

RFA-FRHF

250 V

Fire-resistant screened 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	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 screened pair instrumentation and communication cable. For fixed installation in most areas, and on open deck in ships and offshore units, especially when lightweight cables are needed. 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

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)
20635	1 x 2 x 0.75	8.0	70	65
20637	2 x 2 x 0.75 Quad	9.5	100	75
20639	2 x 2 x 0.75	13.0	145	100
20641	4 x 2 x 0.75	15.0	210	120
20643	7 x 2 x 0.75	18.0	315	145
20645	8 x 2 x 0.75	19.5	355	155
20647	10 x 2 x 0.75	22.5	435	180
20649	12 x 2 x 0.75	23.5	500	185
20651	14 x 2 x 0.75	25.5	590	205
20653	16 x 2 x 0.75	27.0	655	215
20655	19 x 2 x 0.75	29.0	770	235
20657	24 x 2 x 0.75	32.5	955	260
21521	1 x 2 x 1.5	9.0	95	75
21523	1 x 3 x 1.5	10.0	130	80
21524	2 x 2 x 1.5 Quad	11.0	160	85
21525	2 x 2 x 1.5	14.5	210	115
21526	3 x 2 x 1.5	15.5	240	125
21527	4 x 2 x 1.5	17.0	305	135
21529	7 x 2 x 1.5	20.5	480	165
21531	8 x 2 x 1.5	22.5	555	180
21533	10 x 2 x 1.5	26.0	685	205
21535	12 x 2 x 1.5	27.0	790	215
21537	14 x 2 x 1.5	29.0	910	230
21539	16 x 2 x 1.5	31.0	1020	245
21541	19 x 2 x 1.5	33.5	1210	270

Standard length 1000 m

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

Other sizes on request.