

Gexol[®] **Low Smoke** **Halogen-Free** **Cables**

***Fire Resistant and
Flame Retardant Constructions***

***Gexol-331HF
Fire Resistant***

***Gexol-HF
Flame Retardant***



AmerCable

INCORPORATED

The Global Cable Solutions Company



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■ Fastest Lead Times

- Standard 6 - 8 weeks
- Emergency 2 - 4 weeks

■ Best On Time Delivery Rate

(99%+ in the last 36 months)*

■ Highest Ampacity Ratings

- DNV: 95°C
- ABS: 100°C
- Lloyd's: 95°C

■ Extremely Flexible

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Severe Cold Durability
Exceeds CSA Cold Bend /
Cold Impact (-40°C/-35°C)



Flame Retardant
Certified to IEC 92-3 (332-3A)
and IEEE 1202

Gexol-331HF *Fire Resistant Low Smoke / Halogen-Free*

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AmerCable believes the information presented throughout this catalog to be reliable and current. All information is subject to change without notice. The information listed is approximate, and is presented only as a guide for product selection. We make no claims or warranties for the suitability of any product for any particular application.



Gexol® Low Smoke Halogen-Free Oil & Gas Cables are the industry's standard for premium power, control and instrumentation performance. Gexol cables prove their value daily in the punishing operating environments of offshore drilling and petroleum facilities around the world.

Offshore applications challenge cable construction with relentless heat, vibration, salt corrosion, drilling mud and mechanical stress.

For environments that require Fire Resistant/Retardant Low Smoke Halogen-Free cables – you can depend on AmerCable.



Ampacity Ratings

110°C (Free Air) Ratings	Based on IEEE Std. 835-1994 for isolated cables in free air with full sun, 2 ft/s air movement, and a 45°C ambient.
110°C Ratings	Based on IEEE Std. 45 with a 45°C ambient and arranged in a single bank per hanger. For those instances where cable must be double banked, the 110°C ampacities should be multiplied by 0.8.
100°C Ratings	Based on IEEE Std. 45 with a 45°C ambient and arranged in a single bank per hanger. For those instances where cable must be double banked, the 100°C ampacities should be multiplied by 0.8.
95°C Ratings	Based on Table 4/3C.10 of the 1997 ABS MODU rules and a 45°C ambient.
Ampacities for four conductor cables are based on one conductor not acting as a normal current-carrying conductor (e.g., grounded neutral or grounding conductor).	

Bend Radius

	Unarmored	Armored	Armored & Sheathed
IEEE 45	6X Diameter	8X Diameter	8X Diameter
IEC 92	<1" (25mm) 4 x Diameter >1" (25mm) 6X Diameter	6X Diameter	8X Diameter
Transport Canada	<1" (25mm) 4X Diameter >1" (25mm) 6X Diameter	6X Diameter	6X Diameter

Diameter Conversion → (inches to millimeters): Multiply by 25.4

Hawke Gland Types

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

Stranding Profile

Size AWG/kcmil	Number of Strands	Individual Strand Dia. (inches)	Closest IEEE 45 Std. Size	Equivalent Metric Size (mm ²)	Uninsulated Conductor Dia. (inches)
18	19	0.0100	2	0.96	0.049
16	19	0.0117	3	1.32	0.059
14	19	0.0147	4	2.08	0.074
12	19	0.0185	6	3.29	0.093
10	37	0.0167	10	5.23	0.113
8	37	0.0201	16	7.57	0.136
6	61	0.0201	26	12.49	0.175
4	133	0.0177	41	21.11	0.258
2	133	0.0223	66	33.51	0.324
1	209	0.0201	83	42.79	0.361
1/0	266	0.0201	106	54.45	0.407
2/0	342	0.0201	133	70.01	0.461
3/0	418	0.0201	168	85.57	0.510
4/0	532	0.0201	212	108.91	0.575
262	646	0.0201	262	132.25	0.654
313	777	0.0201	313	159.06	0.720
373	925	0.0201	373	189.36	0.785
444	1110	0.0201	444	227.23	0.860
535	1332	0.0201	535	272.68	0.941
646	1591	0.0201	646	325.70	1.029
777	1924	0.0201	777	393.87	1.132
1111	2745	0.0201	1111	561.94	1.354

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.

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.

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)

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

Unarmored						Armored (B)		Armored and Sheath (BS)								
Size AWG/ kcmil	Part No. 37-104	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.)	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	0.308	32	0.416	42	0.071	13.586	7.210	9.763	30	17	20
16	1.3	-102	0.288	20	0.056	0.318	36	0.426	47	0.067	8.541	4.520	6.121	35	25	23
14	2.1	-105	0.283	28	0.053	0.333	50	0.472	67	0.064	5.408	2.850	3.859	41	40	37
12	3.3	-106	0.302	34	0.049	0.352	64	0.491	89	0.060	3.417	1.790	2.424	64	48	45
10	5.2	-108	0.322	56	0.046	0.372	103	0.511	141	0.056	2.176	1.130	1.530	85	62	51
8	7.6	-109	0.401	79	0.047	0.451	129	0.590	176	0.055	1.358	0.694	0.940	112	77	72
6	12.5	-110	0.441	120	0.043	0.491	172	0.630	226	0.051	0.870	0.436	0.590	148	103	96
4	21	-112	0.523	192	0.038	0.573	255	0.712	329	0.045	0.598	0.286	0.399	196	137	128
2	34	-114	0.589	269	0.035	0.639	336	0.778	406	0.042	0.381	0.175	0.244	259	181	169
1	43	-115	0.630	371	0.035	0.680	450	0.819	519	0.041	0.312	0.140	0.195	298	208	194
1/0	54	-116	0.694	466	0.034	0.744	548	0.925	634	0.041	0.258	0.111	0.156	344	243	217
2/0	70	-117	0.761	548	0.033	0.811	642	0.992	735	0.039	0.213	0.089	0.125	396	281	262
3/0	86	-118	0.820	747	0.033	0.870	876	1.052	1055	0.038	0.178	0.070	0.100	457	321	300
4/0	109	-119	0.928	953	0.033	0.978	1100	1.160	1295	0.038	0.150	0.056	0.080	528	376	351
262	132	-120	1.030	1150	0.032	1.080	1311	1.261	1524	0.037	0.130	0.046	0.067	599	436	407
313	159	-121	1.096	1235	0.031	1.146	1479	1.327	1655	0.036	0.115	0.038	0.056	604	487	455
373	189	-122	1.163	1559	0.031	1.213	1742	1.394	1979	0.035	0.102	0.032	0.047	674	553	516
444	227	-123	1.239	1825	0.030	1.289	2021	1.470	2272	0.034	0.092	0.027	0.041	750	630	588
535	273	-124	1.353	2185	0.030	1.403	2395	1.585	2667	0.034	0.083	0.022	0.035	839	709	662
646	326	-126	1.442	2606	0.029	1.492	2840	1.735	3060	0.034	0.076	0.019	0.030	937	783	731
777	394	-127	1.540	3102	0.029	1.590	3344	1.833	3205	0.033	0.070	0.015	0.026	1048	881	822
1111	562	-129	1.813	4420	0.028	1.863	4583	2.106	4977	0.032	0.058	0.011	0.018	1303	1098	1025

Cable diameters shown as nominal are subject to a $\pm 5\%$ 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

Manufactured by AmerCable Incorporated • 800-506-9473 • 713-896-5800 • Fax: 713-849-9009
www.amercable.com • e-mail: marine@amercable.com

Gexol®-331HF Fire Resistant Two Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:
Black-White

Conductor

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

Jacket

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

Sheath (Optional)

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

Armor (Optional)

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

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.

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)

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 – Two Conductor

Size AWG/ kcmil	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Ampacity		
		Nominal Diameter (inches)	Weight (lbs/MFT)	Nominal Diameter (inches)	Weight (lbs/MFT)	Nominal Diameter (inches)	Weight (lbs/MFT)					110°C	100°C	95°C
16	1.3	0.421	86	0.471	161	0.610	230	4.610	6.121	0.042	8.515	20	19	20
14	2.1	0.451	108	0.501	188	0.640	262	2.907	3.859	0.039	5.382	33	31	27
12	3.3	0.508	133	0.558	221	0.697	300	1.826	2.424	0.037	3.393	43	40	32
10	5.2	0.529	169	0.579	266	0.718	350	1.153	1.530	0.035	2.154	53	49	43
8	7.6	0.648	252	0.698	373	0.837	474	0.708	0.940	0.036	1.338	69	64	58
6	12.5	0.728	351	0.778	483	0.959	637	0.445	0.590	0.034	0.852	91	85	77
4	21	0.935	588	0.985	757	1.166	952	0.300	0.399	0.030	0.583	118	110	103
1/0	54	1.291	1286	1.341	1521	1.522	1781	0.117	0.156	0.028	0.246	213	199	184
4/0	109	1.641	2283	1.691	2589	1.934	3055	0.058	0.080	0.027	0.138	329	307	285

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

Ordering Gexol-331HF Cables

Example:

- Two conductor power cable
- 0.6/1kV
- #4 AWG
- bronze armored & sheathed

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

37-104 – 594

BS

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-331HF Fire Resistant Three Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductor

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White-Red

Jacket

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

Armor (Optional)

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

Sheath (Optional)

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



An uninsulated ground conductor may be incorporated on a make-to-order basis.

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.

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)

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

37-104 Gexol®-331HF Fire Resistant Three Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Flexible Power Cable – Three Conductor

Size AWG/ kcmil	mm2	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Opt. Uninsulated Grounding Cond. Size AWG	Ampacity		
			Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)						110°C	100°C	95°C
16	1.3	-502	0.443	75	0.493	146	0.632	207	4.610	6.121	0.042	8.515	-	17	16	16
14	2.1	-508	0.475	136	0.525	211	0.664	293	2.907	3.859	0.039	5.382	-	27	25	22
12	3.3	-516	0.535	185	0.585	292	0.726	352	1.826	2.424	0.037	3.393	-	33	31	27
10	5.2	-308	0.585	234	0.635	343	0.775	455	1.153	1.530	0.035	2.154	-	44	41	36
8	7.6	-309	0.688	335	0.738	443	0.919	595	0.708	0.940	0.036	1.338	-	56	52	48
6	12.5	-310	0.766	456	0.816	576	0.997	742	0.445	0.590	0.034	0.852	8	75	70	64
4	21	-312	0.993	773	1.043	961	1.224	1145	0.300	0.399	0.030	0.583	8	99	92	85
2	34	-314	1.135	1125	1.185	1102	1.366	1566	0.184	0.244	0.029	0.368	6	131	122	113
1	43	-315	1.257	1407	1.307	1662	1.490	1910	0.147	0.195	0.029	0.300	6	153	143	131
1/0	54	-316	1.377	1651	1.427	2030	1.609	2297	0.117	0.156	0.028	0.246	6	176	164	152
2/0	70	-317	1.473	2217	1.523	2373	1.767	2763	0.093	0.125	0.028	0.201	6	201	188	175
3/0	86	-318	1.593	2495	1.643	2748	1.883	3176	0.074	0.100	0.027	0.166	4	234	218	202
4/0	109	-319	1.793	3174	1.843	3456	2.084	3933	0.058	0.080	0.027	0.138	4	270	252	235
262	132	-320	2.031	3935	2.081	4423	2.325	5055	0.048	0.067	0.027	0.120	3	315	294	267
313	159	-321	2.153	4554	2.203	4901	2.443	5465	0.040	0.056	0.026	0.105	3	344	321	299
373	189	-322	2.307	5285	2.357	5657	2.597	6258	0.034	0.047	0.026	0.092	3	387	361	334
444	227	-323	2.445	6464	2.495	7041	2.739	7825	0.028	0.041	0.026	0.083	2	440	411	372
535	273	-324	2.688	7734	2.738	8541	3.045	9405	0.024	0.035	0.026	0.075	2	498	465	418
646	326	-326	3.009	9075	3.059	9592	3.360	10554	0.020	0.030	0.026	0.069	1	553	516	470
777	394	-327	3.219	10913	3.269	11474	3.570	12477	0.016	0.026	0.026	0.063	1	602	562	529

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:

- Three conductor power cable
- 0.6/1kV
- bronze armored & sheathed
- with ground

37-104 - 320

BS

G

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Ground Conductor
G – with ground
Blank – no ground

Gexol®-331HF Fire Resistant Four Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White-Red-Green

Conductor

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

Jacket

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

Sheath (Optional)

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

Armor (Optional)

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

An uninsulated ground conductor may be incorporated on a make-to-order basis.

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.

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)

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 – Four Conductor

Size AWG/ kcmil	Part No.	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms /1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Opt. Uninsulated Grounding Cond. Size AWG	Ampacity		
		Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)						110°C	100°C	95°C
16	37-104	0.479	113	0.529	176	0.668	259	4.610	6.121	0.045	8.518	–	17	16	16
14	-509	0.515	146	0.565	243	0.704	314	2.907	3.859	0.042	5.385	–	27	25	22
12	-517	0.571	192	0.621	292	0.761	368	1.826	2.424	0.039	3.396	–	33	31	27
10	-408	0.609	277	0.659	357	0.798	455	1.153	1.530	0.037	2.157	–	44	41	36
8	-409	0.754	405	0.804	531	0.985	674	0.708	0.940	0.039	1.341	–	56	52	48
6	-410	0.850	608	0.900	763	1.081	921	0.445	0.590	0.036	0.855	8	75	70	64
4	-412	1.091	1002	1.141	1211	1.322	1409	0.300	0.399	0.033	0.586	8	99	92	85
2	-414	1.250	1277	1.300	1533	1.481	1912	0.184	0.244	0.032	0.370	6	131	122	113
1	-415	1.388	1826	1.438	2176	1.619	2444	0.147	0.195	0.032	0.303	6	153	143	131
1/0	-416	1.521	2174	1.571	2485	1.814	2775	0.117	0.156	0.031	0.249	6	176	164	152
2/0	-417	1.629	2890	1.679	3038	1.923	3477	0.093	0.125	0.030	0.204	6	201	188	175
3/0	-418	1.810	3655	1.860	4079	2.104	4563	0.074	0.100	0.030	0.169	4	234	218	202
4/0	-419	2.020	4292	2.070	4804	2.313	5324	0.058	0.080	0.029	0.141	4	270	252	235
262	-420	2.261	5273	2.311	5466	2.554	6395	0.048	0.067	0.029	0.123	3	315	294	267
313	-421	2.430	6118	2.480	6689	2.723	7290	0.040	0.056	0.029	0.108	3	344	321	299
373	-422	2.551	7367	2.601	7812	2.902	8637	0.034	0.047	0.029	0.095	3	387	361	334
444	-423	2.709	8618	2.759	9105	3.066	9986	0.028	0.041	0.028	0.086	2	440	411	372
535	-424	3.045	10584	2.095	11129	3.402	12050	0.024	0.035	0.029	0.078	2	463	432	418
646	-426	3.333	12051	3.383	12478	3.684	13498	0.020	0.030	0.029	0.071	1	553	516	470

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:
• Four conductor power cable
• 0.6/1kV
• #6 AWG
• bronze armored & sheathed
• with ground

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Ground Conductor
G – with ground
Blank – no ground

Manufactured by AmerCable Incorporated • 800-506-9473 • 713-896-5800 • Fax: 713-849-9009
www.amercable.com • e-mail: marine@amercable.com

Gexol®-331HF Fire Resistant Five Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductors

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

Jacket

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

Armor (Optional)

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White-Red-Green-Orange

Sheath (Optional)

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



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.

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)

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 – Five Conductor

Size AWG/ kcmil	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Ampacity		
		Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)					110°C	100°C	95°C
18	1.0	0.493	114	0.543	195	0.682	252	7.354	9.763	0.048	13.562	11	10	11
16	1.3	0.518	125	0.568	215	0.709	301	4.610	6.121	0.045	8.518	14	13	13
14	2.1	0.560	170	0.610	267	0.749	343	2.907	3.859	0.042	5.385	21	20	18
12	3.3	0.612	223	0.662	303	0.814	381	1.826	2.424	0.039	3.396	27	25	22
10	5.2	0.666	337	0.716	463	0.897	563	1.153	1.530	0.037	2.157	35	33	29
8	7.6	0.827	516	0.877	649	1.058	803	0.708	0.940	0.039	1.341	45	42	38
6	12.5	0.976	744	1.026	927	1.207	1109	0.445	0.590	0.036	0.855	60	56	51
4	21	1.199	1223	1.249	1473	1.430	1688	0.300	0.399	0.033	0.586	79	74	68
2	34	1.377	1552	1.427	1866	1.608	2116	0.184	0.244	0.032	0.370	105	98	90
1	43	1.532	2428	1.582	2499	1.826	2829	0.147	0.195	0.032	0.303	122	114	105
1/0	54	1.680	2907	1.730	3130	1.973	3543	0.117	0.156	0.031	0.249	140	131	122
2/0	70	1.864	3368	1.914	3763	2.158	4257	0.093	0.125	0.030	0.204	161	150	140
4/0	109	2.229	4121	2.279	4509	2.523	5235	0.058	0.080	0.029	0.141	216	202	188

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

Ordering Gexol-331HF Cables

Example:

- Five conductor power cable
- 0.6/1kV
- #2 AWG
- bronze armored & sheathed

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

37-104 - 566

BS

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-331HF Fire Resistant Multi-Conductor Control Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductors

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

Jacket

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

Sheath (Optional) Jacket

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

ICEA K-1, Method 1.
For less than minimum order quantities, Method 3 may be used.

Armor (Optional)

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

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.

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)

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 Control Cable – Multi-Conductor

				Unarmored		Armored (B)		Armored and Sheath (BS)				
Size AWG	mm2	Number of Conductors	Part No. 37-104	Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)	Ampacity		
										110°C	100°C	95°C
16	1.3	4	-529	0.429	119	0.529	185	0.668	272	17	16	16
16	1.3	5	-559	0.518	132	0.568	227	0.709	317	14	13	13
16	1.3	7	-505	0.562	186	0.612	306	0.751	396	12	11	11
16	1.3	8	-503	0.605	197	0.655	318	0.794	408	12	11	11
16	1.3	10	-504	0.719	247	0.769	439	0.950	534	9	8	11
16	1.3	16	-546	0.821	359	0.871	558	1.052	722	9	8	11
16	1.3	20	-687	0.908	432	0.958	672	1.139	869	9	8	11
16	1.3	24	-525	1.051	554	1.101	862	1.282	971	8	7	11
16	1.3	37	-526	1.196	790	1.246	983	1.427	1187	6	6	8
16	1.3	44	-577	1.341	968	1.391	1176	1.572	1410	6	6	8
16	1.3	60	-527	1.486	1264	1.536	1507	1.780	1795	6	6	8
16	1.3	91	-581	1.776	1914	1.826	2275	2.069	2617	6	6	8
14	2.1	4	-509	0.515	154	0.565	256	0.704	330	27	25	22
14	2.1	5	-510	0.560	179	0.610	281	0.749	361	21	20	18
14	2.1	6	-511	0.628	218	0.678	317	0.817	402	21	20	18
14	2.1	7	-521	0.628	251	0.678	349	0.817	453	19	18	15
14	2.1	10	-512	0.779	336	0.829	487	1.010	618	14	13	15
14	2.1	12	-585	0.804	368	0.854	514	1.035	670	14	13	15
14	2.1	14	-523	0.870	572	0.920	709	1.102	893	14	13	15
14	2.1	20	-513	1.030	672	1.080	974	1.261	1051	14	13	15
14	2.1	24	-571	1.141	738	1.191	1070	1.372	1358	12	11	15
14	2.1	30	-573	1.207	936	1.257	1158	1.438	1416	12	11	13
14	2.1	37	-514	1.301	1051	1.351	1362	1.532	1686	11	10	13
14	2.1	44	-574	1.461	1304	1.511	1512	1.754	1772	10	9	11
14	2.1	91	-582	2.003	2640	2.053	2958	2.296	3426	10	9	11
12	3.3	4	-517	0.571	192	0.621	292	0.761	368	33	31	27
12	3.3	5	-560	0.612	235	0.662	319	0.814	401	27	25	22
12	3.3	6	-547	0.679	336	0.729	486	0.910	600	27	25	22
12	3.3	10	-518	0.859	443	0.909	600	1.090	755	17	16	19
12	3.3	20	-519	1.136	841	1.186	1068	1.367	1266	17	16	19
12	3.3	24	-572	1.261	1033	1.311	1400	1.492	1762	15	14	19
12	3.3	37	-520	1.441	1514	1.491	1760	1.672	2012	13	12	16

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

Ordering Gexol-331HF Cables

Example:

- Multi-Conductor control cable
- 0.6/1kV
- #12 AWG
- bronze armored & sheathed

37-104 - 519

BS

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-331HF Fire Resistant Shielded Pairs Instrumentation Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Pairs

Each pair is twisted with a bare tinned drain wire. Each pair is shielded with polyester-backed aluminum foil tape to afford 100% coverage. Pair-to-pair isolation plus overall shield is provided.

Pair color code:

Black-White

Armor (Optional)

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

Sheath (Optional)

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

Conductor

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

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

Cable available with blue stripe to signify intrinsically safe circuit.

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 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.

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)

GEXOL® is a registered trademark of AmerCable Incorporated

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 Instrumentation Cable – Individually Shielded Pairs

Size AWG	mm ²	Number of Pairs	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)	
				Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)
18	1.0	1	-601	0.408	102	0.458	173	0.597	254
18	1.0	2	-602	0.639	211	0.689	312	0.828	416
18	1.0	3	-603	0.661	231	0.711	338	0.915	485
18	1.0	4	-604	0.726	273	0.776	392	0.960	550
18	1.0	5	-605	0.801	294	0.851	478	1.032	618
18	1.0	7	-606	0.870	411	0.920	553	1.101	696
18	1.0	8	-607	0.940	484	0.990	641	1.171	841
18	1.0	10	-608	1.144	599	1.194	846	1.375	1057
18	1.0	12	-609	1.185	700	1.235	893	1.416	1134
18	1.0	16	-645	1.317	905	1.367	1008	1.548	1430
18	1.0	18	-641	1.389	997	1.439	1270	1.620	1573
18	1.0	24	-646	1.630	1433	1.680	1713	1.924	2156
16	1.3	1	-610	0.436	91	0.486	158	0.625	235
16	1.3	2	-611	0.634	236	0.689	339	0.871	484
16	1.3	3	-612	0.711	299	0.761	416	0.942	580
16	1.3	4	-613	0.776	312	0.826	433	1.007	597
16	1.3	5	-614	0.871	345	0.921	560	1.102	706
16	1.3	7	-615	0.920	482	0.970	648	1.151	815
16	1.3	8	-616	1.036	640	1.086	816	1.267	1039
16	1.3	10	-617	1.215	703	1.265	913	1.446	1274
16	1.3	12	-618	1.255	825	1.305	1071	1.486	1320
16	1.3	16	-619	1.403	1100	1.453	1428	1.634	1760
16	1.3	18	-626	1.473	1276	1.523	1462	1.766	1821
16	1.3	20	-688	1.547	1409	1.597	1712	1.840	2197
16	1.3	24	-699	1.730	1433	1.780	1713	2.023	2156
14	2.1	1	-620	0.458	112	0.508	175	0.646	255
14	2.1	2	-621	0.709	234	0.759	365	0.940	558
14	2.1	3	-622	0.752	291	0.802	454	0.983	597
14	2.1	4	-623	0.826	349	0.876	544	1.057	734
14	2.1	5	-624	0.907	434	0.957	705	1.137	913
14	2.1	7	-625	1.033	608	1.083	817	1.264	1028
14	2.1	8	-630	1.119	578	1.169	931	1.350	1173
14	2.1	10	-627	1.316	867	1.366	1163	1.547	1387
14	2.1	12	-628	1.360	1039	1.410	1395	1.591	1663

#18 Pairs

Capacitance = 22 nF/1000 ft.
Inductance = 0.12 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

#16 Pairs

Capacitance = 22 nF/1000 ft.
Inductance = 0.11 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

#14 Pairs

Capacitance = 25 nF/1000 ft.
Inductance = 0.11 mH/1000 ft.
Resistance = 2.85 ohms/1000 ft.

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

Ordering Gexol-331HF Cables

Example:

- Instrumentation cable
- 0.6/1kV
- #14 AWG, 1 Pair
- bronze armored & sheathed

37-104 - 620

BS

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-331HF Fire Resistant Shielded Triads Instrumentation Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Triads

Each triad is twisted with a bare tinned drain wire. Each triad is shielded with polyester-backed aluminum foil tape to afford 100% coverage. Triad to triad isolation plus overall shielding is provided.

Triad color code:
Black-White-Red

Armor (Optional)

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

Sheath (Optional)

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

Conductor

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

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

Cable available with blue jacket or stripe to signify intrinsically safe circuit.

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.

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)

GEXOL® is a registered trademark of AmerCable Incorporated

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 Instrumentation Cable – Individually Shielded Triads

Size AWG	mm2	Number of Triads	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)	
				Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)
18	1.0	1	-647	0.431	91	0.481	174	0.620	241
18	1.0	2	-681	0.743	221	0.793	351	0.974	460
18	1.0	3	-648	0.789	230	0.839	369	1.020	476
18	1.0	4	-682	0.867	340	0.917	494	1.098	667
18	1.0	5	-649	0.995	346	1.045	507	1.226	679
18	1.0	7	-650	1.084	495	1.134	684	1.315	876
18	1.0	8	-683	1.176	640	1.226	1007	1.407	1234
18	1.0	12	-640	1.431	927	1.481	1168	1.662	1446
16	1.3	1	-668	0.450	116	0.500	189	0.639	270
16	1.3	3	-669	0.836	264	0.886	409	1.067	564
16	1.3	4	-698	0.919	496	0.969	641	1.150	847
16	1.3	6	-676	1.149	762	1.199	908	1.380	1156
16	1.3	7	-670	1.149	762	1.199	908	1.380	1271
16	1.3	8	-677	1.240	882	1.290	1060	1.471	1335

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

#18 Triads

Capacitance = 22 nF/1000 ft.
Inductance = 0.12 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

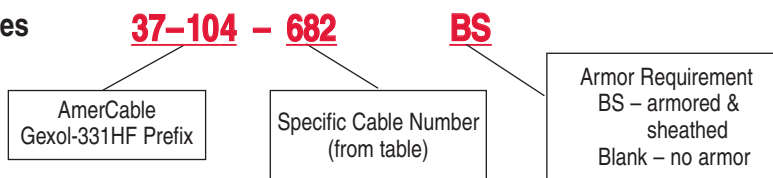
#16 Triads

Capacitance = 22 nF/1000 ft.
Inductance = 0.11 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

Ordering Gexol-331HF Cables

Example:

- Instrumentation cable
- 0.6/1kV
- #18 AWG, 4 triad
- bronze armored & sheathed



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.

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.

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)

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

			Unarmored					Armored (B)			Armored and Sheath (BS)						
Size AWG/ kcmil	mm2	Part No. 37-103	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.)	Nominal Diameter (inches)	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		
														110°C	100°C	95°C	
18	1.0	-101	0.238	17	0.058	13.572	0.288	31	0.396	41	0.070	7.210	9.763	30	17	20	
16	1.3	-102	0.248	19	0.055	8.528	0.298	35	0.406	46	0.066	4.520	6.121	35	25	23	
14	2.1	-105	0.263	27	0.051	5.394	0.313	49	0.452	66	0.063	2.850	3.859	41	40	37	
12	3.3	-106	0.282	33	0.047	3.404	0.332	62	0.471	87	0.059	1.790	2.424	64	48	45	
10	5.2	-108	0.302	54	0.044	2.164	0.352	101	0.491	139	0.055	1.130	1.530	85	62	51	
8	7.6	-109	0.381	77	0.045	1.348	0.431	127	0.570	174	0.055	0.894	0.940	112	77	68	
6	12.5	-110	0.421	116	0.042	0.861	0.471	168	0.610	222	0.050	0.436	0.590	148	103	96	
4	21	-112	0.503	186	0.037	0.590	0.553	249	0.692	323	0.044	0.286	0.399	196	137	128	
2	34	-114	0.569	262	0.035	0.374	0.619	329	0.758	399	0.041	0.175	0.244	259	181	169	
1	43	-115	0.610	364	0.034	0.305	0.660	443	0.799	512	0.040	0.140	0.195	298	208	194	
1/0	54	-116	0.674	458	0.033	0.251	0.724	540	0.905	626	0.040	0.111	0.156	344	243	217	
2/0	70	-117	0.741	540	0.033	0.206	0.791	634	0.972	727	0.039	0.089	0.125	396	281	262	
3/0	86	-118	0.800	738	0.032	0.171	0.850	867	1.032	1046	0.038	0.070	0.100	457	321	289	
4/0	109	-119	0.908	943	0.032	0.144	0.958	1090	1.140	1285	0.037	0.056	0.080	528	376	351	
262	132	-120	1.010	1139	0.032	0.125	1.060	1300	1.241	1513	0.036	0.046	0.067	599	436	407	
313	159	-121	1.076	1223	0.031	0.110	1.126	1467	1.307	1643	0.035	0.038	0.056	604	487	455	
373	189	-122	1.143	1546	0.030	0.097	1.193	1729	1.374	1966	0.035	0.032	0.047	674	553	516	
444	227	-123	1.219	1812	0.030	0.088	1.269	2008	1.450	2259	0.034	0.027	0.041	750	630	588	
535	273	-124	1.333	2171	0.030	0.079	1.383	2381	1.565	2653	0.033	0.022	0.035	839	709	662	
646	326	-126	1.422	2592	0.029	0.072	1.472	2826	1.653	3046	0.033	0.019	0.030	937	783	731	
777	394	-127	1.520	3088	0.028	0.066	1.550	3330	1.813	3191	0.033	0.015	0.026	1048	881	822	
1111	562	-129	1.793	4405	0.028	0.054	1.843	4568	2.086	4692	0.032	0.011	0.018	1303	1098	1025	

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)

37-103 - 124

BS

Armor Requirement
BS – armored & sheathed
Blank – no armor

Manufactured by AmerCable Incorporated • 800-506-9473 • 713-896-5800 • Fax: 713-849-9009
www.amercable.com • e-mail: marine@amercable.com

Gexol®-HF Flame Retardant Two Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White

Conductor

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

Jacket

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

Sheath (Optional)

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

Armor (Optional)

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

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 – Two Conductor

Size AWG/ kcmil	mm2	Part No.	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance at 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop at 110°C (Volts/Amp/1000 ft.)	Ampacity		
			Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)					110°C	100°C	95°C
16	1.3	-501	0.373	75	0.423	141	0.562	202	4.610	6.121	0.039	8.511	20	19	20
14	2.1	-507	0.403	95	0.453	165	0.592	230	2.907	3.859	0.036	5.379	33	31	27
12	3.3	-515	0.441	117	0.491	194	0.630	263	1.826	2.424	0.034	3.390	43	40	32
10	5.2	-553	0.481	148	0.531	233	0.670	307	1.153	1.530	0.032	2.151	53	49	43
8	7.6	-209	0.600	221	0.650	327	0.789	416	0.708	0.940	0.034	1.336	69	64	58
6	12.5	-210	0.680	308	0.730	424	0.911	559	0.445	0.590	0.032	0.850	91	85	77
4	21	-594	0.887	516	0.937	664	1.118	835	0.300	0.399	0.029	0.582	118	110	103
1/0	54	-216	1.243	1128	1.293	1334	1.474	1562	0.117	0.156	0.028	0.245	213	199	184
4/0	109	-219	1.593	2003	1.643	2271	1.886	2680	0.058	0.080	0.026	0.138	329	307	285

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

Ordering Gexol-HF Cables

Example:

- Two conductor power cable
- 0.6/1kV
- #4 AWG
- bronze armored & sheathed

37-103 – 594

BS

AmerCable
Gexol-HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-HF Flame Retardant Three Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductor

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

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White-Red

Jacket

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

Armor (Optional)

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

Sheath (Optional)

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



An uninsulated ground conductor may be incorporated on a make-to-order basis.

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.

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)

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 – Three Conductor

Size AWG/ kcmil	Part No. 37-103	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Opt. Uninsulated Grounding Cond. Size AWG		Ampacity	
		Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)							110°C	95°C
16	1.3	0.392	66	0.442	128	0.581	182	4.610	6.121	0.039	8.511	—	—	17	16
14	2.1	0.424	102	0.474	176	0.613	236	2.907	3.859	0.036	5.379	—	—	27	25
12	3.3	0.465	133	0.515	212	0.654	276	1.826	2.424	0.034	3.390	—	—	33	31
10	5.2	0.508	189	0.558	281	0.697	352	1.153	1.530	0.032	2.151	—	—	44	41
8	7.6	0.637	274	0.687	385	0.826	477	0.708	0.940	0.034	1.336	—	—	56	52
6	12.5	0.723	390	0.773	519	0.954	650	0.445	0.590	0.032	0.850	8	8	75	70
4	21	0.942	678	0.992	843	1.173	1004	0.300	0.399	0.029	0.582	8	8	99	92
2	34	1.084	987	1.134	967	1.315	1374	0.184	0.244	0.028	0.366	6	6	131	122
1	43	1.206	1234	1.256	1458	1.439	1675	0.147	0.195	0.028	0.299	6	6	153	143
1/0	54	1.326	1448	1.376	1781	1.558	2015	0.117	0.156	0.028	0.245	6	6	176	164
2/0	70	1.422	1945	1.472	2082	1.653	2424	0.093	0.125	0.027	0.200	6	6	201	188
3/0	86	1.528	2379	1.578	2720	1.822	3106	0.074	0.100	0.027	0.166	4	4	234	218
4/0	109	1.765	2864	1.815	3233	2.058	3652	0.058	0.080	0.026	0.138	4	4	270	252
262	132	1.980	3452	2.030	3880	2.274	4434	0.048	0.067	0.026	0.119	3	3	315	294
313	159	2.131	4023	2.181	4434	2.426	4919	0.040	0.056	0.026	0.105	3	3	344	321
373	189	2.231	4772	2.281	5219	2.525	5718	0.034	0.047	0.025	0.092	3	3	387	361
444	227	2.394	5670	2.444	6176	2.688	6864	0.028	0.041	0.025	0.083	2	2	440	411
535	273	2.637	6784	2.687	7492	2.994	8250	0.024	0.035	0.026	0.075	2	2	498	465
646	326	2.958	7961	3.008	8414	3.309	9258	0.020	0.030	0.026	0.069	1	1	553	516
777	394	3.168	9573	3.218	10065	3.519	10945	0.016	0.026	0.026	0.063	1	1	602	562

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:

- Three conductor power cable
- 0.6/1kV
- 262 kcmil
- bronze armored & sheathed
- with ground

AmerCable
Gexol-HF Prefix

37-103 - 320

Specific Cable Number
(from table)

BS

Armor Requirement
BS – armored &
sheathed
Blank – no armor

G

Ground Conductor
G – with ground
Blank – no ground

Gexol®-HF Flame Retardant Four Conductor Power Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked, polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

Black-White-Red-Green

Conductor

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

Jacket

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

Sheath (Optional)

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

Armor (Optional)

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

An uninsulated ground conductor may be incorporated on a make-to-order basis.

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 – Four Conductor

Size AWG/ kcmil	mm2	Part No. 37-103	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Opt. Uninsulated Grounding Cond. Size AWG	Ampacity		
			Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)						110°C	100°C	95°C
16	1.3	-529	0.423	99	0.473	154	0.612	227	4.610	6.121	0.042	8.514	-	17	16	16
14	2.1	-509	0.459	128	0.509	213	0.648	275	2.907	3.859	0.039	5.392	-	27	25	22
12	3.3	-517	0.505	168	0.555	256	0.694	323	1.826	2.424	0.037	3.393	-	33	31	27
10	5.2	-408	0.553	243	0.603	313	0.742	390	1.153	1.530	0.035	2.154	-	44	41	36
8	7.6	-409	0.698	355	0.748	466	0.929	591	0.708	0.940	0.037	1.339	-	56	52	48
6	12.5	-410	0.794	533	0.844	669	1.025	808	0.445	0.590	0.035	0.853	8	75	70	64
4	21	-412	1.035	879	1.085	1062	1.266	1236	0.300	0.399	0.032	0.585	8	99	92	85
2	34	-414	1.194	1120	1.244	1345	1.425	1677	0.184	0.244	0.030	0.369	6	131	122	113
1	43	-415	1.332	1602	1.382	1909	1.563	2144	0.147	0.195	0.031	0.302	6	153	143	131
1/0	54	-416	1.465	1907	1.515	2180	1.758	2434	0.117	0.156	0.030	0.248	6	176	164	152
2/0	70	-417	1.573	2535	1.623	2865	1.867	3050	0.093	0.125	0.030	0.203	6	201	188	175
3/0	86	-418	1.754	3206	1.804	3578	2.048	4003	0.074	0.100	0.029	0.168	4	234	218	202
4/0	109	-419	1.964	3765	2.014	4214	2.257	4670	0.058	0.080	0.029	0.140	4	270	252	235
262	132	-420	2.205	4625	2.255	4795	2.498	5610	0.048	0.067	0.029	0.122	3	315	294	267
313	159	-421	2.374	5367	2.424	5868	2.667	6395	0.040	0.056	0.028	0.107	3	344	321	299
373	189	-422	2.495	6462	2.545	6853	2.846	7576	0.034	0.047	0.028	0.095	3	387	361	334
444	227	-423	2.653	7560	2.703	7987	3.010	8760	0.028	0.041	0.028	0.086	2	440	411	372
535	273	-424	2.989	19284	3.039	9762	3.346	10570	0.024	0.035	0.028	0.077	2	463	432	418
646	326	-426	3.277	10571	3.327	10946	3.682	11840	0.020	0.030	0.029	0.071	1	553	516	470

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:

- Four conductor power cable
- 0.6/1kV
- #6 AWG
- bronze armored & sheathed
- with ground

37-103 - 410

BS

G

AmerCable
Gexol-HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Ground Conductor
G – with ground
Blank – no ground

Manufactured by AmerCable Incorporated • 800-506-9473 • 713-896-5800 • Fax: 713-849-9009
www.amercable.com • e-mail: marine@amercable.com

37-103 Gexol®-HF Flame Retardant Five Conductor Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductors

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

Jacket

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

Armor (Optional)

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

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:
Black-White-Red-Green-Orange

Sheath (Optional)

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



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.

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)

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 – Five Conductor

Size AWG/ kcmil	Part No.	Unarmored		Armored (B)		Armored and Sheath (BS)		DC Resistance at 25°C (Ohms/1000 ft.)	AC Resistance 110°C, 60 Hz (Ohms/1000 ft.)	Inductive Reactance (Ohms/1000 ft.)	Voltage Drop 110°C (Volts/Amp/1000 ft.)	Ampacity		
		Nominal Diameter (inches)	Weight (lbs/MFT)	Nominal Diameter (inches)	Weight (lbs/MFT)	Nominal Diameter (inches)	Weight (lbs/MFT)					110°C	100°C	95°C
18	-558	0.431	100	0.481	171	0.620	221	7.354	9.763	0.044	13.558	11	10	11
16	-559	0.456	110	0.506	189	0.647	264	4.610	6.121	0.042	8.514	14	13	13
14	-510	0.498	149	0.548	234	0.687	301	2.907	3.859	0.039	5.382	21	20	18
12	-560	0.550	196	0.600	266	0.752	334	1.826	2.424	0.037	3.393	27	25	22
10	-561	0.604	296	0.654	406	0.973	494	1.153	1.530	0.035	2.154	35	33	29
8	-562	0.765	453	0.815	569	1.996	704	0.708	0.940	0.037	1.339	45	42	38
6	-563	0.914	653	.964	813	1.145	973	0.445	0.590	0.035	0.853	60	56	51
4	-565	1.137	1073	1.187	1292	1.368	1481	0.300	0.399	0.032	0.585	79	74	68
2	-566	1.315	1361	1.365	1637	1.546	1856	0.184	0.244	0.030	0.369	105	98	90
1	-567	1.470	2130	1.520	2192	1.764	2482	0.147	0.195	0.031	0.302	122	114	105
1/0	-568	1.618	2550	1.668	2746	1.911	3108	0.117	0.156	0.030	0.248	140	131	122
2/0	-569	1.802	2954	1.852	3301	2.096	3734	0.093	0.125	0.030	0.203	161	150	140
4/0	-746	2.167	3615	2.217	3955	2.461	4592	0.058	0.080	0.029	0.140	216	202	188

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

Ordering Gexol-HF Cables

Example:

- Five conductor power cable
- 0.6/1kV
- #2 AWG
- bronze armored & sheathed

37-103 - 566

BS

AmerCable
Gexol-HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-HF Flame Retardant Multi-Conductor Control Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Conductors

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

Jacket

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

Sheath (Optional) Jacket

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

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color code:

ICEA K-1, Method 1.
For less than minimum order quantities, Method 3 may be used.

Armor (Optional)

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

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.

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)

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 Control Cable – Multi-Conductor

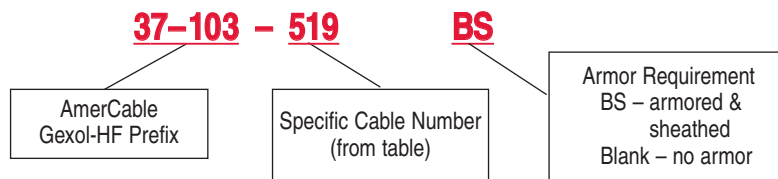
Size AWG	mm2	Number of Conductors	Part No. 37-103	Unarmored		Armored (B)		Armored and Sheath (BS)		Ampacity		
				Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	110°C	100°C	95°C
16	1.3	4	-529	0.423	99	0.473	154	0.612	227	17	16	16
16	1.3	5	-559	0.456	110	0.506	189	0.647	264	14	13	13
16	1.3	7	-505	0.494	155	0.544	255	0.683	330	12	11	11
16	1.3	8	-503	0.531	164	0.581	265	0.720	340	12	11	11
16	1.3	10	-504	0.631	206	0.681	366	0.820	445	9	8	11
16	1.3	16	-546	0.719	299	0.769	465	0.950	602	9	8	11
16	1.3	20	-687	0.794	360	0.844	560	1.025	724	9	8	11
16	1.3	24	-525	0.923	462	0.973	718	1.154	809	8	7	11
16	1.3	37	-526	1.048	658	1.098	819	1.279	989	6	6	8
16	1.3	44	-577	1.173	807	1.223	980	1.404	1175	6	6	8
16	1.3	60	-527	1.298	1053	1.348	1256	1.529	1496	6	6	8
16	1.3	91	-581	1.548	1595	1.598	1896	1.841	2181	6	6	8
14	2.1	4	-509	0.459	128	0.509	213	0.648	275	27	25	22
14	2.1	5	-510	0.498	149	0.548	234	0.687	301	21	20	18
14	2.1	6	-511	0.539	182	0.589	264	0.728	335	21	20	18
14	2.1	7	-521	0.539	205	0.589	297	0.728	377	19	18	15
14	2.1	10	-512	0.691	280	0.741	406	0.922	515	14	13	15
14	2.1	12	-585	0.713	307	0.763	428	0.944	558	14	13	15
14	2.1	14	-523	0.749	415	0.799	540	0.980	665	14	13	15
14	2.1	20	-513	0.916	560	0.966	812	1.147	876	14	13	15
14	2.1	24	-571	1.013	615	1.063	892	1.244	1132	12	11	15
14	2.1	30	-573	1.071	780	1.121	965	1.302	1180	12	11	13
14	2.1	37	-514	1.153	876	1.203	1135	1.384	1405	11	10	13
14	2.1	44	-574	1.293	1087	1.343	1260	1.524	1477	10	9	11
14	2.1	91	-582	1.775	2200	1.825	2465	2.068	2855	10	9	11
12	3.3	4	-517	0.505	168	0.555	256	0.694	323	33	31	27
12	3.3	5	-560	0.550	196	0.600	266	0.752	334	27	25	22
12	3.3	6	-547	0.611	280	0.661	405	0.800	500	27	25	22
12	3.3	10	-518	0.771	369	0.821	500	1.002	629	17	16	19
12	3.3	20	-519	1.022	701	1.072	890	1.253	1055	17	16	19
12	3.3	24	-572	1.133	861	1.183	1167	1.364	1468	15	14	19
12	3.3	37	-520	1.293	1262	1.343	1467	1.524	1677	13	12	16

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

Ordering Gexol-HF Cables

Example:

- Multi-Conductor control cable
- 0.6/1kV
- #12 AWG
- bronze armored & sheathed



Gexol®-HF Flame Retardant Shielded Pairs Instrumentation Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Pairs

Each pair is twisted with a bare tinned drain wire. Each pair is shielded with polyester-backed aluminum foil tape to afford 100% coverage. Pair-to-pair isolation plus overall shield is provided.

Pair color code:

Black-White

Armor (Optional)

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

Sheath (Optional)

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



Conductor

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

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

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

Cable available with blue stripe to signify intrinsically safe circuit.

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.

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)

GEXOL® is a registered trademark of AmerCable Incorporated

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 Instrumentation Cable – Individually Shielded Pairs

Size AWG	mm ²	Number of Pairs	Part No. 37-103	Unarmored		Armored (B)		Armored and Sheath (BS)	
				Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)
18	1.0	1	-601	0.360	63	0.410	123	0.549	176
18	1.0	2	-602	0.551	131	0.601	204	0.740	335
18	1.0	3	-603	0.581	163	0.631	265	0.770	343
18	1.0	4	-604	0.630	195	0.680	317	0.809	410
18	1.0	5	-605	0.685	243	0.735	395	0.908	511
18	1.0	7	-606	0.742	340	0.792	457	0.965	575
18	1.0	8	-607	0.800	388	0.850	521	1.023	752
18	1.0	10	-608	0.976	495	1.026	699	1.207	874
18	1.0	12	-609	1.011	581	1.061	780	1.242	982
18	1.0	16	-645	1.121	748	1.171	833	1.352	1182
18	1.0	18	-641	1.181	824	1.231	1050	1.412	1300
18	1.0	24	-646	1.382	1069	1.432	1151	1.613	1720
16	1.3	1	-610	0.388	77	0.438	120	0.577	203
16	1.3	2	-611	0.565	160	0.615	249	0.759	377
16	1.3	3	-612	0.617	200	0.667	311	0.793	410
16	1.3	4	-613	0.671	239	0.721	389	0.894	569
16	1.3	5	-614	0.730	297	0.780	483	0.953	609
16	1.3	7	-615	0.792	416	0.842	559	1.015	703
16	1.3	8	-616	0.896	475	0.946	638	1.127	803
16	1.3	10	-617	1.047	606	1.097	787	1.278	1098
16	1.3	12	-618	1.081	711	1.131	923	1.312	1138
16	1.3	16	-619	1.207	948	1.257	1231	1.430	1517
16	1.3	18	-626	1.265	1100	1.315	1260	1.496	1570
16	1.3	20	-688	1.327	1215	1.377	1476	1.560	1894
16	1.3	24	-699	1.482	1510	1.532	1625	1.775	2065
14	2.1	1	-620	0.410	97	0.460	151	0.598	199
14	2.1	2	-621	0.621	202	0.671	315	0.810	481
14	2.1	3	-622	0.658	251	0.708	391	0.889	515
14	2.1	4	-623	0.721	301	0.771	469	0.952	633
14	2.1	5	-624	0.791	374	0.841	608	1.021	787
14	2.1	7	-625	0.905	524	0.955	704	1.136	886
14	2.1	8	-629	0.979	498	1.029	803	1.210	1011
14	2.1	10	-627	1.148	747	1.198	1003	1.379	1196
14	2.1	12	-628	1.186	896	1.236	1203	1.417	1434

#18 Pairs

Capacitance = 33 nF/1000 ft.
Inductance = 0.22 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

#16 Pairs

Capacitance = 37 nF/1000 ft.
Inductance = 0.20 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

#14 Pairs

Capacitance = 43 nF/1000 ft.
Inductance = 0.19 mH/1000 ft.
Resistance = 2.85 ohms/1000 ft.

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

Ordering Gexol-HF Cables

Example:

- Instrumentation cable
- 0.6/1kV
- #14 AWG, 1 pair
- bronze armored & sheathed

37-103 - 620

BS

AmerCable
Gexol-HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor

Gexol®-HF Flame Retardant Shielded Triads Instrumentation Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Triads

Each triad is twisted with a bare tinned drain wire. Each triad is shielded with polyester-backed aluminum foil tape to afford 100% coverage. Triad-to-triad isolation plus overall shielding is provided.

Triad color code:

Black-White-Red

Armor (Optional)

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

Sheath (Optional)

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

Conductor

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

Insulation

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

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

Cable available with blue jacket or stripe to signify intrinsically safe circuit.

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.

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)

GEXOL® is a registered trademark of AmerCable Incorporated

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 Instrumentation Cable – Individually Shielded Triads

Size AWG	mm ²	Number of Triads	Part No. 37-103	Unarmored		Armored (B)		Armored and Sheath (BS)	
				Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)	Nominal Diameter (inches)	Weight (lbs/Mft.)
18	1.0	1	-647	0.380	75	0.430	144	0.569	199
18	1.0	2	-681	0.649	183	0.699	290	0.880	380
18	1.0	3	-648	0.688	190	0.738	305	0.919	393
18	1.0	4	-682	0.755	281	0.805	408	0.986	551
18	1.0	5	-649	0.871	286	0.921	419	1.102	561
18	1.0	7	-650	0.947	409	0.997	565	1.178	724
18	1.0	8	-683	1.026	515	1.076	680	1.257	870
18	1.0	12	-640	1.244	766	1.294	965	1.475	1195
16	1.3	1	-668	0.399	86	0.449	155	0.588	213
16	1.3	3	-669	0.735	218	0.785	338	0.966	466
16	1.3	4	-698	0.807	410	0.857	530	1.038	700
16	1.3	6	-676	1.012	630	1.062	750	1.243	955
16	1.3	7	-670	1.012	630	1.062	750	1.243	1050
16	1.3	8	-677	1.090	729	1.140	876	1.338	1103

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

#18 Triads

Capacitance = 33 nF/1000 ft.
Inductance = 0.22 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

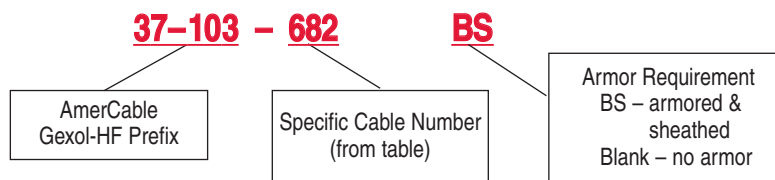
#16 Triads

Capacitance = 37 nF/1000 ft.
Inductance = 0.20 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

Ordering Gexol-HF Cables

Example:

- Instrumentation cable
- 0.6/1kV
- #18 AWG, 4 triad
- bronze armored & sheathed



37-103VFD Type VFD Power Cable Gexol®-HF Insulated Low Smoke Halogen-Free

Three Conductor • 2kV • Rated 110°C

Power Conductors (x3)

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

Insulation (2kV)

GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Color: Gray with printed phase I.D. (Black-White-Red)

Armor (Optional)

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

Ground Conductors (x3)

Soft annealed flexible stranded tinned copper per IEEE 1580 Table 11. Gexol®-HF insulated and sized per UL 1277. Color: Green

Shield

Overall tinned copper braid plus aluminum/polyester tape providing 100% coverage.

Jacket

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

Sheath (Optional)

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

Application

A flexible, braid and foil shielded, 2kV power cable specifically engineered for use in variable frequency AC motor drive (VFD) applications.

Features

- Low Smoke and Halogen-Free.
- Specially engineered cable design produces a longer cable life in VFD applications.
- Overall braid and foil shield provides 100% coverage containing VFD EMI emissions.
- Symmetrical insulated ground conductors reduce induced voltage imbalances and carry common mode noise back to the drive.
- High strand count conductors and braid shield design is much more flexible and easier than IEC 60092-350 series cables to install.
- Gexol-HF's lower dielectric constant (standard HFXLPE, HFEPR insulation materials have higher dielectric constants) reduces reflected wave peak voltage magnitudes. This allows for longer output cable distances and minimizes the effect of high frequency noise induced into the plant ground system.
- 2kV insulation thickness resists the repetitive 2x voltage spikes from 600V VFDs and reduces drive over current trip problems due to cable charging current.
- Dual certified IEEE 1580 Type LSX and UL 1309/CSA 245 Type X110.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Flame retardant: IEC 332-3 Category A and IEEE 1202.
- Suitable for use in Class I, Division 1 and Zone 1 environments (armored and sheathed).
- Optional braid armor of bronze, aluminum or tinned copper.

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 pending
- Germanischer Lloyd (GL): pending

Other certifications pending

	Unarmored			Armored			Armored & Sheathed (BS)						
Size AWG/ kcmil	Part No. 37-103	Nominal Diameter Inches*	Weight Per 1000 Ft.	Part No. 37-103	Nominal Diameter Inches*	Weight Per 1000 Ft.	Part No. 37-103	Nominal Diameter Inches*	Weight Per 1000 Ft.	Green Insulated Grounding Conductor (x3) Size (AWG)	Ampacity		
											110°C	90°C	75°C
14	-508VFD	0.540	194	-508BVFD	0.590	281	-508BSVFD	0.725	356	18	27	24	18
12	-516VFD	0.590	224	-516BVFD	0.646	321	-516BSVFD	0.772	401	18	33	29	24
10	-308VFD	0.633	308	-308BVFD	0.694	412	-308BSVFD	0.820	497	14	44	38	33
8	-309VFD	0.764	441	-309BVFD	0.820	565	-309BSVFD	0.988	702	14	56	48	43
6	-310VFD	0.865	570	-310BVFD	0.925	708	-310BSVFD	1.090	865	12	75	65	58
4	-312VFD	1.072	886	-312BVFD	1.125	1061	-312BSVFD	1.295	1243	12	99	83	79
2	-314VFD	1.215	1421	-314BVFD	1.271	1618	-314BSVFD	1.440	1822	10	131	111	105
1	-315VFD	1.340	1517	-315BVFD	1.395	1743	-315BSVFD	1.560	1966	10	153	131	121
1/0	-316VFD	1.443	1803	-316BVFD	1.493	2027	-316BSVFD	1.666	2327	10	176	150	145
2/0	-317VFD	1.572	2153	-317BVFD	1.622	2399	-317BSVFD	1.854	2840	10	201	173	166
4/0	-319VFD	2.053	3463	-319BVFD	2.103	3785	-319BSVFD	2.335	4347	8	270	232	223
262	-320VFD	2.193	4175	-320BVFD	2.243	4522	-320BSVFD	2.475	5120	6	315	273	254
313	-321VFD	2.370	4727	-321BVFD	2.420	5104	-321BSVFD	2.652	5747	6	344	298	287
373	-322VFD	2.501	5415	-322BVFD	2.551	5809	-322BSVFD	2.845	6674	6	387	332	315
444	-323VFD	2.670	6707	-323BVFD	2.721	7141	-323BSVFD	3.014	8059	6	440	382	350
535	-324VFD	2.972	7483	-324BVFD	3.022	2966	-324BSVFD	3.316	8981	6	498	407	390
646	-326VFD	3.164	8916	-326BVFD	3.214	9428	-326BSVFD	3.508	10504	4	553	474	431
777	-327VFD	3.388	10395	-327BVFD	3.438	10940	-327BSVFD	3.732	12088	4	602	516	473

*Cable diameters are subject to a +/- 5% manufacturing tolerance

See page 2 for
Stranding Profile



VFD Cable Ampacity Ratings

110°C Ratings

Based on IEEE Std. 45 with a 45°C ambient and arranged in a single bank per hanger. For those instances where cable must be double banked, the 110°C ampacities should be multiplied by 0.8.

75°C Ratings

Based on Table B.310.1 of the 2005 NEC for cables in raceway and a 30°C ambient.

90°C Ratings

Based on IEEE Std. 45 with a 45°C ambient and arranged in a single bank per hanger. For those instances where cable must be double banked, the 90°C ampacities should be multiplied by 0.8.

GEXOL® is a registered trademark of
AmerCable Incorporated

37-449-812 & 37-449-813 Gexol-331HF Fire Resistant Public Address/General Alarm Cable Low Smoke Halogen-Free

Composite • 0.6/1kV • Rated 110°C



Conductors

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

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

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

Armor

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

Sheath

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

Exclusively approved by GAI-Tronics for use as the system cable for their SmartSeries® public address/general alarm systems. GAI-Tronics' microprocessor-based SmartSeries® systems utilize the latest technology in data communications to significantly improve system integrity and functionality. It is critical to personnel safety that the public address/general alarm system continue to function in an emergency fire condition. For this reason, AmerCable has designed these system cables to be rugged, reliable, fire resistant, and based on its proven Gexol technology.

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).



AmerCable P/N 37-449-812
(GAI-Tronics P/N 60029-108)

Armored and Sheathed 16 Core Composite Cable

Consisting of:

- 6 x 18 AWG twisted pairs,
- 1 x 14 AWG twisted pair,
- 1 x 18 AWG orange conductor,
- 1 x 14 AWG green/yellow conductor.



AmerCable P/N 37-449-813
(GAI-Tronics P/N 60029-109)

Armored and Sheathed 16 Core Composite Cable

Consisting of:

- 6 x 18 AWG twisted pairs,
- 1 x 12 AWG twisted pair,
- 1 x 18 AWG orange conductor,
- 1 x 12 AWG green/yellow conductor

Exclusively approved by
 **GAI-TRONICS®**



The Global Cable Solutions Company

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Applications:

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- Driller's Console
- Mud Pump Controls
- 15kV Bridle Assembly
- Tender-to-Platform Bridle
- Ship-to-Shore Power
- Portable Power Generation
- Zone 1 (EX) Rated Cable Assemblies

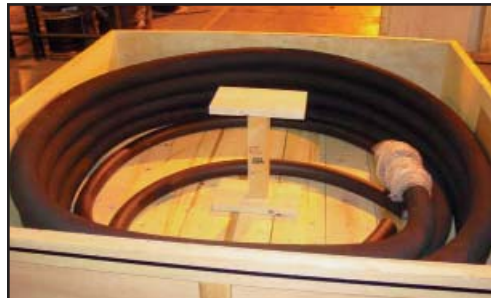
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The Assembly Application Professionals

- **Fast Delivery**
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AmerCable's manufacturing facility in El Dorado, Arkansas.

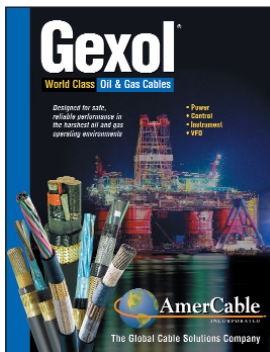
AmerCable is an ISO 9001 certified cable manufacturer that combines leading-edge manufacturing technology, innovative thinking, and high quality service to deliver the finest oil & gas cable products available.



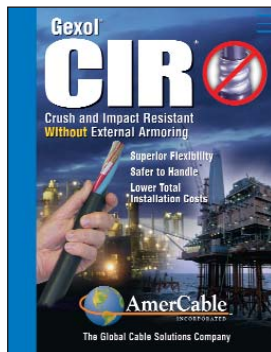
AmerCable serves the world from our Oil & Gas Group headquarters in Houston, Texas. Our professional field engineers and sales force work with you to create innovative, cost effective project solutions.

What can you expect from AmerCable?

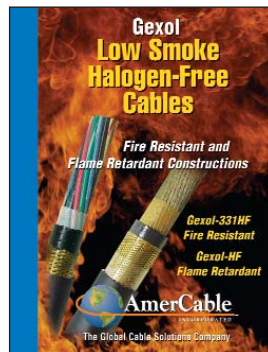
- Fastest Lead Times in the Industry
(Standard 6 - 8 weeks / Emergency 2 - 4 weeks)
- On Time Delivery (99%+ avg. in the last 36 months)
- Professional Sales, Support and Service
- Strategic Inventory Locations



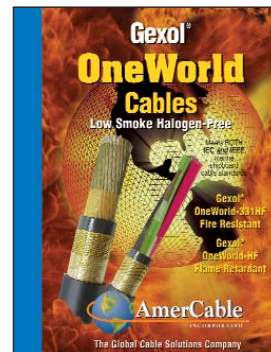
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World Class Oil & Gas power, control and instrumentation Cables



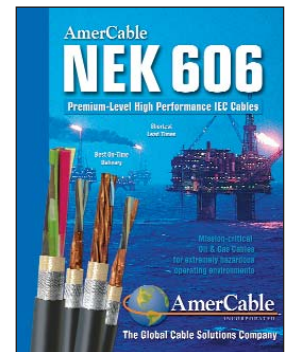
CIR® –
Crush and Impact Resistant cables without external armoring



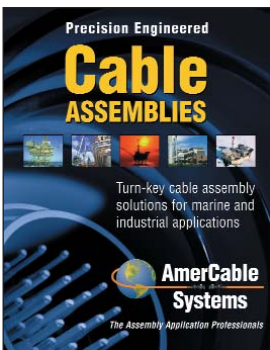
Low Smoke Halogen-Free –
Fire resistant and flame retardant cable constructions



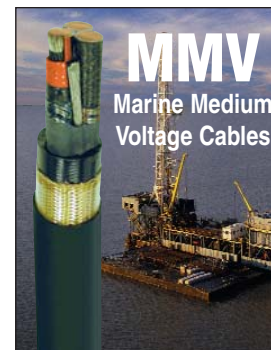
OneWorld –
Meets BOTH IEC and IEEE marine shipboard cable standards



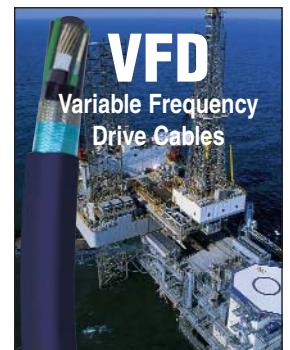
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Premium quality IEC Power, control and instrumentation cables



Cable Assemblies
Turn-key cable assembly solutions for hazardous and industrial environments



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Marine Medium Voltage Cables



VFD
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