

# RFA-FRHF (i)+WSR/WJR

250 V

Fire-resistant + Water Spray Resistant and/or Water Jet Resistant collectively and 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

<b>CONDUCTOR</b>	Stranded copper conductor, IEC 60228 Class 2
<b>INSULATION</b>	Special grade Mica tape XLPE
<b>TWISTED PAIR/TWISTED PAIR &amp; INDIVIDUAL SCREEN</b>	Two insulated cores twisted together to form a pair
<b>CABLING</b>	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.
<b>COLLECTIVE SCREEN</b>	Tinned copper drain wire (all sizes) Aluminium polyester tape, coverage 100%
<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 + Water Spray Resistant and/or Water Jet Resistant collectively 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:

<b>CABLE TYPES</b>	Cable Ø ≤20 mm RFA-FRHF (i) +WSR Cable Ø >20 mm RFA-FRHF (i) +WJR
<b>CORE IDENTIFICATION</b>	Pair colours white and blue Pair identification with colour code and identification number
<b>MARINE TYPE APPROVALS</b>	DNV, 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>HALOGEN-FREE</b>	IEC 60754 series
<b>SMOKE EMISSION</b>	IEC 61034 series
<b>FIRE- AND WATER SPRAY RESISTANT (WSR)</b>	IEC 60331-2 + EN 50200 Annex E (180 min)
<b>FIRE- AND WATER JET RESISTANT (WJR)</b>	IEC 60331-1 + BS 8491 (180 min)
<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)	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 <sup>2</sup> )	Nominal outer Ø (mm)	Weight kg/km	Min. bending radius mm (fixed)
620664	1 x 2 x 0.75	9.0	80	70
620666	2 x 2 x 0.75 Quad	16.0	165	125
620667	2 x 2 x 0.75	13.5	175	110
620669	4 x 2 x 0.75	16.0	245	130
620671	7 x 2 x 0.75	19.5	380	155
620673	8 x 2 x 0.75	21.0	435	170
620675	10 x 2 x 0.75	24.5	555	195
620677	12 x 2 x 0.75	25.5	630	205
620679	14 x 2 x 0.75	27.5	715	220
620681	16 x 2 x 0.75	29.0	815	235
620683	19 x 2 x 0.75	31.5	940	250
620685	24 x 2 x 0.75	35.5	1195	285
621550	1 x 2 x 1.5	10.0	110	80
621552	2 x 2 x 1.5 Quad	18.0	245	145
621553	2 x 2 x 1.5	15.5	245	125
621555	4 x 2 x 1.5	18.5	365	145
621557	7 x 2 x 1.5	22.5	575	180
621559	8 x 2 x 1.5	24.5	665	195
621561	10 x 2 x 1.5	28.0	840	225
621563	12 x 2 x 1.5	29.5	965	235
621565	14 x 2 x 1.5	31.5	1100	250
621567	16 x 2 x 1.5	33.5	1265	270
621569	19 x 2 x 1.5	36.5	1485	290

Standard length 1000 m

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

Other sizes on request.