

# RFE-EMC(i)

## Armoured and individually screened pair instrumentation and communication cable 250V

DESIGN:	STANDARDS: IEC 60092-376, design	
1. Conductor	- stranded copper conductor - tinned stranded copper conductor on request	IEC 60228, class 2
2. Insulation	- XLPE plastic	IEC 60092-360
3. Twisted pair & individual screen	- two insulated cores twisted together to form a pair - plastic coated aluminium tape and a tinned copper drain wire	
4. Bedding	- filler tape	
5. Screen	- drain wire copper (in all sizes) - copper tape 100%	
6. Armour	- copper wire braid, coverage >94% - tinned copper wire braid on request - the armour serves as a collective screen	IEC 60092-350
7. Sheath	- polyolefine plastic, SHF1 - on request, thermosetting polyolefine, SHF2 - standard colour grey, other colours on request - rip cord under sheath	IEC 60092-360



● Flame-retardant ● Halogen-free ● Low smoke emission ● Oil resistant (only SHF2)

**Application:** For fixed installation in most areas and on open deck in ships and offshore units. If the cable is exposed to direct sun light protective covering or cable with black outer sheath is recommended. Design to meet requirements for improved EMC screening properties.

### Main characteristics

Rated voltage	<b>150/250V (300V)</b>
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
Halogen-free	<b>IEC 60754</b> series
Smoke emission	<b>IEC 61034</b> series
Oil resistance (only SHF2)	<b>IEC 60811-404</b> conditions according to 60092-360/SHF2
Transfer impedance	<b>IEC 61196-1</b> (typical value 26dB over 1mΩ/m at 100MHz [20mΩ/m])

### Electrical data:

	0,5mm <sup>2</sup>	0,75mm <sup>2</sup>	1,5mm <sup>2</sup>	Unit
Loop resistance of pair, max. / +20°C	80	52	24,4	ohm/km
Pair capacitance, nom. / 1 KHz	55	70	90	nF/km
Loop inductance, nom.	0,6	0,6	0,7	mH/km
Insulation resistance / +20°C	≥1500	≥1500	≥1500	Mohm/km

### Temperature rating:

Maximum conductor temperature + 90 °C  
 Fixed installation -40 °C to +80 °C  
 Minimum recommended installation temperature - 15 °C

For details see general information section

RFE-EMC(i) 250V Part number	Number of conductors & cross-section n x mm <sup>2</sup>	Nominal outer diameter mm	Approx- imate weight kg/km	Min. bending radius fixed installation mm
21949	1x2x0,5	8,5	105	50
21950	1x3x0,5	8,5	120	50
21951	2x2x0,5 Quad	9,0	140	55
21952	2x2x0,5	11,0	170	65
21953	3x2x0,5	11,5	200	70
21954	4x2x0,5	12,5	235	75
21955	7x2x0,5	14,5	330	85
21956	8x2x0,5	15,0	360	90
21957	10x2x0,5	17,0	465	100
21958	12x2x0,5	17,5	520	105
21959	14x2x0,5	19,0	590	115
21960	16x2x0,5	19,5	650	120
21961	19x2x0,5	21,0	735	125
21962	24x2x0,5	23,5	910	140
21963	27x2x0,5	24,5	1000	145
21964	30x2x0,5	25,5	1085	150
21965	32x2x0,5	26,0	1140	155
21966	37x2x0,5	27,5	1290	165
21911	1x2x0,75	9,0	120	55
21912	1x3x0,75	9,5	140	55
21913	2x2x0,75 Quad	10,0	150	60
21914	2x2x0,75	12,5	195	75
21915	3x2x0,75	13,0	235	80
21916	4x2x0,75	14,0	270	85
21917	7x2x0,75	17,0	410	100
21918	8x2x0,75	17,5	450	105
21919	10x2x0,75	20,0	540	120
21920	12x2x0,75	20,5	600	125
21921	14x2x0,75	22,0	690	135
21922	16x2x0,75	23,0	755	140
21923	19x2x0,75	25,0	870	150
21924	24x2x0,75	27,5	1045	165
21925	27x2x0,75	28,5	1145	170
21926	30x2x0,75	30,5	1270	180
21927	32x2x0,75	31,0	1330	185
21928	37x2x0,75	33,0	1490	195
21930	1x2x1,5	11,5	180	70
21931	1x3x1,5	12,0	205	70
21932	2x2x1,5 Quad	12,5	240	75
21933	2x2x1,5	16,0	295	95
21934	3x2x1,5	17,0	390	100
21935	4x2x1,5	18,5	465	110
21936	7x2x1,5	21,5	670	130
21937	8x2x1,5	23,0	760	140
21938	10x2x1,5	25,5	910	155
21939	12x2x1,5	27,5	1040	165
21940	14x2x1,5	29,0	1185	175
21941	16x2x1,5	31,0	1310	185
21942	19x2x1,5	33,5	1530	200
21943	24x2x1,5	37,0	1875	220

Other sizes on request.

Part number for oil resistant SHF2 cable:

4 + code from above table → 4xxxxx