

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)

CONDUCTOR	Stranded copper conductor, IEC 60228 Class 2
INSULATION	Mica tape 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.
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 Cross-linked polyolefine SHF2 on request Standard colour orange, SHF2 standard colour black, other colours on request
REFERENCE STANDARD	IEC 60092-376

APPLICATION

Fire-resistant armoured pair instrumentation and communication cable. Designed to be used in areas demanding high mechanical and electromagnetic protection. 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
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

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

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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)	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 ²)	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.