

RFE-EMC

Armoured pair instrumentation and communication cable with improved EMC screening 250V


 HELKAMA RFE-EMC
DESIGN:**STANDARDS:**

IEC 60092-376, design

1. Conductor

- stranded copper conductor IEC 60228, class 2
- tinned stranded copper conductor on request

2. Insulation

- XLPE plastic IEC 60092-360

3. Twisted pair

- two insulated cores twisted together to form a pair
- See next page for Quad

4. Bedding

- filler tape

5. Screen

- drain wire copper (in all sizes)
- copper tape 100%

6. Armour

- copper wire braid, coverage >94% EC 60092-350
- tinned copper wire braid on request
- the armour serves as a collective screen

7. Sheath

- polyolefine plastic, SHF1 EC 60092-360
- on request, thermosetting polyolefine, SHF2
- standard colour grey, other colours on request

Flame-retardant



Fire-resistant



Halogen-free



Low smoke emission



Oil resistant (only SHF2)



Application: For fixed installation in most areas and on open deck in ships and offshore units. If the cable is exposed to direct sun light protective covering or cable with black outer sheath is recommended. Design to meet requirements for improved **EMC** screening properties.

Main characteristics

Rated voltage	150/250V (300V)
Maximum conductor temperature	+ 90 °C
Flame-retardant	IEC 60332-1-2 -test for single insulated wire and cable IEC 60332-3-22 -test for bunched wires and cables, category A
Halogen-free	IEC 60754 series
Smoke emission	IEC 61034 series
Oil resistance (only SHF2)	IEC 60811-404 conditions according to 60092-360/SHF2
Transfer impedance	IEC 61196-1 (typical value 26dB over 1mΩ/m at 100MHz [20mΩ/m])

Electrical data:

Loop resistance of pair, max. / +20°C
 Pair capacitance, nom. / 800Hz
 Loop inductance, nom.
 Insulation resistance / +20°C

0,5mm ²	0,75mm ²	1,5mm ²	Unit
80	52	24,4	ohm/km
55	50	60	nF/km
0,6	0,6	0,7	mH/km
≥1500	≥1500	≥1500	Mohm/km

Minimum recommended installation temperature -15 °C

Lowest operation temperature -40 °C

Core identification: See technical information section

Identification: Lot number, cable type, cable size, voltage, temperature, standards, manufacturer's name, production month and meter marking printed on the sheath



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Thorne & Derrick
+44 (0) 191 410 4292
www.powerandcables.com

RFE-EMC 250V	Number of conductors & cross-section n x mm²	Nominal outer diameter mm	Approximate weight kg/km	Min. bending radius fixed installation mm
Part number				
21968	1x2x0,5	8,5	95	50
21969	1x3x0,5	8,5	135	50
21970	1x4x0,5	9,0	145	55
21971	2x2x0,5	11,0	150	65
21972	3x2x0,5	11,5	170	70
21973	4x2x0,5	12,0	195	75
21974	7x2x0,5	14,0	260	85
21975	8x2x0,5	15,0	280	90
21976	10x2x0,5	16,5	360	100
21977	12x2x0,5	17,0	400	105
21978	14x2x0,5	18,0	435	110
21979	16x2x0,5	19,0	480	115
21980	19x2x0,5	20,5	540	125
21981	24x2x0,5	22,5	655	135
21982	27x2x0,5	23,5	710	140
21983	30x2x0,5	24,5	760	145
21984	32x2x0,5	25,5	810	150
21985	37x2x0,5	27,0	895	160
21987	1x2x0,75	9,0	110	55
21988	1x3x0,75	9,5	150	55
21989	1x4x0,75	10,0	165	60
21990	2x2x0,75	12,5	185	75
21991	3x2x0,75	13,0	210	75
21992	4x2x0,75	14,0	245	85
21993	7x2x0,75	16,0	330	95
21994	8x2x0,75	17,5	400	105
21995	10x2x0,75	19,5	475	115
21996	12x2x0,75	20,0	520	120
21997	14x2x0,75	21,5	580	130
21998	16x2x0,75	23,0	655	135
21999	19x2x0,75	24,5	740	145
22000	24x2x0,75	26,5	885	160
22001	27x2x0,75	28,0	975	170
22002	30x2x0,75	29,5	1055	175
22003	32x2x0,75	30,0	1105	180
22004	37x2x0,75	32,5	1265	195
22375	1x2x1,5	11,5	170	70
22376	1x3x1,5	12,0	210	70
22377	1x4x1,5	12,5	240	75
22378	2x2x1,5	15,5	280	95
22379	3x2x1,5	16,5	325	100
22380	4x2x1,5	18,0	425	110
22381	7x2x1,5	21,5	605	130
22382	8x2x1,5	23,0	690	140
22383	10x2x1,5	25,5	820	155
22384	12x2x1,5	27,0	930	160
22385	14x2x1,5	28,5	1045	170
22386	16x2x1,5	30,5	1165	180
22387	19x2x1,5	32,5	1330	195
22388	24x2x1,5	36,5	1640	220
22389	27x2x1,5	38,0	1800	230
22390	30x2x1,5	40,0	1975	240
22391	32x2x1,5	41,0	2075	245
22392	37x2x1,5	44,5	2480	265

Other sizes on request.

Part number for oil resistant SHF2 cable:
4 + code from above table → 4xxxxx



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