

# RFE-FRHF

250 V

Fire-resistant armoured pair instrumentation  
and communication cable



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

<b>CONDUCTOR</b>	Stranded copper conductor, IEC 60228 Class 2
<b>INSULATION</b>	Mica tape XLPE
<b>TWISTED PAIR</b>	Two insulated cores twisted together to form a pair
<b>CABLING/BEDDING</b>	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.
<b>ARMOUR</b>	Copper drain wire (all sizes) Copper wire braid, coverage > 90% Tinned copper wire braid on request Armour serves as collective screen
<b>SHEATH</b>	Polyolefine SHF1, IEC 60092-360 Thermosetting polyolefine SHF2 on request Standard colour orange, SHF2 standard colour black, other colours on request
<b>REFERENCE STANDARD</b>	IEC 60092-376

## APPLICATION

Fire-resistant armoured 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:

<b>CORE IDENTIFICATION</b>	Pair colours white and blue Pair identification with colour code and identification number
<b>MARINE TYPE APPROVALS</b>	ABS, BV, CCS, CRS, DNV, KR, LR, RINA

### MAIN CHARACTERISTICS:

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

**ELECTRICAL PROPERTIES:**

	0.75 mm <sup>2</sup>	1.5 mm <sup>2</sup>	Unit
Loop resistance (pair, max 20 °C)	52	24.4	ohm/km
Pair capacitance (nom. 1 KHz)	45	55	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 <sup>2</sup> )	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
20520	1 x 2 x 0.75	9.0	105	55
20522	2 x 2 x 0.75 Quad	10.5	150	65
20524	2 x 2 x 0.75	13.5	195	80
20526	4 x 2 x 0.75	16.0	265	95
20528	7 x 2 x 0.75	19.5	430	115
20530	8 x 2 x 0.75	21.0	485	125
20532	10 x 2 x 0.75	24.0	600	145
20534	12 x 2 x 0.75	25.0	670	150
20536	14 x 2 x 0.75	26.5	750	160
20538	19 x 2 x 0.75	30.5	955	180
20540	24 x 2 x 0.75	34.0	1185	205
20575	1 x 2 x 1.5	10.0	135	60
20577	2 x 2 x 1.5 Quad	11.5	195	70
20579	2 x 2 x 1.5	15.5	310	90
20574	3 x 2 x 1.5	16.0	340	95
20581	4 x 2 x 1.5	17.5	395	105
20583	7 x 2 x 1.5	21.5	600	130
20585	8 x 2 x 1.5	22.5	660	135
20587	10 x 2 x 1.5	25.5	805	155
20589	12 x 2 x 1.5	27.0	925	160
20591	14 x 2 x 1.5	29.0	1040	175
20593	16 x 2 x 1.5	31.0	1180	185
20595	19 x 2 x 1.5	33.0	1350	200

Standard length 1000 m

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

Other sizes on request.