

37-103 Gexol®-HF Flame Retardant Single Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 2kV • Rated 110°C

Conductor

Soft annealed flexible stranded tinned copper per IEEE 1580 Table 11.

Armor (Optional)

Basket weave wire armor per IEEE 1580 and UL 1309/CSA 245. Bronze standard. Aluminum or tinned copper available by request.



Insulation/Jacket

GEXOL®-HF low smoke, Halogen-Free flame retardant cross-linked, polyolefin insulation meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245 plus a black low smoke Halogen-Free flame retardant polyolefin jacket meeting IEEE 1580 and UL 1309/CSA 245. 2000V/IEC 1000V.

Sheath (Optional)

A black low smoke Halogen-Free flame retardant polyolefin, meeting IEEE 1580 and UL 1309/CSA 245.

Ratings & Approvals

- 110°C Temperature Rating
- American Bureau of Shipping (ABS) 99-BT5905-X
- UL Listed as Marine Shipboard Cable (E111461)
- Transport Canada (pending)
- Det Norske Veritas (DNV) (pending)
- Lloyd's Register of Shipping (LRS) (pending)

Application

Smoke, with its toxic and corrosive effects, is becoming more clearly recognized as the real culprit in fire fatalities. And there is increasing concern about smoke evolution in confined spaces or areas of limited egress. Low smoke, Halogen-Free, Gexol-HF should be used in the living quarters area to insure safe egress of personnel during a fire. Gexol-HF does not produce corrosive gases during a fire that might damage expensive electronic equipment, making it ideal for use in control rooms that house this equipment.

Features

- Flame retardant: IEC 332-3 Category A and IEEE 1202.
- Low smoke and Halogen-Free.
- High strand count conductors make this product more flexible and easier to install than IEC 60092-350 Series cables.
- Higher temperature rating results in higher ampacity ratings.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class I, Division 1 and Zone 1 environments (armored and sheathed).
- Optional braid armor of bronze, aluminum or tinned copper.

Hawke Gland Types	Unarmored	Armored & Sheathed
Industrial & Safe Area (IP68)	121	153-X
Increased Safety "EExe"	501/421	501/453/U
Explosion Proof	710 Class I, Div. 2 Class I, Zone 2	753 Class I, Div. 1 Class I, Zone 1 & 2
Flameproof "EExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

Flexible Power Cable – Single Conductor

Size AWG/ kcmil	Part No. 37-103	Unarmored				Armored (B)				Armored and Sheath (BS)								
		Nominal Diameter (inches)	Weight (lbs./MFT.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop at 110°C (Volts/Amp/1000 ft.)	Nominal Diameter (inches)	Weight (lbs./MFT.)	Voltage Drop at 110°C (Volts/Amp/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Nominal Diameter (inches)	Weight (lbs./MFT.)	Voltage Drop at 110°C (Volts/Amp/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance at 110°C, 60 Hz (Ohms/1000 ft.)	Free Air 110°C	Ampacity	
18	1.0	-101	0.238	17	0.058	13.572	0.288	31	0.396	41	13.585	0.070	7.210	9.763	30	17	16	20
16	1.3	-102	0.248	19	0.055	8.528	0.298	35	0.406	46	8.539	0.066	4.520	6.121	35	25	23	23
14	2.1	-105	0.263	27	0.051	5.394	0.313	49	0.432	66	5.407	0.063	2.850	3.859	41	40	37	32
12	3.3	-106	0.282	33	0.047	3.404	0.332	62	0.471	87	3.416	0.059	1.790	2.424	64	48	45	38
10	5.2	-108	0.302	54	0.044	2.164	0.352	101	0.491	139	2.175	0.055	1.130	1.530	85	62	58	51
8	7.6	-109	0.381	77	0.045	1.348	0.431	127	0.570	174	1.357	0.055	0.694	0.940	112	77	72	68
6	12.5	-110	0.421	116	0.042	0.861	0.471	168	0.610	222	0.869	0.050	0.436	0.590	148	103	96	91
4	21	-112	0.503	186	0.037	0.590	0.553	249	0.692	323	0.598	0.044	0.286	0.399	196	137	128	121
2	34	-114	0.569	262	0.035	0.374	0.619	329	0.758	399	0.380	0.041	0.175	0.244	259	181	169	162
1	43	-115	0.610	364	0.034	0.305	0.660	443	0.799	512	0.312	0.040	0.140	0.195	298	208	194	187
1/0	54	-116	0.674	458	0.033	0.251	0.724	540	0.905	626	0.258	0.040	0.111	0.156	344	243	227	217
2/0	70	-117	0.741	540	0.033	0.206	0.791	634	0.972	727	0.213	0.039	0.089	0.125	396	281	262	250
3/0	86	-118	0.800	738	0.032	0.171	0.850	867	1.032	1046	0.177	0.038	0.070	0.100	457	321	300	289
4/0	109	-119	0.908	943	0.032	0.144	0.958	1090	1.140	1285	0.150	0.037	0.056	0.080	528	376	351	335
262	132	-120	1.010	1139	0.032	0.125	1.060	1300	1.241	1513	0.130	0.036	0.046	0.067	599	436	407	382
313	159	-121	1.076	1223	0.031	0.110	1.126	1467	1.307	1643	0.115	0.035	0.038	0.056	604	487	455	427
373	189	-122	1.143	1546	0.030	0.097	1.193	1729	1.374	1966	0.101	0.035	0.032	0.047	674	553	516	476
444	227	-123	1.219	1812	0.030	0.088	1.269	2008	1.450	2259	0.092	0.034	0.027	0.041	750	630	588	531
535	273	-124	1.333	2171	0.030	0.079	1.383	2381	1.565	2653	0.083	0.033	0.022	0.035	839	709	662	597
646	326	-126	1.422	2592	0.029	0.072	1.472	2826	1.653	3046	0.075	0.033	0.019	0.030	937	783	731	671
777	394	-127	1.520	3088	0.028	0.066	1.550	3330	1.813	3191	0.070	0.033	0.015	0.026	1048	881	822	753
1111	562	-129	1.793	4405	0.028	0.054	1.843	4568	2.086	4692	0.058	0.032	0.011	0.018	1303	1098	1025	937

Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance

GEXOL® is a registered trademark of AmerCable Incorporated

Ordering Gexol-HF Cables

Example:

- Single conductor power cable
- 2kV
- 535 kcmil
- bronze armored & sheathed

AmerCable
Gexol-HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored & sheathed
Blank – no armor

BS

37-103 - 124

Manufactured by AmerCable Incorporated • 800-506-9473 • 713-896-5800 • Fax: 713-849-9009

www.amercable.com • e-mail: marine@amercable.com