

RFE-FRHF (i)+WSR/WJR

250 V

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

250 V CABLES



- 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 & INDIVIDUAL SCREEN	Two insulated cores twisted together to form a pair Aluminium polyester tape and tinned copper drain wire
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 Thermosetting 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 and individually 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 hours 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 (i)+WSR Cable Ø >20 mm RFE-FRHF (i)+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
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)
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

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)	55	75	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)
620546	1 x 2 x 0.75	9.5	115	55
620548	2 x 2 x 0.75 Quad	11.0	165	65
620550	2 x 2 x 0.75	14.5	220	85
620552	4 x 2 x 0.75	17.0	345	105
620554	7 x 2 x 0.75	20.5	505	125
620556	8 x 2 x 0.75	22.0	555	130
620558	10 x 2 x 0.75	25.0	690	150
620560	12 x 2 x 0.75	26.5	785	160
620562	14 x 2 x 0.75	28.0	880	170
620563	16 x 2 x 0.75	30.0	990	180
620564	19 x 2 x 0.75	32.0	1125	190
620566	24 x 2 x 0.75	36.0	1400	215
620603	1 x 2 x 1.5	10.5	155	65
620604	2 x 2 x 1.5 Quad	12.0	220	75
620605	2 x 2 x 1.5	16.5	345	100
620607	4 x 2 x 1.5	19.0	470	115
620609	7 x 2 x 1.5	23.0	710	140
620611	8 x 2 x 1.5	25.0	800	150
620513	10 x 2 x 1.5	28.5	975	170
620615	12 x 2 x 1.5	30.0	1135	180
620617	14 x 2 x 1.5	32.0	1280	190
620619	16 x 2 x 1.5	34.0	1440	205
620621	19 x 2 x 1.5	36.5	1650	220

Standard length 1000 m

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

Other sizes on request.