ZH2/5	2.5	4	50/0.25	15.5	12.1	241
3185ZH2/5	2.5	5	50/0.25	17	13.3	297
3187ZH2/5	2.5	7	50/0.25	20	15.7	445
31810ZH2/5	2.5	10	50/0.25	22.1	17.5	575
31812ZH2/5	2.5	12	50/0.25	26.2	20.6	702
31819ZH2/5	2.5	19	50/0.25	30.9	24.4	1030
3181ZH4	4	1	56/0.3	9	7.2	89
3182ZH4	4	2	56/0.3	15.1	11.8	217
3183ZH4	4	3	56/0.3	16.2	12.7	271
3184ZH4	4	4	56/0.3	17.9	14	336
3185ZH4	4	5	56/0.3	19.9	15.6	422
6383ZH6	6	3	84/0.30	14.1	18.0	355
6384ZH6	6	4	84/0.30	15.7	20.0	449
6385ZH6	6	5	84/0.30	17.5	22.2	567
6382ZH10	10	2	80/0.40	19.1	21.0	600
6383ZH10	10	3	80/0.40	20.9	24.2	694
6384ZH10	10	4	80/0.40	20.9	26.5	833
6385ZH10	10	5	80/0.40	22.9	29.1	1010
6382ZH16	16	2	80/0.40	22.4	23.5	800
6383ZH16	16	3	80/0.40	23.7	27.6	946
6385ZH16	16	5	126/0.40	26.4	33.3	1400

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(Lower)	Overall Diameter(Upper)	Weight(Kg/Km)
6381ZH25	25	1	196/0.40	12.7	15.8	450
6382ZH25	25	2	196/0.40	24.3	30.7	1210
6383ZH25	25	3	196/0.40	26.1	33	1394
6384ZH25	25	4	196/0.40	28.9	36.6	1995
6385ZH25	25	5	196/0.40	32	40.4	2470
6381ZH35	35	1	276/0.40	14.3	17.9	605
6383ZH35	35	3	276/0.40	29.3	37.1	1850
6384ZH35	35	4	276/0.40	32.5	41.1	2645
6385ZH35	35	5	276/0.40	34	43	2930
6381ZH50	50	1	396/0.40	16.5	20.6	825
6383ZH50	50	3	396/0.40	34.1	42.9	2890
6384ZH50	50	4	396/0.40	37.7	47.5	3635
6385ZH50	50	5	396/0.40	39.03	49.18	4450
6381ZH70	70	1	360/0.50	18.6	23.3	1090
6383ZH70	70	3	360/0.50	38.4	48.3	3850
6384ZH70	70	4	360/0.50	42.7	54	4830
6385ZH70	70	5	360/0.50	48.5	55	5938
6381ZH95	95	1	475/0.50	20.8	26	1405
6383ZH95	95	3	475/0.50	43.3	50	4185
6384ZH95	95	4	475/0.50	48.5	61	6320
6385ZH95	95	5	475/0.50	54	64.5	6695
6381ZH120	120	1	608/0.50	22.8	28.6	1745
6383ZH120	120	3	608/0.50	47.4	60	5080
6384ZH120	120	4	608/0.50	53	66	6500
6385ZH120	120	5	608/0.50	57.9	68.5	7542
6381ZH150	150	1	756/0.50	25.2	31.4	1824
6383ZH150	150	3	756/0.50	52	66	6267
6384ZH150	150	4	756/0.50	58	73	8031
6381ZH185	185	1	925/0.50	27.6	34.4	2202
6383ZH185	185	3	925/0.50	57	72	7661
6384ZH185	185	4	925/0.50	64	80	9830
6381ZH240	240	1	1221/0.50	30.6	38.3	2847
6383ZH240	240	3	1221/0.50	65	82	9692
6384ZH240	240	4	1221/0.50	72	914	12444
6385ZH240	240	5	1221/0.50	125.5	142.6	13720
6381ZH300	300	1	1525/0.50	33.5	41.9	3495
6384ZH300	300	4	1525/0.50	78.2	88.2	15200
6381ZH400	400	1	2257/0.50	45.5	56.5	4880
6381ZH500	500	1	1769/0.60	41.3	52	5301

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Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(Lower)	Overall Diameter(Upper)	Weight(Kg/Km)
6381ZH630	630	1	2257/0.60	45.5	56.5	7460

TABLE 4F2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 90 °C

Conductor cross-sectional area	Two-core cable or 2 x Single core cables DC	2 core cable, single-phase AC			1 x 3 core, 4 core or 5 core cable, three-phase AC			2 single-core cables, touching Single-phase AC*		
(mm^2)	(mV/Nm)	(mV/Nm)			(mV/Nm)			(mV/Nm)		
4	13.20	13.20			11.10			-		
6	8.50	8.50			7.40			-		
10	5.10	5.10			4.40			-		
16	3.20	3.20			2.70			-		
		r	x	z	r	x	z	r	x	z
25	2.03	2.03	0.175	2.04	1.73	0.150	1.73	-	-	-
35	1.420	-	-	-	1.22	0.150	1.23	1.44	0.21	1.46
50	1.000	-	-	-	0.91	0.145	0.93	1.00	0.21	1.02
70	0.710	-	-	-	0.62	0.140	0.64	0.71	0.20	0.73
95	0.540	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.420	-	-	-	0.37	0.135	0.39	0.42	0.190	0.46
150	0.340	-	-	-	0.29	0.130	0.32	0.34	0.190	0.39
185	0.270	-	-	-	0.24	0.130	0.27	0.27	0.190	0.33
240	0.210	-	-	-	0.188	0.130	0.23	0.210	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.180	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.100	-	-	-	-	-	-	0.107	0.170	0.20
630	0.074	-	-	-	-	-	-	0.085	0.170	0.190

NOTES:

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. In 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.

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.