

GAALSHIP® HF 250 OSA FR WSR

Pairs/triples twisted cables for telecommunication and instrumentation, overall screened, armoured, fire resistant and water spray resistant



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA 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:

Conductor:	Plain annealed copper or Tinned annealed copper conductor Cl. 2, acc. to IEC 60228, DIN VDE 0295
Insulation:	MICA glass tape + GAALTHERM® 597
Cores color:	Pair: black- light blue Triple: black- light blue - brown
Stranding:	Core laid-up together in pairs/triples
Overall screen:	Aluminium/polyester tape with tinned annealed copper stranded drain wire
1st Wrapping:	Glass fiber tape
2nd Wrapping:	Two plain annealed copper / polyester tapes
3rd Wrapping:	Glass fiber tape
Armour:	Plain or tinned annealed copper wires braid acc. to IEC 60092-350
Outer sheath:	Halogen free thermoplastic compound SHF1 acc. to IEC 60092-360, thickness acc. to IEC 60092-376
Marking:	ELETTROTEK KABEL® GAALSHIP® HF 250 OSA 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.

Technical data:

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

Type Approvals/Certificates:

RINA / RINAMIL (Registro Italiano Navale)
BV (Bureau Veritas)
LR (Lloyd's Register)
DNV-GL (Det Norske Veritas - Germanischer Lloyd) in progress
ABS (American Bureau of Shipping)
 Other approvals on request

Resistance:



Fire resistant acc. to:
 IEC 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

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

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Part no.	No. of pairs/triples x cross section n x mm ²	Outer sheath color	Outer diameter ca.mm	Copper weight approx. kg/km	Cable weight approx. kg/km
11230CGX012M05	1 x 2 x 0,5	Orange	10	61	155
11230CGX012M07	1 x 2 x 0,75	Orange	10,4	67	168
11230CGX012M10	1 x 2 x 1	Orange	10,8	76	183
11230CGX012M15	1 x 2 x 1,5	Orange	11,7	94	217
11230CGX012M25	1 x 2 x 2,5	Orange	12,5	116	253
11230CGX022M05	2 x 2 x 0,5	Orange	13,2	96	241
11230CGX022M07	2 x 2 x 0,75	Orange	14,4	139	304
11230CGX022M10	2 x 2 x 1	Orange	15,2	156	338
11230CGX022M15	2 x 2 x 1,5	Orange	16,8	189	409
11230CGX022M25	2 x 2 x 2,5	Orange	18,2	242	494
11230CGX032M05	3 x 2 x 0,5	Orange	14,4	139	295
11230CGX032M07	3 x 2 x 0,75	Orange	15,2	161	333
11230CGX032M10	3 x 2 x 1	Orange	16	181	364
11230CGX032M15	3 x 2 x 1,5	Orange	17,8	231	453
11230CGX032M25	3 x 2 x 2,5	Orange	19,4	297	549
11230CGX042M05	4 x 2 x 0,5	Orange	15,9	157	356
11230CGX042M07	4 x 2 x 0,75	Orange	16,7	188	403
11230CGX042M10	4 x 2 x 1	Orange	17,6	220	454
11230CGX042M15	4 x 2 x 1,5	Orange	19,6	268	551
11230CGX042M25	4 x 2 x 2,5	Orange	21,4	366	693
11230CGX052M05	5 x 2 x 0,5	Orange	16,9	179	406
11230CGX052M07	5 x 2 x 0,75	Orange	17,9	217	467
11230CGX052M10	5 x 2 x 1	Orange	18,9	244	517
11230CGX052M15	5 x 2 x 1,5	Orange	21,1	319	651
11230CGX052M25	5 x 2 x 2,5	Orange	23,1	427	806
11230CGX062M05	6 x 2 x 0,5	Orange	18,2	203	474
11230CGX062M07	6 x 2 x 0,75	Orange	19,4	240	535
11230CGX062M10	6 x 2 x 1	Orange	20,5	287	607
11230CGX062M15	6 x 2 x 1,5	Orange	22,9	355	750
11230CGX062M25	6 x 2 x 2,5	Orange	25,1	497	958
11230CGX072M05	7 x 2 x 0,5	Orange	18,2	213	476
11230CGX072M07	7 x 2 x 0,75	Orange	19,4	254	543
11230CGX072M10	7 x 2 x 1	Orange	20,5	307	622
11230CGX072M15	7 x 2 x 1,5	Orange	22,9	388	773
11230CGX072M25	7 x 2 x 2,5	Orange	25,1	540	984
11230CGX082M05	8 x 2 x 0,5	Orange	21,1	251	628
11230CGX082M07	8 x 2 x 0,75	Orange	22,4	297	706
11230CGX082M10	8 x 2 x 1	Orange	23,7	346	787
11230CGX082M15	8 x 2 x 1,5	Orange	26,6	445	972
11230CGX082M25	8 x 2 x 2,5	Orange	29,3	627	1233
11230CGX102M05	10 x 2 x 0,5	Orange	21,9	272	669
11230CGX102M07	10 x 2 x 0,75	Orange	23,4	329	774
11230CGX102M10	10 x 2 x 1	Orange	24,8	395	882
11230CGX102M15	10 x 2 x 1,5	Orange	27,8	523	1120
11230CGX102M25	10 x 2 x 2,5	Orange	30,7	733	1430
11230CGX122M05	12 x 2 x 0,5	Orange	23,9	307	777
11230CGX122M07	12 x 2 x 0,75	Orange	25,4	383	898
11230CGX122M10	12 x 2 x 1	Orange	27,0	448	1015
11230CGX122M15	12 x 2 x 1,5	Orange	30,5	593	1289
11230CGX122M25	12 x 2 x 2,5	Orange	33,6	850	1656
11230CGX142M05	14 x 2 x 0,5	Orange	24,8	342	840
11230CGX142M07	14 x 2 x 0,75	Orange	26,3	414	960
11230CGX142M10	14 x 2 x 1	Orange	27,9	508	1104
11230CGX142M15	14 x 2 x 1,5	Orange	31,6	669	1405
11230CGX142M25	14 x 2 x 2,5	Orange	34,8	975	1829
11230CGX152M05	15 x 2 x 0,5	Orange	26,1	355	924
11230CGX152M07	15 x 2 x 0,75	Orange	27,8	451	1074
11230CGX152M10	15 x 2 x 1	Orange	29,5	534	1219

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11230CGX152M15	15 x 2 x 1,5	Orange	33,4	707	1556
11230CGX152M25	15 x 2 x 2,5	Orange	37,3	1114	2110
11230CGX162M05	16 x 2 x 0,5	Orange	26,1	365	926
11230CGX162M07	16 x 2 x 0,75	Orange	27,8	465	1082
11230CGX162M10	16 x 2 x 1	Orange	29,5	564	1244
11230CGX162M15	16 x 2 x 1,5	Orange	33,4	739	1578
11230CGX162M25	16 x 2 x 2,5	Orange	37,3	1162	2141
11230CGX192M05	19 x 2 x 0,5	Orange	27,7	416	1055
11230CGX192M07	19 x 2 x 0,75	Orange	29,6	519	1227
11230CGX192M10	19 x 2 x 1	Orange	31,5	633	1412
11230CGX192M15	19 x 2 x 1,5	Orange	35,7	860	1828
11230CGX192M25	19 x 2 x 2,5	Orange	39,7	1347	2472
11230CGX242M05	24 x 2 x 0,5	Orange	31,6	498	1375
11230CGX242M07	24 x 2 x 0,75	Orange	33,8	622	1588
11230CGX242M10	24 x 2 x 1	Orange	36,4	844	1913
11230CGX242M15	24 x 2 x 1,5	Orange	41,3	1135	2446
11230CGX242M25	24 x 2 x 2,5	Orange	45,6	1660	3165
11230CGX272M05	27 x 2 x 0,5	Orange	32,7	535	1456
11230CGX272M07	27 x 2 x 0,75	Orange	35	692	1711
11230CGX272M10	27 x 2 x 1	Orange	37,8	919	2051
11230CGX272M15	27 x 2 x 1,5	Orange	42,8	1233	2633
11230CGX272M25	27 x 2 x 2,5	Orange	47,4	1818	3443
11230CGX302M05	30 x 2 x 0,5	Orange	33,9	571	1551
11230CGX302M07	30 x 2 x 0,75	Orange	36,7	820	1917
11230CGX303M10	30 x 2 x 1	Orange	39,1	1008	2212
11230CGX303M15	30 x 2 x 1,5	Orange	44,3	1328	2819
11230CGX303M25	30 x 2 x 2,5	Orange	49	1973	3704
11230CGX372M05	37 x 2 x 0,5	Orange	37,4	748	1941
11230CGX372M07	37 x 2 x 0,75	Orange	40,1	970	2297
11230CGX373M10	37 x 2 x 1	Orange	42,6	1164	2619
11230CGX373M15	37 x 2 x 1,5	Orange	48,4	1590	3400
11230CGX373M25	37 x 2 x 2,5	Orange	53,6	2369	4478
11230CGX013M05	1 x 3 x 0,5	Orange	10,4	67	167
11230CGX013M07	1 x 3 x 0,75	Orange	10,9	78	185
11230CGX013M10	1 x 3 x 1	Orange	11,3	88	202
11230CGX013M15	1 x 3 x 1,5	Orange	12,3	109	239
11230CGX013M25	1 x 3 x 2,5	Orange	13,1	147	291
11230CGX023M05	2 x 3 x 0,5	Orange	14,7	141	318
11230CGX023M07	2 x 3 x 0,75	Orange	15,5	162	357
11230CGX023M10	2 x 3 x 1	Orange	16,4	182	396
11230CGX023M15	2 x 3 x 1,5	Orange	18,2	233	489
11230CGX023M25	2 x 3 x 2,5	Orange	19,9	299	597
11230CGX033M05	3 x 3 x 0,5	Orange	15,5	163	351
11230CGX033M07	3 x 3 x 0,75	Orange	16,4	196	402
11230CGX033M10	3 x 3 x 1	Orange	17,2	229	450
11230CGX033M15	3 x 3 x 1,5	Orange	19,3	281	551
11230CGX033M25	3 x 3 x 2,5	Orange	21,1	390	701
11230CGX043M05	4 x 3 x 0,5	Orange	17,1	190	430
11230CGX043M07	4 x 3 x 0,75	Orange	18,1	231	494
11230CGX043M10	4 x 3 x 1	Orange	19,1	262	549
11230CGX043M15	4 x 3 x 1,5	Orange	21,3	346	697
11230CGX043M25	4 x 3 x 2,5	Orange	23,2	470	868
11230CGX053M05	5 x 3 x 0,5	Orange	18,3	218	494
11230CGX053M07	5 x 3 x 0,75	Orange	19,4	261	564
11230CGX053M10	5 x 3 x 1	Orange	20,5	316	646
11230CGX053M15	5 x 3 x 1,5	Orange	22,9	400	809
11230CGX053M25	5 x 3 x 2,5	Orange	25,2	569	1038
11230CGX063M05	6 x 3 x 0,5	Orange	19,9	241	572

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11230CGX063M07	6 x 3 x 0,75	Orange	21,1	303	665
11230CGX063M10	6 x 3 x 1	Orange	22,3	354	756
11230CGX063M15	6 x 3 x 1,5	Orange	25	467	964
11230CGX063M25	6 x 3 x 2,5	Orange	27,5	656	1235
11230CGX073M05	7 x 3 x 0,5	Orange	19,9	258	587
11230CGX073M07	7 x 3 x 0,75	Orange	21,1	325	687
11230CGX073M10	7 x 3 x 1	Orange	22,3	383	778
11230CGX073M15	7 x 3 x 1,5	Orange	25	507	994
11230CGX073M25	7 x 3 x 2,5	Orange	27,5	728	1289
11230CGX083M05	8 x 3 x 0,5	Orange	22,9	299	749
11230CGX083M07	8 x 3 x 0,75	Orange	24,3	379	869
11230CGX083M10	8 x 3 x 1	Orange	25,9	443	980
11230CGX083M15	8 x 3 x 1,5	Orange	29,1	590	1237
11230CGX083M25	8 x 3 x 2,5	Orange	32,1	843	1588
11230CGX103M05	10 x 3 x 0,5	Orange	23,9	346	841
11230CGX103M07	10 x 3 x 0,75	Orange	25,4	425	971
11230CGX103M10	10 x 3 x 1	Orange	27	517	1120
11230CGX103M15	10 x 3 x 1,5	Orange	30,5	695	1444
11230CGX103M25	10 x 3 x 2,5	Orange	33,6	996	1860
11230CGX103M05	12 x 3 x 0,5	Orange	26,1	383	965
11230CGX123M07	12 x 3 x 0,75	Orange	27,7	491	1130
11230CGX123M10	12 x 3 x 1	Orange	29,5	584	1287
11230CGX123M15	12 x 3 x 1,5	Orange	33,3	792	1661
11230CGX123M25	12 x 3 x 2,5	Orange	37,2	1252	2272
11230CGX143M05	14 x 3 x 0,5	Orange	27	426	1049
11230CGX143M07	14 x 3 x 0,75	Orange	28,8	540	1225
11230CGX143M10	14 x 3 x 1	Orange	30,6	666	1421
11230CGX143M15	14 x 3 x 1,5	Orange	34,6	905	1842
11230CGX143M25	14 x 3 x 2,5	Orange	38,6	1441	2532
11230CGX153M05	15 x 3 x 0,5	Orange	28,5	450	1155
11230CGX153M07	15 x 3 x 0,75	Orange	30,4	573	1346
11230CGX153M10	15 x 3 x 1	Orange	32,3	699	1557
11230CGX153M15	15 x 3 x 1,5	Orange	37,1	1037	2122
11230CGX153M25	15 x 3 x 2,5	Orange	40,9	1523	2782
11230CGX163M05	16 x 3 x 0,5	Orange	28,5	465	1168
11230CGX163M07	16 x 3 x 0,75	Orange	30,4	595	1368
11230CGX163M10	16 x 3 x 1	Orange	32,3	727	1578
11230CGX163M15	16 x 3 x 1,5	Orange	37,1	1081	2155
11230CGX163M25	16 x 3 x 2,5	Orange	40,9	1595	2836
11230CGX193M05	19 x 3 x 0,5	Orange	30,4	531	1341
11230CGX193M07	19 x 3 x 0,75	Orange	32,5	678	1576
11230CGX193M10	19 x 3 x 1	Orange	34,5	830	1817
11230CGX193M15	19 x 3 x 1,5	Orange	39,5	1257	2495
11230CGX193M25	19 x 3 x 2,5	Orange	43,7	1825	3267
11230CGX243M05	24 x 3 x 0,5	Orange	34,7	631	1723
11230CGX243M07	24 x 3 x 0,75	Orange	37,5	913	2122
11230CGX243M10	24 x 3 x 1	Orange	39,9	1131	2454
11230CGX243M15	24 x 3 x 1,5	Orange	45,3	1542	3188
11230CGX243M25	24 x 3 x 2,5	Orange	50,2	2262	4166
11230CGX014M05	1 x 4 x 0,5	Orange	11,1	76	189
11230CGX014M07	1 x 4 x 0,75	Orange	11,6	93	214
11230CGX014M10	1 x 4 x 1	Orange	12	105	233
11230CGX014M15	1 x 4 x 1,5	Orange	13,1	130	279
11230CGX014M25	1 x 4 x 2,5	Orange	14,5	206	374

Other dimensions and colors available on request.