

# 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.

## 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 – 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	1.0 -558	0.431	100	0.481	171	0.620	221	7.354	9.763	0.044	13.558	11	10	11
16	1.3 -559	0.456	110	0.506	189	0.647	264	4.610	6.121	0.042	8.514	14	13	13
14	2.1 -510	0.498	149	0.548	234	0.687	301	2.907	3.859	0.039	5.382	21	20	18
12	3.3 -560	0.550	196	0.600	266	0.752	334	1.826	2.424	0.037	3.393	27	25	22
10	5.2 -561	0.604	296	0.654	406	0.973	494	1.153	1.530	0.035	2.154	35	33	29
8	7.6 -562	0.765	453	0.815	569	1.196	704	0.708	0.940	0.037	1.339	45	42	38
6	12.5 -563	0.914	653	.964	813	1.145	973	0.445	0.590	0.035	0.853	60	56	51
4	21 -565	1.137	1073	1.187	1292	1.368	1481	0.300	0.399	0.032	0.585	79	74	68
2	34 -566	1.315	1361	1.365	1637	1.546	1856	0.184	0.244	0.030	0.369	105	98	90
1	43 -567	1.470	2130	1.520	2192	1.764	2482	0.147	0.195	0.031	0.302	122	114	105
1/0	54 -568	1.618	2550	1.668	2746	1.911	3108	0.117	0.156	0.030	0.248	140	131	122
2/0	70 -569	1.802	2954	1.852	3301	2.096	3734	0.093	0.125	0.030	0.203	161	150	140
4/0	109 -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

AmerCable  
Gexol-HF Prefix

**37-103 - 566**

Specific Cable Number  
(from table)

**BS**

Armor Requirement  
BS – armored & sheathed  
Blank – no armor