

RFE-EMC-FRHF (i)

250 V

Fire-resistant armoured and individually screened pair instrumentation and communication cable with improved collective EMC-screening



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

CONDUCTOR	Stranded copper conductor, IEC 60228 Class 2
INSULATION	Mica tape 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, fillers or dummy cores included in select sizes based on product specifications to obtain symmetrical and round construction. Bedding, lapped tape.
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

Fire-resistant armoured and individually screened pair instrumentation and communication cable with improved collective 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, BV, DNV

MAIN CHARACTERISTICS:

RATED VOLTAGE	150/250 V (300 V)
FIRE PERFORMANCE	IEC 60332-1-2 IEC 60332-3-22
FIRE-RESISTANT	IEC 60331-1/IEC 60331-2 (180 min.)
HALOGEN-FREE	IEC 60754 series
SMOKE EMISSION	IEC 61034 series
OIL RESISTANCE (SHF2 only)	IEC 60811-404 conditions acc. to 60092-360/SHF2
MIN. INSTALLATION TEMPERATURE	-15 °C
OPERATING TEMPERATURE	-40 - 80 °C fixed installation
MAX. CONDUCTOR TEMPERATURE	90 °C

ELECTRICAL PROPERTIES:

	0.75 mm ²	1.5 mm ²	Unit
Loop resistance (pair, max 20 °C)	52	24.4	ohm/km
Pair capacitance (nom. 1 KHz)	55	75	nF/km
Loop inductance (nom.)	0.6	0.7	mH/km
Insulation resistance (20 °C)	≥ 1500	≥ 1500	Mohm/km

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Part number	No. of conductors x Conductor area (mm ²)	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
22858	1 x 2 x 0.75	10.5	135	85
22860	2 x 2 x 0.75 Quad	12.0	190	95
22861	2 x 2 x 0.75	15.0	240	120
22862	3 x 2 x 0.75	16.0	280	125
22863	4 x 2 x 0.75	18.0	380	140
22864	7 x 2 x 0.75	21.0	535	170
22865	8 x 2 x 0.75	22.0	585	180
22866	10 x 2 x 0.75	25.5	720	200
22867	12 x 2 x 0.75	26.5	815	215
22868	14 x 2 x 0.75	28.0	910	225
22869	16 x 2 x 0.75	30.0	1020	240
22870	19 x 2 x 0.75	32.0	1155	255
22871	24 x 2 x 0.75	36.0	1430	285
22877	1 x 2 x 1.5	11.5	180	95
22879	2 x 2 x 1.5 Quad	13.0	245	105
22880	2 x 2 x 1.5	17.5	360	140
22881	3 x 2 x 1.5	18.0	415	145
22882	4 x 2 x 1.5	20.0	505	160
22883	7 x 2 x 1.5	23.5	750	190
22884	8 x 2 x 1.5	25.0	840	200
22885	10 x 2 x 1.5	28.5	1020	230
22886	12 x 2 x 1.5	30.0	1180	240
22887	14 x 2 x 1.5	32.0	1330	255
22888	16 x 2 x 1.5	34.0	1485	270
22889	19 x 2 x 1.5	36.5	1700	290

Standard length 1000 m

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

Other sizes on request.