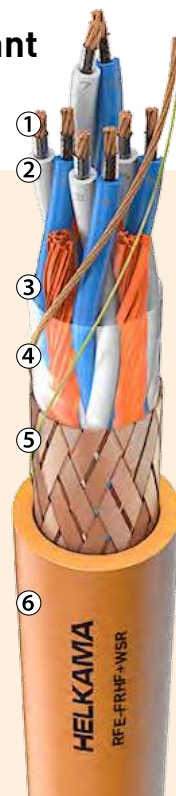


RFE-FRHF+WSR/WJR

Fire Resistant + Water Spray Resistant and/or Water Jet Resistant armoured pair instrumentation and communication cable 250V

Cable types: RFE-FRHF+WSR (diameter ≤ 20 mm)
RFE-FRHF+WJR (diameter > 20 mm)

DESIGN:	STANDARDS:
1. Conductor	IEC 60092-376, design IEC 60228, class 2
- stranded copper conductor 0,75–2,5 mm ²	
- tinned stranded copper conductor on request	
2. Insulation	IEC 60092-360
- special grade Mica tape(s)	
- XLPE plastic	
3. Twisted unit and cabling	
- insulated, numbered cores twisted together to form a pair, triple or quad	
- cabling with optional fillers or dummy cores to obtain symmetrical and round construction	
4. Bedding	
- filler tape	
5. Armour	IEC 60092-350
- drain wire (in all sizes)	
- copper wire braid, coverage > 94%	
- tinned copper wire braid on request	
- the armour serves as a collective screen	
6. Sheath	IEC 60092-360
- polyolefine plastic, SHF1, standard colour orange	
- oil resistant thermosetting black polyolefine, SHF2 on request	
- other colours on request	



● Halogen-free ● Flame-retardant ● Low smoke emission ● Fire-resistant ● Water Spray and/or Water Jet Resistant

Application: For fixed installation in most areas and on open deck in ships and offshore units. Especially intended to ensure the 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 the firefighting conditions.

If the cable is exposed to direct sunlight, we recommend cable with black outer sheath or a protective covering.

Main characteristics

Rated voltage	150/250V (300V)
Halogen-free	IEC 60754 series
Flame-retardant	IEC 60332-1-2 -test for single insulated wire and cable IEC 60332-3-22 -test for bunched wires and cables, category A
Smoke emission	IEC 61034 series
Fire- and Water Spray Resistant	IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (diameter ≤ 20 mm)
Fire- and Water Jet Resistant	IEC 60331-1 (180 min test) + BS 8491:2008 (diameter > 20 mm)
Oil resistance (only SHF2)	IEC 60811-404 conditions according to 60092-360/SHF2
For details see general information section	

Electrical data:

Loop resistance of pair, max. / +20°C
Pair capacitance, nom. / 800Hz
Loop inductance, nom.
Insulation resistance / +20°C

0,75mm ²	1,5mm ²	Unit
52	24,4	ohm/km
45	55	nF/km
0,6	0,7	mH/km
≥1500	≥1500	Mohm/km

Lowest operation temperature -40 °C

Minimum recommended installation temperature -15 °C

Maximum conductor temperature + 90 °C

Recommended minimum bending radius (fixed installation): 4 x outer diameter of the cable

Identification: Lot number, cable type, cable size, voltage, temperature, standards, manufacturer's name, production month/year and meter marking printed on the sheath permanently with laser.



**THORNE &
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