


# RFE-SHF2 120°C

Heat and oil resistant armoured pair instrumentation and communication cable



**DESIGN:**

- 1. Conductor**
  - stranded copper conductor IEC 60228, class 2
  - tinned stranded copper conductor on request
- 2. Insulation**
  - improved heat resistant XLPE (+120°C) IEC 60092-360
- 3. Twisted pair**
  - two insulated cores twisted together to form a pair
  - See next page for Quad
- 4. Bedding**
  - filler tape
- 5. Armour**
  - copper wire braid, coverage > 90% IEC 60092-350
  - tinned copper wire braid on request
  - the armour serves as a collective screen
- 6. Sheath**
  - improved heat resistant SHF2 (+120°C) IEC 60092-360
  - standard colour black with grey stripes, other colours on request

**STANDARDS:**  
IEC 60092-376, design

+120°C heat resistant	●
Oil resistant	●
Flame-retardant	●
Fire-resistant	○
Halogen-free	●
Low smoke emission	●

**Application:** For fixed installation in most areas and on open deck in ships or on oil rigs and various industrial use. Excellent resistance against weathering, ozone, UV-rays, Oil / Diesel oil. Typical Marine, Oil, Gas and Petrochemical applications are for example Ship Engine rooms, power plants and/or other areas where ambient temperature may exceed +80°C, which is the limit for traditional IEC 60092-cables.

Rated voltage	<b>150/250V (300V)</b>
Oil resistance	<b>IEC 60811-404</b> conditions according to 60092-360
Halogen-free	<b>IEC 60754</b> series
Flame-retardant	<b>IEC 60332-1-2</b> Test for single insulated wire and cable <b>IEC 60332-3-22</b> Test for bunched wires and cables, category A
Smoke emission	<b>IEC 61034</b> series

**Temperature rating:**

Fixed installation:	-40°C to +120°C
Occasionally moved:	-20°C to +120°C
Max. conductor temperature:	+120°C

**Electrical data:**

Loop resistance of pair, max. / +20°C	80	52	24,4	ohm/km
Pair capacitance, nom. / 800Hz	55	50	60	nF/km
Loop inductance, nom.	0,6	0,6	0,7	mH/km
Insulation resistance / +20°C	≥1500	≥1500	≥1500	Mohm/km

0,5mm <sup>2</sup>	0,75mm <sup>2</sup>	1,5mm <sup>2</sup>	Unit
80	52	24,4	ohm/km
55	50	60	nF/km
0,6	0,6	0,7	mH/km
≥1500	≥1500	≥1500	Mohm/km



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RFE-SHF2 120°C 250V	Number of conductors & cross-section n x mm <sup>2</sup>	Nominal outer diameter mm	Approximate weight kg/km	Min. bending radius fixed installation mm
Part number				
4120362	1x2x0,5	6,5	80	40
4120364	1x4x0,5	7,5	95	45
4120363	2x2x0,5	9,5	115	55
4120366	4x2x0,5	10,5	150	65
4120368	7x2x0,5	12,5	215	75
4120369	8x2x0,5	13,5	235	80
4120370	10x2x0,5	15,5	310	90
4120371	12x2x0,5	16,0	340	95
4120372	14x2x0,5	17,0	395	100
4120373	16x2x0,5	18,0	425	110
4120374	19x2x0,5	19,0	480	115
4120376	24x2x0,5	21,5	585	130
4120382	1x2x0,75	7,5	90	45
4120384	1x4x0,75	8,5	120	50
4120383	2x2x0,75	11,0	145	65
4120386	4x2x0,75	12,5	200	75
4120388	7x2x0,75	15,0	315	90
4120389	8x2x0,75	16,0	345	95
4120390	10x2x0,75	18,0	415	110
4120391	12x2x0,75	19,0	465	115
4120392	14x2x0,75	20,0	535	120
4120393	16x2x0,75	21,5	585	130
4120394	19x2x0,75	23,0	675	140
4120396	24x2x0,75	25,5	815	155
4120398	32x2x0,75	29,0	1040	175
4120490	1x2x1,5	10,0	135	60
4120491	1x4x1,5	10,5	185	65
4120492	2x2x1,5	14,5	230	85
4120493	4x2x1,5	17,0	370	100
4120494	7x2x1,5	20,0	540	120
4120495	8x2x1,5	21,5	620	130
4120496	10x2x1,5	24,5	750	150
4120497	12x2x1,5	26,0	850	155
4120498	14x2x1,5	27,5	955	165
4120499	19x2x1,5	31,5	1230	190
4120500	24x2x1,5	35,0	1525	210
4120501	32x2x1,5	40,0	1945	240

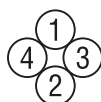
Other sizes on request.

**Core identification:** See technical information section

Each pair white - blue. Cores numbered 1, 2, 3, 4, 5....

(Quad)cable is built up as a star quad  
with the following identification

1 core white  
2 core blue  
3 core white  
4 core blue



Sheath marking: Lot number, cable type, cable size, voltage, temperature, standards,  
manufacturer's name, production month and meter marking printed on the sheath

The cable is marine type approved by all major classification societies. Cable name on type approval  
certificate is RFE-SHF2.



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