

RFE-FRHF+WSR/WJR

250 V

Fire-resistant + Water Spray Resistant and/or Water Jet Resistant armoured pair instrumentation and communication cable



• FLAME-RETARDANT • FIRE-RESISTANT • HALOGEN-FREE • LOW SMOKE EMISSION • WATER SPRAY and/or WATER JET RESISTANT

CONDUCTOR	Stranded copper conductor, IEC 60228 Class 2
INSULATION	Special grade 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 + Water Spray Resistant and/or Water Jet Resistant armoured pair instrumentation and communication cable. For fixed installation in most areas, and on open deck in ships and offshore units. Especially intended to ensure availability of all critical transportation-, comfort- and safety systems, i.e. to meet the concepts of; **Orderly Evacuation** (3 h burning time) and **Safe Return to Port** (Fire test with simultaneous Water Spray / Water Jet + mechanical shocks) to simulate firefighting conditions. If the cable is exposed to direct sunlight, protective covering or cable with black outer sheath is recommended.

PHYSICAL PROPERTIES

CABLE TYPES	Cable Ø ≤20 mm RFE-FRHF+WSR Cable Ø >20 mm RFE-FRHF+WJR
CORE IDENTIFICATION	Pair colours white and blue Pair identification with colour code and identification number
MARINE TYPE APPROVALS	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
FIRE- AND WATER SPRAY RESISTANT (WSR)	IEC 60331-2 + EN 50200 Annex E (180 min)
FIRE- AND WATER JET RESISTANT (WJR)	IEC 60331-1 + BS 8491 (180 min)
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)	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)
620520	1 x 2 x 0.75	9.5	110	55
620522	2 x 2 x 0.75 Quad	11.5	165	70
620524	2 x 2 x 0.75	14.5	200	85
620526	4 x 2 x 0.75	17.0	285	100
620528	7 x 2 x 0.75	20.5	465	125
620530	8 x 2 x 0.75	22.0	520	130
620532	10 x 2 x 0.75	25.5	645	150
620534	12 x 2 x 0.75	26.5	720	160
620536	14 x 2 x 0.75	28.0	800	170
620537	16 x 2 x 0.75	30.0	900	180
620538	19 x 2 x 0.75	32.0	1020	195
620540	24 x 2 x 0.75	36.0	1270	215
620575	1 x 2 x 1.5	11.0	150	65
620577	2 x 2 x 1.5 Quad	12.5	215	75
620579	2 x 2 x 1.5	17.0	310	100
620581	4 x 2 x 1.5	19.5	440	115
620583	7 x 2 x 1.5	23.5	670	140
620585	8 x 2 x 1.5	25.0	740	150
620587	10 x 2 x 1.5	28.5	905	170
620589	12 x 2 x 1.5	30.0	1035	180
620591	14 x 2 x 1.5	32.0	1165	195
620593	16 x 2 x 1.5	34.5	1320	205
620595	19 x 2 x 1.5	37.0	1510	220

Standard length 1000 m

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

Other sizes on request.