

Gexol® OneWorld-331HF Fire Resistant Low Smoke Halogen-Free One Core Power Cable

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Conductor

Flexible Class 5 (metric) tinned copper per IEC 228.

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.



Insulation/Jacket

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351 plus a low smoke halogen-free flame retardant polyolefin jacket meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 "EEEx"	501/421	501/453/U
Explosion Proof	710 Class 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, 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

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

- Meets IEC 60092-3, IEC 60092-353 AND IEEE 45/1580.
- Fire resistant: IEC 60331.
- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

Flexible Power Cable – One Core

		Unarmored						Armored and Sheath (BS)								
Size (mm ²)	Part No.	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	DC Resistance at 20°C (Ohms/km)	AC Resistance at 85°C 60 Hz (Ohms/km)	Current Rating 85°C Core 45°C Ambient
16	-107	11.6	0.456	269	180	0.120	2.238	16.2	0.637	499	335	0.145	2.264	1.240	1.527	90
25	-108	13.1	0.517	388	260	0.115	1.474	17.7	0.698	645	433	0.137	1.497	0.795	0.979	120
35	-109	14.9	0.588	498	334	0.117	1.084	19.5	0.769	785	527	0.137	1.105	0.565	0.696	145
50	-110	16.9	0.667	674	452	0.110	0.790	22.6	0.890	1050	705	0.132	0.813	0.393	0.489	180
70	-111	19.1	0.751	913	613	0.108	0.589	24.7	0.974	1319	885	0.128	0.609	0.277	0.344	225
95	-112	22.2	0.875	1238	831	0.107	0.480	27.9	1.099	1719	1153	0.125	0.498	0.210	0.266	275
120	-113	24.8	0.976	1630	1094	0.104	0.398	30.5	1.199	2159	1449	0.119	0.414	0.164	0.210	320
150	-114	27.5	1.081	1975	1325	0.101	0.341	33.1	1.304	2556	1715	0.115	0.355	0.132	0.171	365
185	-115	29.3	1.155	2308	1549	0.099	0.298	35.0	1.378	2924	1962	0.112	0.312	0.108	0.141	415
240	-116	32.1	1.263	2916	1957	0.098	0.256	38.1	1.500	3593	2411	0.111	0.269	0.082	0.112	490
300	-117	35.5	1.396	3498	2347	0.096	0.228	41.5	1.633	4240	2845	0.108	0.240	0.065	0.093	560

• Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
 • Current ratings based on IEC 60092-352

**OneWorld
Stranding
Profile**
See Page 4

Ordering Gexol OneWorld-331HF Cables

Example:

- One core power cable
- 0.6/1kV
- 70mm²
- Bronze armored & sheathed

AmerCable
Gexol OneWorld-331HF
Prefix

37-107 - 111

Specific Cable Number
(from table)

BS

Armor Requirement
BS – armored & sheathed
Blank – no armor

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Insulation

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351

Color code:

White-Black

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.



Conductor

Flexible Class 5 (metric) tinned copper per IEC 228.

Jacket

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 "EEExe"	501/421	501/453/U
Explosion Proof	710 Class 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, Zone 1 & 2
Flameproof "EEExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

- Meets IEC 60092-3, IEC 60092-353 AND IEEE 45/1580.
- Fire resistant: IEC 60331.
- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Flexible Power Cable – Two Core

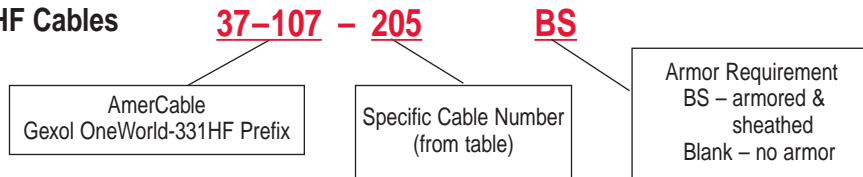
		Unarmored				Armored and Sheath (BS)									
Size (mm²)	Part No. 37-107	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000Ft.)	DC Resistance at 20°C (Ohms/km)	AC Resistance at 85°C 60 hz (Ohms/km)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	Current Rating 85°C Core, 45°C Ambient	
1.5	-201	10.3	0.405	107	72	14.8	0.581	299	201	13.700	16.868	0.044	23.494	17	
2.5	-202	11.4	0.449	137	92	16.0	0.630	353	237	8.210	10.108	0.039	14.124	24	
4	-203	12.8	0.503	183	123	17.4	0.684	421	282	5.090	6.267	0.038	8.803	32	
6	-204	14.7	0.577	262	176	19.3	0.758	532	357	3.390	4.174	0.036	5.899	41	
10	-205	17.3	0.681	379	254	22.8	0.899	743	499	1.950	2.401	0.035	3.441	57	
16	-206	22.8	0.897	632	424	28.5	1.120	1110	745	1.240	1.527	0.031	2.220	77	
25	-207	25.9	1.019	886	595	31.5	1.242	1424	956	0.795	0.979	0.030	1.458	102	
35	-208	27.9	1.097	1059	711	33.5	1.320	1634	1096	0.565	0.696	0.030	1.065	123	
50	-209	31.9	1.255	1424	956	37.9	1.492	2081	1396	0.393	0.489	0.029	0.774	153	
70	-210	36.1	1.423	1916	1286	42.2	1.660	2656	1782	0.277	0.344	0.029	0.575	191	
95	-211	40.3	1.587	2471	1658	47.9	1.886	3467	2326	0.210	0.266	0.028	0.463	234	

- Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
- Current ratings based on IEC 60092-352

Ordering Gexol OneWorld-331HF Cables

Example:

- Two core power cable
- 0.6/1kV
- 10mm²
- Bronze armored and sheathed



Stranding Profile					
Size (mm²)	No. of Strands	Individual Strand Dia. (mm)	Individual Strand Dia. (Inch)	Uninsulated Conductor Dia. (mm)	Uninsulated Conductor Dia. (Inch)
1.0	32	0.20	0.0079	1.3	0.050
1.5	30	0.25	0.0100	1.5	0.059
2.5	50	0.25	0.0100	2.1	0.081
4	56	0.30	0.0120	2.5	0.099
6	84	0.30	0.0120	3.0	0.120
10	80	0.40	0.0159	4.0	0.156
16	133	0.40	0.0158	6.0	0.238
25	259	0.36	0.0143	7.4	0.291
35	259	0.41	0.0160	8.2	0.321
50	399	0.40	0.0159	10.2	0.400
70	342	0.51	0.0201	11.9	0.468
95	456	0.51	0.0201	13.7	0.541
120	627	0.51	0.0201	16.1	0.634
150	777	0.51	0.0201	18.5	0.730
185	925	0.51	0.0201	20.2	0.797
240	1221	0.51	0.0201	22.6	0.888
300	1480	0.51	0.0201	25.6	1.008

GEXOL® is a registered trademark of AmerCable Incorporated

37-107 Gexol® OneWorld-331HF Fire Resistant Low Smoke Halogen-Free Three Core (and Two Core + E) Power Cable

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Conductor

Flexible Class 5 (metric) tinned copper per IEC 228.

Insulation

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351

Color code:

White-Black-Red or Green/Yellow



Jacket

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 "EEExe"	501/421	501/453/U
Explosion Proof	710 Class 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, Zone 1 & 2
Flameproof "EEExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

- Meets IEC 60092-3, IEC 60092-353 AND IEEE 45/1580.
- Fire resistant: IEC 60331.
- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

Gexol® OneWorld-331HF Fire Resistant Low Smoke Halogen-Free Three Core (and Two Core + E) Power Cable

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Flexible Power Cable – Three Core (and Two Core + E)

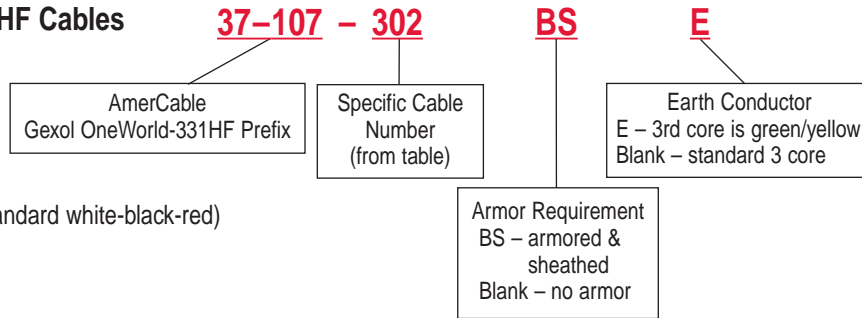
Size (mm²)	Part No. 37-107	Unarmored				Armored and Sheath (BS)				DC Resistance at 20°C (Ohms/km)	AC Resistance at 85°C 60 Hz (Ohms/km)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	Current Rating 85°C Core, 45°C Ambient
		Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)					
1.5	-301	10.9	0.429	133	89	15.5	0.610	331	222	13.700	16.868	0.143	23.494	14
2.5	-302	12.1	0.476	176	118	16.7	0.658	394	264	8.210	10.108	0.129	14.124	20
4	-303	14.4	0.566	265	178	19.0	0.748	521	350	5.090	6.267	0.125	8.803	27
6	-304	15.5	0.612	342	229	20.1	0.793	616	413	3.390	4.174	0.118	5.899	34
10	-305	18.4	0.724	507	340	24.1	0.947	203	136	1.950	2.401	0.114	3.441	47
16	-306	24.2	0.953	839	563	29.9	1.177	1322	887	1.240	1.527	0.103	2.220	63
25	-307	27.5	1.085	1204	808	33.2	1.308	1749	1174	0.795	0.979	0.099	1.458	84
35	-308	29.7	1.169	1453	975	35.4	1.392	2038	1367	0.565	0.696	0.099	1.065	102
50	-309	34.0	1.339	1978	1327	40.0	1.576	2653	1780	0.393	0.489	0.094	0.774	126
70	-310	38.6	1.520	2692	1806	46.2	1.819	3608	2421	0.277	0.344	0.094	0.575	158
95	-311	44.7	1.759	3652	2450	52.3	2.057	4703	3156	0.210	0.266	0.091	0.463	193
120	-312	50.2	1.976	4827	3239	57.8	2.275	6000	4026	0.164	0.210	0.089	0.384	224
150	-313	56.2	2.212	5858	3931	63.8	2.511	7162	4806	0.132	0.171	0.088	0.328	256
185	-314	60.4	2.376	6911	4637	67.9	2.675	8309	5575	0.108	0.141	0.087	0.286	291
240	-315	66.8	2.629	8791	5899	75.8	2.986	10570	7092	0.082	0.112	0.087	0.245	343
300	-316	74.7	2.939	10661	7154	83.7	3.296	12642	8483	0.065	0.093	0.086	0.217	392

- Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
- Current ratings based on IEC 60092-352

Ordering Gexol OneWorld-331HF Cables

Example:

- Three core power cable
- 0.6/1kV
- 2.5 mm²
- 3rd core is green/yellow
(delete "E" from part number for standard white-black-red)
- Bronze armored & sheathed



**OneWorld
Stranding
Profile**
See Page 4

Gexol® OneWorld-331HF Fire Resistant Low Smoke Halogen-Free Four Core (And Three Core +E) Power Cable

Extremely Flexible • 0.6/1kV • Rated 85/90°C



Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 "EEExe"	501/421	501/453/U
Explosion Proof	710 Class 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, Zone 1 & 2
Flameproof "EEExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

Application

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Features

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- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
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Gexol® OneWorld-331HF Fire Resistant Low Smoke Halogen-Free Four Core (And Three Core +E) Power Cable

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Flexible Power Cable – Four Core (and Three Core + E)

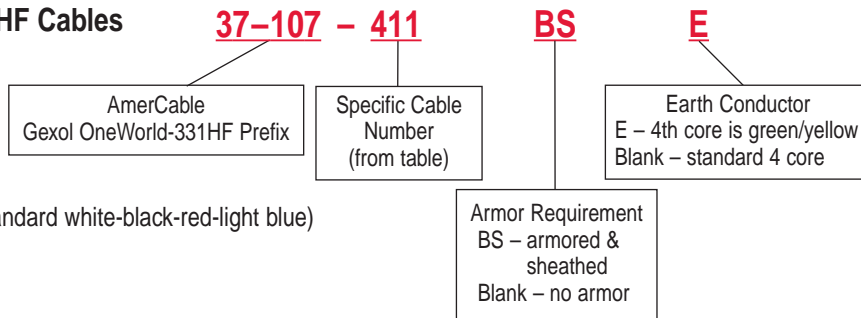
Size (mm²)	Part No. 37-107	Unarmored				Armored and Sheath (BS)				DC Resistance at 20°C (Ohms/km)	AC Resistance at 85°C 60 hz (Ohms/km)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	Current Rating 85°C Core, 45°C Ambient
		Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)					
1.5	-401	11.9	0.468	166	111	16.5	0.649	380	255	13.700	16.868	0.152	23.503	14
2.5	-402	14.1	0.553	246	165	18.7	0.735	495	332	8.210	10.108	0.138	14.133	20
4	-403	15.7	0.619	333	223	20.3	0.800	610	409	5.090	6.267	0.134	8.812	27
6	-404	17.0	0.669	433	291	22.7	0.893	782	525	3.390	4.174	0.127	5.908	34
10	-405	20.2	0.795	649	435	25.9	1.018	1057	709	1.950	2.401	0.123	3.450	47
16	-406	26.6	1.047	1072	719	32.3	1.270	1600	1074	1.240	1.527	0.112	2.229	63
25	-407	30.3	1.194	1551	1041	36.3	1.431	2156	1447	0.795	0.979	0.108	1.467	84
35	-408	32.7	1.288	1878	1260	38.7	1.525	2528	1696	0.565	0.696	0.107	1.074	102
50	-409	37.6	1.479	2569	1724	45.2	1.778	3462	2323	0.393	0.489	0.103	0.783	126
70	-410	44.3	1.744	3660	2456	51.9	2.043	4702	3155	0.277	0.344	0.103	0.584	158
95	-411	49.3	1.942	4747	3185	56.9	2.240	5900	3959	0.210	0.266	0.100	0.472	193
120	-412	55.5	2.186	6297	4225	63.1	2.484	7588	5092	0.164	0.210	0.098	0.393	224
150	-413	62.3	2.453	7702	5168	71.4	2.810	9370	6287	0.132	0.171	0.097	0.337	256
185	-414	67.3	2.648	9086	6097	76.3	3.005	10879	7300	0.108	0.141	0.096	0.295	291
240	-415	74.6	2.936	11623	7799	83.6	3.293	13602	9127	0.082	0.112	0.096	0.254	343
300	-416	82.7	3.257	13952	9362	91.8	3.614	16138	10829	0.065	0.093	0.095	0.227	392

- Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
- Current ratings based on IEC 60092-352

Ordering Gexol OneWorld-331HF Cables

Example:

- Four core power cable
- 0.6/1kV
- 95 mm²
- 4th core is green/yellow
(delete "E" from part number for standard white-black-red-light blue)
- Bronze armored & sheathed



**OneWorld
Stranding
Profile**
See Page 4

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Conductor

Flexible Class 5 (metric)
tinned copper per
IEC 228.

Jacket

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.



Insulation

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351

Color code:

White with printed black numbers.

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

- Meets IEC 60092-3, IEC 60092-353 AND IEEE 45/1580.
- Fire resistant: IEC 60331.
- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 "EEExe"	501/421	501/453/U
Explosion Proof	710 Class 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, Zone 1 & 2
Flameproof "EEExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Flexible Power Cable – Five Core

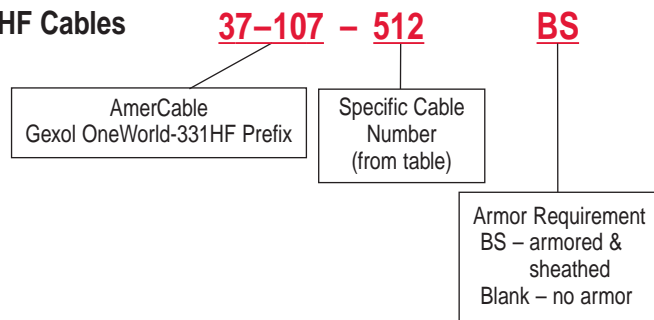
Size (mm²)	Part No. 37-107	Unarmored				Armored and Sheath (BS)				DC Resistance at 20°C (Ohms/km)	AC Resistance at 85°C 60 Hz (Ohms/km)	Inductive Reactance (Ohms/km)	Voltage Drop at 85°C (Volts/Amp/km)	Current Rating 85°C Core, 45°C Ambient
		Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)					
1.5	-501	13.0	0.512	204	137	17.6	0.693	447	300	13.700	16.868	0.152	23.503	12
2.5	-502	15.3	0.604	303	203	19.9	0.785	585	393	8.210	10.108	0.138	14.133	16
4	-503	17.2	0.677	411	276	22.9	0.900	780	523	5.090	6.267	0.134	8.812	22
6	-504	18.6	0.733	536	360	24.3	0.957	933	626	3.390	4.174	0.127	5.908	28
10	-505	23.3	0.916	862	578	28.9	1.139	1348	905	1.950	2.401	0.123	3.450	39
16	-506	29.2	1.151	1329	892	34.9	1.374	1931	1296	1.240	1.527	0.112	2.229	53
25	-507	33.4	1.316	1926	1292	39.4	1.552	2620	1758	0.795	0.979	0.108	1.467	70
35	-508	36.1	1.421	2334	1566	42.1	1.658	3080	2067	0.565	0.696	0.107	1.074	85
50	-509	41.5	1.634	3195	2144	49.1	1.933	4226	2836	0.393	0.489	0.103	0.783	105
70	-510	48.8	1.923	4549	3052	56.4	2.222	5752	3860	0.277	0.344	0.103	0.584	132
95	-511	54.5	2.145	5904	3962	62.1	2.443	7237	4856	0.210	0.266	0.100	0.472	161
120	-512	61.9	2.435	7904	5304	70.9	2.792	9653	6477	0.164	0.210	0.098	0.393	187

- Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
- Current ratings based on IEC 60092-352

Ordering Gexol OneWorld-331HF Cables

Example:

- Five core power cable
- 0.6/1kV
- 120 mm²
- Bronze armored & sheathed



**OneWorld
Stranding
Profile**
See Page 4

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-Light Blue

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.

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



Conductor

Flexible Class 5 (metric) tinned copper per IEC 228.

Insulation

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351

Jacket

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

- Meets IEC 60092-3, IEC 60092-353 AND IEEE 45/1580.
- Fire resistant: IEC 60331.
- Flame retardant: IEC 332-3 Category A/F and IEEE 1202.
- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, 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

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Flexible Instrumentation Cable – Individually Shielded Pairs

Size (mm ²)	No. of Pairs	Part No.	Unarmored				Armored and Sheath (BS)			
			Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)
1.0	1	-601	9.5	0.375	89	60	14.1	0.556	272	183
1.0	2	-602	15.5	0.610	189	127	20.1	0.791	473	317
1.0	3	-603	16.4	0.647	238	160	22.1	0.870	593	398
1.0	4	-604	18.0	0.708	291	195	23.7	0.931	675	453
1.0	5	-605	19.7	0.776	346	232	25.4	0.999	764	513
1.0	7	-606	22.6	0.888	498	334	28.2	1.112	971	652
1.0	8	-607	24.4	0.960	558	374	30.1	1.184	1067	716
1.0	10	-608	28.6	1.124	683	458	34.2	1.348	1273	854
1.0	12	-609	29.5	1.161	776	521	35.2	1.384	1384	929
1.0	16	-610	32.8	1.290	975	654	38.8	1.526	1650	1107
1.0	18	-611	33.6	1.325	1068	717	39.7	1.562	1763	1183
1.0	24	-612	40.5	1.596	1387	931	48.1	1.895	2395	1607
1.5	1	-613	10.0	0.393	101	68	14.6	0.574	292	196
1.5	2	-614	16.3	0.640	216	145	20.9	0.822	513	344
1.5	3	-615	17.3	0.679	276	185	22.9	0.903	646	433
1.5	4	-616	18.9	0.744	341	229	24.6	0.968	744	499
1.5	5	-617	20.7	0.816	407	273	26.4	1.040	845	567
1.5	7	-618	23.7	0.933	585	393	29.4	1.157	1081	725
1.5	8	-619	25.7	1.010	657	441	31.3	1.233	1190	798
1.5	10	-620	30.1	1.185	807	541	36.1	1.421	1435	963
1.5	12	-621	31.1	1.224	921	618	37.1	1.460	1568	1052
1.5	16	-622	34.6	1.361	1166	782	40.6	1.597	1881	1262
1.5	18	-623	35.5	1.398	1281	860	41.5	1.635	2015	1352
1.5	20	-624	38.4	1.512	1415	949	46.0	1.811	2311	1551
1.5	24	-625	44.4	1.749	1831	1229	52.0	2.049	2930	1966

1.0 mm² Pairs

Capacitance = 93 nF/km
Inductance = 0.79 mH/km
Max. DC Resistance @20°C = 20.0 ohms/km

1.5 mm² Pairs

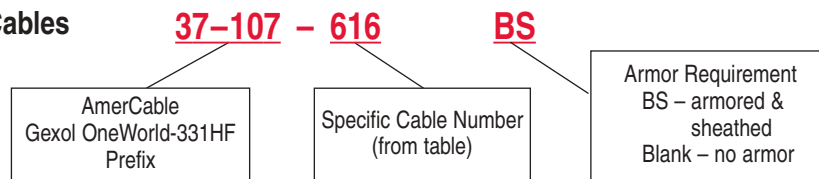
Capacitance = 103 nF/km
Inductance = 0.75 mH/km
Max. DC Resistance @20°C = 13.7 ohms/km

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

Ordering Gexol OneWorld-331HF Cables

Example:

- Instrumentation cable
- 250V(IEC), 0.6/1kV (IEEE)
- 1.5mm², 4 Pair
- Bronze armored & sheathed



OneWorld
Stranding
Profile
See 37-107
Two Core

AmerCable believes the information presented 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. Tiger® Brand is a registered trademark of AmerCable Incorporated.

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Conductor

Flexible Class 5 (metric) tinned copper per IEC 228.

Jacket

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.

Sheath (Optional)

A low smoke halogen-free flame retardant polyolefin meeting IEEE 45/1580 Type TPO and IEC 60092-359 Type SHF-1. Meets a 35 lb/in. (6.4 N/mm) tear resistance.



Insulation

Fire resistant tape + low smoke halogen-free cross-linked polyethylene meeting IEEE45/1580, IEC 60092-3 and IEC 60092-351

Color code:

White with printed black numbers.

Armor (Optional)

Basket weave wire armor per IEEE 45/1580 and IEC 60092-3 (for wire diameter). Bronze standard. Tinned copper available by request.

Application

The Gexol® OneWorld-331HF cable is 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. Designed, tested and approved to meet BOTH IEC (International) and IEEE (North American) marine shipboard cable standards. Can be used with EITHER IEC or NEMA designed electrical systems.

Features

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- Inner jacket same as outer sheath.
- Low smoke: IEC 61034-2, MIL-C-24643A and NES 711.
- Acidity: IEC 754-2 and MIL-C-24643A.
- Halogen content: IEC 754-1 and MIL-C-24643A.
- Toxicity index: NES 713.
- High strand count Class 5 (metric) conductors make this product more flexible and easier to install than standard IEC 60092-350 Series cables that use Class 2 conductors.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class 1, Division 1, and Zone 1 environments (armored and sheathed).

Ratings & Approvals

- 85/90°C Temperature Rating
- UL Classified In Accordance With IEEE Std. 1580
- American Bureau of Shipping (ABS) BT367739
- 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 1, Div. 2 Class 1, Zone 2	753 Class 1, Div. 1 Class 1, 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

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

Extremely Flexible • 0.6/1kV • Rated 85/90°C

Flexible Control Cable – Multi-Core

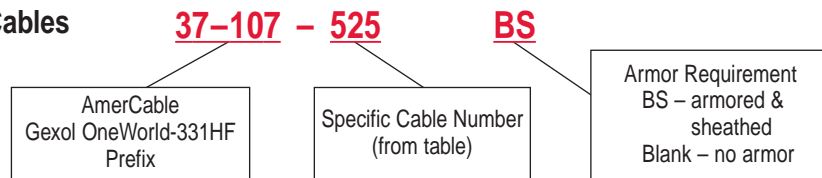
Size (mm ²)	No. of Cores	Part No. 37-107	Unarmored				Armored and Sheath (BS)				Current Rating 85°C Core 45°C Ambient
			Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	Nominal Diameter (mm)	Nominal Diameter (inches)	Weight (kg/km)	Weight (lbs/1000ft)	
1.5	4	-401	11.9	0.468	166	111	16.5	0.649	380	255	14
1.5	5	-501	13.0	0.512	204	137	17.6	0.693	447	300	12
1.5	7	-513	15.0	0.590	294	197	19.6	0.771	570	382	10
1.5	8	-514	16.2	0.637	331	222	20.8	0.818	626	420	10
1.5	10	-515	18.9	0.743	406	272	24.5	0.966	808	542	9
1.5	16	-516	22.7	0.892	647	434	28.3	1.116	1123	754	8
1.5	20	-517	25.0	0.985	781	524	30.7	1.208	1302	874	7
1.5	24	-518	27.7	1.091	918	616	33.4	1.314	1491	1000	7
1.5	37	-519	31.6	1.244	1315	882	37.6	1.481	1973	1324	6
1.5	44	-520	35.5	1.397	1547	1038	41.5	1.634	2281	1531	6
1.5	60	-521	39.4	1.550	2026	1359	47.0	1.849	3007	2018	5
1.5	91	-522	48.7	1.918	3136	2104	56.3	2.217	4335	2909	4
2.5	4	-402	14.1	0.553	246	165	18.7	0.735	495	332	20
2.5	5	-502	15.3	0.604	303	203	19.9	0.785	585	393	16
2.5	6	-523	16.7	0.656	352	236	22.3	0.879	711	477	15
2.5	10	-524	22.2	0.873	599	402	27.8	1.096	1064	714	13
2.5	20	-525	28.0	1.101	1055	708	33.7	1.325	1634	1096	10
2.5	24	-526	31.1	1.223	1245	835	37.1	1.460	1892	1270	10
2.5	37	-527	35.5	1.398	1805	1211	41.5	1.635	2539	1704	8

- Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance
- Current ratings based on IEC 60092-352

Ordering Gexol OneWorld-331HF Cables

Example:

- Twenty core control cable
- 0.6/1kV
- 2.5mm²
- Bronze armored & sheathed



**OneWorld
Stranding
Profile**
See Page 4