

RFA-FRHF+WSR/WJR

250 V

Fire-resistant + Water Spray Resistant and/or Water Jet Resistant screened 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 Aluminium polyester tape and tinned copper drain wire
CABLING	Pairs twisted together, fillers or dummy cores included in select sizes based on product specifications to obtain symmetrical and round construction, covered by separator tape.
COLLECTIVE SCREEN	Tinned copper drain wire (all sizes) Aluminium polyester tape, coverage 100%
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 screened 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 RFA-FRHF+WSR Cable Ø >20 mm RFA-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)
620635	1 x 2 x 0.75	8.5	75	70
620637	2 x 2 x 0.75 Quad	10.0	110	80
620639	2 x 2 x 0.75	13.5	160	110
620641	4 x 2 x 0.75	16.0	220	130
620643	7 x 2 x 0.75	19.5	335	155
620645	8 x 2 x 0.75	20.5	375	165
620647	10 x 2 x 0.75	23.5	465	190
620649	12 x 2 x 0.75	25.0	530	200
620651	14 x 2 x 0.75	27.0	625	215
620653	16 x 2 x 0.75	28.5	695	230
620655	19 x 2 x 0.75	31.0	815	250
620657	24 x 2 x 0.75	34.5	1005	275
621521	1 x 2 x 1.5	9.5	105	75
621524	2 x 2 x 1.5 Quad	11.5	170	95
621525	2 x 2 x 1.5	15.5	225	125
621527	4 x 2 x 1.5	18.0	325	145
621529	7 x 2 x 1.5	22.0	510	175
621531	8 x 2 x 1.5	24.0	595	190
621533	10 x 2 x 1.5	27.5	735	220
621535	12 x 2 x 1.5	29.0	845	230
621537	14 x 2 x 1.5	31.0	975	250
621539	16 x 2 x 1.5	33.0	1090	265
621541	19 x 2 x 1.5	36.0	1295	285

Standard length 1000 m

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

Other sizes on request.