

# 37-104 Gexol®-331HF Fire Resistant 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

Fire resistant tape + 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

Designed and constructed for the demanding environments of offshore drilling and petroleum facilities located throughout the world. Primarily used on critical circuits that must continue to function even in a fire condition. This product should be used on any circuit dedicated to emergency lighting, fire detection/suppression, alarms and personnel egress.

## Features

- Fire resistant: IEC 60331.
- 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. 37-104	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.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop at 110°C (Volts/Amp/1000 ft.)	Nominal Diameter (inches)	Weight (lbs./MFT.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop at 110°C (Volts/Amp/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	0.258	18	0.060	13.574	0.308	32	0.416	42	0.071	13.586	7.210	9.763	30	17	16	20
16	1.3	-102	0.288	20	0.056	8.529	0.318	36	0.426	47	0.067	8.541	4.520	6.121	35	25	23	23
14	2.1	-105	0.288	28	0.053	5.396	0.333	50	0.472	67	0.064	5.408	2.850	3.859	41	40	37	32
12	3.3	-106	0.302	34	0.049	3.405	0.352	64	0.491	89	0.060	3.417	1.790	2.424	64	48	45	38
10	5.2	-108	0.322	56	0.046	2.165	0.372	103	0.511	141	0.056	2.176	1.130	1.530	85	62	58	51
8	7.6	-109	0.401	79	0.047	1.349	0.451	129	0.590	176	0.055	1.358	0.694	0.940	112	77	72	68
6	12.5	-110	0.441	120	0.043	0.862	0.491	172	0.630	226	0.051	0.870	0.436	0.590	148	103	96	91
4	21	-112	0.523	192	0.038	0.591	0.573	255	0.712	329	0.045	0.598	0.286	0.399	196	137	128	121
2	34	-114	0.589	269	0.035	0.374	0.639	336	0.778	406	0.042	0.381	0.175	0.244	259	181	169	162
1	43	-115	0.630	371	0.035	0.306	0.680	450	0.819	519	0.041	0.312	0.140	0.195	298	208	194	187
1/0	54	-116	0.694	466	0.034	0.252	0.744	548	0.925	634	0.041	0.258	0.111	0.156	344	243	227	217
2/0	70	-117	0.761	548	0.033	0.207	0.811	642	0.992	735	0.039	0.213	0.089	0.125	396	281	262	250
3/0	86	-118	0.820	747	0.033	0.172	0.870	876	1.052	1055	0.038	0.178	0.070	0.100	457	321	300	289
4/0	109	-119	0.928	953	0.033	0.145	0.978	1100	1.160	1295	0.038	0.150	0.056	0.080	528	376	351	335
262	132	-120	1.030	1150	0.032	0.126	1.080	1311	1.261	1524	0.037	0.130	0.046	0.067	599	436	407	382
313	159	-121	1.096	1235	0.031	0.110	1.146	1479	1.327	1655	0.036	0.115	0.038	0.056	604	487	455	427
373	189	-122	1.163	1559	0.031	0.097	1.213	1742	1.394	1979	0.035	0.102	0.032	0.047	674	553	516	476
444	227	-123	1.239	1825	0.030	0.088	1.289	2021	1.470	2272	0.034	0.092	0.027	0.041	750	630	588	531
535	273	-124	1.353	2185	0.030	0.079	1.403	2395	1.585	2667	0.034	0.083	0.022	0.035	839	709	662	597
646	326	-126	1.442	2606	0.029	0.072	1.492	2840	1.735	3060	0.034	0.076	0.019	0.030	937	783	731	671
777	394	-127	1.540	3102	0.029	0.066	1.590	3344	1.833	3205	0.033	0.070	0.015	0.026	1048	881	822	753
1111	562	-129	1.813	4420	0.028	0.054	1.863	4583	2.106	4977	0.032	0.058	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-331HF Cables**

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

AmerCable  
 Gexol-331HF Prefix  
 Specific Cable Number  
 (from table)

**37-104 - 124**

**BS**

Armor Requirement  
 BS – armored & sheathed  
 Blank – no armor

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