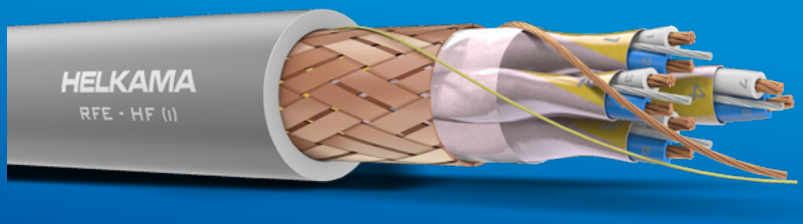
RFE-HF (i)

250 V

Armoured and individually screened pair instrumentation and communication cable



• 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.
ARMOUR	Copper drain wire (all sizes) 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. 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.

PHYSICAL PROPERTIES:

CORE IDENTIFICATION	Pair colours white and blue Pair identification with colour code and identification number
MARINE TYPE APPROVALS	ABS, BV, CCS, CRS, DNV, KR, 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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HELKAMA
THE PERFECT CONNECTION

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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	50	60	nF/km
Loop inductance (nom.)	0.6	0.6	0.7	mH/km
Insulation resistance (20 °C)	≥ 1500	≥ 1500	≥ 1500	Mohm/km

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Part number	No. of conductors x Conductor area (mm²)	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
22338	1 x 2 x 0.5	6.5	70	40
22340	1 x 3 x 0.5	6.7	100	40
22342	2 x 2 x 0.5 Quad	7.0	120	42
22344	2 x 2 x 0.5	9.5	130	55
22346	3 x 2 x 0.5	10.0	145	60
22348	4 x 2 x 0.5	11.0	170	65
22350	7 x 2 x 0.5	12.5	250	75
22352	8 x 2 x 0.5	13.5	275	80
22354	10 x 2 x 0.5	15.5	380	95
22356	12 x 2 x 0.5	16.5	425	100
22358	14 x 2 x 0.5	17.5	475	105
22360	16 x 2 x 0.5	18.5	520	110
22362	19 x 2 x 0.5	19.5	590	115
22364	24 x 2 x 0.5	22.0	740	130
22370	32 x 2 x 0.5	24.5	925	150
22372	37 x 2 x 0.5	26.5	1050	160
22006	1 x 2 x 0.75	7.5	90	45
22005	1 x 3 x 0.75	7.5	110	45
22008	2 x 2 x 0.75 Quad	8.0	145	50
22010	2 x 2 x 0.75	11.0	155	65
22096	3 x 2 x 0.75	11.5	185	70
22012	4 x 2 x 0.75	12.5	220	75
22014	7 x 2 x 0.75	15.5	370	90
22016	8 x 2 x 0.75	16.5	400	100
22018	10 x 2 x 0.75	18.5	475	110
22020	12 x 2 x 0.75	19.0	535	115
22022	14 x 2 x 0.75	21.0	620	125
22094	16 x 2 x 0.75	22.0	685	130
22024	19 x 2 x 0.75	23.5	795	140
22026	24 x 2 x 0.75	26.0	965	155
22028	32 x 2 x 0.75	29.5	1235	180
22031	37 x 2 x 0.75	31.5	1390	190
22050	1 x 2 x 1.5	9.5	130	55
22049	1 x 3 x 1.5	10.0	120	55
22052	2 x 2 x 1.5 Quad	10.0	210	60
22054	2 x 2 x 1.5	13.5	235	80
22093	3 x 2 x 1.5	15.0	335	90
22056	4 x 2 x 1.5	16.0	390	95
22058	7 x 2 x 1.5	19.0	565	115
22060	8 x 2 x 1.5	21.0	650	125
22062	10 x 2 x 1.5	23.5	790	140
22064	12 x 2 x 1.5	24.5	895	150
22066	14 x 2 x 1.5	26.5	1025	160
22095	16 x 2 x 1.5	28.0	1140	165
22068	19 x 2 x 1.5	30.5	1340	180
22070	24 x 2 x 1.5	33.5	1650	200

Standard length 1000 m

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

Other sizes on request.