

Single Conductor Power Cable Gexol® Insulated

Extremely Flexible • 600V or 2kV • Rated 110°C

Conductor

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

Insulation/Jacket

GEXOL® cross-linked flame retardant polyolefin, meeting the requirements for Type P of IEEE 1580 and Type X110 of UL 1309/CSA 245. 2000V/IEC 1000V.

Armor (Optional)

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

Sheath (Optional)

A black, arctic grade, flame retardant, oil, abrasion, chemical and sunlight resistant thermosetting compound meeting UL 1309/CSA 245 and IEEE 1580.



Application

Designed and constructed for the demanding environments of offshore drilling and petroleum facilities located throughout the world.

Features

- High strand count conductors make this product much more flexible, easier to install and more resistant to vibration than Type MC, IEC spec or commercial cables.
- Gexol's lower dielectric constant and higher insulation resistance reduces electrical losses.
- Gexol's excellent resistance to moisture produces stable electrical properties throughout the life of the cable.
- In a fire condition, Gexol's nonchlorinated flame retardant system produces less toxic and less corrosive gases.
- Dual certified IEEE 1580 Type P and UL 1309/CSA 245 Type X110.
- Highest ampacity ratings: ABS 100°C, DNV 95°C, LRS 95°C, Transport Canada 95°C.
- 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 or tinned copper.

Ratings & Approvals *(Other certifications pending)*

- 110°C Temperature Rating
- NVE 95/1696, FAL
- Transport Canada
- Det Norske Veritas (DNV)
- Lloyd's Register of Shipping
- American Bureau of Shipping (ABS)
- UL Listed as Marine Shipboard Cable (E111461)
- United States Coast Guard November 2, 1987 / 9304
- CSA listed as Marine Shipboard Cable

**600V
Unarmored**

(2kV on next page)

Size AWG/ kcmil	Part No. 37-102	Unarmored Diameter (inches)	Weight (lbs/Mft.)	Inductive Reactance (Ohms/k ft.)	Voltage Drop at 110°C (Volts/Amp/kft.)	DC Resistance at 25°C (Volts/Amp/kft.)	AC Resistance at 110°C, 60 Hz (Ohms/k ft.)	Ampacity			
								Free Air 110°C	110°C	100°C	95°C
18	-151	0.115	11	0.046	13.560	7.210	9.763	30	17	16	20
16	-153	0.125	14	0.044	8.516	4.520	6.121	35	25	23	23
14	-154	0.164	20	0.041	5.383	2.850	3.859	41	40	37	32
12	-156	0.187	28	0.038	3.394	1.790	2.424	64	48	45	38
10	-158	0.208	41	0.036	2.155	1.130	1.530	85	62	58	51
8	-159	0.260	63	0.036	1.338	0.694	0.940	112	77	72	68
6	-160	0.290	104	0.034	0.852	0.436	0.590	148	103	96	91
4	-162	0.390	169	0.030	0.583	0.286	0.399	196	137	128	121
2	-164	0.450	247	0.029	0.368	0.175	0.244	259	181	169	162
1	-165	0.505	329	0.029	0.301	0.140	0.195	298	208	194	187
1/0	-166	0.554	412	0.029	0.246	0.111	0.156	344	243	227	217
2/0	-167	0.609	524	0.028	0.202	0.089	0.125	396	281	262	250
3/0	-168	0.659	631	0.028	0.167	0.070	0.100	457	321	300	289

Gexol® Flexible Power Cable – Single Conductor

Size AWG/ kcmil	mm ²	Part No. 37-102	Unarmored		Armored (B)		Armored and Sheath (BS)		Inductive Reactance (Ohms/ 1000 ft.)	Voltage Drop 110°C (Volts/Amp/ 1000 ft.)	DC Resistance at 25°C, (Ohms / 1000 ft.)	AC Resistance at 110°C, 60 Hz (Ohms/ 1000 ft.)	Ampacity			
			Nominal Diameter (inches)	Weight (lbs/ Mft.)	Nominal Diameter (inches)	Weight (lbs/ Mft.)	Nominal Diameter (inches)	Weight (lbs/ Mft.)					Free Air 110°C	110°C	100°C	95°C
			18	1.0	-101	0.232*	32	0.188					60	0.322	88	0.065
16	1.3	-102	0.248*	34	0.200	68	0.335	98	0.062	8.535	4.520	6.121	35	25	23	23
14	2.1	-105	0.259*	44	0.215	79	0.349	111	0.057	5.401	2.850	3.859	41	40	37	32
12	3.3	-106	0.281*	53	0.237	95	0.372	129	0.053	3.410	1.790	2.424	64	48	45	38
10	5.2	-108	0.302*	68	0.258	116	0.393	153	0.050	2.170	1.130	1.530	85	62	58	51
8	7.6	-109	0.354*	96	0.310	157	0.476	212	0.048	1.351	0.694	0.940	112	77	72	68
6	12.5	-110	0.384*	130	0.346	202	0.482	249	0.045	0.864	0.436	0.590	148	103	96	91
4	21	-112	0.484*	210	0.440	234	0.606	307	0.039	0.593	0.286	0.399	196	137	128	121
2	34	-114	0.576*	314	0.501	327	0.667	409	0.037	0.376	0.175	0.244	259	181	169	162
1	43	-115	0.629*	393	0.555	409	0.721	498	0.036	0.307	0.140	0.195	298	208	194	187
1/0	54	-116	0.687*	485	0.604	486	0.770	582	0.035	0.253	0.111	0.156	344	243	227	217
2/0	70	-117	0.737*	596	0.659	597	0.825	700	0.034	0.208	0.089	0.125	396	281	262	250
3/0	86	-118	0.788*	709	0.710	711	0.918	853	0.034	0.174	0.070	0.100	457	321	300	289
4/0	109	-119	0.812	836	0.867	1087	1.040	1119	0.033	0.145	0.056	0.080	528	376	351	335
262	132	-120	0.885	1015	0.935	1101	1.131	1344	0.034	0.127	0.046	0.067	599	436	407	382
313	159	-121	0.937	1178	0.987	1302	1.175	1495	0.033	0.112	0.038	0.056	604	487	455	427
373	189	-122	1.000	1400	1.050	1514	1.245	1774	0.032	0.099	0.032	0.047	674	553	516	476
444	227	-123	1.077	1654	1.127	1815	1.325	2025	0.031	0.089	0.027	0.041	750	630	588	531
535	273	-124	1.179	2005	1.230	2200	1.430	2438	0.031	0.081	0.022	0.035	839	709	630	597
646	326	-126	1.272	2348	1.328	2586	1.530	2841	0.031	0.073	0.019	0.030	937	783	731	671
777	394	-127	1.400	2709	1.455	3050	1.629	3336	0.030	0.067	0.015	0.026	1048	881	822	753
1111	562	-129	1.687	3965	1.750	4225	2.050	4638	0.030	0.056	0.011	0.018	1303	1098	1025	937

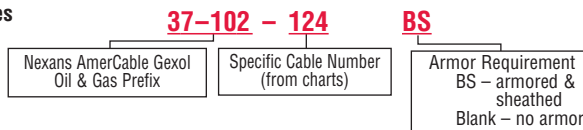
*Unarmored 3/0 and smaller has a jacket per UL1309 & IEEE1580
Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance

GEXOL® is a registered trademark of AmerCable Incorporated.

Ordering Gexol Oil & Gas Cables

Example:

- Single conductor power cable
- 2kV 100%
- 535 kcmil
- bronze armored & sheathed



See page 2 for Stranding Profile