



Applications

These type of cables which HFFR sheathed and braiding screened is used in are used in office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision and measurement purposes. They are very flexible due to the use of thin multicore copper as conductor. They can be used in wet or dry indoor applications. Because of the HFFR material, they don't burn easily and the flames go off by themselves. They have low smoke intensity and they don't emit poisonous and corrosive gases. They are used in buildings where there are important goods or human population.

Construction

Conductor	Stranded Electrolytic Annealed Copper (IEC 228 / VDE 0295 / HD 383 / BS 6360 Class 5)
Insulation	HFFR (EN 50290-2 / HD 624.6 S1 / VDE 0207-HI 2), Color Code (VDE 0293): Black (White numbered) After 3 cores there is number/green marked drain wire.
Lay-up	All cores as layers
Inner Sheath	HFFR Color : RAL 7001 Grey
Screen	Tinned Copper Wire Braiding (70% Coverage) (EN 50288)
Outer Sheath	HFFR (EN 50290-2 / HD 624.7 S1 / VDE 0207-HM2) Outer Sheath Color : RAL 7001 Grey
Reference Standards	VDE 0245
Flame Test	IEC 60332-1, VDE 0482-265-2-1
Smoke Emission	IEC 61034-2 / EN 50268 (HD 606) / BS 7622
Corrosive Gas Measurement	IEC 60754-2 / EN 50267 (HD 602)

Technical and Electrical Properties (20°C)

Operating Voltage	0.50 mm²...1.50 mm²	300 V / 500 V
	2.50 mm².....	450 V / 750 V
Test Voltage	2500 V	
Insulation Resistance	Min. 200 M. Ohm x Km	
Current Carrying Capacity	See Technical Data Table 4	
Temperature Range	Fixed	-30 °C... + 70 °C
	Flexible	-5 °C... + 70 °C
Minimum Bending Radius	Fixed	10 x Cable Diameter
	Flexible	20 x Cable Diameter

Cross Section	Conductor Resistance (Max. Ω/Km)
0.50 mm²	39.0
0.75 mm²	26.0
1.00 mm²	19.5
1.50 mm²	13.3
2.50 mm²	7.98

PART NUMBER	NO. OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
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0.50 mm²

33X40502	2x0.50	6.8	20.3	70
33X40503	3x0.50	7.0	24.9	81
33X40504	4x0.50	7.9	31.8	96
33X40505	5x0.50	8.4	37.4	109
33X40506	6x0.50	8.9	42.6	121
33X40507	7x0.50	8.9	46.9	134
33X40508	8x0.50	9.8	53.6	149
33X40509	9x0.50	10.4	58.7	166
33X40510	10x0.50	11.0	65.2	184
33X40512	12x0.50	11.3	74.7	216
33X40515	15x0.50	12.8	90.1	256
33X40516	16x0.50	12.8	94.3	269
33X40519	19x0.50	13.3	106.4	308
33X40520	20x0.50	14.0	122.5	321
33X40521	21x0.50	14.0	126.8	334
33X40525	25x0.50	15.3	148.9	389
33X40527	27x0.50	15.8	159.0	409
33X40530	30x0.50	16.2	174.4	443

0.75 mm²

33X40802	2x0.75	7.2	26.8	80
33X40803	3x0.75	7.6	35.7	96
33X40804	4x0.75	8.2	44.2	115
33X40805	5x0.75	9.1	51.9	137
33X40806	6x0.75	9.8	61.4	155
33X40807	7x0.75	9.8	67.9	166
33X40808	8x0.75	10.4	76.7	192
33X40809	9x0.75	11.1	84.5	218
33X40810	10x0.75	12.0	93.3	244
33X40812	12x0.75	12.5	108.3	270
33X40815	15x0.75	13.8	139.9	323
33X40816	16x0.75	13.8	146.4	338
33X40819	19x0.75	14.6	169.2	397
33X40820	20x0.75	15.3	178.5	419
33X40821	21x0.75	15.3	185.5	431
33X40825	25x0.75	16.9	217.2	509
33X40827	27x0.75	17.4	237.2	542
33X40830	30x0.75	18.1	255.5	614

PART NUMBER	NO. OF CORES/ CROSS SECTION (mm²)	CABLE DIAMETER (mm)	COPPER WEIGHT (Kg/Km)	CABLE WEIGHT (Kg/Km)
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1.00 mm²

33X41002	2x1.00	7.9	34.0	96
33X41003	3x1.00	8.3	44.2	113
33X41004	4x1.00	9.1	54.5	135
33X41005	5x1.00	10.0	64.2	165
33X41006	6x1.00	11.0	79.5	196
33X41007	7x1.00	11.0	86.5	207
33X41008	8x1.00	12.0	96.9	243
33X41009	9x1.00	12.9	109.8	277
33X41010	10x1.00	14.2	127.7	335
33X41012	12x1.00	14.5	147.9	367
33X41015	15x1.00	15.8	178.9	437
33X41016	16x1.00	15.8	187.9	443
33X41019	19x1.00	16.9	216.7	516
33X41020	20x1.00	17.9	230.9	565
33X41021	21x1.00	17.9	239.9	571
33X41025	25x1.00	19.6	283.4	694

1.50 mm²

33X41502	2x1.50	8.6	44.4	118
33X41503	3x1.50	9.1	58.8	138
33X41504	4x1.50	10.0	75.0	170
33X41505	5x1.50	11.0	90.4	207
33X41506	6x1.50	12.1	112.0	249
33X41507	7x1.50	12.1	119.8	260
33X41508	8x1.50	13.1	140.6	302
33X41509	9x1.50	14.2	158.7	353
33X41510	10x1.50	15.2	177.5	401
33X41512	12x1.50	15.6	206.1	437
33X41515	15x1.50	17.4	251.3	540
33X41516	16x1.50	17.4	264.8	551
33X41519	19x1.50	18.6	301.5	637
33X41520	20x1.50	19.6	328.1	693

2.50 mm²

33X42502	2x2.50	10.0	65.7	164
33X42503	3x2.50	10.6	89.3	196
33X42504	4x2.50	11.6	113.7	239
33X42505	5x2.50	13.0	144.0	302
33X42506	6x2.50	14.1	185.8	357
33X42507	7x2.50	14.1	192.8	373
33X42508	8x2.50	15.9	219.5	457
33X42509	9x2.50	16.8	245.4	511
33X42510	10x2.50	18.0	272.0	578

X: For JZ types with Yellow / Green marked earthing core 2; for OZ types without earthing core 1
4.00 mm² and 6.00 mm² cross sections are also available for HSLHCH-JZ cables.