

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	0.283	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)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

BS

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