

# RFE-EMC

250 V

Armoured 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	Two insulated cores twisted together to form a pair
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.
SCREEN	Copper drain wire (all sizes) Copper tape, coverage 100%
ARMOUR	Copper wire braid, coverage > 90%, IEC 60092-350 Tinned copper wire braid on request Armour serves as collective screen
SHEATH	Polyolefine SHF1, IEC 60092-360 Cross-linked polyolefine SHF2 on request Standard colour grey, other colours on request
REFERENCE STANDARD	IEC 60092-376

## APPLICATION

Armoured 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 acc. to 60092-360/SHF2
MIN. INSTALLATION TEMPERATURE	-15 °C
OPERATING TEMPERATURE	-40 - 80 °C fixed installation
MAX. CONDUCTOR TEMPERATURE	90 °C

Subject to change without prior notice. See latest update on our webpage.

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## ELECTRICAL PROPERTIES

	0.5 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1.5 mm <sup>2</sup>	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 (mm <sup>2</sup> )	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
21968	1 x 2 x 0.5	8.0	90	65
21969	1 x 3 x 0.5	8.5	100	65
21970	2 x 2 x 0.5 Quad	9.0	115	70
21971	2 x 2 x 0.5	11.0	140	85
21972	3 x 2 x 0.5	11.5	160	90
21973	4 x 2 x 0.5	12.0	180	95
21974	7 x 2 x 0.5	14.0	245	110
21975	8 x 2 x 0.5	14.5	265	115
21976	10 x 2 x 0.5	16.5	360	135
21977	12 x 2 x 0.5	17.0	395	135
21978	14 x 2 x 0.5	18.0	430	145
21979	16 x 2 x 0.5	19.0	475	155
21980	19 x 2 x 0.5	20.5	530	165
21981	24 x 2 x 0.5	22.5	645	180
21982	27 x 2 x 0.5	23.5	700	190
21983	30 x 2 x 0.5	24.5	755	195
21984	32 x 2 x 0.5	25.5	800	200
21985	37 x 2 x 0.5	26.5	890	215
21987	1 x 2 x 0.75	9.0	105	70
21988	1 x 3 x 0.75	9.0	125	75
21989	2 x 2 x 0.75 Quad	10.0	140	80
21990	2 x 2 x 0.75	12.0	175	95
21991	3 x 2 x 0.75	12.5	195	100
21992	4 x 2 x 0.75	14.0	230	110
21993	7 x 2 x 0.75	16.0	315	125
21994	8 x 2 x 0.75	17.0	395	140
21995	10 x 2 x 0.75	19.5	465	155
21996	12 x 2 x 0.75	20.0	515	160
21997	14 x 2 x 0.75	21.5	570	170
21998	16 x 2 x 0.75	22.5	650	180
21999	19 x 2 x 0.75	24.0	730	195
22000	24 x 2 x 0.75	26.5	875	215
22001	27 x 2 x 0.75	28.0	965	225
22002	30 x 2 x 0.75	29.5	1045	235
22003	32 x 2 x 0.75	30.0	1095	240
22004	37 x 2 x 0.75	32.0	1250	260
22375	1 x 2 x 1.5	10.5	150	85
22376	1 x 3 x 1.5	11.0	180	90
22377	2 x 2 x 1.5 Quad	11.5	210	95
22378	2 x 2 x 1.5	14.5	255	115
22379	3 x 2 x 1.5	15.0	290	120
22380	4 x 2 x 1.5	17.0	390	135
22381	7 x 2 x 1.5	20.0	550	160
22382	8 x 2 x 1.5	21.5	625	170
22383	10 x 2 x 1.5	24.0	755	195
22384	12 x 2 x 1.5	25.0	845	200
22385	14 x 2 x 1.5	26.5	945	215
22386	16 x 2 x 1.5	28.0	1060	225
22387	19 x 2 x 1.5	30.0	1205	240
22388	24 x 2 x 1.5	33.5	1495	270

Standard length 1000 m

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

Other sizes on request.