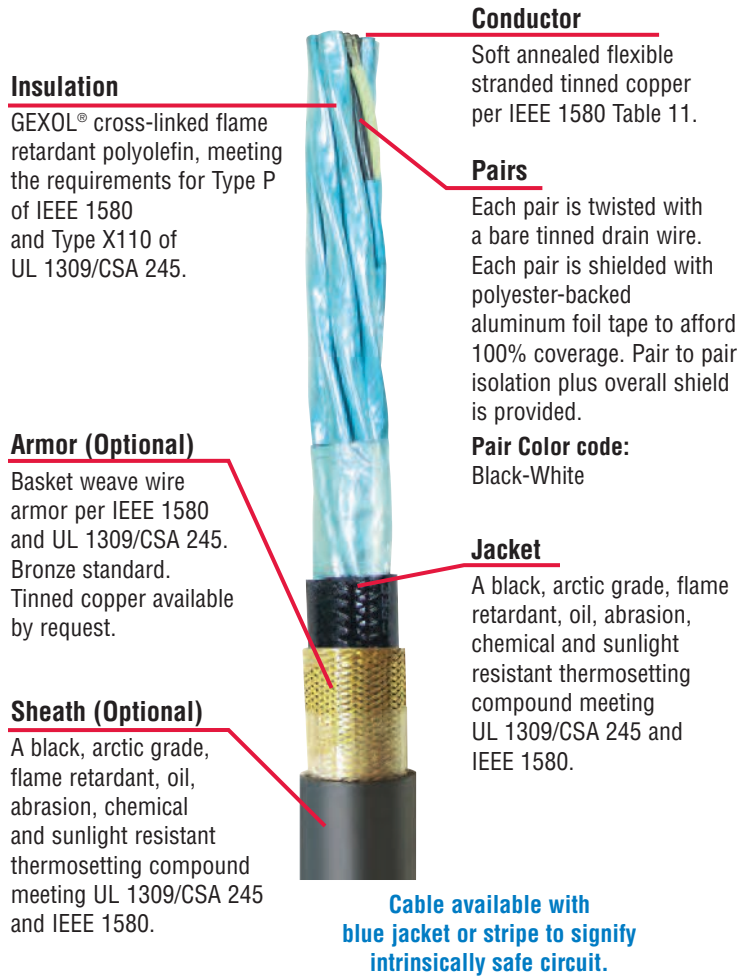


Shielded Pairs Instrumentation Cable – Gexol® Insulated

Extremely Flexible • Individually Shielded Pairs • 0.6/1kV • Rated 110°C



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

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.

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

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

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

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

Ratings & Approvals (Other certifications pending)

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

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.

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

GEXOL® is a registered trademark of AmerCable Incorporated.

Flexible Instrumentation Cable – Individually Shielded Pairs

Size AWG	Number of Pairs	Part No. 37-102	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	-601	0.336	57	0.386	149	0.535	151
18	2	-602	0.518	140	0.568	223	0.720	294
18	3	-603	0.581	177	0.631	270	0.780	497
18	4	-604	0.625	212	0.675	405	0.820	558
18	5	-605	0.665	257	0.715	359	0.889	505
18	7	-606	0.760	306	0.810	431	1.017	592
18	8	-607	0.782	342	0.832	468	1.027	607
18	10	-608	0.965	468	1.015	625	1.215	1020
18	12	-609	0.990	533	1.040	692	1.261	1089
18	16	-645	1.093	661	1.143	843	1.338	1325
18	18	-641	1.230	776	1.280	973	1.488	1216
18	24	-646	1.442	958	1.492	1194	1.758	1564
16	1	-610	0.356	68	0.406	165	0.560	166
16	2	-611	0.584	190	0.634	282	0.787	501
16	3	-612	0.630	220	0.680	320	0.875	558
16	4	-613	0.648	248	0.698	346	0.893	671
16	5	-614	0.715	299	0.765	420	0.932	541
16	7	-615	0.810	365	0.860	494	1.034	638
16	8	-616	0.885	448	0.935	589	1.114	724
16	10	-617	1.030	763	1.080	736	1.289	1222
16	12	-618	1.065	631	1.115	808	1.310	1014
16	16	-619	1.175	806	1.225	1049	1.396	1237
16	18	-626	1.259	901	1.309	1112	1.504	1317
16	20	-688	1.315	1011	1.365	1222	1.582	1461
16	24	-699	1.472	1120	1.522	1361	1.755	1685
14	1	-620	0.386	87	0.436	149	0.589	193
14	2	-621	0.634	264	0.684	365	0.879	543
14	3	-622	0.670	348	0.720	375	0.811	448
14	4	-623	0.736	324	0.786	440	0.991	799
14	5	-624	0.772	392	0.822	515	1.031	678
14	7	-625	0.929	528	0.979	676	1.187	866
14	8	-630	0.956	548	1.006	736	1.180	911
14	10	-627	1.117	706	1.167	886	1.350	1077
14	12	-628	1.205	851	1.255	1037	1.450	1275

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

VALUES:

#18 Pairs

Capacitance (nF/1000 feet) = 28
 Inductance (mH/1000) = 0.22
 Resistance (Ohms/1000 feet) = 7.21 (@ 20°C)

#16 Pairs

Capacitance (nF/1000 feet) = 32
 Inductance (mH/1000) = 0.20
 Resistance (Ohms/1000 feet) = 4.52 (@ 20°C)

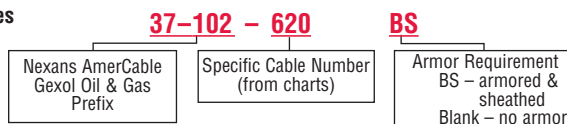
#14 Pairs

Capacitance (nF/1000 feet) = 37
 Inductance (mH/1000) = 0.19
 Resistance (Ohms/1000 feet) = 2.85 (@ 20°C)

Ordering Gexol Oil & Gas Cables

Example:

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



See page 29 for Stranding Profile