GAALSHIP® HF 1000 FR WSR

Fire resistant and water spray resistant, power and control cable 0,6/1 kV



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 mm² Cl. 5 from 16 mm², 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
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 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.

Type Approvals/Certificates:

RINA / RINAMIL (Registro Italiano Navale)

BV (Bureau Veritas)

LR (Lloyd's Register)

DNV-GL (Det Norske Veritas - Germanisher Lloyd) in progress

ABS (American Bureau of Shipping)

Other approvals on request

Resistance:

Fire resistant acc. to:
IEC 60331-21,
IEC 60331-2 (under 20 mm Ø),
IEC 60331-1 (over 20 mm Ø),
EN 50200 Annex E Water Spray Test,
BS 8491 Water Jet Test

Flame and fire retardant acc. to:
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

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	3,5 kV
Temperature range:	-40°C up to +90°C
Installation temp.:	-5°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 1000 FR WSR

Fire resistant and water spray resistant, power and control cable 0,6/1 kV



Part no.	No. of cores x cross section n x mm²	Outer sheath color	Outer diameter ca.mm	Copper weight approx. kg/km	Cable weight approx. kg/km	Current rating in open air at 45°C (A)
12101G7L010M15	1 x 1,5	Black	6,6	22	65	23
12101G7L010M25	1 x 2,5	Black	7	33	79	30
12101G7L010M40	1 x 4	Black	7,6	48	102	40
12101G7L010M60	1 x 6	Black	8,1	68	128	52
12101G7L010M61	1 x 10	Black	9,2	109	181	72
12101G7L010M62	1 x 16	Black	10,3	168	255	96
12101G7L010M63	1 x 25	Black	12,1	258	372	127
12101G7L010M64	1 x 35	Black	13,3	356	487	157
12101G7L010M65	1 x 50	Black	15,2	503	666	196
12101G7L010M66	1 x 70	Black	17,1	699	894	242
12101G7L010M67	1 x 95	Black	18,8	942	1164	293
12101G7L010M68	1 x 120	Black	20,9	1185	1451	339
12101G7L010M69	1 x 150	Black	22,8	1477	1787	389
12101G7L010M70	1 x 185	Black	25,2	1817	2191	444
12101G7L010M71	1 x 240	Black	28	2350	2791	522
12101G7L010M72	1 x 300	Black	31	2932	3449	601
12101G7L010M72	1 x 400	Black	34,7	3898	4528	690 (DC) / 670 (AC)
12101G73020M10	2 x 1	Black	10,4	32	138	11
12101G73020M15	2 x 1,5	Black	11	43	160	20
12101G73020M25	2 x 2,5	Black	11,8	64	194	26
12101GE3020M40	2 x 4	Green	12,9	95	244	34
12101GE3020M60	2 x 6	Green	14,2	135	309	44
12101G73020M61	2 x 10	Black	16,2	216	427	61
12101G73020M62	2 x 16	Black	18,3	335	592	82
12101G73020M63	2 x 25	Black	21,3	514	822	108
12101G73020M64	2 x 35	Black	23,7	710	1080	133
12101G73020M65	2 x 50	Black	27,4	1005	1475	155
12101G73030M10	3 x 1	Black	11	43	159	9
12101G73030M15	3 x 1,5	Black	11,6	59	183	16
12101GE2031M15	3 G 1,5	Green	11,6	59	183	20
12101G73030M25	3 x 2,5	Black	12,5	89	230	21
12101GE2031M25	3 G 2,5	Green	12,5	89	230	26
12101G73030M40	3 x 4	Black	13,8	134	299	28
12101G72031M40	3 G 4	Black	13,8	134	299	34
12101G73030M60	3 x 6	Black	15,1	194	393	36
12101G72031M60	3 G 6	Black	15,1	194	393	44
12101G73030M61	3 x 10	Black	17,1	314	552	50
12101G72031M61	3 G 10	Black	17,1	314	552	61
12101G73030M62	3 x 16	Black	19,5	491	779	67
12101G72031M62	3 G 16	Black	19,5	491	779	82
12101G73030M63	3 x 25	Black	22,8	757	1120	89
12101G73030M64	3 x 35	Black	25,4	1049	1475	110
12101G73030M65	3 x 50	Black	29,3	1488	2025	137
12101G73030M66	3 x 70	Black	33,5	2072	2748	169
12101G73030M67	3 x 95	Black	37,3	2799	3603	205
12101G73030M68	3 x 120	Black	41,7	3527	4501	237
12101G73030M69	3 x 150	Black	45,8	4398	5531	272
12101G73030M70	3 x 185	Black	51	5415	6760	311
12101G73030M71	3 x 240	Black	57,1	7010	8598	365
12101G73030M72	3 x 300	Black	63,6	8750	10600	421
12101GG3040M10	4 x 1	Orange	11,8	54	188	13
12101GG3040M15	4 x 1,5	Orange	12,5	75	222	16
12101G73040M15	4 x 1,5	Black	12,5	75	222	16
12101GE2041M15	4 G 1,5	Green	12,5	75	222	16
12101GG3040M25	4 x 2,5	Orange	13,7	115	285	21
12101G73040M25	4 x 2,5	Black	13,7	115	285	21
12101GE2041M25	4 G 2,5	Green	13,7	115	285	21
12101G73040M40	4 x 4	Black	15	175	370	28
12101G72041M40	4 G 4	Black	15	175	370	28

GAALSHIP® HF 1000 FR WSR

Fire resistant and water spray resistant, power and control cable 0,6/1 kV



Part no.	No. of cores x cross section n x mm²	Outer sheath color	Outer diameter ca.mm	Copper weight approx. kg/km	Cable weight approx. kg/km	Current rating in open air at 45°C (A)
12101G73040M60	4 x 6	Black	16,4	254	477	36
12101G72041M60	4 G 6	Black	16,4	254	477	36
12101G73040M61	4 x 10	Black	18,8	412	678	50
12101G72041M61	4 G 10	Black	18,8	412	678	50
12101G73040M62	4 x 16	Black	21,5	647	975	67
12101G72041M62	4 G 16	Black	21,5	647	975	67
12101G73040M63	4 x 25	Black	25,1	1001	1399	89
12101G73040M64	4 x 35	Black	28	1390	1853	110
12101G73040M65	4 x 50	Black	32,3	1974	2636	137
12101G73040M66	4 x 70	Black	37,1	2750	3576	169
12101G73040M67	4 x 95	Black	41,2	3718	4704	205
12101G73040M68	4 x 120	Black	46,1	4687	5837	237
12101G73040M69	4 x 150	Black	50,7	5847	7255	272
12101G73040M70	4 x 185	Black	56,6	7201	8930	311
12101G73040M71	4 x 240	Black	63,3	9325	11348	365
12101GG3050M10	5 x 1	Orange	12,8	65	226	13
12101GG3050M15	5 x 1,5	Orange	13,7	91	270	16
12101G72051M15	5 G 1,5	Black	13,7	91	270	16
12101GG3050M25	5 x 2,5	Orange	14,8	141	345	21
12101G72051M25	5 G 2,5	Black	14,8	141	345	21
12101G73050M25	5 x 4	Black	16,3	216	451	28
12101G72051M40	5 G 4	Black	16,3	216	451	28
12101G73050M60	5 x 6	Black	18	314	587	36
12101G72051M60	5 G 6	Black	18	314	587	36
12101G73050M61	5 x 10	Black	20,7	512	842	50
12101G72051M61	5 G 10	Black	20,7	512	842	50
12101G73050M62	5 x 16	Black	23,6	805	1206	67
12101G72051M62	5 G 16	Black	23,6	805	1206	67
12101G73050M63	5 x 25	Black	27,8	1246	1745	89
12101G73050M64	5 x 35	Black	30,9	1731	2316	110
12101G73050M65	5 x 50	Black	35,9	2460	3270	137
12101G73050M66	5 x 70	Black	41,2	3430	4461	169
12101G73050M67	5 x 95	Black	45,8	4638	5809	172
12101G73050M68	5 x 120	Black	51,3	5848	7271	199
12101G73050M69	5 x 150	Black	56,5	7297	8969	228
12101G73050M70	5 x 185	Black	63	8989	11042	261
12101GG1070M10	7 x 1	Orange	13,5	87	267	8
12101GG1070M15	7 x 1,5	Orange	14,4	122	320	10
12101GG1070M25	7 x 2,5	Orange	15,6	191	413	14
12101GG1100M10	10 x 1	Orange	16,2	120	385	7
12101GG1100M15	10 x 1,5	Orange	17,3	170	466	9
12101GG1100M25	10 x 2,5	Orange	19	269	607	12
12101GG1120M10	12 x 1	Orange	17,3	141	440	7
12101GG1120M15	12 x 1,5	Orange	18,5	201	529	9
12101GG1120M25	12 x 2,5	Orange	20,2	320	694	11
12101GG1140M10	14 x 1	Orange	18,1	162	487	6
12101GG1140M15	14 x 1,5	Orange	19,3	231	589	8
12101GG1140M25	14 x 2,5	Orange	21,4	369	788	11
12101GG1160M10	16 x 1	Orange	19,1	183	548	6
12101GG1160M15	16 x 1,5	Orange	20,4	262	664	8
12101GG1160M25	16 x 2,5	Orange	22,5	420	889	10
12101GG1190M10	19 x 1	Orange	20,1	214	622	6
12101GG1190M15	19 x 1,5	Orange	21,6	307	762	7
12101GG1190M25	19 x 2,5	Orange	23,7	494	1012	10
12101GG1240M10	24 x 1	Orange	23,2	267	833	5
12101GG1240M15	24 x 1,5	Orange	24,8	385	1014	7
12101GG1240M25	24 x 2,5	Orange	27,4	620	1350	9

GAALSHIP® HF 1000 FR WSR

Fire resistant and water spray resistant, power and control cable 0,6/1 kV



Part no.	No. of cores x cross section n x mm²	Outer sheath color	Outer diameter ca.mm	Copper weight approx. kg/km	Cable weight approx. kg/km	Current rating in open air at 45°C (A)
12101GG1270M10	27 x 1	Orange	24,1	297	907	5
12101GG1270M15	27 x 1,5	Orange	25,8	430	1100	7
12101GG1270M25	27 x 2,5	Orange	28,4	694	1464	9
12101GG1300M10	30 x 1	Orange	24,9	328	973	5
12101GG1300M15	30 x 1,5	Orange	26,7	475	1190	6
12101GG1300M25	30 x 2,5	Orange	29,6	768	1598	8
12101GG1370M10	37 x 1	Orange	26,9	398	1156	5
12101GG1370M15	37 x 1,5	Orange	28,8	580	1413	6
12101GG1370M25	37 x 2,5	Orange	31,9	940	1907	8

Other dimensions and colors available on request.