

## GAALSHIP® HF 250 IS FR WSR

Pairs/triples twisted cables telecommunication and instrumentation cable, Individually screened, fire resistant and water spray resistant



ELETTROTEK KABEL® GAALSHIP® HF 250 IS FR WSR



### Applications:

Fire resistant and water spray instrumentation cables for fixed electrical installations aboard ships, screened against electromagnetic interferences, suitable for the signal and telecommunication of safety-fire devices.

These cables prevent the cable short-circuit due to water sprays of Fire Fighters' hydrants used during the fire, allowing the continuous operation of these devices.

### Construction:

<b>Conductor:</b>	Plain annealed copper or Tinned annealed copper conductor Cl. 2, acc. to IEC 60228, DIN VDE 0295
<b>Insulation:</b>	MICA glass tape + GAALTHERM® 597
<b>Cores color:</b>	Pair: black- light blue Triple: black- light blue - brown
<b>Stranding:</b>	Core laid-up together in pairs/triples
<b>Individual screen:</b>	Aluminium/polyester tape with tinned annealed copper stranded drain wire
<b>1<sup>st</sup> Wrapping:</b>	Glass fiber tape
<b>2<sup>nd</sup> Wrapping:</b>	Two plain annealed copper / polyester tapes
<b>3<sup>rd</sup> Wrapping:</b>	Glass fiber tape
<b>Outer sheath:</b>	Halogen free thermoplastic compound SHF1 acc. to IEC 60092-360, thickness acc. to IEC 60092-376
<b>Marking:</b>	ELETTROTEK KABEL® GAALSHIP® HF 250 IS FR WSR, cross nominal section sqmm, 150/250 V, part n°, IEC 60092-376, IEC 60332-3-22, IEC 60331, BS 8491, production plant, batch n°, production date, CE RoHS, progressive meter marking.

### Type Approvals/Certificates:

**RINA / RINAMIL** (Registro Italiano Navale)  
**BV** (Bureau Veritas)  
**LR** (Lloyd's Register)  
**ABS** (American Bureau of Shipping)  
**RMRS** (Russian Maritime Register of Shipping)  
Other approvals on request

### Resistance:



**Fire resistant acc. to:**

IEEC 60331-21,  
IEC 60331-2 (under 20 mm Ø),  
IEC 60331-1 (over 20 mm Ø),  
EN 50200 Annex E Water Spray Test,  
BS 8491 Water Jet Test



**Flame and fire retardant acc. to:**

IEC 60332-1-2,  
IEC 60332-3-22



**Halogen free acc. to:**

IEC 60754-1/2



**Smoke emission properties acc. to:**

IEC 61034-1/2

### Technical data:

<b>Nominal voltage:</b>	150/250 V
<b>Temperature range:</b>	-40°C up to +90°C
<b>Installation temp.:</b>	-5°C
<b>Short circuit temperature:</b>	+250°C
<b>Min. bending radius:</b>	4 x Outer diameter

### Features:

Sheathing and insulating materials acc. to IEC 60092-360  
Design guidelines acc. to IEC 60092-350/376  
Choice and installation of electric cables acc. to IEC 60092-352  
Cold bend test at low temperatures  
acc. to CSA C22.2 No. 0.3-09 (-40°C)  
Cold bend impact at low temperatures  
acc. to CSA C22.2 No. 0.3-09 (-35°C)  
On request class 5 conductor acc. to IEC 60228

# GAALSHIP® MARINE CABLES

## GAALSHIP® HF 250 IS FR WSR

Pairs/triples twisted cables telecommunication and instrumentation cable, Individually screened, fire resistant and water spray resistant



ELETTROTEK KABEL® GAALSHIP® HF 250 IS FR WSR



Part no.	No. of pairs/triples x cross section n x mm <sup>2</sup>	Outer diameter ca.mm			Cable weight approx. kg/km	Max. resistance of conductors at 20°C (Ohm/km)	Current rating in open air at 45°C (A)	Capacitance approx. (nF/km)	Inductance approx. (mH/km)	Reactance approx. (Ohm/km)		Impedance approx. (Ohm/km)				Short circuit rating I sec. (kA)
		Min.	Nom.	Max.						50 Hz	60 Hz	at 20°C		at 90°C		
												50 Hz	60 Hz	50 Hz	60 Hz	
11240CGX052M05	5 x 2 x 0,5	18,7	20,2	21,7	416	41,6	5	75	0,64	0,201	0,241	41,6	41,6	53,04	53,04	0,07
11240CGX012M07	1 x 2 x 0,75	9,1	10,6	12,1	137	26,3	12	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX022M07	2 x 2 x 0,75	14,9	16,4	17,9	288	26,3	10	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX042M07	4 x 2 x 0,75	17,8	19,3	20,8	378	26,3	7	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX052M07	5 x 2 x 0,75	19,6	21,1	22,6	459	26,3	7	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX072M07	7 x 2 x 0,75	21,1	23,1	24,6	549	26,3	7	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX102M07	10 x 2 x 0,75	26,4	28,4	29,9	815	26,3	7	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX142M07	14 x 2 x 0,75	29,9	32,4	34,9	1011	26,3	6	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX242M07	24 x 2 x 0,75	39,2	41,7	44,2	1674	26,3	5	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX372M07	37 x 2 x 0,75	47,1	49,6	52,1	2366	26,3	5	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX012M10	1 x 2 x 1	9,5	11	12,5	151	19,3	15	65	0,64	0,201	0,241	19,3	19,3	24,61	24,61	0,14
11240CGX032M10	3 x 2 x 1	16,7	18,2	19,7	335	19,3	10	65	0,64	0,201	0,241	19,3	19,3	24,61	24,61	0,14
11240CGX042M10	4 x 2 x 1	18,6	20,1	21,6	424	19,3	8	65	0,64	0,201	0,241	19,3	19,3	24,61	24,61	0,14
11240CGX072M10	7 x 2 x 1	22,1	24,1	25,6	624	19,3	8	65	0,64	0,201	0,241	19,3	19,3	24,61	24,61	0,14
11240CGX012M15	1 x 2 x 1,5	10,6	12,1	13,6	184	12,9	19	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX022M15	2 x 2 x 1,5	17,4	18,9	20,4	390	12,9	16	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX042M15	4 x 2 x 1,5	20,8	22,3	23,8	523	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX052M15	5 x 2 x 1,5	22,9	24,4	25,9	640	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX072M15	7 x 2 x 1,5	24,8	26,8	28,3	774	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX082M15	8 x 2 x 1,5	29,6	31,6	33,1	943	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX102M15	10 x 2 x 1,5	31,2	33,2	34,7	1167	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX122M15	12 x 2 x 1,5	33,5	36	38,5	1286	12,9	11	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX192M15	19 x 2 x 1,5	40	42,5	45	1884	12,9	9	60	0,52	0,163	0,196	12,9	12,9	16,45	16,45	0,21
11240CGX122M25	1 x 2 x 2,5	11,5	13	14,5	222	8,02	27	55	0,52	0,163	0,196	8,02	8,02	10,23	10,23	0,36
11240CGX013M07	1 x 3 x 0,75	9,8	11,3	12,8	153	26,3	10	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX073M07	7 x 3 x 0,75	24,3	25,8	27,8	706	26,3	7	70	0,64	0,201	0,241	26,3	26,3	33,54	33,54	0,11
11240CGX073M10	7 x 3 x 1	25,4	26,9	28,9	805	19,3	8	65	0,64	0,201	0,241	19,3	19,3	24,61	24,61	0,14

Other dimensions and colors available on request.