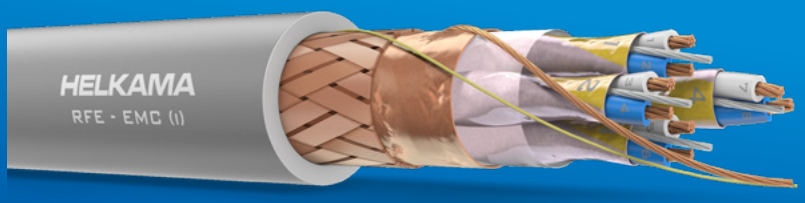
RFE-EMC (i)

250 V

Armoured and individually screened pair instrumentation and communication cable with improved EMC-screening



• Flame-retardant • Halogen-free • Low smoke emission • Oil resistant (SHF2 only)

CONDUCTOR	Stranded copper conductor, IEC 60228 Class 2
INSULATION	XLPE
TWISTED PAIR & INDIVIDUAL SCREEN	Two insulated cores twisted together to form a pair Aluminium polyester tape and tinned copper drain wire
CABLING/BEDDING	Cabling, pairs twisted together, with optional fillers to obtain symmetrical and round construction. Bedding, lapped tape.
SCREEN	Copper drain wire (all sizes) Copper tape, coverage 100%
ARMOUR	Copper wire braid, coverage > 90% Tinned copper wire braid on request Armour serves as collective screen
SHEATH	Polyolefine SHF1, IEC 60092-360 Thermosetting polyolefine SHF2 on request Standard colour grey, other colours on request
REFERENCE STANDARD	IEC 60092-376

APPLICATION

Armoured and individually screened pair instrumentation and communication cable with improved EMC-screening.
For fixed installation in most areas, and on open deck in ships and offshore units. If the cable is exposed to direct sunlight, protective covering or cable with black outer sheath is recommended. Specially designed cables with screen for improved screening properties to address EMI/EMC problems.

PHYSICAL PROPERTIES:

CORE IDENTIFICATION	Pair colours white and blue Pair identification with colour code and identification number
MARINE TYPE APPROVALS	ABS, CRS, DNV, LR, RINA

MAIN CHARACTERISTICS:

RATED VOLTAGE	150/250 V (300 V)
FIRE PERFORMANCE	IEC 60332-1-2 IEC 60332-3-22
HALOGEN-FREE	IEC 60754 series
SMOKE EMISSION	IEC 61034 series
OIL RESISTANCE (SHF2 only)	IEC 60811-404 conditions according to 60092-360/SHF2
MIN. INSTALLATION TEMPERATURE	-15 °C
OPERATING TEMPERATURE	-40 – 80 °C fixed installation
MAXIMUM CONDUCTOR TEMPERATURE	90 °C

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ELECTRICAL PROPERTIES:

	0.5 mm²	0.75 mm²	1.5 mm²	Unit
Loop resistance (pair, max 20 °C)	80	52	24.4	ohm/km
Pair capacitance (nom. 1 KHz)	55	70	90	nF/km
Loop inductance (nom.)	0.6	0.6	0.7	mH/km
Insulation resistance (20 °C)	≥ 1500	≥ 1500	≥ 1500	Mohm/km

RFE-HF (i) 250 V

Part number	No. of conductors x Conductor area (mm²)	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
21949	1 x 2 x 0.5	8.0	105	65
21950	1 x 3 x 0.5	8.5	115	65
21951	2 x 2 x 0.5 Quad	9.0	130	70
21952	2 x 2 x 0.5	11.0	165	90
21953	3 x 2 x 0.5	11.5	190	90
21954	4 x 2 x 0.5	12.5	220	100
21955	7 x 2 x 0.5	14.0	315	115
21956	8 x 2 x 0.5	15.5	395	120
21957	10 x 2 x 0.5	17.0	460	135
21958	12 x 2 x 0.5	17.5	515	140
21959	14 x 2 x 0.5	18.5	585	150
21960	16 x 2 x 0.5	19.5	640	155
21961	19 x 2 x 0.5	21.0	730	165
21962	24 x 2 x 0.5	23.0	905	185
21963	27 x 2 x 0.5	24.0	990	195
21964	30 x 2 x 0.5	25.0	1075	200
21965	32 x 2 x 0.5	26.0	1130	205
21966	37 x 2 x 0.5	27.5	1280	220
21911	1 x 2 x 0.75	9.0	110	70
21912	1 x 3 x 0.75	9.5	130	75
21913	2 x 2 x 0.75 Quad	10.0	140	80
21914	2 x 2 x 0.75	12.5	190	100
21915	3 x 2 x 0.75	13.0	225	105
21916	4 x 2 x 0.75	14.0	255	110
21917	7 x 2 x 0.75	17.0	405	135
21918	8 x 2 x 0.75	17.5	440	140
21919	10 x 2 x 0.75	20.0	530	160
21920	12 x 2 x 0.75	20.5	590	165
21921	14 x 2 x 0.75	22.0	680	175
21922	16 x 2 x 0.75	23.0	745	185
21923	19 x 2 x 0.75	25.0	860	200
21924	24 x 2 x 0.75	27.5	1035	220
21925	27 x 2 x 0.75	28.5	1135	230
21926	30 x 2 x 0.75	30.0	1260	240
21927	32 x 2 x 0.75	31.0	1320	250
21928	37 x 2 x 0.75	33.0	1480	260
21930	1 x 2 x 1.5	11.0	160	85
21931	1 x 3 x 1.5	11.0	185	90
21932	2 x 2 x 1.5 Quad	12.0	215	95
21933	2 x 2 x 1.5	15.0	275	120
21934	3 x 2 x 1.5	16.5	370	130
21935	4 x 2 x 1.5	17.5	430	140
21936	7 x 2 x 1.5	20.5	625	165
21937	8 x 2 x 1.5	22.0	710	175
21938	10 x 2 x 1.5	24.0	850	195
21939	12 x 2 x 1.5	26.0	970	205
21940	14 x 2 x 1.5	27.5	1105	220
21941	16 x 2 x 1.5	29.0	1220	235
21942	19 x 2 x 1.5	31.5	1430	250
21943	24 x 2 x 1.5	35.0	1750	280

Standard length 1000 m

SHF2 on request. Part number for SHF2 cables 4 + code from above table → 4xxxxx

Other sizes on request.

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