



SHIPBUILDING CABLE CATALOG

A COMPLETE OFFER OF CABLE SOLUTIONS AND SERVICES FOR THE SHIPBUILDING INDUSTRY



“We started out in Italy. After just a few years we opened subsidiaries in Europe. Then around the world. Now, with the acquisition of important manufacturing companies we have broadened our business and strategic vision even more. We’ve faced many challenges along the way, always tackling them with real passion. But right from the start we have taken only one direction: the path of quality. Quality in terms of technology, products, services and customer relations. That’s the essence of Elettrotek Kabel. And our products represent the best of us.”



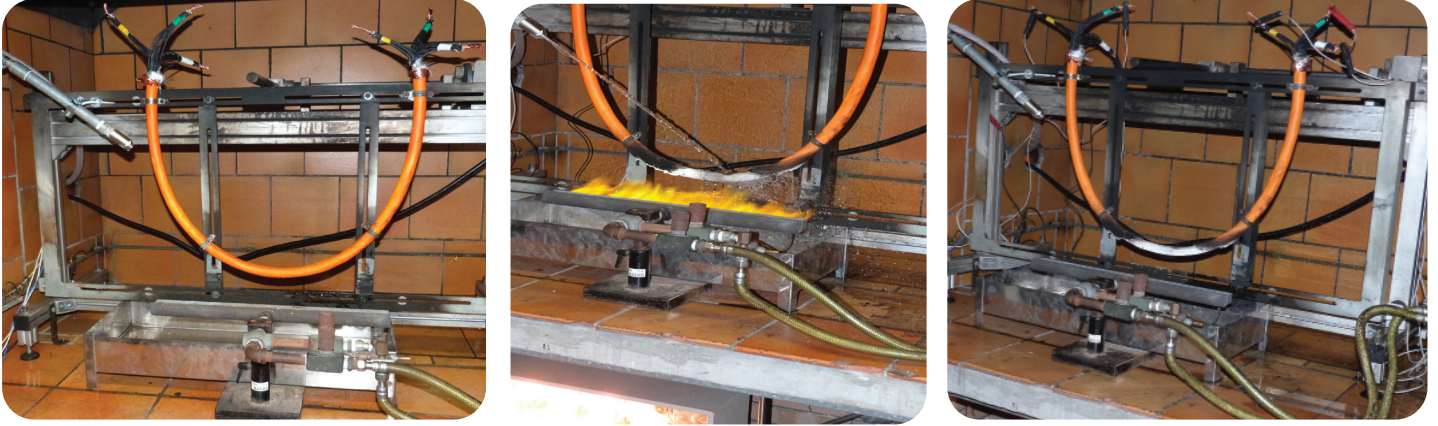
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Introduction



With our range of GAALSHIP® Shipbuilding cables we offer the best service to our customers. Their high flexibility helps to facilitate the installations as well as their optimized diameters help to save space on the ship.

GAALSHIP® Shipbuilding cables are Halogen Free and Low Smoke, manufactured in accordance to IEC 60092 Standards.

One of our special product lines of GAALSHIP® Shipbuilding Cables FR-WSR (Fire resistant - Water spray Resistant) according to the following standards GAALSHIP® Shipbuilding Cables FR-WSR (Fire resistant - Water spray Resistant) according to the following standards

IEC 60331-21

IEC 60331-2 + Water Spray acc. to EN 50200 Annex E.

IEC 60331-1 Water Jet acc. to BS 8491.

GAALSHIP® FR-WSR Cables:

Fire resistant and water spray resistant cables for fixed electrical installations aboard ships, screened against electromagnetic interferences, suitable for power, control, 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.

We firmly believe that our competence in finding the best cable solution according to our customers' requests will increase productivity and the satisfaction of the end users.

CONDUCTOR

The FLEXIBLE CLASS 2 conductors used by the EK Group in the manufacturing of shipbuilding cables are copper conductors with the same electrical characteristics of class 2 conductors providing excellent handling characteristics with high flexibility (normally associated with class 5 conductors) giving the added advantage over class 5 conductors, which have higher resistance values and thus reduced ampacity.

Note: According to EN IEC 60228 for references to classes of conductors, copper class 5 conductors may have a lower conductivity than the equivalent class 2 conductors of the same nominal cross section area.

Conclusion: The unique flexible Class 2 conductor, originally patented by the EK-GROUP, allows for such ease of installation and thus reducing the time and cost, and easy handling in the limited spaces of vessels and offshore platforms.



Type Approvals



LR - LLOYD'S REGISTER



RINA / RINAMIL
REGISTRO ITALIANO NAVALE



DNV - DET NORSKE VERITAS



ABS - AMERICAN BUREAU
OF SHIPPING



BV - BUREAU VERITAS

Reference Standard

GAALSHIP® SHIPBUILDING CABLE ACCORDING TO:

IEC 60092-350 General construction and test methods of power, control and instrumentation cables for shipbuild and offshore application.

IEC 60092-352 Choice and installation of electric cables.

IEC 60092-353 Power cables for rated voltages 1 kV and 3 kV.

IEC 60092-354 Single and three-core power cables with extruded solid insulation for rated voltages 6 and 30 kV.

IEC 60092-360 Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables.

IEC 60092-376 Cables for control and instrumentation circuits 150/250 V (300 V).

IEC 60228 Conductors of insulated cables.

IEC 60331-1 Test method for fire with shock at a temperature of at least 830°C for cables of rated voltage up to and including 0,6/1 kV and with an overall diameter exceeding 20 mm.
The sample is also subjected to a mechanical shock, directly on the cable, every 10 minutes.
Lastly, 5 minutes before the end of the test, the cable is sprayed by a strong jet of water for a period of 5 seconds, at intervals of 60 seconds (acc. to BS 8491).

IEC 60331-2 Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1 kV and with an overall diameter not exceeding 20 mm.
The sample is also subjected to mechanical shocks for 15 minutes, and an additional 15 minutes to flame, mechanical shocks, and water spray (acc. to EN 50200 Annex E Water Spray Test).

IEC 60332-1-2 Test for vertical flame propagation for a single insulated wire or cable.

IEC 60332-3-22 Test for vertical flame spread of vertically - mounted bunched wires or cables - Category A

IEC 60754-1 Test on gases evolved during combustion of materials from cables - Part 1: Determination of the halogen acid gas content.

IEC 60754-2 Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity.

IEC 61034-1 Measurement of smoke density of cables burning under defined conditions - Part 1: Test apparatus

IEC 61034-2 Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements

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Flame Retardant

Flame Retardant Test



**IEC 60332-1-2
on single cable**

**IEC 60332-3-22
Category A
on bunched cables**



GAALSHIP HF 1000

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000

APPLICATIONS:

POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	GAALTHERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING BLACK.

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.




TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:

	FLAME AND FIRE RETARDANT ACC. TO: EN IEC 60332-1-2, EN IEC 60332-3-22
	HALOGEN FREE ACC. TO: EN IEC 60754-1/2
	SMOKE EMISSION PROPERTIES ACC. TO: EN IEC 61034-1/2
	UV RESISTANCE ACC. TO: UL 1581
	OZONE RESISTANCE ACC. TO: IEC 60092-360

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²

GAALSHIP HF 1000

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12041G7L010M15	1X1,5	5	40	12,100	23
12041G7L010M25	1X2,5	5,4	53	7,410	30
12041G7L010M40	1X4	5,9	71	4,610	40
12041G7L010M60	1X6	6,4	94	3,080	52
12041G7L010M61	1X10	7,5	142	1,830	72
12041G7L010M62	1X16	8,6	210	1,210	96
12041G7L010M63	1X25	10,4	318	0,780	127
12041G7L010M64	1X35	11,6	427	0,554	157
12041G7L010M65	1X50	13,4	595	0,386	196
12041G7L010M66	1X70	15,4	817	0,272	242
12041G7L010M67	1X95	17,1	1079	0,206	293
12041G7L010M68	1X120	19,1	1351	0,161	339
12041G7L010M69	1X150	21,1	1683	0,129	389
12041G7L010M70	1X185	23,5	2075	0,106	444
12041G7L010M71	1X240	26,3	2662	0,080	522
12041G7L010M72	1X300	29,3	3305	0,064	601
12041G7L010M73	1X400	33	4366	0,049	690
12041G73020M10	2X1	8,3	90	18,100	11
12041G73020M15	2X1,5	8,7	104	12,100	20
12041G73020M25	2X2,5	9,7	138	7,410	26
12041G73020M40	2X4	10,8	183	4,610	34
12041G73020M60	2X6	12	239	3,080	44
12041G73020M61	2X10	13,9	343	1,830	61
12041G73020M62	2X16	16,2	499	1,210	82
12041G73020M63	2X25	19,1	716	0,780	108
12041G73020M64	2X35	21,5	962	0,554	133
12041G73020M65	2X50	25,2	1338	0,386	155
12041G73030M10	3X1	8,6	103	18,100	9
12041G73030M15	3X1,5	9,4	128	12,100	16
12041G72031M15	3G1,5	9,4	128	12,100	20
12041G73030M25	3X2,5	10,2	168	7,410	21
12041G72031M25	3G2,5	10,2	168	7,410	26
12041G73030M40	3X4	11,4	227	4,610	28
12041G72031M40	3G4	11,4	227	4,610	34
12041G73030M60	3X6	12,7	313	3,080	36
12041G72031M60	3G6	12,7	313	3,080	44
12041G73030M61	3X10	15	465	1,830	50
12041G72031M61	3G10	15	465	1,830	61
12041G73030M62	3X16	17,3	681	1,210	67
12041G72031M62	3G16	17,3	681	1,210	82
12041G73030M63	3X25	20,5	996	0,780	89
12041G73030M64	3X35	23,1	1332	0,554	110
12041G73030M65	3X50	27	1870	0,386	137
12041G73030M66	3X70	31,2	2570	0,272	169

GAALSHIP HF 1000

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12041G73030M67	3X95	35	3374	0,206	205
12041G73030M68	3X120	39,4	4244	0,161	237
12041G73030M69	3X150	43,6	5297	0,129	272
12041G73030M70	3X185	48,7	6487	0,106	311
12041G73030M71	3X240	54,8	8293	0,080	365
12041G73030M72	3X300	61,4	10273	0,064	421
12041G73040M10	4X1	9,5	129	18,100	13
12041G73040M15	4X1,5	10,1	157	12,100	16
12041G73040M15	4X1,5	10,1	157	12,100	16
12041G72041M15	4G1,5	10,1	157	12,100	16
12041G73040M25	4X2,5	11,2	211	7,410	21
12041G73040M25	4X2,5	11,2	211	7,410	21
12041G72041M25	4G2,5	11,2	211	7,410	21
12041G73040M40	4X4	12,5	290	4,610	28
12041G72041M40	4G4	12,5	290	4,610	28
12041G73040M60	4X6	14	393	3,080	36
12041G72041M60	4G6	14	393	3,080	36
12041G73040M61	4X10	16,4	583	1,830	50
12041G72041M61	4G10	16,4	583	1,830	50
12041G73040M62	4X16	19	859	1,210	67
12041G72041M62	4G16	19	859	1,210	67
12041G73040M63	4X25	22,7	1269	0,780	89
12041G73040M64	4X35	25,6	1710	0,554	110
12041G73040M65	4X50	30,1	2464	0,386	137
12041G73040M66	4X70	34,7	3371	0,272	169
12041G73040M67	4X95	38,9	4432	0,206	205
12041G73040M68	4X120	43,8	5591	0,161	237
12041G73040M69	4X150	48,4	6973	0,129	272
12041G73040M70	4X185	54,2	8615	0,106	311
12041G73040M71	4X240	60,9	10995	0,080	365
12041G73050M10	5X1	10,3	156	18,100	13
12041G73050M15	5X1,5	11,1	193	12,100	16
12041G72051M15	5G1,5	11,1	193	12,100	16
12041G73050M25	5X2,5	12,2	260	7,410	21
12041G72051M25	5G2,5	12,2	260	7,410	21
12041G73050M40	5X4	13,8	360	4,610	28
12041G72051M40	5G4	13,8	360	4,610	28
12041G73050M60	5X6	15,4	485	3,080	36
12041G72051M60	5G6	15,4	485	3,080	36
12041G73050M61	5X10	18,1	723	1,830	50
12041G72051M61	5G10	18,1	723	1,830	50
12041G73050M62	5X16	21,1	1073	1,210	67
12041G72051M62	5G16	21,1	1073	1,210	67
12041G73050M63	5X25	25,3	1588	0,780	89

GAALSHIP HF 1000

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12041G73050M64	5X35	28,4	2140	0,554	110
12041G73050M65	5X50	33,4	3065	0,386	137
12041G73050M66	5X70	38,7	4206	0,272	169
12041G73050M67	5X95	43,3	5546	0,206	172
12041G73050M68	5X120	48,8	6977	0,161	199
12041G73050M69	5X150	54	8645	0,129	228
12041G73050M70	5X185	60,5	10679	0,106	261
12041G71070M10	7X1	10,9	189	18,100	8
12041G71070M15	7X1,5	11,8	237	12,100	10
12041G71070M25	7X2,5	13,1	326	7,410	14
12041G71100M10	10X1	13,3	282	18,100	7
12041G71100M15	10X1,5	14,2	349	12,100	9
12041G71100M25	10X2,5	15,9	482	7,410	12
12041G71120M10	12X1	14,1	322	18,100	7
12041G71120M15	12X1,5	15,3	404	12,100	9
12041G71120M25	12X2,5	17,1	560	7,410	11
12041G71140M10	14X1	14,9	364	18,100	6
12041G71140M15	14X1,5	16,1	458	12,100	8
12041G71140M25	14X2,5	18	634	7,410	11
12041G71160M10	16X1	15,8	413	18,100	6
12041G71160M15	16X1,5	17,1	520	12,100	8
12041G71160M25	16X2,5	19	721	7,410	10
12041G71190M10	19X1	16,6	470	18,100	6
12041G71190M15	19X1,5	18	594	12,100	7
12041G71190M25	19X2,5	20,2	834	7,410	10
12041G71240M10	24X1	19,3	640	18,100	5
12041G71240M15	24X1,5	20,8	799	12,100	7
12041G71240M25	24X2,5	23,5	1119	7,410	9
12041G71270M10	27X1	20	698	18,100	5
12041G71270M15	27X1,5	21,8	882	12,100	7
12041G71270M25	27X2,5	24,4	1225	7,410	9
12041G71300M10	30X1	20,7	751	18,100	5
12041G71300M15	30X1,5	22,6	959	12,100	6
12041G71300M25	30X2,5	25,4	1337	7,410	8
12041G71370M10	37X1	22,6	908	18,100	5
12041G71370M15	37X1,5	24,5	1148	12,100	6
12041G71370M25	37X2,5	27,5	1608	7,410	8

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 1000 A

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A

APPLICATIONS:

POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	GAAL THERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
ARMOUR:	PLAIN ANNEALED COPPER WIRES BRAID ACC. TO IEC 60092-350.
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING BLACK.

(* HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST

GAALSHIP HF 1000 A

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A

Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12051G7L010M15	1X1,5	5,9	64	12,1	23
12051G7L010M25	1X2,5	6,3	79	7,41	30
12051G7L010M40	1X4	6,8	100	4,61	40
12051G7L010M60	1X6	7,5	128	3,08	52
12051G7L010M61	1X10	8,6	183	1,83	72
12051G7L010M62	1X16	9,6	255	1,21	96
12051G7L010M63	1X25	11,5	378	0,78	127
12051G7L010M64	1X35	12,7	495	0,554	157
12051G7L010M65	1X50	14,9	705	0,386	196
12051G7L010M66	1X70	16,9	943	0,272	242
12051G7L010M67	1X95	18,6	1221	0,206	293
12051G7L010M68	1X120	20,7	1518	0,161	339
12051G7L010M69	1X150	22,5	1854	0,129	389
12051G7L010M70	1X185	25	2266	0,106	444
12051G7L010M71	1X240	27,8	2881	0,0801	522
12051G7L010M72	1X300	30,8	3551	0,0641	601
12051G7L010M73	1X400	34,5	4648	0,0486	690
12051G73020M10	2X1	9,4	132	18,1	11
12051G73020M15	2X1,5	9,9	151	12,1	20
12051G73020M25	2X2,5	10,8	189	7,41	26
12051G73020M40	2X4	11,8	239	4,61	34
12051G73020M60	2X6	13	298	3,08	44
12051G73020M61	2X10	15,5	457	1,83	61
12051G73020M62	2X16	17,7	628	1,21	82
12051G73020M63	2X25	20,7	884	0,78	108
12051G73020M64	2X35	23	1134	0,554	133
12051G73020M65	2X50	26,7	1555	0,386	155
12051G73030M10	3X1	9,8	148	18,1	9
12051G73030M15	3X1,5	10,3	176	12,1	16
12051G72031M15	3G1,5	10,3	176	12,1	20
12051G73030M25	3X2,5	11,3	220	7,41	21
12051G72031M25	3G2,5	11,3	220	7,41	26
12051G73030M40	3X4	12,5	288	4,61	28
12051G72031M40	3G4	12,5	288	4,61	34
12051G73030M60	3X6	13,9	385	3,08	36
12051G72031M60	3G6	13,9	385	3,08	44
12051G73030M61	3X10	16,4	583	1,83	50
12051G72031M61	3G10	16,4	583	1,83	61
12051G73030M62	3X16	18,8	826	1,21	67
12051G72031M62	3G16	18,8	826	1,21	82
12051G73030M63	3X25	22,1	1174	0,78	89
12051G73030M64	3X35	24,5	1529	0,554	110
12051G73030M65	3X50	28,5	2102	0,386	137
12051G73030M66	3X70	32,8	2837	0,272	169

GAALSHIP HF 1000 A

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A

Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12051G73030M67	3X95	37	3762	0,206	205
12051G73030M68	3X120	41,4	4701	0,161	237
12051G73030M69	3X150	45,4	5794	0,129	272
12051G73030M70	3X185	50,7	7057	0,106	311
12051G73030M71	3X240	56,7	8890	0,0801	365
12051G73030M72	3X300	63,3	10968	0,0641	421
12051G73040M10	4X1	10,5	177	18,1	13
12051G73040M15	4X1,5	11,2	210	12,1	16
12051G73040M15	4X1,5	11,2	210	12,1	16
12051G72041M15	4G1,5	11,2	210	12,1	16
12051G73040M25	4X2,5	12,3	272	7,41	21
12051G73040M25	4X2,5	12,3	272	7,41	21
12051G72041M25	4G2,5	12,3	272	7,41	21
12051G73040M40	4X4	13,7	358	4,61	28
12051G72041M40	4G4	13,7	358	4,61	28
12051G73040M60	4X6	15,5	504	3,08	36
12051G72041M60	4G6	15,5	504	3,08	36
12051G73040M61	4X10	17,9	715	1,83	50
12051G72041M61	4G10	17,9	715	1,83	50
12051G73040M62	4X16	20,6	1009	1,21	67
12051G72041M62	4G16	20,6	1009	1,21	67
12051G73040M63	4X25	24,2	1458	0,78	89
12051G73040M64	4X35	27	1915	0,554	110
12051G73040M65	4X50	31,5	2721	0,386	137
12051G73040M66	4X70	36,6	3745	0,272	169
12051G73040M67	4X95	40,7	4878	0,206	205
12051G73040M68	4X120	45,7	6089	0,161	237
12051G73040M69	4X150	50,3	7536	0,129	272
12051G73040M70	4X185	56,2	9223	0,106	311
12051G73040M70	4X240	62,9	11703	0,0801	365
12051G73050M10	5X1	11,4	210	18,1	13
12051G73050M15	5X1,5	12,1	253	12,1	16
12051G72051M15	5G1,5	12,1	253	12,1	16
12051G73050M25	5X2,5	13,4	331	7,41	21
12051G72051M25	5G2,5	13,4	331	7,41	21
12051G73050M40	5X4	15,3	471	4,61	28
12051G72051M40	5G4	15,3	471	4,61	28
12051G73050M60	5X6	16,9	605	3,08	36
12051G72051M60	5G6	16,9	605	3,08	36
12051G73050M61	5X10	19,6	874	1,83	50
12051G72051M61	5G10	19,6	874	1,83	50
12051G73050M62	5X16	22,6	1245	1,21	67
12051G72051M62	5G16	22,6	1245	1,21	67
12051G73050M63	5X25	26,7	1808	0,78	89

GAALSHIP HF 1000 A

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A

Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12051G73050M64	5X35	29,9	2384	0,554	110
12051G73050M65	5X50	34,9	3352	0,386	137
12051G73050M66	5X70	40,6	4634	0,272	169
12051G73050M67	5X95	45,3	6053	0,206	172
12051G73050M68	5X120	50,8	7547	0,161	199
12051G73050M69	5X150	55,9	9273	0,129	228
12051G73050M70	5X185	62,5	11386	0,106	261
12051G71070M10	7X1	12	249	18,1	8
12051G71070M15	7X1,5	12,7	298	12,1	10
12051G71070M25	7X2,5	14,5	434	7,41	14
12051G71100M10	10X1	14,7	391	18,1	7
12051G71100M15	10X1,5	15,8	467	12,1	9
12051G71100M25	10X2,5	17,5	611	7,41	12
12051G71120M10	12X1	15,7	440	18,1	7
12051G71120M15	12X1,5	16,7	526	12,1	9
12051G71120M25	12X2,5	18,6	697	7,41	11
12051G71140M10	14X1	16,4	482	18,1	6
12051G71140M15	14X1,5	17,6	593	12,1	8
12051G71140M25	14X2,5	19,5	778	7,41	11
12051G71160M10	16X1	17,3	537	18,1	6
12051G71160M15	16X1,5	18,5	659	12,1	8
12051G71160M25	16X2,5	20,5	880	7,41	10
12051G71190M10	19X1	18,1	608	18,1	6
12051G71190M15	19X1,5	19,4	738	12,1	7
12051G71190M25	19X2,5	21,7	1004	7,41	10
12051G71240M10	24X1	20,7	799	18,1	5
12051G71240M15	24X1,5	22,5	977	12,1	7
12051G71240M25	24X2,5	25	1308	7,41	9
12051G71270M10	27X1	21,6	866	18,1	5
12051G71270M15	27X1,5	23,2	1051	12,1	7
12051G71270M25	27X2,5	25,9	1418	7,41	9
12051G71300M10	30X1	22,3	923	18,1	5
12051G71300M15	30X1,5	24,1	1148	12,1	6
12051G71300M25	30X2,5	26,9	1548	7,41	8
12051G71370M10	37X1	24,1	1097	18,1	5
12051G71370M15	37X1,5	25,9	1346	12,1	6
12051G71370M25	37X2,5	28,9	1831	7,41	8

NOTE(S)

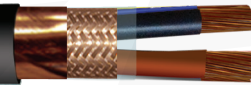
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 1000 A EMC

ARMoured / EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A EMC



APPLICATIONS:

POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	GAAL THERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 52 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
ARMOUR:	PLAIN ANNEALED COPPER WIRES BRAID ACC. TO IEC 60092-350.
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF1000 A EMC, CROSS NOMINAL SECTION SQMM, 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE, ROHS, PROGRESSIVE METER MARKING.

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:

	FLAME AND FIRE RETARDANT ACC. TO: EN IEC 60332-1-2, EN IEC 60332-3-22
	HALOGEN FREE ACC. TO: EN IEC 60754-1/2
	SMOKE EMISSION PROPERTIES ACC. TO: EN IEC 61034-1/2
	UV RESISTANCE ACC. TO: UL 1581
	OZONE RESISTANCE ACC. TO: IEC 60092-360

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES
 ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES
 ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES
 ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST

GAALSHIP HF 1000 A EMC

ARMoured / EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A EMC

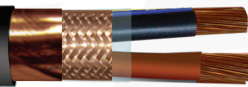
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12091G73030M15	3X1,5	10,4	225	12,1	16
12091G73030M25	3X2,5	11,4	273	7,41	21
12091G73030M40	3X4	12,6	350	4,61	28
12091G73030M60	3X6	13,9	455	3,08	36
12091G73030M61	3X10	16,5	700	1,83	50
12091G73030M62	3X16	18,9	963	1,21	67
12091G73030M63	3X25	22,1	1345	0,78	89
12091G73030M64	3X35	24,7	1732	0,554	110
12091G73030M65	3X50	28,6	2305	0,386	137
12091G73030M66	3X70	32,9	3096	0,272	169
12091G73030M67	3X95	37	4134	0,206	205
12091G73030M68	3X120	41,4	5110	0,161	237
12091G73030M69	3X150	45,5	6272	0,129	272
12091G73030M70	3X185	50,8	7604	0,106	311
12091G73030M71	3X240	56,8	9477	0,0801	365
12091G73030M72	3X300	63,3	11650	0,0641	690
12091G73037M62	3X16+3G6	22,1	1145	1,21	67
12091G73037M63	3X25+3G6	23	1523	0,78	89
12091G73037M64	3X35+3G6	24,2	1900	0,554	110
12091G73037M65	3X50+3G10	28,8	2583	0,386	137
12091G73037M66	3X70+3G16	33	3530	0,272	169
12091G73037M67	3X95+3G16	36,1	4551	0,206	205
12091G73037M68	3X120+3G25	41,3	5803	0,161	237
12091G73037M69	3X150+3G25	46,4	6923	0,129	272
12091G73037M70	3X185+3G35	49,6	8546	0,106	311
12091G73037M71	3X240+3G50	57,7	10893	0,0801	365
12091G73037M72	3X300+3G50	63,3	13056	0,0641	421
12091G73040M15	4X1,5	11,2	263	12,1	16
12091G73040M25	4X2,5	12,3	329	7,41	21
12091G73040M40	4X4	13,7	426	4,61	28
12091G73040M60	4X6	15,5	611	3,08	36
12091G73040M61	4X10	18	846	1,83	50
12091G73040M62	4X16	20,7	1155	1,21	67
12091G73040M63	4X25	24,3	1643	0,78	89
12091G73040M64	4X35	27,1	2131	0,554	110
12091G73040M65	4X50	31,6	2976	0,386	137
12091G73040M66	4X70	36,6	4111	0,272	169
12091G73040M67	4X95	40,9	5290	0,206	205
12091G73040M68	4X120	45,8	6560	0,161	237
12091G73040M69	4X150	50,4	8071	0,129	272
12091G73040M70	4X185	56,2	9807	0,106	311
12091G73040M71	4X240	63	12374	0,0801	365
12091G73050M10	5X1	11,4	261	18,1	13
12091G73050M15	5X1,5	12,2	312	12,1	16

GAALSHIP HF 1000 A EMC

ARMoured / EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A EMC



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
12091G73050M25	5X2,5	13,5	399	7,41	21
12091G73050M40	5X4	15,3	578	4,61	28
12091G73050M60	5X6	16,9	716	3,08	36
12091G73050M61	5X10	19,6	1006	1,83	50
12091G73050M62	5X16	22,6	1413	1,21	67
12091G73050M63	5X25	26,8	2018	0,78	89
12091G73050M64	5X35	30,1	2634	0,554	110
12091G73050M65	5X50	35	3638	0,386	137
12091G73050M66	5X70	40,6	5053	0,272	169
12091G73050M67	5X95	45,3	6522	0,206	172
12091G73070M10	7X1	12	306	18,1	8
12091G73070M15	7X1,5	12,8	364	12,1	10
12091G73070M25	7X2,5	14,6	530	7,41	14
12091G73100M10	10X1	14,8	498	18,1	7
12091G731050M15	10X1,5	15,8	572	12,1	9
12091G73100M25	10X2,5	17,6	735	7,41	12
12091G73120M10	12X1	15,8	545	18,1	7
12091G73120M15	12X1,5	16,8	641	12,1	9
12091G73120M25	12X2,5	18,7	833	7,41	11
12091G73140M10	14X1	16,4	599	18,1	7
12091G73140M15	14X1,5	17,6	724	12,1	9
12091G73140M25	14X2,5	19,5	917	7,41	11
12091G731650M10	16X1	17,3	662	18,1	6
12091G73160M15	16X1,5	18,6	798	12,1	8
12091G73160M25	16X2,5	20,6	1039	7,41	10
12091G73190M10	19X1	18,1	738	18,1	6
12091G73190M15	19X1,5	19,5	877	12,1	8
12091G73190M25	19X2,5	21,8	1170	7,41	10
12091G732450M10	24X1	20,8	959	18,1	6
12091G73240M15	24X1,5	22,6	1145	12,1	7
12091G73240M25	24X2,5	25	1499	7,41	10
12091G73270M10	27X1	21,7	1030	18,1	5
12091G73270M15	27X1,5	23,3	1227	12,1	7
12091G73270M25	27X2,5	26	1613	7,41	9
12091G73300M10	30X1	22,3	1091	18,1	5
12091G73300M15	30X1,5	24,1	1331	12,1	6
12091G73300M25	30X2,5	26,9	1760	7,41	8
12091G73370M10	37X1	24,1	1280	18,1	5
12091G73370M15	37X1,5	26	1545	12,1	6
12091G73370M25	37X2,5	29	2057	7,41	8

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OS

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS



APPLICATIONS:

INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR: PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295

INSULATION: GAAL THERM® 595

STRANDING: CORE LAID-UP TOGETHER IN PAIRS/TRIPLES

CORES COLOR: PAIR: BLACK- LIGHT BLUE
 TRIPLE: BLACK- LIGHT BLUE - BROWN

OVERALL SCREEN: ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE

OUTER SHEATH: HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376

MARKING: ELETTROTEK KABEL® GAALSHIP® HF 250 OS, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE: U₀/U 150/250 V

TEMPERATURE RANGE: -40°C UP TO +90°C

INSTALLATION TEMP.: -20°C

SHORT CIRCUIT TEMPERATURE: +250°C

MIN. BENDING RADIUS: 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 IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)

COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)

ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228

GAALSHIP HF 250 OS

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11040C5X012M05	1X2X0,5	7,4	72	40,4
11040C5X012M07	1X2X0,75	7,8	86	26
11040C5X012M10	1X2X1	8,2	95	19,2
11040C5X012M15	1X2X1,5	9,1	120	12,8
11040C5X012M25	1X2X2,5	9,9	150	7,86
11040C5X022M05	2X2X0,5	9,8	116	40,4
11040C5X022M07	2X2X0,75	10,5	138	26
11040C5X022M10	2X2X1	11,2	154	19,2
11040C5X022M15	2X2X1,5	12,9	208	12,8
11040C5X022M25	2X2X2,5	14,4	276	7,86
11040C5X032M05	3X2X0,5	10,4	130	40,4
11040C5X032M07	3X2X0,75	11,2	153	26
11040C5X032M10	3X2X1	12	179	19,2
11040C5X032M15	3X2X1,5	13,7	236	12,8
11040C5X032M25	3X2X2,5	15,4	321	7,86
11040C5X042M05	4X2X0,5	11,6	166	40,4
11040C5X042M07	4X2X0,75	12,5	200	26
11040C5X042M10	4X2X1	13,3	232	19,2
11040C5X042M15	4X2X1,5	15,4	310	12,8
11040C5X042M25	4X2X2,5	17,2	422	7,86
11040C5X052M05	5X2X0,5	12,4	194	40,4
11040C5X052M07	5X2X0,75	13,4	235	26
11040C5X052M10	5X2X1	14,4	279	19,2
11040C5X052M15	5X2X1,5	16,7	376	12,8
11040C5X052M25	5X2X2,5	18,7	514	7,86
11040C5X062M05	6X2X0,5	13,6	233	40,4
11040C5X062M07	6X2X0,75	14,7	285	26
11040C5X062M10	6X2X1	15,8	337	19,2
11040C5X062M15	6X2X1,5	18,3	449	12,8
11040C5X062M25	6X2X2,5	20,5	618	7,86
11040C5X072M05	7X2X0,5	13,6	238	40,4
11040C5X072M07	7X2X0,75	14,7	292	26
11040C5X072M10	7X2X1	15,8	346	19,2
11040C5X072M15	7X2X1,5	18,3	471	12,8
11040C5X072M25	7X2X2,5	20,5	654	7,86
11040C5X082M05	8X2X0,5	15,9	319	40,4
11040C5X082M07	8X2X0,75	17,2	392	26
11040C5X082M10	8X2X1	18,6	472	19,2
11040C5X082M15	8X2X1,5	21,5	620	12,8
11040C5X082M25	8X2X2,5	24,2	833	7,86
11040C5X102M05	10X2X0,5	16,7	366	40,4
11040C5X102M07	10X2X0,75	18,1	446	26
11040C5X102M10	10X2X1	19,5	525	19,2
11040C5X102M15	10X2X1,5	22,6	719	12,8
11040C5X102M25	10X2X2,5	25,4	990	7,86

GAALSHIP HF 250 OS

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11040C5X122M05	12X2X0,5	18,4	433	40,4
11040C5X122M07	12X2X0,75	19,9	527	26
11040C5X122M10	12X2X1	21,5	626	19,2
11040C5X122M15	12X2X1,5	24,9	850	12,8
11040C5X122M25	12X2X2,5	28	1172	7,86
11040C5X142M05	14X2X0,5	19,1	470	40,4
11040C5X142M07	14X2X0,75	20,6	576	26
11040C5X142M10	14X2X1	22,3	689	19,2
11040C5X142M15	14X2X1,5	26	941	12,8
11040C5X142M25	14X2X2,5	29,1	1301	7,86
11040C5X152M05	15X2X0,5	20,2	529	40,4
11040C5X152M07	15X2X0,75	21,9	647	26
11040C5X152M10	15X2X1	23,6	775	19,2
11040C5X152M15	15X2X1,5	27,5	1049	12,8
11040C5X152M25	15X2X2,5	31	1455	7,86
11040C5X162M05	16X2X0,5	20,2	533	40,4
11040C5X162M07	16X2X0,75	21,9	654	26
11040C5X162M10	16X2X1	23,6	784	19,2
11040C5X162M15	16X2X1,5	27,5	1072	12,8
11040C5X162M25	16X2X2,5	31	1491	7,86
11040C5X192M05	19X2X0,5	21,6	618	40,4
11040C5X192M07	19X2X0,75	23,5	765	26
11040C5X192M10	19X2X1	25,3	909	19,2
11040C5X192M15	19X2X1,5	29,5	1250	12,8
11040C5X192M25	19X2X2,5	33,1	1740	7,86
11040C5X242M05	24X2X0,5	24,9	857	40,4
11040C5X242M07	24X2X0,75	27	1044	26
11040C5X242M10	24X2X1	29,1	1227	19,2
11040C5X242M15	24X2X1,5	34,1	1669	12,8
11040C5X242M25	24X2X2,5	38,4	2293	7,86
11040C5X272M05	27X2X0,5	25,8	905	40,4
11040C5X272M07	27X2X0,75	28	1109	26
11040C5X272M10	27X2X1	30,3	1320	19,2
11040C5X272M15	27X2X1,5	35,4	1814	12,8
11040C5X272M25	27X2X2,5	39,9	2513	7,86
11040C5X302M05	30X2X0,5	26,7	968	40,4
11040C5X302M07	30X2X0,75	29,1	1197	26
11040C5X302M10	30X2X1	31,4	1429	19,2
11040C5X302M15	30X2X1,5	36,8	1968	12,8
11040C5X302M25	30X2X2,5	41,5	2745	7,86
11040C5X372M05	37X2X0,5	29,4	1180	40,4
11040C5X372M07	37X2X0,75	32	1460	26
11040C5X372M10	37X2X1	34,6	1749	19,2
11040C5X372M15	37X2X1,5	40,4	2406	12,8
11040C5X372M25	37X2X2,5	45,6	3368	7,86

GAALSHIP HF 250 OS

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11040C5X013M05	1X3X0,5	7,7	84	40,4
11040C5X013M07	1X3X0,75	8,2	97	26
11040C5X013M10	1X3X1	8,6	110	19,2
11040C5X013M15	1X3X1,5	9,6	139	12,8
11040C5X013M25	1X3X2,5	10,4	179	7,86
11040C5X023M05	2X3X0,5	10,7	144	40,4
11040C5X023M07	2X3X0,75	11,4	167	26
11040C5X023M10	2X3X1	12,2	198	19,2
11040C5X023M15	2X3X1,5	14,1	265	12,8
11040C5X023M25	2X3X2,5	15,7	354	7,86
11040C5X033M05	3X3X0,5	11,3	162	40,4
11040C5X033M07	3X3X0,75	12,2	198	26
11040C5X033M10	3X3X1	13,1	234	19,2
11040C5X033M15	3X3X1,5	15,1	317	12,8
11040C5X033M25	3X3X2,5	16,8	433	7,86
11040C5X043M05	4X3X0,5	12,7	212	40,4
11040C5X043M07	4X3X0,75	13,7	260	26
11040C5X043M10	4X3X1	14,6	304	19,2
11040C5X043M15	4X3X1,5	16,8	413	12,8
11040C5X043M25	4X3X2,5	18,8	572	7,86
11040C5X053M05	5X3X0,5	13,6	251	40,4
11040C5X053M07	5X3X0,75	14,7	309	26
11040C5X053M10	5X3X1	15,8	369	19,2
11040C5X053M15	5X3X1,5	18,3	500	12,8
11040C5X053M25	5X3X2,5	20,5	700	7,86
11040C5X063M05	6X3X0,5	14,9	303	40,4
11040C5X063M07	6X3X0,75	16,1	370	26
11040C5X063M10	6X3X1	17,3	442	19,2
11040C5X063M15	6X3X1,5	20,1	611	12,8
11040C5X063M25	6X3X2,5	22,6	851	7,86
11040C5X073M05	7X3X0,5	14,9	313	40,4
11040C5X073M07	7X3X0,75	16,1	389	26
11040C5X073M10	7X3X1	17,3	465	19,2
11040C5X073M15	7X3X1,5	20,1	646	12,8
11040C5X073M25	7X3X2,5	22,6	908	7,86
11040C5X083M05	8X3X0,5	17,5	420	40,4
11040C5X083M07	8X3X0,75	19	522	26
11040C5X083M10	8X3X1	20,4	611	19,2
11040C5X083M15	8X3X1,5	23,7	822	12,8
11040C5X083M25	8X3X2,5	26,6	1127	7,86
11040C5X103M05	10X3X0,5	18,3	476	40,4
11040C5X103M07	10X3X0,75	19,9	590	26
11040C5X103M10	10X3X1	21,5	706	19,2
11040C5X103M15	10X3X1,5	25	971	12,8

GAALSHIP HF 250 OS

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11040C5X103M25	10X3X2,5	28	1354	7,86
11040C5X123M05	12X3X0,5	20,2	567	40,4
11040C5X123M07	12X3X0,75	21,9	699	26
11040C5X123M10	12X3X1	23,6	837	19,2
11040C5X123M15	12X3X1,5	27,4	1150	12,8
11040C5X123M25	12X3X2,5	30,8	1610	7,86
11040C5X143M05	14X3X0,5	21	622	40,4
11040C5X143M07	14X3X0,75	22,8	773	26
11040C5X143M10	14X3X1	24,6	930	19,2
11040C5X143M15	14X3X1,5	28,6	1285	12,8
11040C5X143M25	14X3X2,5	32,2	1811	7,86
11040C5X153M05	15X3X0,5	22,2	697	40,4
11040C5X153M07	15X3X0,75	24,1	861	26
11040C5X153M10	15X3X1	26,1	1036	19,2
11040C5X153M15	15X3X1,5	30,3	1426	12,8
11040C5X153M25	15X3X2,5	34,2	2017	7,86
11040C5X163M05	16X3X0,5	22,2	706	40,4
11040C5X163M07	16X3X0,75	24,1	879	26
11040C5X163M10	16X3X1	26,1	1059	19,2
11040C5X163M15	16X3X1,5	30,3	1461	12,8
11040C5X163M25	16X3X2,5	34,2	2074	7,86
11040C5X193M05	19X3X0,5	23,8	822	40,4
11040C5X193M07	19X3X0,75	25,9	1029	26
11040C5X193M10	19X3X1	28	1238	19,2
11040C5X193M15	19X3X1,5	32,6	1719	12,8
11040C5X193M25	19X3X2,5	36,7	2434	7,86
11040C5X243M05	24X3X0,5	27,4	1114	40,4
11040C5X243M07	24X3X0,75	29,8	1378	26
11040C5X243M10	24X3X1	32,2	1643	19,2
11040C5X243M15	24X3X1,5	37,7	2262	12,8
11040C5X243M25	24X3X2,5	42,5	3168	7,86
11040C5X014M05	1X4X0,5	8,3	98	40,4
11040C5X014M07	1X4X0,75	8,8	114	26
11040C5X014M10	1X4X1	9,2	130	19,2
11040C5X014M15	1X4X1,5	10,3	166	12,8
11040C5X014M25	1X4X2,5	11,3	219	7,86

NOTE(S)

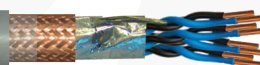
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OSA

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA



APPLICATIONS:

INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352






TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295
INSULATION:	GAAL THERM® 595
STRANDING:	CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
CORES COLOR:	PAIR: BLACK- LIGHT BLUE TRIPLE: BLACK- LIGHT BLUE - BROWN
OVERALL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
ARMOUR:	PLAIN 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, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:

	FLAME AND FIRE RETARDANT ACC. TO: EN IEC 60332-1-2, EN IEC 60332-3-22
	HALOGEN FREE ACC. TO: EN IEC 60754-1/2
	SMOKE EMISSION PROPERTIES ACC. TO: EN IEC 61034-1/2
	UV RESISTANCE ACC. TO: UL 1581
	OZONE RESISTANCE ACC. TO: IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	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 IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST

GAALSHIP HF 250 OSA

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA

Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11080C5X012M05	1X2X0,5	8,3	105	40,4
11080C5X012M07	1X2X0,75	8,7	121	26
11080C5X012M10	1X2X1	9,1	134	19,2
11080C5X012M15	1X2X1,5	10	163	12,8
11080C5X012M25	1X2X2,5	10,8	197	7,86
11080C5X022M05	2X2X0,5	10,7	165	40,4
11080C5X022M07	2X2X0,75	11,4	189	26
11080C5X022M10	2X2X1	12,2	211	19,2
11080C5X022M15	2X2X1,5	14,3	307	12,8
11080C5X022M25	2X2X2,5	15,7	386	7,86
11080C5X032M05	3X2X0,5	11,3	181	40,4
11080C5X032M07	3X2X0,75	12,1	210	26
11080C5X032M10	3X2X1	12,9	243	19,2
11080C5X032M15	3X2X1,5	15,2	346	12,8
11080C5X032M25	3X2X2,5	16,7	441	7,86
11080C5X042M05	4X2X0,5	12,6	224	40,4
11080C5X042M07	4X2X0,75	13,4	262	26
11080C5X042M10	4X2X1	14,8	337	19,2
11080C5X042M15	4X2X1,5	16,7	429	12,8
11080C5X042M25	4X2X2,5	18,5	555	7,86
11080C5X052M05	5X2X0,5	13,4	257	40,4
11080C5X052M07	5X2X0,75	14,8	341	26
11080C5X052M10	5X2X1	15,8	389	19,2
11080C5X052M15	5X2X1,5	18,1	511	12,8
11080C5X052M25	5X2X2,5	20,1	656	7,86
11080C5X062M05	6X2X0,5	15	340	40,4
11080C5X062M07	6X2X0,75	16,1	396	26
11080C5X062M10	6X2X1	17,2	458	19,2
11080C5X062M15	6X2X1,5	19,6	587	12,8
11080C5X062M25	6X2X2,5	21,9	775	7,86
11080C5X072M05	7X2X0,5	15	344	40,4
11080C5X072M07	7X2X0,75	16,1	410	26
11080C5X072M10	7X2X1	17,2	467	19,2
11080C5X072M15	7X2X1,5	19,6	612	12,8
11080C5X072M25	7X2X2,5	21,9	812	7,86
11080C5X082M05	8X2X0,5	17,3	440	40,4
11080C5X082M07	8X2X0,75	18,7	528	26
11080C5X082M10	8X2X1	20	615	19,2
11080C5X082M15	8X2X1,5	22,9	783	12,8
11080C5X082M25	8X2X2,5	25,5	1019	7,86
11080C5X102M05	10X2X0,5	18,1	498	40,4
11080C5X102M07	10X2X0,75	19,5	584	26
11080C5X102M10	10X2X1	20,8	680	19,2
11080C5X102M15	10X2X1,5	24	900	12,8
11080C5X102M25	10X2X2,5	26,8	1197	7,86

GAALSHIP HF 250 OSA

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA

Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11080C5X122M05	12X2X0,5	19,8	571	40,4
11080C5X122M07	12X2X0,75	21,4	690	26
11080C5X122M10	12X2X1	22,8	789	19,2
11080C5X122M15	12X2X1,5	26,3	1038	12,8
11080C5X122M25	12X2X2,5	29,4	1391	7,86
11080C5X142M05	14X2X0,5	20,4	625	40,4
11080C5X142M07	14X2X0,75	22	738	26
11080C5X142M10	14X2X1	23,7	868	19,2
11080C5X142M15	14X2X1,5	27,3	1135	12,8
11080C5X142M25	14X2X2,5	30,6	1543	7,86
11080C5X152M05	15X2X0,5	21,6	689	40,4
11080C5X152M07	15X2X0,75	23,2	826	26
11080C5X152M10	15X2X1	25	960	19,2
11080C5X152M15	15X2X1,5	28,9	1265	12,8
11080C5X152M25	15X2X2,5	32,3	1696	7,86
11080C5X162M05	16X2X0,5	21,6	694	40,4
11080C5X162M07	16X2X0,75	23,2	833	26
11080C5X162M10	16X2X1	25	977	19,2
11080C5X162M15	16X2X1,5	28,9	1282	12,8
11080C5X162M25	16X2X2,5	32,3	1731	7,86
11080C5X192M05	19X2X0,5	23	783	40,4
11080C5X192M07	19X2X0,75	24,9	951	26
11080C5X192M10	19X2X1	26,7	1102	19,2
11080C5X192M15	19X2X1,5	30,9	1485	12,8
11080C5X192M25	19X2X2,5	34,6	2015	7,86
11080C5X242M05	24X2X0,5	26,2	1044	40,4
11080C5X242M07	24X2X0,75	28,4	1254	26
11080C5X242M10	24X2X1	30,6	1455	19,2
11080C5X242M15	24X2X1,5	35,5	1939	12,8
11080C5X242M25	24X2X2,5	40,2	2714	7,86
11080C5X272M05	27X2X0,5	27,2	1114	40,4
11080C5X272M07	27X2X0,75	29,5	1332	26
11080C5X272M10	27X2X1	31,7	1564	19,2
11080C5X272M15	27X2X1,5	37,2	2170	12,8
11080C5X272M25	27X2X2,5	41,7	2938	7,86
11080C5X302M05	30X2X0,5	28,2	1184	40,4
11080C5X302M07	30X2X0,75	30,5	1436	26
11080C5X302M10	30X2X1	32,9	1678	19,2
11080C5X302M15	30X2X1,5	38,5	2334	12,8
11080C5X302M25	30X2X2,5	43,3	3170	7,86
11080C5X372M05	37X2X0,5	30,8	1414	40,4
11080C5X372M07	37X2X0,75	33,4	1711	26
11080C5X372M10	37X2X1	36	2021	19,2
11080C5X372M15	37X2X1,5	42,3	2837	12,8
11080C5X372M25	37X2X2,5	47,4	3849	7,86

GAALSHIP HF 250 OSA

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx.kg/km	Max conductor resistance @20°C (Ω/Km)
11080C5X013M05	1X3X0,5	8,6	118	40,4
11080C5X013M07	1X3X0,75	9	135	26
11080C5X013M10	1X3X1	9,5	149	19,2
11080C5X013M15	1X3X1,5	10,4	184	12,8
11080C5X013M25	1X3X2,5	11,3	227	7,86
11080C5X023M05	2X3X0,5	11,6	199	40,4
11080C5X023M07	2X3X0,75	12,4	228	26
11080C5X023M10	2X3X1	13,2	263	19,2
11080C5X023M15	2X3X1,5	15,5	372	12,8
11080C5X023M25	2X3X2,5	17,1	475	7,86
11080C5X033M05	3X3X0,5	12,3	220	40,4
11080C5X033M07	3X3X0,75	13,2	262	26
11080C5X033M10	3X3X1	14,5	339	19,2
11080C5X033M15	3X3X1,5	16,5	434	12,8
11080C5X033M25	3X3X2,5	18,2	565	7,86
11080C5X043M05	4X3X0,5	13,6	278	40,4
11080C5X043M07	4X3X0,75	15	366	26
11080C5X043M10	4X3X1	16	417	19,2
11080C5X043M15	4X3X1,5	18,3	549	12,8
11080C5X043M25	4X3X2,5	20,3	719	7,86
11080C5X053M05	5X3X0,5	15,1	360	40,4
11080C5X053M07	5X3X0,75	16,1	420	26
11080C5X053M10	5X3X1	17,2	490	19,2
11080C5X053M15	5X3X1,5	19,7	638	12,8
11080C5X053M25	5X3X2,5	21,9	857	7,86
11080C5X063M05	6X3X0,5	16,3	418	40,4
11080C5X063M07	6X3X0,75	17,6	504	26
11080C5X063M10	6X3X1	18,8	579	19,2
11080C5X063M15	6X3X1,5	21,5	767	12,8
11080C5X063M25	6X3X2,5	24	1034	7,86
11080C5X073M05	7X3X0,5	16,3	428	40,4
11080C5X073M07	7X3X0,75	17,6	523	26
11080C5X073M10	7X3X1	18,8	606	19,2
11080C5X073M15	7X3X1,5	21,5	806	12,8
11080C5X073M25	7X3X2,5	24	1091	7,86
11080C5X083M05	8X3X0,5	18,9	553	40,4
11080C5X083M07	8X3X0,75	20,3	668	26
11080C5X083M10	8X3X1	21,8	768	19,2
11080C5X083M15	8X3X1,5	25,1	1004	12,8
11080C5X083M25	8X3X2,5	28	1340	7,86
11080C5X103M05	10X3X0,5	19,7	616	40,4
11080C5X103M07	10X3X0,75	21,3	746	26
11080C5X103M10	10X3X1	22,8	869	19,2
11080C5X103M15	10X3X1,5	26,3	1161	12,8
11080C5X103M25	10X3X2,5	29,5	1579	7,86

GAALSHIP HF 250 OSA

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx.kg/km	Max conductor resistance @20°C (Ω/Km)
11080C5X123M05	12X3X0,5	21,6	728	40,4
11080C5X123M07	12X3X0,75	23,3	867	26
11080C5X123M10	12X3X1	25	1024	19,2
11080C5X123M15	12X3X1,5	28,8	1361	12,8
11080C5X123M25	12X3X2,5	32,3	1859	7,86
11080C5X143M05	14X3X0,5	22,4	786	40,4
11080C5X143M07	14X3X0,75	24,1	957	26
11080C5X143M10	14X3X1	26	1118	19,2
11080C5X143M15	14X3X1,5	30	1504	12,8
11080C5X143M25	14X3X2,5	33,6	2075	7,86
11080C5X153M05	15X3X0,5	23,6	876	40,4
11080C5X153M07	15X3X0,75	25,5	1047	26
11080C5X153M10	15X3X1	27,4	1242	19,2
11080C5X153M15	15X3X1,5	31,8	1670	12,8
11080C5X153M25	15X3X2,5	35,6	2288	7,86
11080C5X163M05	16X3X0,5	23,6	887	40,4
11080C5X163M07	16X3X0,75	25,5	1067	26
11080C5X163M10	16X3X1	27,4	1261	19,2
11080C5X163M15	16X3X1,5	31,8	1705	12,8
11080C5X163M25	16X3X2,5	35,6	2345	7,86
11080C5X193M05	19X3X0,5	25,2	1004	40,4
11080C5X193M07	19X3X0,75	27,3	1235	26
11080C5X193M10	19X3X1	29,3	1451	19,2
11080C5X193M15	19X3X1,5	33,9	1968	12,8
11080C5X193M25	19X3X2,5	38,5	2805	7,86
11080C5X243M05	24X3X0,5	28,8	1331	40,4
11080C5X243M07	24X3X0,75	31,2	1613	26
11080C5X243M10	24X3X1	33,6	1886	19,2
11080C5X243M15	24X3X1,5	39,5	2664	12,8
11080C5X243M25	24X3X2,5	44,3	3596	7,86
11080C5X014M05	1X4X0,5	9,1	137	40,4
11080C5X014M07	1X4X0,75	9,6	154	26
11080C5X014M10	1X4X1	10,1	173	19,2
11080C5X014M15	1X4X1,5	11,2	215	12,8
11080C5X014M25	1X4X2,5	12,1	273	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISA

INDIVIDUAL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISA



APPLICATIONS:

INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295
INSULATION:	GAAL THERM® 595
STRANDING:	CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
CORES COLOR:	PAIR: BLACK- LIGHT BLUE TRIPLE: BLACK- LIGHT BLUE - BROWN
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
ARMOUR:	PLAIN 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 ISA, CROSS NOMINAL SECTION mm ² , 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.






TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	4 × OUTER DIAMETER

TYPE APPROVALS/CERTIFICATES:

- RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
- BV (BUREAU VERITAS)
- LR (LLOYD'S REGISTER)
- DNV (DET NORSKE VERITAS)
- ABS (AMERICAN BUREAU OF SHIPPING)
- OTHER APPROVALS ON REQUEST

RESISTANCE:

	FLAME AND FIRE RETARDANT ACC. TO: EN IEC 60332-1-2, EN IEC 60332-3-22
	HALOGEN FREE ACC. TO: EN IEC 60754-1/2
	SMOKE EMISSION PROPERTIES ACC. TO: EN IEC 61034-1/2
	UV RESISTANCE ACC. TO: UL1581
	OZONE RESISTANCE ACC. TO: IEC 60092-360

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 IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
- COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
- ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228
- TINNED COPPER WIRES BRAID ARMOUR ON REQUEST

GAALSHIP HF 250 ISA

INDIVIDUAL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISA



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11110C5X022M05	2X2X0,5	11,4	182	40,4
11110C5X022M07	2X2X0,75	12,2	206	26
11110C5X022M10	2X2X1	13	238	19,2
11110C5X022M15	2X2X1,5	15,2	334	12,8
11110C5X022M25	2X2X2,5	16,7	412	7,86
11110C5X032M05	3X2X0,5	12,1	204	40,4
11110C5X032M07	3X2X0,75	13	239	26
11110C5X032M10	3X2X1	14,2	302	19,2
11110C5X032M15	3X2X1,5	16,1	372	12,8
11110C5X032M25	3X2X2,5	17,8	478	7,86
11110C5X042M05	4X2X0,5	13,4	258	40,4
11110C5X042M07	4X2X0,75	14,8	338	26
11110C5X042M10	4X2X1	15,7	374	19,2
11110C5X042M15	4X2X1,5	17,8	478	12,8
11110C5X042M25	4X2X2,5	19,7	599	7,86
11110C5X052M05	5X2X0,5	14,8	337	40,4
11110C5X052M07	5X2X0,75	15,9	384	26
11110C5X052M10	5X2X1	16,9	439	19,2
11110C5X052M15	5X2X1,5	19,3	556	12,8
11110C5X052M25	5X2X2,5	21,4	717	7,86
11110C5X062M05	6X2X0,5	16,1	389	40,4
11110C5X062M07	6X2X0,75	17,3	453	26
11110C5X062M10	6X2X1	18,4	520	19,2
11110C5X062M15	6X2X1,5	21,1	672	12,8
11110C5X062M25	6X2X2,5	23,5	848	7,86
11110C5X072M05	7X2X0,5	16,1	401	40,4
11110C5X072M07	7X2X0,75	17,3	467	26
11110C5X072M10	7X2X1	18,4	533	19,2
11110C5X072M15	7X2X1,5	21,1	692	12,8
11110C5X072M25	7X2X2,5	23,5	892	7,86
11110C5X082M05	8X2X0,5	18,7	527	40,4
11110C5X082M07	8X2X0,75	20,1	603	26
11110C5X082M10	8X2X1	21,5	697	19,2
11110C5X082M15	8X2X1,5	24,7	884	12,8
11110C5X082M25	8X2X2,5	27,4	1125	7,86
11110C5X102M05	10X2X0,5	19,5	580	40,4
11110C5X102M07	10X2X0,75	21,1	686	26
11110C5X102M10	10X2X1	22,5	781	19,2
11110C5X102M15	10X2X1,5	25,9	1006	12,8
11110C5X102M25	10X2X2,5	28,8	1303	7,86
11110C5X122M05	12X2X0,5	21,4	689	40,4
11110C5X122M07	12X2X0,75	23	794	26
11110C5X122M10	12X2X1	24,7	914	19,2
11110C5X122M15	12X2X1,5	28,3	1182	12,8

GAALSHIP HF 250 ISA

INDIVIDUAL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISA



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11110C5X122M25	12X2X2,5	31,6	1532	7,86
11110C5X142M05	14X2X0,5	22,2	742	40,4
11110C5X142M07	14X2X0,75	23,9	874	26
11110C5X142M10	14X2X1	25,6	990	19,2
11110C5X142M15	14X2X1,5	29,5	1289	12,8
11110C5X142M25	14X2X2,5	32,9	1691	7,86
11110C5X152M05	15X2X0,5	23,5	816	40,4
11110C5X152M07	15X2X0,75	25,2	959	26
11110C5X152M10	15X2X1	27,1	1116	19,2
11110C5X152M15	15X2X1,5	31,2	1438	12,8
11110C5X152M25	15X2X2,5	34,8	1876	7,86
11110C5X162M05	16X2X0,5	23,5	832	40,4
11110C5X162M07	16X2X0,75	25,2	975	26
11110C5X162M10	16X2X1	27,1	1120	19,2
11110C5X162M15	16X2X1,5	31,2	1460	12,8
11110C5X162M25	16X2X2,5	34,8	1919	7,86
11110C5X192M05	19X2X0,5	25	960	40,4
11110C5X192M07	19X2X0,75	27	1131	26
11110C5X192M10	19X2X1	28,9	1290	19,2
11110C5X192M15	19X2X1,5	33,3	1671	12,8
11110C5X192M25	19X2X2,5	37,6	2295	7,86
11110C5X242M05	24X2X0,5	28,6	1262	40,4
11110C5X242M07	24X2X0,75	30,9	1478	26
11110C5X242M10	24X2X1	33,2	1684	19,2
11110C5X242M15	24X2X1,5	38,8	2308	12,8
11110C5X242M25	24X2X2,5	43,3	2963	7,86
11110C5X272M05	27X2X0,5	29,7	1340	40,4
11110C5X272M07	27X2X0,75	32,1	1579	26
11110C5X272M10	27X2X1	34,5	1831	19,2
11110C5X272M15	27X2X1,5	40,3	2485	12,8
11110C5X272M25	27X2X2,5	45,1	3269	7,86
11110C5X302M05	30X2X0,5	30,8	1447	40,4
11110C5X302M07	30X2X0,75	33,2	1703	26
11110C5X302M10	30X2X1	35,7	1967	19,2
11110C5X302M15	30X2X1,5	41,7	2675	12,8
11110C5X302M25	30X2X2,5	46,7	3531	7,86
11110C5X372M05	37X2X0,5	33,7	1731	40,4
11110C5X372M07	37X2X0,75	36,4	2047	26
11110C5X372M10	37X2X1	39,5	2483	19,2
11110C5X372M15	37X2X1,5	45,7	3240	12,8
11110C5X372M25	37X2X2,5	51,2	4256	7,86
11110C5X023M05	2X3X0,5	12,5	215	40,4
11110C5X023M07	2X3X0,75	13,5	249	26
11110C5X023M10	2X3X1	14,8	322	19,2

GAALSHIP HF 250 ISA

INDIVIDUAL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISA



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11110C5X023M15	2X3X1,5	16,8	404	12,8
11110C5X023M25	2X3X2,5	18,5	519	7,86
11110C5X033M05	3X3X0,5	13,4	250	40,4
11110C5X033M07	3X3X0,75	14,7	328	26
11110C5X033M10	3X3X1	15,7	370	19,2
11110C5X033M15	3X3X1,5	17,9	476	12,8
11110C5X033M25	3X3X2,5	19,8	607	7,86
11110C5X043M05	4X3X0,5	15,3	353	40,4
11110C5X043M07	4X3X0,75	16,3	407	26
11110C5X043M10	4X3X1	17,4	465	19,2
11110C5X043M15	4X3X1,5	19,8	598	12,8
11110C5X043M25	4X3X2,5	22	778	7,86
11110C5X053M05	5X3X0,5	16,5	409	40,4
11110C5X053M07	5X3X0,75	17,7	486	26
11110C5X053M10	5X3X1	18,9	550	19,2
11110C5X053M15	5X3X1,5	21,5	718	12,8
11110C5X053M25	5X3X2,5	23,9	942	7,86
11110C5X063M05	6X3X0,5	17,9	487	40,4
11110C5X063M07	6X3X0,75	19,2	566	26
11110C5X063M10	6X3X1	20,5	655	19,2
11110C5X063M15	6X3X1,5	23,6	855	12,8
11110C5X063M25	6X3X2,5	26,2	1108	7,86
11110C5X073M05	7X3X0,5	17,9	503	40,4
11110C5X073M07	7X3X0,75	19,2	588	26
11110C5X073M10	7X3X1	20,5	686	19,2
11110C5X073M15	7X3X1,5	23,6	898	12,8
11110C5X073M25	7X3X2,5	26,2	1174	7,86
11110C5X083M05	8X3X0,5	20,8	643	40,4
11110C5X083M07	8X3X0,75	22,4	759	26
11110C5X083M10	8X3X1	24	873	19,2
11110C5X083M15	8X3X1,5	27,6	1119	12,8
11110C5X083M25	8X3X2,5	30,8	1458	7,86
11110C5X103M05	10X3X0,5	21,8	723	40,4
11110C5X103M07	10X3X0,75	23,5	862	26
11110C5X103M10	10X3X1	25,1	987	19,2
11110C5X103M15	10X3X1,5	28,9	1294	12,8
11110C5X103M25	10X3X2,5	32,3	1720	7,86
11110C5X123M05	12X3X0,5	23,9	855	40,4
11110C5X123M07	12X3X0,75	25,8	1004	26
11110C5X123M10	12X3X1	27,5	1163	19,2
11110C5X123M15	12X3X1,5	31,7	1522	12,8
11110C5X123M25	12X3X2,5	35,4	2026	7,86
11110C5X143M05	14X3X0,5	24,8	929	40,4
11110C5X143M07	14X3X0,75	26,7	1097	26

GAALSHIP HF 250 ISA

INDIVIDUAL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISA



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11110C5X143M10	14X3X1	28,7	1273	19,2
11110C5X143M15	14X3X1,5	33,1	1679	12,8
11110C5X143M25	14X3X2,5	37,4	2331	7,86
11110C5X153M05	15X3X0,5	26,2	1021	40,4
11110C5X153M07	15X3X0,75	28,3	1214	26
11110C5X153M10	15X3X1	30,3	1409	19,2
11110C5X153M15	15X3X1,5	35	1863	12,8
11110C5X153M25	15X3X2,5	39,6	2598	7,86
11110C5X163M05	16X3X0,5	26,2	1041	40,4
11110C5X163M07	16X3X0,75	28,3	1237	26
11110C5X163M10	16X3X1	30,3	1443	19,2
11110C5X163M15	16X3X1,5	35	1908	12,8
11110C5X163M25	16X3X2,5	39,6	2666	7,86
11110C5X193M05	19X3X0,5	28	1205	40,4
11110C5X193M07	19X3X0,75	30,2	1442	26
11110C5X193M10	19X3X1	32,5	1666	19,2
11110C5X193M15	19X3X1,5	37,9	2296	12,8
11110C5X193M25	19X3X2,5	42,4	3082	7,86
11110C5X243M05	24X3X0,5	32,1	1566	40,4
11110C5X243M07	24X3X0,75	34,7	1872	26
11110C5X243M10	24X3X1	37,8	2246	19,2
11110C5X243M15	24X3X1,5	43,6	2950	12,8
11110C5X243M25	24X3X2,5	48,8	3941	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP® HF 250 ISOS

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS



APPLICATIONS:

INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295
INSULATION:	GAALTherm® 595
STRANDING:	CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
CORES COLOR:	PAIR: BLACK- LIGHT BLUE TRIPLE: BLACK- LIGHT BLUE - BROWN
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
OVERALL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 250 ISA, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:

	FLAME AND FIRE RETARDANT ACC. TO: EN IEC 60332-1-2, EN IEC 60332-3-22
	HALOGEN FREE ACC. TO: EN IEC 60754-1/2
	SMOKE EMISSION PROPERTIES ACC. TO: EN IEC 61034-1/2
	UV RESISTANCE ACC. TO: UL 1581
	OZONE RESISTANCE ACC. TO: IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	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 IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228

GAALSHIP[®] HF 250 ISOS

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE


 ELETTROTEK KABEL[®] GAALSHIP[®] HF 250 ISOS


Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11120C5X022M05	2X2X0,5	10,6	139	40,4
11120C5X022M07	2X2X0,75	11,4	158	26
11120C5X022M10	2X2X1	12,2	183	19,2
11120C5X022M15	2X2X1,5	14	237	12,8
11120C5X022M25	2X2X2,5	15,5	303	7,86
11120C5X032M05	3X2X0,5	11,3	156	40,4
11120C5X032M07	3X2X0,75	12,1	183	26
11120C5X032M10	3X2X1	13	211	19,2
11120C5X032M15	3X2X1,5	14,8	271	12,8
11120C5X032M25	3X2X2,5	16,6	358	7,86
11120C5X042M05	4X2X0,5	12,6	205	40,4
11120C5X042M07	4X2X0,75	13,6	241	26
11120C5X042M10	4X2X1	14,5	274	19,2
11120C5X042M15	4X2X1,5	16,6	356	12,8
11120C5X042M25	4X2X2,5	18,5	472	7,86
11120C5X052M05	5X2X0,5	13,6	241	40,4
11120C5X052M07	5X2X0,75	14,6	283	26
11120C5X052M10	5X2X1	15,7	329	19,2
11120C5X052M15	5X2X1,5	18,1	430	12,8
11120C5X052M25	5X2X2,5	20,2	572	7,86
11120C5X062M05	6X2X0,5	14,9	288	40,4
11120C5X062M07	6X2X0,75	16	342	26
11120C5X062M10	6X2X1	17,2	396	19,2
11120C5X062M15	6X2X1,5	19,9	527	12,8
11120C5X062M25	6X2X2,5	22,2	692	7,86
11120C5X072M05	7X2X0,5	14,9	300	40,4
11120C5X072M07	7X2X0,75	16	356	26
11120C5X072M10	7X2X1	17,2	413	19,2
11120C5X072M15	7X2X1,5	19,9	548	12,8
11120C5X072M25	7X2X2,5	22,2	735	7,86
11120C5X082M05	8X2X0,5	17,5	405	40,4
11120C5X082M07	8X2X0,75	18,9	471	26
11120C5X082M10	8X2X1	20,3	550	19,2
11120C5X082M15	8X2X1,5	23,5	710	12,8
11120C5X082M25	8X2X2,5	26,2	928	7,86
11120C5X102M05	10X2X0,5	18,3	454	40,4
11120C5X102M07	10X2X0,75	19,8	542	26
11120C5X102M10	10X2X1	21,3	630	19,2
11120C5X102M15	10X2X1,5	24,6	830	12,8
11120C5X102M25	10X2X2,5	27,5	1106	7,86
11120C5X122M05	12X2X0,5	20,2	543	40,4
11120C5X122M07	12X2X0,75	21,8	641	26
11120C5X122M10	12X2X1	23,4	740	19,2
11120C5X122M15	12X2X1,5	27,1	980	12,8
11120C5X122M25	12X2X2,5	30,4	1311	7,86
11120C5X142M05	14X2X0,5	20,9	589	40,4

GAALSHIP[®] HF 250 ISOS

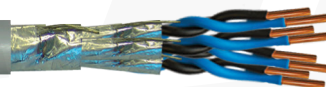
INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE


 ELETTROTEK KABEL[®] GAALSHIP[®] HF 250 ISOS


Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11120C5X142M07	14X2X0,75	22,7	706	26
11120C5X142M10	14X2X1	24,3	818	19,2
11120C5X142M15	14X2X1,5	28,2	1087	12,8
11120C5X142M25	14X2X2,5	31,7	1464	7,86
11120C5X152M05	15X2X0,5	22,2	664	40,4
11120C5X152M07	15X2X0,75	24	786	26
11120C5X152M10	15X2X1	25,9	919	19,2
11120C5X152M15	15X2X1,5	29,9	1214	12,8
11120C5X152M25	15X2X2,5	33,6	1623	7,86
11120C5X162M05	16X2X0,5	22,2	675	40,4
11120C5X162M07	16X2X0,75	24	800	26
11120C5X162M10	16X2X1	25,9	936	19,2
11120C5X162M15	16X2X1,5	29,9	1235	12,8
11120C5X162M25	16X2X2,5	33,6	1667	7,86
11120C5X192M05	19X2X0,5	23,8	784	40,4
11120C5X192M07	19X2X0,75	25,8	939	26
11120C5X192M10	19X2X1	27,7	1087	19,2
11120C5X192M15	19X2X1,5	32,1	1443	12,8
11120C5X192M25	19X2X2,5	36	1955	7,86
11120C5X242M05	24X2X0,5	27,4	1066	40,4
11120C5X242M07	24X2X0,75	29,7	1262	26
11120C5X242M10	24X2X1	32	1459	19,2
11120C5X242M15	24X2X1,5	37,1	1912	12,8
11120C5X242M25	24X2X2,5	41,7	2562	7,86
11120C5X272M05	27X2X0,5	28,4	1139	40,4
11120C5X272M07	27X2X0,75	30,8	1357	26
11120C5X272M10	27X2X1	33,2	1579	19,2
11120C5X272M15	27X2X1,5	38,6	2085	12,8
11120C5X272M25	27X2X2,5	43,3	2811	7,86
11120C5X302M05	30X2X0,5	29,5	1231	40,4
11120C5X302M07	30X2X0,75	32	1470	26
11120C5X302M10	30X2X1	34,5	1711	19,2
11120C5X302M15	30X2X1,5	40,1	2275	12,8
11120C5X302M25	30X2X2,5	45,1	3073	7,86
11120C5X372M05	37X2X0,5	32,4	1501	40,4
11120C5X372M07	37X2X0,75	35,1	1792	26
11120C5X372M10	37X2X1	37,9	2095	19,2
11120C5X372M15	37X2X1,5	44	2780	12,8
11120C5X372M25	37X2X2,5	49,5	3767	7,86
11120C5X023M05	2X3X0,5	11,8	168	40,4
11120C5X023M07	2X3X0,75	12,7	196	26
11120C5X023M10	2X3X1	13,5	226	19,2
11120C5X023M15	2X3X1,5	15,6	296	12,8
11120C5X023M25	2X3X2,5	17,3	394	7,86
11120C5X033M05	3X3X0,5	12,5	194	40,4

GAALSHIP[®] HF 250 ISOS

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE


 ELETTROTEK KABEL[®] GAALSHIP[®] HF 250 ISOS


Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11120C5X033M07	3X3X0,75	13,5	232	26
11120C5X033M10	3X3X1	14,5	270	19,2
11120C5X033M15	3X3X1,5	16,7	357	12,8
11120C5X033M25	3X3X2,5	18,5	475	7,86
11120C5X043M05	4X3X0,5	14	255	40,4
11120C5X043M07	4X3X0,75	15,1	304	26
11120C5X043M10	4X3X1	16,2	354	19,2
11120C5X043M15	4X3X1,5	18,6	468	12,8
11120C5X043M25	4X3X2,5	20,8	632	7,86
11120C5X053M05	5X3X0,5	15,2	304	40,4
11120C5X053M07	5X3X0,75	16,4	366	26
11120C5X053M10	5X3X1	17,6	427	19,2
11120C5X053M15	5X3X1,5	20,3	569	12,8
11120C5X053M25	5X3X2,5	22,7	770	7,86
11120C5X063M05	6X3X0,5	16,7	366	40,4
11120C5X063M07	6X3X0,75	18	440	26
11120C5X063M10	6X3X1	19,3	512	19,2
11120C5X063M15	6X3X1,5	22,3	688	12,8
11120C5X063M25	6X3X2,5	25	934	7,86
11120C5X073M05	7X3X0,5	16,7	383	40,4
11120C5X073M07	7X3X0,75	18	463	26
11120C5X073M10	7X3X1	19,3	542	19,2
11120C5X073M15	7X3X1,5	22,3	731	12,8
11120C5X073M25	7X3X2,5	25	999	7,86
11120C5X083M05	8X3X0,5	19,5	498	40,4
11120C5X083M07	8X3X0,75	21,2	608	26
11120C5X083M10	8X3X1	22,8	702	19,2
11120C5X083M15	8X3X1,5	26,3	923	12,8
11120C5X083M25	8X3X2,5	29,6	1242	7,86
11120C5X103M05	10X3X0,5	20,5	575	40,4
11120C5X103M07	10X3X0,75	22,3	695	26
11120C5X103M10	10X3X1	23,9	815	19,2
11120C5X103M15	10X3X1,5	27,7	1091	12,8
11120C5X103M25	10X3X2,5	31,1	1498	7,86
11120C5X123M05	12X3X0,5	22,6	686	40,4
11120C5X123M07	12X3X0,75	24,4	825	26
11120C5X123M10	12X3X1	26,3	968	19,2
11120C5X123M15	12X3X1,5	30,5	1301	12,8
11120C5X123M25	12X3X2,5	34,2	1773	7,86
11120C5X143M05	14X3X0,5	23,5	757	40,4
11120C5X143M07	14X3X0,75	25,4	913	26
11120C5X143M10	14X3X1	27,4	1076	19,2
11120C5X143M15	14X3X1,5	31,9	1453	12,8
11120C5X143M25	14X3X2,5	35,7	1993	7,86
11120C5X153M05	15X3X0,5	24,9	842	40,4

GAALSHIP[®] HF 250 ISOS

INDIVIDUAL & OVERALL SCREEN , INSTRUMENTATION CABLE


 ELETTROTEK KABEL[®] GAALSHIP[®] HF 250 ISOS


Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11120C5X153M07	15X3X0,75	27	1022	26
11120C5X153M10	15X3X1	29,1	1193	19,2
11120C5X153M15	15X3X1,5	33,7	1610	12,8
11120C5X153M25	15X3X2,5	38	2213	7,86
11120C5X163M05	16X3X0,5	24,9	859	40,4
11120C5X163M07	16X3X0,75	27	1044	26
11120C5X163M10	16X3X1	29,1	1224	19,2
11120C5X163M15	16X3X1,5	33,7	1653	12,8
11120C5X163M25	16X3X2,5	38	2279	7,86
11120C5X193M05	19X3X0,5	26,7	1000	40,4
11120C5X193M07	19X3X0,75	29	1222	26
11120C5X193M10	19X3X1	31,2	1439	19,2
11120C5X193M15	19X3X1,5	36,2	1940	12,8
11120C5X193M25	19X3X2,5	40,7	2673	7,86
11120C5X243M05	24X3X0,5	30,8	1346	40,4
11120C5X243M07	24X3X0,75	33,4	1620	26
11120C5X243M10	24X3X1	36	1895	19,2
11120C5X243M15	24X3X1,5	41,9	2539	12,8
11120C5X243M25	24X3X2,5	47,2	3478	7,86

NOTE(S)

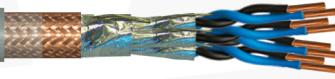
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISOSA

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA



APPLICATIONS:

INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295
INSULATION:	GAALThERM® 595
STRANDING:	CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
CORES COLOR:	PAIR: BLACK- LIGHT BLUE TRIPLE: BLACK- LIGHT BLUE - BROWN
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
OVERALL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
ARMOUR:	PLAIN 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 ISA, CROSS NOMINAL SECTION mm ² , 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
ABS (AMERICAN BUREAU OF SHIPPING)
OTHER APPROVALS ON REQUEST

RESISTANCE:



FLAME AND FIRE RETARDANT ACC. TO:
EN IEC 60332-1-2,
EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
UL 1581



OZONE RESISTANCE ACC. TO:
IEC 60092-360

FEATURES:

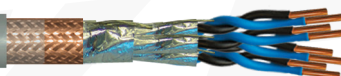
SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
DESIGN GUIDELINES ACC. TO IEC 60092-350/376
CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228
TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 250 ISOSA

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA



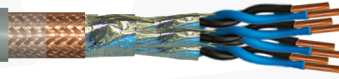
Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11140C5X022M05	2X2X0,5	11,6	193	40,4
11140C5X022M07	2X2X0,75	12,3	215	26
11140C5X022M10	2X2X1	13,1	247	19,2
11140C5X022M15	2X2X1,5	15,3	344	12,8
11140C5X022M25	2X2X2,5	16,9	422	7,86
11140C5X032M05	3X2X0,5	12,2	214	40,4
11140C5X032M07	3X2X0,75	13,1	247	26
11140C5X032M10	3X2X1	14,4	312	19,2
11140C5X032M15	3X2X1,5	16,3	387	12,8
11140C5X032M25	3X2X2,5	17,9	489	7,86
11140C5X042M05	4X2X0,5	13,6	270	40,4
11140C5X042M07	4X2X0,75	15	348	26
11140C5X042M10	4X2X1	15,9	388	19,2
11140C5X042M15	4X2X1,5	18,1	493	12,8
11140C5X042M25	4X2X2,5	19,9	610	7,86
11140C5X052M05	5X2X0,5	15	347	40,4
11140C5X052M07	5X2X0,75	16	394	26
11140C5X052M10	5X2X1	17,1	447	19,2
11140C5X052M15	5X2X1,5	19,4	568	12,8
11140C5X052M25	5X2X2,5	21,6	729	7,86
11140C5X062M05	6X2X0,5	16,3	403	40,4
11140C5X062M07	6X2X0,75	17,5	467	26
11140C5X062M10	6X2X1	18,7	537	19,2
11140C5X062M15	6X2X1,5	21,3	683	12,8
11140C5X062M25	6X2X2,5	23,6	863	7,86
11140C5X072M05	7X2X0,5	16,3	415	40,4
11140C5X072M07	7X2X0,75	17,5	490	26
11140C5X072M10	7X2X1	18,7	548	19,2
11140C5X072M15	7X2X1,5	21,3	703	12,8
11140C5X072M25	7X2X2,5	23,6	907	7,86
11140C5X082M05	8X2X0,5	18,9	538	40,4
11140C5X082M07	8X2X0,75	20,3	615	26
11140C5X082M10	8X2X1	21,6	711	19,2
11140C5X082M15	8X2X1,5	24,8	895	12,8
11140C5X082M25	8X2X2,5	27,6	1137	7,86
11140C5X102M05	10X2X0,5	19,7	592	40,4
11140C5X102M07	10X2X0,75	21,2	698	26
11140C5X102M10	10X2X1	22,7	793	19,2
11140C5X102M15	10X2X1,5	26	1020	12,8
11140C5X102M25	10X2X2,5	28,9	1316	7,86
11140C5X122M05	12X2X0,5	21,6	700	40,4
11140C5X122M07	12X2X0,75	23,2	806	26
11140C5X122M10	12X2X1	24,8	928	19,2

GAALSHIP HF 250 ISOSA

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA



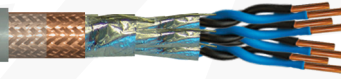
Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11140C5X122M15	12X2X1,5	28,5	1194	12,8
11140C5X122M25	12X2X2,5	31,7	1548	7,86
11140C5X142M05	14X2X0,5	22,4	754	40,4
11140C5X142M07	14X2X0,75	24	886	26
11140C5X142M10	14X2X1	25,8	1012	19,2
11140C5X142M15	14X2X1,5	29,6	1303	12,8
11140C5X142M25	14X2X2,5	33,1	1706	7,86
11140C5X152M05	15X2X0,5	23,6	833	40,4
11140C5X152M07	15X2X0,75	25,4	973	26
11140C5X152M10	15X2X1	27,2	1123	19,2
11140C5X152M15	15X2X1,5	31,3	1453	12,8
11140C5X152M25	15X2X2,5	34,9	1892	7,86
11140C5X162M05	16X2X0,5	23,6	854	40,4
11140C5X162M07	16X2X0,75	25,4	989	26
11140C5X162M10	16X2X1	27,2	1133	19,2
11140C5X162M15	16X2X1,5	31,3	1475	12,8
11140C5X162M25	16X2X2,5	34,9	1936	7,86
11140C5X192M05	19X2X0,5	25,2	975	40,4
11140C5X192M07	19X2X0,75	27,1	1147	26
11140C5X192M10	19X2X1	29,1	1312	19,2
11140C5X192M15	19X2X1,5	33,5	1691	12,8
11140C5X192M25	19X2X2,5	37,9	2322	7,86
11140C5X242M05	24X2X0,5	28,7	1277	40,4
11140C5X242M07	24X2X0,75	31	1494	26
11140C5X242M10	24X2X1	33,3	1704	19,2
11140C5X242M15	24X2X1,5	39	2301	12,8
11140C5X242M25	24X2X2,5	43,6	2992	7,86
11140C5X272M05	27X2X0,5	29,8	1358	40,4
11140C5X272M07	27X2X0,75	32,2	1595	26
11140C5X272M10	27X2X1	34,6	1847	19,2
11140C5X272M15	27X2X1,5	40,4	2503	12,8
11140C5X272M25	27X2X2,5	45,2	3289	7,86
11140C5X302M05	30X2X0,5	30,9	1462	40,4
11140C5X302M07	30X2X0,75	33,4	1718	26
11140C5X302M10	30X2X1	35,8	1983	19,2
11140C5X302M15	30X2X1,5	41,9	2694	12,8
11140C5X302M25	30X2X2,5	46,8	3552	7,86
11140C5X372M05	37X2X0,5	33,8	1748	40,4
11140C5X372M07	37X2X0,75	37	2159	26
11140C5X372M10	37X2X1	39,7	2501	19,2
11140C5X372M15	37X2X1,5	45,9	3259	12,8
11140C5X372M25	37X2X2,5	51,4	4279	7,86
11140C5X023M05	2X3X0,5	12,8	232	40,4

GAALSHIP HF 250 ISOSA

INDIVIDUAL & OVERALL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA



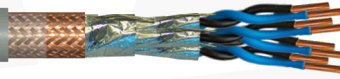
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11140C5X023M07	2X3X0,75	13,6	258	26
11140C5X023M10	2X3X1	14,9	331	19,2
11140C5X023M15	2X3X1,5	16,9	415	12,8
11140C5X023M25	2X3X2,5	18,8	534	7,86
11140C5X033M05	3X3X0,5	13,5	258	40,4
11140C5X033M07	3X3X0,75	14,9	338	26
11140C5X033M10	3X3X1	15,8	380	19,2
11140C5X033M15	3X3X1,5	18	487	12,8
11140C5X033M25	3X3X2,5	20	619	7,86
11140C5X043M05	4X3X0,5	15,4	362	40,4
11140C5X043M07	4X3X0,75	16,5	418	26
11140C5X043M10	4X3X1	17,6	476	19,2
11140C5X043M15	4X3X1,5	20	609	12,8
11140C5X043M25	4X3X2,5	22,1	790	7,86
11140C5X053M05	5X3X0,5	16,6	422	40,4
11140C5X053M07	5X3X0,75	17,8	496	26
11140C5X053M10	5X3X1	19	564	19,2
11140C5X053M15	5X3X1,5	21,7	729	12,8
11140C5X053M25	5X3X2,5	24	954	7,86
11140C5X063M05	6X3X0,5	18	498	40,4
11140C5X063M07	6X3X0,75	19,4	578	26
11140C5X063M10	6X3X1	20,7	667	19,2
11140C5X063M15	6X3X1,5	23,7	867	12,8
11140C5X063M25	6X3X2,5	26,3	1138	7,86
11140C5X073M05	7X3X0,5	18	514	40,4
11140C5X073M07	7X3X0,75	19,4	600	26
11140C5X073M10	7X3X1	20,7	697	19,2
11140C5X073M15	7X3X1,5	23,7	910	12,8
11140C5X073M25	7X3X2,5	26,3	1204	7,86
11140C5X083M05	8X3X0,5	21	660	40,4
11140C5X083M07	8X3X0,75	22,6	770	26
11140C5X083M10	8X3X1	24,1	886	19,2
11140C5X083M15	8X3X1,5	27,7	1132	12,8
11140C5X083M25	8X3X2,5	30,9	1481	7,86
11140C5X103M05	10X3X0,5	21,9	735	40,4
11140C5X103M07	10X3X0,75	23,6	874	26
11140C5X103M10	10X3X1	25,3	1001	19,2
11140C5X103M15	10X3X1,5	29,1	1308	12,8
11140C5X103M25	10X3X2,5	32,4	1739	7,86
11140C5X123M05	12X3X0,5	24	868	40,4
11140C5X123M07	12X3X0,75	25,9	1018	26
11140C5X123M10	12X3X1	27,7	1177	19,2
11140C5X123M15	12X3X1,5	31,9	1538	12,8
11140C5X123M25	12X3X2,5	35,7	2052	7,86

GAALSHIP HF 250 ISOSA

INDIVIDUAL & OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11140C5X143M05	14X3X0,5	24,9	942	40,4
11140C5X143M07	14X3X0,75	26,8	1110	26
11140C5X143M10	14X3X1	28,8	1288	19,2
11140C5X143M15	14X3X1,5	33,2	1693	12,8
11140C5X143M25	14X3X2,5	37,5	2349	7,86
11140C5X153M05	15X3X0,5	26,3	1034	40,4
11140C5X153M07	15X3X0,75	28,4	1228	26
11140C5X153M10	15X3X1	30,5	1432	19,2
11140C5X153M15	15X3X1,5	35,1	1879	12,8
11140C5X153M25	15X3X2,5	39,7	2615	7,86
11140C5X163M05	16X3X0,5	26,3	1053	40,4
11140C5X163M07	16X3X0,75	28,4	1251	26
11140C5X163M10	16X3X1	30,5	1465	19,2
11140C5X163M15	16X3X1,5	35,1	1925	12,8
11140C5X163M25	16X3X2,5	39,7	2683	7,86
11140C5X193M05	19X3X0,5	28,1	1220	40,4
11140C5X193M07	19X3X0,75	30,4	1457	26
11140C5X193M10	19X3X1	32,6	1678	19,2
11140C5X193M15	19X3X1,5	38,1	2313	12,8
11140C5X193M25	19X3X2,5	42,5	3101	7,86
11140C5X243M05	24X3X0,5	32,2	1582	40,4
11140C5X243M07	24X3X0,75	34,8	1889	26
11140C5X243M10	24X3X1	37,9	2273	19,2
11140C5X243M15	24X3X1,5	43,8	2969	12,8
11140C5X243M25	24X3X2,5	49	3962	7,86

NOTE(S)

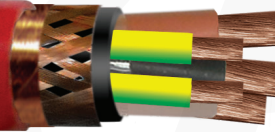
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP MEDIUM MHF VFD 1,8/3 KV

ARMoured, SCREENED MEDIUM VOLTAGE, VFD POWER CABLE, THREE CORES



ELETTROTEK KABEL® GAALSHIP® MEDIUM MHF VFD



APPLICATIONS:

MULTI-CORES, MEDIUM VOLTAGE VFD POWER CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	FLEXIBLE PLAIN ANNEALED COPPER CONDUCTOR CL.5 ACC.TO IEC 60228
INSULATION:	GAAL THERM® 595
CORES COLOR::	ACC. TO DIN VDE 0293-308, HD 308 S2 3 CONDUCTORS + 3 EARTH CONDUCTORS: GREY, BROWN, BLACK AND GREEN/YEL- LOW DIVIDED IN INTERSTICES 3 CORES: GREY, BROWN, BLACK
INNER SHEATH:	HALOGEN-FREE COMPOUND
ARMOURING:	PLAIN ANNEALED COPPER BRAID ACC. TO IEC 60092-350
SCREEN:	PLAIN ANNEALED COPPER TAPE
OUTER SHEATH:	BLACK (RAL 9004), HALOGEN-FREE COMPOUND TYPE SHFI ACC. TO IEC 60092-360
MARKING:	ELETTROTEK KABEL® GAALSHIP® MEDIUM MHF VFD, CROSS NOMINAL SECTION SQMM, 1,8/3 kV, PART N°, IEC 60092-353, IEC 60332-3-22, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

TYPE APPROVALS/CERTIFICATES:

DNV (DET NORSKE VERITAS)
OTHER APPROVALS ON REQUEST

RESISTANCE:



FLAME AND FIRE RETARDANT ACC. TO:
EN IEC 60332-1-2,
EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
UL 1581



OZONE RESISTANCE ACC. TO:
IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
MIN. BENDING RADIUS:	6 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)
 SUITABLE FOR APPLICATION ACC. TO EN 55011, DIN VDE 0875
 AND EN 61800-3

GAALSHIP MEDIUM MHF VFD 1,8/3 KV

ARMoured, SCREENED MEDIUM VOLTAGE, VFD POWER CABLE, THREE CORES



ELETTROTEK KABEL® GAALSHIP® MEDIUM MHF VFD

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45°C (A)
13030KR3030M61	3X10	24,1	1157	1,91	50
13030KR3030M62	3X16	26,6	1469	1,21	67
13030KR3030M63	3X25	29,7	1896	0,78	89
13030KR3030M64	3X35	32,3	2331	0,554	110
13030KR3030M65	3X50	36,4	3179	0,386	137
13030KR3030M66	3X70	40,4	3982	0,272	169
13030KR3030M67	3X95	44,3	4976	0,206	205
13030KR3030M68	3X120	48,5	5970	0,161	237
13030KR3030M69	3X150	51,8	7049	0,129	272
13030KR3030M70	3X185	56,3	8370	0,106	311
13030KR3030M71	3X240	62,2	10380	0,0801	365
13030KR3030M72	3X300	68,6	12579	0,0641	421
13030KR2037M65	3X50+3G10	36,4	3494	0,386	137
13030KR2037M66	3X70+3G16	40,4	4507	0,272	169
13030KR2037M67	3X95+3G16	44,3	5510	0,206	205
13030KR2037M68	3X120+3G25	48,5	6753	0,161	237
13030KR2037M69	3X150+3G25	51,8	7894	0,129	272
13030KR2037M70	3X185+3G35	56,3	9469	0,106	311
13030KR2037M71	3X240+3G50	62,2	11949	0,0801	365
13030KR2037M72	3X300+3G50	68,6	14149	0,0641	421

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

CCI XAI MV

3,6/6 - 6/10 - 8,7/15 - 12/20 - 18/30 KV
 HALOGEN FREE, FLAME RETARDANT, ARMoured









CCI XAI MV

CONSTRUCTION:

CONDUCTOR:	TINNED ANNEALED COPPER FLEXIBLE CLASS 2 IEC 60228 (PLAIN COPPER AND/OR CL.5 ON REQUEST)
SEMI CONDUCTOR LAYERS:	HF EXTRUDED COMPOUND
INSULATION:	HEPR HF EXTRUDED COMPOUND IEC 60092-360
CORES SCREEN:	INDIVIDUAL PLAIN COPPER TAPE
COLOUR CORES:	1 CORE OFF WHITE 3 CORES OFF WHITE (COLOURED OR NUMBERED TAPES)
BEDDING AND FILLERS:	FLAMEBAR® FIBERGLASS TAPE(S) + FIBERGLASS ROPES HEPR SHEATHED WHEN 3 CORES
INNER SHEAT:	SHF1 COMPOUND
ARMOUR:	TINNED COPPER WIRE BRAID (PLAIN COPPER BRAIN ON REQUEST)
OUTER SHEATH:	SHF1 COMPOUND, RED (SHF2 ON REQUEST)

RESISTANCE:

	FLAME RETARDANCY IEC 60332-1-2 IEC 60332-3-22 CAT A
	HALOGEN CONTENT & CORROSIVITY IEC 60754-1 & 2 IEC 60684-2
	SMOKE DENSITY IEC 61034-1 & 2
	UV RESISTANCE UL 1581 & 1200
	OZONE RESISTANCE IEC 60092-360
	IMPACT & COLD RESISTANCE CSA C 22.2 N° 0.3-09 & N° 38-18

TECHNICAL DATA:

NOMINAL VOLTAGE:	U0/U 3,6/6 - 6/10 - 8,7/15 - 12/20 - 18/30 kv
MAX OPERATING VOLTAGE UMAX	7,2 - 12 - 17,5 - 24 - 36 kv
TEMPERATURE RANGE:	90 °C ACCORDING TO IEC 60092-360
MIN. BENDING RADIUS	4/5 X Ø (DEPENDING ON OVERALL DIAMETER)

CCI XAI MV

3,6/6 - 6/10 - 8,7/15 - 12/20 - 18/30 KV
 HALOGEN FREE, FLAME RETARDANT, ARMoured



CCI XAI MV

CCI XAI MV 3,6/6 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13060MRH010M63	1X25	23	890	0,727
13060MRH010M64	1X35	24	1.020	0,524
13060MRH010M65	1X50	25	1.160	0,387
13060MRH010M66	1X70	27	1.500	0,268
13060MRH010M67	1X95	29	1.850	0,193
13060MRH010M68	1X120	31	2.130	0,153
13060MRH010M69	1X150	32	2.450	0,124
13060MRH010M70	1X185	35	2.900	0,0991
13060MRH010M71	1X240	38	3.670	0,0754
13060MRH010M72	1X300	41	4.370	0,0601
13060MRC030M63	3X25	43	2.840	0,727
13060MRC030M64	3X35	45	3.240	0,524
13060MRC030M65	3X50	48	3.850	0,387
13060MRC030M66	3X70	52	4.780	0,268
13060MRC030M67	3X95	56	5.800	0,193
13060MRC030M68	3X120	59	6.730	0,153
13060MRC030M69	3X150	62	7.840	0,124
13060MRC030M70	3X185	67	9.180	0,0991
13060MRC030M71	3X240	74	11.780	0,0754

CCI XAI MV 6/10 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13060QRH010M63	1X25	24	1.000	0,727
13060QRH010M64	1X35	27	1.200	0,524
13060QRH010M65	1X50	27	1.360	0,387
13060QRH010M66	1X70	29	1.610	0,268
13060QRH010M67	1X95	31	1.950	0,193
13060QRH010M68	1X120	33	2.270	0,153
13060QRH010M69	1X150	34	2.600	0,124
13060QRH010M70	1X185	37	3.130	0,0991
13060QRH010M71	1X240	40	3.850	0,0754
13060QRH010M72	1X300	43	4.500	0,0601
13060QRC030M63	3X25	47	3.300	0,727
13060QRC030M64	3X35	50	3.780	0,524
13060QRC030M65	3X50	52	4.300	0,387
13060QRC030M66	3X70	56	5.200	0,268
13060QRC030M67	3X95	60	6.300	0,193
13060QRC030M68	3X120	63	7.250	0,153
13060QRC030M69	3X150	67	8.250	0,124
13060QRC030M70	3X185	72	9.960	0,0991
13060QRC030M71	3X240	78	12.270	0,0754

CCI XAI MV

3,6/6 - 6/10 - 8,7/15 - 12/20 - 18/30 KV
 HALOGEN FREE, FLAME RETARDANT, ARMoured



CCI XAI MV

CCI XAI MV 8,7/15 kv

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13060SRH010M63	1X25	28	1.200	0,727
13060SRH010M64	1X35	29	1.360	0,524
13060SRH010M65	1X50	30	1.520	0,387
13060SRH010M66	1X70	31	1.800	0,268
13060SRH010M67	1X95	34	2.170	0,193
13060SRH010M68	1X120	35	2.450	0,153
13060SRH010M69	1X150	37	2.860	0,124
13060SRH010M70	1X185	39	3.420	0,0991
13060SRH010M71	1X240	42	4.070	0,0754
13060SRH010M72	1X300	46	4.820	0,0601
13060SRC030M63	3X25	53	3.900	0,727
13060SRC030M64	3X35	55	4.350	0,524
13060SRC030M65	3X50	57	4.900	0,387
13060SRC030M66	3X70	61	5.850	0,268
13060SRC030M67	3X95	65	6.950	0,193
13060SRC030M68	3X120	69	8.100	0,153
13060SRC030M69	3X150	73	9.300	0,124
13060SRC030M70	3X185	77	10.900	0,0991

CCI XAI MV 12/20 kv

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13060URH010M64	1X35	31	1.520	0,524
13060URH010M65	1X50	32	1.640	0,387
13060URH010M66	1X70	34	1.970	0,268
13060URH010M67	1X95	36	2.430	0,193
13060URH010M68	1X120	38	2.720	0,153
13060URH010M69	1X150	40	3.100	0,124
13060URH010M70	1X185	42	3.620	0,0991
13060URH010M71	1X240	45	4.300	0,0754
13060URH010M72	1X300	48	5.050	0,0601
13060URC030M64	3X35	59	4.920	0,727
13060URC030M65	3X50	61	5.480	0,524
13060URC030M66	3X70	65	6.360	0,387
13060URC030M67	3X95	71	7.800	0,268
13060URC030M68	3X120	74	8.820	0,193
13060URC030M69	3X150	78	10.040	0,153
13060URC030M70	3X185	82	11.500	0,124

CCI XAI MV

3,6/6 - 6/10 - 8,7/15 - 12/20 - 18/30 KV
 HALOGEN FREE, FLAME RETARDANT, ARMoured



CCI XAI MV

CCI XAI MV 18/30 kV

	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13060XRH010M65	1X50	38	2.210	0,387
13060XRH010M66	1X70	40	2.580	0,268
13060XRH010M67	1X95	42	2.950	0,193
13060XRH010M68	1X120	43	3.280	0,153
13060XRH010M69	1X150	45	3.630	0,124
13060XRH010M70	1X185	48	4.230	0,0991
13060XRH010M71	1X240	50	4.990	0,0754
13060XRH010M72	1X300	53	5.680	0,0601
13060XRC030M65	3X50	74	7.050	0,387
13060XRC030M66	3X70	78	8.030	0,268
13060XRC030M67	3X95	82	9.330	0,193
13060XRC030M68	3X120	85	10.400	0,153
13060XRC030M69	3X150	89	11.690	0,124

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

CCI XAI VFD EMC MV

3,6/6 - 6/10 - 8,7/15 - 12/20 KV

HALOGEN FREE, FLAME RETARDANT, ELECTROMAGNETIC SHIELD, ARMoured










CCI XAI VFD EMC MV

CONSTRUCTION:

CONDUCTOR:	TINNED COPPER FLEXIBLE CLASS 2 FLEX IEC 60228 (PLAIN COPPER AND/OR CL.5 ON REQUEST)
SEMICONDUCTIVE LAYERS:	HF EXTRUDED COMPOUND
INSULATION:	HEPR HF EXTRUDED COMPOUND IEC 60092-360
CORES SCREEN:	INDIVIDUAL PLAIN COPPER TAPE
COLOUR CORES:	3 CORES OFF WHITE (COLOURED OR NUMBERED TAPES)
EARTH CONDUCTORS:	PLAIN OR TINNED COPPER FLEXIBLE CL. 2, HEPR SHEATHED
BEDDING:	FLAMEBAR® FIBERGLASS TAPE
INNER SHEATH:	SHF1
ELECTROMAGNETIC SHIELD:	COPPER BACKED POLYESTER TAPE
ARMOUR:	TINNED COPPER WIRE BRAID (PLAIN COPPER BRAIN ON REQUEST)
OUTER SHEATH:	SHF1 COMPOUND, RED (SHF2 ON REQUEST)

RESISTANCE:

	FLAME RETARDANCY IEC 60332-1-2 IEC 60332-3-22 CAT A
	HALOGEN CONTENT & CORROSIVITY IEC 60754-1 & 2 IEC 60684-2
	SMOKE DENSITY IEC 61034-1 & 2
	UV RESISTANCE UL 1581 & 1200
	OZONE RESISTANCE IEC 60092-360
	ELECTROMAGNETIC PROTECTION IEC 60533 ANNEX B – IEC 62153-4-3
	IMPACT & COLD RESISTANCE CSA C 22.2 N° 0.3-09 & N° 38-18

TECHNICAL DATA:

NOMINAL VOLTAGE:	U0/U 3,6/6 - 6/10 - 8,7/15 - 12/20 kV
MAX OPERATING VOLTAGE UMAX	7,2 - 12 - 17,5 - 24 kV
TEMPERATURE RANGE:	90 °C ACCORDING TO IEC 60092-360
MIN. BENDING RADIUS	4/5 X Ø (DEPENDING ON OVERALL DIAMETER)

CCI XAI VFD EMC MV

3,6/6 - 6/10 - 8,7/15 - 12/20 KV

HALOGEN FREE, FLAME RETARDANT, ELECTROMAGNETIC SHIELD, ARMoured



CCI XAI VFD EMC MV

CCI XAI VFD EMC MV 3,6/6 kV

Part number	No. of cores x cross section n x mm ²		Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
	Conductors	Earths			
13040MRC037M65	3X50	3X10	49	4.050	0,387
13040MRC037M66	3X70	3X16	53	5.060	0,268
13040MRC037M67	3X95	3X16	57	6.130	0,193
13040MRC037M68	3X120	3X25	60	7.220	0,153
13040MRC037M69	3X150	3X25	63	8.200	0,124
13040MRC037M70	3X185	3X35	67	9.920	0,0991

CCI XAI VFD EMC MV 6/10 kV

	No. of cores x cross section n x mm ²		Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
	Conductors	Earths			
13040QRC037M65	3X50	3X10	53,0	4.480	0,387
13040QRC037M66	3X70	3X16	57	5.500	0,268
13040QRC037M67	3X95	3X16	61	6.600	0,193
13040QRC037M68	3X120	3X25	64	7.720	0,153
13040QRC037M69	3X150	3X25	68	8.720	0,124
13040QRC037M70	3X185	3X35	73	10.710	0,0991

CCI XAI VFD EMC MV 8,7/15 kV

	No. of cores x cross section n x mm ²		Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
	Conductors	Earths			
13040SRC037M65	3X50	3X10	58	5.050	0,387
13040SRC037M66	3X70	3X16	62	6.100	0,268
13040SRC037M67	3X95	3X16	66	7.270	0,193
13040SRC037M68	3X120	3X25	70	8.550	0,153
13040SRC037M69	3X150	3X25	74	9.690	0,124
13040SRC037M70	3X185	3X35	78	11.460	0,0991

CCI XAI VFD EMC MV 12/20 kV

	No. of cores x cross section n x mm ²		Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
	Conductors	Earths			
13040URC037M65	3X50	3X10	63	5580	0,387
13040URC037M66	3X70	3X16	66	6680	0,268
13040URC037M67	3X95	3X16	72	8080	0,193
13040URC037M68	3X120	3X25	75	9240	0,153
13040URC037M69	3X150	3X25	78	10350	0,124
13040URC037M70	3X185	3X35	83	12180	0,0991

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.



Fire Resistant

Fire Resistance Test

IEC 60331-2

Overall diameter not exceeding 20 mm
flame @ 830 °C for 120 minutes
with mechanical shocks every 5 minutes



IEC 60331-1

Overall diameter exceeding 20 mm
flame @ 830 °C for 120 minutes
with mechanical shocks every 5 minutes



GAALSHIP HF 1000 FR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR

APPLICATIONS:

FIRE RESISTANT POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	MICA GLASS TAPE + GAAL THERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000 FR, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

(* HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 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)



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²

GAALSHIP HF 1000 FR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12061GGL010M15	1X1,5	5,4	45	12,1	23
12061GGL010M25	1X2,5	5,8	58	7,41	30
12061GGL010M40	1X4	6,3	76	4,61	40
12061GGL010M60	1X6	6,8	100	3,08	52
12061GGL010M61	1X10	7,9	149	1,83	72
12061GGL010M62	1X16	9	218	1,21	96
12061GGL010M63	1X25	10,8	328	0,78	127
12061GGL010M64	1X35	12	438	0,554	157
12061GGL010M65	1X50	13,9	610	0,386	196
12061GGL010M66	1X70	15,8	830	0,272	242
12061GGL010M67	1X95	17,5	1094	0,206	293
12061GGL010M68	1X120	19,6	1372	0,161	339
12061GGL010M69	1X150	21,5	1701	0,129	389
12061GGL010M70	1X185	23,9	2095	0,106	444
12061GGL010M71	1X240	26,7	2685	0,0801	522
12061GGL010M72	1X300	29,7	3330	0,0641	601
12061GGL010M73	1X400	33,4	4394	0,0486	690
12061GG3020M10	2X1	9,3	107	18,1	11
12061GG3020M15	2X1,5	9,8	124	12,1	20
12061GG3020M25	2X2,5	10,7	158	7,41	26
12061GG3020M40	2X4	11,7	202	4,61	34
12061GG3020M60	2X6	12,9	259	3,08	44
12061GG3020M61	2X10	15	374	1,83	61
12061GG3020M62	2X16	17,1	531	1,21	82
12061GG3020M63	2X25	20,1	749	0,78	108
12061GG3020M64	2X35	22,5	999	0,554	133
12061GG3020M65	2X50	26,2	1381	0,386	155
12061GG3030M10	3X1	9,8	124	18,1	9
12061GG3030M15	3X1,5	10,3	146	12,1	16
12061GG2031M15	3G1,5	10,3	146	12,1	20
12061GG3030M25	3X2,5	11,3	189	7,41	21
12061GG2031M25	3G2,5	11,3	189	7,41	26
12061GG3030M40	3X4	12,5	251	4,61	28
12061GG2031M40	3G4	12,5	251	4,61	34
12061GG3030M60	3X6	13,9	344	3,08	36
12061GG2031M60	3G6	13,9	344	3,08	44
12061GG3030M61	3X10	16	498	1,83	50
12061GG2031M61	3G10	16	498	1,83	61
12061GG3030M62	3X16	18,3	714	1,21	67
12061GG2031M62	3G16	18,3	714	1,21	82
12061GG3030M63	3X25	21,6	1042	0,78	89
12061GG3030M64	3X35	24,1	1389	0,554	110
12061GG3030M65	3X50	28,1	1925	0,386	137
12061GG3030M66	3X70	32,3	2632	0,272	169
12061GG3030M67	3X95	36,1	3474	0,206	205

GAALSHIP HF 1000 FR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12061GG3030M68	3X120	40,5	4357	0,161	237
12061GG3030M69	3X150	44,5	5372	0,129	272
12061GG3030M70	3X185	49,8	6583	0,106	311
12061GG3030M71	3X240	55,9	8399	0,0801	365
12061GG3030M72	3X300	62,5	10393	0,0641	421
12061GG3040M10	4X1	10,7	153	18,1	13
12061GG3040M15	4X1,5	11,3	181	12,1	16
12061GG3040M15	4X1,5	11,3	181	12,1	16
12061GG2041M15	4G1,5	11,3	181	12,1	16
12061GG3040M25	4X2,5	12,3	238	7,41	21
12061GG3040M25	4X2,5	12,3	238	7,41	21
12061GG2041M25	4G2,5	12,3	238	7,41	21
12061GG3040M40	4X4	13,8	322	4,61	28
12061GG2041M40	4G4	13,8	322	4,61	28
12061GG3040M60	4X6	15,2	425	3,08	36
12061GG2041M60	4G6	15,2	425	3,08	36
12061GG3040M61	4X10	17,6	619	1,83	50
12061GG2041M61	4G10	17,6	619	1,83	50
12061GG3040M62	4X16	20,3	909	1,21	67
12061GG2041M62	4G16	20,3	909	1,21	67
12061GG3040M63	4X25	23,9	1323	0,78	89
12061GG3040M64	4X35	26,7	1768	0,554	110
12061GG3040M65	4X50	31,1	2525	0,386	137
12061GG3040M66	4X70	35,9	3448	0,272	169
12061GG3040M67	4X95	40	4562	0,206	205
12061GG3040M68	4X120	45	5688	0,161	237
12061GG3040M69	4X150	49,5	7079	0,129	272
12061GG3040M70	4X185	55,4	8733	0,106	311
12061GG3040M71	4X240	62,1	11127	0,0801	365
12061GG3050M10	5X1	11,6	184	18,1	13
12061GG3050M15	5X1,5	12,4	223	12,1	16
12061GG2051M15	5G1,5	12,4	223	12,1	16
12061GG3050M25	5X2,5	13,6	296	7,41	21
12061GG2051M25	5G2,5	13,6	296	7,41	21
12061GG3050M40	5X4	15,1	397	4,61	28
12061GG2051M40	5G4	15,1	397	4,61	28
12061GG3050M60	5X6	16,7	523	3,08	36
12061GG2051M60	5G6	16,7	523	3,08	36
12061GG3050M61	5X10	19,4	768	1,83	50
12061GG2051M61	5G10	19,4	768	1,83	50
12061GG3050M62	5X16	22,4	1127	1,21	67
12061GG2051M62	5G16	22,4	1127	1,21	67
12061GG3050M63	5X25	26,6	1650	0,78	89

GAALSHIP HF 1000 FR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12061GG3050M64	5X35	29,7	2210	0,554	110
12061GG3050M65	5X50	34,7	3146	0,386	137
12061GG3050M66	5X70	40	4319	0,272	169
12061GG3050M67	5X95	44,6	5650	0,206	172
12061GG3050M68	5X120	50,1	7093	0,161	199
12061GG3050M69	5X150	55,3	8772	0,129	228
12061GG3050M70	5X185	61,8	10822	0,106	261
12061GG1070M10	7X1	12,3	222	18,1	8
12061GG1070M15	7X1,5	13,2	273	12,1	10
12061GG1070M25	7X2,5	14,5	365	7,41	14
12061GG1100M10	10X1	15	331	18,1	7
12061GG1100M15	10X1,5	16	404	12,1	9
12061GG1100M25	10X2,5	17,8	543	7,41	12
12061GG1120M10	12X1	16,1	382	18,1	7
12061GG1120M15	12X1,5	17,2	467	12,1	9
12061GG1120M25	12X2,5	19	625	7,41	11
12061GG1140M10	14X1	17	431	18,1	6
12061GG1140M15	14X1,5	18,1	525	12,1	8
12061GG1140M25	14X2,5	20	711	7,41	11
12061GG1160M10	16X1	17,9	484	18,1	6
12061GG1160M15	16X1,5	19,2	595	12,1	8
12061GG1160M25	16X2,5	21,3	813	7,41	10
12061GG1190M10	19X1	18,9	554	18,1	6
12061GG1190M15	19X1,5	20,3	684	12,1	7
12061GG1190M25	19X2,5	22,6	937	7,41	10
12061GG1240M10	24X1	22	754	18,1	5
12061GG1240M15	24X1,5	23,6	930	12,1	7
12061GG1240M25	24X2,5	26,2	1257	7,41	9
12061GG1270M10	27X1	22,9	825	18,1	5
12061GG1270M15	27X1,5	24,5	1012	12,1	7
12061GG1270M25	27X2,5	27,2	1368	7,41	9
12061GG1300M10	30X1	23,7	888	18,1	5
12061GG1300M15	30X1,5	25,5	1099	12,1	6
12061GG1300M25	30X2,5	28,2	1490	7,41	8
12061GG1370M10	37X1	25,7	1065	18,1	5
12061GG1370M15	37X1,5	27,6	1315	12,1	6
12061GG1370M25	37X2,5	30,8	1805	7,41	8

NOTE(S)

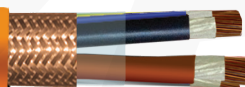
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 1000 A FR

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR



APPLICATIONS:

FIRE RESISTANT POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	MICA GLASS TAPE + GAALTHERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
ARMOUR:	PLAIN ANNEALED COPPER WIRES BRAID ACC. TO IEC 60092-350.
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF1000 FR, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 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)



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE:	U _o /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	4 x OUTER DIAMETER

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 1000 A FR

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR

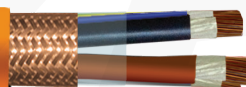
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
1207IGGL010M15	1X1,5	6,3	70	12,1	23
1207IGGL010M25	1X2,5	6,7	87	7,41	30
1207IGGL010M40	1X4	7,3	109	4,61	40
1207IGGL010M60	1X6	7,9	136	3,08	52
1207IGGL010M61	1X10	9	191	1,83	72
1207IGGL010M62	1X16	10,1	269	1,21	96
1207IGGL010M63	1X25	11,9	389	0,78	127
1207IGGL010M64	1X35	13,1	506	0,554	157
1207IGGL010M65	1X50	15,4	725	0,386	196
1207IGGL010M66	1X70	17,3	959	0,272	242
1207IGGL010M67	1X95	19	1237	0,206	293
1207IGGL010M68	1X120	21,1	1538	0,161	339
1207IGGL010M69	1X150	22,9	1876	0,129	389
1207IGGL010M70	1X185	25,4	2293	0,106	444
1207IGGL010M71	1X240	28,2	2910	0,0801	522
1207IGGL010M72	1X300	31,2	3580	0,0641	601
1207IGGL010M73	1X400	34,9	4679	0,0486	690
1207IGG3020M10	2X1	10,2	150	18,1	11
1207IGG3020M15	2X1,5	10,8	171	12,1	20
1207IGG3020M25	2X2,5	11,6	207	7,41	26
1207IGG3020M40	2X4	12,7	260	4,61	34
1207IGG3020M60	2X6	14	328	3,08	44
1207IGG3020M61	2X10	16,4	488	1,83	61
1207IGG3020M62	2X16	18,5	664	1,21	82
1207IGG3020M63	2X25	21,5	910	0,78	108
1207IGG3020M64	2X35	23,9	1179	0,554	133
1207IGG3020M65	2X50	27,6	1589	0,386	155
1207IGG3030M10	3X1	10,8	172	18,1	9
1207IGG3030M15	3X1,5	11,3	196	12,1	16
1207IGG2031M15	3G1,5	11,3	196	12,1	20
1207IGG3030M25	3X2,5	12,3	247	7,41	21
1207IGG2031M25	3G2,5	12,3	247	7,41	26
1207IGG3030M40	3X4	13,6	315	4,61	28
1207IGG2031M40	3G4	13,6	315	4,61	34
1207IGG3030M60	3X6	15,2	445	3,08	36
1207IGG2031M60	3G6	15,2	445	3,08	44
1207IGG3030M61	3X10	17,4	619	1,83	50
1207IGG2031M61	3G10	17,4	619	1,83	61
1207IGG3030M62	3X16	19,7	854	1,21	67
1207IGG2031M62	3G16	19,7	854	1,21	82
1207IGG3030M63	3X25	22,9	1205	0,78	89
1207IGG3030M64	3X35	25,5	1579	0,554	110
1207IGG3030M65	3X50	29,5	2154	0,386	137

GAALSHIP HF 1000 A FR

ARMoured, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR



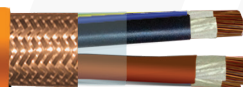
Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12071GG3030M66	3X70	33,7	2899	0,272	169
12071GG3030M67	3X95	37,8	3838	0,206	205
12071GG3030M68	3X120	42,3	4801	0,161	237
12071GG3030M69	3X150	46,4	5864	0,129	272
12071GG3030M70	3X185	51,7	7134	0,106	311
12071GG3030M71	3X240	57,7	8990	0,0801	365
12071GG3030M72	3X300	64,2	11064	0,0641	421
12071GG3040M10	4X1	11,5	201	18,1	13
12071GG3040M15	4X1,5	12,3	239	12,1	16
12071GG3040M15	4X1,5	12,3	239	12,1	16
12071GG2041M15	4G1,5	12,3	239	12,1	16
12071GG3040M25	4X2,5	13,4	300	7,41	21
12071GG3040M25	4X2,5	13,4	300	7,41	21
12071GG2041M25	4G2,5	13,4	300	7,41	21
12071GG3040M40	4X4	15,1	422	4,61	28
12071GG2041M40	4G4	15,1	422	4,61	28
12071GG3040M60	4X6	16,5	535	3,08	36
12071GG2041M60	4G6	16,5	535	3,08	36
12071GG3040M61	4X10	19	749	1,83	50
12071GG2041M61	4G10	19	749	1,83	50
12071GG3040M62	4X16	21,7	1062	1,21	67
12071GG2041M62	4G16	21,7	1062	1,21	67
12071GG3040M63	4X25	25,3	1503	0,78	89
12071GG3040M64	4X35	28,1	1965	0,554	110
12071GG3040M65	4X50	32,5	2771	0,386	137
12071GG3040M66	4X70	37,6	3811	0,272	169
12071GG3040M67	4X95	41,8	4995	0,206	205
12071GG3040M68	4X120	46,8	6170	0,161	237
12071GG3040M69	4X150	51,3	7612	0,129	272
12071GG3040M70	4X185	57,2	9342	0,106	311
12071GG3040M71	4X240	64	11813	0,0801	365
12071GG3050M10	5X1	12,5	242	18,1	13
12071GG3050M15	5X1,5	13,4	286	12,1	16
12071GG2051M15	5G1,5	13,4	286	12,1	16
12071GG3050M25	5X2,5	15	399	7,41	21
12071GG2051M25	5G2,5	15	399	7,41	21
12071GG3050M40	5X4	16,5	510	4,61	28
12071GG2051M40	5G4	16,5	510	4,61	28
12071GG3050M60	5X6	18,1	659	3,08	36
12071GG2051M60	5G6	18,1	659	3,08	36
12071GG3050M61	5X10	20,8	929	1,83	50
12071GG2051M61	5G10	20,8	929	1,83	50
12071GG3050M62	5X16	23,7	1292	1,21	67

GAALSHIP HF 1000 A FR

ARMOURED, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12071GG2051M62	5G16	23,7	1292	1,21	67
12071GG3050M63	5X25	27,9	1862	0,78	89
12071GG3050M64	5X35	31,1	2444	0,554	110
12071GG3050M65	5X50	36,5	3496	0,386	137
12071GG3050M66	5X70	41,7	4733	0,272	169
12071GG3050M67	5X95	46,5	6142	0,206	172
12071GG3050M68	5X120	52	7658	0,161	199
12071GG3050M69	5X150	57,1	9346	0,129	228
12071GG3050M70	5X185	63,6	11475	0,106	261
12071GG1070M10	7X1	13,3	286	18,1	8
12071GG1070M15	7X1,5	14,5	374	12,1	10
12071GG1070M25	7X2,5	15,8	476	7,41	14
12071GG1100M10	10X1	16,4	443	18,1	7
12071GG1100M15	10X1,5	17,5	530	12,1	9
12071GG1100M25	10X2,5	19,1	677	7,41	12
12071GG1120M10	12X1	17,5	512	18,1	7
12071GG1120M15	12X1,5	18,6	599	12,1	9
12071GG1120M25	12X2,5	20,4	767	7,41	11
12071GG1140M10	14X1	18,3	566	18,1	6
12071GG1140M15	14X1,5	19,5	662	12,1	8
12071GG1140M25	14X2,5	21,5	875	7,41	11
12071GG1160M10	16X1	19,2	620	18,1	6
12071GG1160M15	16X1,5	20,5	750	12,1	8
12071GG1160M25	16X2,5	22,7	976	7,41	10
12071GG1190M10	19X1	20,3	696	18,1	6
12071GG1190M15	19X1,5	21,7	850	12,1	7
12071GG1190M25	19X2,5	23,9	1120	7,41	10
12071GG1240M10	24X1	23,4	919	18,1	5
12071GG1240M15	24X1,5	25	1115	12,1	7
12071GG1240M25	24X2,5	27,5	1471	7,41	9
12071GG1270M10	27X1	24,3	1010	18,1	5
12071GG1270M15	27X1,5	25,9	1204	12,1	7
12071GG1270M25	27X2,5	28,6	1584	7,41	9
12071GG1300M10	30X1	25	1074	18,1	5
12071GG1300M15	30X1,5	26,9	1306	12,1	6
12071GG1300M25	30X2,5	29,7	1713	7,41	8
12071GG1370M10	37X1	27,1	1273	18,1	5
12071GG1370M15	37X1,5	28,9	1532	12,1	6
12071GG1370M25	37X2,5	32,1	2045	7,41	8

NOTE(S)

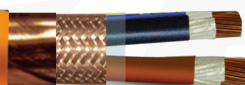
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 1000 A FR EMC

ARMoured, EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR EMC



APPLICATIONS:

FIRE RESISTANT POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS COMPLYING WITH IEC 60092-352.

CONSTRUCTION:

CONDUCTOR:	PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2 FLEXIBLE * UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	MICA GLASS TAPE + GAALTHERM® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
ARMOUR:	PLAIN ANNEALED COPPER WIRES BRAID + 100% COVERAGE PLAIN ANNEALED COPPER/POLYESTER TAPE ACC. TO IEC 60092-350
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000 FR, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, IEC 60331, 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)
 DNV (DET NORSKE VERITAS)
 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)



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	4 x OUTER DIAMETER

FEATURES:

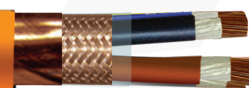
SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 1000 A FR EMC

ARMoured, EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR EMC



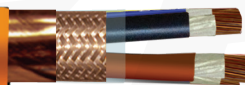
Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12081GG3030M15	3X1,5	11,4	248	12,1	16
12081GG3030M25	3X2,5	12,3	305	7,41	21
12081GG3030M40	3X4	13,6	387	4,61	28
12081GG3030M60	3X6	15,3	557	3,08	36
12081GG3030M61	3X10	17,5	748	1,83	50
12081GG3030M62	3X16	19,7	998	1,21	67
12081GG3030M63	3X25	23	1377	0,78	89
12081GG3030M64	3X35	25,6	1778	0,554	110
12081GG3030M65	3X50	29,5	2393	0,386	137
12081GG3030M66	3X70	33,7	3144	0,272	169
12081GG3030M67	3X95	37,9	4208	0,206	205
12081GG3030M68	3X120	42,4	5226	0,161	237
12081GG3030M69	3X150	46,5	6354	0,129	272
12081GG3030M70	3X185	51,7	7684	0,106	311
12081GG3030M71	3X240	57,7	9621	0,0801	365
12081GG3030M72	3X300	64,3	11749	0,0641	421
12081GG3037M62	3X16+3G6	19,7	1183	1,21	67
12081GG3037M63	3X25+3G6	23	1557	0,78	89
12081GG3037M64	3X35+3G6	25,6	1936	0,554	110
12081GG3037M65	3X50+3G10	29,5	2669	0,386	137
12081GG3037M66	3X70+3G16	33,7	3578	0,272	169
12081GG3037M67	3X95+3G16	37,9	4604	0,206	205
12081GG3037M68	3X120+3G25	42,4	5871	0,161	237
12081GG3037M69	3X150+3G25	46,5	7005	0,129	272
12081GG3037M70	3X185+3G35	51,7	8636	0,106	311
12081GG3037M71	3X240+3G50	57,7	10983	0,0801	365
12081GG3037M72	3X300+3G50	64,3	13165	0,0641	421
12081GG3040M15	4X1,5	12,3	297	12,1	16
12081GG3040M25	4X2,5	13,5	364	7,41	21
12081GG3040M40	4X4	15,2	534	4,61	28
12081GG3040M60	4X6	16,6	651	3,08	36
12081GG3040M61	4X10	19	885	1,83	50
12081GG3040M62	4X16	21,7	1224	1,21	67
12081GG3040M63	4X25	25,3	1702	0,78	89
12081GG3040M64	4X35	28,2	2173	0,554	110
12081GG3040M65	4X50	32,6	3030	0,386	137
12081GG3040M66	4X70	37,7	4181	0,272	169
12081GG3040M67	4X95	41,9	5418	0,206	205
12081GG3040M68	4X120	46,8	6661	0,161	237
12081GG3040M69	4X150	51,4	8156	0,129	272
12081GG3040M70	4X185	57,3	9910	0,106	311
12081GG3040M71	4X240	64	12497	0,0801	365
12081GG3050M10	5X1	12,6	303	18,1	13

GAALSHIP HF 1000 A FR EMC

ARMOURED, EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR EMC



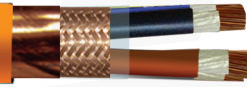
Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12081GG3050M15	5X1,5	13,5	349	12,1	16
12081GG2051M15	5G1,5	13,5	349	12,1	16
12081GG3050M25	5X2,5	15,1	499	7,41	21
12081GG2051M25	5G2,5	15,1	499	7,41	21
12081GG3050M40	5X4	16,5	623	4,61	28
12081GG2051M40	5G4	16,5	623	4,61	28
12081GG3050M60	5X6	18,2	776	3,08	36
12081GG2051M60	5G6	18,2	776	3,08	36
12081GG3050M61	5X10	20,9	1063	1,83	50
12081GG2051M61	5G10	20,9	1063	1,83	50
12081GG3050M62	5X16	23,8	1464	1,21	67
12081GG2051M62	5G16	23,8	1464	1,21	67
12081GG3050M63	5X25	28	2077	0,78	89
12081GG3050M64	5X35	31,2	2698	0,554	110
12081GG3050M65	5X50	36,5	3872	0,386	137
12081GG3050M66	5X70	41,8	5182	0,272	169
12081GG3050M67	5X95	46,5	6632	0,206	172
12081GG1070M10	7X1	13,3	355	18,1	8
12081GG1070M15	7X1,5	14,6	474	12,1	10
12081GG1070M25	7X2,5	15,9	588	7,41	14
12081GG1100M10	10X1	16,4	562	18,1	7
12081GG1100M15	10X1,5	17,6	654	12,1	9
12081GG1100M25	10X2,5	19,2	820	7,41	12
12081GG1120M10	12X1	17,5	628	18,1	7
12081GG1120M15	12X1,5	18,7	736	12,1	9
12081GG1120M25	12X2,5	20,4	921	7,41	11
12081GG1140M10	14X1	18,4	696	18,1	6
12081GG1140M15	14X1,5	19,5	803	12,1	8
12081GG1140M25	14X2,5	21,6	1034	7,41	11
12081GG1160M10	16X1	19,3	761	18,1	6
12081GG1160M15	16X1,5	20,6	891	12,1	8
12081GG1160M25	16X2,5	22,8	1145	7,41	10
12081GG1190M10	19X1	20,3	849	18,1	6
12081GG1190M15	19X1,5	21,8	1008	12,1	7
12081GG1190M25	19X2,5	24	1281	7,41	10
12081GG1240M10	24X1	23,5	1090	18,1	5
12081GG1240M15	24X1,5	25	1300	12,1	7
12081GG1240M25	24X2,5	27,6	1677	7,41	9
12081GG1270M10	27X1	24,3	1193	18,1	5
12081GG1270M15	27X1,5	26	1398	12,1	7
12081GG1270M25	27X2,5	28,6	1804	7,41	9
12081GG1300M10	30X1	25,2	1272	18,1	5
12081GG1300M15	30X1,5	26,9	1490	12,1	6

GAALSHIP HF 1000 A FR EMC

ARMoured, EMC, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR EMC



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12081GG1300M25	30X2,5	29,8	1944	7,41	8
12081GG1370M10	37X1	27,1	1462	18,1	5
12081GG1370M15	37X1,5	29	1758	12,1	6
12081GG1370M25	37X2,5	32,2	2296	7,41	8

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OS FR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR



APPLICATIONS:

FIRE RESISTANT, INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352.

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR: PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295

INSULATION: MICA GLASS TAPE + GAALTHERM® 595

STRANDING: CORE LAID-UP TOGETHER IN PAIRS/TRIPLES

CORES COLOR: PAIR: BLACK- LIGHT BLUE
 TRIPLE: BLACK- LIGHT BLUE - BROWN

OVERALL SCREEN: ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE

OUTER SHEATH: HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376

MARKING: ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 (UNDER 20 MM Ø)
 IEC 60331-1 (OVER 20 MM Ø)



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE: U₀/U 150/250 V

TEMPERATURE RANGE: -40°C UP TO +90°C

INSTALLATION TEMP.: -20°C

SHORT CIRCUIT TEMPERATURE: +250°C

MIN. BENDING RADIUS: 4 x OUTER DIAMETER

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360

DESIGN GUIDELINES ACC. TO IEC 60092-350/353

CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352

COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)

COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)

ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²

GAALSHIP HF 250 OS FR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11050CGX012M05	1X2X0,5	8,2	87	40,4
11050CGX012M07	1X2X0,75	8,6	99	26
11050CGX012M10	1X2X1	9	109	19,2
11050CGX012M15	1X2X1,5	9,9	134	12,8
11050CGX012M25	1X2X2,5	10,7	166	7,86
11050CGX022M05	2X2X0,5	11,2	139	40,4
11050CGX022M07	2X2X0,75	12	165	26
11050CGX022M10	2X2X1	12,8	189	19,2
11050CGX022M15	2X2X1,5	14,4	243	12,8
11050CGX022M25	2X2X2,5	15,8	311	7,86
11050CGX032M05	3X2X0,5	12	156	40,4
11050CGX032M07	3X2X0,75	12,8	184	26
11050CGX032M10	3X2X1	13,5	208	19,2
11050CGX032M15	3X2X1,5	15,4	272	12,8
11050CGX032M25	3X2X2,5	16,9	357	7,86
11050CGX042M05	4X2X0,5	13,3	201	40,4
11050CGX042M07	4X2X0,75	14,2	237	26
11050CGX042M10	4X2X1	15,1	274	19,2
11050CGX042M15	4X2X1,5	17,2	357	12,8
11050CGX042M25	4X2X2,5	18,9	470	7,86
11050CGX052M05	5X2X0,5	14,4	240	40,4
11050CGX052M07	5X2X0,75	15,5	285	26
11050CGX052M10	5X2X1	16,5	330	19,2
11050CGX052M15	5X2X1,5	18,7	433	12,8
11050CGX052M25	5X2X2,5	20,6	572	7,86
11050CGX062M05	6X2X0,5	15,8	291	40,4
11050CGX062M07	6X2X0,75	16,9	342	26
11050CGX062M10	6X2X1	18	394	19,2
11050CGX062M15	6X2X1,5	20,5	521	12,8
11050CGX062M25	6X2X2,5	22,7	698	7,86
11050CGX072M05	7X2X0,5	15,8	293	40,4
11050CGX072M07	7X2X0,75	16,9	350	26
11050CGX072M10	7X2X1	18	408	19,2
11050CGX072M15	7X2X1,5	20,5	540	12,8
11050CGX072M25	7X2X2,5	22,7	729	7,86
11050CGX082M05	8X2X0,5	18,6	411	40,4
11050CGX082M07	8X2X0,75	19,9	478	26
11050CGX082M10	8X2X1	21,2	546	19,2
11050CGX082M15	8X2X1,5	24,2	703	12,8
11050CGX082M25	8X2X2,5	26,8	923	7,86
11050CGX102M05	10X2X0,5	19,5	448	40,4
11050CGX102M07	10X2X0,75	20,8	536	26
11050CGX102M10	10X2X1	22,3	628	19,2
11050CGX102M15	10X2X1,5	25,4	828	12,8

GAALSHIP HF 250 OS FR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11050CGX102M25	10X2X2,5	28,2	1114	7,86
11050CGX122M05	12X2X0,5	21,5	535	40,4
11050CGX122M07	12X2X0,75	23	635	26
11050CGX122M10	12X2X1	24,5	734	19,2
11050CGX122M15	12X2X1,5	28	977	12,8
11050CGX122M25	12X2X2,5	31	1305	7,86
11050CGX142M05	14X2X0,5	22,3	581	40,4
11050CGX142M07	14X2X0,75	23,9	693	26
11050CGX142M10	14X2X1	25,5	808	19,2
11050CGX142M15	14X2X1,5	29,1	1074	12,8
11050CGX142M25	14X2X2,5	32,4	1454	7,86
11050CGX152M05	15X2X0,5	23,6	659	40,4
11050CGX152M07	15X2X0,75	25,3	783	26
11050CGX152M10	15X2X1	27,1	912	19,2
11050CGX152M15	15X2X1,5	31	1212	12,8
11050CGX152M25	15X2X2,5	34,4	1635	7,86
11050CGX162M05	16X2X0,5	23,6	660	40,4
11050CGX162M07	16X2X0,75	25,3	790	26
11050CGX162M10	16X2X1	27,1	926	19,2
11050CGX162M15	16X2X1,5	31	1232	12,8
11050CGX162M25	16X2X2,5	34,4	1666	7,86
11050CGX192M05	19X2X0,5	25,3	763	40,4
11050CGX192M07	19X2X0,75	27,2	919	26
11050CGX192M10	19X2X1	29,1	1078	19,2
11050CGX192M15	19X2X1,5	33,1	1432	12,8
11050CGX192M25	19X2X2,5	36,9	1949	7,86
11050CGX242M05	24X2X0,5	29,1	1043	40,4
11050CGX242M07	24X2X0,75	31,3	1241	26
11050CGX242M10	24X2X1	33,5	1443	19,2
11050CGX242M15	24X2X1,5	38,4	1904	12,8
11050CGX242M25	24X2X2,5	42,7	2559	7,86
11050CGX272M05	27X2X0,5	30,3	1113	40,4
11050CGX272M07	27X2X0,75	32,5	1336	26
11050CGX272M10	27X2X1	34,8	1560	19,2
11050CGX272M15	27X2X1,5	39,9	2075	12,8
11050CGX272M25	27X2X2,5	44,4	2808	7,86
11050CGX302M05	30X2X0,5	31,4	1198	40,4
11050CGX302M07	30X2X0,75	33,8	1441	26
11050CGX302M10	30X2X1	36,1	1687	19,2
11050CGX302M15	30X2X1,5	41,5	2259	12,8
11050CGX302M25	30X2X2,5	46,2	3065	7,86
11050CGX372M05	37X2X0,5	34,6	1465	40,4
11050CGX372M07	37X2X0,75	37,2	1763	26
11050CGX372M10	37X2X1	39,7	2061	19,2

GAALSHIP HF 250 OS FR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11050CGX372M15	37X2X1,5	45,6	2768	12,8
11050CGX372M25	37X2X2,5	50,7	3754	7,86
11050CGX013M05	1X3X0,5	8,6	98	40,4
11050CGX013M07	1X3X0,75	9	111	26
11050CGX013M10	1X3X1	9,5	125	19,2
11050CGX013M15	1X3X1,5	10,4	155	12,8
11050CGX013M25	1X3X2,5	11,3	196	7,86
11050CGX023M05	2X3X0,5	12,2	176	40,4
11050CGX023M07	2X3X0,75	13,1	207	26
11050CGX023M10	2X3X1	13,9	237	19,2
11050CGX023M15	2X3X1,5	15,7	305	12,8
11050CGX023M25	2X3X2,5	17,3	397	7,86
11050CGX033M05	3X3X0,5	13,1	199	40,4
11050CGX033M07	3X3X0,75	14	238	26
11050CGX033M10	3X3X1	14,8	272	19,2
11050CGX033M15	3X3X1,5	16,8	360	12,8
11050CGX033M25	3X3X2,5	18,6	484	7,86
11050CGX043M05	4X3X0,5	14,6	258	40,4
11050CGX043M07	4X3X0,75	15,6	307	26
11050CGX043M10	4X3X1	16,6	358	19,2
11050CGX043M15	4X3X1,5	18,8	475	12,8
11050CGX043M25	4X3X2,5	20,8	638	7,86
11050CGX053M05	5X3X0,5	15,8	311	40,4
11050CGX053M07	5X3X0,75	16,9	372	26
11050CGX053M10	5X3X1	18	433	19,2
11050CGX053M15	5X3X1,5	20,5	578	12,8
11050CGX053M25	5X3X2,5	22,7	778	7,86
11050CGX063M05	6X3X0,5	17,3	373	40,4
11050CGX063M07	6X3X0,75	18,6	448	26
11050CGX063M10	6X3X1	19,9	530	19,2
11050CGX063M15	6X3X1,5	22,6	705	12,8
11050CGX063M25	6X3X2,5	25	955	7,86
11050CGX073M05	7X3X0,5	17,3	385	40,4
11050CGX073M07	7X3X0,75	18,6	470	26
11050CGX073M10	7X3X1	19,9	551	19,2
11050CGX073M15	7X3X1,5	22,6	738	12,8
11050CGX073M25	7X3X2,5	25	1009	7,86
11050CGX083M05	8X3X0,5	20,4	519	40,4
11050CGX083M07	8X3X0,75	21,9	614	26
11050CGX083M10	8X3X1	23,4	714	19,2
11050CGX083M15	8X3X1,5	26,6	932	12,8
11050CGX083M25	8X3X2,5	29,6	1255	7,86
11050CGX103M05	10X3X0,5	21,5	591	40,4

GAALSHIP HF 250 OS FR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11050CGX103M07	10X3X0,75	23	711	26
11050CGX103M10	10X3X1	24,6	836	19,2
11050CGX103M15	10X3X1,5	28	1111	12,8
11050CGX103M25	10X3X2,5	31,1	1515	7,86
11050CGX123M05	12X3X0,5	23,6	700	40,4
11050CGX123M07	12X3X0,75	25,3	840	26
11050CGX123M10	12X3X1	27	987	19,2
11050CGX123M15	12X3X1,5	30,8	1318	12,8
11050CGX123M25	12X3X2,5	34,3	1794	7,86
11050CGX143M05	14X3X0,5	24,6	768	40,4
11050CGX143M07	14X3X0,75	26,4	928	26
11050CGX143M10	14X3X1	28,2	1095	19,2
11050CGX143M15	14X3X1,5	32,2	1471	12,8
11050CGX143M25	14X3X2,5	35,8	2016	7,86
11050CGX153M05	15X3X0,5	26,1	863	40,4
11050CGX153M07	15X3X0,75	27,9	1035	26
11050CGX153M10	15X3X1	29,9	1223	19,2
11050CGX153M15	15X3X1,5	34,2	1652	12,8
11050CGX153M25	15X3X2,5	38	2251	7,86
11050CGX163M05	16X3X0,5	26,1	875	40,4
11050CGX163M07	16X3X0,75	27,9	1056	26
11050CGX163M10	16X3X1	29,9	1246	19,2
11050CGX163M15	16X3X1,5	34,2	1685	12,8
11050CGX163M25	16X3X2,5	38	2305	7,86
11050CGX193M05	19X3X0,5	28	1019	40,4
11050CGX193M07	19X3X0,75	29,9	1232	26
11050CGX193M10	19X3X1	32	1454	19,2
11050CGX193M15	19X3X1,5	36,7	1972	12,8
11050CGX193M25	19X3X2,5	40,7	2704	7,86
11050CGX243M05	24X3X0,5	32,2	1366	40,4
11050CGX243M07	24X3X0,75	34,6	1646	26
11050CGX243M10	24X3X1	37	1928	19,2
11050CGX243M15	24X3X1,5	42,5	2585	12,8
11050CGX243M25	24X3X2,5	47,3	3524	7,86
11050CGX014M05	1X4X0,5	9,2	115	40,4
11050CGX014M07	1X4X0,75	9,7	132	26
11050CGX014M10	1X4X1	10,2	148	19,2
11050CGX014M15	1X4X1,5	11,3	186	12,8
11050CGX014M25	1X4X2,5	12,2	240	7,86

NOTE(S)

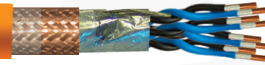
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OSA FR

OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR



APPLICATIONS:

FIRE RESISTANT, INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352.

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR: PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295

INSULATION: MICA GLASS TAPE + GAALTHERM® 595

STRANDING: CORE LAID-UP TOGETHER IN PAIRS/TRIPLES

CORES COLOR: PAIR: BLACK- LIGHT BLUE
 TRIPLE: BLACK- LIGHT BLUE - BROWN

OVERALL SCREEN: ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE

ARMOUR: PLAIN 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 OS FR, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 (UNDER 20 MM Ø)
 IEC 60331-1 (OVER 20 MM Ø)



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE: U₀/U 150/250 V

TEMPERATURE RANGE: -40°C UP TO +90°C

INSTALLATION TEMP.: -20°C

SHORT CIRCUIT TEMPERATURE: +250°C

MIN. BENDING RADIUS: 4 x OUTER DIAMETER

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 250 OSA FR

OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR



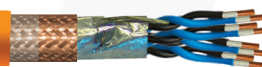
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11090CGX012M05	1X2X0,5	9,1	125	40,4
11090CGX012M07	1X2X0,75	9,5	138	26
11090CGX012M10	1X2X1	9,9	152	19,2
11090CGX012M15	1X2X1,5	10,8	181	12,8
11090CGX012M25	1X2X2,5	11,6	218	7,86
11090CGX022M05	2X2X0,5	12,2	197	40,4
11090CGX022M07	2X2X0,75	12,9	228	26
11090CGX022M10	2X2X1	13,6	250	19,2
11090CGX022M15	2X2X1,5	15,7	350	12,8
11090CGX022M25	2X2X2,5	17,2	432	7,86
11090CGX032M05	3X2X0,5	12,9	220	40,4
11090CGX032M07	3X2X0,75	13,7	244	26
11090CGX032M10	3X2X1	14,9	315	19,2
11090CGX032M15	3X2X1,5	16,7	388	12,8
11090CGX032M25	3X2X2,5	18,3	488	7,86
11090CGX042M05	4X2X0,5	14,3	268	40,4
11090CGX042M07	4X2X0,75	15,6	346	26
11090CGX042M10	4X2X1	16,5	389	19,2
11090CGX042M15	4X2X1,5	18,5	490	12,8
11090CGX042M25	4X2X2,5	20,4	617	7,86
11090CGX052M05	5X2X0,5	15,8	351	40,4
11090CGX052M07	5X2X0,75	16,8	401	26
11090CGX052M10	5X2X1	17,8	461	19,2
11090CGX052M15	5X2X1,5	20,1	576	12,8
11090CGX052M25	5X2X2,5	22	732	7,86
11090CGX062M05	6X2X0,5	17,2	413	40,4
11090CGX062M07	6X2X0,75	18,3	477	26
11090CGX062M10	6X2X1	19,4	533	19,2
11090CGX062M15	6X2X1,5	21,9	680	12,8
11090CGX062M25	6X2X2,5	24,1	881	7,86
11090CGX072M05	7X2X0,5	17,2	414	40,4
11090CGX072M07	7X2X0,75	18,3	482	26
11090CGX072M10	7X2X1	19,4	548	19,2
11090CGX072M15	7X2X1,5	21,9	704	12,8
11090CGX072M25	7X2X2,5	24,1	909	7,86
11090CGX082M05	8X2X0,5	20	553	40,4
11090CGX082M07	8X2X0,75	21,3	637	26
11090CGX082M10	8X2X1	22,6	710	19,2
11090CGX082M15	8X2X1,5	25,5	885	12,8
11090CGX082M25	8X2X2,5	28,3	1143	7,86
11090CGX102M05	10X2X0,5	20,8	604	40,4
11090CGX102M07	10X2X0,75	22,3	703	26
11090CGX102M10	10X2X1	23,7	807	19,2
11090CGX102M15	10X2X1,5	26,8	1021	12,8

GAALSHIP HF 250 OSA FR

OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR



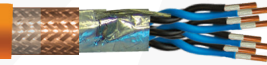
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11090CGX102M25	10X2X2,5	29,6	1330	7,86
11090CGX122M05	12X2X0,5	22,8	699	40,4
11090CGX122M07	12X2X0,75	24,3	808	26
11090CGX122M10	12X2X1	25,9	933	19,2
11090CGX122M15	12X2X1,5	29,4	1196	12,8
11090CGX122M25	12X2X2,5	32,5	1554	7,86
11090CGX142M05	14X2X0,5	23,7	753	40,4
11090CGX142M07	14X2X0,75	25,3	880	26
11090CGX142M10	14X2X1	27	1007	19,2
11090CGX142M15	14X2X1,5	30,6	1316	12,8
11090CGX142M25	14X2X2,5	33,8	1704	7,86
11090CGX152M05	15X2X0,5	25	844	40,4
11090CGX152M07	15X2X0,75	26,7	975	26
11090CGX152M10	15X2X1	28,5	1128	19,2
11090CGX152M15	15X2X1,5	32,3	1453	12,8
11090CGX152M25	15X2X2,5	35,8	1912	7,86
11090CGX162M05	16X2X0,5	25	846	40,4
11090CGX162M07	16X2X0,75	26,7	984	26
11090CGX162M10	16X2X1	28,5	1133	19,2
11090CGX162M15	16X2X1,5	32,3	1465	12,8
11090CGX162M25	16X2X2,5	35,8	1937	7,86
11090CGX192M05	19X2X0,5	26,7	959	40,4
11090CGX192M07	19X2X0,75	28,6	1136	26
11090CGX192M10	19X2X1	30,4	1308	19,2
11090CGX192M15	19X2X1,5	34,6	1689	12,8
11090CGX192M25	19X2X2,5	38,7	2316	7,86
11090CGX242M05	24X2X0,5	30,6	1270	40,4
11090CGX242M07	24X2X0,75	32,7	1483	26
11090CGX242M10	24X2X1	34,9	1710	19,2
11090CGX242M15	24X2X1,5	40,2	2319	12,8
11090CGX242M25	24X2X2,5	44,5	2996	7,86
11090CGX272M05	27X2X0,5	31,7	1356	40,4
11090CGX272M07	27X2X0,75	33,9	1585	26
11090CGX272M10	27X2X1	36,2	1841	19,2
11090CGX272M15	27X2X1,5	41,7	2500	12,8
11090CGX272M25	27X2X2,5	46,3	3296	7,86
11090CGX302M05	30X2X0,5	32,9	1444	40,4
11090CGX302M07	30X2X0,75	35,3	1719	26
11090CGX302M10	30X2X1	38	2060	19,2
11090CGX302M15	30X2X1,5	43,3	2681	12,8
11090CGX302M25	30X2X2,5	48	3552	7,86
11090CGX372M05	37X2X0,5	36	1737	40,4
11090CGX372M07	37X2X0,75	39	2139	26

GAALSHIP HF 250 OSA FR

OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR



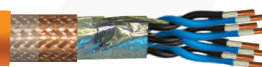
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11090CGX372M10	37X2X1	41,6	2487	19,2
11090CGX372M15	37X2X1,5	47,4	3249	12,8
11090CGX372M25	37X2X2,5	52,6	4277	7,86
11090CGX013M05	1X3X0,5	9,5	137	40,4
11090CGX013M07	1X3X0,75	9,9	152	26
11090CGX013M10	1X3X1	10,3	171	19,2
11090CGX013M15	1X3X1,5	11,3	202	12,8
11090CGX013M25	1X3X2,5	12,2	252	7,86
11090CGX023M05	2X3X0,5	13,2	240	40,4
11090CGX023M07	2X3X0,75	14,1	273	26
11090CGX023M10	2X3X1	15,3	347	19,2
11090CGX023M15	2X3X1,5	17,1	426	12,8
11090CGX023M25	2X3X2,5	18,8	538	7,86
11090CGX033M05	3X3X0,5	14,1	266	40,4
11090CGX033M07	3X3X0,75	15,4	341	26
11090CGX033M10	3X3X1	16,3	388	19,2
11090CGX033M15	3X3X1,5	18,2	493	12,8
11090CGX033M25	3X3X2,5	20	626	7,86
11090CGX043M05	4X3X0,5	16	370	40,4
11090CGX043M07	4X3X0,75	17	428	26
11090CGX043M10	4X3X1	18	494	19,2
11090CGX043M15	4X3X1,5	20,3	622	12,8
11090CGX043M25	4X3X2,5	22,2	799	7,86
11090CGX053M05	5X3X0,5	17,2	432	40,4
11090CGX053M07	5X3X0,75	18,3	504	26
11090CGX053M10	5X3X1	19,4	570	19,2
11090CGX053M15	5X3X1,5	21,9	739	12,8
11090CGX053M25	5X3X2,5	24,1	961	7,86
11090CGX063M05	6X3X0,5	18,8	509	40,4
11090CGX063M07	6X3X0,75	20	590	26
11090CGX063M10	6X3X1	21,2	685	19,2
11090CGX063M15	6X3X1,5	24	886	12,8
11090CGX063M25	6X3X2,5	26,4	1145	7,86
11090CGX073M05	7X3X0,5	18,8	522	40,4
11090CGX073M07	7X3X0,75	20	611	26
11090CGX073M10	7X3X1	21,2	708	19,2
11090CGX073M15	7X3X1,5	24	918	12,8
11090CGX073M25	7X3X2,5	26,4	1199	7,86
11090CGX083M05	8X3X0,5	21,8	681	40,4
11090CGX083M07	8X3X0,75	23,2	778	26
11090CGX083M10	8X3X1	24,8	899	19,2
11090CGX083M15	8X3X1,5	28	1146	12,8
11090CGX083M25	8X3X2,5	31	1494	7,86

GAALSHIP HF 250 OSA FR

OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11090CGX103M05	10X3X0,5	22,8	754	40,4
11090CGX103M07	10X3X0,75	24,3	895	26
11090CGX103M10	10X3X1	26	1027	19,2
11090CGX103M15	10X3X1,5	29,5	1336	12,8
11090CGX103M25	10X3X2,5	32,5	1756	7,86
11090CGX123M05	12X3X0,5	25	886	40,4
11090CGX123M07	12X3X0,75	26,7	1034	26
11090CGX123M10	12X3X1	28,4	1198	19,2
11090CGX123M15	12X3X1,5	32,3	1567	12,8
11090CGX123M25	12X3X2,5	35,7	2080	7,86
11090CGX143M05	14X3X0,5	26	958	40,4
11090CGX143M07	14X3X0,75	27,7	1137	26
11090CGX143M10	14X3X1	29,6	1314	19,2
11090CGX143M15	14X3X1,5	33,6	1716	12,8
11090CGX143M25	14X3X2,5	37,7	2388	7,86
11090CGX153M05	15X3X0,5	27,4	1061	40,4
11090CGX153M07	15X3X0,75	29,4	1260	26
11090CGX153M10	15X3X1	31,2	1457	19,2
11090CGX153M15	15X3X1,5	35,6	1923	12,8
11090CGX153M25	15X3X2,5	39,8	2656	7,86
11090CGX163M05	16X3X0,5	27,4	1081	40,4
11090CGX163M07	16X3X0,75	29,4	1282	26
11090CGX163M10	16X3X1	31,2	1479	19,2
11090CGX163M15	16X3X1,5	35,6	1956	12,8
11090CGX163M25	16X3X2,5	39,8	2711	7,86
11090CGX193M05	19X3X0,5	29,3	1228	40,4
11090CGX193M07	19X3X0,75	31,4	1476	26
11090CGX193M10	19X3X1	33,5	1705	19,2
11090CGX193M15	19X3X1,5	38,5	2343	12,8
11090CGX193M25	19X3X2,5	42,6	3146	7,86
11090CGX243M05	24X3X0,5	33,6	1611	40,4
11090CGX243M07	24X3X0,75	36	1918	26
11090CGX243M10	24X3X1	38,9	2310	19,2
11090CGX243M15	24X3X1,5	44,3	3017	12,8
11090CGX243M25	24X3X2,5	49,1	4023	7,86
11090CGX014M05	1X4X0,5	10,1	158	40,4
11090CGX014M07	1X4X0,75	10,6	178	26
11090CGX014M10	1X4X1	11,1	197	19,2
11090CGX014M15	1X4X1,5	12,1	242	12,8
11090CGX014M25	1X4X2,5	13,1	302	7,86

NOTE(S)

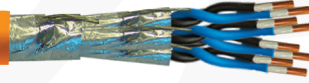
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISOS FR

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR



APPLICATIONS:

FIRE RESISTANT, INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352.

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
BV (BUREAU VERITAS)
LR (LLOYD'S REGISTER)
DNV (DET NORSKE VERITAS)
ABS (AMERICAN BUREAU OF SHIPPING)
OTHER APPROVALS ON REQUEST

CONSTRUCTION:

CONDUCTOR: PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295

INSULATION: MICA GLASS TAPE + GAAL THERM® 595

STRANDING: CORE LAID-UP TOGETHER IN PAIRS/TRIPLES

CORES COLOR: PAIR: BLACK- LIGHT BLUE
TRIPLE: BLACK- LIGHT BLUE - BROWN

OVERALL SCREEN: ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE

OUTER SHEATH: HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376

MARKING: ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:



FIRE RESISTANT ACC. TO:
IEC 60331-21
IEC 60331-2 (UNDER 20 MM Ø)
IEC 60331-1 (OVER 20 MM Ø)



FLAME AND FIRE RETARDANT ACC. TO:
EN IEC 60332-1-2,
EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
UL 1581



OZONE RESISTANCE ACC. TO:
IEC 60092-360

TECHNICAL DATA:

NOMINAL VOLTAGE: U₀/U 150/250 V

TEMPERATURE RANGE: -40°C UP TO +90°C

INSTALLATION TEMP.: -20°C

SHORT CIRCUIT TEMPERATURE: +250°C

MIN. BENDING RADIUS: 4 x OUTER DIAMETER

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360

DESIGN GUIDELINES ACC. TO IEC 60092-350/353

CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352

COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)

COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)

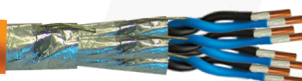
ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²

GAALSHIP HF 250 ISOS FR

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR



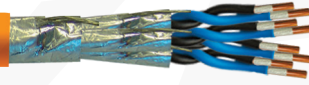
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11130CGX022M05	2X2X0,5	12,2	168	40,4
11130CGX022M07	2X2X0,75	13	189	26
11130CGX022M10	2X2X1	13,7	215	19,2
11130CGX022M15	2X2X1,5	15,5	271	12,8
11130CGX022M25	2X2X2,5	17	340	7,86
11130CGX032M05	3X2X0,5	13	188	40,4
11130CGX032M07	3X2X0,75	13,8	213	26
11130CGX032M10	3X2X1	14,6	243	19,2
11130CGX032M15	3X2X1,5	16,6	310	12,8
11130CGX032M25	3X2X2,5	18,2	396	7,86
11130CGX042M05	4X2X0,5	14,5	242	40,4
11130CGX042M07	4X2X0,75	15,4	281	26
11130CGX042M10	4X2X1	16,4	320	19,2
11130CGX042M15	4X2X1,5	18,5	407	12,8
11130CGX042M25	4X2X2,5	20,4	526	7,86
11130CGX052M05	5X2X0,5	15,7	290	40,4
11130CGX052M07	5X2X0,75	16,8	337	26
11130CGX052M10	5X2X1	17,8	384	19,2
11130CGX052M15	5X2X1,5	20,2	491	12,8
11130CGX052M25	5X2X2,5	22,3	639	7,86
11130CGX062M05	6X2X0,5	17,2	350	40,4
11130CGX062M07	6X2X0,75	18,4	403	26
11130CGX062M10	6X2X1	19,5	466	19,2
11130CGX062M15	6X2X1,5	22,2	595	12,8
11130CGX062M25	6X2X2,5	24,6	777	7,86
11130CGX072M05	7X2X0,5	17,2	359	40,4
11130CGX072M07	7X2X0,75	18,4	418	26
11130CGX072M10	7X2X1	19,5	479	19,2
11130CGX072M15	7X2X1,5	22,2	622	12,8
11130CGX072M25	7X2X2,5	24,6	816	7,86
11130CGX082M05	8X2X0,5	20,3	489	40,4
11130CGX082M07	8X2X0,75	21,7	559	26
11130CGX082M10	8X2X1	23	630	19,2
11130CGX082M15	8X2X1,5	26,2	800	12,8
11130CGX082M25	8X2X2,5	29	1026	7,86
11130CGX102M05	10X2X0,5	21,3	553	40,4
11130CGX102M07	10X2X0,75	22,7	639	26
11130CGX102M10	10X2X1	24,2	732	19,2
11130CGX102M15	10X2X1,5	27,5	944	12,8
11130CGX102M25	10X2X2,5	30,5	1238	7,86
11130CGX122M05	12X2X0,5	23,4	648	40,4
11130CGX122M07	12X2X0,75	25	757	26
11130CGX122M10	12X2X1	26,6	863	19,2
11130CGX122M15	12X2X1,5	30,4	1116	12,8

GAALSHIP HF 250 ISOS FR

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR



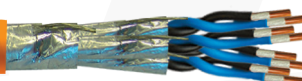
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11130CGX122M25	12X2X2,5	33,6	1461	7,86
11130CGX142M05	14X2X0,5	24,3	710	40,4
11130CGX142M07	14X2X0,75	26,1	834	26
11130CGX142M10	14X2X1	27,8	952	19,2
11130CGX142M15	14X2X1,5	31,7	1237	12,8
11130CGX142M25	14X2X2,5	35	1621	7,86
11130CGX152M05	15X2X0,5	25,9	804	40,4
11130CGX152M07	15X2X0,75	27,6	932	26
11130CGX152M10	15X2X1	29,5	1077	19,2
11130CGX152M15	15X2X1,5	33,6	1380	12,8
11130CGX152M25	15X2X2,5	37,2	1814	7,86
11130CGX162M05	16X2X0,5	25,9	812	40,4
11130CGX162M07	16X2X0,75	27,6	947	26
11130CGX162M10	16X2X1	29,5	1089	19,2
11130CGX162M15	16X2X1,5	33,6	1407	12,8
11130CGX162M25	16X2X2,5	37,2	1854	7,86
11130CGX192M05	19X2X0,5	27,7	941	40,4
11130CGX192M07	19X2X0,75	29,6	1105	26
11130CGX192M10	19X2X1	31,6	1269	19,2
11130CGX192M15	19X2X1,5	36	1647	12,8
11130CGX192M25	19X2X2,5	39,9	2170	7,86
11130CGX242M05	24X2X0,5	32	1275	40,4
11130CGX242M07	24X2X0,75	34,3	1483	26
11130CGX242M10	24X2X1	36,6	1692	19,2
11130CGX242M15	24X2X1,5	41,7	2173	12,8
11130CGX242M25	24X2X2,5	46,3	2847	7,86
11130CGX272M05	27X2X0,5	33,2	1371	40,4
11130CGX272M07	27X2X0,75	35,6	1603	26
11130CGX272M10	27X2X1	38	1838	19,2
11130CGX272M15	27X2X1,5	43,3	2374	12,8
11130CGX272M25	27X2X2,5	48,1	3126	7,86
11130CGX302M05	30X2X0,5	34,5	1481	40,4
11130CGX302M07	30X2X0,75	37	1735	26
11130CGX302M10	30X2X1	39,4	1990	19,2
11130CGX302M15	30X2X1,5	45,1	2587	12,8
11130CGX302M25	30X2X2,5	50	3415	7,86
11130CGX372M05	37X2X0,5	37,9	1811	40,4
11130CGX372M07	37X2X0,75	40,6	2120	26
11130CGX372M10	37X2X1	43,4	2442	19,2
11130CGX372M15	37X2X1,5	49,5	3168	12,8
11130CGX372M25	37X2X2,5	55	4192	7,86
11130CGX023M05	2X3X0,5	13,5	203	40,4
11130CGX023M07	2X3X0,75	14,4	238	26

GAALSHIP HF 250 ISOS FR

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ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11130CGX023M10	2X3X1	15,4	268	19,2
11130CGX023M15	2X3X1,5	17,3	346	12,8
11130CGX023M25	2X3X2,5	19,1	436	7,86
11130CGX033M05	3X3X0,5	14,5	235	40,4
11130CGX033M07	3X3X0,75	15,5	275	26
11130CGX033M10	3X3X1	16,4	315	19,2
11130CGX033M15	3X3X1,5	18,5	403	12,8
11130CGX033M25	3X3X2,5	20,5	530	7,86
11130CGX043M05	4X3X0,5	16,2	308	40,4
11130CGX043M07	4X3X0,75	17,3	360	26
11130CGX043M10	4X3X1	18,4	413	19,2
11130CGX043M15	4X3X1,5	20,8	535	12,8
11130CGX043M25	4X3X2,5	22,9	702	7,86
11130CGX053M05	5X3X0,5	17,6	370	40,4
11130CGX053M07	5X3X0,75	18,8	434	26
11130CGX053M10	5X3X1	20	500	19,2
11130CGX053M15	5X3X1,5	22,7	649	12,8
11130CGX053M25	5X3X2,5	25,1	854	7,86
11130CGX063M05	6X3X0,5	19,3	442	40,4
11130CGX063M07	6X3X0,75	20,6	525	26
11130CGX063M10	6X3X1	21,9	601	19,2
11130CGX063M15	6X3X1,5	25	788	12,8
11130CGX063M25	6X3X2,5	27,6	1045	7,86
11130CGX073M05	7X3X0,5	19,3	461	40,4
11130CGX073M07	7X3X0,75	20,6	546	26
11130CGX073M10	7X3X1	21,9	630	19,2
11130CGX073M15	7X3X1,5	25	830	12,8
11130CGX073M25	7X3X2,5	27,6	1107	7,86
11130CGX083M05	8X3X0,5	22,8	609	40,4
11130CGX083M07	8X3X0,75	24,3	708	26
11130CGX083M10	8X3X1	26	814	19,2
11130CGX083M15	8X3X1,5	29,6	1048	12,8
11130CGX083M25	8X3X2,5	32,7	1372	7,86
11130CGX103M05	10X3X0,5	23,9	700	40,4
11130CGX103M07	10X3X0,75	25,6	827	26
11130CGX103M10	10X3X1	27,3	955	19,2
11130CGX103M15	10X3X1,5	31,1	1255	12,8
11130CGX103M25	10X3X2,5	34,4	1663	7,86
11130CGX123M05	12X3X0,5	26,3	830	40,4
11130CGX123M07	12X3X0,75	28,2	983	26
11130CGX123M10	12X3X1	30	1129	19,2
11130CGX123M15	12X3X1,5	34,2	1481	12,8
11130CGX123M25	12X3X2,5	38	1979	7,86

GAALSHIP HF 250 ISOS FR

INDIVIDUAL & OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11130CGX143M05	14X3X0,5	27,4	916	40,4
11130CGX143M07	14X3X0,75	29,4	1087	26
11130CGX143M10	14X3X1	31,3	1254	19,2
11130CGX143M15	14X3X1,5	35,7	1653	12,8
11130CGX143M25	14X3X2,5	39,6	2212	7,86
11130CGX153M05	15X3X0,5	29,1	1020	40,4
11130CGX153M07	15X3X0,75	31,2	1216	26
11130CGX153M10	15X3X1	33,3	1406	19,2
11130CGX153M15	15X3X1,5	38	1849	12,8
11130CGX153M25	15X3X2,5	42,1	2462	7,86
11130CGX163M05	16X3X0,5	29,1	1040	40,4
11130CGX163M07	16X3X0,75	31,2	1236	26
11130CGX163M10	16X3X1	33,3	1435	19,2
11130CGX163M15	16X3X1,5	38	1890	12,8
11130CGX163M25	16X3X2,5	42,1	2526	7,86
11130CGX193M05	19X3X0,5	31,2	1221	40,4
11130CGX193M07	19X3X0,75	33,5	1450	26
11130CGX193M10	19X3X1	35,7	1681	19,2
11130CGX193M15	19X3X1,5	40,7	2212	12,8
11130CGX193M25	19X3X2,5	45,1	2972	7,86
11130CGX243M05	24X3X0,5	36	1619	40,4
11130CGX243M07	24X3X0,75	38,6	1910	26
11130CGX243M10	24X3X1	41,3	2211	19,2
11130CGX243M15	24X3X1,5	47,2	2895	12,8
11130CGX243M25	24X3X2,5	52,4	3859	7,86

NOTE(S)

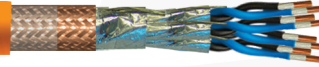
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISOSA FR

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR



APPLICATIONS:

FIRE RESISTANT, INSTRUMENTATION CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SCREENED AGAINST ELECTROMAGNETIC INTERFERENCES, COMPLYING WITH IEC 60092-352.

TYPE APPROVALS/CERTIFICATES:

- RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
- BV (BUREAU VERITAS)
- LR (LLOYD'S REGISTER)
- DNV (DET NORSKE VERITAS)
- ABS (AMERICAN BUREAU OF SHIPPING)
- OTHER APPROVALS ON REQUEST

CONSTRUCTION:

- CONDUCTOR:** PLAIN ANNEALED COPPER OR TINNED ANNEALED COPPER CONDUCTOR CL. 2, ACC. TO IEC 60228, DIN VDE 0295
- INSULATION:** MICA GLASS TAPE + GAAL THERM® 595
- STRANDING:** CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
- CORES COLOR:** PAIR: BLACK- LIGHT BLUE
TRIPLE: BLACK- LIGHT BLUE - BROWN
- OVERALL SCREEN:** ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
- ARMOUR:** PLAIN 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 OS FR, CROSS NOMINAL SECTION mm², 150/250 V, PART N°, IEC 60092-376, IEC 60332-3-22, IEC 60331, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

RESISTANCE:



FIRE RESISTANT ACC. TO:
IEC 60331-21
IEC 60331-2 (UNDER 20 MM Ø)
IEC 60331-1 (OVER 20 MM Ø)



FLAME AND FIRE RETARDANT ACC. TO:
EN IEC 60332-1-2,
EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
UL 1581



OZONE RESISTANCE ACC. TO:
IEC 60092-360

TECHNICAL DATA:

- NOMINAL VOLTAGE:** U₀/U 150/250 V
- TEMPERATURE RANGE:** -40°C UP TO +90°C
- INSTALLATION TEMP.:** -20°C
- SHORT CIRCUIT TEMPERATURE:** +250°C
- MIN. BENDING RADIUS:** 4 x OUTER DIAMETER

FEATURES:

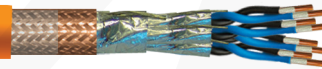
- SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
- DESIGN GUIDELINES ACC. TO IEC 60092-350/353
- CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
- COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
- COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
- ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
- TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 250 ISOSA FR

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR



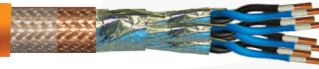
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11150CGX022M05	2X2X0,5	13,1	231	40,4
11150CGX022M07	2X2X0,75	14,3	289	26
11150CGX022M10	2X2X1	15,2	325	19,2
11150CGX022M15	2X2X1,5	16,9	393	12,8
11150CGX022M25	2X2X2,5	18,4	476	7,86
11150CGX032M05	3X2X0,5	14,4	288	40,4
11150CGX032M07	3X2X0,75	15,2	327	26
11150CGX032M10	3X2X1	16	353	19,2
11150CGX032M15	3X2X1,5	17,9	441	12,8
11150CGX032M25	3X2X2,5	19,6	535	7,86
11150CGX042M05	4X2X0,5	15,9	358	40,4
11150CGX042M07	4X2X0,75	16,8	397	26
11150CGX042M10	4X2X1	17,7	450	19,2
11150CGX042M15	4X2X1,5	19,9	546	12,8
11150CGX042M25	4X2X2,5	21,8	686	7,86
11150CGX052M05	5X2X0,5	17,1	410	40,4
11150CGX052M07	5X2X0,75	18,1	469	26
11150CGX052M10	5X2X1	19,2	520	19,2
11150CGX052M15	5X2X1,5	21,6	652	12,8
11150CGX052M25	5X2X2,5	23,7	821	7,86
11150CGX062M05	6X2X0,5	18,7	490	40,4
11150CGX062M07	6X2X0,75	19,8	548	26
11150CGX062M10	6X2X1	20,9	622	19,2
11150CGX062M15	6X2X1,5	23,6	775	12,8
11150CGX062M25	6X2X2,5	25,9	965	7,86
11150CGX072M05	7X2X0,5	18,7	497	40,4
11150CGX072M07	7X2X0,75	19,8	564	26
11150CGX072M10	7X2X1	20,9	636	19,2
11150CGX072M15	7X2X1,5	23,6	801	12,8
11150CGX072M25	7X2X2,5	25,9	1005	7,86
11150CGX082M05	8X2X0,5	21,6	645	40,4
11150CGX082M07	8X2X0,75	23	723	26
11150CGX082M10	8X2X1	24,4	815	19,2
11150CGX082M15	8X2X1,5	27,6	1011	12,8
11150CGX082M25	8X2X2,5	30,3	1246	7,86
11150CGX102M05	10X2X0,5	22,7	716	40,4
11150CGX102M07	10X2X0,75	24,1	822	26
11150CGX102M10	10X2X1	25,6	920	19,2
11150CGX102M15	10X2X1,5	28,9	1156	12,8
11150CGX102M25	10X2X2,5	31,9	1478	7,86
11150CGX122M05	12X2X0,5	24,8	840	40,4
11150CGX122M07	12X2X0,75	26,4	946	26
11150CGX122M10	12X2X1	28,1	1079	19,2
11150CGX122M15	12X2X1,5	31,7	1354	12,8

GAALSHIP HF 250 ISOSA FR

INDIVIDUAL & OVERALL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR



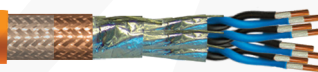
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11150CGX122M25	12X2X2,5	35	1731	7,86
11150CGX142M05	14X2X0,5	25,8	903	40,4
11150CGX142M07	14X2X0,75	27,5	1042	26
11150CGX142M10	14X2X1	29,1	1169	19,2
11150CGX142M15	14X2X1,5	33,1	1480	12,8
11150CGX142M25	14X2X2,5	36,9	1987	7,86
11150CGX152M05	15X2X0,5	27,2	1013	40,4
11150CGX152M07	15X2X0,75	29	1147	26
11150CGX152M10	15X2X1	30,9	1311	19,2
11150CGX152M15	15X2X1,5	34,9	1652	12,8
11150CGX152M25	15X2X2,5	39,1	2225	7,86
11150CGX162M05	16X2X0,5	27,2	1020	40,4
11150CGX162M07	16X2X0,75	29	1162	26
11150CGX162M10	16X2X1	30,9	1327	19,2
11150CGX162M15	16X2X1,5	34,9	1677	12,8
11150CGX162M25	16X2X2,5	39,1	2267	7,86
11150CGX192M05	19X2X0,5	29,1	1161	40,4
11150CGX192M07	19X2X0,75	31	1343	26
11150CGX192M10	19X2X1	33	1508	19,2
11150CGX192M15	19X2X1,5	37,9	2014	12,8
11150CGX192M25	19X2X2,5	41,7	2599	7,86
11150CGX242M05	24X2X0,5	33,3	1518	40,4
11150CGX242M07	24X2X0,75	35,6	1753	26
11150CGX242M10	24X2X1	38,3	2058	19,2
11150CGX242M15	24X2X1,5	43,6	2603	12,8
11150CGX242M25	24X2X2,5	48,1	3333	7,86
11150CGX272M05	27X2X0,5	34,6	1639	40,4
11150CGX272M07	27X2X0,75	37,4	1959	26
11150CGX272M10	27X2X1	39,8	2243	19,2
11150CGX272M15	27X2X1,5	45,2	2856	12,8
11150CGX272M25	27X2X2,5	50	3624	7,86
11150CGX302M05	30X2X0,5	35,8	1752	40,4
11150CGX302M07	30X2X0,75	38,8	2116	26
11150CGX302M10	30X2X1	41,3	2418	19,2
11150CGX302M15	30X2X1,5	46,8	3071	12,8
11150CGX302M25	30X2X2,5	51,9	3963	7,86
11150CGX372M05	37X2X0,5	39,7	2215	40,4
11150CGX372M07	37X2X0,75	42,5	2551	26
11150CGX372M10	37X2X1	45,2	2873	19,2
11150CGX372M15	37X2X1,5	51,4	3675	12,8
11150CGX372M25	37X2X2,5	56,8	4767	7,86
11150CGX023M05	2X3X0,5	14,9	310	40,4
11150CGX023M07	2X3X0,75	15,8	349	26
11150CGX023M10	2X3X1	16,7	388	19,2

GAALSHIP HF 250 ISOSA FR

INDIVIDUAL & OVERALL SCREEN , ARMOURED, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR



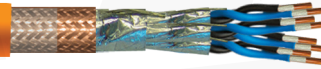
Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11150CGX023M15	2X3X1,5	18,8	486	12,8
11150CGX023M25	2X3X2,5	20,5	592	7,86
11150CGX033M05	3X3X0,5	15,8	346	40,4
11150CGX033M07	3X3X0,75	16,8	391	26
11150CGX033M10	3X3X1	17,8	446	19,2
11150CGX033M15	3X3X1,5	20	548	12,8
11150CGX033M25	3X3X2,5	21,8	692	7,86
11150CGX043M05	4X3X0,5	17,6	431	40,4
11150CGX043M07	4X3X0,75	18,6	497	26
11150CGX043M10	4X3X1	19,7	551	19,2
11150CGX043M15	4X3X1,5	22,1	697	12,8
11150CGX043M25	4X3X2,5	24,3	883	7,86
11150CGX053M05	5X3X0,5	19	506	40,4
11150CGX053M07	5X3X0,75	20,2	577	26
11150CGX053M10	5X3X1	21,4	661	19,2
11150CGX053M15	5X3X1,5	24	832	12,8
11150CGX053M25	5X3X2,5	26,4	1047	7,86
11150CGX063M05	6X3X0,5	20,7	597	40,4
11150CGX063M07	6X3X0,75	22	687	26
11150CGX063M10	6X3X1	23,4	773	19,2
11150CGX063M15	6X3X1,5	26,3	978	12,8
11150CGX063M25	6X3X2,5	29	1255	7,86
11150CGX073M05	7X3X0,5	20,7	617	40,4
11150CGX073M07	7X3X0,75	22	707	26
11150CGX073M10	7X3X1	23,4	802	19,2
11150CGX073M15	7X3X1,5	26,3	1019	12,8
11150CGX073M25	7X3X2,5	29	1320	7,86
11150CGX083M05	8X3X0,5	24,1	794	40,4
11150CGX083M07	8X3X0,75	25,8	901	26
11150CGX083M10	8X3X1	27,4	1021	19,2
11150CGX083M15	8X3X1,5	30,9	1273	12,8
11150CGX083M25	8X3X2,5	34,2	1631	7,86
11150CGX103M05	10X3X0,5	25,3	886	40,4
11150CGX103M07	10X3X0,75	27	1039	26
11150CGX103M10	10X3X1	28,7	1171	19,2
11150CGX103M15	10X3X1,5	32,4	1496	12,8
11150CGX103M25	10X3X2,5	35,8	1942	7,86
11150CGX123M05	12X3X0,5	27,7	1039	40,4
11150CGX123M07	12X3X0,75	29,6	1196	26
11150CGX123M10	12X3X1	31,5	1372	19,2
11150CGX123M15	12X3X1,5	35,7	1761	12,8
11150CGX123M25	12X3X2,5	39,7	2383	7,86
11150CGX143M05	14X3X0,5	28,8	1130	40,4
11150CGX143M07	14X3X0,75	30,8	1326	26

GAALSHIP HF 250 ISOSA FR

INDIVIDUAL & OVERALL SCREEN , ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11150CGX143M10	14X3X1	32,7	1496	19,2
11150CGX143M15	14X3X1,5	37,5	2021	12,8
11150CGX143M25	14X3X2,5	41,5	2636	7,86
11150CGX153M05	15X3X0,5	30,5	1261	40,4
11150CGX153M07	15X3X0,75	32,5	1455	26
11150CGX153M10	15X3X1	34,6	1675	19,2
11150CGX153M15	15X3X1,5	39,7	2257	12,8
11150CGX153M25	15X3X2,5	43,9	2896	7,86
11150CGX163M05	16X3X0,5	30,5	1281	40,4
11150CGX163M07	16X3X0,75	32,5	1473	26
11150CGX163M10	16X3X1	34,6	1705	19,2
11150CGX163M15	16X3X1,5	39,7	2298	12,8
11150CGX163M25	16X3X2,5	43,9	2959	7,86
11150CGX193M05	19X3X0,5	32,6	1459	40,4
11150CGX193M07	19X3X0,75	34,8	1718	26
11150CGX193M10	19X3X1	37,5	2038	19,2
11150CGX193M15	19X3X1,5	42,5	2637	12,8
11150CGX193M25	19X3X2,5	47	3467	7,86
11150CGX243M05	24X3X0,5	37,9	1996	40,4
11150CGX243M07	24X3X0,75	40,5	2327	26
11150CGX243M10	24X3X1	43,1	2631	19,2
11150CGX243M15	24X3X1,5	49	3388	12,8
11150CGX243M25	24X3X2,5	54,3	4418	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

The image features a solid blue background with a large orange parallelogram shape on the right side. The text "Water Spray Resistant" is written in white, bold, sans-serif font across the orange shape. There are also white and orange geometric outlines at the bottom of the page.

Water Spray Resistant

Water Resistance Test

IEC 60331-2, EN 50200 ANNEX E WATER SPRAY TEST (UNDER 20 MM Ø)

Overall diameter not exceeding 20 mm is held on a flame at a temperature of roughly 830°C, for a minimum of 120 minutes. The sample is also subjected to a mechanical shock, directly on the cable, every 10 minutes. Lastly, 5 minutes before the end of the test, the cable is sprayed by a strong jet of water for a period of 5 seconds, at intervals of 60 seconds.



IEC 60331-1, BS 8491 WATER JET TEST (OVER 20 MM Ø)

Overall diameter exceeding 20mm is exposed to a flame at 830°C, mechanical shocks for 15 minutes, and an additional 15 minutes to flame, mechanical shocks, and water spray.



GAALSHIP HF 1000 FR WSR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR WSR

APPLICATIONS:

FIRE RESISTANT AND WATER SPRAY RESISTANT POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SUITABLE FOR THE POWER SUPPLY 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® 595
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
1ST WRAPPING:	GLASS FIBER TAPE
2ND WRAPPING:	TWO PLAIN ANNEALED COPPER / POLYESTER TAPES
3RD WRAPPING:	GLASS FIBER TAPE
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000 FR WSR, CROSS NOMINAL SECTION mm ² , 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, IEC 60331, BS 8491, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 + WATER SPRAY ACC. TO EN 50200 ANNEX E.
 IEC 60331-1 + WATER JET ACC. TO BS 8491.



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

FEATURES:

SHEATHING AND INSULATING MATERIALS ACC. TO: IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²

GAALSHIP HF 1000 FR WSR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12101G7L010M15	1X1,5	6,6	65	12,1	23
12101G7L010M25	1X2,5	7	79	7,41	30
12101G7L010M40	1X4	7,6	102	4,61	40
12101G7L010M60	1X6	8,1	128	3,08	52
12101G7L010M61	1X10	9,2	181	1,83	72
12101G7L010M62	1X16	10,3	255	1,21	96
12101G7L010M63	1X25	12,1	372	0,78	127
12101G7L010M64	1X35	13,3	487	0,554	157
12101G7L010M65	1X50	15,2	666	0,386	196
12101G7L010M66	1X70	17,1	894	0,272	242
12101G7L010M67	1X95	18,8	1164	0,206	293
12101G7L010M68	1X120	20,9	1451	0,161	339
12101G7L010M69	1X150	22,8	1787	0,129	389
12101G7L010M70	1X185	25,2	2191	0,106	444
12101G7L010M71	1X240	28	2791	0,0801	522
12101G7L010M72	1X300	31	3449	0,0641	601
12101G7L010M72	1X400	34,7	4528	0,0486	690
12101G73020M10	2X1	10,4	138	18,1	11
12101G73020M15	2X1,5	11	160	12,1	20
12101G73020M25	2X2,5	11,8	194	7,41	26
12101GE3020M40	2X4	12,9	244	4,61	34
12101GE3020M60	2X6	14,2	309	3,08	44
12101G73020M61	2X10	16,2	427	1,83	61
12101G73020M62	2X16	18,3	592	1,21	82
12101G73020M63	2X25	21,3	822	0,78	108
12101G73020M64	2X35	23,7	1080	0,554	133
12101G73020M65	2X50	27,4	1475	0,386	155
12101G73030M10	3X1	11	159	18,1	9
12101G73030M15	3X1,5	11,6	183	12,1	16
12101GE2031M15	3G1,5	11,6	183	12,1	20
12101G73030M25	3X2,5	12,5	230	7,41	21
12101GE2031M25	3G2,5	12,5	230	7,41	26
12101G73030M40	3X4	13,8	299	4,61	28
12101G72031M40	3G4	13,8	299	4,61	34
12101G73030M60	3X6	15,1	393	3,08	36
12101G72031M60	3G6	15,1	393	3,08	44
12101G73030M61	3X10	17,1	552	1,83	50
12101G72031M61	3G10	17,1	552	1,83	61
12101G73030M62	3X16	19,5	779	1,21	67
12101G72031M62	3G16	19,5	779	1,21	82
12101G73030M63	3X25	22,8	1120	0,78	89
12101G73030M64	3X35	25,4	1475	0,554	110
12101G73030M65	3X50	29,3	2025	0,386	137

GAALSHIP HF 1000 FR WSR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12101G73030M66	3X70	33,5	2748	0,272	169
12101G73030M67	3X95	37,3	3603	0,206	205
12101G73030M68	3X120	41,7	4501	0,161	237
12101G73030M69	3X150	45,8	5531	0,129	272
12101G73030M70	3X185	51	6760	0,106	311
12101G73030M71	3X240	57,1	8598	0,0801	365
12101G73030M72	3X300	63,6	10600	0,0641	421
12101GG3040M10	4X1	11,8	188	18,1	13
12101GG3040M15	4X1,5	12,5	222	12,1	16
12101G73040M15	4X1,5	12,5	222	12,1	16
12101GE2041M15	4G1,5	12,5	222	12,1	16
12101GG3040M25	4X2,5	13,7	285	7,41	21
12101G73040M25	4X2,5	13,7	285	7,41	21
12101GE2041M25	4G2,5	13,7	285	7,41	21
12101G73040M40	4X4	15	370	4,61	28
12101G72041M40	4G4	15	370	4,61	28
12101G73040M60	4X6	16,4	477	3,08	36
12101G72041M60	4G6	16,4	477	3,08	36
12101G73040M61	4X10	18,8	678	1,83	50
12101G72041M61	4G10	18,8	678	1,83	50
12101G73040M62	4X16	21,5	975	1,21	67
12101G72041M62	4G16	21,5	975	1,21	67
12101G73040M63	4X25	25,1	1399	0,78	89
12101G73040M64	4X35	28	1853	0,554	110
12101G73040M65	4X50	32,3	2636	0,386	137
12101G73040M66	4X70	37,1	3576	0,272	169
12101G73040M67	4X95	41,2	4704	0,206	205
12101G73040M68	4X120	46,1	5837	0,161	237
12101G73040M69	4X150	50,7	7255	0,129	272
12101G73040M70	4X185	56,6	8930	0,106	311
12101G73040M71	4X240	63,3	11348	0,0801	365
12101GG3050M10	5X1	12,8	226	18,1	13
12101GG3050M15	5X1,5	13,7	270	12,1	16
12101G72051M15	5G1,5	13,7	270	12,1	16
12101GG3050M25	5X2,5	14,8	345	7,41	21
12101G72051M25	5G2,5	14,8	345	7,41	21
12101G73050M25	5X4	16,3	451	4,61	28
12101G72051M40	5G4	16,3	451	4,61	28
12101G73050M60	5X6	18	587	3,08	36
12101G72051M60	5G6	18	587	3,08	36
12101G73050M61	5X10	20,7	842	1,83	50
12101G72051M61	5G10	20,7	842	1,83	50
12101G73050M62	5X16	23,6	1206	1,21	67

GAALSHIP HF 1000 FR WSR

POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
12101G72051M62	5G16	23,6	1206	1,21	67
12101G73050M63	5X25	27,8	1745	0,78	89
12101G73050M64	5X35	30,9	2316	0,554	110
12101G73050M65	5X50	35,9	3270	0,386	137
12101G73050M66	5X70	41,2	4461	0,272	169
12101G73050M67	5X95	45,8	5809	0,206	172
12101G73050M68	5X120	51,3	7271	0,161	199
12101G73050M69	5X150	56,5	8969	0,129	228
12101G73050M70	5X185	63	11042	0,106	261
12101GG1070M10	7X1	13,5	267	18,1	8
12101GG1070M15	7X1,5	14,4	320	12,1	10
12101GG1070M25	7X2,5	15,6	413	7,41	14
12101GG1100M10	10X1	16,2	385	18,1	7
12101GG1100M15	10X1,5	17,3	466	12,1	9
12101GG1100M25	10X2,5	19	607	7,41	12
12101GG1120M10	12X1	17,3	440	18,1	7
12101GG1120M15	12X1,5	18,5	529	12,1	9
12101GG1120M25	12X2,5	20,2	694	7,41	11
12101GG1140M10	14X1	18,1	487	18,1	6
12101GG1140M15	14X1,5	19,3	589	12,1	8
12101GG1140M25	14X2,5	21,4	788	7,41	11
12101GG1160M10	16X1	19,1	548	18,1	6
12101GG1160M15	16X1,5	20,4	664	12,1	8
12101GG1160M25	16X2,5	22,5	889	7,41	10
12101GG1190M10	19X1	20,1	622	18,1	6
12101GG1190M15	19X1,5	21,6	762	12,1	7
12101GG1190M25	19X2,5	23,7	1012	7,41	10
12101GG1240M10	24X1	23,2	833	18,1	5
12101GG1240M15	24X1,5	24,8	1014	12,1	7
12101GG1240M25	24X2,5	27,4	1350	7,41	9
12101GG1270M10	27X1	24,1	907	18,1	5
12101GG1270M15	27X1,5	25,8	1100	12,1	7
12101GG1270M25	27X2,5	28,4	1464	7,41	9
12101GG1300M10	30X1	24,9	973	18,1	5
12101GG1300M15	30X1,5	26,7	1190	12,1	6
12101GG1300M25	30X2,5	29,6	1598	7,41	8
12101GG1370M10	37X1	26,9	1156	18,1	5
12101GG1370M15	37X1,5	28,8	1413	12,1	6
12101GG1370M25	37X2,5	31,9	1907	7,41	8

NOTE(S)

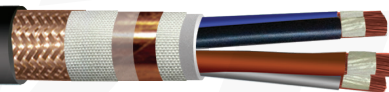
OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 1000 A FR WSR

ARMOURED, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR WSR



APPLICATIONS:

FIRE RESISTANT AND WATER SPRAY RESISTANT POWER AND CONTROL CABLES FOR FIXED ELECTRICAL INSTALLATIONS ABOARD SHIPS, SUITABLE FOR THE POWER SUPPLY 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 (*) FLEXIBLE UP TO 10 mm ² CL. 5 FROM 16 mm ² , ACC. TO EN IEC 60228
INSULATION:	MICA GLASS TAPE + GAALTHERM® 597
CORES COLOR:	ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW EARTH-WIRE FROM 3 CORES
INNER SHEATH (IF ANY):	HALOGEN FREE COMPOUND OR SYNTHETIC TAPE
1ST WRAPPING:	GLASS FIBER TAPE
2ND WRAPPING:	TWO PLAIN ANNEALED COPPER / POLYESTER TAPES
3RD WRAPPING:	GLASS FIBER TAPE
ARMOUR:	PLAIN ANNEALED COPPER WIRES BRAID ACC. TO IEC 60092-350.
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND TYPE SHF1, ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-353
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR WSR, CROSS NOMINAL SECTION SQMM, 0,6/1 kV, PART N°, IEC 60092-353, IEC 60332-3-22, IEC 60331, BS 8491, PRODUCTION PLANT, BATCH N°, PRODUCTION DATE, CE ROHS, PROGRESSIVE METER MARKING.

(*) HIGH FLEXIBILITY ASSOCIATED WITH CLASS 5 CONDUCTORS, SEE 'CONDUCTOR' ON PAGE 5.

TECHNICAL DATA:

NOMINAL VOLTAGE:	U ₀ /U 0,6/1 kV
TEST VOLTAGE:	3,5 kV
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°C
SHORT CIRCUIT TEMPERATURE:	+250°C
MIN. BENDING RADIUS:	4 × OUTER DIAMETER

TYPE APPROVALS/CERTIFICATES:

RINA / RINAMIL (REGISTRO ITALIANO NAVALE)
 BV (BUREAU VERITAS)
 LR (LLOYD'S REGISTER)
 DNV (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 + WATER SPRAY ACC. TO EN
 50200 ANNEX E.
 IEC 60331-1 + WATER JET ACC. TO BS 8491.



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

FEATURES:

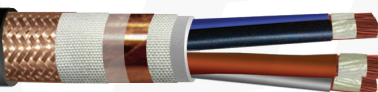
SHEATHING AND INSULATING MATERIALS ACC. TO IEC 60092-360
 DESIGN GUIDELINES ACC. TO IEC 60092-350/353
 CHOICE AND INSTALLATION OF ELECTRIC CABLES ACC. TO
 IEC 60092-352
 COLD BEND TEST AT LOW TEMPERATURES
 ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES
 ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR FOR SECTIONS UP TO 10 mm²
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 1000 A FR WSR

ARMOURED, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR WSR



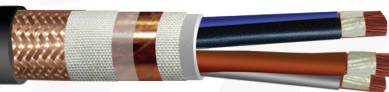
Part number	No. of cores x cross section n x mm ²	Outer dia- meter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
1211G7L010M15	1X1,5	7,5	97	12,1	23
1211G7L010M25	1X2,5	7,9	113	7,41	30
1211G7L010M40	1X4	8,5	139	4,61	40
1211G7L010M60	1X6	9	166	3,08	52
1211G7L010M61	1X10	10,1	226	1,83	72
1211G7L010M62	1X16	11,2	308	1,21	96
1211G7L010M63	1X25	13	434	0,78	127
1211G7L010M64	1X35	14,6	587	0,554	157
1211G7L010M65	1X50	16,4	777	0,386	196
1211G7L010M66	1X70	18,4	1027	0,272	242
1211G7L010M67	1X95	20,1	1314	0,206	293
1211G7L010M68	1X120	22,2	1610	0,161	339
1211G7L010M69	1X150	24,1	1964	0,129	389
1211G7L010M70	1X185	26,5	2392	0,106	444
1211G7L010M71	1X240	29,3	3005	0,0801	522
1211G7L010M72	1X300	32,3	3685	0,0641	601
1211G7L010M73	1X400	36,4	4878	0,0486	690
1211G73020M10	2X1	11,3	188	18,1	11
1211G73020M15	2X1,5	11,8	209	12,1	20
1211G73020M25	2X2,5	12,7	251	7,41	26
1211GE3020M40	2X4	13,9	310	4,61	34
12101GE3020M60	2X6	15,5	412	3,08	44
1211G73020M61	2X10	17,5	545	1,83	61
1211G73020M62	2X16	19,6	724	1,21	82
1211G73020M63	2X25	22,6	981	0,78	108
1211G73020M64	2X35	25	1258	0,554	133
1211G73020M65	2X50	28,7	1681	0,386	155
1211G73030M10	3X1	11,8	211	18,1	9
1211G73030M15	3X1,5	12,5	239	12,1	16
1211GE2031M15	3G1,5	12,5	239	12,1	20
1211G73030M25	3X2,5	13,5	296	7,41	21
1211GE2031M25	3G2,5	13,5	296	7,41	26
1211G73030M40	3X4	15,1	399	4,61	28
1211G72031M40	3G4	15,1	399	4,61	34
1211G73030M60	3X6	16,4	502	3,08	36
1211G72031M60	3G6	16,4	502	3,08	44
1211G73030M61	3X10	18,4	681	1,83	50
1211G72031M61	3G10	18,4	681	1,83	61
1211G73030M62	3X16	20,9	936	1,21	67
1211G72031M62	3G16	20,9	936	1,21	82
1211G73030M63	3X25	24,1	1297	0,78	89
1211G73030M64	3X35	26,7	1664	0,554	110

GAALSHIP HF 1000 A FR WSR

ARMOURED, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR WSR



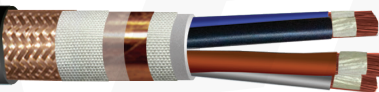
Part number	No. of cores x cross section n x mm ²	Outer dia- meter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
1211G73030M65	3X50	30,6	2252	0,386	137
1211G73030M66	3X70	34,8	3011	0,272	169
1211G73030M67	3X95	39	3993	0,206	205
1211G73030M68	3X120	43,4	4933	0,161	237
1211G73030M69	3X150	47,5	6008	0,129	272
1211G73030M70	3X185	52,7	7295	0,106	311
1211G73030M71	3X240	58,8	9182	0,0801	365
1211G73030M72	3X300	65,4	11279	0,0641	421
1211GG3040M10	4X1	12,7	245	18,1	13
1211GG3040M15	4X1,5	13,5	288	12,1	16
1211G73040M15	4X1,5	13,5	288	12,1	16
1211GE2041M15	4G1,5	13,5	288	12,1	16
1211GG3040M25	4X2,5	15	385	7,41	21
1211G73040M25	4X2,5	15	385	7,41	21
1211GE2041M25	4G2,5	15	385	7,41	21
1211G73040M40	4X4	16,3	480	4,61	28
1211G72041M40	4G4	16,3	480	4,61	28
1211G73040M60	4X6	17,8	601	3,08	36
1211G72041M60	4G6	17,8	601	3,08	36
1211G73040M61	4X10	20,2	821	1,83	50
1211G72041M61	4G10	20,2	821	1,83	50
1211G73040M62	4X16	22,8	1133	1,21	67
1211G72041M62	4G16	22,8	1133	1,21	67
1211G73040M63	4X25	26,4	1588	0,78	89
1211G73040M64	4X35	29,3	2060	0,554	110
1211G73040M65	4X50	33,6	2880	0,386	137
1211G73040M66	4X70	38,8	3967	0,272	169
1211G73040M67	4X95	42,9	5135	0,206	205
1211G73040M68	4X120	47,9	6327	0,161	237
1211G73040M69	4X150	52,4	7783	0,129	272
1211G73040M70	4X185	58,3	9519	0,106	311
1211G73040M71	4X240	65	12012	0,0801	365
1211GG3050M10	5X1	13,8	292	18,1	13
1211GG3050M15	5X1,5	15	370	12,1	16
1211G72051M15	5G1,5	15	370	12,1	16
1211GG3050M25	5X2,5	16,1	455	7,41	21
1211G72051M25	5G2,5	16,1	455	7,41	21
1211G73050M40	5X4	17,7	573	4,61	28
1211G72051M40	5G4	17,7	573	4,61	28
1211G73050M60	5X6	19,3	717	3,08	36
1211G72051M60	5G6	19,3	717	3,08	36
1211G73050M61	5X10	22	997	1,83	50

GAALSHIP HF 1000 A FR WSR

ARMOURED, POWER & CONTROL CABLE



ELETTROTEK KABEL® GAALSHIP® HF 1000 A FR WSR



Part number	No. of cores x cross section n x mm ²	Outer dia- meter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)	Current rating in open air at 45 °C (A)
1211G72051M61	5G10	22	997	1,83	50
1211G73050M62	5X16	24,9	1384	1,21	67
1211G72051M62	5G16	24,9	1384	1,21	67
1211G73050M63	5X25	29,1	1956	0,78	89
1211G73050M64	5X35	32,2	2548	0,554	110
1211G73050M65	5X50	37,6	3628	0,386	137
1211G73050M66	5X70	42,9	4873	0,272	169
1211G73050M67	5X95	47,6	6297	0,206	172
1211G73050M68	5X120	53,1	7833	0,161	199
1211G73050M69	5X150	58,2	9531	0,129	228
1211G73050M70	5X185	64,7	11689	0,106	261
1211GG1070M10	7X1	14,8	366	18,1	8
1211GG1070M15	7X1,5	15,6	421	12,1	10
1211GG1070M25	7X2,5	16,9	531	7,41	14
1211GG1100M10	10X1	17,6	509	18,1	7
1211GG1100M15	10X1,5	18,6	595	12,1	9
1211GG1100M25	10X2,5	20,3	746	7,41	12
1211GG1120M10	12X1	18,6	568	18,1	7
1211GG1120M15	12X1,5	19,8	667	12,1	9
1211GG1120M25	12X2,5	21,6	852	7,41	11
1211GG1140M10	14X1	19,4	622	18,1	6
1211GG1140M15	14X1,5	20,6	741	12,1	8
1211GG1140M25	14X2,5	22,7	946	7,41	11
1211GG1160M10	16X1	20,4	687	18,1	6
1211GG1160M15	16X1,5	21,8	823	12,1	8
1211GG1160M25	16X2,5	23,8	1055	7,41	10
1211GG1190M10	19X1	21,5	780	18,1	6
1211GG1190M15	19X1,5	22,9	922	12,1	7
1211GG1190M25	19X2,5	25	1193	7,41	10
1211GG1240M10	24X1	24,5	1012	18,1	5
1211GG1240M15	24X1,5	26,1	1198	12,1	7
1211GG1240M25	24X2,5	28,7	1563	7,41	9
1211GG1270M10	27X1	25,4	1090	18,1	5
1211GG1270M15	27X1,5	27,1	1290	12,1	7
1211GG1270M25	27X2,5	29,8	1686	7,41	9
1211GG1300M10	30X1	26,2	1157	18,1	5
1211GG1300M15	30X1,5	28	1394	12,1	6
1211GG1300M25	30X2,5	30,9	1815	7,41	8
1211GG1370M10	37X1	28,2	1362	18,1	5
1211GG1370M11	37X1,5	30,2	1635	12,1	6
1211GG1370M12	37X2,5	33,2	2145	7,41	8

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS 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
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
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR, CROSS NOMINAL SECTION mm ² , 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:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 + WATER SPRAY ACC. TO EN 50200 ANNEX E.
 IEC 60331-1 + WATER JET ACC. TO BS 8491.



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

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 IEC 60092-350 ART. 8.9 AND ANNEX E (-40°C)
 COLD BEND IMPACT AT LOW TEMPERATURES
 ACC. TO IEC 60092-350 ART. 8.9 AND ANNEX E (-35°C)
 ON REQUEST CLASS 5 CONDUCTOR ACC. TO IEC 60228

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/km)
11200CGX012M05	1X2X0,5	9,2	114	40,4
11200CGX012M07	1X2X0,75	9,6	126	26
11200CGX012M10	1X2X1	10	138	19,2
11200CGX012M15	1X2X1,5	10,9	165	12,8
11200CGX012M25	1X2X2,5	11,7	200	7,86
11200CGX012M05	2X2X0,5	12,3	178	40,4
11200CGX022M07	2X2X0,75	13,1	207	26
11200CGX022M10	2X2X1	13,9	233	19,2
11200CGX022M15	2X2X1,5	15,5	293	12,8
11200CGX022M25	2X2X2,5	16,9	366	7,86
11200CGX032M05	3X2X0,5	13,1	198	40,4
11200CGX032M07	3X2X0,75	13,9	228	26
11200CGX032M10	3X2X1	14,7	255	19,2
11200CGX032M15	3X2X1,5	16,5	325	12,8
11200CGX032M25	3X2X2,5	18,1	415	7,86
11200CGX042M05	4X2X0,5	14,5	247	40,4
11200CGX042M07	4X2X0,75	15,4	287	26
11200CGX042M10	4X2X1	16,3	326	19,2
11200CGX042M15	4X2X1,5	18,3	417	12,8
11200CGX042M25	4X2X2,5	20	535	7,86
11200CGX052M05	5X2X0,5	15,6	290	40,4
11200CGX052M07	5X2X0,75	16,6	338	26
11200CGX052M10	5X2X1	17,6	387	19,2
11200CGX052M15	5X2X1,5	19,8	497	12,8
11200CGX052M25	5X2X2,5	21,8	643	7,86
11200CGX062M05	6X2X0,5	16,9	345	40,4
11200CGX062M07	6X2X0,75	18,1	401	26
11200CGX062M10	6X2X1	19,2	456	19,2
11200CGX062M15	6X2X1,5	21,6	591	12,8
11200CGX062M25	6X2X2,5	23,8	775	7,86
11200CGX072M05	7X2X0,5	16,9	347	40,4
11200CGX072M07	7X2X0,75	18,1	408	26
11200CGX072M10	7X2X1	19,2	470	19,2
11200CGX072M15	7X2X1,5	21,6	610	12,8
11200CGX072M25	7X2X2,5	23,8	807	7,86
11200CGX082M05	8X2X0,5	19,7	470	40,4
11200CGX082M07	8X2X0,75	21,1	547	26
11200CGX082M10	8X2X1	22,4	619	19,2
11200CGX082M15	8X2X1,5	25,3	786	12,8
11200CGX082M25	8X2X2,5	27,9	1015	7,86
11200CGX102M05	10X2X0,5	20,6	515	40,4
11200CGX102M07	10X2X0,75	22	606	26
11200CGX102M10	10X2X1	23,5	704	19,2

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11200CGX102M15	10X2X1,5	26,5	915	12,8
11200CGX102M25	10X2X2,5	29,4	1210	7,86
11200CGX122M05	12X2X0,5	22,6	608	40,4
11200CGX122M07	12X2X0,75	24,1	713	26
11200CGX122M10	12X2X1	25,7	824	19,2
11200CGX122M15	12X2X1,5	29,2	1073	12,8
11200CGX122M25	12X2X2,5	32,2	1410	7,86
11200CGX142M05	14X2X0,5	23,5	657	40,4
11200CGX142M07	14X2X0,75	25	776	26
11200CGX142M10	14X2X1	26,6	895	19,2
11200CGX142M15	14X2X1,5	30,3	1173	12,8
11200CGX142M25	14X2X2,5	33,5	1565	7,86
11200CGX152M05	15X2X0,5	24,8	740	40,4
11200CGX152M07	15X2X0,75	26,5	868	26
11200CGX152M10	15X2X1	28,2	1005	19,2
11200CGX152M15	15X2X1,5	32,1	1317	12,8
11200CGX152M25	15X2X2,5	35,6	1752	7,86
11200CGX162M05	16X2X0,5	24,8	741	40,4
11200CGX162M07	16X2X0,75	26,5	877	26
11200CGX162M10	16X2X1	28,2	1019	19,2
11200CGX162M15	16X2X1,5	32,1	1337	12,8
11200CGX162M25	16X2X2,5	35,6	1783	7,86
11200CGX192M05	19X2X0,5	26,4	849	40,4
11200CGX192M07	19X2X0,75	28,3	1012	26
11200CGX192M10	19X2X1	30,2	1176	19,2
11200CGX192M15	19X2X1,5	34,3	1545	12,8
11200CGX192M25	19X2X2,5	38	2074	7,86
11200CGX242M05	24X2X0,5	30,3	1143	40,4
11200CGX242M07	24X2X0,75	32,5	1349	26
11200CGX242M10	24X2X1	34,6	1557	19,2
11200CGX242M15	24X2X1,5	39,5	2035	12,8
11200CGX242M25	24X2X2,5	43,9	2704	7,86
11200CGX272M05	27X2X0,5	31,4	1216	40,4
11200CGX272M07	27X2X0,75	33,7	1447	26
11200CGX272M10	27X2X1	36	1679	19,2
11200CGX272M15	27X2X1,5	41	2211	12,8
11200CGX272M25	27X2X2,5	45,6	2959	7,86
11200CGX302M05	30X2X0,5	32,6	1305	40,4
11200CGX302M07	30X2X0,75	34,9	1557	26
11200CGX302M10	30X2X1	37,3	1810	19,2
11200CGX302M15	30X2X1,5	42,6	2400	12,8
11200CGX302M25	30X2X2,5	47,3	3222	7,86

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11200CGX372M05	37X2X0,5	35,7	1583	40,4
11200CGX372M07	37X2X0,75	38,3	1888	26
11200CGX372M10	37X2X1	40,8	2197	19,2
11200CGX372M15	37X2X1,5	46,7	2923	12,8
11200CGX372M25	37X2X2,5	51,8	3925	7,86
11200CGX013M05	1X3X0,5	9,6	126	40,4
11200CGX013M07	1X3X0,75	10,1	140	26
11200CGX013M10	1X3X1	10,5	155	19,2
11200CGX013M15	1X3X1,5	11,5	188	12,8
11200CGX013M25	1X3X2,5	12,3	232	7,86
11200CGX023M05	2X3X0,5	13,4	218	40,4
11200CGX023M07	2X3X0,75	14,2	252	26
11200CGX023M10	2X3X1	15,1	286	19,2
11200CGX023M15	2X3X1,5	16,9	359	12,8
11200CGX023M25	2X3X2,5	18,5	456	7,86
11200CGX033M05	3X3X0,5	14,2	245	40,4
11200CGX033M07	3X3X0,75	15,1	286	26
11200CGX033M10	3X3X1	15,9	323	19,2
11200CGX033M15	3X3X1,5	18	418	12,8
11200CGX033M25	3X3X2,5	19,7	544	7,86
11200CGX043M05	4X3X0,5	15,8	312	40,4
11200CGX043M07	4X3X0,75	16,7	361	26
11200CGX043M10	4X3X1	17,7	416	19,2
11200CGX043M15	4X3X1,5	19,9	539	12,8
11200CGX043M25	4X3X2,5	21,9	709	7,86
11200CGX053M05	5X3X0,5	17	365	40,4
11200CGX053M07	5X3X0,75	18,1	431	26
11200CGX053M10	5X3X1	19,2	494	19,2
11200CGX053M15	5X3X1,5	21,6	648	12,8
11200CGX053M25	5X3X2,5	23,9	855	7,86
11200CGX063M05	6X3X0,5	18,5	432	40,4
11200CGX063M07	6X3X0,75	19,7	508	26
11200CGX063M10	6X3X1	21	597	19,2
11200CGX063M15	6X3X1,5	23,7	782	12,8
11200CGX063M25	6X3X2,5	26,2	1040	7,86
11200CGX073M05	7X3X0,5	18,5	444	40,4
11200CGX073M07	7X3X0,75	19,7	529	26
11200CGX073M10	7X3X1	21	619	19,2
11200CGX073M15	7X3X1,5	23,7	815	12,8
11200CGX073M25	7X3X2,5	26,2	1095	7,86
11200CGX083M05	8X3X0,5	21,6	589	40,4
11200CGX083M07	8X3X0,75	23	688	26

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11200CGX083M10	8X3X1	24,5	788	19,2
11200CGX083M15	8X3X1,5	27,8	1023	12,8
11200CGX083M25	8X3X2,5	30,8	1356	7,86
11200CGX103M05	10X3X0,5	22,6	664	40,4
11200CGX103M07	10X3X0,75	24,1	789	26
11200CGX103M10	10X3X1	25,6	914	19,2
11200CGX103M15	10X3X1,5	29,1	1206	12,8
11200CGX103M25	10X3X2,5	32,3	1621	7,86
11200CGX123M05	12X3X0,5	24,8	781	40,4
11200CGX123M07	12X3X0,75	26,4	926	26
11200CGX123M10	12X3X1	28,2	1079	19,2
11200CGX123M15	12X3X1,5	32	1423	12,8
11200CGX123M25	12X3X2,5	35,4	1911	7,86
11200CGX143M05	14X3X0,5	25,6	847	40,4
11200CGX143M07	14X3X0,75	27,5	1019	26
11200CGX143M10	14X3X1	29,3	1192	19,2
11200CGX143M15	14X3X1,5	33,3	1580	12,8
11200CGX143M25	14X3X2,5	36,9	2138	7,86
11200CGX153M05	15X3X0,5	27,2	952	40,4
11200CGX153M07	15X3X0,75	29,1	1130	26
11200CGX153M10	15X3X1	31	1325	19,2
11200CGX153M15	15X3X1,5	35,4	1769	12,8
11200CGX153M25	15X3X2,5	39,2	2380	7,86
11200CGX163M05	16X3X0,5	27,2	964	40,4
11200CGX163M07	16X3X0,75	29,1	1152	26
11200CGX163M10	16X3X1	31	1347	19,2
11200CGX163M15	16X3X1,5	35,4	1802	12,8
11200CGX163M25	16X3X2,5	39,2	2435	7,86
11200CGX193M05	19X3X0,5	29,1	1114	40,4
11200CGX193M07	19X3X0,75	31,1	1334	26
11200CGX193M10	19X3X1	33,1	1563	19,2
11200CGX193M15	19X3X1,5	37,8	2097	12,8
11200CGX193M25	19X3X2,5	41,9	2842	7,86
11200CGX243M05	24X3X0,5	33,4	1476	40,4
11200CGX243M07	24X3X0,75	35,8	1764	26
11200CGX243M10	24X3X1	38,2	2054	19,2
11200CGX243M15	24X3X1,5	43,6	2730	12,8
11200CGX243M25	24X3X2,5	48,5	3684	7,86
11200CGX014M05	1X4X0,5	10,3	144	40,4
11200CGX014M07	1X4X0,75	10,8	163	26
11200CGX014M10	1X4X1	11,2	181	19,2

GAALSHIP HF 250 OS FR WSR

OVERALL SCREEN, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11200CGX014M15	1X4X1,5	12,3	222	12,8
11200CGX014M25	1X4X2,5	13,3	279	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 OSA FR WSR

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



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 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 OS FR WSR, CROSS NOMINAL SECTION mm ² , 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:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
- ABS (AMERICAN BUREAU OF SHIPPING)
- OTHER APPROVALS ON REQUEST

RESISTANCE:

-  **FIRE RESISTANT ACC. TO:**
IEC 60331-21
IEC 60331-2 + WATER SPRAY ACC. TO EN 50200 ANNEX E.
IEC 60331-1 + WATER JET ACC. TO BS 8491.
-  **FLAME AND FIRE RETARDANT ACC. TO:**
EN IEC 60332-1-2,
EN IEC 60332-3-22
-  **HALOGEN FREE ACC. TO:**
EN IEC 60754-1/2
-  **SMOKE EMISSION PROPERTIES ACC. TO:**
EN IEC 61034-1/2
-  **UV RESISTANCE ACC. TO:**
UL 1581
-  **OZONE RESISTANCE ACC. TO:**
IEC 60092-360

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
- TINNED COPPER WIRES BRAID ARMOUR ON REQUEST.

GAALSHIP HF 250 OSA FR WSR

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11230CGX012M05	1X2X0,5	10	155	40,4
11230CGX012M07	1X2X0,75	10,4	168	26
11230CGX012M10	1X2X1	10,8	183	19,2
11230CGX012M15	1X2X1,5	11,7	217	12,8
11230CGX012M25	1X2X2,5	12,5	253	7,86
11230CGX022M05	2X2X0,5	13,2	241	40,4
11230CGX022M07	2X2X0,75	14,4	304	26
11230CGX022M10	2X2X1	15,2	338	19,2
11230CGX022M15	2X2X1,5	16,8	409	12,8
11230CGX022M25	2X2X2,5	18,2	494	7,86
11230CGX032M05	3X2X0,5	14,4	295	40,4
11230CGX032M07	3X2X0,75	15,2	333	26
11230CGX032M10	3X2X1	16	364	19,2
11230CGX032M15	3X2X1,5	17,8	453	12,8
11230CGX032M25	3X2X2,5	19,4	549	7,86
11230CGX042M05	4X2X0,5	15,9	356	40,4
11230CGX042M07	4X2X0,75	16,7	403	26
11230CGX042M10	4X2X1	17,6	454	19,2
11230CGX042M15	4X2X1,5	19,6	551	12,8
11230CGX042M25	4X2X2,5	21,4	693	7,86
11230CGX052M05	5X2X0,5	16,9	406	40,4
11230CGX052M07	5X2X0,75	17,9	467	26
11230CGX052M10	5X2X1	18,9	517	19,2
11230CGX052M15	5X2X1,5	21,1	651	12,8
11230CGX052M25	5X2X2,5	23,1	806	7,86
11230CGX062M05	6X2X0,5	18,2	474	40,4
11230CGX062M07	6X2X0,75	19,4	535	26
11230CGX062M10	6X2X1	20,5	607	19,2
11230CGX062M15	6X2X1,5	22,9	750	12,8
11230CGX062M25	6X2X2,5	25,1	958	7,86
11230CGX072M05	7X2X0,5	18,2	476	40,4
11230CGX072M07	7X2X0,75	19,4	543	26
11230CGX072M10	7X2X1	20,5	622	19,2
11230CGX072M15	7X2X1,5	22,9	773	12,8
11230CGX072M25	7X2X2,5	25,1	984	7,86
11230CGX082M05	8X2X0,5	21,1	628	40,4
11230CGX082M07	8X2X0,75	22,4	706	26
11230CGX082M10	8X2X1	23,7	787	19,2
11230CGX082M15	8X2X1,5	26,6	972	12,8
11230CGX082M25	8X2X2,5	29,3	1233	7,86
11230CGX102M05	10X2X0,5	21,9	669	40,4
11230CGX102M07	10X2X0,75	23,4	774	26
11230CGX102M10	10X2X1	24,8	882	19,2

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Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11230CGX102M15	10X2X1,5	27,8	1120	12,8
11230CGX102M25	10X2X2,5	30,7	1430	7,86
11230CGX122M05	12X2X0,5	23,9	777	40,4
11230CGX122M07	12X2X0,75	25,4	898	26
11230CGX122M10	12X2X1	27	1015	19,2
11230CGX122M15	12X2X1,5	30,5	1289	12,8
11230CGX122M25	12X2X2,5	33,6	1656	7,86
11230CGX142M05	14X2X0,5	24,8	840	40,4
11230CGX142M07	14X2X0,75	26,3	960	26
11230CGX142M10	14X2X1	27,9	1104	19,2
11230CGX142M15	14X2X1,5	31,6	1405	12,8
11230CGX142M25	14X2X2,5	34,8	1829	7,86
11230CGX152M05	15X2X0,5	26,1	924	40,4
11230CGX152M07	15X2X0,75	27,8	1074	26
11230CGX152M10	15X2X1	29,5	1219	19,2
11230CGX152M15	15X2X1,5	33,4	1556	12,8
11230CGX152M25	15X2X2,5	37,3	2110	7,86
11230CGX162M05	16X2X0,5	26,1	926	40,4
11230CGX162M07	16X2X0,75	27,8	1082	26
11230CGX162M10	16X2X1	29,5	1244	19,2
11230CGX162M15	16X2X1,5	33,4	1578	12,8
11230CGX162M25	16X2X2,5	37,3	2141	7,86
11230CGX192M05	19X2X0,5	27,7	1055	40,4
11230CGX192M07	19X2X0,75	29,6	1227	26
11230CGX192M10	19X2X1	31,5	1412	19,2
11230CGX192M15	19X2X1,5	35,7	1828	12,8
11230CGX192M25	19X2X2,5	39,7	2472	7,86
11230CGX242M05	24X2X0,5	31,6	1375	40,4
11230CGX242M07	24X2X0,75	33,8	1588	26
11230CGX242M10	24X2X1	36,4	1913	19,2
11230CGX242M15	24X2X1,5	41,3	2446	12,8
11230CGX242M25	24X2X2,5	45,6	3165	7,86
11230CGX272M05	27X2X0,5	32,7	1456	40,4
11230CGX272M07	27X2X0,75	35	1711	26
11230CGX272M10	27X2X1	37,8	2051	19,2
11230CGX272M15	27X2X1,5	42,8	2633	12,8
11230CGX272M25	27X2X2,5	47,4	3443	7,86
11230CGX302M05	30X2X0,5	33,9	1551	40,4
11230CGX302M07	30X2X0,75	36,7	1917	26
11230CGX303M10	30X2X1	39,1	2212	19,2
11230CGX303M15	30X2X1,5	44,3	2819	12,8
11230CGX303M25	30X2X2,5	49	3704	7,86
11230CGX372M05	37X2X0,5	37,4	1941	40,4

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ELETTROTEK KABEL® GAALSHIP® HF 250 OSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11230CGX372M07	37X2X0,75	40,1	2297	26
11230CGX373M10	37X2X1	42,6	2619	19,2
11230CGX373M15	37X2X1,5	48,4	3400	12,8
11230CGX373M25	37X2X2,5	53,6	4478	7,86
11230CGX013M05	1X3X0,5	10,4	167	40,4
11230CGX013M07	1X3X0,75	10,9	185	26
11230CGX013M10	1X3X1	11,3	202	19,2
11230CGX013M15	1X3X1,5	12,3	239	12,8
11230CGX013M25	1X3X2,5	13,1	291	7,86
11230CGX023M05	2X3X0,5	14,7	318	40,4
11230CGX023M07	2X3X0,75	15,5	357	26
11230CGX023M10	2X3X1	16,4	396	19,2
11230CGX023M15	2X3X1,5	18,2	489	12,8
11230CGX023M25	2X3X2,5	19,9	597	7,86
11230CGX033M05	3X3X0,5	15,5	351	40,4
11230CGX033M07	3X3X0,75	16,4	402	26
11230CGX033M10	3X3X1	17,2	450	19,2
11230CGX033M15	3X3X1,5	19,3	551	12,8
11230CGX033M25	3X3X2,5	21,1	701	7,86
11230CGX043M05	4X3X0,5	17,1	430	40,4
11230CGX043M07	4X3X0,75	18,1	494	26
11230CGX043M10	4X3X1	19,1	549	19,2
11230CGX043M15	4X3X1,5	21,3	697	12,8
11230CGX043M25	4X3X2,5	23,2	868	7,86
11230CGX053M05	5X3X0,5	18,3	494	40,4
11230CGX053M07	5X3X0,75	19,4	564	26
11230CGX053M10	5X3X1	20,5	646	19,2
11230CGX053M15	5X3X1,5	22,9	809	12,8
11230CGX053M25	5X3X2,5	25,2	1038	7,86
11230CGX063M05	6X3X0,5	19,9	572	40,4
11230CGX063M07	6X3X0,75	21,1	665	26
11230CGX063M10	6X3X1	22,3	756	19,2
11230CGX063M15	6X3X1,5	25	964	12,8
11230CGX063M25	6X3X2,5	27,5	1235	7,86
11230CGX073M05	7X3X0,5	19,9	587	40,4
11230CGX073M07	7X3X0,75	21,1	687	26
11230CGX073M10	7X3X1	22,3	778	19,2
11230CGX073M15	7X3X1,5	25	994	12,8
11230CGX073M25	7X3X2,5	27,5	1289	7,86
11230CGX083M05	8X3X0,5	22,9	749	40,4
11230CGX083M07	8X3X0,75	24,3	869	26
11230CGX083M10	8X3X1	25,9	980	19,2

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Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11230CGX083M15	8X3X1,5	29,1	1237	12,8
11230CGX083M25	8X3X2,5	32,1	1588	7,86
11230CGX103M05	10X3X0,5	23,9	841	40,4
11230CGX103M07	10X3X0,75	25,4	971	26
11230CGX103M10	10X3X1	27	1120	19,2
11230CGX103M15	10X3X1,5	30,5	1444	12,8
11230CGX103M25	10X3X2,5	33,6	1860	7,86
11230CGX103M05	12X3X0,5	26,1	965	40,4
11230CGX123M07	12X3X0,75	27,7	1130	26
11230CGX123M10	12X3X1	29,5	1287	19,2
11230CGX123M15	12X3X1,5	33,3	1661	12,8
11230CGX123M25	12X3X2,5	37,2	2272	7,86
11230CGX143M05	14X3X0,5	27	1049	40,4
11230CGX143M07	14X3X0,75	28,8	1225	26
11230CGX143M10	14X3X1	30,6	1421	19,2
11230CGX143M15	14X3X1,5	34,6	1842	12,8
11230CGX143M25	14X3X2,5	38,6	2532	7,86
11230CGX153M05	15X3X0,5	28,5	1155	40,4
11230CGX153M07	15X3X0,75	30,4	1346	26
11230CGX153M10	15X3X1	32,3	1557	19,2
11230CGX153M15	15X3X1,5	37,1	2122	12,8
11230CGX153M25	15X3X2,5	40,9	2782	7,86
11230CGX163M05	16X3X0,5	28,5	1168	40,4
11230CGX163M07	16X3X0,75	30,4	1368	26
11230CGX163M10	16X3X1	32,3	1578	19,2
11230CGX163M15	16X3X1,5	37,1	2155	12,8
11230CGX163M25	16X3X2,5	40,9	2836	7,86
11230CGX193M05	19X3X0,5	30,4	1341	40,4
11230CGX193M07	19X3X0,75	32,5	1576	26
11230CGX193M10	19X3X1	34,5	1817	19,2
11230CGX193M15	19X3X1,5	39,5	2495	12,8
11230CGX193M25	19X3X2,5	43,7	3267	7,86
11230CGX243M05	24X3X0,5	34,7	1723	40,4
11230CGX243M07	24X3X0,75	37,5	2122	26
11230CGX243M10	24X3X1	39,9	2454	19,2
11230CGX243M15	24X3X1,5	45,3	3188	12,8
11230CGX243M25	24X3X2,5	50,2	4166	7,86
11230CGX014M05	1X4X0,5	11,1	189	40,4
11230CGX014M07	1X4X0,75	11,6	214	26
11230CGX014M10	1X4X1	12	233	19,2
11230CGX014M15	1X4X1,5	13,1	279	12,8
11230CGX014M25	1X4X2,5	14,5	374	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISOS FR WSR

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS 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 + GAAL THERM® 597
CORES COLOR:	PAIR: BLACK- LIGHT BLUE TRIPLE: BLACK- LIGHT BLUE - BROWN
STRANDING:	CORE LAID-UP TOGETHER IN PAIRS/TRIPLES
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
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
OUTER SHEATH:	HALOGEN FREE THERMOPLASTIC COMPOUND SHF1 ACC. TO IEC 60092-360, THICKNESS ACC. TO IEC 60092-376
MARKING:	ELETTROTEK KABEL® GAALSHIP® HF 250 OS FR WSR, CROSS NOMINAL SECTION mm², 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:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 + WATER SPRAY ACC. TO EN 50200 ANNEX E.
 IEC 60331-1 + WATER JET ACC. TO BS 8491.



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

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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11260CGX022M05	2X2X0,5	13,3	210	40,4
11260CGX022M07	2X2X0,75	14,1	234	26
11260CGX022M10	2X2X1	14,8	262	19,2
11260CGX022M15	2X2X1,5	16,6	324	12,8
11260CGX022M25	2X2X2,5	18,1	399	7,86
11260CGX032M05	3X2X0,5	14,1	233	40,4
11260CGX032M07	3X2X0,75	14,9	262	26
11260CGX032M10	3X2X1	15,8	294	19,2
11260CGX032M15	3X2X1,5	17,7	367	12,8
11260CGX032M25	3X2X2,5	19,3	459	7,86
11260CGX042M05	4X2X0,5	15,6	292	40,4
11260CGX042M07	4X2X0,75	16,6	333	26
11260CGX042M10	4X2X1	17,5	376	19,2
11260CGX042M15	4X2X1,5	19,6	470	12,8
11260CGX042M25	4X2X2,5	21,6	596	7,86
11260CGX052M05	5X2X0,5	16,8	345	40,4
11260CGX052M07	5X2X0,75	17,9	394	26
11260CGX052M10	5X2X1	19	444	19,2
11260CGX052M15	5X2X1,5	21,3	560	12,8
11260CGX052M25	5X2X2,5	23,4	715	7,86
11260CGX062M05	6X2X0,5	18,3	410	40,4
11260CGX062M07	6X2X0,75	19,5	466	26
11260CGX062M10	6X2X1	20,7	533	19,2
11260CGX062M15	6X2X1,5	23,3	665	12,8
11260CGX062M25	6X2X2,5	25,6	855	7,86
11260CGX072M05	7X2X0,5	18,3	418	40,4
11260CGX072M07	7X2X0,75	19,5	481	26
11260CGX072M10	7X2X1	20,7	545	19,2
11260CGX072M15	7X2X1,5	23,3	692	12,8
11260CGX072M25	7X2X2,5	25,6	895	7,86
11260CGX082M05	8X2X0,5	21,4	558	40,4
11260CGX082M07	8X2X0,75	22,8	634	26
11260CGX082M10	8X2X1	24,2	709	19,2
11260CGX082M15	8X2X1,5	27,4	889	12,8
11260CGX082M25	8X2X2,5	30,1	1125	7,86
11260CGX102M05	10X2X0,5	22,4	625	40,4
11260CGX102M07	10X2X0,75	23,9	717	26
11260CGX102M10	10X2X1	25,3	815	19,2
11260CGX102M15	10X2X1,5	28,7	1038	12,8
11260CGX102M25	10X2X2,5	31,6	1335	7,86
11260CGX122M05	12X2X0,5	24,6	733	40,4
11260CGX122M07	12X2X0,75	26,2	843	26
11260CGX122M10	12X2X1	27,8	953	19,2

GAALSHIP HF 250 ISOS FR WSR

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Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11260CGX122M15	12X2X1,5	31,5	1220	12,8
11260CGX122M25	12X2X2,5	34,7	1574	7,86
11260CGX142M05	14X2X0,5	25,5	793	40,4
11260CGX142M07	14X2X0,75	27,2	923	26
11260CGX142M10	14X2X1	28,9	1047	19,2
11260CGX142M15	14X2X1,5	32,7	1338	12,8
11260CGX142M25	14X2X2,5	36,2	1740	7,86
11260CGX152M05	15X2X0,5	27	892	40,4
11260CGX152M07	15X2X0,75	28,8	1027	26
11260CGX152M10	15X2X1	30,6	1177	19,2
11260CGX152M15	15X2X1,5	34,7	1494	12,8
11260CGX152M25	15X2X2,5	38,3	1941	7,86
11260CGX162M05	16X2X0,5	27	901	40,4
11260CGX162M07	16X2X0,75	28,8	1042	26
11260CGX162M10	16X2X1	30,6	1190	19,2
11260CGX162M15	16X2X1,5	34,7	1522	12,8
11260CGX162M25	16X2X2,5	38,3	1980	7,86
11260CGX192M05	19X2X0,5	28,8	1036	40,4
11260CGX192M07	19X2X0,75	30,8	1205	26
11260CGX192M10	19X2X1	32,7	1377	19,2
11260CGX192M15	19X2X1,5	37,1	1770	12,8
11260CGX192M25	19X2X2,5	41,1	2315	7,86
11260CGX242M05	24X2X0,5	33,1	1384	40,4
11260CGX242M07	24X2X0,75	35,4	1599	26
11260CGX242M10	24X2X1	37,7	1816	19,2
11260CGX242M15	24X2X1,5	42,8	2315	12,8
11260CGX242M25	24X2X2,5	47,4	3004	7,86
11260CGX272M05	27X2X0,5	34,4	1484	40,4
11260CGX272M07	27X2X0,75	36,8	1724	26
11260CGX272M10	27X2X1	39,1	1967	19,2
11260CGX272M15	27X2X1,5	44,5	2522	12,8
11260CGX272M25	27X2X2,5	49,3	3291	7,86
11260CGX302M05	30X2X0,5	35,6	1599	40,4
11260CGX302M07	30X2X0,75	38,1	1860	26
11260CGX302M10	30X2X1	40,6	2124	19,2
11260CGX302M15	30X2X1,5	46,2	2740	12,8
11260CGX302M25	30X2X2,5	51,2	3584	7,86
11260CGX372M05	37X2X0,5	39	1940	40,4
11260CGX372M07	37X2X0,75	41,7	2258	26
11260CGX372M10	37X2X1	44,5	2588	19,2
11260CGX372M15	37X2X1,5	50,6	3337	12,8
11260CGX372M25	37X2X2,5	56,1	4380	7,86
11260CGX023M05	2X3X0,5	14,7	249	40,4

GAALSHIP HF 250 ISOS FR WSR

OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11260CGX023M07	2X3X0,75	15,6	288	26
11260CGX023M10	2X3X1	16,5	321	19,2
11260CGX023M15	2X3X1,5	18,4	404	12,8
11260CGX023M25	2X3X2,5	20,2	502	7,86
11260CGX033M05	3X3X0,5	15,6	285	40,4
11260CGX033M07	3X3X0,75	16,6	328	26
11260CGX033M10	3X3X1	17,6	371	19,2
11260CGX033M15	3X3X1,5	19,6	467	12,8
11260CGX033M25	3X3X2,5	21,6	600	7,86
11260CGX043M05	4X3X0,5	17,3	364	40,4
11260CGX043M07	4X3X0,75	18,4	420	26
11260CGX043M10	4X3X1	19,5	476	19,2
11260CGX043M15	4X3X1,5	21,9	606	12,8
11260CGX043M25	4X3X2,5	24	780	7,86
11260CGX053M05	5X3X0,5	18,8	430	40,4
11260CGX053M07	5X3X0,75	20	498	26
11260CGX053M10	5X3X1	21,2	569	19,2
11260CGX053M15	5X3X1,5	23,8	727	12,8
11260CGX053M25	5X3X2,5	26,2	939	7,86
11260CGX063M05	6X3X0,5	20,4	508	40,4
11260CGX063M07	6X3X0,75	21,8	596	26
11260CGX063M10	6X3X1	23,1	675	19,2
11260CGX063M15	6X3X1,5	26,1	874	12,8
11260CGX063M25	6X3X2,5	28,7	1138	7,86
11260CGX073M05	7X3X0,5	20,4	528	40,4
11260CGX073M07	7X3X0,75	21,8	616	26
11260CGX073M10	7X3X1	23,1	706	19,2
11260CGX073M15	7X3X1,5	26,1	915	12,8
11260CGX073M25	7X3X2,5	28,7	1202	7,86
11260CGX083M05	8X3X0,5	23,9	687	40,4
11260CGX083M07	8X3X0,75	25,5	791	26
11260CGX083M10	8X3X1	27,1	902	19,2
11260CGX083M15	8X3X1,5	30,7	1149	12,8
11260CGX083M25	8X3X2,5	33,8	1484	7,86
11260CGX103M05	10X3X0,5	25,1	781	40,4
11260CGX103M07	10X3X0,75	26,7	914	26
11260CGX103M10	10X3X1	28,4	1048	19,2
11260CGX103M15	10X3X1,5	32,2	1362	12,8
11260CGX103M25	10X3X2,5	35,6	1781	7,86
11260CGX123M05	12X3X0,5	27,4	920	40,4
11260CGX123M07	12X3X0,75	29,3	1079	26
11260CGX123M10	12X3X1	31,2	1238	19,2
11260CGX123M15	12X3X1,5	35,3	1598	12,8

GAALSHIP HF 250 ISOS FR WSR

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ELETTROTEK KABEL® GAALSHIP® HF 250 ISOS FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11260CGX123M25	12X3X2,5	39,1	2108	7,86
11260CGX143M05	14X3X0,5	28,6	1009	40,4
11260CGX143M07	14X3X0,75	30,6	1188	26
11260CGX143M10	14X3X1	32,4	1362	19,2
11260CGX143M15	14X3X1,5	36,9	1774	12,8
11260CGX143M25	14X3X2,5	40,7	2347	7,86
11260CGX153M05	15X3X0,5	30,2	1119	40,4
11260CGX153M07	15X3X0,75	32,3	1322	26
11260CGX153M10	15X3X1	34,4	1519	19,2
11260CGX153M15	15X3X1,5	39,1	1978	12,8
11260CGX153M25	15X3X2,5	43,2	2605	7,86
11260CGX163M05	16X3X0,5	30,2	1139	40,4
11260CGX163M07	16X3X0,75	32,3	1342	26
11260CGX163M10	16X3X1	34,4	1549	19,2
11260CGX163M15	16X3X1,5	39,1	2019	12,8
11260CGX163M25	16X3X2,5	43,2	2668	7,86
11260CGX193M05	19X3X0,5	32,4	1327	40,4
11260CGX193M07	19X3X0,75	34,6	1564	26
11260CGX193M10	19X3X1	36,8	1802	19,2
11260CGX193M15	19X3X1,5	41,8	2349	12,8
11260CGX193M25	19X3X2,5	46,2	3125	7,86
11260CGX243M05	24X3X0,5	37,2	1741	40,4
11260CGX243M07	24X3X0,75	39,8	2041	26
11260CGX243M10	24X3X1	42,5	2352	19,2
11260CGX243M15	24X3X1,5	48,3	3056	12,8
11260CGX243M25	24X3X2,5	53,5	4037	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

GAALSHIP HF 250 ISOSA FR WSR

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA 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
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE WITH TINNED ANNEALED COPPER STRANDED DRAIN WIRE
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 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 ISOSA FR WSR, CROSS NOMINAL SECTION mm ² , 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:	U ₀ /U 150/250 V
TEMPERATURE RANGE:	-40°C UP TO +90°C
INSTALLATION TEMP.:	-20°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 (DET NORSKE VERITAS)
 ABS (AMERICAN BUREAU OF SHIPPING)
 OTHER APPROVALS ON REQUEST

RESISTANCE:



FIRE RESISTANT ACC. TO:
 IEC 60331-21
 IEC 60331-2 + WATER SPRAY ACC. TO EN 50200 ANNEX E.
 IEC 60331-1 + WATER JET ACC. TO BS 8491.



FLAME AND FIRE RETARDANT ACC. TO:
 EN IEC 60332-1-2,
 EN IEC 60332-3-22



HALOGEN FREE ACC. TO:
 EN IEC 60754-1/2



SMOKE EMISSION PROPERTIES ACC. TO:
 EN IEC 61034-1/2



UV RESISTANCE ACC. TO:
 UL 1581



OZONE RESISTANCE ACC. TO:
 IEC 60092-360

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
 TINNED COPPER WIRES BRAID ARMOUR ON REQUEST

GAALSHIP HF 250 ISOSA FR WSR

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11210CGX022M05	2X2X0,5	14,6	309	40,4
11210CGX022M07	2X2X0,75	15,4	339	26
11210CGX022M10	2X2X1	16,1	369	19,2
11210CGX022M15	2X2X1,5	17,9	446	12,8
11210CGX022M25	2X2X2,5	19,4	534	7,86
11210CGX032M05	3X2X0,5	15,4	337	40,4
11210CGX032M07	3X2X0,75	16,3	375	26
11210CGX032M10	3X2X1	17,1	410	19,2
11210CGX032M15	3X2X1,5	19	501	12,8
11210CGX032M25	3X2X2,5	20,6	597	7,86
11210CGX042M05	4X2X0,5	17	407	40,4
11210CGX042M07	4X2X0,75	17,9	456	26
11210CGX042M10	4X2X1	18,8	507	19,2
11210CGX042M15	4X2X1,5	20,9	609	12,8
11210CGX042M25	4X2X2,5	22,9	755	7,86
11210CGX052M05	5X2X0,5	18,1	472	40,4
11210CGX052M07	5X2X0,75	19,2	525	26
11210CGX052M10	5X2X1	20,3	581	19,2
11210CGX052M15	5X2X1,5	22,6	720	12,8
11210CGX052M25	5X2X2,5	24,7	896	7,86
11210CGX062M05	6X2X0,5	19,6	545	40,4
11210CGX062M07	6X2X0,75	20,8	618	26
11210CGX062M10	6X2X1	22	687	19,2
11210CGX062M15	6X2X1,5	24,7	850	12,8
11210CGX062M25	6X2X2,5	27	1048	7,86
11210CGX072M05	7X2X0,5	19,6	551	40,4
11210CGX072M07	7X2X0,75	20,8	621	26
11210CGX072M10	7X2X1	22	702	19,2
11210CGX072M15	7X2X1,5	24,7	876	12,8
11210CGX072M25	7X2X2,5	27	1088	7,86
11210CGX082M05	8X2X0,5	22,7	713	40,4
11210CGX082M07	8X2X0,75	24,1	803	26
11210CGX082M10	8X2X1	25,5	892	19,2
11210CGX082M15	8X2X1,5	28,7	1099	12,8
11210CGX082M25	8X2X2,5	31,4	1343	7,86
11210CGX102M05	10X2X0,5	23,7	787	40,4
11210CGX102M07	10X2X0,75	25,2	899	26
11210CGX102M10	10X2X1	26,6	1001	19,2
11210CGX102M15	10X2X1,5	30	1248	12,8
11210CGX102M25	10X2X2,5	33	1580	7,86
11210CGX122M05	12X2X0,5	25,9	917	40,4
11210CGX122M07	12X2X0,75	27,5	1038	26
11210CGX122M10	12X2X1	29,2	1168	19,2

GAALSHIP HF 250 ISOSA FR WSR

INDIVIDUAL & OVERALL SCREEN, ARMoured, INSTRUMENTATION CABLE



ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11210CGX122M15	12X2X1,5	32,8	1454	12,8
11210CGX122M25	12X2X2,5	36	1841	7,86
11210CGX142M05	14X2X0,5	26,8	978	40,4
11210CGX142M07	14X2X0,75	28,5	1129	26
11210CGX142M10	14X2X1	30,2	1263	19,2
11210CGX142M15	14X2X1,5	34,1	1585	12,8
11210CGX142M25	14X2X2,5	38	2104	7,86
11210CGX152M05	15X2X0,5	28,3	1098	40,4
11210CGX152M07	15X2X0,75	30,1	1239	26
11210CGX152M10	15X2X1	31,9	1409	19,2
11210CGX152M15	15X2X1,5	36,5	1851	12,8
11210CGX152M25	15X2X2,5	40,1	2348	7,86
11210CGX162M05	16X2X0,5	28,3	1105	40,4
11210CGX162M07	16X2X0,75	30,1	1255	26
11210CGX162M10	16X2X1	31,9	1426	19,2
11210CGX162M15	16X2X1,5	36,5	1878	12,8
11210CGX162M25	16X2X2,5	40,1	2390	7,86
11210CGX192M05	19X2X0,5	30,2	1259	40,4
11210CGX192M07	19X2X0,75	32,1	1442	26
11210CGX192M10	19X2X1	34	1613	19,2
11210CGX192M15	19X2X1,5	38,9	2134	12,8
11210CGX192M25	19X2X2,5	42,8	2731	7,86
11210CGX242M05	24X2X0,5	34,4	1624	40,4
11210CGX242M07	24X2X0,75	37,1	1956	26
11210CGX242M10	24X2X1	39,4	2181	19,2
11210CGX242M15	24X2X1,5	44,5	2731	12,8
11210CGX242M25	24X2X2,5	49,1	3487	7,86
11210CGX272M05	27X2X0,5	35,7	1749	40,4
11210CGX272M07	27X2X0,75	38,5	2078	26
11210CGX272M10	27X2X1	40,8	2369	19,2
11210CGX272M15	27X2X1,5	46,3	2999	12,8
11210CGX272M25	27X2X2,5	51,1	3783	7,86
11210CGX302M05	30X2X0,5	37,3	1955	40,4
11210CGX302M07	30X2X0,75	39,8	2257	26
11210CGX302M10	30X2X1	42,4	2548	19,2
11210CGX302M15	30X2X1,5	47,9	3220	12,8
11210CGX302M25	30X2X2,5	52,9	4116	7,86
11210CGX372M05	37X2X0,5	40,7	2340	40,4
11210CGX372M07	37X2X0,75	43,5	2685	26
11210CGX372M10	37X2X1	46,2	3017	19,2
11210CGX372M15	37X2X1,5	52,4	3840	12,8
11210CGX372M25	37X2X2,5	57,9	4949	7,86

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ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11210CGX023M05	2X3X0,5	16	357	40,4
11210CGX023M07	2X3X0,75	16,9	403	26
11210CGX023M10	2X3X1	17,8	441	19,2
11210CGX023M15	2X3X1,5	19,8	544	12,8
11210CGX023M25	2X3X2,5	21,5	656	7,86
11210CGX033M05	3X3X0,5	16,9	401	40,4
11210CGX033M07	3X3X0,75	17,9	456	26
11210CGX033M10	3X3X1	18,9	502	19,2
11210CGX033M15	3X3X1,5	21	612	12,8
11210CGX033M25	3X3X2,5	22,9	761	7,86
11210CGX043M05	4X3X0,5	18,6	493	40,4
11210CGX043M07	4X3X0,75	19,7	555	26
11210CGX043M10	4X3X1	20,8	629	19,2
11210CGX043M15	4X3X1,5	23,2	767	12,8
11210CGX043M25	4X3X2,5	25,3	959	7,86
11210CGX053M05	5X3X0,5	20,1	566	40,4
11210CGX053M07	5X3X0,75	21,3	642	26
11210CGX053M10	5X3X1	22,5	728	19,2
11210CGX053M15	5X3X1,5	25,1	908	12,8
11210CGX053M25	5X3X2,5	27,5	1131	7,86
11210CGX063M05	6X3X0,5	21,7	662	40,4
11210CGX063M07	6X3X0,75	23,1	757	26
11210CGX063M10	6X3X1	24,4	852	19,2
11210CGX063M15	6X3X1,5	27,4	1062	12,8
11210CGX063M25	6X3X2,5	30	1347	7,86
11210CGX073M05	7X3X0,5	21,7	682	40,4
11210CGX073M07	7X3X0,75	23,1	777	26
11210CGX073M10	7X3X1	24,4	883	19,2
11210CGX073M15	7X3X1,5	27,4	1104	12,8
11210CGX073M25	7X3X2,5	30	1412	7,86
11210CGX083M05	8X3X0,5	25,2	872	40,4
11210CGX083M07	8X3X0,75	26,8	977	26
11210CGX083M10	8X3X1	28,4	1107	19,2
11210CGX083M15	8X3X1,5	32	1383	12,8
11210CGX083M25	8X3X2,5	35,1	1753	7,86
11210CGX103M05	10X3X0,5	26,4	965	40,4
11210CGX103M07	10X3X0,75	28	1118	26
11210CGX103M10	10X3X1	29,7	1263	19,2
11210CGX103M15	10X3X1,5	33,5	1600	12,8
11210CGX103M25	10X3X2,5	37,3	2137	7,86
11210CGX123M05	12X3X0,5	28,7	1126	40,4
11210CGX123M07	12X3X0,75	30,6	1289	26

GAALSHIP HF 250 ISOSA FR WSR

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ELETTROTEK KABEL® GAALSHIP® HF 250 ISOSA FR WSR



Part number	No. of cores x cross section n x mm ²	Outer diameter ca. mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
11210CGX123M10	12X3X1	32,5	1472	19,2
11210CGX123M15	12X3X1,5	37,1	1956	12,8
11210CGX123M25	12X3X2,5	40,8	2507	7,86
11210CGX143M05	14X3X0,5	29,9	1221	40,4
11210CGX143M07	14X3X0,75	31,9	1424	26
11210CGX143M10	14X3X1	33,7	1600	19,2
11210CGX143M15	14X3X1,5	38,6	2140	12,8
11210CGX143M25	14X3X2,5	42,5	2769	7,86
11210CGX153M05	15X3X0,5	31,5	1351	40,4
11210CGX153M07	15X3X0,75	33,6	1558	26
11210CGX153M10	15X3X1	35,7	1785	19,2
11210CGX153M15	15X3X1,5	40,8	2384	12,8
11210CGX153M25	15X3X2,5	45	3036	7,86
11210CGX163M05	16X3X0,5	31,5	1370	40,4
11210CGX163M07	16X3X0,75	33,6	1576	26
11210CGX163M10	16X3X1	35,7	1814	19,2
11210CGX163M15	16X3X1,5	40,8	2425	12,8
11210CGX163M25	16X3X2,5	45	3099	7,86
11210CGX193M05	19X3X0,5	33,7	1563	40,4
11210CGX193M07	19X3X0,75	35,9	1828	26
11210CGX193M10	19X3X1	38,5	2156	19,2
11210CGX193M15	19X3X1,5	43,6	2771	12,8
11210CGX193M25	19X3X2,5	48	3617	7,86
11210CGX243M05	24X3X0,5	39	2118	40,4
11210CGX243M07	24X3X0,75	41,6	2456	26
11210CGX243M10	24X3X1	44,2	2768	19,2
11210CGX243M15	24X3X1,5	50	3544	12,8
11210CGX243M25	24X3X2,5	55,2	4578	7,86

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

CCI XAI FIREBAR MV

3,6/6 - 6/10 - 8,7/15 - 12/20 KV

HALOGEN FREE, FLAME RETARDANT, ARMoured

FIRE + MECHANICAL SHOCKS + WATER JETS + WATER IMMERSION RESISTANT











CCI XAI FIREBAR MV

CONSTRUCTION:

CONDUCTOR:	TINNED COPPER FLEXIBLE CLASS 2 IEC 60228 (CLASS 5 ON REQUEST)
SEMICONDUCTIVE LAYERS:	HF EXTRUDED COMPOUND
INSULATION:	HEPR HF EXTRUDED COMPOUND IEC 60092-360 + HF HEAT RESISTANT RUBBER COMPOUND
PHASE SCREEN:	PLAIN COPPER TAPE
COLOUR CORES:	1 CORE OFF WHITE 3 CORES OFF WHITE (COLOURED OR NUMBERED TAPES)
FIREBAR® PROTECTION:	FLAMEBAR® FIBERGLASS TAPES + FIBERGLASS ROPES HEPR SHEATHED WHEN 3 CORES
INNER SHEATH:	SHF1 OR SHF2 COMPOUND ACC. TO OUTER SHEATH IEC 60092-360
ELECTROMAGNETIC SHIELD:	PLAIN COPPER TAPE
ARMOUR:	TINNED COPPER WIRE BRAID (PLAIN COPPER BRAID ON REQUEST)
OUTER SHEATH:	SHF1 COMPOUND, RED (SHF2 ON REQUEST)

RESISTANCE:

	FLAME RETARDANCY IEC 60332-1-2 IEC 60332-3-22 CAT A
	FIRE RESISTANCE BS 8491 F120
	HALOGEN CONTENT & CORROSION IEC 60754-1 & 2 IEC 60684-2
	SMOKE DENSITY IEC 61034-1 & 2
	UV RESISTANCE UL 1581 & 1200
	OZONE RESISTANCE IEC 60092-360
	ELECTROMAGNETIC PROTECTION IEC 60533 ANNEX B – IEC 62153-4-3
	IMPACT & COLD RESISTANCE CSA C 22.2 N° 0.3-09 & N° 38-18

TECHNICAL DATA:

NOMINAL VOLTAGE:	U0/U 3,6/6 - 6/10 - 8,7/15 - 12/20 kV
MAX OPERATING VOLTAGE UMAX	7,2 - 12 - 17,5 - 24 kV
TEMPERATURE RANGE:	90 °C ACCORDING TO IEC 60092-360
MIN. BENDING RADIUS	4/5 X Ø (DEPENDING ON OVERALL DIAMETER)

CCI XAI FIREBAR MV

3,6/6 - 6/10 - 8,7/15 - 12/20 KV

HALOGEN FREE, FLAME RETARDANT, ARMoured

FIRE + MECHANICAL SHOCKS + WATER JETS + WATER IMMERSION RESISTANT



CCI XAI FIREBAR MV

CCI XAI FIREBAR MV 3,6/6 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13110MRH010M65	1X50	41	2.460	0,391
13110MRH010M66	1X70	43	2.780	0,270
13110MRH010M67	1X95	44	3.180	0,195
13110MRH010M68	1X120	46	3.510	0,154
13110MRH010M69	1X150	47	3.880	0,126
13110MRH010M70	1X185	50	4.400	0,100
13110MRH010M71	1X240	52	5.160	0,0762
13110MRH010M72	1X300	56	5.900	0,0607
13110MRC030M65	3X50	66	5.950	0,391
13110MRC030M66	3X70	70	6.910	0,270
13110MRC030M67	3X95	74	8.210	0,195
13110MRC030M68	3X120	78	9.130	0,154
13110MRC030M69	3X150	81	10.300	0,126
13110MRC030M70	3X185	85	11.840	0,100
13110MRC030M71	3X240	91	14.250	0,0762

CCI XAI FIREBAR MV 6/10 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13110QRH010M65	1X50	43	2.690	0,391
13110QRH010M66	1X70	45	3.020	0,270
13110QRH010M67	1X95	47	3.430	0,195
13110QRH010M68	1X120	48	3.770	0,154
13110QRH010M69	1X150	50	4.140	0,126
13110QRH010M70	1X185	52	4.670	0,100
13110QRH010M71	1X240	55	5.420	0,0762
13110QRH010M72	1X300	58	6.120	0,0607
13110QRC030M65	3X50	71	6.620	0,391
13110QRC030M66	3X70	75	7.680	0,270
13110QRC030M67	3X95	79	8.870	0,195
13110QRC030M68	3X120	83	9.920	0,154
13110QRC030M69	3X150	86	11.120	0,126
13110QRC030M70	3X185	90	12.790	0,100

CCI XAI FIREBAR MV 8,7/15 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13110SRH010M65	1X50	45	2.930	0,391
13110SRH010M66	1X70	47	3.280	0,270
13110SRH010M67	1X95	49	3.700	0,195
13110SRH010M68	1X120	51	4.040	0,154
13110SRH010M69	1X150	52	4.420	0,126
13110SRH010M70	1X185	54	4.965	0,100
13110SRH010M71	1X240	57	5.720	0,0762

CCI XAI FIREBAR MV

3,6/6 - 6/10 - 8,7/15 - 12/20 kV

HALOGEN FREE, FLAME RETARDANT, ARMoured

FIRE + MECHANICAL SHOCKS + WATER JETS + WATER IMMERSION RESISTANT



CCI XAI FIREBAR MV

CCI XAI FIREBAR MV 8,7/15 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13110SRH010M72	1X300	60	6.440	0,0607
13110SRC030M65	3X50	76	7.370	0,391
13110SRC030M66	3X70	80	8.440	0,270
13110SRC030M67	3X95	84	9.680	0,195
13110SRC030M68	3X120	88	10.930	0,154
13110SRC030M69	3X150	91	11.980	0,126
13110SRC030M70	3X185	95	13.680	0,100

CCI XAI FIREBAR MV 12/20 kV

Part number	No. of cores x cross section n x mm ²	Outer diameter ca.mm	Cable weight approx. kg/km	Max conductor resistance @20°C (Ω/Km)
13110URH010M65	1X50	48	3.170	0,391
13110URH010M66	1X70	49	3.520	0,270
13110URH010M67	1X95	51	3.950	0,195
13110URH010M68	1X120	53	4.290	0,154
13110URH010M69	1X150	54	4.440	0,126
13110URH010M70	1X185	56	5.230	0,100
13110URH010M71	1X240	59	6.000	0,0762
13110URH010M72	1X300	62	6.730	0,0607
13110URC030M65	3X50	81	8.090	0,391
13110URC030M66	3X70	85	9.110	0,270
13110URC030M67	3X95	89	10.630	0,195
13110URC030M68	3X120	92	11.560	0,154
13110URC030M69	3X150	96	12.820	0,126

NOTE(S)

OTHER DIMENSIONS AND COLORS AVAILABLE ON REQUEST.

SPECIAL DATA CABLES

PROFIBUS:

A purple cable with a braided shield and twisted pair conductors.

ELETTROTEK KABEL®

SHIELDED TWISTED PAIR CABLE FOR FIELDBUS SYSTEMS.
OUTER SHEATH LSZH.
WITH MARINE TYPE APPROVAL.

ETHERNET:

A green cable with a braided shield and multiple twisted pair conductors.

ELETTROTEK KABEL®

COMMUNICATION CABLE FOR AUTOMATION DEVICES.
OUTER SHEATH LSZH.
AVAILABLE VERSIONS EIA/TIA-485.

PROFINET:

A black cable with a braided shield and multiple twisted pair conductors.

ELETTROTEK KABEL®

INDUSTRIAL ETHERNET CABLE CAT 6 / CAT 7 TYPES.
OUTER SHEATH LSZH.
WITH MARINE TYPE APPROVAL.


COAXIAL:

A black cable with a braided shield and a central conductor.

ELETTROTEK KABEL®

"RG" TYPES.
50-75 OHM.
ARMOURED / UNARMOURED.
WITH MARINE TYPE APPROVAL.

GAALFIBER®:

A black cable with a braided shield and multiple fiber optic strands.

ELETTROTEK KABEL®

FIBER OPTIC SINGLE-MODE / MULTI-MODE.
ARMOURED / UNARMOURED.
OUTER SHEATH LSZH.
FIRE RESISTANT ACC. TO IEC 60331
WITH MARINE TYPE APPROVAL.

The background features several overlapping geometric shapes. At the top, there are orange parallelograms and triangles, some with thin blue outlines. A large blue parallelogram is positioned at the bottom. The text 'General Data' is centered in a bold, blue, sans-serif font.

General Data

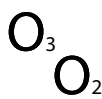
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Resistance symbol legend



FIRE PERFORMANCE
FIRE RESISTANT



OZONE-OXYGENE
RESISTANCE



MUD RESISTANT



FLAME RETARDANT AND
SELF-EXTINGUISHING

F

FLOURINE
RESISTANCE



MICROBE RESISTANT



HALOGEN-FREE



WEATHER/ATMOSPHERIC
RESISTANCE



RAILWAY
NETWORK STABILITY



SMOKE DENSITY/
LOW SMOKE EMISSION



IMPACT-CRUSHING
RESISTANCE



IMPACT & COLD
RESISTANCE



CORROSIVENESS OF
COMBUSTION GASES



MECHANICAL RESISTANCE



CHEM. RESISTANCE



WATER AND COLD
RESISTANCE



ABRASION
NOTCH RESISTANT



HIGH TEMPERATURE/
HEAT RESISTANCE



UV RESISTANT/
SUNLIGHT RESISTANT



ELECTRO MAGNETIC
RESISTANCE



OZONE RESISTANCE



AGEING RESISTANCE



OIL RESISTANCE



WATER RESISTANT

INSULATION COLORS:

N. OF CORES	CORES COLOR					
1x...	-	-	-	Black	-	-
2x...	-	Blue	Brown	-	-	-
3G...	Green/Yellow	Blue	Brown	-	-	-
3x...	-	-	Brown	Black	Grey	-
4G...	Green/Yellow	-	Brown	Black	Grey	-
4x...	-	Blue	Brown	Black	Grey	-
5G..	Green/Yellow	Blue	Brown	Black	Grey	-
5x..	-	Blue	Brown	Black	Grey	Black
> 5G... or > 5x...	Black with white printed numbers, with or without Green/Yellow, acc. to EN 50334					

150 / 250 V INSTRUMENTATION CABLES

N. OF CORES	CORES COLOR
Pairs	Black - Light blue
Triples	Black - Light blue -Brown
	Pairs and triples are numbered in white on each core (e.g. 1-1-, 2-2-...)

3,6 UP TO 12/20 KV MEDIUM VOLTAGE CABLES

1x...:	natural color of the compound
3x...:	natural color of the compound + numbered tape(s) or coloured tapes or thread

OUTER SHEATH COLOURS:

ORANGE	RAL 2003
BLACK	RAL 9004
GREEN	RAL 6018
RED	RAL 3000

ELECTRICAL DATA

- POWER & CONTROL 0,6/1 KV -

No. of cores x cross section n x mm ²	Capacitance (nF/km)	Inductance (mH/Km)	Reactance approx. (Ohm/km)		Max. Resistance of conductors (Ohm/km)		Current rating in open air at 45°C (A)	Fault current at 250 °C for 1 sec. (kA)
			50 Hz	60 Hz	Plain Copper			
					at 20°C	at 90°C		
1X1,5	182	0,42	0,131	0,157	12,1	15,428	23	0,214
1X2,5	226	0,394	0,123	0,148	7,41	9,448	30	0,357
1X4	269	0,365	0,114	0,137	4,61	5,878	40	0,572
1X6	323	0,336	0,105	0,126	3,08	3,927	52	0,85
1X10	374	0,332	0,103	0,124	1,83	2,333	72	1,43
1X16	452	0,312	0,098	0,117	1,21	1,543	96	2,29
1X25	458	0,311	0,098	0,117	0,78	0,995	127	3,57
1X35	517	0,29	0,092	0,11	0,554	0,706	157	5000
1X50	546	0,285	0,09	0,108	0,386	0,492	196	7,15
1X70	593	0,275	0,088	0,105	0,272	0,347	242	10,01
1X95	716	0,268	0,085	0,102	0,206	0,263	293	13,59
1X120	736	0,266	0,084	0,101	0,161	0,205	339	17,16
1X150	783	0,258	0,088	0,105	0,129	0,164	389	21,45
1X185	791	0,255	0,085	0,102	0,106	0,135	44	26,45
1X240	819	0,248	0,083	0,099	0,0801	0,102	522	34,32
1X300	882	0,242	0,084	0,101	0,0641	0,082	601	42,9
2X1,5	152	0,318	0,101	0,121	12,1	15,428	20	0,214
2X2,5	183	0,299	0,094	0,113	7,41	9,448	26	0,357
2X4	206	0,277	0,089	0,107	4,61	5,878	34	0,572
2X6	232	0,264	0,084	0,101	3,08	3,927	44	0,85
2X10	253	0,248	0,081	0,097	1,83	2,333	61	1,43
2X16	284	0,239	0,077	0,092	1,21	1,543	82	2,29
2X25	293	0,236	0,077	0,092	0,78	0,995	108	3,57
2X35	309	0,229	0,076	0,091	0,554	0,706	133	5
3X1,5	153	0,318	0,103	0,124	12,1	15,428	16	0,214
3X2,5	178	0,299	0,096	0,115	7,41	9,448	21	0,357
3X4	194	0,277	0,091	0,109	4,61	5,878	28	0,572
3X6	233	0,264	0,085	0,102	3,08	3,927	36	0,85
3X10	257	0,248	0,083	0,096	1,83	2,333	50	1,43
3X16	290	0,239	0,078	0,093	1,21	1,543	67	2,29
3X25	303	0,236	0,076	0,091	0,78	0,995	89	3,57
3X35	317	0,229	0,073	0,088	0,554	0,706	110	5
3X50	328	0,226	0,072	0,086	0,386	0,492	137	7,15
3X70	342	0,223	0,071	0,085	0,272	0,347	169	10,01
3X95	350	0,223	0,07	0,084	0,206	0,263	205	13,59
3X120	371	0,22	0,07	0,084	0,161	0,205	237	17,16
3X150	391	0,22	0,069	0,083	0,129	0,164	272	21,45
3X185	395	0,22	0,069	0,083	0,106	0,135	311	26,45
3X240	407	0,22	0,068	0,082	0,0801	0,102	365	34,32
3G1,5	153	0,318	0,103	0,124	12,1	15,428	20	0,214
3G2,5	178	0,299	0,096	0,115	7,41	9,448	26	0,357
3G4	194	0,277	0,091	0,109	4,61	5,878	34	0,572
3G6	233	0,264	0,085	0,102	3,08	3,927	44	0,85
4X1	101	0,341	0,117	0,14	18,1	23,078	13	0,143
4X1,5	147	0,318	0,11	0,132	12,1	15,428	16	0,214
4X2,5	173	0,299	0,103	0,123	7,41	9,448	21	0,357
4X4	191	0,277	0,097	0,116	4,61	5,878	28	0,572
4X6	230	0,264	0,091	0,109	3,08	3,927	36	0,85
4X10	253	0,248	0,086	0,103	1,83	2,333	50	1,43
4X16	266	0,239	0,083	0,1	1,21	1,543	67	2,29

ELECTRICAL DATA

- POWER & CONTROL 0,6/1 KV -

No. of cores x cross section n x mm ²	Capacitance (nF/km)	Inductance (mH/Km)	Reactance approx. (Ohm/km)		Max. Resistance of conductors (Ohm/km)		Current rating in open air at 45°C (A)	Fault current at 250 °C for 1 sec. (kA)
			50 Hz	60 Hz	Plain Copper			
					at 20°C	at 90°C		
4X70	336	0,223	0,076	0,091	0,272	0,347	169	10,01
4X95	347	0,22	0,076	0,091	0,206	0,263	205	13,59
4X120	369	0,22	0,075	0,09	0,161	0,205	237	17,16
4X150	388	0,22	0,074	0,089	0,129	0,164	272	21,45
4X185	393	0,22	0,074	0,089	0,106	0,135	311	26,45
5X1	140	0,341	0,107	0,128	18,1	23,078	13	0,143
5X1,5	203	0,318	0,103	0,124	12,1	15,428	16	0,214
5X2,5	206	0,299	0,096	0,115	7,41	9,448	21	0,357
5X4	165	0,277	0,091	0,109	4,61	5,878	28	0,572
5X6	198	264	0,085	0,102	3,08	3,927	36	85
5X10	229	0,248	0,083	0,096	1,83	2,333	50	1,43
5X16	276	0,239	0,078	0,093	1,21	1,543	67	2,29
5X25	295	0,236	0,076	0,091	0,78	0,995	89	3,57
5X35	317	0,229	0,073	0,088	0,554	0,706	110	5
5X50	321	226	0,072	0,086	0,386	0,492	137	7,15
5X70	335	0,223	0,071	0,085	0,272	0,347	169	10,01
7X1	153	0,341	0,107	0,128	18,1	23,078	8	0,143
10X1	162	0,341	0,107	0,128	18,1	23,078	7	0,143
14X1	100	0,341	0,107	0,128	18,1	23,078	6	0,143
19X1	90	0,341	0,107	0,128	18,1	23,078	6	0,143
24X1	84	0,341	0,107	0,128	18,1	23,078	5	0,143
30X1	79	0,341	0,107	0,128	18,1	23,078	5	0,143
7X1,5	156	0,318	0,1	0,12	12,1	15,428	10	0,214
10X1,5	166	0,318	0,1	0,12	12,1	15,428	9	0,214
14X1,5	96	0,318	0,1	0,12	12,1	15,428	8	0,214
19X1,5	85	0,318	0,1	0,12	12,1	15,428	7	0,214
24X1,5	78	0,318	0,1	0,12	12,1	15,428	7	0,214
30X1,5	73	0,318	0,1	0,12	12,1	15,428	6	0,214
7X2,5	172	0,299	0,096	0,115	7,41	9,448	14	0,357
10X2,5	124	0,299	0,096	0,115	7,41	9,448	12	0,357
14X2,5	100	0,299	0,096	0,115	7,41	9,448	11	0,357
19X2,5	90	0,299	0,096	0,115	7,41	9,448	10	0,357
24X2,5	82	0,299	0,096	0,115	7,41	9,448	9	0,357
30X2,5	75	0,299	0,096	0,115	7,41	9,448	8	0,357

ELECTRICAL DATA

- INSTRUMENTATION 150/250 V -

No. of cores x cross section n x mm ²	Capacitance (nF/km)	Inductance (mH/Km)	Reactance approx. (Ohm/km)		Max. Resistance of conductors (Ohm/km)		Fault current at 250°C for sec. (kA)
			50 Hz	60 Hz	Plain Copper		
					at 20°C	at 90°C	
2X0,75	76	0,00066	0,188	0,217	26	33,15	0,11
2X1	88	0,0006	0,76	0,204	19,2	24,48	0,14
2X1,50	94	0,00058	0,163	0,198	12,8	16,32	0,21

EXAMINATION OF THE VERTICAL FLAME LENGTH, TEST METHOD KV - FLAME WITH GAS/AIR MIXTURE

DESCRIPTION	IEC 60332-1-2
LENGHT OF SAMPLE	600 MM
BURNER	EN 60695
POSITION OF SAMPLE	VERTICAL
POSITION OF FLAME	45° TO VERTICAL SAMPLE
DURATION OF FLAME	SEE TABLE 1
CONDITIONS	CABLE MUST BE SELF-EXTINGUISHING. THE DAMAGE OR CARBONIZATION MAY ONLY REACH MAX. 50 MM UNDER THE UPPER FIXING CLAMP.

EN 60332- 3 / 22	CATEGORY A - 7 L/M
EN 60332- 3 / 23	CATEGORY B - 3,5 L/M
EN 60332- 3 / 24	CATEGORY C - 1,5 L/M > 12 MM CABLE - Ø
EN 60332- 3 / 25	CATEGORY D - 0,5 L/M > 12 MM CABLE - Ø
VOLUME % OF NON METALLIC MATERIAL X METER	

AMERICAN/EUROPEAN CONVERSION TABLE FROM AWG TO MM²

AWG NUMBER	CROSS SECTION MM ² (AMERICAN COMPARISON)	CROSS SECTION MM ² (AMERICAN COMPARISON)	Ø MM	CONDUCTOR RESISTANCE Ω/KM
1000 MCM	507	500	29,3	0,036
900	456	-	27,8	0,04
750	380	400	25,4	0,048
600	304	300	22,7	0,061
550	279	-	21,7	0,066
500	253	240	20,7	0,07
450	228	-	19,6	0,08
400	203	-	18,5	0,09
350	177	185	17,3	0,1
300	152	150	16	0,12
250	127	-	14,6	0,14
4/0	107,2	120	11,68	0,18
3/0	85	95	10,4	0,23
2/0	67,4	70	9,27	0,29
0	53,4	-	8,25	0,37
1	42,4	50	7,35	0,47
2	33,6	35	6,54	0,57
3	26,7	-	5,83	0,71
4	21,2	25	5,19	0,91
5	16,8	-	4,62	1,12
6	13,3	16	4,11	1,44
7	10,6	-	3,67	1,78
8	8,34	10	3,26	2,36
9	6,62	-	2,91	2,77
10	5,26	6	2,59	3,64
11	4,15	-	2,3	4,44
12	3,31	4	2,05	5,41
13	2,63	-	1,83	7,02
14	2,08	2,5	1,63	8,79
15	1,65	-	1,45	11,2
16	1,31	1,5	1,29	14,7
17	1,04	-	1,15	17,8
18	0,823	1	1,024	23
19	0,653	0,75	0,912	28,3
20	0,519	0,5	0,812	34,5
21	0,412	0,38	0,723	44
22	0,324	0,34	0,644	54,8
23	0,259	-	0,573	70,1
24	0,205	0,25	0,511	89,2
25	0,163	-	0,455	111
26	0,128	0,14	0,405	146
27	0,102	-	0,361	176
28	0,0804	0,08	0,321	232
29	0,0646	-	0,286	282
30	0,0503	0,05	0,255	350
31	0,04	-	0,227	446
32	0,032	-	0,202	578
33	0,0252	-	0,18	710
34	0,0200	-	0,16	899
35	0,0161	-	0,143	1125
36	0,0123	-	0,127	1426
37	0,01	-	0,113	1800
38	0,00795	-	0,101	2255
39	0,00632	-	0,0897	2860

4/0 is also known as 0000; 1 mil = inch = 0.0254 mm

*Shown in MCM (circular mills) for bigger cross sections

1 CM = 1 Circ. mil = 0.0005067 mm²

1 MCM = 1000 Circ. mils = 0.5067 mm²

1 CM = 1 Circ. mil = 0.0005067 mm²

1 MCM = 1000 Circ. mils = 0.5067 mm²

ADDITIONAL CONVERSION TABLE

LENGHT		
From	to	Formula
INCH (In)	MILLIMETER (mm)	In x 25,4 = mm
MILLIMETER (mm)	INCH (In)	mm x 0,03937 = In
FOOT (Ft)	METER (m)	Ft x 0,3048 = Mt
METER (m)	FOOT (Ft)	Mt x 3,218 = Ft
MILE (Mi)	KILOMETER (Km)	Mi x 1,609 = Km
KILOMETER (Km)	MILE (Mi)	KM x 0,621 = Mi

WEIGHTS		
From	to	Formula
POUND (Lb)	KILOGRAM (Kg)	Lb x 2,205 = Kg
KILOGRAM (Kg)	POUND (Lb)	Kg : 2,205 = Lb

TEMPERATURE		
From	to	Formula
FAHRENHEIT (F)	CELSIUS (C)	(F-32) x 0,56 = C
CELSIUS (C)	FAHRENHEIT (F)	C x 1,8 + 32 = F

EXAMINATION OF THE VERTICAL FLAME LENGTH, TEST METHOD 1 KV - FLAME WITH GAS/AIR MIXTURE

DESCRIPTION	VDE 0482 PART. 265-2-1, EN 50265-2-1 AND IEC 60332-1	VDE 0482 PART. 265-2-2, EN 50265-2-2 AND IEC 60332-2
Length of sample	600 mm	600 mm
Burner	Acc. to EN 60695-2-4-1	Acc. to VDE 0482 part. 265-1 and EN 50265-1
Test temperature	1 kW flame	Defined by the stipulated setting of the Flame length
Position of sample	Vertical	Vertical
Position of flame	45° to vertical sample	45° to vertical sample
Duration of flame	See table 1	20 seconds
Conditions	Cable must be self-extinguishing. The damage or carbonization may only reach max. 50 mm under the upper fixing clamp.	Cable must be self-extinguishing. The damage or carbonization may only reach max. 10 mm under the upper fixing clamp.

TABLE 1

OUTER DIAMETER * OF SAMPLE IN MM	
NOMINAL VALUE	DURATION OF FLAME TEST IN SECONDS
$D \leq 25$	60
$25 < D \leq 50$	120
$50 < D \leq$	240
$D > 75$	480

* If the insulated cables are not round (i.e. flat cables), dimensions must be measured to determine an equivalent diameter.



ASSESSMENT OF THE VERTICAL FLAME LENGTH FOR VERTICAL EXTENDED BUNDLE OF INSULATED CABLES

DESCRIPTION	IEC 60332-3
Length of sample	3500 mm
Burner	Flat burner (Ribbon gas burner)
Position of sample	Vertical
Position of flame	Horizontal
Duration of flame	Category A, B: 40 minutes Category C, D: 20 minutes
Conditions	The burned portion of the sample must be shorter than 2,5 m measured from the bottom edge of the burner, unless specified otherwise.

EN 60332- 3 / 22	CATEGORY A - 7 L/M
EN 60332- 3 / 23	CATEGORY B - 3,5 L/M
EN 60332- 3 / 24	CATEGORY C - 1,5 L/M > 12 MM CABLE - Ø
EN 60332- 3 / 25	CATEGORY D - 0,5 L/M > 12 MM CABLE - Ø
VOLUME % OF NON METALLIC MATERIAL X METER	

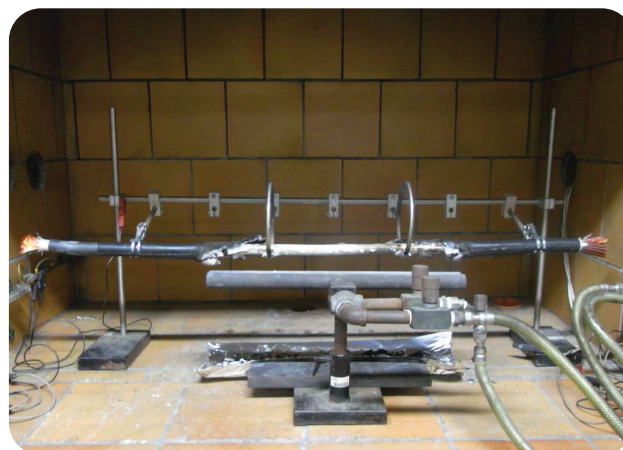


TESTS FOR ELECTRIC CABLES UNDER FIRE CONDITIONS - CIRCUITS INTEGRITY - PART.2

DESCRIPTION:	IEC 60331-2
	Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to 0,6/1 kV and with an overall diameter not exceeding 20 mm
Test temperature:	830°C (+40/-0°C)
Duration:	30, 60, 90, 120 min
Mechanical shocks:	every 5 min.
Water spray:	0,8 lt/min. (last 15 min.) (with water spray BS EN 50200 annex E)

TESTS FOR ELECTRIC CABLES UNDER FIRE CONDITIONS - CIRCUITS INTEGRITY - PART.1

DESCRIPTION:	IEC 60331-1
	Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to 0,6/1 kV and with an overall diameter exceeding 20 mm
Test temperature:	830°C (+40/-0°C)
Duration:	60, 90, 120 min
Mechanical shocks:	every 5 min.



FIRE RESISTANCE

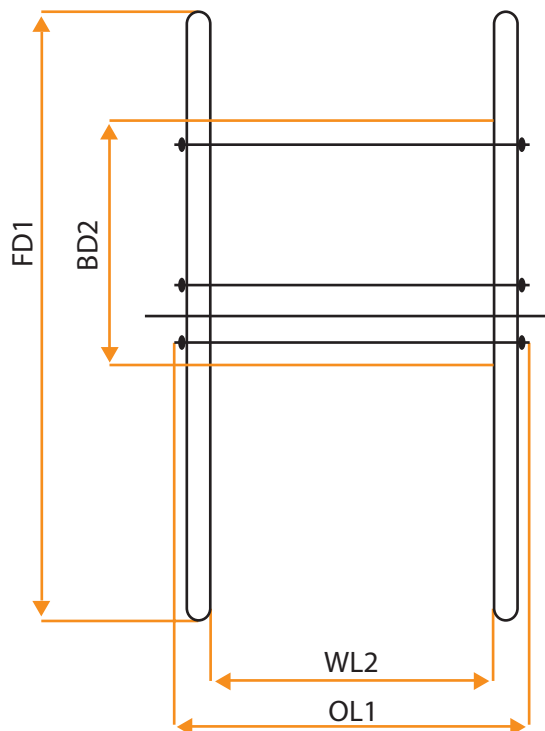
DESCRIPTION:	BS EN 50200
	This test serves to verify the circuit integrity of cables while exposed to fire at 830°C as well as mechanical shocks.
Classification:	PH 15 - flame exposure for 15 min. PH 30 - flame exposure for 30 min. PH 60 - flame exposure for 60 min. PH 90 - flame exposure for 90 min. PH 120 - flame exposure for 120 min.

WOODEN DRUMS

DRUM TYPE	FLANGE ∅ FD1 (MM)	BARREL ∅ BD2 (MM)	OVERALL WIDTH OL1 (MM)	WINDING WIDTH WL2 (MM)	MAX. CARRYING CAPACITY (KG)	DRUM WEIGHT (KG)
051	500	150	470	410	100	8
061	630	315	415	315	250	17
071	710	355	520	400	250	25
081	800	400	520	400	400	31
091	900	450	690	560	750	47
101	1000	500	710	560	900	71
121	1250	630	890	670	1700	144
141	1400	710	890	670	2000	175
161	1600	800	1100	850	3000	280
181	1800	1000	1100	840	4000	380
201	2000	1250	1350	1045	5000	550
221	2240	1400	1450	1140	6000	710
250	2500	1400	1450	1140	7500	875
251	2500	1600	1450	1130	7500	900
281	2800	1800	1635	1280	10000	1175

PLASTIC DRUMS

DRUM TYPE	FLANGE ∅ FD1 (MM)	BARREL ∅ BD2 (MM)	OVERALL WIDTH OL1 (MM)	WINDING WIDTH WL2 (MM)	MAX. CARRYING CAPACITY (KG)	DRUM WEIGHT (KG)
050	500	150	456	404	100	4
070	710	355	510	400	250	15
080	800	400	510	400	350	16
090	900	450	680	560	400	23
100	1000	500	704	560	500	32





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