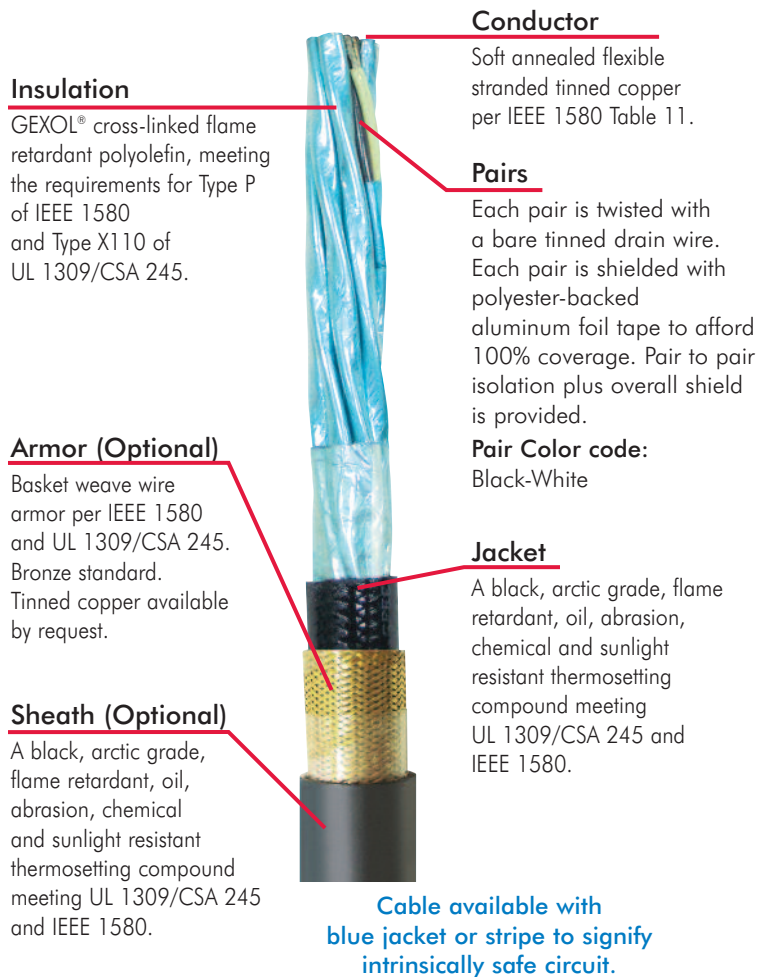


SHIELDED PAIRS INSTRUMENTATION CABLE – GEXOL® INSULATED

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.

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.

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
- 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

| 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 $\pm 5\%$ 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)

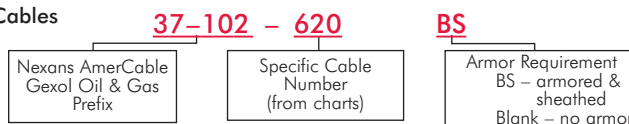
#14 Pairs

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