



# Cabling Solutions

for the Broadcast, Professional A/V and Commercial A/V Markets



 **General Cable**

*One Company*  
Connecting the World

# One Company Connecting The World

## POWERFUL PRESENCE • PRODUCTS PERFORMANCE • PEOPLE

With more than 14,000 associates on six continents, General Cable is a global leader in the development, design, manufacture, marketing and distribution of copper, aluminium and fiber optic wire and cable products for the energy, industrial, specialty and communications markets.

**We are one of the largest wire and cable manufacturers in the world and have a significant presence in both established and growing markets.**

General Cable serves its customers through a global network of manufacturing facilities with worldwide sales representation and distribution. With a portfolio of more than 100,000 products to meet thousands of diverse applications requirements, we continue to invest in research and development in order to maintain and extend our technology leadership, developing new materials, designing new products, and creating new solutions to meet tomorrow's market challenges.

In every sector and everywhere, we are strongly positioned to help our partners achieve their objectives.

**We offer our customers all the strengths and value of a large company, but our people give us the agility and responsiveness of a small one. We can service you globally or locally.**



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All information in this catalog is presented solely as a guide to product selection and is believed to be reliable. All printing errors are subject to correction in subsequent releases of this catalog. Although General Cable has taken precautions to ensure the accuracy of the product specifications at the time of publication, the specifications of all products contained herein are subject to change without notice.

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BROADCAST

PRO A/V

COMMERCIAL A/V

RECORDING

PRODUCTION

LIGHTING

STAGING

CONTROL

## GEPCO® HISTORY

Since 1981, Gepco has been committed to the development and manufacturing of cable and connectivity products for the broadcast and professional A/V markets. Through continual involvement with our customers and technology, Gepco has developed unique and innovative, solutions-based interconnect products.

Exclusively focused on cabling technology for professional audio and video applications, the Gepco® Brand has grown from a single product to a complete range of professional audio, video and data cabling products with international sales and distribution. Over the past three decades, Gepco has developed many innovations in broadcast and professional A/V cable technology including easy-to-terminate audio cables, the first gas-injected coax for serial digital video applications, tactical network cables and ruggedized camera cable interconnects.

Looking toward the next 30 years as being the leading brand of audio, video and network cabling solutions, Gepco continues to embrace advancing technology to ensure that it consistently provides the professional industry with innovative design, reliability and products with unparalleled quality.

**MADE IN THE U.S.A.**





## INNOVATIVE CABLING TECHNOLOGY

### CUSTOMIZED SOLUTIONS

Designed and engineered to meet the unique requirements and formats of professional audio and video applications, Gepco® Brand solutions deliver the performance and reliability needed in leading-edge, studio and live-production applications.

### PRECISION ENGINEERED

Gepco Brand cables are manufactured to precision tolerances with premium materials to achieve exacting electrical and mechanical characteristics. Critical specifications such as bandwidth, return loss, flexibility and flame retardancy are designed and specified for each unique interconnect application.

### TESTED & VERIFIED

All cable reels are tested and verified to meet or exceed cable specifications and industry standards. Through comprehensive multi-stage testing, Gepco's quality and process control ensures consistent performance in every reel.

### PRODUCT EVOLUTION

As formats and technology advance, so does Gepco Brand. From increased bandwidths for the latest HD formats to new applications for fiber and data cables in A/V, Gepco cable has evolved to meet the latest standards and to future-proof for new technology.

## ANALOG AUDIO CABLES

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- Speaker and Control: Unshielded Plenum
- Speaker and Control: Shielded Riser
- Speaker and Control: Shielded Plenum

# CABLING TECHNOLOGY FOR HIGH-RESOLUTION ANALOG AUDIO INTERCONNECTIONS



## Low-Loss Dielectric Compounds

The dielectric material insulates each conductor and affects the high-frequency loss of the cable. Gepco® Brand cables utilize only low-loss gas/polymer, polyethylene or high-quality PVC dielectric compounds.

## 100% Foil or 95% Braided Shield

In addition to the pair twisting, noise rejection in balanced cables is achieved with a 100% aluminum/Mylar® shield or a tight-angled braid shield. Aluminum/Mylar foil provides additional strength compared to standard foil shields, while a tight-angled braid achieves greater strength, flaccidity and coverage.

## Application-Specific Jackets

Jacket compounds are specified for each cable type based upon the application. Each compound type has a unique combination of flexibility, abrasion resistance, flame retardancy and temperature properties.

## Precision Pair Twisting & Balancing

The frequency and consistency of the pair twisting determines the noise rejection of the cable. Gepco balanced pairs are twisted to a tight and uniform lay to maximize common-mode noise rejection.

## High-Purity Copper

Most cable conductors are made from corrosion-resistant tinned copper or 99.999% oxygen-free copper. These conductor types are easy to solder and maximize conductivity.

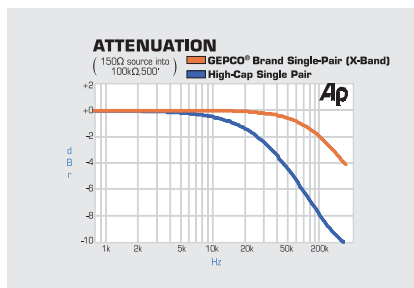
## Easy to Terminate

Each cable has time-saving features such as color-coded jackets, optimized conductor stranding, drain wires and easy-to-strip compounds.

## Electrical Characteristics & Specifications

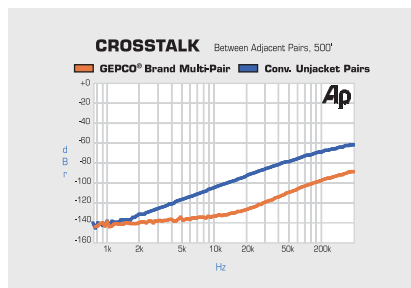
### Bandwidth & Low Attenuation

The low-loss dielectric compounds and conductors minimize loss. Compared to other types, Gepco audio cables have less attenuation and greater bandwidth.



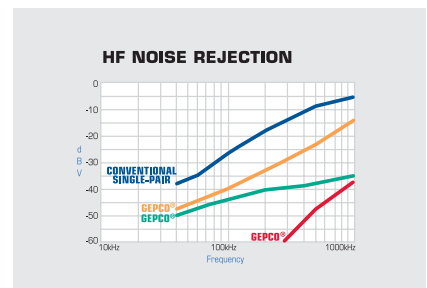
### Minimal Crosstalk

Individual pair jackets in multi-pair cable provide greater physical separation and electrical isolation between pairs to improve crosstalk between channels.



### Exceptional RF/EMI Noise Rejection

Capacitive balancing, tight and uniform pair-twisting and effective shielding all combine to provide exceptional RF/EMI and common-mode noise rejection.



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## Multi-Pair: GEP-FLEX 22 AWG



The original Gepco® Brand multi-pair cable, the GA618 series multi-pair, was designed for low noise and attenuation and is durable, easy to terminate and UL listed. A high-grade polyethylene dielectric minimizes high-frequency attenuation, while excellent process control and tight pair twisting achieve superior noise rejection. Color coded and alphanumerically printed pairs facilitate easy channel identification, and the riser rated Gepco Brand GEP-FLEX master jacket is both flexible and easy to pull through conduit. The 22 AWG conductors offer the lowest DCR available in any of the Gepco Brand multi-pair products, making the GA618 series ideal for extended-distance runs of mic level signals.

## Features &amp; Benefits

- Low Attenuation & Crosstalk
- Flexible
- Easy to Terminate
- Polyethylene Dielectric
- Individually Shielded & Jacketed Pairs
- Color Coded & Alphanumeric Pair Identification
- Additional Overall Foil Shield
- All-Weather GEP-FLEX Master Jacket
- CMR Riser Rated

## Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Extended-Distance Runs

## Mechanical Specifications (Series)

Conductors	Insulation/Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Overall Shield	Overall Common Drain	Master Jacket	UL Type
22 AWG (7x30) Stranded TC	PE, 0.010", (0.254 mm) Wall/ Red & Black	100% Foil	22 AWG (7x30) Stranded TC	PVC, 0.140" (3.56 mm)/ Base 10 (See Color Code Chart 1, Page 142)	100% Foil	16 AWG (19x29) Stranded TC, 20 AWG (7x28) Stranded TC for GA61802GFC	Riser GEP-FLEX TPE, Blue	CMR

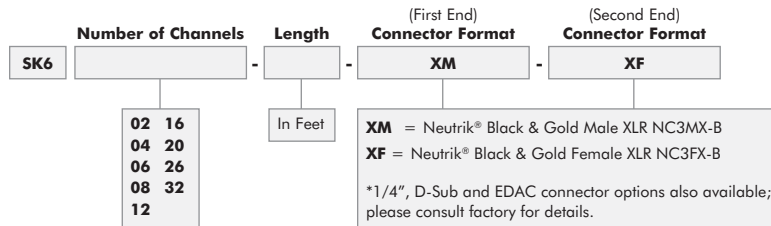
## Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Approx. Weight	Part Number	# of Pairs	Nominal OD	Approx. Weight
GA61802GFC	2	0.360" (9.1 mm)	67 lbs/Mft (100 kg/km)	GA61816GFC	16	0.710" (18.0 mm)	263 lbs/Mft (392 kg/km)
GA61804GFC	4	0.400" (10.2 mm)	95 lbs/Mft (142 kg/km)	GA61820GFC	20	0.800" (20.3 mm)	315 lbs/Mft (469 kg/km)
GA61806GFC	6	0.475" (12.1 mm)	121 lbs/Mft (180 kg/km)	GA61826GFC	26	0.840" (21.3 mm)	387 lbs/Mft (577 kg/km)
GA61808GFC	8	0.570" (14.5 mm)	159 lbs/Mft (237 kg/km)	GA61832GFC	32	0.935" (23.7 mm)	497 lbs/Mft (741 kg/km)
GA61812GFC	12	0.635" (16.1 mm)	217 lbs/Mft (323 kg/km)				

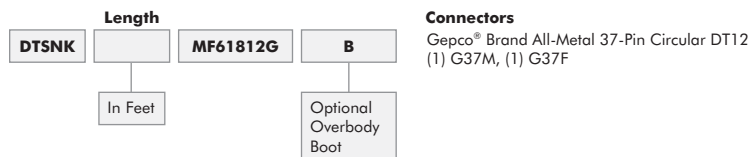
## Electrical Specifications

Capacitance	Cond. DCR	Drain DCR	Overall Common DCR
26 pF/ft Between Conductors, 48 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft	4.5 Ω/Mft 9.6 Ω/Mft for GA61802GFC

## Audio Snake



## DT12 Snake



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## Multi-Pair: GEP-FLEX 24 AWG



A thin-profile version of the Gepco® Brand easy-strip multi-pair, the GA724 series was designed for low noise and attenuation and is durable, easy to terminate and UL listed. A high-grade polyethylene dielectric minimizes high frequency attenuation, while excellent process control and tight pair twisting achieve superior noise rejection. Color coded and alphanumerically printed pairs facilitate easy channel identification, and the GEP-FLEX master jacket is both flexible and easy to pull through conduit. The 24 AWG conductors are easier to terminate while still maintaining low DCR. The GA724 series is ideal for cable assemblies, patchbay wiring or portable snakes.

### Features & Benefits

- Low Attenuation & Crosstalk
- Flexible
- Easy to Terminate
- Polyethylene Dielectric
- Easy-Strip Bonded Foil Shield
- Individually Shielded & Jacketed Pairs
- Color Coded & Alphanumeric Pair Identification
- Additional Overall Foil Shield
- All-Weather GEP-FLEX Master Jacket
- CM Rated

### Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Patchbay Wiring & Multi-Pin Cable Assemblies

### Mechanical Specifications (Series)

Conductors	Insulation/Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Overall Shield	Overall Common Drain	Master Jacket	UL Type
24 AWG (7x32) Stranded TC	PE, 0.008" (0.20 mm) Wall/Red & Black	100% Foil (Bonded)	24 AWG (7x32) Stranded TC	PVC, 0.115" (2.92 mm)/ Base 10 (See Color Code Chart 1, Page 142)	100% Foil	20 AWG (19x32) Stranded TC	GEP-FLEX TPE, Black	CM

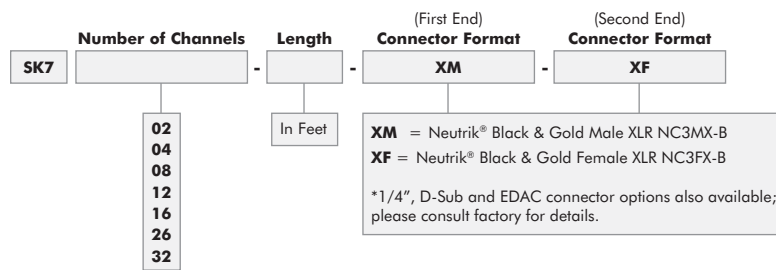
### Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Approx. Weight	Part Number	# of Pairs	Nominal OD	Approx. Weight
GA72402GFC	2	0.320" (8.13 mm)	62 lbs/Mft (92 kg/km)	GA72416GFC	16	0.664" (16.9 mm)	225 lbs/Mft (335 kg/km)
GA72404GFC	4	0.405" (10.3 mm)	88 lbs/Mft (131 kg/km)	GA72426GFC	26	0.830" (21.1 mm)	363 lbs/Mft (541 kg/km)
GA72408GFC	8	0.500" (12.7 mm)	134 lbs/Mft (200 kg/km)	GA72432GFC	32	0.890" (22.6 mm)	423 lbs/Mft (630 kg/km)
GA72412GFC	12	0.595" (15.1 mm)	198 lbs/Mft (295 kg/km)				

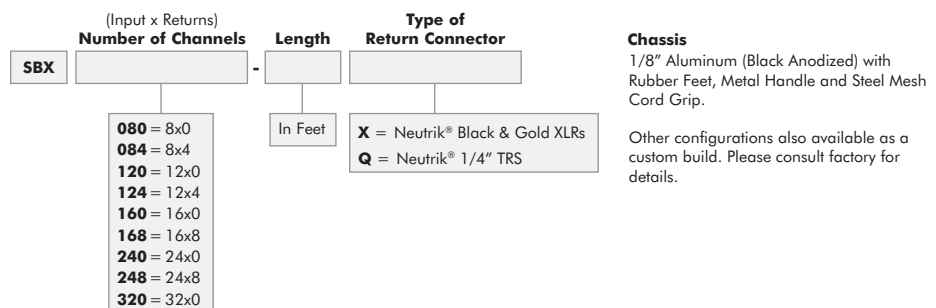
### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR	Overall Common DCR
28 pF/ft Between Conductors, 51 pF/ft Between One Conductor and Other Tied to Shield	23.8 Ω/Mft	23.8 Ω/Mft	8.9 Ω/Mft

## Audio Snake



## Stage Box Snake



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## Multi-Pair: Thin-Profile 12-Pair



The smallest profile in 12-pair audio, GA72412TP was designed for low noise and attenuation and is durable, easy to terminate and UL listed. A high-grade polyethylene dielectric minimizes high frequency attenuation, while excellent process control and tight pair twisting achieve superior noise rejection. Alphanumerically printed pairs facilitate easy channel identification, and the GEP-FLEX master jacket is both flexible and easy to pull through conduit. The 24 AWG conductors are easier to terminate while still maintaining low DCR. The GA72412TP is ideal for cable assemblies, patchbay wiring or portable snakes.

### Features & Benefits

- Low Attenuation & Crosstalk
- Easy to Terminate
- Polyethylene Dielectric
- Individually Shielded & Jacketed Pairs
- Alphanumeric Pair Identification
- Flexible, All-Weather GEP-FLEX Master Jacket
- CM Rated

### Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Patchbay Wiring & Multi-Pin Cable Assemblies

### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Master Jacket	UL Type	Approx. Weight
GA72412TP	12	0.510" (13.0 mm)	24 AWG (7x32) Stranded TC	PE, 0.010" (0.25 mm) Wall/Red & Black	100% Foil (Bonded)	24 AWG (7x32) Stranded TC	PVC, 0.105"/Black, Alphanumeric Printed Channels	GEP-FLEX TPE, Black	CM	110 lbs/Mft (164 kg/km)

### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR	Overall Common DCR
25 pF/ft Between Conductors, 45 pF/ft Between One Conductor and Other Tied to Shield	23.8 Ω/Mft	23.8 Ω/Mft	8.9 Ω/Mft

## Multi-Pair: Direct Burial



Designed for permanent underground installation, the Gepco® Brand direct burial multi-pair features low loss, low noise and color coded pair jackets just like the standard GA618 series. Unique to the PEF direct burial version is a rugged polyethylene jacket and water blocking tape that is wrapped around the cable core. This construction is difficult to puncture and protects the core from moisture should the cable be accidentally damaged.

### Features & Benefits

- Low Attenuation & Crosstalk
- Polyethylene Dielectric
- Individually Shielded & Jacketed Pairs
- Color Coded & Alphanumeric Pair Identification
- Additional Overall Foil Shield
- Polyethylene Jacket
- Water Blocking Tape

### Applications

- Microphone or Line Level Balanced Analog Audio
- Direct Burial Permanent Installation

### Mechanical Specifications (Series)

Conductors	Insulation/Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Overall Shield	Overall Common Drain	Master Jacket
22 AWG (7x30) Stranded TC	PE, 0.010" (0.25 mm) Wall/Red & Black	100% Foil	22 AWG (7x30) Stranded TC	PVC, 0.140" (3.56 mm)/Base 10 (See Color Code Chart 1, Page 142)	100% Foil	16 AWG (19x29) Stranded TC	PE with Water Blocking Tape

### Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Approx. Weight
GA61806PEF	6	0.475" (12.1 mm)	118 lbs/Mft (176 kg/km)
GA61812PEF	12	0.635" (16.1 mm)	220 lbs/Mft (328 kg/km)

### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR	Overall Common DCR
26 pF/ft Between Conductors, 48 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft	4.5 Ω/Mft

## Multi-Pair: X-Band



The X-Band series is an ultra-flexible, sonically transparent, low-noise and durable balanced audio cable for use in critical recording studio facilities or live sound venues. X-Band multi-pair is both extremely flexible and flaccid, yet maintains a high degree of durability. Each oxygen-free copper conductor is insulated with a unique low k constant, foam polypropylene dielectric that lowers the capacitance and extends the bandwidth of the cable. Low noise and crosstalk is achieved through exacting pair twisting, 95% braid shielding and individual pair jackets. In addition, X-Band also remains easy to prep and terminate. The insulation and jacket are both easy to score, break and strip; the tight-weave braided shield is easy to trim and terminate via the drain wire. Individual pairs can be easily identified by the alphanumeric print and color coded stripe, yet maintain a more neutral cosmetic appearance in high visibility installations.

### Features & Benefits

- Ultra-Flexible
- Oxygen-Free, Finely Stranded Conductors
- High-Bandwidth Dielectric
- Braided Pair Shields with Drain Wire
- Low Crosstalk & Superior Noise Rejection
- Easy to Terminate
- Pair Jackets with Alphanumeric Print & Color Coded Stripe
- G-Flex Master Jacket

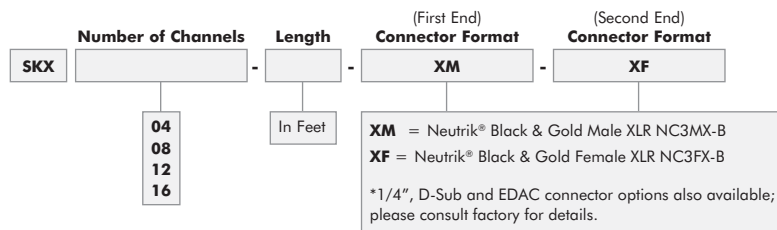
### Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect or Portable Snakes

Mechanical Specifications (Series)					
Conductors	Insulation/Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Master Jacket
24 AWG (40x40) Stranded Oxygen-Free Bare Copper	Foam Polypropylene, 0.012" (0.30 mm) Wall/ One White, One Black	95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC 0.145" (3.68 mm)/ Black with Base 10 Resistor Color Coded Stripe Alphanumeric Print Inverted Every Inch	Ultra-Flexible G-Flex PVC, Black

Mechanical Specifications (Individual)				
Part Number	# of Pairs	Nominal OD	Approx. Weight	
<b>XB404</b>	4	0.490" (12.4 mm)	115 lbs/Mft (171 kg/km)	
<b>XB408</b>	8	0.580" (14.7 mm)	176 lbs/Mft (262 kg/km)	
<b>XB412</b>	12	0.738" (18.7 mm)	270 lbs/Mft (402 kg/km)	
<b>XB416</b>	16	0.785" (19.9 mm)	320 lbs/Mft (477 kg/km)	

Electrical Specifications			
Capacitance	Cond. DCR	Shield & Drain DCR	
17.5 pF/ft Between Conductors, 31 pF/ft Between One Conductor and Other Tied to Shield	27.5 Ω/Mft	6 Ω/Mft	



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## Multi-Pair: Heavy-Duty 12-Channel



For use in hostile environments, the DT61812 12-channel multi-pair utilizes an extra-thick, extra-tough polyurethane compound for its outer jacket, making it extremely weather-resistant and difficult to puncture. Each pair is individually shielded, isolated and color coded for channel identification.

### Features & Benefits

- Extremely Durable & Rugged
- Low Attenuation
- Polyethylene Dielectric
- Individual Pair Shields
- Polyurethane Jacket

### Applications

- Microphone or Line Level Balanced Analog Audio
- DT12 Remote Snakes
- Hostile Environments

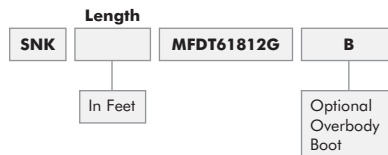
### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation	Color Code	Pair Shield	Pair Drain	Master Jacket	Approx. Weight
DT61812	12	0.505" (12.8 mm)	22 AWG (19x34) Stranded TC	PE, 0.010" (2.54 mm) Wall	Varies for Each Pair, (See Color Code Chart 2, Page 142)	100% Foil, Mylar® Side Out (Pairs Are Isolated)	22 AWG (19x34) Stranded TC	PU, Black	160 lbs/Mft (238 kg/km)

### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
26 pF/ft Between Conductors, 48 pF/ft Between One Conductor and Other Tied to Shield	14.3 Ω/Mft	14.3 Ω/Mft

## DT12 Snake



### Connectors

Gepco® Brand All-Metal 37-Pin Circular DT12  
(1) G37M, (1) G37F

## DT12 Breakout Box



The Gepco® Brand DT12 Breakout Box is a 12-channel audio breakout from a DT12 multi-pin connector to 12 Neutrik® panel mount XLRs in a heavy-gauge 1/8" thick extruded aluminum chassis. A recessed top-plate design protects connectors, while the modular construction and internal slots allow for custom options such as transformer isolated splits. This breakout box is available in a standard 12-channel configuration or with multi-pin and/or XLR parallel passive splits. The Gepco Brand DT12 multi-pin connector features a stainless steel male housing, mil-spec gold plated contacts, and a scalloped insulator that is crack-proof and prevents rotation.

### Features & Benefits

- Neutrik XLRs
- Gold-Plated Contacts
- FK37-DT12 Pinout Compatible
- Passive Split Options
- 1/8" Anodized Aluminum Chassis
- Modular & Customizable

### Applications

- DT12 Snake Breakout from Multi-Pin to XLR Connectors
- Mic or Line Level

Assembly Specifications					
Part #	# of Channels	Connectors	Chassis Dimensions	Chassis Material	Comments
<b>Standard DT12 Breakout Box</b>					
<i>Standard Single-Pair: Easy Strip</i>					
<b>DTBXS912FNMNG</b>	12	(12) Neutrik® NC3FD-L-1-B Female XLRs (1) Gepco Male G37MP DT12 Multi-pin Connector	4.5" High x 5.25" Wide x 9" Long (11.4 cm High x 13.3 cm Wide x 22.9 cm Long)	1/8" Extruded Aluminum, Black Anodized	Wired "straight through" from XLRs to DT12. Ground lifts or transformer isolation available as a custom option.
<b>Feed Through DT12 Breakout Box</b>					
<i>Male Multi-Pin to 12 Female XLRs with Multi-Pin Feedthrough</i>					
<b>DTBXS912FNMFG</b>	12	(12) Neutrik® NC3FD-L-1-B Female XLRs (1) Gepco Male G37MP DT12 Multi-pin Connector (1) Gepco Female G37FP DT12 Multi-pin Connector	4.5" High x 5.25" Wide x 9" Long (11.4 cm High x 13.3 cm Wide x 22.9 cm Long)	1/8" Extruded Aluminum, Black Anodized	Wired "straight through" from XLRs to DT12. Ground lifts or transformer isolation available as a custom option.
<b>Feed Through/XLR Split DT12 Breakout Box</b>					
<i>Male Multi-Pin to 12 Female XLRs with Male XLR-Split and Multi-Pin Feedthrough</i>					
<b>DTBXS1624FYMFG</b>	12	(12) Neutrik® NC3FD-L-1-B Female XLRs (12) Neutrik® NC3MD-L-1-B Male XLRs (1) Gepco Male G37MP DT12 Multi-pin Connector (1) Gepco Female G37FP DT12 Multi-pin Connector	4.5" High x 5.25" Wide x 16" Long (11.4 cm High x 13.3 cm Wide x 40.6 cm Long)	1/8" Extruded Aluminum, Black Anodized	Wired "straight through" from XLRs to DT12. Ground lifts or transformer isolation available as a custom option.

### DT12 Snake

See pages 6 and 10 for DT12 Snake Assemblies.



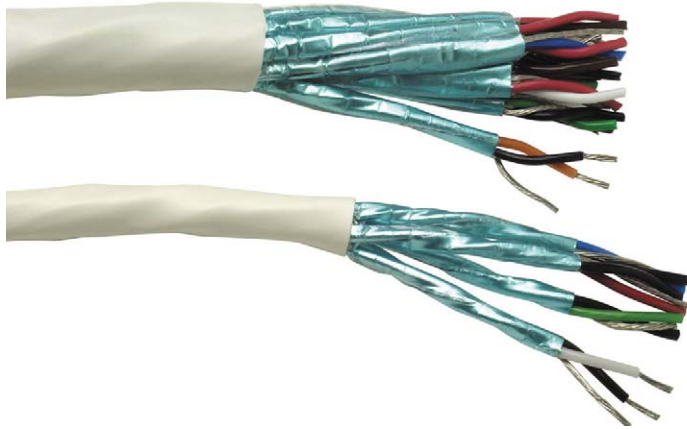
### DT12 Fanout

See page 21 for DT12 Fanout Assemblies.



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## Multi-Pair: Plenum



### Features & Benefits

- Low Attenuation
- Halar® Dielectric
- Individual Pair Shields
- Plenum PVC Master Jacket
- CMP Plenum Rated

### Applications

- Microphone or Line Level Balanced Analog Audio
- Permanent Installation in Plenum Air Spaces

Designed for installation in plenum air spaces, the Gepco® Brand plenum multi-pair audio cable features an outer plenum PVC jacket that is more flexible and easier to strip than other high-temperature plenum compounds. By utilizing Halar® for the insulating dielectric, which has a lower constant than standard plenum PVC, the capacitance of the plenum multi-pair series is similar to the non-plenum GA series. Pairs are individually shielded and isolated, and the conductors of each pair are color coded for channel identification.

#### Mechanical Specifications (Series)

Conductors	Insulation	Insulation Color Code	Pair Shield	Pair Drain	Master Jacket	UL Type
22 AWG (7x30) Stranded TC	Halar®, 0.010" (0.254 mm) Wall	Varies for Each Pair, (See Color Code Chart 2, Page 142)	100% Foil, Mylar® Side Out (Pairs Are Isolated)	22 AWG (7x30) Stranded TC	Plenum PVC, White	CMP

#### Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Approx. Weight
6604HS	4	0.285" (7.24 mm)	47 lbs/Mft (70 kg/km)
6606HS	6	0.345" (8.76 mm)	72 lbs/Mft (107 kg/km)
6608HS	8	0.385" (9.78 mm)	98 lbs/Mft (146 kg/km)
6612HS	12	0.475" (12.1 mm)	145 lbs/Mft (216 kg/km)

#### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
28 pF/ft Between Conductors, 52 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft

## Two-Pair Shielded



Ideal for general purpose data or machine control applications, the 6600 series features two shielded twisted-pairs under a single round jacket with a reduced overall cable diameter. Easy to terminate, each pair is individually shielded, but electrically in common, and shares a single finned-copper drain wire. Insulation in the 6600 is a high-grade polyethylene that provides both improved electrical and temperature characteristics compared to PVC.

### Features & Benefits

- Standard Capacitance
- Polyethylene or Halar® Dielectric
- Individual Pair Shields
- Common Drain Wire
- CM or Plenum CMP Versions

### Applications

- Data or Two-Pair Audio
- Machine Control

Mechanical Specifications (Individual)									
Part #	# of Pairs	Nominal OD	Conductors	Insulation/Color Code	Shield	Common Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
6600	2	0.173" (4.39 mm)	22 AWG (7x30) Stranded TC	PE, 0.008" (0.203 mm) Wall/ Red & Black, White & Green	100% Foil (Each Pair)	24 AWG (7x32) Stranded TC	PVC, Black or Gray	CM	21 lbs/Mft (31 kg/km)
	Audio/Control Two-Pair								
6600HS	2	0.178" (4.52 mm)	22 AWG (7x30) Stranded TC	Halar®, 0.011" (0.279 mm) Wall/ Red & Black, White & Green	100% Foil (Each Pair)	24 AWG (7x32) Stranded TC	Plenum PVC, White	CMP	22 lbs/Mft (33 kg/km)
	Audio/Control Two-Pair: Plenum								

Electrical Specifications			
Part #	Capacitance	Cond. DCR	Drain DCR
6600	29 pF/ft Between Conductors, 53 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	23.8 Ω/Mft
6600HS	27 pF/ft Between Conductors, 50 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	23.8 Ω/Mft

## High-Grade Line Level Audio



Gepco® Brand high-grade line level audio cable is an economical option for permanent installation in conduit, walls or ceilings. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. For added noise rejection and suppression, the conductors are shielded with a durable 100% foil/Mylar® and tinned copper drain wire. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit.

### Features & Benefits

- Economical Construction
- Bare Copper Conductors
- PVC Insulation
- Foil Shield with Drain Wire
- 12 Through 22 AWG Versions
- UL Rated

### Applications

- General Purpose Audio
- Control

Mechanical Specifications									
Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SSS202R	2	0.142" (3.61 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	15 lbs/Mft (22 kg/km)
	20 AWG High-Grade Line Level Audio Cable: Riser								
SSS202P	2	0.139" (3.53 mm)	20 (7x28) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	20 lbs/Mft (30 kg/km)
	20 AWG High-Grade Line Level Audio Cable: Plenum								
SSS222R	2	0.125" (3.18 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CMR	11 lbs/Mft (16 kg/km)
	22 AWG High-Grade Line Level Audio Cable: Riser								
SSS222P	2	0.128" (3.25 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	24 AWG (7x32) Stranded TC	PVC, Natural (Gray by Request)	CMR	12 lbs/Mft (18 kg/km)
	22 AWG High-Grade Line Level Audio Cable: Plenum								

Electrical Specifications		
Part #	Capacitance	Cond. DCR
SSS202R	53.2 pF/ft Between Conductors, 95.7 pF/ft Between One Conductor and Other Tied to Shield	10.5 Ω/Mft
SSS202P	50.9 pF/ft Between Conductors, 91.6 pF/ft Between One Conductor and Other Tied to Shield	10.5 Ω/Mft
SSS222R	44.6 pF/ft Between Conductors, 80.2 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft
SSS222P	45.6 pF/ft Between Conductors, 82.0 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft

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## Single- &amp; Dual-Pair: 22 AWG



The industry-standard for balanced audio cable for permanent installation, the Gepco® Brand 22 AWG single- and dual-pair audio cables feature stranded tinned-copper conductors that are easy to solder or punch-down. The non-plenum products feature a high-grade polyethylene dielectric that is used to minimize high-frequency attenuation. Excellent process control and tight pair twisting achieve superior noise rejection. The 22 AWG conductors offer the lowest DCR available in any Gepco Brand single-pair product, and the foil shield with same gauge drain wire facilitates quick shield termination. The Gepco Brand 22 AWG single- and dual-pair audio cables are ideal for punch-down, rack wiring and extended-distance runs of mic level signals.

## Features &amp; Benefits

- Low Attenuation
- Low Crosstalk
- Easy to Terminate
- Polyethylene or Halar® Dielectric
- Easy-Strip, Bonded Foil Shield (EZ Versions)
- CMR Riser or CMP Plenum Rated

## Applications

- Microphone or Line Level Balanced Analog Audio
- Patchbay, Rack or Console Permanent Installation Wiring
- Ideal for Extended-Distance Runs

## Mechanical Specifications (Series)

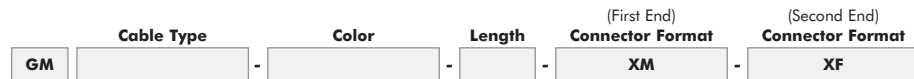
Conductors	Drain Wire
22 AWG (7x30) Stranded TC	22 AWG (7x30) Stranded TC

## Mechanical Specifications (Individual)

Part #	# of Pairs	Nominal OD	Insulation/Color Code	Shield	Jacket	Jacket Colors	UL Type	Approx. Weight
<b>61801EZ</b>	1	0.138" (3.51 mm)	PE, 0.008" (0.203 mm) Wall/ Red & Black	100% Foil (Bonded)	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	CMR	15 lbs/Mft (22 kg/km)
<i>Standard Single-Pair: Easy Strip</i>								
<b>D61801EZGF</b>	2	0.140" x 0.290" (3.56 mm x 7.37 mm)	PE, 0.008" (0.203 mm) Wall/ Red & Black	100% Foil (Bonded)	GEP-FLEX TPE	Blue with Red Stripe	—	27 lbs/Mft (40 kg/km)
<i>Flexible Dual-Pair: Easy Strip</i>								
<b>61801HS</b>	1	0.134" (3.40 mm)	Halar®, 0.010" (0.254 mm) Wall/ Red & Black	100% Foil	Plenum PVC	White	CMP 75°C	13 lbs/Mft (19 kg/km)
<i>Plenum Single-Pair</i>								

## Electrical Specifications

Part #	Capacitance	Cond. DCR	Drain DCR
61801	26 pF/ft Between Conductors, 48 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft
61801EZ / D61801EZGF	34 pF/ft Between Conductors, 62 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft
61801HS	28 pF/ft Between Conductors, 52 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft



**C17** = 61801EZ  
**C17P** = 61801HS  
**T4** = D61801EZGF

\*No color designation necessary for 61801HS (White) and D61801EZGF (Blue with Red Stripe).

**0** = Black  
**1** = Brown  
**2** = Red  
**3** = Orange  
**4** = Yellow  
**5** = Green  
**6** = Blue  
**7** = Violet  
**8** = Gray  
**9** = White

In Feet

**XM** = Neutrik® Black & Gold Male XLR NC3MX-B  
**XF** = Neutrik® Black & Gold Female XLR NC3FX-B

\*1/4", D-Sub and EDAC connector options also available; please consult factory for details.

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## Single- & Dual-Pair: 24 AWG



### Features & Benefits

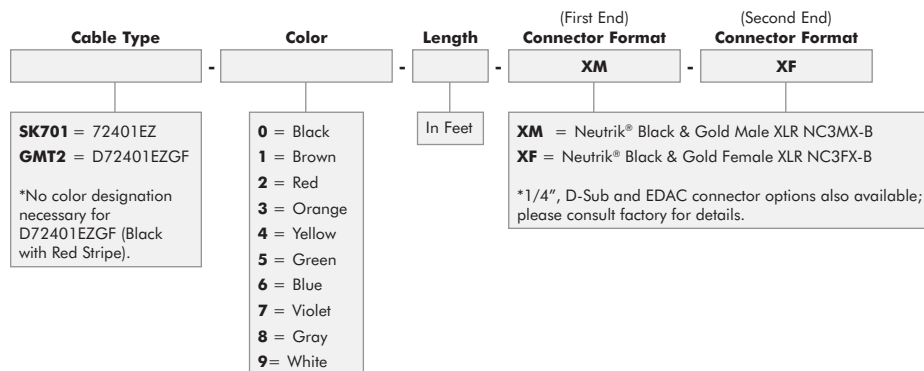
- Thin Profile
- Low Attenuation
- Low Crosstalk
- Easy to Terminate
- Polyethylene Dielectric
- Easy-Strip, Bonded Foil Shield
- CM Rated

### Applications

- Microphone or Line Level Balanced Analog Audio
- Patchbay, Rack or Console Permanent Installation Wiring

For applications that require a reduced diameter and/or weight, Gepco® Brand 24 AWG thin profile, balanced audio cables are ideal for patchbay wiring or mobile production trucks. Stranded tinned-copper conductors are easy to solder or punch-down. A high-quality polyethylene insulation minimizes cable capacitance in conjunction with excellent process control and tight twisting for superior noise rejection. A foil shield with same gauge drain wire facilitates quick shield termination, and the 24 AWG conductors are easier to terminate while still maintaining low DCR.

Mechanical Specifications (Series)								
Conductors					Drain Wire			
24 AWG (7x32) Stranded TC					24 AWG (7x32) Stranded TC			
Mechanical Specifications (Individual)								
Part #	# of Pairs	Nominal OD	Insulation/Color Code	Shield	Jacket	Jacket Colors	UL Type	Approx. Weight
<b>72401EZ</b>	1	0.115" (2.92 mm)	PE, 0.008" (0.203 mm) Wall/ Red & Black	100% Foil (Bonded)	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	CM	10 lbs/Mft (15 kg/km)
<i>Thin Profile Single-Pair: Easy Strip</i>								
<b>D72401EZGF</b>	2	0.130" x 0.265" (3.30 mm x 6.73 mm)	PE, 0.008" (0.203 mm) Wall/ Red & Black	100% Foil (Bonded)	GEP-FLEX TPE	Black with Red Stripe	CM	22 lbs/Mft (33 kg/km)
<i>Thin Profile Dual-Pair: Extra Flexible &amp; Easy Strip</i>								
Electrical Specifications								
Capacitance				Cond. DCR		Drain DCR		
28 pF/ft Between Conductors, 51 pF/ft Between One Conductor and Other Tied to Shield				23.8 Ω/Mft		23.8 Ω/Mft		



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## X-Band Single-Pair



The Gepco® Brand X-Band single-pair series is an ultra-flexible, sonically transparent, low-noise and durable balanced audio cable for use in critical recording studio facilities or live sound venues. X-Band single-pair is both extremely flexible and flaccid, yet maintains a high degree of durability. Each oxygen-free copper conductor is insulated with a unique low k constant, foam polypropylene dielectric that lowers the capacitance and extends the bandwidth of the cable. Low noise is achieved through tight and precision pair twisting with a durable 95% braid shield or dual (foil and braid) shield. In addition, X-Band remains easy to prep and terminate. Both the insulation and jacket are easy to score, break and strip; the tight weave braided shield is easy to trim and terminate via the drain wire.

### Features & Benefits

- Ultra-Flexible
- Oxygen-Free, Finely Stranded Conductors
- High-Bandwidth Dielectric
- Braid Shield or Dual (Foil & Braid) Shield
- Superior Noise Rejection
- Easy to Terminate
- Drain Wire for Quick Ground Termination

### Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect, Rack or Patchbay Wiring

### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation/ Color Code	Shield	Drain Wire	Jacket	Approx. Weight
XB401	1	0.145" (3.68 mm)	24 AWG (40x40) Stranded Oxygen-Free BC	Foam Polypropylene, 0.012" (0.305 mm) Wall/ One White, One Black	95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC	15 lbs/Mft (22 kg/km)
XB401FB	1	0.148" (3.76 mm)	24 AWG (40x40) Stranded Oxygen-Free BC	Foam Polypropylene, 0.012" (0.305 mm) Wall/ One White, One Black	100% Foil, 95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC	15 lbs/Mft (22 kg/km)

### Electrical Specifications

Capacitance	Cond. DCR	Shield & Drain DCR
17.5 pF/ft Between Conductors, 31 pF/ft Between One Conductor and Other Tied to Shield	27.5 Ω/Mft	6 Ω/Mft

## Guitar/Instrument: Low Capacitance



An extra-flexible, low-noise and low-loss guitar or unbalanced instrument cable, the GLC20 features a large 20 AWG conductor with a 50 ohm polyethylene dielectric which together lower both the DC and capacitive loss of the cable. As a result, pickup loading is minimized and high frequency attenuation, which can dull the signal and transient response, is significantly reduced. For RF/EMI noise rejection, the GLC20 has a 95% copper braid with a semi-conductive PVC layer that minimizes triboelectric handling noise. The outer jacket is extruded from a matte PVC compound that is both extra-flexible and rugged.

### Features & Benefits

- Low Attenuation
- Extra Flexible
- Heavy-Gauge Conductor
- Polyethylene Dielectric
- Noise Reducing PVC
- Full-Copper Braid Shield
- Matte PVC Flexible Master Jacket

### Applications

Line or Instrument Level Unbalanced Analog Audio

Mechanical Specifications							
Part #	# of Cond.	Nominal OD	Conductors	Insulation	Shield	Jacket (Type, Colors)	Approx. Weight
GLC20	1	0.265" (6.73 mm)	20 AWG (41x36) Stranded BC	PE, 0.040" (1.02 mm) Wall	Semi-Conductive PVC, 95% BC Braid	Flexible Matte PVC, Black	43 lbs/Mft (64 kg/km)

Electrical Specifications		
Impedance	Capacitance	Cond. DCR
50 Ω	32 pF/ft	10.0 Ω/Mft

## Guitar/Instrument: X-Band Dual Shield



The first unbalanced cable in the X-Band series, the XB20UB offers users X-Band performance in guitar and instrument applications. The XB20UB features a 20 AWG, oxygen-free copper conductor for maximum conductivity and corrosion resistance. To provide exceptional EMI/RF rejection and low triboelectric handling noise, the XB20UB has two densely stranded 95% copper braid shields combined with a semi-conductive PVC layer. As with all X-Band cables, the XB20UB has a data-grade, foam dielectric that significantly reduces the capacitance of the cable. The outer jacket is constructed from Gepco® Brand G-Flex PVC compound that is exceptionally flexible, easy to strip and abrasion-resistant.

### Features & Benefits

- Ultra-Flexible
- Oxygen-Free, Heavy-Gauge Conductor
- 95% Double-Braid Shield
- Noise Reducing PVC
- Low Capacitance
- Superior Noise Rejection
- Easy to Terminate

### Applications

Line or Instrument Level Unbalanced Analog Audio

Mechanical Specifications							
Part #	# of Cond.	Nominal OD	Conductors	Insulation	Shield	Jacket (Type, Colors)	Approx. Weight
XB20UB	1	0.228" (5.79 mm)	20 AWG (41x36) Stranded OFC	Foam PE, 0.032" (0.813 mm) Wall	Semi-Conductive PVC, Double 95% TC Braid	Flexible Matte PVC, Black	41 lbs/Mft (61 kg/km)

Electrical Specifications		
Impedance	Capacitance	Cond. DCR
50 Ω	22.3 pF/ft	10.37 Ω/Mft

Guitar assemblies available upon request.

## Microphone: Heavy-Duty



The Gepco® Brand heavy-duty microphone cable features an extra-tough jacket and oversized heavy-duty construction for exceptional ruggedness and durability. A tight-angled, full-coverage braid, thick insulation wall and large 20 AWG conductors give the M1042 improved flex-life, while providing excellent noise rejection and low attenuation. Mutual capacitance is lower than typical microphone cable to reduce the high frequency roll-off that occurs in long runs of mic level signals. The M1042 is ideal for sound reinforcement and remote production in hostile environments.

### Features & Benefits

- Durable & Rugged, yet Flexible
- Extra-Low Attenuation
- Heavy-Gauge Conductors
- Polyethylene Dielectric
- Full-Copper Braid Shield
- Drain Wire for Quick Shield Termination
- All-Weather TPE Master Jacket

### Applications

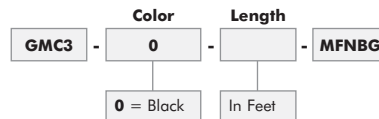
- Microphone or Line Level Balanced Analog Audio
- Portable Microphone Cables
- Hostile Environments
- Ideal for Extended-Distance Runs

### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	Approx. Weight
M1042	1	0.255" (6.48 mm)	20 AWG (26x34) Stranded TC	PE, 0.020" (0.508 mm) Wall/ Red & Black	95% TC Braid	22 AWG (19x34) Stranded TC	TPE, Black	40 lbs/Mft (60 kg/km)

### Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
20 pF/ft Between Conductors, 37 pF/ft Between One Conductor and Other Tied to Shield	10.1 Ω/Mft	16.1 Ω/Mft



### Connectors

Neutrik® Black & Gold Male XLRs, Male NC3MX-B and Female NC3FX-B

## Microphone: X-Band



The Gepco® Brand extra-flexible, high-bandwidth X-Band microphone cable series has been specifically designed for use in critical recording studio facilities or live sound venues. The X-Band microphone series features an extended frequency response and exceptional RF/EMI noise rejection. The bandwidth and rejection characteristics are achieved through precision pair twisting and a video-grade foam dielectric that significantly reduces the capacitance. Conductors are finely stranded, oxygen-free copper to maximize conductivity and protect against corrosion. For shielding and additional noise rejection, each pair is shielded with a dense 95% TC braid or dual braid.

### Features & Benefits

- Extra Flexible
- Wide Bandwidth
- 22 AWG Oxygen-Free Conductors
- Data-Grade, Gas/Polymer Dielectric
- Dense 95% Copper Braid(s)
- Exceptional RF/EMI & Common-Mode Noise Rejection

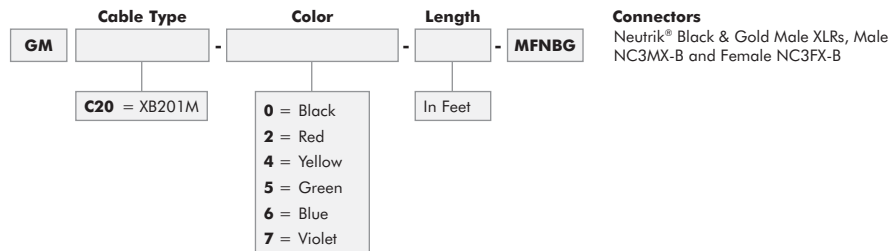
### Applications

- Microphone or Line Level Balanced Analog Audio
- High-Bandwidth Audio Interconnects
- Portable Stage or Studio Microphone Cable

Mechanical Specifications									
Part #	# of Pairs	Nominal OD	Conductors	Insulation/Color Code	Shield	Jacket	Jacket Colors	Approx. Weight	
XB201M	1	0.240" (6.10 mm)	22 AWG (41x38) Stranded Oxygen-Free BC	Foam Polypropylene, 0.015" (0.381 mm) Wall/White & Black	95% TC Braid	Flexible Matte PVC	Black, Red, Yellow, Green, Blue, Violet	38 lbs/Mft (57 kg/km)	
								<i>X-Band 22 AWG Microphone Cable</i>	
XB201DBM	1	0.265" (6.73 mm)	22 AWG (41x38) Stranded Oxygen-Free BC	Foam Polypropylene, 0.015" (0.381 mm) Wall/White & Black	Dual Braid (95% TC/95% TC)	Flexible Matte PVC	Black	40 lbs/Mft (60 kg/km)	
								<i>X-Band 22 AWG Microphone Cable: Dual Braid</i>	

Electrical Specifications	
Capacitance	Cond. DCR
17 pF/ft Between Conductors, 30.6 pF/ft Between One Conductor and Other Tied to Shield	10.5 Ω/Mft



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## Microphone: Quad Star



### Features & Benefits

- Improved Noise & Hum Rejection
- Extra Flexible
- Increased Flex-Life
- Polyethylene Dielectric
- Full-Copper Braid Shield
- Drain Wire for Quick Shield Termination (MP1201 Only)
- Matte PVC Flexible Master Jacket

### Applications

- Microphone or Line Level Balanced Analog Audio
- Portable Microphone Cables
- Ideal for Use in High EMI Environments
- Long-Frame or Bantam Patchcords

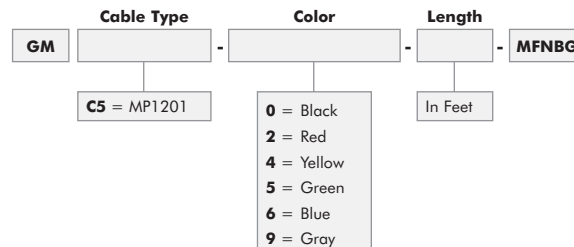
The MP1201 and MM1024 microphone cables use the industry-proven, quad-star design and tight-angled, full-coverage braid shield for maximum low-frequency EMI noise rejection. Four conductors form a "double balanced" system that minimizes the loop area and reduces noise induction from external sources such as AC lines and dimmer packs. As a result, this series is ideal for applications where high EMI is present or where a redundant pin-to-pin connection is desired for improved flex-life.

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductors	Insulation/Color Code	Shield	Drain Wire	Jacket	Jacket Colors	Approx. Weight
<b>MP1201</b>	4	0.240" (6.10 mm)	24 AWG (41x40) Stranded BC	PE, 0.016" (0.406 mm) Wall/ White & Black, Red & Blue	95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC	Black, Red, Yellow, Green, Blue, Gray	38 lbs/Mft (57 kg/km)
<i>Standard Quad Star</i>									
<b>MM1024</b>	4	0.193" (4.90 mm)	26 AWG (30x40) Stranded TC	PE, 0.012" (0.305 mm) Wall/ White & Black, Red & Blue	95% TC Braid	None	Flexible Matte PVC	Black (Other Colors May Also Be Available)	26 lbs/Mft (39 kg/km)
<i>Thin Profile Quad Star</i>									

### Electrical Specifications

Part #	Capacitance	Cond. DCR	Drain DCR
MP1201	39 pF/ft Between Conductors, 57 pF/ft Between One Conductor and Other Tied to Shield	25.6 Ω/Mft	25.6 Ω/Mft
MM1024	32 pF/ft Between Conductors, 54 pF/ft Between One Conductor and Other Tied to Shield	34.4 Ω/Mft	—



**Connectors**  
Neutrik® Black & Gold Male XLRs, Male NC3MX-B and Female NC3FX-B

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## Microphone: Thin Profile



The MP1022 is a thin profile, easy-to-terminate microphone cable for applications where reduced size and weight are required. The reduced diameter, matte PVC jacket and tight-angled braid shield make MP1022 both extremely flexible and easy to handle. The MP1022 microphone cable is ideal for mobile production trucks, multi-pin to XLR breakout cables, bantam or long-frame patchcords and short distance balanced mic or line level equipment interconnect.

### Features & Benefits

- Thin Profile
- Light Weight
- Low Attenuation
- Extra Flexible
- Polyethylene Dielectric
- Full-Copper Braid Shield
- Drain Wire for Quick Shield Termination
- Matte PVC Flexible Master Jacket

### Applications

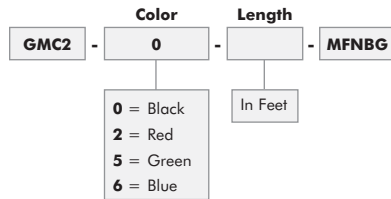
- Microphone or Line Level Balanced Analog Audio
- Portable Microphone Cables
- Balanced Equipment Interconnect
- Long-Frame or Bantam Patchcords

Mechanical Specifications										
Part #	# of Pairs	Nominal OD	Conductors	Insulation/Color Code	Shield	Drain Wire	Jacket	Jacket Colors	Approx. Weight	
MP1022	1	0.194" (4.93 mm)	24 AWG (41x40) Stranded TC	PE, 0.013" (0.330 mm) Wall/ White & Black	95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC	Black, Red, Green, Blue	25 lbs/Mft (37 kg/km)	

Electrical Specifications		
Capacitance	Cond. DCR	Drain DCR
20 pF/ft Between Conductors, 37 pF/ft Between One Conductor and Other Tied to Shield	25.6 Ω/Mft	25.6 Ω/Mft

## Microphone



**Connectors**  
 Neutrik® Black & Gold Male XLRs, Male NC3MX-B and Female NC3FX-B

## DT12 Fanout



**DTFAN36F12MG**

**Connectors**  
 Gepco® Brand All-Metal 37-Pin Circular DT12 (1) G37M & (12) Neutrik® Black & Gold Female XLRs (NC3FX-B)

**DTFAN36M12FG**

**Connectors**  
 Gepco® Brand All-Metal 37-Pin Circular DT12 (1) G37M & (12) Neutrik® Black & Gold Female XLRs (NC3FX-B)

Neutrik is a registered trademark of Neutrik AG.

## Speaker: High Definition



The Gepco® Brand high-purity, densely stranded, oxygen-free speaker cable is designed for high-resolution control room monitoring applications. Each conductor is constructed from 423 or 259 strands of 99.999% oxygen-free bare copper. The high conductivity of these strands minimizes the series resistance of the cable, thereby reducing the power loss and improving amplifier-to-speaker dampening performance. These characteristics not only improve the efficiency of the monitoring system, but also improve the low-frequency and imaging response compared to other cable types. The outer jacket is constructed of a transparent PVC compound that is both flexible and easy to terminate.

### Features & Benefits

- Low Loss
- Extra Flexible
- Heavy-Gauge Conductors
- Densely Stranded, Oxygen-Free Copper
- Convenient Zip Construction
- Transparent Flexible PVC Jacket

### Applications

- Speaker-to-Amplifier Interconnect
- Control Room Monitoring
- Home Theater

#### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductors	Insulation	Conductor Identification	Approx. Weight
GSC102OFC	2	0.225" x 0.455" (5.72 mm x 11.56 mm)	10 AWG (423x36) Stranded Oxygen-Free BC	Transparent PVC, 0.048" (1.22 mm) Wall	One Leg Legend, One Leg Plain	88 lbs/Mft (131 kg/km)
GSC122OFC	2	0.182" x 0.370" (4.62 mm x 9.40 mm)	12 AWG (259x36) Stranded Oxygen-Free BC	Transparent PVC, 0.040" (1.02 mm) Wall	One Leg Legend, One Leg Plain	65 lbs/Mft (97 kg/km)

#### Electrical Specifications

Part #	Cond. DCR
GSC102OFC	1.0 Ω/Mft
GSC122OFC	1.6 Ω/Mft

## Speaker: High-Bandwidth HBW Series



The HBW series of high-bandwidth speaker cables offers exceptional stereo imaging and transient response, wide bandwidth and extra flexibility, all in an easy-to-terminate design. The HBW series is available in 12 or 14 AWG types in two- or four-conductor versions. All conductors consist of high-density, oxygen-free copper to provide maximum conductivity and power transfer. To further reduce the attenuation and increase the bandwidth of the cable, each conductor is coated with a low-loss, premium-grade, polyethylene dielectric compound. For the outer jacket, the HBW features a round and extra-flexible TPE matte jacket.

### Features & Benefits

- 99.999% OFC Copper
- Extended Frequency Response
- Extra-Flexible & Round Jacket
- Two- & Four-Conductor Versions
- UL Rated for Permanent Installation

### Applications

- Speaker Level Analog Audio
- Permanent Installation
- High-Resolution Monitoring

#### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Jacket (Type, Colors)	UL Type	Approx. Weight
142HBW	2	0.350" (8.89 mm)	14 AWG (3x56/36) Oxygen-Free BC	PE, 0.020" (0.508 mm)/ Black & Red	TPE, Black	CL3	68 lbs/Mft (101 kg/km)
			14 AWG x 2 High-Bandwidth OFC Speaker Cable				
144HBW	4	0.410" (10.4 mm)	14 AWG (3x56/36) Oxygen-Free BC	PE, 0.020" (0.508 mm)/ Black, White, Red, Green	TPE, Black	CL3	45 lbs/Mft (67 kg/km)
			14 AWG x 4 High-Bandwidth OFC Speaker Cable				
122HBW	2	0.390" (9.90 mm)	12 AWG (3x87/36) Oxygen-Free BC	PE, 0.020" (0.508 mm)/ Black & Red	TPE, Black	CL3	93 lbs/Mft (139 kg/km)
			12 AWG x 2 High-Bandwidth OFC Speaker Cable				
124HBW	4	0.480" (12.2 mm)	12 AWG (3x87/36) Oxygen-Free BC	PE, 0.020" (0.508 mm)/ Black, White, Red, Green	TPE, Black	CL3	169 lbs/Mft (252 kg/km)
			12 AWG x 4 High-Bandwidth OFC Speaker Cable				

#### Electrical Specifications

Part #	Cond. DCR	Capacitance
142HBW/144HBW	2.5 Ω/Mft	20 pF/ft
122HBW/124HBW	1.5 Ω/Mft	20 pF/ft



## Speaker: Portable Multi-Conductor



### Features & Benefits

- Easy-to-Handle Round Construction
- Low Loss
- Extra Flexible
- Heavy-Gauge Conductors
- All-Weather TPE Master Jacket

### Applications

- Speaker-to-Amplifier Interconnect
- Portable Speaker Cables
- Ideal for Use with Neutrik® speakON® Connectors

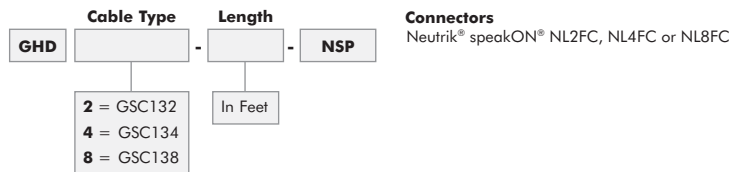
In a flexible and portable round construction, the Gepco® Brand multi-conductor, low-loss speaker cable features densely stranded 13 AWG conductors that achieve low series resistance and excellent flex-life. Multiple conductors allow for bi-amping or multiple speaker cabinets to be interconnected by one cable. Durable and flexible in low temperatures, the all-weather TPE jacket makes this series well suited for sound reinforcement applications or use in hostile environments. This series is ideal for termination with Neutrik® speakON® type connectors.

Mechanical Specifications (Series)				
Conductors	Insulation	Jacket (Type, Colors)		
13 AWG (52x30) Stranded BC	PVC, 0.024" (0.610 mm)	TPE, Black		
Mechanical Specifications (Individual)				
Part #	# of Cond.	Nominal OD	Conductor Color Code	Approx. Weight
GSC132	2	0.350" (8.89 mm)	White & Black	85 lbs/Mft (127 kg/km)
GSC134	4	0.420" (10.67 mm)	White, Black, Green, Red	130 lbs/Mft (194 kg/km)
GSC138	8	0.580" (14.73 mm)	White, Black, Green, Red, Brown, Blue, Orange, Yellow	259 lbs/Mft (386 kg/km)
Electrical Specifications				
<b>Cond. DCR</b>				
2.2 Ω/Mft				

### 1/4" Speaker



### SpeakON® Speaker



Neutrik and speakON are registered trademarks of Neutrik AG. Switchcraft is a registered trademark of Switchcraft, Inc.

## Unshielded Indoor/Outdoor Direct Burial Speaker: High-Resolution



Gepco® Brand direct burial high-resolution speaker cables feature 99.99% oxygen-free copper conductors for maximum conductivity and power transfer. Designed for both indoor and outdoor use, the jacket is both sunlight-resistant and suitable for direct burial. Available in 14 and 18 AWG and in two- and four-conductor versions, these speaker cables are UL rated for permanent installation.

### Features & Benefits

- 99.99% Oxygen-Free Copper (OFC) Conductors
- Wide Frequency Response
- Direct Burial and Sunlight-Resistant
- Two- and Four-Conductor Versions

### Applications

- Direct Burial
- Permanent Installation

#### Mechanical Specifications

Part #	# of Conductors	Nominal OD	Conductor (Type, DCR)	Insulation (Type, Color Code)	Jacket (Type, Color)	UL Type	Approx. Weight
SSPUB162	2	0.236" (5.99 mm)	16 AWG (65x34) Oxygen-Free BC	PVC, 0.010" (0.25 mm) Black & Red	PVC, White, Black	CL3/PLTC or CM	37 lbs/Mft (55 kg/km)
SSPUB164	4	0.272" (6.91 mm)	16 AWG (65x34) Oxygen-Free BC	PVC, 0.010" (0.25 mm) Black, White, Red, Green	PVC, Teal	CL3/PLTC or CM	61 lbs/Mft (91 kg/km)
SSPUB142	2	0.268" (6.81 mm)	14 AWG (105x34) Oxygen-Free BC	PVC, 0.012" (0.30 mm) Black & Red	PVC, White, Violet, Black	CL3/PLTC	52 lbs/Mft (77 kg/km)
SSPUB144	4	0.312" (7.92 mm)	14 AWG (105x34) Oxygen-Free BC	PVC, 0.012" (0.30 mm) Black, White, Red, Green	PVC, Blue	CL3/PLTC	89 lbs/Mft (133 kg/km)

#### Electrical Specifications

Part #	Cond. DCR
SSPUB162, SSPUB164	4.0 Ω/Mft
SSPUB142, SSPUB144	2.5 Ω/Mft

## Unshielded Indoor/Outdoor Direct Burial Speaker



Gepco® Brand direct burial speaker cables feature high-strand bare copper conductors for maximum conductivity and power transfer. Designed for both indoor and outdoor use, the jacket is both sunlight-resistant and suitable for direct burial. Available in 12 to 18 AWG and in two- and four-conductor versions, these speaker cables are UL rated for permanent installation.

### Features & Benefits

- High-Strand Bare Copper
- Wide Frequency Response
- Direct Burial and Sunlight-Resistant

### Applications

- Direct Burial
- Permanent Installation

#### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor (Type, DCR)	Insulation (Type, Color Code)	Jacket (Type, Color)	UL Type	Approx. Weight
SSUB162	2	0.222" (5.64 mm)	16 AWG (65x34) Stranded BC	PVC, 0.010" (0.254 mm), Red & Black	PVC, White or Black	CM & CL3	37 lbs/Mft (55 kg/km)
SSUB164	4	0.250" (6.35 mm)	16 AWG (65x34) Stranded BC	PVC, 0.009" (0.229 mm), Black, White, Red, Green	PVC, White or Black	CL3	61 lbs/Mft (91 kg/km)
SSUB142	2	0.252" (6.40 mm)	14 AWG (41x30) Stranded BC	PVC, 0.011" (0.279 mm), Black & Red	PVC, White or Black	CL3	52 lbs/Mft (77 kg/km)
SSUB144	4	0.297" (7.54 mm)	14 AWG (41x30) Stranded BC	PVC, 0.012" (0.305 mm), Black, White, Red, Green	PVC, White or Black	CL3	89 lbs/Mft (133 kg/km)
SSUB122	2	0.306" (7.77 mm)	12 AWG (105x32) Stranded BC	PVC, 0.011" (0.279 mm), Black & Red	PVC, White or Black	CL3	66 lbs/Mft (98 kg/km)
SSUB124	4	0.364" (9.25 mm)	12 AWG (105x32) Stranded BC	PVC, 0.011" (0.279 mm), Black, White, Red, Green	PVC, White or Black	CL3	120 lbs/Mft (179 kg/km)

#### Electrical Specifications

Part #	Cond. DCR
SSUB162, SSUB164	4.0 Ω/Mft
SSUB142, SSUB144	2.5 Ω/Mft
SSUB122, SSUB124	1.5 Ω/Mft

## Speaker: Permanent Installation, Unshielded



Gepeco® Brand permanent-installation speaker cable is made from only high-grade compounds and materials. Each conductor is constructed from tinned copper to protect against oxidization and improve cable termination. For non-plenum versions, the insulation is a premium-grade PVC compound with both exceptional electrical and mechanical characteristics, ensuring improved cable termination and better signal transfer. Available in 12 through 18 AWG, each version is manufactured in both UL rated plenum or non-plenum constructions and is ideal for permanent installation in conduit, walls or ceilings.

### Features & Benefits

- Easy to Install
- Premium PVC Insulation (Non-Plenum)
- Low-Friction, Easy-to-Install Jacket
- Tinned Copper Conductors
- Multiple Gauge Sizes Available
- UL Listed

### Applications

- Speaker Level Analog Audio
- Permanent Installation

Mechanical Specifications										
Part #	# of Pairs	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight	
1200	1	0.384" (9.75 mm)	12 AWG (19x25) Stranded TC	PVC, 0.031" (0.787 mm) Wall/ White & Black	—	—	PVC, Gray	PLTC	89 lbs/Mft (133 kg/km)	
									12 AWG Speaker Cable	
1200HS	1	0.270" (6.86 mm)	12 AWG (65x30) Stranded TC	Halar®, 0.008" (0.203 mm) Wall/ Red & Black	—	—	Plenum PVC, White	CL3P	87 lbs/Mft (130 kg/km)	
									12 AWG Speaker Cable: Plenum	
1400	1	0.336" (8.53 mm)	14 AWG (19x27) Stranded TC	PVC, 0.031" (0.787 mm) Wall/ White & Black	—	—	PVC, Gray	PLTC	66 lbs/Mft (98 kg/km)	
									14 AWG Speaker Cable	
1400HS	1	0.215" (5.46 mm)	14 AWG (41x30) Stranded TC	Halar®, 0.008" (0.203 mm) Wall/ Red & Black	—	—	Plenum PVC, White	CL2P	64 lbs/Mft (95 kg/km)	
									14 AWG Speaker Cable: Plenum	
1600	1	0.254" (6.45 mm)	16 AWG (19x29) Stranded TC	PVC, 0.016" (0.406 mm) Wall/ White & Black	—	—	PVC, Gray	PLTC	43 lbs/Mft (64 kg/km)	
									16 AWG Speaker Cable	
1600HS	1	0.180" (4.57 mm)	16 AWG (19x29) Stranded TC	Halar®, 0.008" (0.203 mm) Wall/ Red & Black	—	—	Plenum PVC, White	CMP	39 lbs/Mft (58 kg/km)	
									16 AWG Speaker Cable: Plenum	
1800	1	0.224" (5.69 mm)	18 AWG (7x26) Stranded TC	PVC, 0.016" (0.406 mm) Wall/ White & Black	—	—	PVC, Gray	CM	31 lbs/Mft (46 kg/km)	
									18 AWG Speaker Cable	
1800HS	1	0.160" (4.06 mm)	18 AWG (16x30) Stranded TC	Halar®, 0.007" (0.178 mm) Wall/ Red & Black	—	—	Plenum PVC, White	CMP	28 lbs/Mft (42 kg/km)	
									18 AWG Speaker Cable: Plenum	
Electrical Specifications										
Part #	Cond. DCR									
1200	1.8 Ω/Mft									
1200HS	1.7 Ω/Mft									
1400	2.8 Ω/Mft									
1400HS	2.7 Ω/Mft									
1600	4.5 Ω/Mft									
1600HS	4.5 Ω/Mft									
1800	6.0 Ω/Mft									
1800HS	6.7 Ω/Mft									

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## Speaker and Control: Unshielded Riser



Gepco® Brand unshielded speaker and control cable is an economical option for permanent installation in conduit, walls or ceilings. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand unshielded speaker and control cables are available in eight through 22 AWG.

### Features & Benefits

- Economical Construction
- Bare Copper Conductors
- PVC Insulation
- 8 Through 22 AWG Versions
- UL Rated

### Applications

- Speaker Interconnections
- General Purpose Audio
- Control

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
<b>SSU102R</b>	4	0.305" (7.75 mm)	10 AWG (65x28) Stranded BC	PVC, 0.012" (0.30 mm) Wall/ Black & Red	—	—	PVC, Gray	CL2R	78 lbs/Mft (116 kg/km)
<i>10 AWG Speaker Cable: Riser</i>									
<b>SSU122R</b>	2	0.252" (6.40 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/ Black & Red	—	—	PVC, Gray	CL3R	52 lbs/Mft (77 kg/km)
<b>SSU124R</b>	4	0.298" (7.57 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CL3R	99 lbs/Mft (148 kg/km)
<i>12 AWG Speaker and Control Cable: Riser</i>									
<b>SSU142R</b>	2	0.212" (5.38 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/ Black & Red	—	—	PVC, Gray	CL3R	34 lbs/Mft (51 kg/km)
<b>SSU144R</b>	4	0.247" (6.32 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CL3R	65 lbs/Mft (97 kg/km)
<i>14 AWG Speaker and Control Cable: Riser</i>									
<b>SSU162R</b>	2	0.178" (4.52 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/ Black & Red	—	—	PVC, Gray	CMR	24 lbs/Mft (36 kg/km)
<b>SSU164R</b>	4	0.210" (5.33 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CMR	43 lbs/Mft (64 kg/km)
<i>16 AWG Speaker and Control Cable: Riser</i>									
<b>SSU182R</b>	2	0.154" (3.91 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	—	—	PVC, Gray	CMR	17 lbs/Mft (25 kg/km)
<b>SSU184R</b>	4	0.180" (4.57 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CMR	29 lbs/Mft (43 kg/km)
<i>18 AWG Speaker and Control Cable: Riser</i>									
<b>SSU202R</b>	2	0.134" (3.40 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/ Black & Red	—	—	PVC, Gray	CMR	12 lbs/Mft (18 kg/km)
<b>SSU204R</b>	4	0.142" (3.61 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CMR	20 lbs/Mft (30 kg/km)
<i>20 AWG Speaker and Control Cable: Riser</i>									
<b>SSU222R</b>	2	0.144" (3.66 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	—	—	PVC, Gray	CMR	9 lbs/Mft (13 kg/km)
<b>SSU224R</b>	4	0.122" (3.10 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	—	—	PVC, Gray	CMR	15 lbs/Mft (22 kg/km)
<b>SSU226R</b>	6	0.165" (4.19 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White, Green, Brown & Black	—	—	PVC, Gray	CMR	22 lbs/Mft (33 kg/km)
<i>22 AWG Speaker and Control Cable: Riser</i>									

### Electrical Specifications

Part #	Cond. DCR
SSU102R	0.94 Ω/Mft
SSU122R, SSU124R	1.70 Ω/Mft
SSU142R, SSU144R	2.71 Ω/Mft
SSU162R, SSU164R	4.31 Ω/Mft
SSU182R, SSU184R	5.83 Ω/Mft
SSU202R, SSU204R	9.27 Ω/Mft
SSU222R, SSU224R, SSU226R	14.7 Ω/Mft

## Speaker and Control: Unshielded Plenum



Gepco® Brand unshielded speaker and control cable is an economical option for permanent installation in conduit, walls or ceilings. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand unshielded speaker and control cables are available in eight through 22 AWG.

### Features & Benefits

- Economical Construction
- Bare Copper Conductors
- PVC Insulation
- 8 Through 22 AWG Versions
- UL Rated

### Applications

- Speaker Interconnections
- General Purpose Audio
- Control

Mechanical Specifications									
Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SSU102P	4	0.305" (7.75 mm)	10 AWG (65x28) Stranded BC	PVC, 0.012" (0.30 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CL2P	81 lbs/Mft (121 kg/km)
SSU122P	2	0.252" (6.40 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CL3P	54 lbs/Mft (80 kg/km)
SSU124P	4	0.298" (7.57 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CL3P	103 lbs/Mft (153 kg/km)
SSU142P	2	0.212" (5.38 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CL3P	36 lbs/Mft (54 kg/km)
SSU144P	4	0.247" (6.32 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CL3P	67 lbs/Mft (100 kg/km)
SSU162P	2	0.174" (4.42 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CMP	25 lbs/Mft (37 kg/km)
SSU164P	4	0.205" (5.21 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CMP	44 lbs/Mft (66 kg/km)
SSU182P	2	0.156" (3.96 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CMP	18 lbs/Mft (27 kg/km)
SSU184P	4	0.180" (4.57 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CMP	31 lbs/Mft (46 kg/km)
SSU202P	2	0.134" (3.40 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CMP	13 lbs/Mft (19 kg/km)
SSU204P	4	0.156" (3.96 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CMP	22 lbs/Mft (33 kg/km)
SSU222P	2	0.120" (3.05 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/Black & Red	—	—	PVC, Natural (Gray by Request)	CMP	10 lbs/Mft (15 kg/km)
SSU224P	4	0.139" (3.53 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/Black, Red, White & Green	—	—	PVC, Natural (Gray by Request)	CMP	16 lbs/Mft (24 kg/km)
SSU226P	6	0.165" (4.19 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/Black, Red, White, Green, Brown & Black	—	—	PVC, Natural (Gray by Request)	CMP	22 lbs/Mft (33 kg/km)
Electrical Specifications									
Part #	Cond. DCR								
SSU102P	0.94 Ω/Mft								
SSU122P, SSU124P	1.70 Ω/Mft								
SSU142P, SSU144P	2.71 Ω/Mft								
SSU162P, SSU164P	4.31 Ω/Mft								
SSU182P, SSU184P	5.83 Ω/Mft								
SSU202P, SSU204P	9.27 Ω/Mft								
SSU224P, SSU226P	14.7 Ω/Mft								

## Speaker and Control: Shielded Riser



Gepeco® Brand shielded speaker and control cable is an economical option for permanent installation in conduit, walls or ceilings. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. For added noise rejection and suppression, the conductors are shielded with a durable 100% foil/Mylar® and tinned copper drain wire. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepeco Brand shielded speaker and control cables are available in 12 through 22 AWG.

### Features & Benefits

- Economical Construction
- Bare Copper Conductors
- PVC Insulation
- Foil Shield with Drain Wire
- 12 Through 22 AWG Versions
- UL Rated

### Applications

- Speaker Interconnections
- General Purpose Audio
- Control

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SSS122R	2	0.257" (6.53 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/ Black & Red	100% Foil	18 AWG (16x30) Stranded TC	PVC, Gray	CL3R	58 lbs/Mft (86 kg/km)
SSS124R	4	0.304" (7.72 mm)	12 AWG (19x25) Stranded BC	PVC, 0.011" (0.28 mm) Wall/ Black, Red, White & Green	100% Foil	18 AWG (16x30) Stranded TC	PVC, Gray	CL3R	105 lbs/Mft (156 kg/km)
<i>12 AWG Shielded Speaker and Control Cable: Riser</i>									
SSS142R	2	0.217" (5.51 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/ Black & Red	100% Foil	18 AWG (16x30) Stranded TC	PVC, Gray	CL3R	41 lbs/Mft (61 kg/km)
SSS144R	4	0.254" (6.45 mm)	14 (19x27) AWG Stranded BC	PVC, 0.010" (0.25 mm) Wall/ Black, Red, White & Green	100% Foil	18 AWG (16x30) Stranded TC	PVC, Gray	CL3R	73 lbs/Mft (109 kg/km)
<i>14 AWG Shielded Speaker and Control Cable: Riser</i>									
SSS162R	2	0.183" (4.65 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	27 lbs/Mft (40 kg/km)
SSS164R	4	0.219" (5.56 mm)	16 (19x29) AWG Stranded BC	PVC, 0.009" (0.23 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	47 lbs/Mft (70 kg/km)
<i>16 AWG Shielded Speaker and Control Cable: Riser</i>									
SSS182R	2	0.159" (4.04 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	20 lbs/Mft (30 kg/km)
SSS184R	4	0.184" (4.67 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	33 lbs/Mft (49 kg/km)
<i>18 AWG Shielded Speaker and Control Cable: Riser</i>									
SSS204R	4	0.171" (4.34 mm)	20 (7x28) AWG Stranded BC	PVC, 0.007" (0.18 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CMR	23 lbs/Mft (34 kg/km)
<i>20 AWG Shielded Speaker and Control Cable: Riser</i>									
SSS224R	4	0.144" (3.66 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CMR	17 lbs/Mft (25 kg/km)
SSS226R	6	0.170" (4.32 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White, Green, Brown & Black	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CMR	23 lbs/Mft (34 kg/km)
<i>22 AWG Shielded Speaker and Control Cable: Riser</i>									

### Electrical Specifications

Part #	Capacitance	Cond. DCR
SSS122R	70.3 pF/ft Between Conductors, 127 pF/ft Between One Conductor and Other Tied to Shield	1.65 Ω/Mft
SSS124R	59.4 pF/ft Between Conductors, 107 pF/ft Between One Conductor and Other Tied to Shield	1.65 Ω/Mft
SSS142R	66.2 pF/ft Between Conductors, 119 pF/ft Between One Conductor and Other Tied to Shield	2.67 Ω/Mft
SSS144R	56.4 pF/ft Between Conductors, 102 pF/ft Between One Conductor and Other Tied to Shield	2.67 Ω/Mft
SSS162R	62.1 pF/ft Between Conductors, 112 pF/ft Between One Conductor and Other Tied to Shield	4.19 Ω/Mft
SSS164R	53.4 pF/ft Between Conductors, 96.1 pF/ft Between One Conductor and Other Tied to Shield	4.19 Ω/Mft
SSS182R	56.1 pF/ft Between Conductors, 101 pF/ft Between One Conductor and Other Tied to Shield	6.66 Ω/Mft
SSS184R	48.9 pF/ft Between Conductors, 88.0 pF/ft Between One Conductor and Other Tied to Shield	6.66 Ω/Mft
SSS204R	46.7 pF/ft Between Conductors, 84.0 pF/ft Between One Conductor and Other Tied to Shield	10.5 Ω/Mft
SSS224R	39.9 pF/ft Between Conductors, 71.8 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft
SSS226R	36.4 pF/ft Between Conductors, 65.5 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft

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## Speaker and Control: Shielded Plenum



Gepco® Brand shielded speaker and control cable is an economical option for permanent installation in conduit, walls or ceilings. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. For added noise rejection and suppression, the conductors are shielded with a durable 100% foil/Mylar® and tinned copper drain wire. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand shielded speaker and control cables are available in 12 through 22 AWG.

### Features & Benefits

- Economical Construction
- Bare Copper Conductors
- PVC Insulation
- Foil Shield with Drain Wire
- 12 Through 22 AWG Versions
- UL Rated

### Applications

- Speaker Interconnections
- General Purpose Audio Control

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SSS122P	2	0.244" (6.20 mm)	12 AWG (19x25) Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	18 AWG (16x30) Stranded TC	PVC, Natural (Gray by Request)	CL3P	59 lbs/Mft (88 kg/km)
12 AWG Shielded Speaker and Control Cable: Plenum									
SSS124P	4	0.288" (7.32 mm)	12 AWG (19x25) Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	18 AWG (16x30) Stranded TC	PVC, Natural (Gray by Request)	CL3P	107 lbs/Mft (159 kg/km)
12 AWG Shielded Speaker and Control Cable: Plenum									
SSS142P	2	0.207" (5.26 mm)	14 (19x27) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	18 AWG (16x30) Stranded TC	PVC, Natural (Gray by Request)	CL3P	41 lbs/Mft (61 kg/km)
SSS144P	4	0.260" (6.60 mm)	14 (19x27) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	18 AWG (16x30) Stranded TC	PVC, Natural (Gray by Request)	CL3P	72 lbs/Mft (107 kg/km)
14 AWG Shielded Speaker and Control Cable: Plenum									
SSS162P	2	0.179" (4.55 mm)	16 (19x29) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	28 lbs/Mft (43 kg/km)
SSS164P	4	0.209" (5.31 mm)	16 (19x29) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	47 lbs/Mft (70 kg/km)
16 AWG Shielded Speaker and Control Cable: Plenum									
SSS182P	2	0.159" (4.04 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black & Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	20 lbs/Mft (30 kg/km)
SSS184P	4	0.185" (4.70 mm)	18 (7x26) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	34 lbs/Mft (51 kg/km)
18 AWG Shielded Speaker and Control Cable: Plenum									
SSS204P	4	0.161" (4.09 mm)	20 (7x28) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Natural (Gray by Request)	CMR	25 lbs/Mft (37 kg/km)
20 AWG Shielded Speaker and Control Cable: Plenum									
SSS224P	4	0.147" (3.73 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White & Green	100% Foil	24 AWG (7x32) Stranded TC	PVC, Natural (Gray by Request)	CMR	19 lbs/Mft (28 kg/km)
SSS226P	6	0.170" (4.32 mm)	22 (7x30) AWG Stranded BC	PVC, 0.008" (0.20 mm) Wall/ Black, Red, White, Green, Brown & Black	100% Foil	24 AWG (7x32) Stranded TC	PVC, Natural (Gray by Request)	CMR	24 lbs/Mft (36 kg/km)
22 AWG Shielded Speaker and Control Cable: Plenum									

### Electrical Specifications

Part #	Capacitance	Cond. DCR
SSS122P	82.5 pF/ft Between Conductors, 148 pF/ft Between One Conductor and Other Tied to Shield	1.65 Ω/Mft
SSS124P	68.1 pF/ft Between Conductors, 123 pF/ft Between One Conductor and Other Tied to Shield	1.65 Ω/Mft
SSS142P	77.1 pF/ft Between Conductors, 139 pF/ft Between One Conductor and Other Tied to Shield	2.67 Ω/Mft
SSS144P	57.6 pF/ft Between Conductors, 104 pF/ft Between One Conductor and Other Tied to Shield	2.67 Ω/Mft
SSS162P	67.2 pF/ft Between Conductors, 121 pF/ft Between One Conductor and Other Tied to Shield	4.19 Ω/Mft
SSS164P	57.3 pF/ft Between Conductors, 103 pF/ft Between One Conductor and Other Tied to Shield	4.19 Ω/Mft
SSS182P	57.4 pF/ft Between Conductors, 103 pF/ft Between One Conductor and Other Tied to Shield	6.66 Ω/Mft
SSS184P	50.0 pF/ft Between Conductors, 90.0 pF/ft Between One Conductor and Other Tied to Shield	6.66 Ω/Mft
SSS204P	45.0 pF/ft Between Conductors, 81.0 pF/ft Between One Conductor and Other Tied to Shield	10.5 Ω/Mft
SSS224P	40.8 pF/ft Between Conductors, 73.4 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft
SSS226P	40.8 pF/ft Between Conductors, 73.4 pF/ft Between One Conductor and Other Tied to Shield	16.9 Ω/Mft

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## DIGITAL AUDIO CABLES

Page	Broadcast	Commercial A/V	Assemblies
<b>32</b>	•	•	•
<b>33</b>	•	•	•
<b>34</b>	•	•	•
<b>35</b>	•	•	•

### In This Section:

- 110  $\Omega$  Multi-Pair DS Series: 24 AWG
- 110  $\Omega$  Multi-Pair DS Series: 26 AWG
- 110  $\Omega$  Single-Pair DS Series: 24 AWG
- 110  $\Omega$  Single-Pair DS Series: 26 AWG



# IMPEDANCE-SPECIFIC TWISTED PAIR & COAX FOR DIGITAL AUDIO DATA TRANSMISSION



## Impedance-Stabilizing Rods

The characteristic impedance of cable is determined by the physical relationship between the conductors and shield. To stabilize the impedance, every 110  $\Omega$  twisted-pair cable features a nonconductive polymer rod that maintains the geometry, and thereby impedance, of the cable core.

## 100% Foil or 95% Braided Shield

In addition to the pair twisting, noise rejection in balanced cables is achieved with a 100% aluminum/Mylar® shield or a tight-angled braid shield. Aluminum/Mylar foil provides additional strength compared to standard foil shields, while a tight-angled braid achieves greater strength, flaccidity and coverage.

## AES/EBU Compliant

All digital audio cables meet or exceed AES3 or AES3id standards for digital audio transmission.

## Nitrogen/Polymer Dielectric Compounds

Digital audio data transmission requires a 110  $\Omega$  impedance and up to 25 MHz of bandwidth. To achieve the bandwidth and impedance requirements, all digital audio cables utilize a low k constant nitrogen/polymer dielectric.

## High-Purity Copper

Cable conductors are made from stranded tinned-copper, 99.999% oxygen-free copper or precision-drawn solid copper. These conductor types provide maximum conductivity for high-frequency data signal transmission.

## Easy to Terminate

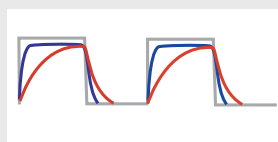
Each cable has time-saving features such as color coded jackets, optimized conductor stranding, drain wires and easy-to-strip compounds.

## Electrical Characteristics & Specifications

### Low Jitter & Pulse Rounding

Through impedance matching, low attenuation, bandwidth certification and noise rejection, cable induced bit-errors and jitter are eliminated or minimized.

#### PULSE ROUNDING OF DATA BITS

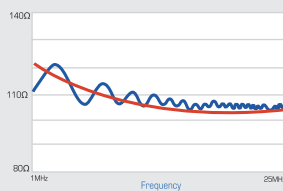


Original Bit Pulse  
Pulse Through 110  $\Omega$  Digital Audio Cable  
Pulse Through Analog Audio Cable

### Precision 110 $\Omega$ Impedance

Digital audio cables feature a 110  $\Omega$  characteristic impedance. Impedance matching ensures low attenuation and minimal signal reflection which can result in bit-errors or jitter.

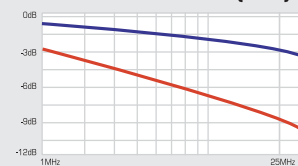
#### CHARACTERISTIC IMPEDANCE



### Extended 25 MHz Bandwidth

All 110  $\Omega$  digital audio cables are certified to 25 MHz for transmission of sample rates up to 192 kHz. The bandwidth ensures that the loss, impedance and return loss meet or exceed the relevant standards across this range.

#### HIGH FREQUENCY CABLE ATTENUATION (100')



Attenuation of Analog Audio Cable  
Attenuation of 110  $\Omega$  Digital Audio Cable

## 110 Ω Multi-Pair DS Series: 24 AWG



The DS4 series of AES/EBU digital audio multi-pair features an extended 25 MHz bandwidth, ultra-low attenuation, mechanical stability and a precision 110 Ω impedance. With the lowest available attenuation and precision impedance specifications, the DS4 series allows for longer runs of AES3 format digital audio over twisted-pair cable. The extended 25 MHz bandwidth is compliant with the 2003 revision of the AES3 standard for transmission of digital audio at sampling rates up to 192 kHz. Color coded and alphanumerically printed pairs facilitate easy channel identification and minimize crosstalk, while the riser rated GEP-FLEX master jacket is both flexible and easy to pull through conduit.

### Features & Benefits

- Precision 110 Ω Impedance
- 25 MHz Bandwidth for 192 kHz Sampling Rates
- Flexible
- Gas-Injected Foam Dielectric
- Stabilizing Polyethylene Rod
- Individually Shielded & Jacketed Pairs
- Color Coded & Alphanumeric Pair Identification
- CMR Riser Rated

### Applications

- AES3 Digital Audio
- Extended Bandwidth Analog Audio
- Studio Interconnect, Permanent Installation or Portable Snakes
- Ideal for Extended-Distance Runs

#### Mechanical Specifications (Series)

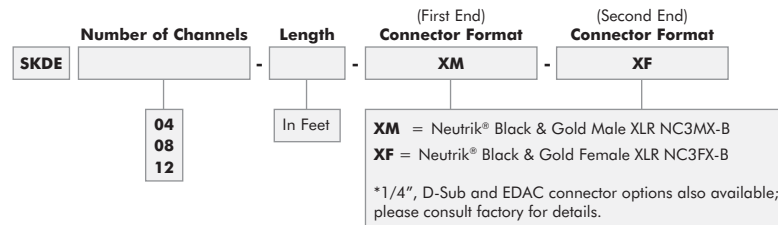
Conductors	Dielectric/ Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/ Color Code	Master Jacket	UL Type
24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/White & Black	100% Foil	22 AWG (7x30) Stranded TC	PVC, 0.180" (4.57 mm)/Base 10 (See Color Code Chart 1, Page 142)	GEP-FLEX TPE, Violet	CMR

#### Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Approx. Weight
DS404	4	0.620" (15.75 mm)	125 lbs/Mft (186 kg/km)
DS408	8	0.815" (20.70 mm)	260 lbs/Mft (387 kg/km)
DS412	12	0.995" (25.27 mm)	380 lbs/Mft (566 kg/km)

#### Electrical Specifications

Impedance	Capacitance	Cond. DCR	Drain DCR	Attenuation (dB per 100 ft)				
				1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
110 Ω	11 pF/ft Between Conductors, 21 pF/ft Between One Conductor and Other Tied to Shield	23.8 Ω/Mft	15.3 Ω/Mft	0.09	1.30	1.60	2.15	4.10



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## 110 Ω Multi-Pair DS Series: 26 AWG



The thin profile DS6 series of AES/EBU digital audio multi-pair features low attenuation, an extended 25 MHz bandwidth and a precision 110 Ω impedance. Color coded and alphanumerically printed pairs facilitate easy channel identification and minimize crosstalk, while the GEP-FLEX master jacket is both flexible and easy to pull through conduit. The smaller diameter makes this series ideal for use with XLR or multi-pin type connectors (such as DB25 or Elco®). The DS6 series is ideal for applications such as rack wiring, portable snakes, multi-pin breakout cables, patchbay harnessing or short-to-medium length permanent installation. The DS6 series is characterized up to 25 MHz for 192 kHz transmission.

### Features & Benefits

- Thin Profile
- Extra-Flexible
- Precision 110 Ω Impedance
- 25 MHz Bandwidth for 192 kHz Sampling Rates
- Foam Polypropylene Dielectric
- Stabilizing Polyethylene Rod
- Individually Shielded & Jacketed Pairs
- Color Coded & Alphanumeric Pair Identification
- CM Rated

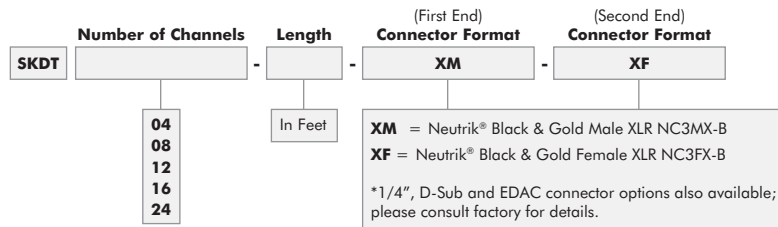
### Applications

- AES3 Digital Audio
- Extended Bandwidth Analog Audio
- Studio Interconnect, Portable Snakes or Permanent Installation
- Multi-Pin Cable Assemblies

Mechanical Specifications (Series)							
Conductors	Dielectric	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Code	Master Jacket	UL Type	
26 AWG (7x34) Stranded TC	Foam PP, 0.015" (0.381 mm) Wall/White & Black	100% Foil	24 AWG (7x32) Stranded TC	PVC, 0.143" (3.63 mm)/Base 10 (See Color Code Chart 1, Page 142)	GEP-FLEX TPE, Black	CM	

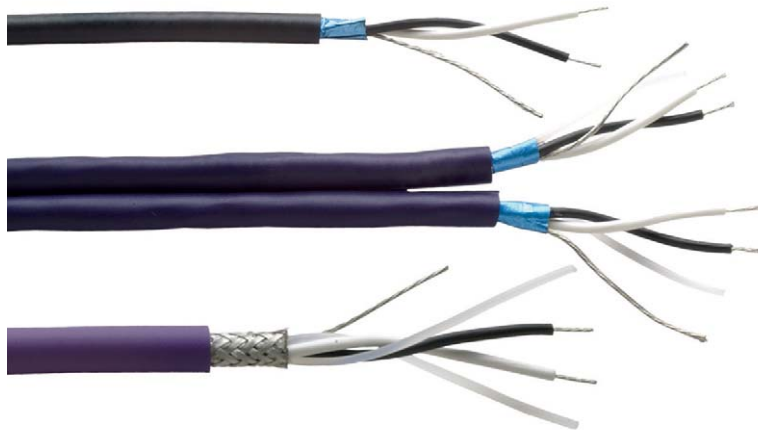
Mechanical Specifications (Individual)			
Part Number	# of Pairs	Nominal OD	Approx. Weight
DS604	4	0.435" (11.05 mm)	65 lbs/Mft (97 kg/km)
DS608	8	0.560" (14.22 mm)	140 lbs/Mft (209 kg/km)
DS612	12	0.685" (17.40 mm)	200 lbs/Mft (298 kg/km)
DS616	16	0.785" (19.94 mm)	270 lbs/Mft (402 kg/km)
DS624	24	0.975" (24.77 mm)	395 lbs/Mft (589 kg/km)

Electrical Specifications		Attenuation (dB per 100 ft)						
Impedance	Capacitance	Cond. DCR	Drain DCR	1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
110 Ω	14 pF/ft Between Conductors, 27 pF/ft Between One Conductor and Other Tied to Shield	38.5 Ω/Mft	23.8 Ω/Mft	1.25	1.85	2.40	3.16	4.20



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## 110 Ω Single-Pair DS Series: 24 AWG



The DS4 series of AES/EBU digital audio twisted-pair features an extended 25 MHz bandwidth, ultra-low attenuation, mechanical stability and a precision 110 Ω impedance. With the lowest available attenuation and precision impedance specifications, the DS4 series allows for longer runs of AES3 format digital audio over twisted-pair cable. The extended 25 MHz bandwidth is compliant with the AES3 standard for transmission of digital audio at sampling rates up to 192 kHz. The DS4 series is available in easy-to-terminate versions for permanent installation and an extra-flexible version for rack patching or portable cables.

## Features &amp; Benefits

- Precision 110 Ω Impedance
- 25 MHz Bandwidth for 192 kHz Sampling Rates
- Flexible
- Gas-Injected Foam Polyethylene or Foam Teflon® Dielectric
- Stabilizing Polyethylene Rod
- UL Rated Versions

## Applications

- AES3 Digital Audio
- Extended Bandwidth Analog Audio
- Time Code
- Studio Interconnect, Permanent Installation or Portable Cables
- Ideal for Extended-Distance Runs

## Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Dielectric/Color Code	Fillers	Shield	Drain	Jacket	UL Type	Approx. Weight
DS401	1	0.180" (4.57 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/One White, One Black	Solid Virgin Polyethylene Rod	100% Foil	22 AWG (7x30) Stranded TC	PVC, Violet or Black	CMR	13 lbs/Mft (19 kg/km)
<i>Wide Bandwidth Single-Pair: Permanent Install. Easy Strip &amp; Termination</i>										
DS401D	2	0.370" x 0.180" (9.40 mm x 4.57 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/One White, One Black	Solid Virgin Polyethylene Rod	100% Foil	22 AWG (7x30) Stranded TC	PVC, Violet with Red Stripe	CMR	26 lbs/Mft (39 kg/km)
<i>Wide Bandwidth Dual-Pair: Permanent Install. Easy Strip &amp; Termination</i>										
DS401M	1	0.235" (5.97 mm)	24 AWG (41x40) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/One White, One Black	Solid Virgin Polyethylene Rods (2)	95% TC Braid	24 AWG (41x40) Stranded TC	Flexible Matte PVC, Violet	—	27 lbs/Mft (40 kg/km)
<i>Wide Bandwidth Single-Pair: Extra Flexible</i>										
DS401TS	1	0.170" (4.32 mm)	24 AWG (7x32) Stranded TC	Foam FEP, 0.021" (0.533 mm) Wall/One White, One Black	—	100% Foil	22 AWG (7x30) Stranded TC	Plenum PVC White	CMP	13 lbs/Mft (19 kg/km)
<i>Wide Bandwidth Single-Pair: Plenum</i>										

## Electrical Specifications

Part #	Impedance	Capacitance	Cond. DCR	Drain DCR	Attenuation (dB per 100 ft)				
					1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
DS401/DS401D	110 Ω	11 pF/ft Between Conductors, 21 pF/ft Between One Conductor and Other Tied to Shield	23.8 Ω/Mft	15.3 Ω/Mft	0.90	1.30	1.60	2.15	4.10
DS401M	110 Ω	11 pF/ft Between Conductors, 21 pF/ft Between One Conductor and Other Tied to Shield	25.6 Ω/Mft	25.6 Ω/Mft	0.60	0.90	1.60	2.30	3.40
DS401TS	110 Ω	11 pF/ft Between Conductors, 21 pF/ft Between One Conductor and Other Tied to Shield	23.8 Ω/Mft	15.3 Ω/Mft	0.80	1.20	1.50	2.00	2.90



## Cable Type

DWB110

DS401M

## Length

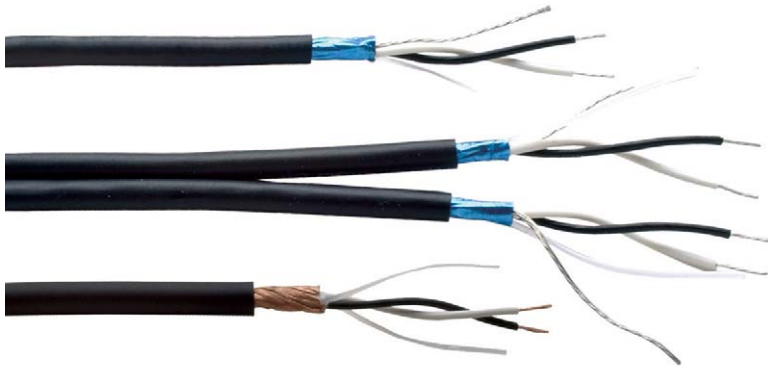
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In Feet

## Connectors

Neutrik® Black &amp; Gold Male XLRs, Male NC3MX-B and Female NC3FX-B

## 110 Ω Single-Pair DS Series: 26 AWG



The thin profile DS6 series of AES/EBU digital audio twisted-pair features low attenuation, an extended 25 MHz bandwidth and a precision 110 Ω impedance. The reduced diameter of this series makes it ideal for applications that do not require extended-distance runs such as rack wiring, patchbay harnessing or short-to-medium length permanent installation. The DS series is available in both an easy-to-terminate version for permanent installation and an extra-flexible version for rack patching or bantam/long-frame patchcords. In addition, the DS6 series is characterized up to 25 MHz for 192 kHz sampling rates.

### Features & Benefits

- Thin Profile
- Flexible
- Precision 110 Ω Impedance
- 25 MHz Bandwidth for 192 kHz Sampling Rates
- Foam Polypropylene Dielectric
- Stabilizing Polyethylene Rod
- CM Rated Versions

### Applications

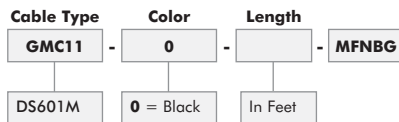
- AES3 Digital Audio
- Extended Bandwidth Analog Audio
- Time Code
- Studio Interconnect, Permanent Installation or Portable Cables
- Ideal for Rack Wiring or Patchcords

### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Dielectric Color Code	Fillers	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
<b>DS601</b>	1	0.143" (3.63 mm)	26 AWG (7x34) Stranded TC	Foam PP, 0.015" (0.381 mm) Wall/White & Black	Solid Virgin Polyethylene Rod	100% Foil	24 AWG (7x32) Stranded TC	PVC, Black	CM	10 lbs/Mft (15 kg/km)
<i>Thin Profile 110 Ω Single-Pair</i>										
<b>DS601D</b>	2	0.143" x 0.290" (3.63 mm x 7.37 mm)	26 AWG (7x34) Stranded TC	Foam PP, 0.015" (0.381 mm) Wall/White & Black	Solid Virgin Polyethylene Rod	100% Foil	24 AWG (7x32) Stranded TC	PVC, Black with Red Stripe	CM	21 lbs/Mft (31 kg/km)
<i>Thin Profile 110 Ω Single-Pair</i>										
<b>DS601M</b>	1	0.199" (5.05 mm)	26 AWG (30x40) Stranded Oxygen-Free BC	Foam PP, 0.016" (0.406 mm) Wall/White & Black	Solid Virgin Polyethylene Rods (2)	98% Oxygen-Free BC Spiral Serve	—	Flexible Matte PVC, Black	—	19 lbs/Mft (28 kg/km)
<i>Thin Profile 110 Ω Dual-Pair</i>										

### Electrical Specifications

Part #	Impedance	Capacitance	Cond. DCR	Drain DCR	Attenuation (dB per 100 ft)				
					1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
DS601/DS601D	110 Ω	14 pF/ft Between Conductors, 27 pF/ft Between One Conductor and Other Tied to Shield	38.5 Ω/Mft	23.8 Ω/Mft	1.25	1.85	2.40	3.16	4.20
DS601M	110 Ω	14 pF/ft Between Conductors, 27 pF/ft Between One Conductor and Other Tied to Shield	38.5 Ω/Mft	—	0.65	1.50	2.70	4.60	7.80



**Connectors**  
Neutrik® Black & Gold Male XLRs, Male NC3MX-B and Female NC3FX-B

Neutrik is a registered trademark of Neutrik AG.

## VIDEO CABLES

Page	Broadcast	Commercial A/V	Assemblies
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45	•	•	•
46	•	•	•
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### In This Section:

- High-Definition SDI Coax
- Direct Burial HDTV Coax
- Miniature HDTV/SDI Coax
- Miniature HDTV/SDI Coax: Ultra-Lightweight
- Extra-Flexible High-Definition SDI Coax
- Extra-Flexible Analog Coax
- Precision Video Coax
- Component RGB: Miniature Plenum
- Component RGB: Miniature 25 AWG Stranded
- Component RGB: Miniature 25 AWG Solid
- Component RGB with 2 Audio
- Component RGB with 4 Audio & 4 Power
- V-CON Multi-Conductor Video System:  
Connectors & Distribution Racks
- V-CON Multi-Conductor Video System:  
Breakout Boxes & Cable Assemblies
- Video Snake: High-Definition Miniature 23 AWG
- Video Snake: High-Definition RG 59
- Video Snake: High-Definition RG 6
- Video Snake: High-Definition RG 7
- Composite A/V: Thin Profile
- Composite A/V: Low Loss

# PRECISION CABLING TECHNOLOGY THAT DELIVERS YOUR CLEAREST VISION



## TactiCel™ Strong Cell Technology Dielectric

A proprietary gas-injection process blends nitrogen and plastic polymers to produce a dielectric that reduces the high-frequency attenuation, while maintaining uniform cell structure, low return loss and exceptional crush resistance.

## Broadband RF/EMI Rejection

High-definition coaxial cables feature a dual foil and braid shield. This construction achieves broadband noise rejection from both low frequency EMI and high frequency RF, which can interfere with digital video transmission.

## Flexible & Easy to Strip

Gepco® Brand coax features flexible and easy-to-strip compounds that streamline and simplify the installation process. In addition, most compounds are also UL rated, thereby allowing for use in permanent installations.

## Crush-Resistant

The dielectric and jacket compounds used have exceptional crush resistance and aging properties. As a result, Gepco Brand coaxial cables are less susceptible to structural damage and deformation.

## Precision-Drawn Conductor

Video-grade conductors feature precision diameters and an exceptionally smooth and uniform surface devoid of irregularities.

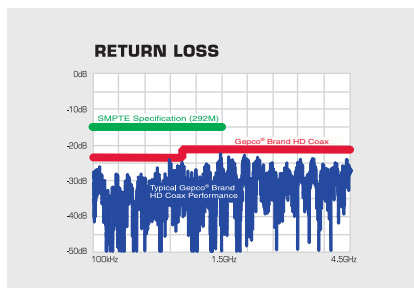
## Industry-Leading Tolerances

Cable tolerances directly affect the electrical performance of the cable and quality of the connector termination. Gepco Brand coax is produced to industry-leading tolerances for all critical dimensions such as diameters, centering, ovality and concentricity.

## Electrical Characteristics & Specifications

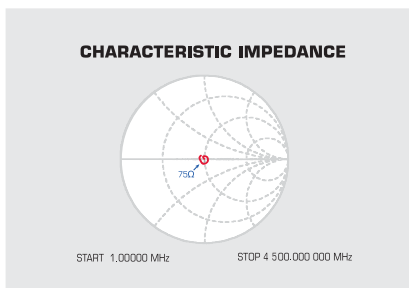
### Meets or Exceeds Standards & 100% Sweep Tested

HD coax meets/exceeds SMPTE 424, 292 or 259 standards for digital video cable including specifications for return loss, impedance, attenuation and bandwidth performance.



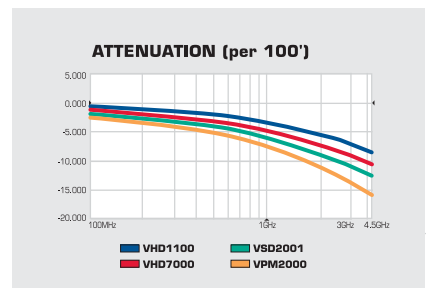
### Precision Impedance Tolerances

All video cables feature a precision 75 Ω or 50 Ω impedance to ensure maximum signal transfer and impedance matching. All coaxial cables are produced within an exceptional +/- 2 Ω or +/- 3 Ω tolerance.



### Low Attenuation

The precision-drawn conductor and proprietary gas-injected dielectric significantly reduce the attenuation of the cable, allowing for longer transmission distances with greater accuracy.



## High-Definition SDI Coax



**TactiCel™**  
Strong Cell Technology

The Gepco® Brand high-definition video coax series has been engineered to feature a 4.5 GHz bandwidth (for HDTV transmission), a TactiCel™ gas-injected foam dielectric, lower attenuation, more RG types, excellent crush resistance, easy termination and a flexible jacket. The TactiCel gas-injected dielectric and precision process control are critical factors in achieving superior electrical performance including faster velocity of propagation, tight impedance tolerance, low attenuation and low structural return loss across the entire 4.5 GHz bandwidth. Conductive elements consist of a stranded or precision-drawn solid copper center conductor and either a 92% or 95% braid with 100% foil shield for complete broadband shielding. The series contains a wide range of sizes to accommodate short-distance rack wiring or extended-distance point-to-point interconnect.

### Features & Benefits

- Ultra-Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- 100% Sweep Tested
- Full-Copper Braid & Foil Shield

### Applications

- High-Definition or Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Digital Audio (AES3id, SPDIF or Word Clock)

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors	UL Type	Approx. Weight
VHD1300	1	0.400" (10.2 mm)	13 AWG Solid BC	Gas-Injected Foam PE, 0.287" (7.29 mm)	92% TC Braid, 100% Foil	PVC	Black, Purple	CMR	92 lbs/Mft (137 kg/km)
<i>Extended-Distance 13 AWG HD Coax</i>									
VHD1100	1	0.405" (10.3 mm)	14 AWG Solid BC	Gas-Injected Foam PE, 0.285" (7.24 mm)	95% TC Braid, 100% Foil	PVC	Black, Others by Special Order	CMR	76 lbs/Mft (113 kg/km)
<i>Extended-Distance RG 11 HD Coax</i>									
VHD1100F	1	0.400" (10.2 mm)	14 AWG (19x27) Stranded BC	Gas-Injected Foam PE, 0.287" (7.29 mm)	92% TC Braid, 100% Foil	TPE	Purple	—	75 lbs/Mft (112 kg/km)
<i>Extended-Distance RG 11 HD Coax: Flexible</i>									
VHD1100TK	1	0.346" (8.79 mm)	14 AWG Solid BC	Gas-Injected Foam FEP, 0.285" (7.24 mm)	95% TC Braid, 100% Foil	PVDF	White, Others by Special Order	CMP	78 lbs/Mft (116 kg/km)
<i>Extended-Distance RG 11 HD Coax: Plenum</i>									
VHD7000	1	0.320" (8.13 mm)	16 AWG Solid BC	Gas-Injected Foam PE, 0.223" (5.66 mm)	95% TC Braid, 100% Foil	PVC	Black, Others by Special Order	CMR	50 lbs/Mft (75 kg/km)
<i>Extended-Distance RG 7 HD Coax</i>									
VSD2001	1	0.272" (6.91 mm)	18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% TC Braid, 100% Foil	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	CMR	42 lbs/Mft (63 kg/km)
<i>Low-Loss RG 6 HD Coax</i>									
VSD2001TS	1	0.237" (6.02 mm)	18 AWG Solid BC	Gas-Injected Foam FEP, 0.170" (4.32 mm)	95% TC Braid, 100% Foil	Plenum PVC	White, Others by Special Order	CMP	40 lbs/Mft (60 kg/km)
<i>Low-Loss RG 6 HD Coax: Plenum</i>									
VPM2000	1	0.242" (6.15 mm)	20 AWG Solid BC	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% TC Braid, 100% Foil	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	CMR	35 lbs/Mft (52 kg/km)
<i>Standard RG 59 HD Coax</i>									
VPM2000TS	1	0.200" (5.08 mm)	20 AWG Solid BC	Gas-Injected Foam FEP, 0.135" (3.43 mm)	95% TC Braid, 100% Foil	Plenum PVC	White, Others by Special Order	CMP	32 lbs/Mft (48 kg/km)
<i>Standard RG 59 HD Coax: Plenum</i>									

### Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz),	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)															
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz			
VHD1300	75 Ω (+/-)	>23 dB, >21 dB	15.0 pF/ft	2.0 Ω	1.5 Ω	89%	0.13	0.27	0.41	0.95	1.31	1.79	2.10	3.09	3.61	4.43	5.43	6.29	8.22			
VHD1100	75 Ω (+/-)	>23 dB, >21 dB	16.2 pF/ft	2.5 Ω	1.5 Ω	84%	0.14	0.28	0.43	1.02	1.40	1.92	2.25	3.30	3.86	4.73	5.80	6.72	8.75			
VHD1100F	75 Ω (+/-)	>20 dB, >15 dB	16.2 pF/ft	2.7 Ω	1.5 Ω	85%	0.07	0.28	0.46	1.12	1.54	2.11	2.50	3.70	4.32	5.34	6.61	7.73	10.15			
VHD1100TK	75 Ω (+/-)	>23 dB, >21 dB	16.0 pF/ft	2.5 Ω	1.5 Ω	84%	0.14	0.25	0.40	1.04	1.45	2.20	2.68	4.20	5.23	6.80	9.07	10.14	13.30			
VHD7000	75 Ω (+/-)	>23 dB, >21 dB	16.2 pF/ft	4.0 Ω	1.9 Ω	84%	0.16	0.34	0.54	1.28	1.70	2.40	2.80	4.05	4.80	5.89	7.25	8.40	10.90			
VSD2001	75 Ω (+/-)	>23 dB, >21 dB	16.3 pF/ft	6.4 Ω	2.8 Ω	83%	0.22	0.43	0.70	1.60	2.10	2.96	3.40	4.95	5.87	7.30	9.13	10.65	13.28			
VSD2001TS	75 Ω (+/-)	>23 dB, >21 dB	16.0 pF/ft	6.4 Ω	2.8 Ω	84%	0.22	0.45	0.73	1.72	2.35	3.36	3.98	6.08	7.23	9.13	11.52	13.64	16.98			
VPM2000	75 Ω (+/-)	>23 dB, >21 dB	16.3 pF/ft	10.2 Ω	3.5 Ω	83%	0.28	0.53	0.86	2.05	2.71	3.80	4.38	6.40	7.57	9.29	11.57	13.36	16.39			
VPM2000TS	75 Ω (+/-)	>23 dB, >21 dB	16.0 pF/ft	10.2 Ω	3.5 Ω	84%	0.28	0.55	0.88	2.10	2.85	4.10	4.85	7.24	9.00	11.42	14.75	17.50	27.50			



**GVC** - Cable Type - Color - Length - Connector Format

25 = VHD7000\*  
11 = VSD2001  
6 = VPM2000

\*Choice of Black Only for VHD7000.

0 = Black 5 = Green  
1 = Brown 6 = Blue  
2 = Red 7 = Violet  
3 = Orange 8 = Gray  
4 = Yellow 9 = White

In Feet

KB = Kings® 2065 Series 3 GHz True 75 Ω BNC  
AB = ADC® 3 GHz True 75 Ω BNC  
CF = Canare® 75 Ω F-Type Connector  
CR = Canare® 200 MHz Crimp RCA

\*No suffix will designate Gepco® Brand BNCs.  
\*\*Boots standard with above connector options.

Kings is a registered trademark of Kings Electronics Company, Inc. ADC is a registered trademark of ADC Telecommunication, Inc. Canare is a registered trademark of Canare Electric Co., Ltd.



## Direct Burial HDTV Coax



The Gepco® Brand high-definition video coax series for direct burial features the same precision center conductor, TactiCel™ gas-injected foam dielectric and broadband shielding as the riser rated versions, but with a polyethylene jacket and water blocking tape. The polyethylene jacket is exceptionally puncture-resistant and inert, while the water blocking tape absorbs moisture and prevents migration. As with all Gepco Brand high-definition cables, the direct burial series has a 4.5 GHz bandwidth, low attenuation and return loss and meets or exceeds SMPTE standards for uncompressed high-definition video interconnects.

### Features & Benefits

- Polyethylene Jacket with Water Blocking Tape
- Ultra-Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- 100% Sweep Tested
- Full Copper Braid & Foil Shield

### Applications

- Direct Burial
- High-Definition or Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Digital Audio (AES3id, SPDIF or Word Clock)

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors	Approx. Weight
VHD1100PEF	1	0.405" (10.3 mm)	14 AWG Solid BC	Gas-Injected Foam PE, 0.285" (7.24 mm)	95% TC Braid, 100% Foil	PE with Water Blocking Tape	Black	78 lbs/Mft (116 kg/km)
<i>Low-Loss RG 11 HD Coax: Direct Burial</i>								
VSD2001PEF	1	0.272" (6.91 mm)	18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% TC Braid, 100% Foil	PE with Water Blocking Tape	Black	40 lbs/Mft (60 kg/km)
<i>Low-Loss RG 6 HD Coax: Direct Burial</i>								

### Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)												
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
VHD1100PEF	75 Ω (+/-2)	>23 dB, >21 dB	16.2 pF/ft	2.5 Ω	1.5 Ω	84%	0.14	0.28	0.43	1.02	1.40	1.92	2.25	3.30	3.86	4.73	5.80	6.72	8.75
VSD2001PEF	75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft	6.4 Ω	2.8 Ω	83%	0.22	0.43	0.70	1.60	2.10	2.96	3.40	4.95	5.87	7.30	9.13	10.65	13.28

P. 800.966.0069 P. 847.795.9555 F. 847.795.8770 www.gepco.com

## Miniature HDTV/SDI Coax



**TactiCel™**  
Strong Cell Technology

The Gepco® Brand miniature coax series features exceptionally low attenuation for its type while maintaining a reduced size and weight. All utilize a pure-copper center conductor, low-loss foam dielectric and broadband foil and braid shielding. VDM230 features the same TactiCel™ gas-injected foam dielectric found in the HD coax series, making it ideal for standard-definition digital video, AES3id digital audio or high-definition digital video interconnect within mobile production trucks. VDM250 and VDM250D are recommended for short distance, low bit-rate digital, analog video, or SVHS applications. The VDM230TS is recommended for plenum installation.

### Features & Benefits

- Thin Profile
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV (VDM230 & VDM230TS)
- High Velocity of Propagation
- Stranded or Solid Conductor
- TactiCel Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- 100% Sweep Tested
- Low Weight

### Applications

- High-Definition Serial Digital Video (VDM230 & VDM230TS)
- Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- High-Resolution Analog Video
- Ideal for Remote Broadcast Interconnect

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors	UL Type	Approx. Weight
<b>VDM230</b>	1	0.164" (4.17 mm)	23 AWG Solid BC	Gas-Injected Foam PE, 0.100" (2.54 mm)	95% TC Braid, 100% Foil	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	CMR	18 lbs/Mft (27 kg/km)
<i>Miniature HD/SDI Coax: 23 AWG Solid</i>									
<b>VDM230TS</b>	1	0.164" (4.17 mm)	23 AWG Solid BC	Gas-Injected Foam FEP, 0.099" (2.51 mm)	95% TC Braid, 100% Foil	Plenum PVC	Black, White	CMP	22 lbs/Mft (33 kg/km)
<i>Miniature HD/SDI Coax: 23 AWG Solid Plenum</i>									
<b>VDM250</b>	1	0.154" (3.91 mm)	25 AWG (7x33) Stranded BC	Gas-Injected Foam PE, 0.099" (2.51 mm)	95% TC Braid, 100% Foil	PVC	Black	CMR	16 lbs/Mft (24 kg/km)
<i>Miniature SDI Coax: 25 AWG Stranded</i>									
<b>VDM250D</b>	2	0.154" x 0.315" (3.91 mm x 8.00 mm)	25 AWG (7x33) Stranded BC	Gas-Injected Foam PE, 0.099" (2.51 mm)	95% TC Braid, 100% Foil	Flexible Matte PVC	Black	—	33 lbs/Mft (49 kg/km)
<i>Miniature SDI or SVHS Coax: Dual 25 AWG Stranded</i>									

### Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
						1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
VDM230 VDM230TS	75 Ω (+/-2)	>23 dB, >21 dB	16.5 pF/ft	20.3 Ω/2.7 Ω	82%	0.38	0.78	1.19	3.01	3.80	5.40	6.18	9.30	10.47	12.97	16.00	18.48	22.8
VDM250	75 Ω (+/-3)	>21 dB, —	16.5 pF/ft	30.0 Ω/4.8 Ω	82%	0.47	0.91	1.43	3.45	4.61	6.46	7.48	10.80	12.80	—	—	—	—
VDM250D	75 Ω (+/-3)	>21 dB, —	16.5 pF/ft	30.0 Ω/4.8 Ω	82%	0.47	0.91	1.43	3.45	4.61	6.46	7.48	10.80	12.80	—	—	—	—



GVC	Cable Type	Color	Length	Connector Format
	17 = VDM230 17P = VDM230TS* 15 = VDM250*	0 = Black 1 = Brown 2 = Red 3 = Orange 4 = Yellow 5 = Green 6 = Blue 7 = Violet 8 = Gray 9 = White	In Feet	KB = Kings® 2065 Series 3 GHz True 75 Ω BNC AB = ADC® 3 GHz True 75 Ω BNC CF = Canare® 75 Ω F-Type Connector CR = Canare® 200 MHz Crimp RCA
	*Choice of Black Only for VDM250, Black & White for VDM230TS.			*No suffix will designate Gepco® Brand BNCs.

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## Miniature HDTV/SDI Coax: Ultra-Lightweight



The Gepco® Brand Ultra-Lightweight Miniature Coax is ideal for mobile production trucks where weight and performance are critical. Maintaining exceptionally low attenuation, the VDM230LT design features a low-loss gas-injected foam dielectric created with Gepco's new TactiCel™ Strong Cell Technology, providing improved crush resistance. For reduced weight, the VDM230LT utilizes a copper center conductor and a 100% bonded foil with a high-strength, ultra-lightweight liquid crystal polymer braid shielding. Maintaining the same dimensions as Gepco's VDM230, VDM230LT is compatible with the same connectors and crimp tools previously used for VDM230. This Gepco Ultra-Lightweight Miniature Coax solution is ideal for high-definition digital video, AES3id digital audio and standard-definition digital video interconnect within mobile production trucks.

### Features & Benefits

- Immense Weight Savings per Mobile Production Truck
- Equal or Better Performance Compared to Standard VDM230 Coax
- Thin Profile (Same Dimension as VDM230)
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation

### Applications

- High Definition Serial Digital Video
- Standard Definition Serial Digital Video
- High Resolution Analog Video
- Digital Audio (AES3id or SPDIF)
- Ideal for Mobile Production Trucks

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors	Max Pull Tension	BNC Connector Pull-Off Strength	Cable Cold Bend (10x Mandrel)	Bending Endurance/ Twisting Endurance†	UL Type	Approx. Weight
VDM230LT	1	0.164" (4.2 mm)	23 AWG Solid BC, 0.023", (0.6 mm)	Gas-Injected Foam PE, 0.100", (2.5 mm)	100% Bonded Foil, Liquid Crystal Polymer Braid	PVC	Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White	36 lbs (16.3 kg)	43.6 lbs (19.8 kg) Average	Passed at -30°C	Passed – No Cracks in Shield Tape	CM	11 lbs/Mft (16 kg/km)

Ultra-Lightweight Miniature HDTV/SDI Coax: 23 AWG Solid

### Electrical Specifications

Impedance	Transfer Impedance	Return Loss (100 kHz-1.6 GHz), (1.6 GHz-4.5 GHz), Capac.	Cond. DCR per Mft (305 m)	Shield DCR per Mft (305 m)	Vel. of Prop.	Nominal Attenuation – db per 100 ft (30.5 m)													
						1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz	
75 Ω (+/-2)	359 mΩ/m (VDM230 - 505 mΩ/m)	>23 dB, >21 dB	16.5 pF/ft (54 pF/m)	20.3 Ω/Mft	9.7 Ω/Mft	82%	0.38	0.78	1.19	3.01	3.80	5.40	6.18	9.30	10.47	12.97	16.00	18.48	22.80

**LOSE WEIGHT FAST**

**SAVE 2,000 lbs**  
per Full-Size Truck and  
Ease Truck Weight Restrictions  
Save Fuel and Delivery Costs

**39% weight reduction**

Weight in lbs.

VDM230	18 lbs/1000 ft (27 kg/km)
VDM230LT	11 lbs/1000 ft (16 kg/km)

## Extra-Flexible High-Definition SDI Coax



**TactiCel™**  
Strong Cell Technology

The VHD2000M and VHD2001M are extra-flexible, low-loss coaxial cables with a 4.5 GHz bandwidth for uncompressed HDTV transmission. They feature a precision stranded center conductor, a unique double-braid shield and a matte PVC jacket to achieve exceptional flexibility and flex-life without compromising the electrical performance required for HD video. For the insulating dielectric, VHD2000M and VHD2001M utilize a TactiCel™ crush-resistant, gas-injected foam dielectric that reduces attenuation and extends the operating bandwidth. As with all other Gepco® Brand HD coax cables, every critical electrical and mechanical characteristic is manufactured to precision tolerances.

## Features &amp; Benefits

Extra Flexible  
4.5 GHz Bandwidth  
Low Attenuation & Return Loss  
Precision 75 Ω Impedance  
TactiCel Gas-Injected Foam Dielectric  
Stranded Center Conductor  
Double-Braid Shield  
100% Sweep Tested  
Matte PVC Flexible Jacket

## Applications

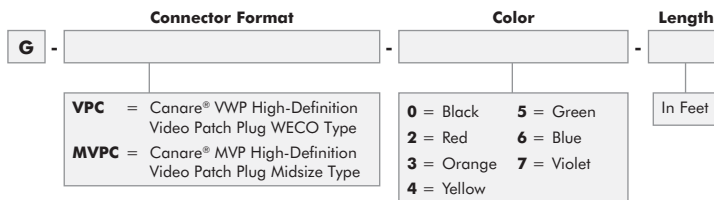
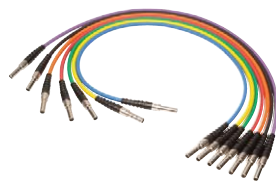
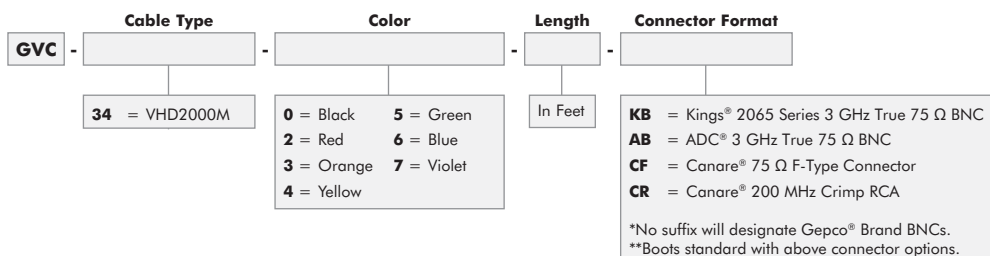
High-Definition Video  
SDI Serial Digital Video  
Digital Audio (AES3id or SPDIF)  
High-Resolution Analog Video  
Portable Cables  
Patchcords

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors	Approx. Weight
VHD2000M	1	0.242" (6.15 mm)	21 AWG (19x34) Stranded BC (Compact)	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% TC Braid, 95% TC Braid	Flexible PVC	Black, Red, Orange, Yellow, Green, Blue, Violet	33 lbs/Mft (49 kg/km)
Extra-Flexible RG 59 HD Coax								
VHD2001M	1	0.275" (6.99 mm)	19 AWG (19x32) Stranded BC (Compact)	Gas-Injected Foam PE, 0.182" (4.62 mm)	95% TC Braid, 95% TC Braid	Flexible PVC	Black	45 lbs/Mft (67 kg/km)
Extra-Flexible RG 6 HD Coax								

## Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)												
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
VHD2000M	75 Ω (+/-3)	>20 dB, >15 dB	17 pF/ft	14.3 Ω	2.4 Ω	78%	0.25	0.52	0.91	2.51	3.50	5.05	5.92	8.60	10.35	13.05	16.50	19.60	24.80
VHD2001M	75 Ω (+/-3)	>20 dB, >15 dB	17 pF/ft	8.5 Ω	1.7 Ω	78%	0.22	0.50	0.73	2.04	2.81	4.05	4.76	7.00	8.28	10.47	13.22	15.63	19.85



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## Extra-Flexible Analog Coax



**TactiCel™**  
Strong Cell Technology

An extremely flexible, low-loss precision video coax, the VE61859M features the same TactiCel™ gas-injected foam dielectric as the high-definition coax series. Unique to VE61859M is a stranded center conductor, single bare-copper braid and matte PVC jacket for increased flexibility and flex-life. VE61859M is ideal for patchcords or any other application that requires an extremely flexible low-loss coax.

### Features & Benefits

- Extra-Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 1 GHz Bandwidth
- High Velocity of Propagation
- Extra Flexible
- TactiCel Gas-Injected Foam Dielectric
- Stranded Center Conductor
- Full-Copper Braid Shield
- 100% Sweep Tested
- Matte PVC Flexible Jacket

### Applications

- High-Resolution Analog Video
- Digital Audio (AES3id or SPDIF)
- Studio Interconnect
- Ideal for Portable Cables or Video Patchcords

Mechanical Specifications							
Part #	# of Cond.	Nominal OD	Conductors	Insulation (Type, Wall)	Shield	Jacket (Type, Colors)	Approx. Weight
VE61859M	1	0.242" (6.15 mm)	21 AWG (19x34) Stranded BC (Compact)	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% BC Braid	Flexible Matte PVC, Black	60 lbs/Mft (89 kg/km)

Electrical Specifications														
Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)									
					1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz	
75 Ω (+/-3)	>20 dB	17.0 pF/ft	15.3 Ω/2.7 Ω	83%	0.26	0.91	2.09	3.00	4.33	6.29	8.63	10.05	10.64	

## Precision Video Coax



The original coax standard for broadcast or production quality analog video applications, the Gepco® Brand precision coax series features a 20 AWG solid (or 22 AWG stranded) center conductor and solid polyethylene dielectric for low attenuation, tight tolerance 75 Ω impedance and 1 GHz bandwidth. The precision coax series is ideal when extra durability is desired or for existing installations that still utilize the precision cable format. For digital video or new analog video installations, the Gepco® Brand high-definition coax series is recommended due to the increased bandwidth, lower attenuation and greater ease of termination.

### Features & Benefits

- Extra-Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 1 GHz Bandwidth
- Extremely Durable
- Pure Copper Conductor
- Solid Polyethylene Dielectric
- Double Braid Shields
- 100% Sweep Tested

### Applications

- High-Resolution Analog Video
- Studio Interconnect or Permanent Installation (VP618PE)
- Ideal for Portable Cables or Video Patching (VP618M)

### Mechanical Specifications (Individual)

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket (Type, Colors)	Approx. Weight
VP618PE	1	0.304" (7.72 mm)	20 AWG	PE, 0.198" (5.03 mm)	Double Braid: 98% & 96% TC	PE, Black	75 lbs/Mft (112 kg/km)
			Solid BC				
20 AWG Precision Coax							
VP618M	1	0.304" (7.72 mm)	22 AWG (19x34)	PE, 0.192" (4.88 mm)	Double Braid: 95% & 93% TC	Flexible Matte PVC, Black	78 lbs/Mft (116 kg/km)
			Stranded BC (Compact)				
22 AWG Precision Coax: Extra Flexible							

### Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	Cond DCR per Mft/ Shield DCR per Mft	Vel. of Prop	Attenuation (dB per 100 ft)								
						1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz
VP618PE	75 Ω (+/-3)	>23 dB	20.3 pF/ft	10.2 Ω/1.1 Ω	66%	0.25	0.78	1.91	2.70	3.82	5.40	7.32	8.74	9.20
VP618M	75 Ω (+/-3)	>23 dB	20.3 pF/ft	14.3 Ω/1.1 Ω	66%	0.28	0.91	2.14	3.22	4.70	7.12	9.90	11.1	12.1

## Component RGB: Miniature Plenum



**TactiCel™**  
Strong Cell Technology

The Gepco® Brand miniature plenum rated RGB coax snake utilizes specialized plenum PVC and other proprietary compounds for improved flexibility compared to conventional high-temperature types. The extra-small diameter coaxials facilitate easy termination to 15-pin high-density D-sub connectors or BNC-type connectors for component breakout. This plenum snake is ideal for projection systems and VGA cables.

### Features & Benefits

- Thin Profile
- Precision 75 Ω Impedance
- High Velocity of Propagation
- Flexible
- TactiCel™ Gas-Injected Foam Dielectric
- Copper Serve & Foil Shield
- Plenum PVC Master Jacket
- 100% Sweep Tested
- CMP Plenum Rated

### Applications

- High-Resolution RGB Component Analog Video
- Permanent Installation

Mechanical Specifications (Series)					
Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)	Master Jacket	UL Type
25 AWG Solid BC	Foam FEP, 0.074" (1.88 mm)	100% Foil, 95% TC Spiral Serve	Fluoropolymer, 0.106" (2.69 mm)	Plenum PVC, White	CMP

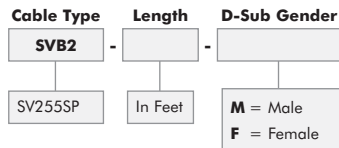
  

Mechanical Specifications (Individual)				
Part #	# of Coaxials	Color Code	Nominal OD	Approx. Weight
SV253SP	3	Red, Green, Blue	0.263" (6.68 mm)	47 lbs/Mft (73 kg/km)
SV254SP	4	Red, Green, Blue, Yellow	0.283" (7.19 mm)	57 lbs/Mft (98 kg/km)
SV255SP	5	Red, Green, Blue, Yellow, White	0.315" (8.00 mm)	68 lbs/Mft (124 kg/km)

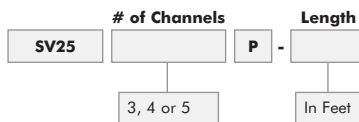
Electrical Specifications									
Impedance	Return Loss (1 MHz-455 MHz), (455 MHz-1 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)			
						100 MHz	200 MHz	400 MHz	1 GHz
75 Ω (+/-3)	>20 dB, >15 dB	16.0 pF/ft	31.0 Ω	18.0 Ω	83%	0.50	1.23	1.80	4.30

### VGA Breakout



**Connectors**  
High-Density 15-Pin D-Sub Male or Female to (5) ADC® 3 GHz True 75 Ω BNCs (BNC-16) with Shrink Tube Strain Relief

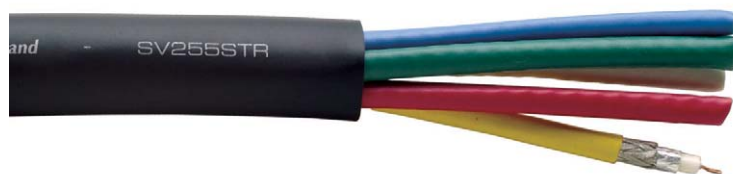
### Component RGB



**Connectors**  
ADC® 3 GHz True 75 Ω BNCs (BNC-16) with Shrink Tube Strain Relief

ADC is a registered trademark of ADC Telecommunication, Inc.

## Component RGB: Miniature 25 AWG Stranded



**TactiCel™**  
Strong Cell Technology

This Gepco® Brand miniature RGB coax snake utilizes precision low-loss VDM250 type miniature coax. The 25 AWG stranded conductors with high velocity TactiCel™ gas-injected foam dielectric yield a 1 GHz bandwidth and exceptionally low attenuation for its size. The tight-angled 95% braid and 100% non-bonded foil shield are easy to terminate and achieve exceptional broadband noise rejection. The Gepco Brand riser GEP-FLEX master jacket is flexible, durable, and UL rated allowing for use in permanent installation or portable applications. This RGB coax snake is ideal for component analog, multi-channel analog or multi-channel standard-definition digital video interconnect.

### Features & Benefits

- Thin Profile
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 1 GHz Bandwidth
- High Velocity of Propagation
- Extra Flexible
- Full Copper Braid & Foil Shield
- 100% Sweep Tested
- CM Riser Rated

### Applications

- RGB Component Analog Video
- Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- Studio Interconnect, Portable Snakes or Permanent Installation

### Mechanical Specifications (Series)

Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)	Master Jacket	UL Type
25 AWG (7x33) Stranded BC	Gas-Injected Foam PE, 0.099" (2.51 mm)	95% TC Braid, 100% Foil	PVC, 0.154" (3.91 mm)	GEP-FLEX TPE, Black	CM

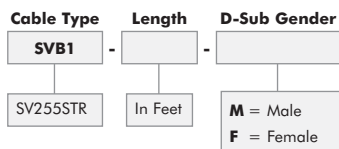
### Mechanical Specifications (Individual)

Part #	# of Coaxials	Color Code	Nominal OD	Approx. Weight
SV253STR	3	Red, Green, Blue	0.460" (11.7 mm)	80 lbs/Mft (119 kg/km)
SV254STR	4	Red, Green, Blue, Yellow	0.470" (11.9 mm)	110 lbs/Mft (164 kg/km)
SV255STR	5	Red, Green, Blue, Yellow, White	0.560" (14.2 mm)	130 lbs/Mft (194 kg/km)
SV256STR	6	Red, Green, Blue, Yellow, White, Black	0.575" (14.6 mm)	160 lbs/Mft (238 kg/km)

### Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)								
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz
75 Ω (+/-3)	>21 dB	16.5 pF/ft	30.0 Ω/4.8 Ω	82%	0.47	0.91	1.43	3.45	4.61	6.46	7.48	10.80	12.80

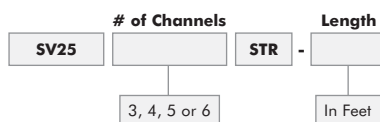
### VGA Breakout



#### Connectors

High-Density 15-Pin D-Sub Male or Female to (5) Kings® 3 GHz True 75 Ω BNCs (2065-11-9) with Rubber Boots

### Component RGB



#### Connectors

Kings® 3 GHz True 75 Ω High-Definition BNCs (2065-11-9) with Rubber Boots

Kings is a registered trademark of Kings Electronics Company, Inc.



## Component RGB: Miniature 25 AWG Solid



### Features & Benefits

- Ultra-Thin Profile
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 3 GHz Bandwidth
- High Velocity of Propagation
- Flexible
- Full Copper Braid & Foil Shield
- 100% Sweep Tested
- CMR Riser Rated

### Applications

- RGB Component Analog Video
- Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- Studio Interconnect, Portable Snakes or Permanent Installation

This Gepco® Brand miniature RGB coax snake utilizes a precision low-loss 25 AWG solid miniature coax. The precision-drawn conductor with high velocity foam TactiCel™ gas-injected foam dielectric yields a 3 GHz bandwidth and exceptionally low attenuation for its size. The tight-angled 95% braid and 100% non-bonded foil shield are easy to terminate and achieve exceptional broadband noise rejection. The riser rated PVC master jacket is flexible, easy to pull through conduit and UL rated allowing for use in permanent installation or portable applications. This RGB coax snake is ideal for component analog, multi-channel analog or multi-channel standard-definition digital video interconnect.

### Mechanical Specifications (Series)

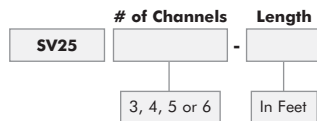
Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)	Master Jacket	UL Type
25 AWG Solid BC	Gas-Injected Foam PE, 0.074" (1.88 mm)	95% TC Braid, 100% Foil	PVC, 0.115"	PVC, Black	CMR

### Mechanical Specifications (Individual)

Part #	# of Coaxials	Color Code	Nominal OD	Approx. Weight
SV253SR	3	Red, Green, Blue	0.325" (8.26 mm)	68 lbs/Mft (101 kg/km)
SV254SR	4	Red, Green, Blue, Yellow	0.365" (9.27 mm)	79 lbs/Mft (118 kg/km)
SV255SR	5	Red, Green, Blue, Yellow, White	0.405" (10.3 mm)	90 lbs/Mft (134 kg/km)
SV256SR	6	Red, Green, Blue, Yellow, White, Black	0.440" (11.2 mm)	105 lbs/Mft (156 kg/km)

### Electrical Specifications

Impedance	Return Loss (100 kHz-3 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)										
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	2.25 GHz	3 GHz
75 Ω (+/-3)	>15 dB	17 pF/ft	31.0 Ω/8.0 Ω	81%	0.36	0.68	1.14	3.09	4.28	6.12	7.10	10.21	12.17	18.9	22.1

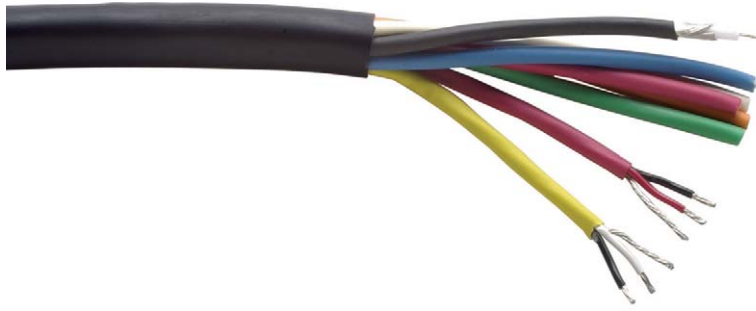


**Connectors**  
Kings® 3 GHz True 75 Ω High-Definition BNCs (2065-11-9) with Rubber Boots

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## Component RGB with 2 Audio Pairs



The hybrid design of the Gepco® Brand RGB62 series allows for two channels of balanced audio to be run with component video, sync and composite video within a single cable. The non-plenum version is constructed from low-loss, solid, 4.5 GHz coaxial elements, while the plenum version is constructed from stranded, 1 GHz miniature coaxial elements. Each audio pair features two twisted 22 AWG conductors with a foil shield, drain wire and color coded jacket. The outer jacket is extruded from an extra-flexible, CM rated TPE or a flexible and easy-to-strip plenum PVC.

### Features & Benefits

- Six Coaxial Elements
- Two Balanced Audio Pairs
- 4.5 GHz Coaxial Bandwidth (Non-Plenum Version)
- Flexible Master Jacket
- 100% Sweep Tested
- UL Rated CM or Plenum

### Applications

- Component Video & Audio Within a Single Cable
- Permanent Installation
- Portable Applications

### Overall Specifications

Part #	# of Coaxials	# of Audio Pairs	Overall Jacket (Type, OD)	UL Type	Approx. Weight
RGB62	6	2	Flexible TPE, 0.430" (10.9 mm)	CM	85 lbs/Mft (127 kg/km)
	Component RGBHVC with 2 Balanced Audio Pairs				
RGB62TS	6	2	Plenum PVC, 0.370" (9.40 mm)	CL2P	68 lbs/Mft (101 kg/km)
	Component RGBHVC with 2 Balanced Audio Pairs: Plenum				

### Coaxial Element Mechanical Specifications

Part #	Conductors (Type, DCR)	Insulation (Type, OD)	Shield	Jacket (Type, OD)	Color Code	Impedance	Vel. of Prop.
RGB62	26 AWG Solid BC, 40.5 Ω/Mft	Gas-Injected Foam PE, 0.074" (1.88 mm)	100% Foil, 95% TC Braid	PVC, 0.114" (2.90 mm)	Red, Green, Blue, Black, Yellow, White	75 Ω	80%
RGB62TS	26 AWG (7x34) Stranded TC, 38.5 Ω/Mft	Foam FEP, 0.072" (1.83 mm)	100% Foil, 95% TC Braid	Plenum PVC, 0.102" (2.59 mm)	Red, Green, Blue, Black, Yellow, White	75 Ω	85%

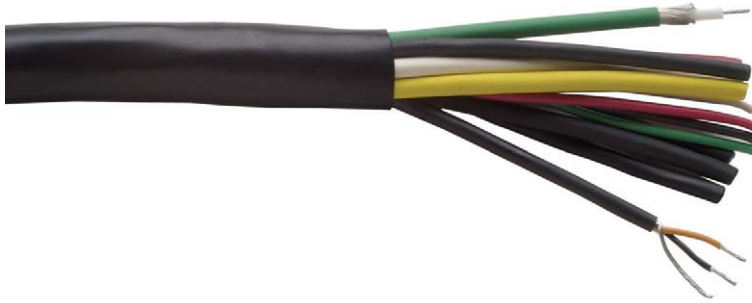
### Coaxial Element Electrical Specifications

Part #	Impedance	Return Loss	Capac.	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
						1 MHz	33.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
RGB62	75 Ω (+/-3)	100 kHz-1 GHz: >23 dB 1 GHz-4.5 GHz: >19 dB	16.8 pF/ft	40.5 Ω/7.0 Ω	80%	0.51	1.12	1.85	4.35	5.74	7.95	9.25	13.20	15.65	19.28	23.73	27.50	34.50
RGB62TS	75 Ω (+/-3)	100 kHz-455 MHz: >20 dB 455 MHz-1 GHz: >15 dB	16.0 pF/ft	38.5 Ω/18.0 Ω	85%	0.90	1.40	2.08	4.90	6.65	9.45	11.0	16.7	20.5	—	—	—	—

### Audio Pair Specifications

Part #	Conductors (Type, DCR)	Insulation (Type, OD)	Insulation Color Code	Shield	Jacket (Type, OD)	Jacket Color Code
RGB62	24 AWG (7x32) Stranded TC, 23.8 Ω/Mft	PE, 0.040" (1.02 mm)	Red & Black, White & Black	100% Foil with 24 AWG (7x32) TC Drain Wire	PVC, 0.130" (3.30 mm)	One Red, One Black
RGB62TS	22 AWG (7x30) Stranded TC, 15.3 Ω/Mft	Plenum PVC, 0.044" (1.12 mm)	Red & Black, White & Black	100% Foil with 26 AWG (7x30) TC Drain Wire	Plenum PVC, 0.102" (2.59 mm)	One Red, One Black

## Component RGB with 4 Audio Pairs & 4 Power Conductors



### Features & Benefits

- Six Coaxial Elements
- Four Balanced Audio Pairs
- Four Power Conductors
- 4.5 GHz Coaxial Bandwidth (Non-Plenum Version)
- Flexible Master Jacket
- 100% Sweep Tested
- UL Rated CM or Plenum

### Applications

- Component Video, Audio & Power Within a Single Cable
- Permanent Installation
- Portable Applications

The hybrid design of the Gepco® Brand RGB644 series allows for four power conductors and four channels of balanced audio to be run with component video, sync and composite video within a single cable. The non-plenum version is constructed from low-loss, solid, 4.5 GHz coaxial elements, while the plenum version is constructed from stranded, 1 GHz miniature coaxial elements. Each audio pair features two twisted 26 AWG conductors with a foil shield, drain wire and color coded jacket. Power elements are constructed from low-loss 20 AWG conductors. The outer jacket is extruded from an extra-flexible, CM rated TPE or a flexible and easy-to-strip plenum PVC.

Overall Specifications						
Part #	# of Coaxials	# of Audio Pairs	# of Power Conductors	Overall Jacket (Type, OD)	UL Type	Approx. Weight
<b>RGB644</b>	6	4	4	Flexible TPE, 0.565" (14.4 mm)	CM	125 lbs/Mft (186 kg/km)
<i>Component RGBHVC with 4 Audio Pairs &amp; 4 Power Conductors</i>						
<b>RGB644TS</b>	6	4	4	Plenum PVC, 0.415" (10.5 mm)	CL2P	105 lbs/Mft (156 kg/km)
<i>Component RGBHVC with 4 Audio Pairs &amp; 4 Power Conductors: Plenum</i>						

Coaxial Element Specifications							
Part #	Conductors (Type, DCR)	Insulation (Type, OD)	Shield	Jacket (Type, OD)	Color Code	Impedance	Vel. of Prop.
RGB644	26 AWG Solid BC, 40.5 Ω/Mft	Gas-Injected Foam PE, 0.074" (1.88 mm)	100% Foil, 95% TC Braid	PVC, 0.114" (2.90 mm)	Red, Green, Blue, Black, Yellow, White	75 Ω	80%
RGB644TS	26 AWG (7x34) Stranded TC, 38.5 Ω/Mft	Foam FEP, 0.072" (1.83 mm)	100% Foil, 95% TC Serve	Plenum PVC, 0.102" (2.59 mm)	Red, Green, Blue, Black, Yellow, White	75 Ω	85%

Coaxial Element Electrical Specifications																		
Part #	Impedance	Return Loss	Capac.	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
						1 MHz	33.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
RGB644	75 Ω (+/-3)	100 kHz-1 GHz: >23 dB 1 GHz-4.5 GHz: >19 dB	16.8 pF/ft	40.5 Ω/7.0 Ω	80%	0.51	1.12	1.85	4.35	5.74	7.95	9.25	13.20	15.65	19.28	23.73	27.50	34.50
RGB644TS	75 Ω (+/-3)	100 kHz-455 MHz: >20 dB 455 MHz-1 GHz: >15 dB	16.0 pF/ft	38.5 Ω/18.0 Ω	85%	0.90	1.40	2.08	4.90	6.65	9.45	11.0	16.7	20.5	—	—	—	—

Audio Pair Specifications					Power Conductor Specifications			
Part #	Conductors (Type, DCR)	Insulation (Type, OD, Color)	Shield	Jacket (Type, OD)	Jacket Color Code	Conductors (Type, DCR)	Insulation (Type, OD)	Color Code
RGB644	26 AWG (7x34) Stranded TC, 38.5 Ω/Mft	PE, 0.033" (0.84 mm), Black & Red	100% Foil with 26 AWG (7x34) TC Drain Wire	PVC, 0.090" (2.29 mm)	Brown, Red, Orange, Yellow	20 AWG (7x28) Stranded TC, 10.1 Ω/Mft	PVC, 0.056" (1.42 mm)	Red, White, Black, Green
RGB644TS	26 AWG (7x34) Stranded TC, 38.5 Ω/Mft	Plenum PVC, 0.033", (0.84 mm) Black & Red	100% Foil with 26 AWG (7x34) TC Drain Wire	Plenum PVC, 0.090" (2.29 mm)	Brown, Red, Orange, Yellow	20 AWG (7x28) Stranded TC, 10.1 Ω/Mft	Plenum PVC, 0.053" (1.35 mm)	Red, White, Black, Green

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## V-CON Multi-Channel Video Connector System

VCON connectors



Setting the standard in multi-channel video connectors, the Gepco® Brand V-CON connector offers a convenient, reliable and durable interface format for high-density video applications. Designed for exceptional durability, the V-CON was specifically

engineered for outdoor broadcast, mobile production and staging applications. It features an all-metal body, locking set-screw and integrated cord grip, all in a completely weather-tight design.

Electrically, the V-CON has the bandwidth and performance for both multi-channel HD and component video applications. Through a configurable insert, the V-CON is available in three-, five- or six-channel versions that may be typically used in component video applications, while the 10-, 12- or 16-channel versions can be used for high-density, multi-channel HD video streams. The low insertion loss and 4.5 GHz bandwidth of the V-CON allows it to be used in uncompressed HD serial digital applications. The V-CON coaxial elements are constructed from stainless steel and 50 micron gold-plated contacts to provide corrosion resistance and exceptionally long mating life.

### Features & Benefits

- Configurable to 3, 5, 6, 10, 12, or 16 Channels
- Extra-Rugged, All-Metal Body with Set-Screw
- Unique Keyway Style for Each Configuration
- 50 Micron Gold-Plated and Stainless Steel Contacts
- Weather-Resistant
- 4.5 GHz Bandwidth
- Uncompressed HD-SDI or Component Video
- Integrated Cord Grip

### Additional Specifications

<b>Structural Return Loss</b>	-15 dB, 1 MHz-4.5 GHz
<b>Insertion Loss</b>	0.25 dB
<b>Cable Termination Type</b>	VDM230 Type 23 AWG Solid

### Mechanical Specifications

Part Number	# of Channels	Gender	Type	Shell Size	Maximum Cable Diameter
VCON16FC	16	Female	Cable Mount	Large - Type 36	0.885" (22.48 mm)
VCON16MP	16	Male	Panel Mount	Large - Type 36	0.885" (22.48 mm)
VCON12FC	12	Female	Cable Mount	Large - Type 36	0.885" (22.48 mm)
VCON12MP	12	Male	Panel Mount	Large - Type 36	0.885" (22.48 mm)
VCON10FC	10	Female	Cable Mount	Large - Type 36	0.885" (22.48 mm)
VCON10MP	10	Male	Panel Mount	Large - Type 36	0.885" (22.48 mm)
VCON6FC	6	Female	Cable Mount	Small - Type 24	0.625" (15.88 mm)
VCON6MP	6	Male	Panel Mount	Small - Type 24	0.625" (15.88 mm)
VCON5FC	5	Female	Cable Mount	Small - Type 24	0.625" (15.88 mm)
VCON5MP	5	Male	Panel Mount	Small - Type 24	0.625" (15.88 mm)
VCON3FC	3	Female	Cable Mount	Small - Type 24	0.625" (15.88 mm)
VCON3MP	3	Male	Panel Mount	Small - Type 24	0.625" (15.88 mm)

VCON distribution racks



The V-CON series distribution racks offer a convenient and flexible solution for the distribution of multiple coaxial channels in a permanent-installation application. Ideal for junction boxes, truck I/O panels, control rooms or staging applications, the

V-CON series is available in a variety on configurations and sizes. Each contact of the V-CON is wired out to a BNC female connector on the back panel for up to a total of 160 channels in the 10x16 version. Available with three, five or 10 V-CON connectors, each V-CON connector can be ordered as a three-, five-, six-, 10-, 12- or 16-channel version.

### Features & Benefits

- Available in 3, 5, or 10 V-CON Multi-Pin Versions
- Option of 3, 5, 6, 10, 12 or 16 Channels per V-CON
- 4.5 GHz Bandwidth
- Uncompressed HD-SDI or Component Video
- Breaks Out V-CON Multi-Pin to BNCs
- Includes Weather-Tight V-CON Dust Caps
- 4RU or 2RU Rack Height

### Mechanical Specifications

Part Number	# of V-CON Connectors	# of Channels/Multi-Pin Connector	Rack Unit Height	V-CON Gender	BNC Gender
VDR10*	10	10, 12, 16	4	Male - Large Type 36	Female
VDR5*	5	10, 12, 16	2	Male - Large Type 36	Female
VDR5*S	5	3, 5, 6	2	Male - Small Type 24	Female
VDR3*	3	10, 12, 16	2	Male - Large Type 36	Female
VDR3*S	3	3, 5, 6	2	Male - Small Type 24	Female

\* = Number of Channels per V-CON

## V-CON Multi-Channel Video Connector System

### VCON breakout boxes



The V-CON series breakout boxes provide a compact and secure solution for interfacing V-CON snakes with external equipment. Built in a heavy-gauge aluminum chassis with a recessed top plate, the V-CON breakout boxes provide exceptional durability and connector protection. Each coaxial channel in the V-CON connector is wired to a female

BNC for easy access and patching. Available in three- to 16-channel versions with a 4.5 GHz bandwidth, the V-CON breakout boxes can be used for distribution of uncompressed HD or component video.

### Features & Benefits

- Heavy-Duty Aluminum Chassis
- Available in 3-, 5-, 6-, 10-, 12- and 16-Channel Versions
- 4.5 GHz Bandwidth
- Uncompressed HD-SDI or Component Video
- Includes Weather-Tight V-CON Dust Caps
- Breaks Out V-CON Multi-Pin to BNCs
- Recessed Top Plate Protects Connectors

### Mechanical Specifications

Part Number	# of Channels	Chassis Dimensions	V-CON Gender	BNC Type
VBB16	16	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 9" (22.9 cm) Long	1 Male - Large Type 36	16 Female
VBB12	12	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 9" (22.9 cm) Long	1 Male - Large Type 36	12 Female
VBB10	10	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 9" (22.9 cm) Long	1 Male - Large Type 36	10 Female
VBB6	6	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 4.5" (11.4 cm) Long	1 Male - Small Type 24	6 Female
VBB5	5	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 4.5" (11.4 cm) Long	1 Male - Small Type 24	5 Female
VBB3	3	4.5" (11.4 cm) High x 5.25" (13.3 cm) Wide x 4.5" (11.4 cm) Long	1 Male - Small Type 24	3 Female

### VCON cable assemblies



V-CON terminated cable assemblies offer an extremely rugged, compact and weather-resistant portable interconnect system for HD or component video applications. Built with the Gepco® Brand V-CON connector and Gepco Brand multi-channel video snake cable, V-CON cable assemblies can be custom ordered in three- to 16-channel versions.

In addition to the durability provided by the internal strain relief, metal cord grip and gaskets of the V-CON design, the connector is also sealed with an overbody, epoxy-lined heat shrink for additional protection. The video snake cables utilize miniature, high bandwidth, gas-injected coaxial elements that are jacketed with an overall, weather-resistant TPE jacket.

The combined materials and termination methods used in the V-CON cable assemblies create the most durable and convenient multi-channel video snake system for broadcast and hostile environment applications.

### Features & Benefits

- Available in 3-, 5-, 6-, 10-, 12- or 16-Channel Versions
- Extra-Rugged, All-Metal Body with Set-Screw
- Heavy-Duty TPE Cable Jacket
- 50 Micron Gold-Plated and Stainless Steel Contacts
- 4.5 GHz Bandwidth
- Weather-Resistant
- Uncompressed HD-SDI
- Multi-Channel HD & Component Video
- Cord Grip with Overbody Heat Shrink

### Mechanical Specifications

Part Number	# of Channels	V-CON Gender	Cable Type	Total Bandwidth
VMC16-length	16	Female - Large Type 36 (Both Ends)	VS16230 (See Page 52)	4.5 GHz
VMC12-length	12	Female - Large Type 36 (Both Ends)	VS12230 (See Page 52)	4.5 GHz
VMC10-length	10	Female - Large Type 36 (Both Ends)	VS10230 (See Page 52)	4.5 GHz
VMC6-length	6	Female - Small Type 24 (Both Ends)	VS6230 (See Page 52)	4.5 GHz
VMC5-length	5	Female - Small Type 24 (Both Ends)	VS5230 (See Page 52)	4.5 GHz
VMC3-length	4	Female - Small Type 24 (Both Ends)	VS3230 (See Page 52)	4.5 GHz

Fanouts available as special order.

For more detailed information, see the V-CON Multi-Channel Video Connector System ([http://www.gepco.com/PDF\\_files/Gepco\\_VCON\\_brochure.pdf](http://www.gepco.com/PDF_files/Gepco_VCON_brochure.pdf)).

## Video Snake: High-Definition Miniature 23 AWG



**TactiCel™**  
Strong Cell Technology

Designed for multi-channel digital or analog video interconnect, the Gepeco® Brand VS230 series is a miniature, multi-conductor, high-definition video coax snake. This snake features a thin-profile construction that reduces the weight and diameter for easy handling and portability in remote applications. The coaxial elements are identical to the Gepeco Brand VDM230 for low attenuation, 4.5 GHz HD bandwidth and broadband shielding. For the outer jacket, an all-weather TPE is used for both flexibility and ruggedness.

### Features & Benefits

- Thin Profile
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- Extra Flexible
- TactiCel™ Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- 100% Sweep Tested
- All-Weather TPE Master Jacket

### Applications

- High-Definition or Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- High-Resolution Analog Video
- Portable Snakes

#### Mechanical Specifications (Series)

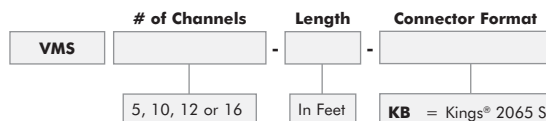
Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)	Master Jacket
23 AWG Solid BC	Gas-Injected Foam PE, 0.100" (2.54 mm)	95% TC Braid, 100% Foil	PVC, 0.164" (4.17 mm)	TPE, Black

#### Mechanical Specifications (Individual)

Part #	# of Coaxials	Color Code	Nominal OD	Approx. Weight
VS3230	3	Red, Green, Blue	0.453" (11.5 mm)	192 lbs/Mft (286 kg/km)
VS5230	5	Red, Green, Blue, Yellow, White	0.570" (14.5 mm)	150 lbs/Mft (224 kg/km)
VS6230	6	Red, Green, Blue, Yellow, White, Black	0.599" (15.2 mm)	170 lbs/Mft (253 kg/km)
VS10230	10	Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black	0.785" (19.9 mm)	315 lbs/Mft (469 kg/km)
VS12230	12	Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White, Black, Beige, Pink	0.800" (20.3 mm)	375 lbs/Mft (559 kg/km)
VS16230	16	Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White, Black, Beige, Pink, Neon Orange, Pumpkin Yellow, Lime Green, Dark Blue	0.885" (22.5 mm)	500 lbs/Mft (745 kg/km)

#### Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
75 Ω (+/-3)	>23 dB, >21 dB	16.5 pF/ft	20.3 Ω/2.7 Ω	82%	0.38	0.78	1.19	3.01	3.80	5.40	6.18	9.30	10.47	12.97	16.00	18.48	22.79



**KB** = Kings® 2065 Series 3 GHz True 75 Ω BNC  
**AB** = ADC® 3 GHz True 75 Ω BNC  
**CF** = Canare® 75 Ω F-Type Connector  
**CR** = Canare® 200 MHz Crimp RCA  
 \*No suffix will designate Gepeco® Brand BNCs.

## Video Snake: High-Definition RG 59



A multi-conductor version of VPM2000 high-definition video coax, the Gepco® Brand VS2000 series also features low attenuation, a 4.5 GHz HD bandwidth, TactiCel™ gas-injected foam dielectric and broadband shielding. Each coaxial element has precision electrical characteristics and is tested and verified to meet or exceed SMPTE 292 standards for digital video transmission. The outer jacket is extruded from a flexible, abrasion-resistant, all-weather TPE compound that remains flexible in low-temperature environments. Commonly used for high-resolution component analog video, the VS2000 series can also be used for multiple channels of uncompressed HD video.

### Features & Benefits

- Ultra-Low Attenuation & Return Loss
- RG 59 VPM2000 HD Coax Elements
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- Flexible
- 100% Sweep Tested
- All-Weather TPE Master Jacket

### Applications

- High-Definition or Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- High-Resolution RGB Component Analog Video
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Extended-Distance Runs

Mechanical Specifications (Series)																	
Conductors	Insulation (Type, OD)		Shield	Coax Jacket (Type, OD)			Master Jacket										
20 AWG Solid BC	Gas-Injected Foam PE, 0.146" (3.71 mm)		95% TC Braid, 100% Foil	PVC, 0.242" (6.15 mm)			TPE, Black										
Mechanical Specifications (Individual)																	
Part #	# of Coaxials	Color Code			Nominal OD			Approx. Weight									
VS52000	5	Red, Green, Blue, Yellow, White			0.745" (18.9 mm)			260 lbs/Mft (387 kg/km)									
VS102000	10	Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black			1.10" (27.9 mm)			520 lbs/Mft (775 kg/km)									
Electrical Specifications																	
Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft	10.2 Ω/3.5 Ω	83%	0.28	0.53	0.86	2.05	2.71	3.80	4.38	6.40	7.57	9.29	11.57	13.36	16.39



**Cable Type** - **Length** - **Connector Format**

**VSC10** - [ ] - [ ]

VS102000 - In Feet - [ ]

**KB** = Kings® 2065 Series 3 GHz True 75 Ω BNC  
**AB** = ADC® 3 GHz True 75 Ω BNC  
**CF** = Canare® 75 Ω F-Type Connector  
**CR** = Canare® 200 MHz Crimp RCA

\*No suffix will designate Gepco® Brand BNCs.

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## Video Snake: High-Definition RG 6



**TactiCel™**  
Strong Cell Technology

A multi-conductor version of VSD2001 high-definition video coax, the Gepco® Brand VS2001 series also features low attenuation, a 4.5 GHz HD bandwidth, TactiCel™ gas-injected foam dielectric and broadband shielding. Each coaxial element has precision electrical characteristics and is tested and verified to meet or exceed SMPTE 292M standards for digital video transmission. The outer jacket is extruded from either from Gepco's GEP-FLEX TPE or an all-weather TPE compound that is flexible and abrasion-resistant for portable applications. The VS2001 series can be used for multiple channels of uncompressed HD video or component level video applications.

### Features & Benefits

- Ultra-Low Attenuation & Return Loss
- RG 6 VSD2001 HD Coax Elements
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- Flexible
- Low-Friction Jacket
- All-Weather GEP-FLEX Master Jacket
- 100% Sweep Tested
- CMR Riser Rated

### Applications

- High-Definition or Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- High-Resolution RGB Component Analog Video
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Extended-Distance Runs

### Mechanical Specifications (Series)

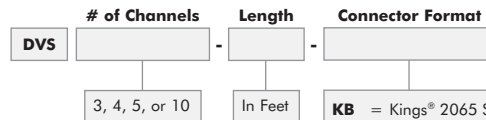
Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)
18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% TC Braid, 100% Foil	PVC, 0.272" (6.91 mm)

### Mechanical Specifications (Individual)

Part #	# of Coaxials	Color Code	Nominal OD	Master Jacket	UL Type	Approx. Weight
VS32001	3	Red, Green, Blue	0.735" (18.7 mm)	Riser GEP-FLEX TPE, Black	CMR	182 lbs/Mft (271 kg/km)
VS42001	4	Red, Green, Blue, Yellow	0.790" (20.1 mm)	Riser GEP-FLEX TPE, Black	CMR	230 lbs/Mft (342 kg/km)
VS52001	5	Red, Green, Blue, Yellow, White	0.845" (21.5 mm)	Riser GEP-FLEX TPE, Black	CMR	295 lbs/Mft (440 kg/km)
VS102001	10	Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black	1.25" (31.8 mm)	TPE, Black	—	600 lbs/Mft (894 kg/km)

### Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft	6.4 Ω/2.8 Ω	83%	0.22	0.43	0.70	1.60	2.10	2.96	3.40	4.95	5.87	7.30	9.13	10.65	13.28



**KB** = Kings® 2065 Series 3 GHz True 75 Ω BNC  
**AB** = ADC® 3 GHz True 75 Ω BNC  
**CF** = Canare® 75 Ω F-Type Connector  
**CR** = Canare® 200 MHz Crimp RCA

\*No suffix will designate Gepco® Brand BNCs.



## Video Snake: High-Definition RG 7



**TactiCel™**  
Strong Cell Technology

A multi-conductor version of VHD7000 high-definition video coax, the Gepco® Brand VS57000 also features low attenuation, a 4.5 GHz HD bandwidth, TactiCel™ gas-injected foam dielectric and broadband shielding. Each coaxial element has precision electrical characteristics and is tested and verified to meet or exceed SMPTE standards for digital video transmission. The outer jacket is extruded from an all-weather TPE that is flexible and abrasion-resistant for portable applications.

### Features & Benefits

- Ultra-Low Attenuation & Return Loss
- RG 7 VHD7000 HD Coax Elements
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- Flexible
- All-Weather TPE Master Jacket
- 100% Sweep Tested

### Applications

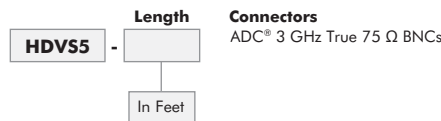
- High-Definition or Standard-Definition Serial Digital Video
- Digital Audio (AES3id or SPDIF)
- High-Resolution RGB Component Analog Video
- Portable Snakes

### Mechanical Specifications

Part #	# of Coaxials	Nominal OD	Conductors	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)	Coax Color Code	Master Jacket	Approx. Weight
VS57000	5	0.980" (24.9 mm)	16 AWG Solid BC	Gas-Injected Foam PE, 0.223" (56.6 mm)	95% TC Braid, 100% Foil	PVC, 0.320" (8.13 mm)	Red, Green, Yellow, Orange, Brown	TPE, Black	400 lbs/Mft (596 kg/km)

### Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
75 Ω (+/-2)	>23 dB, >21 dB	16.2 pF/ft	4.0 Ω/1.9 Ω	84%	0.16	0.34	0.54	1.28	1.70	2.40	2.80	4.05	4.80	5.89	7.25	8.40	10.90



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## Composite A/V: Thin Profile



A multi-element coax and twisted-pair snake cable, the Gepco® Brand VA2TP series utilizes miniature type coax for reduced size and weight. Coaxial construction for the VA2TP series is identical to single VDM250 for low attenuation, low return loss and excellent broadband shielding. The 61801EZ type analog audio single-pair features low-loss 22 AWG conductors and is easy to strip and terminate. The all-weather TPE master jacket is abrasion-resistant, durable and remains flexible in cold temperature environments.

### Features & Benefits

- Thin Profile
- Low Attenuation & Crosstalk
- Flexible
- Easy to Terminate
- 61801EZ Single-Pairs
- VDM250 Coaxials
- Individually Shielded & Jacketed Pairs & Coaxials
- Color Coded
- Additional Overall Foil Shield
- 100% Sweep Tested (Coaxial Elements)
- All-Weather TPE Master Jacket

### Applications

- Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Microphone or Line Level Balanced Analog Audio
- Portable Snakes
- Ideal for ENG or Electronic Field Production

#### Coax Mechanical Specifications

Conductor	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)
25 AWG (7x33) Stranded BC	Gas-Injected Foam PE, 0.099" (2.29 mm)	95% TC Braid, 100% Foil	PVC, 0.154" (3.91 mm)

#### Single-Pair Mechanical Specifications

Conductor	Insulation (Type, OD)	Color Code	Shield	Drain	Jacket (Type, OD)
22 AWG (7x30) Stranded TC	PE, 0.008" (0.20 mm)	Red & Black	100% Foil (Bonded)	22 AWG (7x30) Stranded TC	PVC, 0.138" (3.51 mm)

#### Overall Mechanical Specifications

Overall Shield	Overall Common Drain	Master Jacket
100% Foil	20 AWG (10x30), Stranded TC	TPE, Black

#### Individual Mechanical Specifications

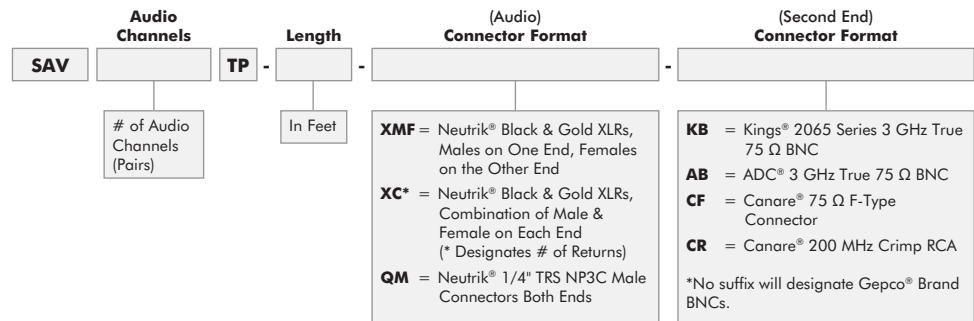
Part #	# of Coaxials	Coax Color Code	# of Single Pairs	Single-Pair Color Code	Nominal OD	Approx. Weight
VA2/2TP	2	Black & White	2	Brown & Red (Base 10)	0.430" (10.9 mm)	95 lbs/Mft (142 kg/km)
VA2/3TP	2	Black & White	3	Brown, Red & Orange (Base 10)	0.485" (12.3 mm)	115 lbs/Mft (171 kg/km)

#### Coax Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)								
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz
75 Ω (+/-3)	>21 dB	16.5 pF/ft	30.0 Ω/4.8 Ω	82%	0.47	0.91	1.43	3.45	4.61	6.46	7.48	10.80	12.80

#### Single-Pair Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
34 pF/ft Between Conductors, 62 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft



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## Composite A/V: Low Loss



A multi-element coax and twisted-pair snake cable, the Gepco® Brand VA2 series utilizes low-loss, high-definition RG 59 type coax. Coaxial construction for the VA2 series is identical to single VPM2000 for low attenuation and return loss, 4.5 GHz HDTV bandwidth and excellent broadband shielding. The 61801EZ type analog audio single-pair features low-loss 22 AWG conductors and is easy to strip and terminate. The all-weather TPE master jacket is abrasion-resistant, durable and remains flexible in cold temperature environments.

### Features & Benefits

- Low Attenuation & Crosstalk
- Flexible
- Easy to Terminate
- 61801EZ Single Pairs
- VPM2000 Coaxials
- Individually Shielded & Jacketed Pairs & Coaxials
- Color Coded
- Additional Overall Foil Shield
- 100% Sweep Tested (Coaxial Elements)
- All-Weather TPE Master Jacket

### Applications

- High-Definition or Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Microphone or Line Level Balanced Analog Audio
- Portable Snakes
- Ideal for ENG or Electronic Field Production

### Coax Mechanical Specifications

Conductor	Insulation (Type, OD)	Shield	Coax Jacket (Type, OD)
20 AWG Solid BC	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% TC Braid, 100% Foil	PVC, 0.242" (6.15 mm)

### Single-Pair Mechanical Specifications

Conductor	Insulation (Type, OD)	Color Code	Shield	Drain	Jacket (Type, OD)
22 AWG (7x30) Stranded TC	PE, 0.008" (0.20 mm)	Red & Black	100% Foil (Bonded)	22 AWG (7x30) Stranded TC	PVC, 0.138" (3.51 mm)

### Overall Mechanical Specifications

Overall Shield	Overall Common Drain	Master Jacket
100% Foil	20 AWG (10x30), Stranded TC	TPE, Black

### Individual Mechanical Specifications

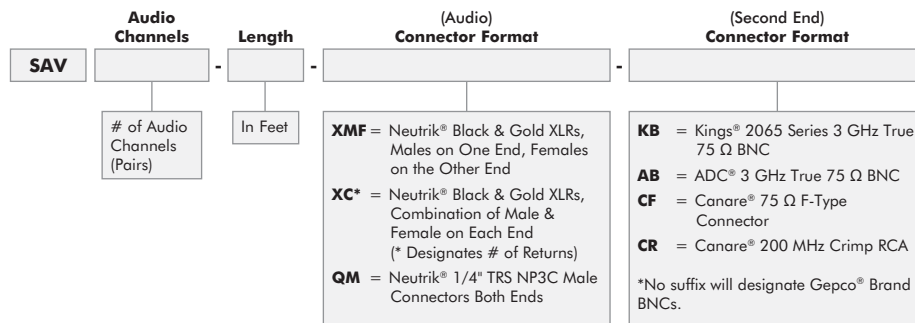
Part #	# of Coaxials	Coax Color Code	# of Single Pairs	Single-Pair Color Code	Nominal OD	Approx. Weight
VA2/3	2	Black & White	3	Brown, Red & Orange (Base 10)	0.615" (15.6 mm)	168 lbs/Mft (250 kg/km)
VA2/4	2	Black & White	4	Brown, Red, Orange & Yellow (Base 10)	0.630" (16.0 mm)	173 lbs/Mft (258 kg/km)
VA2/5	2	Black & White	5	Brown, Red, Orange, Yellow & Green (Base 10)	0.640" (16.3 mm)	186 lbs/Mft (277 kg/km)

### Coax Electrical Specifications

Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft/Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)												
					1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft	10.2 Ω/3.5 Ω	83%	0.28	0.53	0.86	2.05	2.71	3.80	4.38	6.40	7.57	9.29	11.57	13.36	16.39

### Single-Pair Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
34 pF/ft Between Conductors, 62 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft



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## CAMERA & FIBER OPTIC SOLUTIONS

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- Cable:** Permanent-Installation Triax
- Tester:** SMPTE Hybrid Fiber Cable
- Cable:** 7.2 mm Hybrid Fiber Optic
- Cable:** 9.2 mm Hybrid Fiber Optic
- Cable:** 9.2 mm Heavy-Duty Hybrid Fiber Optic
- Cable:** 12 mm Heavy-Duty Hybrid Fiber Optic
- Cable:** 16 mm Heavy-Duty Hybrid Fiber Optic
- Cable:** 3-Channel Permanent-Installation Hybrid Fiber
- Cable:** HD Camera Electrical
- Cable:** Tactical Single-Mode Fiber Optic
- Cable:** Tactical Multi-Mode Fiber Optic
- Assemblies:** Neutrik® opticalCON® Fiber Optic
- Assemblies:** TFOCA-II® and Pierside
- Assemblies:** TACBeam™ Expanded Beam
- Cable:** Single-Mode Fiber Optic: Perm Install
- Cable:** Multi-Mode Fiber Optic: Perm Install
- Distribution:** HSB Fusion Splice Box
- Distribution:** SMPTE Field and Studio Boxes
- Distribution:** HMD Modular Distribution Rack
- Distribution:** HMS Modular Fusion Splice Rack
- Distribution:** HDR1 High-Density, Hybrid Fiber Rack
- Distribution:** NDR1 High-Density, Hybrid Fiber Rack
- Distribution:** HMP8-Bxx SMPTE 304 Breakout Rack
- Distribution:** HMP8 Modular Hybrid Fiber and Triax Panel
- Distribution:** Modular Isolation Panel System
- Distribution:** Hybrid Fiber Blank Panels
- Assemblies:** Hybrid Fiber Breakout: In-Line & Internal Distribution
- Distribution:** Feedthrough Panels & Chassis
- Connectors:** Panel Mount Feedthrough
- SMPTE 304/311 Workflow:** Direct Cable Termination
- SMPTE 304/311 Workflow:** Distribution Rack

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# FIBER & TRIAX CABLES, ASSEMBLIES & DISTRIBUTION FOR CAMERA-TO-CCU INTERCONNECTIONS



## All-Weather Jacket

All portable camera cables utilize an extra-flexible, abrasion-resistant thermoplastic elastomer or polyurethane jacket compound. These materials are exceptionally durable and puncture-resistant and remain flexible even in low temperature environments.

## Gas-Injected Dielectric

Gepco® Brand's proprietary gas-injection process known as TactiCel™, blends nitrogen and plastic polymers to produce a dielectric that reduces high frequency attenuation, while maintaining uniform cell structure, return loss and exceptional crush resistance.

## High Tensile Strength Fiber Coating

All optical fiber elements in Gepco Brand SMPTE hybrid fiber cables are coated with a unique CPE coating that has three times the tensile strength compared to other types, which significantly improves the operating life of the fiber and cable.

## Crush-Resistant

Dielectric and jacket compounds used have exceptional crush resistance and aging properties. As a result, Gepco Brand coaxial cables are less susceptible to structural damage and deformation.

## Heat-Resistant

To eliminate power conductor insulation failure in extreme heat, Gepco Brand camera cables feature heat-resistant materials that maintain their insulation properties as the operating temperature increases.

## Electrical Characteristics & Specifications

### Meets or Exceeds SMPTE Standards

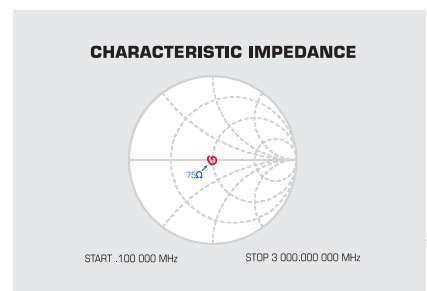
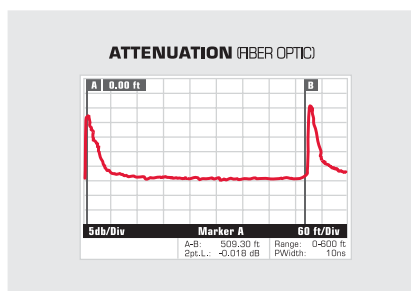
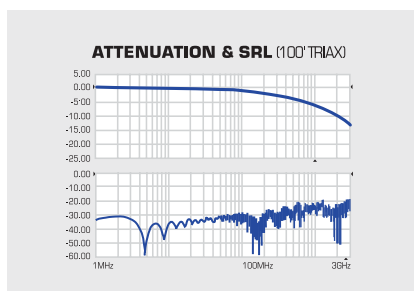
All Gepco Brand triax and SMPTE hybrid fiber cables meet or exceed SMPTE standards for camera interconnections. In addition, all triax is 100% sweep tested for return loss, attenuation, bandwidth and impedance.

### Low Attenuation

Gepco Brand hybrid cables have low-loss single-mode fiber elements for uncompressed HD video transmission, while triaxial cables feature Gepco's proprietary TactiCel gas-injected dielectric.

### Precision Impedance

Triaxial cables have a precision 75 Ω impedance to ensure impedance matching, optimal signal transfer and low structural return loss.



## Flexible Studio/Remote Triax



Comprised of extra-flexible triaxial camera cables, the LVT618 series is designed for use in studio, remote or other portable applications. Like the HD coax series, Gepco® Brand triax features a precision-drawn, copper conductor and TactiCel™, a low-loss, gas-injected polyethylene dielectric. The unique gas injection process achieves low attenuation, a precision 75 Ω impedance, low structural return loss and superior crush resistance. A tight-angled, heavy-gauge braid shield provides excellent RF/EMI shielding and low DCR. The master jacket is an all-weather TPE that is abrasion-resistant, durable and remains flexible even in cold temperature environments.

## Features &amp; Benefits

Ultra-Low Attenuation  
Precision 75 Ω Impedance  
3 GHz Bandwidth  
Low Structural Return Loss  
High Velocity of Propagation  
Flexible  
TactiCel Gas-Injected Foam Dielectric  
Two Isolated Copper Braids  
All-Weather TPE Master Jacket

## Applications

Digital or Analog Video Camera-to-CCU Interconnect  
Portable Cables  
Studio or Remote Environments

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Inner Shield	Inner Belt (Type, OD)	Outer Shield	Jacket	Jacket Colors	Approx. Weight
LVT61811	1	0.515" (13.1 mm)	14 AWG (19x27) Stranded BC	Gas-Injected Foam PE, 0.312" (7.92 mm)	95% BC Braid	TPR, 0.392" (9.96 mm)	95% BC Braid	TPE	Black, Red, Yellow, Green, Blue	136 lbs/Mft (54 kg/km)
<i>Extended-Distance RG 11 Flexible Triax</i>										
LVT61859	1	0.360" (9.14 mm)	20 AWG Solid BC	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% BC Braid	TPR, 0.216" (5.49 mm)	95% BC Braid	TPE	Black, Red, Yellow, Green, Blue, Violet	80 lbs/Mft (119 kg/km)
<i>Thin Profile RG 59 Flexible Triax</i>										
LVT61859S	1	0.360" (9.14 mm)	21 AWG (19x34) Stranded BC (Compact)	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% BC Braid	TPR, 0.216" (5.49 mm)	95% BC Braid	TPE	Black, Red, Blue	80 lbs/Mft (119 kg/km)
<i>Thin Profile RG 59 Flexible Triax: Stranded</i>										

## Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-3 GHz)	Capacitance	Cond. DCR per Mft	Inner Shield DCR per Mft/ Outer Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)											
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz
LVT61811	75 Ω (+/-3)	>22 dB, >15 dB	16.8 pF/ft	2.8 Ω	1.2 Ω/1.2 Ω	78%	0.14	0.28	0.45	1.20	1.79	2.60	3.12	4.70	5.69	8.05	10.75	13.50
LVT61859	75 Ω (+/-3)	>22 dB, >15 dB	16.3 pF/ft	10.2 Ω	2.6 Ω/2.0 Ω	83%	0.28	0.56	0.87	2.18	3.00	4.19	4.83	6.90	8.82	11.98	15.80	19.65
LVT61859S	75 Ω (+/-3)	>22 dB, >15 dB	17.0 pF/ft	14.3 Ω	2.6 Ω/2.0 Ω	78%	0.30	0.57	0.89	2.23	3.12	4.49	5.40	8.14	10.10	13.22	16.85	20.50

## Triax Assembly



GTC - Cable Type - Color - Length - Connector Format

11 = LVT61811  
59A = LVT61859  
59B = LVT61859S

0 = Black (All)  
2 = Red (All)  
4 = Yellow (LVT61811, LVT61859)  
5 = Green (LVT61811, LVT61859)  
6 = Blue (All)  
7 = Violet (LVT61859S)

In Feet

\*No suffix designates Kings® Tri-Loc® Connectors (One Male, One Female)  
7705-2 & 7703-2 for LVT61859/LVT61859S  
7705-3 & 7703-3 for LVT6185911

ADC = ADC® Pro-Ax™ (One Male, One Female)  
TCJ-B38 & TCP-B38 for LVT61859/LVT61859S  
TCJ-C12 & TCP-C12 for LVT61811

\*ADC Global Standard – G-Series (Equivalent to Fischer Connectors® Series 1051 A004) also available.

## Triax Tester

Two-piece test set that measures for multiple combinations of opens and/or shorts between the center conductor, inner braid and outer braid. The convenience of the base and remote, two-unit design allows for testing without having to uninstall and coil the cable. The case of both units is constructed from a durable, coated aluminum chassis that is also weather resistant. Operation of the TT2B is extremely simple via a single latching push button and four, high-visibility LEDs.



## Parts

Part #	Description
TCM	Triaxial Tester (Base & Remote)

Kings and Tri-Loc are registered trademarks of Kings Electronics Company, Inc. Neutrik is a registered trademark of Neutrik AG. ADC and Pro-Ax are trademarks of ADC Telecommunication, Inc. Fischer Connectors is a registered trademark of Fischer Connectors SA.

## Permanent-Installation Triax



**TactiCel™**  
Strong Cell Technology

Designed for permanent installation in conduit, plenum air spaces or outdoor environments, Gepco® Brand permanent install triax features a precision-drawn, copper conductor and TactiCel™, a low-loss, gas-injected polyethylene dielectric. These processed materials achieve low attenuation, a precision 75 Ω impedance, low structural return loss and superior crush resistance. Two heavy-gauge, isolated braid shields provide excellent RF/EMI shielding and low DC resistance.

### Features & Benefits

- Ultra-Low Attenuation
- Precision 75 Ω Impedance
- 3 GHz Bandwidth
- Low Structural Return Loss
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- Two Isolated Copper Braids
- CMR Riser, CMP Plenum and Direct Burial Versions

### Applications

- Digital or Analog Video Camera-to-CCU Interconnect
- Permanent Installation

### Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Inner Shield	Inner Belt (Type, OD)	Outer Shield	Jacket	UL Type	Approx. Weight
VT61811	1	0.475" (12.1 mm)	14 AWG Solid BC	Gas-Injected Foam PE, 0.285" (7.24 mm)	93% BC Braid	FRPE, 0.365" (9.27 mm)	93% BC Braid	PVC, Black	CMR	120 lbs/Mft (179 kg/km)
<i>Extended-Distance RG 11 Triax</i>										
VT61811PEF	1	0.475" (12.1 mm)	14 AWG Solid BC	Gas-Injected Foam PE, 0.285" (7.24 mm)	93% BC Braid	LDPE, 0.365" (9.27 mm)	93% BC Braid	PE with Water Blocking Tape, Black	—	125 lbs/Mft (186 kg/km)
<i>Extended-Distance RG 11 Triax: Direct Burial</i>										
VT61811TK	1	0.413" (10.5 mm)	14 AWG Solid BC	Gas-Injected Foam FEP, 0.285" (7.24 mm)	93% BC Braid	PVDF, 0.350" (8.89 mm)	90% BC Braid	PVDF, White	CMP	122 lbs/Mft (182 kg/km)
<i>Extended-Distance RG 11 Triax: Plenum</i>										
VT61859	1	0.360" (9.1 mm)	20 AWG Solid BC	Gas-Injected Foam PE, 0.146" (3.71 mm)	95% BC Braid	FRPE, 0.216" (5.49 mm)	95% BC Braid	PVC, Black	CMR	80 lbs/Mft (119 kg/km)
<i>Thin Profile RG 59 Triax</i>										

### Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-3 GHz)	Capacitance	Cond. DCR per Mft	Inner Shield DCR per Mft/Outer Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)											
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz
VT61811	75 Ω (+/-3)	>22 dB, >15 dB	16.2 pF/ft	2.5 Ω	1.4 Ω/1.4 Ω	84%	0.14	0.28	0.43	1.09	1.50	2.30	2.68	4.05	5.00	6.28	7.95	9.60
VT61811PEF	75 Ω (+/-3)	>22 dB, >15 dB	16.2 pF/ft	2.5 Ω	1.4 Ω/1.4 Ω	84%	0.14	0.28	0.43	1.09	1.50	2.30	2.68	4.05	5.00	6.28	7.95	9.60
VT61811TK	75 Ω (+/-3)	>20 dB, >15 dB	16.5 pF/ft	2.5 Ω	1.4 Ω/1.3 Ω	84%	0.14	0.25	0.40	1.22	1.82	2.86	3.35	5.30	6.58	8.90	11.95	14.88
VT61859	75 Ω (+/-3)	>22 dB, >15 dB	16.3 pF/ft	10.2 Ω	2.6 Ω/2.0 Ω	83%	0.28	0.55	0.87	2.10	2.98	4.20	4.78	7.00	8.30	10.48	13.40	15.92

### Triax Assembly



**GTC** - **Cable Type** - **Color** - **Length** - **Connector Format**

**11C** = VT61811  
**11D** = VT61811PEF  
**11P** = VT61811TK  
**59C** = VT61859

**0** = Black (VT61811, VT61811PEF, VT61859)  
**9** = White (VT61811TK)

In Feet

\*No suffix designates Kings® Tri-Loc® Connectors (One Male, One Female)  
 7705-1 & 7703-1 for VT61811/VT61811PEF  
 7705-6 & 7703-8 for VT61811TK  
 7705-2 & 7703-2 for VT61859

**ADC** = ADC® Pro-Ax™ (One Male, One Female)  
 TCJ-A12 & TCP-A12 for VT61811/VT61811PEF  
 TCJ-D38 & TCP-D38 for VT61811TK  
 TCJ-B38 & TCP-B38 for VT61859

\*ADC Global Standard – G-Series (Equivalent to Fischer Connectors® Series 1051 A004) also available.

### Triax-to-Coax Adapters

Triax-to-coax adapters are manufactured from true 75 Ω 7700 series Kings Tri-Loc® and BNC connectors. Available in male or female Tri-Loc® versions, both feature a female BNC with a straight-through connection from pin-to-pin, while the outer and inner shield of the Tri-Loc® are electrically in common with each other and the BNC shield. Not recommended for powering Triax cameras over coax without a ground connection.



Part #	Description
<b>TCM</b>	Male Tri-Loc® to Female BNC
<b>TCF</b>	Female Tri-Loc® to Female BNC

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## SMPTE Hybrid Fiber Cable Tester



The only tester needed for hybrid fiber camera cables, the SMPTE-304TS has a portable, hand-held design and provides over 40 hours of continuous use without recharging. The tester's intuitive diagnostic OLED backlit display graphically depicts which contact is defective or pinned out incorrectly.

An optional SMPTE launch cable can be used to zero out the tester and see exact insertion loss.

### Features & Benefits

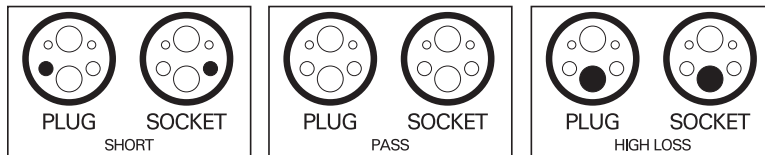
- Compact, Hand-Held Design
- Compatible with All SMPTE 304 Standard Cable
- Rechargeable Battery Lasts for More than 40 Hours
- Tests Both Electrical and Optical Circuits
- Checks All Conductors (Pin for Pin) and Fibers
- Ruggedized ABS Plastic Carrying Case
- Intuitive Diagnostic OLED Backlit Display
  - Easily Seen in Direct Sunlight or at Night
  - Graphically Depicts Which Contact is Defective or Pinned Out Incorrectly

### Applications

- HD Trucks
- Sports/Events Broadcasting
- Fixed or Mobile Facilities

### Specifications

Part Number	Set	Frame	Connectors	Display	Insertion Loss	Return Loss	Accessories Included
<b>SMPTE-304TS Complete Test Set</b>	(1) Metering Unit (1) Optical Source Unit	Black Aluminum, 6" H x 3" W x 2" D (Each Unit)	SMPTE 304 Standard, Stainless Steel with UPC Polish on Fiber Contacts	OLED Backlit Display (2" x 3") 100 x 160 Resolution	≤ 0.5 dB	>45 dB	Ruggedized ABS Plastic Carrying, Rechargeable NiMH Battery with Charger, 6' USB to USB-Mini Charging Cable



The intuitive graphical diagnostic display shows which element of the cable assembly is defective.

### Optional SMPTE Launch Cable

The SMPTE launch cable can be used in series with the SMPTE tester to aid in creating a "0 dB" or Dark Calibration reference point when testing installed SMPTE 311/304 type systems. It is recommended that a launch cable be used to zero out any loss elements that may exist in the test set. **See operations manual.**



**GHF92A-0-10-OB**



Ruggedized ABS Plastic Carrying Case



## 7.2 mm Hybrid Fiber Optic



Radically different from typical industry products, but with the same performance characteristics of traditional SMPTE 311 cables, the new Gepco® Brand HDC720HD 7.2 mm hybrid fiber cable solves the most common durability issues associated with SMPTE camera cables in a design that is 31% smaller and 40% lighter. The revolutionary construction of the HDC720HD starts with replacing the typical heavy steel strength member with a Kevlar® version that has the same pull strength of steel, but is lighter and more flexible. Unlike steel, the Kevlar strength member expands and contracts at the same rate as the glass members during temperature extremes. Using Kevlar in place of steel also means the cable has virtually no memory, making the cable easier to pay off, lay flat and wind back up on the drum. For further durability, the HDC720HD utilizes bend-insensitive fiber elements with very low attenuation and a bend radius of 0.2 mm—versus 2.0 mm for traditional single-mode fiber—in a breakout style with additional Kevlar® protection around the individual fibers. The typical outer braid is replaced with two 18 AWG drain wires that allow the cable to be more flexible, lighter and smaller in diameter. The master jacket is a rugged polyurethane with a glossy finish that reduces the pickup of dirt and debris.

### Features & Benefits

- Extremely Durable and Lightweight
- 7.2 mm Diameter Allows 31% More Cable per Reel
- Breakout Bend-Insensitive Optical Fibers with Kevlar® & PVC Jackets
- Virtually No Memory
- Strong Kevlar® Strength Member with Same Pull Strength as Steel
- Large Conductors for Camera Power
- Four Large-Gauge Copper Conductors
- Heat-Resistant
- Heavy-Duty Polyurethane Jacket

### Applications

- High-Definition Camera-to-CCU Interconnect
- Portable Cables
- Studio or Remote Environments
- High-Definition Steadicams

### Mechanical Specifications (General)

Part #	Nominal OD	Master Jacket (Type, Colors)	Overall Shield	Approx. Weight
HDC720HD	7.2 mm	Polyurethane, Black	100% Foil with 2 x 18 AWG (7x26) Stranded TC	54 lbs/Mft (80 kg/km)
Heavy-Duty 7.2 mm Hybrid Camera Cable				

### Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	2	Single-Mode Bend-Insensitive Fiber Optic (8.3µm Mode Field, 125µm Cladding)	CPE Fiber Coating, Kevlar® Wrap, Tight Tube PVC Jacket, 0.062" (1.57 mm) Finished O.D.	One Blue, One Yellow
Signal	2	24 AWG (7x32) Stranded TC	PE, 0.045" (1.14 mm)	One Red, One Gray
Auxiliary	2	16 AWG (65x34) Stranded TC	PE, 0.079" (2.01 mm)	One Black, One White
Strength Member	1	Kevlar® Strength Member	PE, 0.072" (1.83 mm)	Yellow

### Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature
<0.50 dB/km @ 1310/1550nm	23.8 Ω/Mft	4.01 Ω/Mft	2.93 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)

## 7.2 mm Portable, Heavy-Duty

### Features

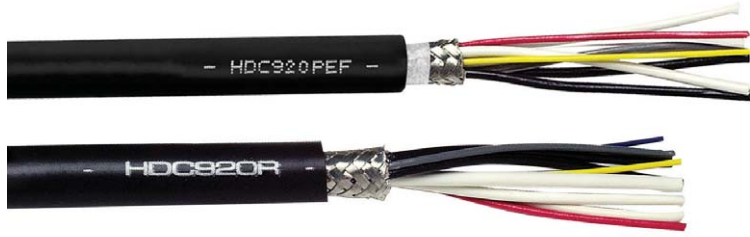
Machine Polished -55 dB RL (Typical)



Cable Type	Color	Standard Lengths	Overbody Boot	Connectors
GHF72HD	0		OB	LEMO® SMPTE 304 Hybrid Connectors - 1 Plug, 1 Socket with Metal Dust Caps
HDC720HD	Black	50' 328' 100' 500' 164' 656' 250'		

Kevlar is a registered trademark of E. I. du Pont de Nemours and Company. Steadicam is a registered trademark of the Tiffen Company.

## 9.2 mm Hybrid Fiber Optic



Gepeco® Brand fiber optic and copper conductor SMPTE 311 hybrid cable is available for high-definition video cameras. In the hybrid 311 format, the HD video signal is transmitted over two single-mode optical fibers to ensure accurate and extended-distance data transmission. To increase the durability, a special nylon-based polymer with increased tensile strength is used for the fiber coatings, and a 16 AWG steel strength member is cabled at the center of the cable core. All copper elements feature heat-resistant PE insulation and are shielded by a dense 95% copper braid. The HDC920 comes in an extra-flexible, abrasion-resistant TPE compound that is ideal for portable, studio and outdoor broadcast applications, while the HDC920R comes in a flexible, riser rated PVC outer jacket for permanent installation applications. Designed for permanent underground installation, the HDC920PEF has an extra-rugged polyethylene jacket and water blocking tape wrapped around the cable core.

### Features & Benefits

- Ultra-Low Attenuation
- SMPTE 311 Compliant
- Single-Mode Optical Glass Fibers
- Proprietary Fiber Coating for Increased Tensile Strength
- Six Copper Conductors
- Heat-Resistant
- Strength Member for Additional Durability
- Copper Braid Shield
- Water-Blocking Tape (HDC920PEF)

### Applications

- High-Definition Camera-to-CCU Interconnect
- Permanent Installation (HDC920R)
- Portable Cables (HDC920)
- Studio or Remote Environments
- Direct Burial Permanent Installation (HDC920PEF)

### Mechanical Specifications (General)

Part #	Nominal OD	Master Jacket (Type, Colors)	Overall Shield	UL Type	Approx. Weight
<b>HDC920</b>	9.2 mm	Flexible TPE, Black	95% TC Braid	—	90 lbs/Mft (134 kg/km)
		Extra-Flexible 9.2 mm Hybrid Camera Cable			
<b>HDC920R</b>	9.2 mm	PVC, Black	95% TC Braid	CMR	91 lbs/Mft (140 kg/km)
		Permanent Install 9.2 mm Hybrid Camera Cable			
<b>HDC920PEF</b>	9.2 mm	PE, Black	95% TC Braid	—	85 lbs/Mft (127 kg/km)
		Direct Burial 9.2 mm Hybrid Fiber Camera Cable			

### Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	2	Single Mode 8.3µm Mode Field, 125µm Cladding	CPE Tight Buffer, 0.9 mm	One Blue, One Yellow
Signal	2	24 AWG (7x32) Stranded TC	PE, 0.045" (1.14 mm)	One Red, One Gray
Auxiliary	4	20 AWG (19x32) Stranded TC	PE, 0.060" (1.52 mm)	Two White, Two Black
Strength Member	1	16 AWG Stranded Steel	PVC, 0.084" (2.13 mm)	One White

### Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature	SMPTE Standard
<0.70 dB/km @ 1310/1550nm	23.8 Ω/Mft	9.7 Ω/Mft	5.4 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60 Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceeds)

### 9.2 mm Portable, Extra-Flexible

#### Features

Machine Polished -55 dB RL (Typical)  
Meets or Exceeds SMPTE 304/311 Standards



Cable Type	Color	Standard Lengths	Overbody Boot	Connectors
<b>GHF92A</b>	<b>0</b>		<b>OB</b>	LEMO® SMPTE 304 Hybrid Connectors - 1 Plug, 1 Socket with Metal Dust Caps
HDC920	Black	50' 328' 100' 500' 164' 656' 250'		

### 9.2 mm Permanent Install

#### Features

Machine Polished -55 dB RL (Typical)  
Meets or Exceeds SMPTE 304/311 Standards



Cable Type	Color	Standard Lengths	LEMO® SMPTE 304 Hybrid Connector Format
<b>GHF92B</b>	<b>0</b>		
HDC920R	Black	50' 328' 100' 500' 164' 656' 250'	*No suffix designates 1 Plug & 1 Socket <b>PB</b> = 1 Plug Bulkhead, 1 Socket <b>SB</b> = 1 Socket Bulkhead, 1 Plug <b>SPB</b> = 1 Plug Bulkhead, 1 Socket Bulkhead **All sockets have metal dust caps.

LEMO is a registered trademark of Interlemon Holding, S. A.

## 9.2 mm Hybrid Fiber Optic: Heavy Duty



Gepco® Brand extra-durable 9.2 mm hybrid fiber cable provides improved durability in high-definition camera-to-CCU interconnects. In addition to the steel strength member and nylon-based polymer fiber coating, each fiber optic element has a Kevlar® wrap and PVC jacket for greater strength and protection. For the power elements, HDC920HD utilizes two signal and four auxiliary conductors. All copper elements now feature heat-resistant PE insulation and are shielded by a dense 95% copper braid. For additional durability, the outer jacket is made with an extra-tough polyurethane compound that is exceptionally abrasion- and puncture-resistant.

### Features & Benefits

- Ultra-Low Attenuation
- SMPTE 311 Compliant
- Single-Mode Optical Glass Fibers with Kevlar® & PVC Jackets
- Proprietary Fiber Coating for Increased Tensile Strength
- Six Copper Conductors
- Heat-Resistant
- Strength Member for Additional Durability
- Copper Braid Shield
- Heavy-Duty Polyurethane Jacket

### Applications

- High-Definition Camera-to-CCU Interconnect
- Portable Cables
- Studio or Remote Environments

Mechanical Specifications (General)							
Part #	Nominal OD	Master Jacket (Type, Colors)	Overall Shield	Approx. Weight			
HDC920HD	9.2 mm	Polyurethane, Black	95% TC Braid	95 lbs/Mft (142 kg/km)			
<i>Heavy-Duty 9.2 mm Hybrid Camera Cable</i>							
HDC920HDG	9.2 mm	Polyurethane, Black	95% TC Braid	100 lbs/Mft (149 kg/km)			
<i>Glossy Heavy-Duty 9.2 mm Hybrid Camera Cable</i>							
Mechanical Specifications (Components)							
Component	Number	Type	Insulation (Type, OD)	Color Code			
Optical	2	Single-Mode Fiber Optic (8.3µm Mode Field, 125µm Cladding)	CPE Fiber Coating, Kevlar® Wrap, Tight Tube PVC Jacket, 0.062" (1.58 mm) Finished O.D.	One Blue, One Yellow			
Signal	2	24 AWG (7x32) Stranded TC	PE, 0.045" (1.14 mm)	One Red, One Gray			
Auxiliary	4	20 AWG (19x32) Stranded TC	PE, 0.060" (1.52 mm)	Two White, Two Black			
Strength Member	1	16 AWG Stranded Steel	PVC, 0.084" (2.13 mm)	One White			
Electrical & Optical Specifications							
Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature	SMPTE Standard
<0.70 dB/km @ 1310/1550nm	23.8 Ω/Mft	9.7 Ω/Mft	5.4 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceeds)

## 9.2 mm Portable, Heavy-Duty

### Features

Machine Polished -55 dB RL (Typical)  
Meets or Exceeds SMPTE 304/311 Standards



<b>Cable Type</b>	<b>Color</b>	<b>Standard Lengths</b>	<b>Overbody Boot</b>
<b>GHF92HD</b>	<b>0</b>		<b>OB</b>
HDC920HD	Black	50' 328' 100' 500' 164' 656' 250'	

### Connectors

LEMO® SMPTE 304 Hybrid Connectors -  
1 Plug, 1 Socket with Metal Dust Caps

Kevlar is a registered trademark of E. I. du Pont de Nemours and Company. LEMO is a registered trademark of Interlemon Holding, S. A.

## 12 mm Heavy-Duty Hybrid Fiber Optic



Gepeco® Brand extra-durable 12 mm hybrid fiber cable provides improved durability in high-definition camera-to-CCU interconnects. In addition to the steel strength member and nylon-based polymer fiber coating, each fiber optic element has a Kevlar® wrap and PVC jacket for greater strength and protection. For the power elements, HDC120P utilizes two auxiliary conductors for streamlined termination, thereby reducing the possibility of electrical faults. All copper elements now feature heat-resistant PE insulation and are shielded by a dense 95% copper braid. For additional durability, the outer jacket is made with an extra-tough polyurethane compound that is exceptionally abrasion- and puncture-resistant.

### Features & Benefits

- Ultra-Low Attenuation
- SMPTE 311 Compliant
- Single-Mode Optical Fibers with Kevlar® & PVC Jackets
- Proprietary Fiber Coating for Increased Tensile Strength
- Four Large-Gauge Copper Conductors
- Heat-Resistant
- Strength Member for Additional Durability
- Heavy-Duty Polyurethane Jacket

### Applications

- High-Definition Camera-to-CCU Interconnect
- Portable Cables
- Studio or Remote Environments

#### Mechanical Specifications (General)

Part #	Nominal OD	Master Jacket (Type, Colors)	Overall Shield	Approx. Weight
<b>HDC120P</b>	12.0 mm	Polyurethane, Black	95% TC Braid	135 lbs/Mft (201 kg/km)

Heavy-Duty 12 mm Hybrid Fiber Camera Cable

#### Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	2	Single-Mode Fiber Optic (8.3µm Mode Field, 125µm Cladding)	CPE Fiber Coating, Kevlar® Wrap, Tight Tube PVC Jacket, 0.062" (1.57 mm) Finished O.D.	One Blue, One Yellow
Signal	2	24 AWG (19x36) Stranded TC	PE, 0.044" (1.11 mm)	One Red, One Gray
Auxiliary	2	16 AWG (65x34) Stranded TC	PE, 0.084" (2.13 mm)	One White, One Black
Strength Member	1	16 AWG Stranded Steel	PVC, 0.087" (2.21 mm)	One White

#### Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature	SMPTE Standard
<0.70 dB/km @ 1310/1550nm	23.8 Ω/Mft	4.5 Ω/Mft	2.6 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceeds)

## 12 mm Portable, Heavy-Duty

### Features

Machine Polished -55 dB RL (Typical)  
Meets or Exceeds SMPTE 304/311 Standards



Cable Type	Color	Standard Lengths	Overbody Boot
<b>GHF12B</b>	<b>0</b>		<b>OB</b>
HDC120P	Black	50' 328' 100' 500' 164' 656' 250'	

### Connectors

LEMO® SMPTE 304 Hybrid Connectors - 1 Plug, 1 Socket with Metal Dust Caps

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## 16 mm Heavy-Duty Hybrid Fiber Optic



Gepco® Brand fiber optic and copper conductor SMPTE 311 hybrid cable is available for high-definition video cameras. In the hybrid 311 format, the HD video signal is transmitted over two single-mode optical fibers to ensure accurate and extended-distance data transmission. To increase the durability, a special nylon-based polymer with increased tensile strength is used for the fiber coatings, and a 16 AWG steel strength member is cabled at the center of the cable core. All copper elements now feature heat-resistant PE insulation and are shielded by a dense 95% copper braid. The HDC160 features a double-jacket construction for extra durability and increased diameter.

### Features & Benefits

- Ultra-Low Attenuation
- SMPTE 311 Compliant
- Single-Mode Optical Glass Fibers
- Proprietary Fiber Coating for Increased Tensile Strength
- Six Copper Conductors
- Heat-Resistant
- Strength Member for Additional Durability
- Copper Braid Shield
- Double (PU & PVC) Jackets

### Applications

- High-Definition Camera-to-CCU Interconnect
- Portable Cables
- Studio or Remote Environments

### Mechanical Specifications (General)

Part #	Nominal OD	Inner Jacket (Type, Colors, Diameter)	Outer Jacket (Type, Colors)	Overall Shield	Approx. Weight
<b>HDC160</b>	16.0 mm	Flexible PVC, Black, 9.2 mm	Polyurethane, Black	95% TC Braid	195 lbs/Mft (291 kg/km)
<i>Extra-Flexible 16 mm Hybrid Camera Cable</i>					

### Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	2	Single Mode 8.3µm Mode Field, 125µm Cladding	CPE Tight Buffer, 0.9 mm	One Blue, One Yellow
Signal	2	24 AWG (7x32) Stranded TC	PE, 0.045" (1.14 mm)	One Red, One Gray
Auxiliary	4	20 AWG (19x32) Stranded TC	PE, 0.060" (1.52 mm)	Two White, Two Black
Strength Member	1	16 AWG Stranded Steel	PVC, 0.084" (2.13 mm)	One White

### Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature	SMPTE Standard
<0.70 dB/km @ 1310/1550nm	23.8 Ω/Mft	9.7 Ω/Mft	5.4 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60 Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceeds)

## 16 mm Portable, Heavy-Duty

### Features

Machine Polished -55 dB RL (Typical)  
Meets or Exceeds SMPTE 304/311 Standards



Cable Type	Color	Standard Lengths	Overbody Boot	Connectors
<b>GHF16A</b>	<b>0</b>		<b>OB</b>	LEMO® SMPTE 304 Hybrid Connectors - 1 Plug, 1 Socket with Metal Dust Caps
HDC160	Black	50' 328' 100' 500' 164' 656' 250'		

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## 3-Channel Permanent-Installation Hybrid Fiber



Gepeco® Brand HDC3R 3-channel hybrid fiber cable is a unique solution for the distribution of up to three SMPTE hybrid fiber camera positions in a permanent installation application. Each channel within the HDC3R features a group of elements that consist of two single-mode fibers, two auxiliary copper conductors, two signal copper conductors and a foil shield with drain wire. The foil shields feature nonconductive backings and edges to provide electrical isolation between the three shields. The single-mode fiber elements feature a break-out-style Kevlar® and PVC jacket construction for added durability and secure connector termination. The PVC jacket is orange with a yellow stripe for easy identification and has a low-friction surface for easy installation through conduit.

### Features & Benefits

- Unique Hybrid Composite Construction
- Low-Loss Single-Mode Optical Fiber
- Three Groups of Fiber and Copper Elements
- Interconnects up to Three SMPTE 304 Based HD Camera Systems
- Single Pull Installation
- UL Riser Rated

### Applications

- High-Definition Camera-to-CCU Interconnect
- Permanent Installation

#### Mechanical Specifications (General)

Part #	Nominal OD	Master Jacket (Type, Colors)	UL Type	Approx. Weight
<b>HDC3R</b>	0.600" (15.2 mm)	PVC, Orange with Yellow Stripe	CMR	170 lbs/Mft (253 kg/km)

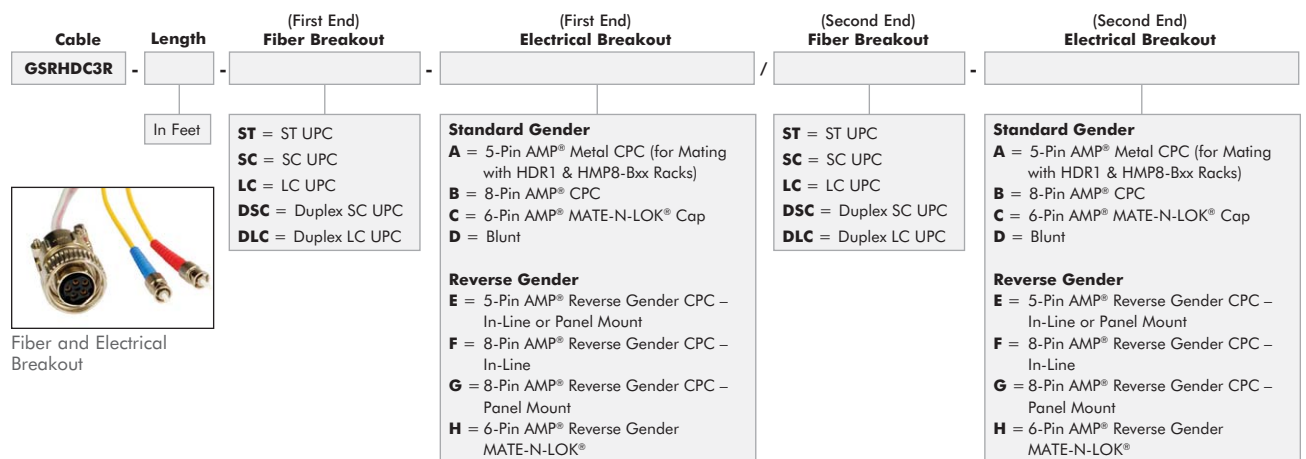
3-Channel Hybrid Fiber Camera Cable

#### Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	6 (3 Groups of 2)	Single-Mode Fiber Optic (8.3µm Mode Field, 125µm Cladding)	PVC Fiber Coating, Kevlar® Wrap, Tube PVC Jacket, 3 mm Finished O.D.	Yellow with Alphanumeric Print
Signal	6 (3 Groups of 2)	24 AWG (17x32) Stranded TC	PVC, 0.040" (1.02 mm)	One Red, One Gray (Solid or with Yellow or Orange Stripe)
Auxiliary	6 (3 Groups of 2)	18 AWG (19x30) Stranded TC	PVC, 0.082" (2.08 mm)	One White, One Black (Solid or with Yellow or Orange Stripe)

#### Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature
<0.70 dB/km @ 1310/1550nm	23.8 Ω/Mft	6.0 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60 Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)



#### Fiber Breakout Connector Options

Angled polished versions are available by request.



ST

SC

LC

#### Electrical Breakout Connector Options



A

B

C



E

F

G

H

Standard Gender

Reverse Gender

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## HD Camera Electrical



Unique Gepco® Brand electrical cables are constructed from only the copper elements utilized in the hybrid fiber camera cables. When used with single-mode fiber optic cables and Gepco hybrid fiber distribution systems, the HDP221 cable provides an alternative when permanently installing rack-to-rack infrastructure wiring. A number of Gepco's breakout systems allow for a hybrid fiber connector's elements to be distributed over separate copper and optical cables. This greatly simplifies on-site HD camera permanent installation cabling and termination.

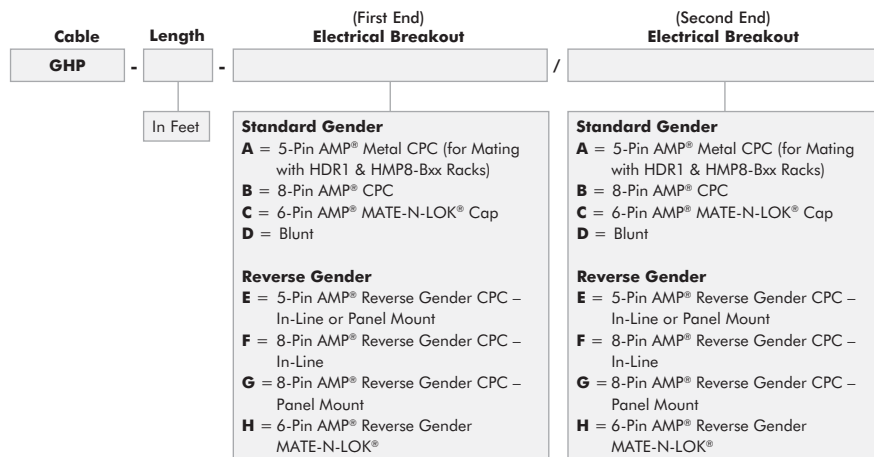
### Features & Benefits

- Specialized Electrical-Only Design
- Four Large-Gauge Copper Conductors
- Heat-Resistant
- Tinned-Copper Braid Shield
- UL Riser Rated

### Applications

- Interconnection of Electrical Contacts from CCUs to HD Cameras
- For Permanent Installation Environments
- Used in Conjunction with Single-Mode Indoor Fiber
- Ideal for Use with Gepco® Brand Hybrid Fiber Distribution Solutions

Mechanical Specifications										
Part #	# of Conductors	Nominal OD	Auxiliary Conductors	Auxiliary Insulation (Type, OD)	Signal Conductors	Signal Insulation	Shield	Jacket (Type, Colors)	UL Type	Approx. Weight
<b>HDP221</b>	2 Auxiliary 2 Signal	0.315" (8.0 mm)	16 AWG (65x34) Stranded TC	PE, 0.020" (0.51 mm)	22 AWG (19x34) Stranded TC	PE, 0.015" (0.38 mm)	90% TC Braid	PVC, Black	CMR	76 lbs/Mft (113 kg/km)
<i>Single-Channel HD Electrical Cable</i>										
Electrical & Optical Specifications										
Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature	SMPTE Standard				
15.3 Ω/Mft	4.5 Ω/Mft	2.6 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60 Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	Compliant with Electrical Specifications for SMPTE 311				



### Electrical Breakout Connector Options



AMP and MATE-N-LOK are registered trademarks of Whitaker Corporation.

## Single-Mode Fiber Optic: Tactical



Designed for portable applications in harsh environments, Gepco® Brand tactical single-mode fiber optic cables are exceptionally rugged and light-weight and are available in both distribution and breakout style constructions. All tactical cables feature an abrasion-, chemical- and cut-resistant outer polyurethane jacket. The 125 $\mu$ m single-mode fiber elements are coated with a 900 $\mu$ m, hard elastomeric, tight-buffer. Available in two series, the distribution series features an aramid strength member filler for exceptional strength, while the breakout series features aramid strength members within a tube elastomeric jacket for each fiber to provide additional strength and crush resistance.

### Features & Benefits

- Exceptionally Rugged
- Crush-Resistant
- Low-Loss Single-Mode Fiber
- Distribution & Breakout Type Constructions
- Aramid Filler
- Heavy-Duty Polyurethane Outer Jacket
- Meets or Exceeds TIA/EIA (Military Requirements)

### Applications

- Portable Applications
- Outdoor Broadcast
- Staging
- Hostile Environments
- Digital Video, Audio or Networking

#### Fiber Specifications

Type	Mode Field Diameter	Cladding Diameter	Maximum Attenuation
Single-Mode	8.3 $\mu$ m	125 $\mu$ m	$\leq$ 0.50 dB/Km @ 1310/1550nm

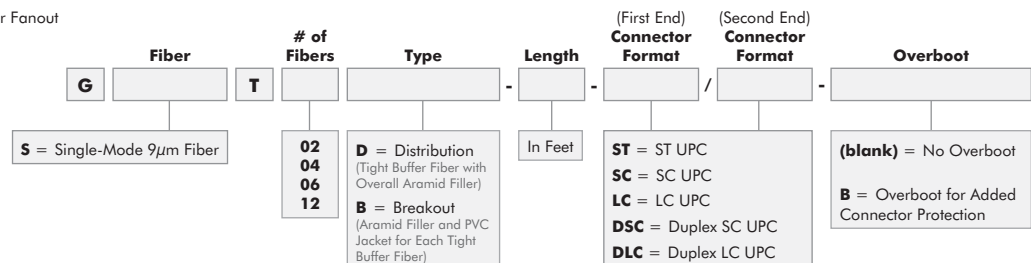
#### Mechanical Specifications

Part #	Fiber Buffer	Outer Jacket	Crush Resistance	Impact Resistance	Flex Resistance	Operating Temp.	Storage Temp.	Number of Elements	Nominal OD	Tensile Load		Minimum Bend Radius		Weight
										Short Term	Long Term	Installation (Pulling)	Operating	
FSD**T * = Number of Elements	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	PU, Black	440 N/cm	200 Impacts	2000 Cycles	-55°C to +85°C	-70°C to +85°C	2	0.200" (5.1 mm)	1,800 lbs	600 lbs	3.2" (81 mm)	1.6" (41 mm)	15 lbs/Mft (22 kg/km)
								4	0.220" (5.6 mm)	1,800 lbs	600 lbs	3.6" (91 mm)	1.8" (46 mm)	19 lbs/Mft (28 kg/km)
								6	0.240" (6.1 mm)	1,800 lbs	600 lbs	3.8" (97 mm)	1.9" (48 mm)	19 lbs/Mft (28 kg/km)
								12	0.260" (6.6 mm)	2,100 lbs	700 lbs	4.2" (107 mm)	2.1" (53 mm)	34 lbs/Mft (51 kg/km)
Tactical Single-Mode Fiber: Distribution														
FSB**T * = Number of Elements	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & PVC Tube Jacket for Each Fiber	PU, Black	440 N/cm	200 Impacts	2000 Cycles	-55°C to +85°C	-70°C to +85°C	2	0.260" (6.6 mm)	2,200 lbs	550 lbs	4.2" (107 mm)	2.1" (53 mm)	21 lbs/Mft (31 kg/km)
								4	0.290" (7.4 mm)	2,200 lbs	550 lbs	4.6" (117 mm)	2.3" (58 mm)	28 lbs/Mft (43 kg/km)
								6	0.340" (8.6 mm)	2,400 lbs	600 lbs	5.4" (137 mm)	2.7" (69 mm)	36 lbs/Mft (53 kg/km)
								12	0.480" (12.2 mm)	4,800 lbs	1,200 lbs	7.6" (193 mm)	3.8" (97 mm)	65 lbs/Mft (97 kg/km)
Tactical Single-Mode Fiber: Breakout														

## ST/SC/LC Tactical Snake Assemblies

### Features

- Machine Polished -55 dB RL (Typical) UPC Quality
- 100% Tested & Verified
- Precision Fiber Connectors
- Optional Overboot Protects Connector Fanout





## Multi-Mode Fiber Optic: Tactical



Designed for portable applications in harsh environments, Gepco® Brand tactical multi-mode fiber optic cables are exceptionally rugged and light-weight and are available in both distribution and breakout style constructions. All tactical cables feature an abrasion-, chemical- and cut-resistant outer polyurethane jacket. The 125µm multi-mode fiber elements are coated with a 900µm, hard elastomeric, tight buffer. Available in two series, the distribution series features an aramid strength member filler for exceptional strength, while the breakout series features aramid strength members within a tube elastomeric jacket for each fiber to provide additional strength and crush resistance.

### Features & Benefits

- Exceptionally Rugged
- Crush-Resistant
- Low-Loss Multi-Mode Fiber
- Distribution & Breakout Type Constructions
- Aramid Filler
- Heavy-Duty Polyurethane Outer Jacket
- Meets or Exceeds TIA/EIA (Military Requirements)

### Applications

- Portable Applications
- Outdoor Broadcast
- Staging
- Hostile Environments
- Digital Video, Audio or Networking

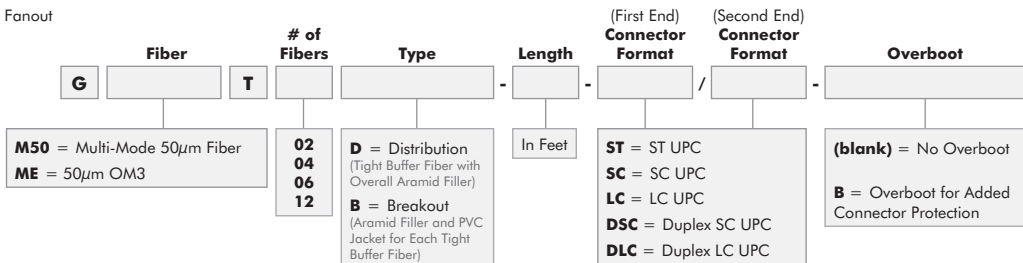
Fiber Specifications													
Type	Mode Field Diameter				Cladding Diameter				Maximum Attenuation				
Multi-Mode	62.5µm				125µm				≤ 3.50 dB/Km @ 850nm, ≤ 1.00 dB/Km @ 1550nm				

Mechanical Specifications														
Part #	Fiber Buffer	Outer Jacket	Crush Resistance	Impact Resistance	Flex Resistance	Operating Temp.	Storage Temp.	Number of Elements	Tensile Load			Minimum Bend Radius		Weight
									Nominal OD	Short Term	Long Term	Installation (Pulling)	Operating	
<b>FMD**T</b> <small>*=Number of Elements</small>	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	PU, Black	440 N/cm	200 Impacts	2000 Cycles	-55°C to +85°C	-70°C to +85°C	2	0.200" (5.1 mm)	1,800 lbs	600 lbs	3.2" (81 mm)	1.6" (41 mm)	15 lbs/Mft (22 kg/km)
								4	0.220" (5.6 mm)	1,800 lbs	600 lbs	3.6" (91 mm)	1.8" (46 mm)	19 lbs/Mft (28 kg/km)
								6	0.240" (6.1 mm)	1,800 lbs	600 lbs	3.8" (97 mm)	1.9" (48 mm)	19 lbs/Mft (28 kg/km)
								12	0.260" (6.6 mm)	2,100 lbs	700 lbs	4.2" (107 mm)	2.1" (53 mm)	34 lbs/Mft (51 kg/km)
<i>Tactical Multi-Mode Fiber: Distribution</i>														
<b>FMB**T</b> <small>*=Number of Elements</small>	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & PVC Tube Jacket for Each Fiber	PU, Black	440 N/cm	200 Impacts	2000 Cycles	-55°C to +85°C	-70°C to +85°C	2	0.260" (6.6 mm)	2,200 lbs	550 lbs	4.2" (107 mm)	2.1" (53 mm)	21 lbs/Mft (31 kg/km)
								4	0.290" (7.4 mm)	2,200 lbs	550 lbs	4.6" (117 mm)	2.3" (58 mm)	28 lbs/Mft (43 kg/km)
								6	0.340" (8.6 mm)	2,400 lbs	600 lbs	5.4" (137 mm)	2.7" (69 mm)	36 lbs/Mft (53 kg/km)
								12	0.480" (12.2 mm)	4,800 lbs	1,200 lbs	7.6" (193 mm)	3.8" (97 mm)	65 lbs/Mft (97 kg/km)
<i>Tactical Multi-Mode Fiber: Breakout</i>														

## ST/SC/LC Tactical Snake Assemblies

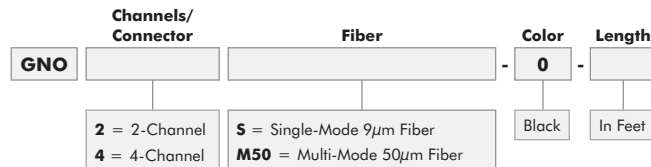
- Features**  
 Machine Polished -55 dB RL (Typical) UPC Quality  
 100% Tested & Verified  
 Precision Fiber Connectors  
 Optional Overboot Protects Connector Fanout



## Neutrik® opticalCON® Fiber Optic Cable Assemblies



Neutrik® opticalCON® cable assemblies by Gepco provide a streamlined and ruggedized solution for the deployment and interfacing of optical fiber in commercial and professional A/V applications. The opticalCON connector features a ruggedized body design, high performance LC fiber contacts, and a unique shutter mechanism to protect against damage and contamination. Machine polished and terminated in the U.S.A., opticalCON assemblies by Gepco provide exceptionally low return-loss, low attenuation, and consistent end-face geometry. opticalCON assemblies are available in almost any length and are custom terminated to user specifications.



### Also Available with Cable Reeler

Add reeler part number to suffix. Add "R" to end of part number. Standard configuration has cable mount connector on both ends. Optional bulkhead on reel is also available upon special request.



GT310-OFFEN



GT380-OFFEN



GT380-RM



GT450-RMFK

### Features & Benefits

- Machine Polished
- Two or Four Fiber Channels per Connector
- Industry Standard LC Fiber Contacts
- Unique Shutter Mechanism Protects Contacts from Damage and Contamination
- 55 dB Return Loss (Typical)
- Ruggedized Body
- Tactical Optical Fiber Cable
- Additional Protection from Included Boot

### Overall Specifications

# of Channels: 2 or 4

Connectors: (2) Neutrik® opticalCON®, Black Chromium Plated Connector Body with Boot

Cable Type: Tactical, Polyurethane Jacket, 5 mm Diameter, Black

Available Lengths: 50', 100', 164', 250', 328', 500', 656', or Custom

### Mechanical Performance Specifications

Cable Retention Force: 500N

Lifetime: >5000 Cycles

Insertion/Withdrawal Force: <45N

Operating Temperature: -40°C to +75°C

Minimum Bend Radius: 5 cm

### Optical Performance Specifications

Type: LC-UPC (Straight Polish)

Fiber Type: 9µm Single-Mode Fiber or 50µm Multi-Mode Fiber

Cable Loss:

< 0.5 dB/km @ 1310/1550nm (Single-Mode)

< 3 dB/km @ 850nm (Multi-Mode)

< 1 dB/km @ 1300nm (Multi-Mode)

Connector Loss: <0.5 dB (per Connection)

Connector Back Reflection: -55 dB RL (Typical), -45 dB RL (Max)

## Neutrik® opticalCON® Panel Mount Connectors & Accessories



### CAS-FOCD opticalCON® Cleaning Kit

\*Sold only to Neutrik-certified field assemblers; certification number required when ordering.

- Hand Microscope (400x Magnification) with Microscope Adapters for opticalCON® and 2.5 mm Ferrules
- opticalCON Cleaning Box (Contains lint-free wipes; optimized for opticalCON fiber cleaning.)
- DRY Cleaners for 1.25 mm and 2.5 mm
- Fiber Optic Cleaning Fluid (Non-Flammable)

### Neutrik® Connector Specifications

Part Number	Connector Description	Fiber	Shell Ground Contact	Mating
<b>NO2-4FDW-A</b>	Panel Mount opticalCON®	2	—	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
<b>NO2-4FDW-1-A</b>	Panel Mount opticalCON®	2	1	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
<b>NO4FDW-A</b>	Panel Mount opticalCON®	4	—	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
<b>NAO2M-H1W-A</b>	Coupler opticalCON®, Black	2 x LC-Duplex Multi-Mode PC	—	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
<b>NAO2S-H1W-A</b>	Coupler opticalCON®, Blue	2 x LC-Duplex Single-Mode PC	—	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
<b>NAO2SA-H1W-A</b>	Coupler opticalCON®, Green	2 x LC-Duplex Single-Mode PC	—	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
<b>NAO4MW-A</b>	Coupler opticalCON®, Black	4 x Multi-Mode PC	—	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
<b>NAO4SW-A</b>	Coupler opticalCON®, Blue	4 x Single-Mode PC	—	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
<b>NAO4SAW-A</b>	Coupler opticalCON®, Green	4 x Single-Mode APC	—	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
<b>NAO4SAW-AX</b>	Coupler opticalCON®, Red	4 x Single-Mode APC	—	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC

Neutrik and opticalCON are registered trademarks of Neutrik AG.

## TFOCA-II® and Pierside Assemblies



TFOCA-II® and Pierside cable assemblies are built for signal transmission over multiple optical fiber elements in hostile and portable applications. Each connector contains two, four or 12 elements in an extra-rugged, hermaphroditic connector shell. The hermaphroditic design enables cables to be mated to either TAC-2/4/12 panel connectors or other TAC-2/4/12 cables in any direction providing flexibility for cable link expansion and eliminating cables from being directionally misdeployed. Machine polished, these cables have exceptionally low return-loss and attenuation with consistent end-face geometry. TFOCA-II and Pierside cables are available in almost any length and are custom terminated to user specifications.

Connector	Fiber Type	# of Fibers	Construction Type	Color	Length
TFATT = TFOCA-II® TFATP = Pierside	S = Single-Mode M50 = Multi-Mode	02 04 12	B = Breakout D = Distribution	0 Black	In Feet

## TACBeam™ Expanded Beam Assemblies



TACBeam™ cable assemblies are built for signal transmission over multiple optical fiber elements in hostile and portable applications. Each connector contains two or four elements in an extra-rugged, hermaphroditic connector shell. The hermaphroditic design enables cables to be mated in any direction, providing flexibility for cable link expansion and eliminating cables from being directionally misdeployed. Machine polished, TACBeam assemblies have exceptionally low return-loss and attenuation. TACBeam assemblies are available in almost any length and are custom terminated to user specifications.

Fiber Type	# of Fibers	Length
S = Single-Mode M50 = Multi-Mode	02 04	In Feet

### Features & Benefits

- Machine Polished
- 2, 4 or 12 Channels per Connector
- Hermaphroditic Design Enables Mating to Cable or Panel Mount Connectors in Either Direction
- Extra-Rugged Metal Shell with Dust Cap
- For Mobile Production Applications

### Overall Specifications

# of Channels: 2, 4, or 12

**Connectors:** (2) Amphenol® TFOCA-II® or (2) Pierside109 Series; Hermaphroditic, Zinc or Nickel Plating, Removable End-Cap Included

**Cable Type:** Tactical Single-Mode 9.2µm or Tactical Multi-Mode 50µm

**Available Lengths:** 50', 100', 164', 250', 328', 500', 656' or Custom

### Mechanical Performance Specifications

**Operating Temperature:** -40°C to 71°C

**Minimum Bend Radius:** 4 cm

### Optical Performance Specifications

**Fiber Type:** OS1 Single-Mode, OM3 Multi-Mode

**Cable Loss:** <0.5 dB/Km

**Connector Loss:**  
0.30 dB Typical, 0.75 dB Maximum (Multi-Mode)  
0.40 dB Typical, 0.75 dB Maximum (Single-Mode)

**Connector Back Reflection:** >55 dB

### Features & Benefits

- Machine Polished
- 2 or 4 Channels per Connector
- Hermaphroditic Design Enables Mating to Cable or Panel Mount Connectors in Either Direction
- Extra-Rugged Metal Shell with Dust Cap
- For Mobile Production Applications
- Expanded Beam Technology is Less Susceptible to Dust and Debris
- Monolithic Insert Design Facilitates Cleaning
- Non-Contacting Interface Allows Thousands of Mating Cycles

### Overall Specifications

# of Channels: 2 or 4

**Connectors:** (2) Amphenol® TACBeam™

**Cable Type:** Tactical Single-Mode 9.2µm or Tactical Multi-Mode 50µm/125µm

**Available Lengths:** 50', 100', 164', 250', 328', 500', 656' or Custom

### Mechanical Performance Specifications

**Operating Temperature:** -20°C to 80°C

**Minimum Bend Radius:** 4 cm

### Optical Performance Specifications

**Fiber Type:** OS2, Single-Mode or OM3 Multi-Mode

**Cable Loss:** Single-Mode <0.5 dB/Km, Multi-Mode 2.5 dB/Km

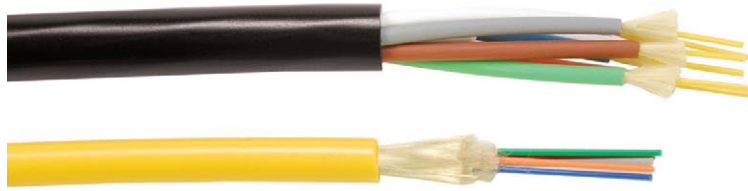
**Connector Loss:** ≤1.5 dB

**Connector Back Reflection:** >55 dB

Amphenol, TFOCA-II and TACBeam are trademarks of Amphenol Corporation.



## Single-Mode Fiber Optic: Permanent Installation



Gepco® Brand low-loss, single-mode, fiber optic cable is available in breakout and distribution types, in either UL plenum or riser rated versions. The modal dispersion characteristics of single-mode glass enable transmission of high bit-rate data, thereby making this fiber type ideal, and the standard, for HD video signal transmission. When used in conjunction with Gepco electrical HD cables and hybrid fiber breakout systems, FS Series fiber can be used for the optical interconnect between camera positions.

### Features & Benefits

- Low-Loss, Single-Mode Optical Glass Fibers
- Distribution & Breakout Type Constructions
- Aramid Filler
- 1 Through 144 Elements
- PVC or PVDF Jacket
- UL Riser or Plenum Rated

### Applications

- Interconnection of Video & Audio Data for Multiple HD Cameras
- For Permanent Installation
- Indoor/Outdoor Use

### Fiber Specifications

Type	Mode Field Diameter	Cladding Diameter	Maximum Attenuation
Single-Mode	8.3µm	125µm	≤ 0.70 dB/Km @ 1310/1550nm

### Mechanical Specifications

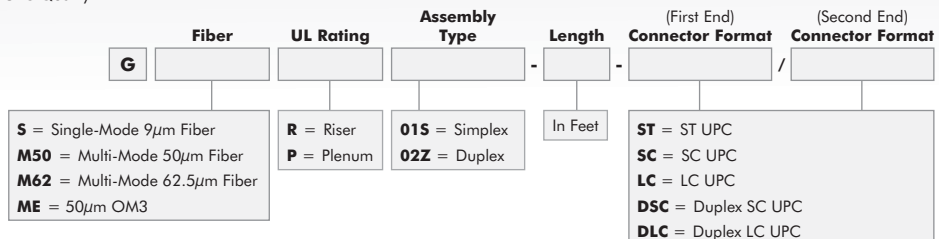
Part #	Fiber Buffer	Number of Elements	Nominal OD	Outer Jacket	Maximum Tension		Minimum Bend Radius		Weight	UL Type
					Installation (Pulling)	Operating	Installation (Pulling)	Operating		
FSD**R	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2	0.180" (4.6 mm)	PVC	310 lbs	100 lbs	2.7" (69 mm)	1.8" (46 mm)	14 lbs/Mft (21 kg/km)	OFNR
		4	0.200" (5.1 mm)	PVC	310 lbs	100 lbs	3.0" (76 mm)	2.0" (51 mm)	17 lbs/Mft (25 kg/km)	
		6	0.220" (5.6 mm)	PVC	310 lbs	100 lbs	3.3" (84 mm)	2.2" (56 mm)	19 lbs/Mft (28 kg/km)	
		12	0.260" (6.6 mm)	PVC	600 lbs	135 lbs	3.9" (99 mm)	2.6" (66 mm)	25 lbs/Mft (37 kg/km)	
Single-Mode Distribution: Riser Rated										
FSD**P	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2	0.160" (4.1 mm)	Plenum PVC	270 lbs	90 lbs	2.4" (61 mm)	1.6" (41 mm)	9 lbs/Mft (13 kg/km)	OFNP
		4	0.180" (4.6 mm)	Plenum PVC	270 lbs	90 lbs	2.7" (69 mm)	1.8" (46 mm)	11 lbs/Mft (16 kg/km)	
		6	0.200" (5.1 mm)	Plenum PVC	310 lbs	100 lbs	3.0" (76 mm)	2.0" (51 mm)	15 lbs/Mft (22 kg/km)	
		12	0.220" (5.6 mm)	Plenum PVC	400 lbs	135 lbs	3.3" (84 mm)	2.2" (56 mm)	19 lbs/Mft (28 kg/km)	
Single-Mode Distribution: Plenum Rated										
FSB**R	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & PVC Tube Jacket for Each Fiber	1 (Simplex)	0.110" (2.8 mm)	PVC	110 lbs	70 lbs	2.0" (51 mm)	1.2" (30 mm)	5 lbs/Mft (7 kg/km)	OFNR
		2 (Duplex)	0.110" x 0.230" (2.8 mm x 5.8 mm)	PVC	220 lbs	110 lbs	2.0" (51 mm)	1.2" (30 mm)	11 lbs/Mft (16 kg/km)	
		2	0.280" (7.1 mm)	PVC	270 lbs	110 lbs	4.2" (107 mm)	2.8" (71 mm)	34 lbs/Mft (51 kg/km)	
		4	0.310" (7.9 mm)	PVC	450 lbs	180 lbs	4.7" (119 mm)	3.1" (79 mm)	44 lbs/Mft (66 kg/km)	
		6	0.370" (9.4 mm)	PVC	670 lbs	270 lbs	5.6" (142 mm)	3.7" (94 mm)	55 lbs/Mft (82 kg/km)	
12	0.490" (12.4 mm)	PVC	1350 lbs	560 lbs	7.4" (188 mm)	4.9" (124 mm)	101 lbs/Mft (150 kg/km)			
Single-Mode Breakout: Riser Rated										
FSB**P	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & Plenum PVC or PVDF Tube Jacket for Each Fiber	1 (Simplex)	0.110" (2.8 mm)	Plenum PVC	110 lbs	70 lbs	2.0" (51 mm)	1.2" (30 mm)	6 lbs/Mft (9 kg/km)	OFNP
		2 (Duplex)	0.110" x 0.230" (2.8 mm x 5.8 mm)	Plenum PVC	220 lbs	110 lbs	2.0" (51 mm)	1.2" (30 mm)	12 lbs/Mft (18 kg/km)	
		2	0.240" (6.1 mm)	PVDF	360 lbs	90 lbs	3.6" (91 mm)	3.6" (91 mm)	23 lbs/Mft (34 kg/km)	
		4	0.240" (6.1 mm)	PVDF	360 lbs	90 lbs	3.6" (91 mm)	3.6" (91 mm)	23 lbs/Mft (34 kg/km)	
		6	0.280" (7.1 mm)	PVDF	540 lbs	130 lbs	4.2" (107 mm)	4.2" (107 mm)	32 lbs/Mft (48 kg/km)	
12	0.390" (9.9 mm)	PVDF	1080 lbs	270 lbs	5.9" (150 mm)	5.9" (150 mm)	63 lbs/Mft (94 kg/km)			
Single-Mode Breakout: Plenum Rated										

Other fiber counts available up to 144 elements. Please consult Gepco for details and color availability. Please see fiber buffer color code chart #4 on page 142.

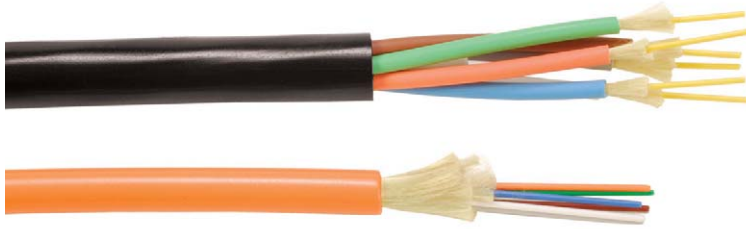
### Permanent Installation Single-Mode & Multi-Mode Fiber ST/SC/LC Simplex & Duplex Assemblies

#### Features

- Machine Polished -55 dB RL (Typical) UPC Quality
- 100% Tested & Verified
- Precision Fiber Connectors



## Multi-Mode Fiber Optic: Permanent Installation



The Gepeco® Brand indoor/outdoor distribution multi-mode fiber series for audio, video or data networking applications is available in both breakout and distribution type constructions. Distribution types feature individually coated fibers with an overall aramid filler and jacket. Breakout types have individual aramid fillers and tube jackets over each individual fiber for added strength and durability when breaking out the individual fibers. Both types are available in plenum and riser constructions for permanent installation in almost any environment.

### Features & Benefits

- Low-Loss, Multi-Mode Optical Glass Fibers
- Distribution & Breakout Type Constructions
- Aramid Filler
- 1 Through 144 Elements
- PVC or PVDF Jacket
- UL Riser or Plenum Rated

### Applications

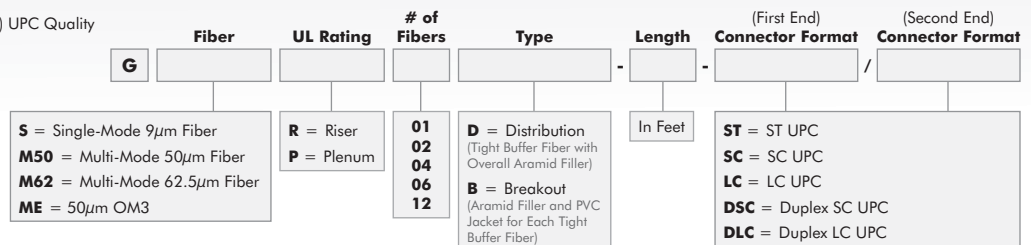
- For Permanent Installation
- Indoor/Outdoor Use

Fiber Specifications										
Type	Mode	Field Diameter	Cladding Diameter	Maximum Attenuation						
Multi-Mode		62.5µm	125µm	3.50 dB/Km @ 850nm, 1.00 dB/Km @ 1550nm						
Mechanical Specifications										
Part #	Fiber Buffer	Number of Elements	Nominal OD	Outer Jacket	Maximum Tension		Minimum Bend Radius		Weight	UL Type
					Installation (Pulling)	Operating	Installation (Pulling)	Operating		
FMD**R	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2	0.180" (4.6 mm)	PVC	310 lbs	100 lbs	2.7" (69 mm)	1.8" (46 mm)	14 lbs/Mft (21 kg/km)	OFNR
		4	0.200" (5.1 mm)	PVC	310 lbs	100 lbs	3.0" (76 mm)	2.0" (51 mm)	17 lbs/Mft (25 kg/km)	
		6	0.220" (5.6 mm)	PVC	310 lbs	100 lbs	3.3" (84 mm)	2.2" (56 mm)	19 lbs/Mft (28 kg/km)	
		12	0.260" (6.6 mm)	PVC	600 lbs	135 lbs	3.9" (99 mm)	2.6" (66 mm)	25 lbs/Mft (37 kg/km)	
		Multi-Mode Distribution: Riser Rated								
FMD**P	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2	0.160" (4.1 mm)	Plenum PVC	270 lbs	90 lbs	2.4" (61 mm)	1.6" (41 mm)	9 lbs/Mft (13 kg/km)	OFNP
		4	0.180" (4.6 mm)	Plenum PVC	270 lbs	90 lbs	2.7" (69 mm)	1.8" (46 mm)	11 lbs/Mft (16 kg/km)	
		6	0.200" (5.1 mm)	Plenum PVC	310 lbs	100 lbs	3.0" (76 mm)	2.0" (51 mm)	15 lbs/Mft (22 kg/km)	
		12	0.220" (5.6 mm)	Plenum PVC	400 lbs	135 lbs	3.3" (84 mm)	2.2" (56 mm)	19 lbs/Mft (28 kg/km)	
		Multi-Mode Distribution: Plenum Rated								
FMB**R	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & PVC Tube Jacket for Each Fiber	1 (Simplex)	0.110" (2.8 mm)	PVC	110 lbs	70 lbs	2.0" (51 mm)	1.2" (30 mm)	5 lbs/Mft (7 kg/km)	OFNR
		2 (Duplex)	0.110" x 0.230" (2.8 mm x 5.8 mm)	PVC	220 lbs	110 lbs	2.0" (51 mm)	1.2" (30 mm)	11 lbs/Mft (16 kg/km)	
		2	0.280" (7.1 mm)	PVC	270 lbs	110 lbs	4.2" (107 mm)	2.8" (71 mm)	34 lbs/Mft (51 kg/km)	
		4	0.310" (7.9 mm)	PVC	450 lbs	180 lbs	4.7" (119 mm)	3.1" (79 mm)	44 lbs/Mft (66 kg/km)	
		6	0.370" (9.4 mm)	PVC	670 lbs	270 lbs	5.6" (142 mm)	3.7" (94 mm)	55 lbs/Mft (82 kg/km)	
12	0.490" (12.4 mm)	PVC	1350 lbs	560 lbs	7.4" (188 mm)	4.9" (124 mm)	101 lbs/Mft (150 kg/km)			
Multi-Mode Breakout: Riser Rated										
FMB**P	Acrylate Tight Buffer Coating (0.9 mm OD) with Aramid Filler & Plenum PVC or PVDF Tube Jacket for Each Fiber	1 (Simplex)	0.110" (2.8 mm)	Plenum PVC	110 lbs	70 lbs	2.0" (51 mm)	1.2" (30 mm)	6 lbs/Mft (9 kg/km)	OFNP
		2 (Duplex)	0.110" x 0.230" (2.8 mm x 5.8 mm)	Plenum PVC	220 lbs	110 lbs	2.0" (51 mm)	1.2" (30 mm)	12 lbs/Mft (18 kg/km)	
		2	0.240" (6.1 mm)	PVDF	360 lbs	90 lbs	3.6" (91 mm)	3.6" (91 mm)	23 lbs/Mft (34 kg/km)	
		4	0.240" (6.1 mm)	PVDF	360 lbs	90 lbs	3.6" (91 mm)	3.6" (91 mm)	23 lbs/Mft (34 kg/km)	
		6	0.280" (7.1 mm)	PVDF	540 lbs	130 lbs	4.2" (107 mm)	4.2" (107 mm)	32 lbs/Mft (48 kg/km)	
12	0.390" (9.9 mm)	PVDF	1080 lbs	270 lbs	5.9" (150 mm)	5.9" (150 mm)	63 lbs/Mft (94 kg/km)			
Multi-Mode Breakout: Plenum Rated										

Other fiber counts available up to 144 elements. Please consult Gepeco for details and color availability. Please see fiber buffer color code chart #4 on page 142.

## Permanent Installation Single-Mode & Multi-Mode Fiber ST/SC/LC Snake Assemblies

- Features**  
 Machine Polished -55 dB RL (Typical) UPC Quality  
 100% Tested & Verified  
 Precision Fiber Connectors



## HSB Fusion Splice Box



Optional Rack Panel and Base

The Gepco® Brand HSB Fusion Splice Box provides a field terminatable solution for the deployment of hybrid fiber cable in a compact chassis. Specifically designed for hybrid camera applications, the HSB features configurable cable ports and a custom fusion splice tray specifically designed for use with 9.2 mm SMPTE hybrid cable, discrete electrical and fiber cables or the HDC3R 3-channel hybrid cable.

Internally, the optical fibers terminate within the HSB's custom fusion splice tray—using the included splice heat shrink and cable management accessories—while the electrical elements terminate with quick-disconnect, 6-position, plastic AMP® connectors. For the external component breakout, the HSB series utilizes metal, twist-and-lock ST and 5-pin connectors for a secure and reliable exterior mating interface.

To permanently install the HSB splice box, an optional base kit can be added to mount the HSB splice box to a wall or floor, or it can be rack mounted with an optional rack panel. For up to eight channels for splicing, two HSBs can be mounted in a single 3RU rack panel.



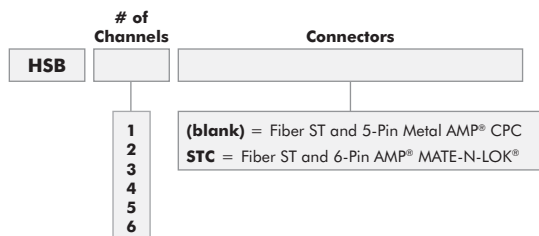
Rugged, Twist-and-Lock, 5-Pin Electrical and ST Fiber Breakout



Configurable Ports for Multiple Cable-Type Compatibility



Custom Fusion Splice Tray with Cable Management



### Features & Benefits

- Custom Fusion Splice Tray for Hybrid Cables
- Internal Cable Management for Security and Streamlined Breakout
- Configurable Cable Ports for Strain Relief of Multiple Cable Formats
- Field Installable and Terminatable
- Can Be Spliced with Any Type of Fusion Splicer
- Twist-and-Lock, Metal-Body, External Connectors for Exceptional Durability
- Expandable up to Four Channels

### Mechanical Specifications

**Dimensions:** 11.5" L x 5.5" W x 2.5" H

#### Optical Connector Specifications:

- ST Female (2 per Channel)
- 55 dB Typical RL, 0.2 dB Max IL Connector End
- Opposite End Blunt for Fusion Splicing

#### Electrical Breakout:

- 6-Pin AMP® MATE-N-LOK® Connector (Internal)
- 5-Pin AMP® CPC (External)

#### Rear Panel Cable Management:

- (6) Ports for Electrical/Hybrid Fiber Cable
- (2) Ports for Fiber/3-Channel Hybrid Fiber Cable

#### Panel Cable Management Ports:

- (1-4) Ports for Electrical/Hybrid Fiber Cable
- (1) Port for Fiber/3-Channel Hybrid Fiber Cable

#### Included Accessories:

- Mating AMP® MATE-N-LOK® Connector(s)
- Gland Seals for HDP221, HDC920 or HDC920R
- Gland Seals for 2- to 4-Channel Distribution Fiber
- Gland Seals for 6- to 12-Channel Distribution Fiber

### Optional Accessories

Part Number	Description
<i>Compatibility Note: Kits for One Strain Relief</i>	
GSKIT-BKFBR-S	Gland Seal Kit for Breakout Fiber: 2-, 4- or 6-Channel Riser or Plenum, 8-Channel Plenum
GSKIT-BKFBR-L	Gland Seal Kit for Breakout Fiber: 8-Channel Riser, 12-Channel Riser or Plenum
GSKIT-HDC3R	Gland Seal Kit for HDC3R 3-Channel Hybrid Cable
GSKIT-HDP221P	Gland Seal Kit for HDP221P Plenum Electrical Cable
<i>Compatibility Note: For HSB Splice Boxes</i>	
HSB-EKIT	Expansion Splice Kit for 1 Hybrid Channel
HSB-BASE	Base Feet for Floor or Wall Mounting
HSB-RP1	2RU Panel for Rack Mounting One HSB Box
HSB-RP2	3RU Panel for Rack Mounting Two HSB Boxes
<i>Compatibility Note: For HMP8 Panels and HSB Boxes</i>	
GHFBK-3-PB/STA	Plug Pigtail Breakout Cable with ST and AMP® 5-Pin
GHFBK-3-SB/STA	Socket Pigtail Breakout Cable with ST and AMP® 5-Pin

AMP and MATE-N-LOK are registered trademarks of Whitaker Corporation.

## SMPT E Field and Studio Boxes



Painted Indoor Box Available

### Features & Benefits

- Field Box for SMPT E 304 & Triax Interconnects
- Weather-Proof Stainless Steel or Indoor-Rated Steel Versions
- Hinged Top Panel with Clamps
- Internal SC Breakout or Fusion Splice Tray
- Configurable Cord Grips/Cable Management
- Distributes Hybrid Connector Over Fiber and Copper Distribution, SMPT E 311 or 3-Channel Hybrid Cables
- Available in 1-, 2- or 3-Channel Configurations

### Mechanical Specifications

**Dimensions:**  
 8" L x 6" W x 4" D Standard 1-, 2- or 3-Channel and 1-Channel Fusion Splice Models: Stainless Steel  
 8" L x 6" W x 3.5" D Standard 1-, 2- or 3-Channel and 1-Channel Fusion Splice Models: Indoor Painted Steel  
 10" L x 8" W x 4" D Fusion Splice 2- and 3-Channel Models: Stainless Steel or Indoor Painted Steel

0.75" Flanged Base with Mounting Holes

#### Optical Connector Specifications:

SMPT E 304 LEMO® Stainless Steel Connector (Plug or Socket)  
 SMPT E 304 Dust Cap with Weather Seal and Coated Lanyard  
 SC-PC Single-Mode Breakout (Internal Breakout Version Only - 2 per Channel)

Fiber Contacts: 2 per Channel  
 -55 dB Typical RL, 0.4 dB Max IL (SMPT E and SC Contacts)

#### Triax Connector Specifications

Kings® Tri-Loc® (Male or Female)  
 ADC® Pro-Ax™ (Male or Female)

#### Electrical Breakout Specifications:

6-Pin AMP® MATE-N-LOK® Cap: 3 Pins, 2 Sockets

#### Cord Grips: 1-, 2- or 3-Channel Models:

Electrical Only/Hybrid Fiber Ports - (1 per Channel):  
 Cable OD 0.310" - 0.380": HDP221, HDC920 or HDC920R

Fiber Ports - (1 per Channel):  
 Cable OD 0.130" - 0.190", 2-Strand Distribution  
 Cable OD 0.250" - 0.310", 2-Strand Breakout  
 Note: Secondary Cord Grip Can Be Replaced with Included Weather-Proof Hole Plug

#### Cord Grips: 3M Models for HDC3R 3-Way Cable:

Single Cord Grip for 3-Way Hybrid Cable  
 Cable OD 0.500" - 0.630"

### Standard Model

Internal SC Fiber and AMP® Electrical Breakout  
 Field-Installed Cables Can Be Terminated by Polishing, Field Term Gel, or Fusion Splicing SC Connectors  
 Includes Splice Holder for SC Spliced Connector

### Fusion Splice Model

Internal Fusion Splice Tray for Full Figure-8 Cable Management  
 AMP® Electrical Breakout Panel  
 Used for Splicing SMPT E Connector Directly to Field-Installed Cable Without SC Breakout

### Included Accessories

Gland Seals for 9.2 mm Hybrid/HDP221 Electrical Cable, 2-Strand Distribution Fiber, and 2-Strand Breakout Fiber (1-, 2- and 3-Channel Models Only)  
 Gland Seals for HDC3R 3-Way Fiber Cable (3M Models Only)  
 Mating AMP® Connectors for Electrical Breakout

### Optional Accessories

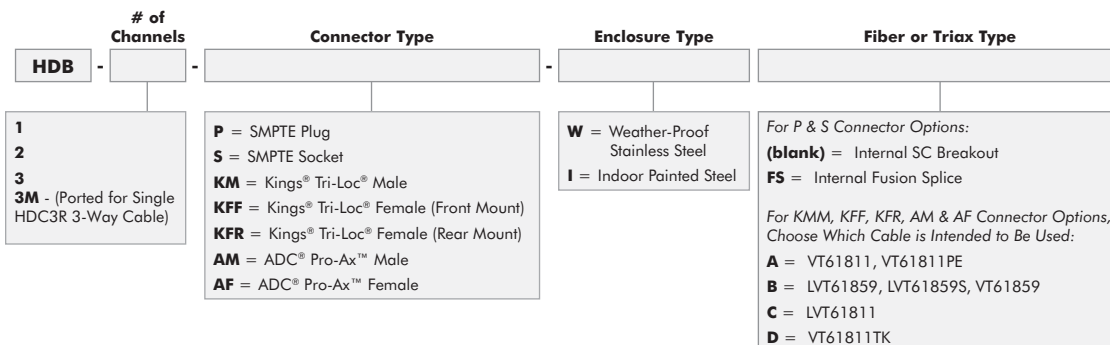
**GSKIT-HDP221P** - Gland Seal Kit or HDP221P Plenum Electrical Cable: Kit for One Strain Relief  
**FSC-SC** - Factory Polished Connector with 12" Tight Buffer 900µm SM Fiber for Fusion Splicing  
**318-191-627** - Field Term SC Connector for 900µm - Quick Cleave with IM Gel



Top Cable Ports



Internal Breakout



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## HMD Modular Distribution Rack



The Gepco® Brand HMD Modular Distribution Rack provides a field terminatable solution for the deployment of hybrid fiber connectors in an expandable chassis system. With internal cable management and component SC plus electrical element breakout, the HMD allows for all electrical and fiber termination to occur within the chassis, streamlining and protecting the cable breakout.

Unique to the HMD, the SC breakout at each position allows for the hybrid connectors to be replaced, serviced or expanded via a quick disconnect. The SC termination of the interconnecting cable between HMD racks can be field terminated with epoxy and polish, quick cleave, or fusion splice SC fiber connectors. To facilitate cable management of SC fusion spliced connectors, each breakout position also features an additional splice holder clip within the HMD chassis.

For flexibility in cable options, the HMD features configurable rear cable ports (six plus two) that accommodate a wide range of cable types and combinations. The HMD can be terminated to a variety of combinations of HDC920 9.2 mm hybrid fiber, discrete electrical and fiber cables, or up to two HDC3R 3-channel hybrid cables.

All HMD configurations come with six electrically isolated connector positions for expandability. Each position can be ordered or expanded with SMPTE 304 plug, SMPTE 304 socket, or Neutrik® opticalCON® format connectors, with future connector modules available as they are released.



Expandable, Electrically Isolated Connector Modules



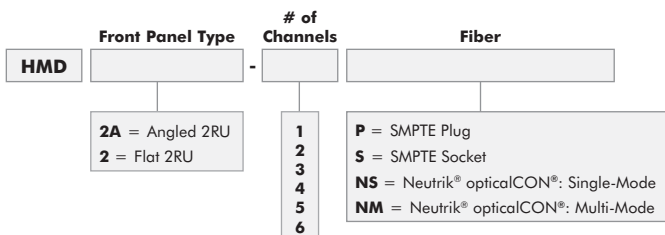
Terminate Mating Cable with SC Connector Options



Rear Cable Ports



Internal SC and Electrical Breakout



### Features & Benefits

Internal SC and Electrical Breakout Distribution

Internal Cable Management for Security and Streamlined Breakout

Field Installable

Mating Fiber Can Be Terminated with Polish, Quick Cleave, or Fusion Splice SC Connectors

Can Be Spliced with Any Type of Fusion Splicer (with SC Splice Connector Option)

Electrically Isolated Connector Mounts

Rear Cable Ports for Maximum Cable Strain Relief

Easy to Expand, 6-Channel Frame

Connector Modules for SMPTE 304 and Neutrik® opticalCON® Format Connectors

### Mechanical Specifications

**Dimensions:** 2RU-3.5" H x 19" W x 5.75" D

#### Optical Connector Specifications:

LEMO® SMPTE 304 or Neutrik® opticalCON®: 1 per Channel (2 Fibers)  
 SC-PC Duplex Breakout: 1 per Channel (2 Fibers)  
 -55 dB Typical RL, 0.4 dB Max IL Connector End

#### Electrical Breakout:

6-Pin AMP® MATE-N-LOK® Connector

#### Rear Panel Cable Management:

(6) Ports for Electrical/Hybrid Fiber Cable  
 (2) Ports for Fiber/3-Channel Hybrid Fiber Cable

#### Included Accessories:

Mating AMP® MATE-N-LOK® Connector(s)  
 Gland Seals for HDP221, HDC920 or HDC920R  
 Gland Seals for 2- to 4-Channel Distribution Fiber  
 Gland Seals for 6- to 12-Channel Distribution Fiber

### Optional Accessories

Part Number	Description
<i>Compatibility Note: Kits for One Strain Relief</i>	
GSKIT-BKFBR-S	Gland Seal Kit for Breakout Fiber: 2-, 4- or 6-Channel Riser or Plenum, 8-Channel Plenum
GSKIT-BKFBR-L	Gland Seal Kit for Breakout Fiber: 8-Channel Riser, 12-Channel Riser or Plenum
GSKIT-HDC3R	Gland Seal Kit for HDC3R 3-Channel Hybrid Cable
GSKIT-HDP221P	Gland Seal Kit for HDP221P Plenum Electrical Cable
<i>Compatibility Note: For HMD and HMS Frames</i>	
HMD-EKIT-P	SMPTE Plug Expansion Module Kit
HMD-EKIT-S	SMPTE Socket Expansion Module Kit
HMD-EKIT-NS	Neutrik® opticalCON® Single-Mode Expansion Module Kit
HMD-EKIT-NM	Neutrik® opticalCON® Multi-Mode Expansion Module Kit

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## HMS Modular Fusion Splice Rack



The Gepco® Brand HMS Modular Fusion Splice Rack provides a field terminatable solution for the deployment of hybrid fiber connectors in an expandable chassis system. With an internal cable management and fusion splice tray system, the HMS allows for all electrical and fiber termination to occur within the chassis, streamlining and protecting the cable breakout. Because the fusion splice occurs within the chassis, not in the connector, almost any type of hybrid connector can be terminated with any type of fusion splicer.

For flexibility in cable options, the HMS features configurable rear cable ports (six plus two) that accommodate a wide range of cable types and combinations. The HMS can be terminated to a variety of combinations of HDC920 9.2 mm hybrid fiber, discrete electrical and fiber cables, or up to two HDC3R 3-channel hybrid cables.

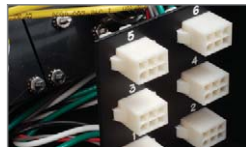
All HMS configurations come with six electrically isolated connector positions for expandability. Each position can be ordered or expanded with SMPTE 304 Plug, SMPTE 304 Socket, or Neutrik® opticalCON® format connectors, with future connector modules available as they are released.



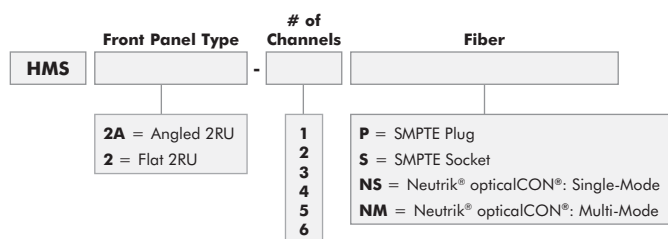
Rear Ports with Integrated Cable Strain Relief and Seal



Internal Fusion Splice Tray with Cable Management



Quick Disconnect Electrical Breakout



### Features & Benefits

- Internal Fusion Splice Tray
- Internal Cable Management for Security and Streamlined Breakout
- Field Installable and Terminatable
- Splice with Any Type of Fusion Splicer
- Electrically Isolated Connector Mounts
- Rear Cable Ports for Maximum Cable Strain Relief
- Easy to Expand, 6-Channel Frame
- Connector Modules for SMPTE 304 and Neutrik® opticalCON® Format Connectors

### Mechanical Specifications

**Dimensions:** 2RU-3.5" H x 19" W x 6.5" D

#### Optical Connector Specifications:

LEMO® SMPTE 304 or Neutrik® opticalCON®: 1 per Channel (2 Fibers)  
 -55 dB Typical RL, 0.2 dB Max IL Connector End  
 Opposite End Blunt for Fusion Splicing

#### Electrical Breakout:

6-Pin AMP® MATE-N-LOK® Connector

#### Rear Panel Cable Management:

(6) Ports for Electrical/Hybrid Fiber Cable  
 (2) Ports for Fiber/3-Channel Hybrid Fiber Cable

#### Included Accessories:

Mating AMP® MATE-N-LOK® Connector(s)  
 Gland Seals for HDP221, HDC920 or HDC920R  
 Gland Seals for 2- to 4-Channel Distribution Fiber  
 Gland Seals for 6- to 12-Channel Distribution Fiber

### Optional Accessories

Part Number	Description
<i>Compatibility Note: Kits for One Strain Relief</i>	
GSKIT-BKFBR-S	Gland Seal Kit for Breakout Fiber: 2-, 4- or 6-Channel Riser or Plenum, 8-Channel Plenum
GSKIT-BKFBR-L	Gland Seal Kit for Breakout Fiber: 8-Channel Riser, 12-Channel Riser or Plenum
GSKIT-HDC3R	Gland Seal Kit for HDC3R 3-Channel Hybrid Cable
GSKIT-HDP221P	Gland Seal Kit for HDP221P Plenum Electrical Cable
<i>Compatibility Note: For HMD and HMS Frames</i>	
HMD-EKIT-P	SMPTE Plug Expansion Module Kit
HMD-EKIT-S	SMPTE Socket Expansion Module Kit
HMD-EKIT-NS	Neutrik® opticalCON® Single-Mode Expansion Module Kit
HMD-EKIT-NM	Neutrik® opticalCON® Multi-Mode Expansion Module Kit

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## HDR1 High-Density, Hybrid Fiber Distribution Rack



The Gepco® Brand HDR1 High-Density Distribution Rack delivers a hybrid fiber breakout or patching solution in a compact 1RU frame. With the highest density available, the HDR1 can deliver up to six positions in a 1RU space, or up to 12 positions in a 2RU space (with two HDR1 units). Commonly used for machine room patching of multiple camera positions to available CCU control units, the HDR1 provides a streamlined cross-connect or general purpose hybrid breakout system.

Each hybrid connector position of the HDR1 externally breaks out to separate fiber and electrical connectors on the rear of the panel. To provide rugged external connector interfacing, the HDR1 utilizes ST fiber and metal circular, 5-pin electrical connectors. These connector breakout formats can easily be terminated onsite without the need for specialized hybrid connector tooling.

All positions on the HDR1 are completely electrically isolated by nonconductive connector mounts on the front, and the hybrid connector shells are wired to isolated pins on the rear of the chassis. For custom user-labeling and identification, each position features a designation strip. Available with SMPTE 304 plug or SMPTE 304 socket connectors, every configuration comes loaded in a standard frame that can be expanded up to six channels with pre-terminated connector modules.



Electrically Isolated Connector Modules



Rear Panel with Fiber and Electrical Component Breakout

### Features & Benefits

- High-Density 1RU Chassis
- External ST Fiber and Metal Circular Electrical Breakout
- Electrically Isolated Connector Mounts
- Designation Strip for Each Position
- Ideal for Machine Room Patching
- Field Installable and Terminatable
- Expandable 6-Channel Frame
- Connector Modules for SMPTE 304 Connectors

### Mechanical Specifications

**Dimensions:** 1RU-1.75" H x 19" W x 3" D

#### Optical Connector Specifications:

LEMO® SMPTE 304: 1 per Channel (2 Fibers)  
ST Breakout: 2 per Channel (2 Fibers)  
-55 dB Typical RL, 0.4 dB Max IL

#### Electrical Breakout:

5-Pin Metal AMP® CPC

#### Included Accessories:

Mating AMP® 5-Pin CPC Connectors

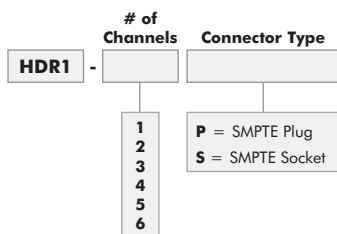
### Optional Accessories

#### Part Number Description

*Compatibility Note: For HDR1 Frames*

HDR1-EKIT-P SMPTE Plug Expansion Module Kit

HDR1-EKIT-S SMPTE Socket Expansion Module Kit



## NDR1 High-Density, Distribution Rack



The Gepco® Brand NDR1 High-Density Distribution Rack delivers hybrid fiber breakout or patching solutions in compact 1RU frames. With the highest density available, these High-Density Distribution Racks can deliver up to 10 Neutrik® opticalCON® Duo positions in a 1RU space, or up to 20 positions in a 2RU space (with two NDR1 units). Commonly used for machine room patching of multiple camera positions to available CCU control units, the NDR1 provide streamlined cross-connections or general purpose hybrid breakout systems.

Each hybrid connector position of the NDR1 frames externally breaks out to separate fiber and electrical connectors on the rear of the panel. To provide rugged external connector interfacing, the NDR1 frames utilize ST fiber and 6-pin electrical connectors. These connector breakout formats can easily be terminated onsite without the need for specialized hybrid connector tooling.



Isolated Connectors



Rear Panel with Fiber and Electrical Component Breakout

### Features & Benefits

- High-Density 1RU Chassis
- External ST Fiber and Electrical Breakout
- Custom Engraving Optional
- Ideal for Machine Room Patching
- Field Installable and Terminatable
- Expandable 10-Channel Frame
- Neutrik® opticalCON® Connectors

### Mechanical Specifications

**Dimensions:** 1RU-1.75" H x 19" W x 3" D

**Optical Connector Specifications:**

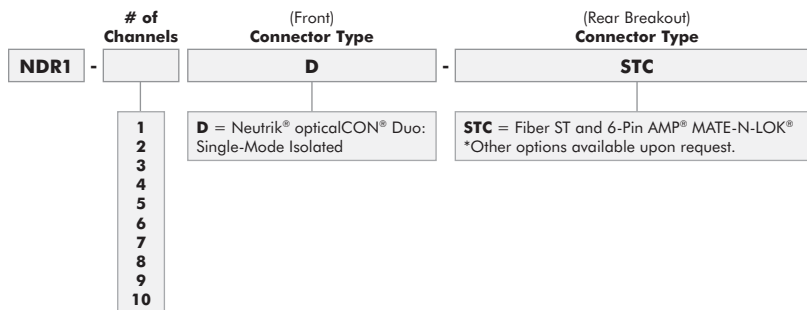
Neutrik® opticalCON®: Single-Mode Isolated  
 ST Breakout: 2 per Channel (2 Fibers)  
 -55 dB Typical RL, 0.4 dB Max IL

**Electrical Breakout:**

6-Pin AMP® MATE-N-LOK®

**Included Accessories:**

Mating 6-Pin AMP® MATE-N-LOK® Connectors



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## HMP8-Bxx SMPTE 304 Breakout Rack



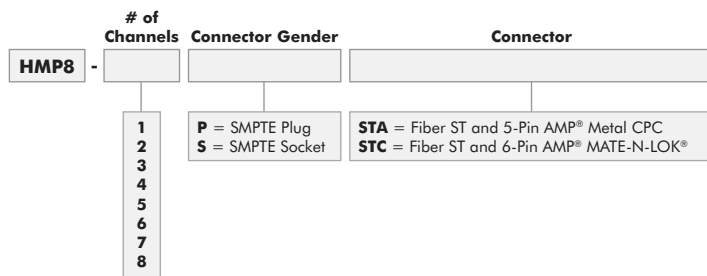
The Gepco® Brand HMP8-Bxx is a completely terminated and loaded version of the HMP8 Modular Panel (opposite page). Positions are loaded with factory terminated SMPTE 304 connectors, which break out to ST fiber and electrical connectors that are mounted in the rear connector panel attachment. Choose from one to eight loaded positions in socket or plug gender configurations. Unused positions are filled with blank modules that can later be removed and expanded with additional SMPTE 304 breakout cable modules.



Top View



Rear View



### Features & Benefits

- Loaded and Terminated HMP8 Breakout Rack
- SMPTE 304 Plug or Socket to 5-Pin/ST Breakout
- Angled Front Panel
- Electrically Isolated Connectors
- Available with One to Eight Breakout Positions
- Expandable
- Custom Engraving Optional

### Mechanical Specifications

**Frame Dimensions:** 2RU-3.5" H x 19" W x 3" D

#### Optical Connector Specifications:

Two Fiber Contacts per Channel  
-55 dB Typical RL  
0.4 dB Max IL (Both Ends in Closed Loop)

#### Front Panel:

1 LEMO® SMPTE 304 Connector per Channel  
Stainless Steel Connector Body with Stainless Steel Dust Cap

#### Rear Panel:

Electrical Breakout: 1 AMP® 5-Pin Connector per Channel or 1 AMP® 6-Pin MATE-N-LOK® Connector per Channel  
Optical Breakout: 2 ST Connectors per Channel

### Optional Accessories

Part Number	Description
<i>Compatibility Note: For HMP8 Frames</i>	
HMP8-EKIT-P	LEMO® SMPTE 304 Plug Expansion Kit
HMP8-EKIT-S	LEMO® SMPTE 304 Socket Expansion Kit
<i>Compatibility Note: For HMP8 Panels and HSB Boxes</i>	
GHFBK-3-PB/STA	Plug Pigtail Breakout Cable with ST and AMP® 5-Pin
GHFBK-3-SB/STA	Socket Pigtail Breakout Cable with ST and AMP® 5-Pin

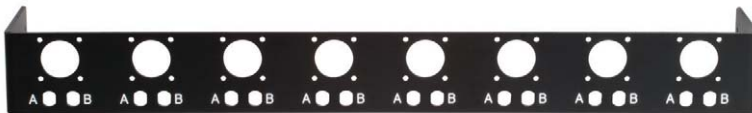
## HMP8 Modular Hybrid Fiber and Triax Panel



The Gepeco® Brand HMP8 modular panel system provides a completely configurable and electrically isolated connector-mounting solution in an angled 2RU rack unit system. With the HMP8 frame, up to eight triax and/or hybrid fiber connectors can be mounted in various combinations to customize the interface panel for each system. Available in six types, the nonconductive plastic HMP8 modules provide electrical isolation between connectors and are available in SMPTE 304, Neutrik® opticalCON®, ADC® ProAx®, Kings® Tri-Loc® and blank versions. In addition, optional rear cable management breakout or lacing bar panels can be attached to the HMP8 frame to provide additional security and strain relief for hybrid fiber pigtail breakout cables.



**HMP8-F**  
8-Position Modular Panel



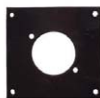
**HMP8-RP**  
Rear Panel for (8) AMP® 5-Pin and (16) ST Feedthrough Connectors



**HMP8-LB**  
Lacing Bar



**HMP8-S**  
SMPTE Universal  
Mount



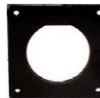
**HMP8-N**  
Neutrik®  
opticalCON®  
Mount



**HMP8-AP**  
ADC® ProAx®  
Plug Mount



**HMP8-AJ**  
ADC® ProAx®  
Jack Mount



**HMP-T**  
Kings® Triax  
Mount



**HMP8-B**  
Blank Module

Ideal for Use With Bulkhead or Breakout Hybrid Fiber Cable Assemblies:



**Bulkhead Hybrid (See 64)**



**In-Line Breakout (See 86)**



**Internal Breakout (See 86)**

### Features & Benefits

- Custom Configurable 8-Position Frame
- Angled Front Panel Reduces Cable Bend Radius
- Electrically Isolated Connectors
- All-Metal Frame
- Nonconductive Plastic Modules
- Optional Rear Connector or Lacing Bar Panel Attachments
- ADC® ProAx®, Kings® Tri-Loc®, SMPTE 304, and Neutrik® opticalCON® Mounts
- Custom Engraving Optional

### Mechanical Specifications

#### HMP8-F Dimensions:

2RU-3.5" H x 19" W x 1.31" D

#### HMP8-RP Dimensions:

2.1" H x 17.1" W x 3" D

#### HMP8-LB Dimensions:

1.1" H x 17.1" W x 5" D

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## Modular Isolation Panel System



Gepco® Brand's modular isolation panel system is designed to provide flexibility and expansion capabilities for the mounting of hybrid fiber and triax connectors in a 19-inch rack format. The all-metal HMPF frame provides seven positions for the connector module mounts and is angled to reduce the bend radius and clearance required for the interfacing cables. Available in four types, the nonconductive plastic HMP modules provide electrical isolation between connectors and are available in SMPTE 304, Kings® Tri-Loc®, Neutrik® opticalCON® and blank versions. In addition, optional rear cable management breakout or lacing bar panels can be attached to the HMPF frame to provide additional security and strain relief for hybrid fiber pigtail breakout cables.



**HMPF**  
7-Position Modular Panel



**HMPR**  
Rear Panel for (7) AMP® 5-Pin and (14) ST Feedthrough Connectors



**HMP8-LB**  
Lacing Bar



**HMP-S**  
SMPTE Universal  
Mount



**HMP-N**  
Neutrik®  
opticalCON® Mount



**HMP-T**  
Kings® Triax  
Mount



**HMP-B**  
Blank Module

Ideal for Use With Bulkhead or Breakout Hybrid Fiber Cable Assemblies:



**Bulkhead Hybrid (See 64)**



**In-Line Breakout (See 86)**



**Internal Breakout (See 86)**

### Features & Benefits

- Custom Configurable 7-Position Frame
- Angled Front Reduces Cable Bend Radius
- Electrically Isolates Connectors
- All-Metal Frame
- Nonconductive Plastic Modules

- Optional Rear Connector or Lacing Bar Panel Attachments

- SMPTE 304, Kings® Tri-Loc® and Neutrik® opticalCON® Connector Mounts

### Mechanical Specifications

#### HMPF Dimensions:

2RU-3.5" H x 19" W

#### HMPR Dimensions:

1.36" H x 17.1" W x 3.7" D

#### HMP8-LB Dimensions:

1.1" H x 17.1" W x 5" D

#### Module Dimensions

2" H x 2" W

## Hybrid Fiber Blank Panels

Gepco® Brand HBP panels offer a pre-engineered solution for the mounting of SMPTE 304 hybrid fiber connectors in a 19" rack. Available in 1RU, 2RU, and angled 2RU versions, all panels feature Gepco's unique Universal Punch Mount that allows for plug or socket connectors to be mounted in any position. Each position also features a hole for mounting the dust cap lanyard eyelets directly to the panel.

The HBP panels are used in the Direct Cable Termination method as well as in the the Distribution Rack method as a patching option (see pages 88 and 89 for system configuration details). When using HBP panels with pre-terminated cable assemblies, the connector body of the cable assembly can be removed, allowing for the assembly to be passed through the panel hole punch from the rear and reassembled from the front.

Note: These panels do not provide connector ground isolation. Long cable runs (>300') will require the HMP8-F and the ABS isolation plates to ensure proper isolation. Does not accommodate PEW connectors.

### Features & Benefits

1RU, 2U or Angled 2RU Versions

Universal Punch Mount Accommodates Plug or Socket Connectors

Works with LEMO® Brand Connectors

Additional Hole for Dust Cap Lanyard Mounting

Can Be Loaded with Pre-terminated Cable Assemblies

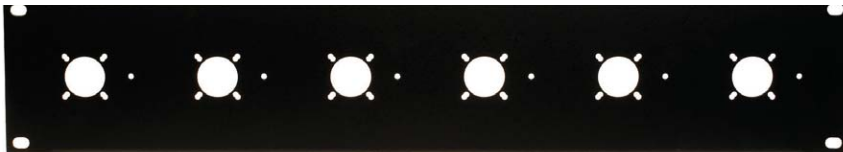
### Angled 2RU Panel

PART NUMBER: HBPA-\*U \*Designates Number of Holes (1-6)



### Straight 2RU Panel

PART NUMBER: HBP2-\*U \*Designates Number of Holes (1-6)



### Straight 1RU Panel

PART NUMBER: HBP1-\*U \*Designates Number of Holes (1-6)



Ideal for Use With Bulkhead or Breakout Hybrid Fiber Cable Assemblies:



Bulkhead Hybrid (See 64)



In-Line Breakout (See 86)



Internal Breakout (See 86)

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## Hybrid Fiber Breakout: In-Line Cable and Internal Distribution



Gepeco® Brand hybrid fiber breakout cables offer an in-line solution for breaking out SMPTE 304 hybrid fiber connectors to separate optical and electrical connectors. This solution allows for the interfacing of SMPTE hybrid camera devices, such as CCUs, directly to the back of a Gepeco HDR1 or HMP8-Bxx distribution rack.

Gepeco® Brand hybrid fiber internal distribution cables do not use conventional hybrid 311 cables and are intended for internal equipment or panel wiring only. The SMPTE 304 end uses OEM style, panel-mount hybrid connectors and is terminated to insulated copper wire and individual, simplex breakout fibers. The component breakout end has ST, SC, or LC optical connectors, while the copper elements feature AMP® or blunt ends.

As with all Gepeco GHF cables, the breakout series is machine polished to meet or exceed all SMPTE 304/311 standards. Terminated with HDC920R riser rated 9.2 mm cable, breakout cables can be used in most permanent installation environments.

### Overall Features & Benefits

- ST/SC/LC Optical Breakout
- AMP® Electrical Breakout
- Machine Polished to -55 dB RL (Typical)
- Custom Lengths Available

### In-Line Cable Features & Benefits

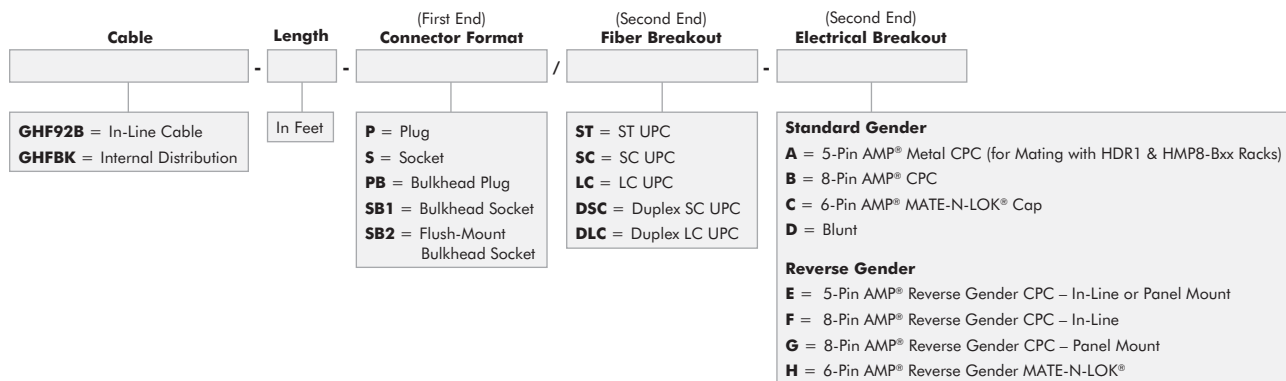
Riser Rated 311 Hybrid Cable for Permanent Installation

For Interfacing SMPTE Hybrid Devices with the Back Panel of Distribution Panels or Other Component Level Devices

### Internal Distribution Features & Benefits

Uses Short-Length Fiber and Electrical Elements

For Panel Mounting in Blank Panels or as a Replacement in Hybrid Devices



### Hybrid Fiber Connector Options



### Fiber Breakout Connector Options

Angled polished versions are available by request.



### Electrical Breakout Connector Options



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## Feedthrough Panels & Chassis



Gepco® Brand's series of feedthrough panels provides a convenient, pre-engineered solution for bulkhead interfacing of general-purpose ST, SC or LC optical fiber formats. Utilizing premium-grade, zirconia sleeve connectors, Gepco feedthrough panels deliver precision optical alignment and low insertion loss. Available in two configurations, the flanged panel series provides extra rigidity to minimize panel flexing, while the chassis series provides a complete rear enclosure for cable management.

### Features & Benefits

- Precision, Zirconia Sleeve Connectors
- Available with ST, SC, or LC Format Connectors
- Flanged Panel Series for Extra Rigidity
- Chassis Series for Integrated Cable Management
- Black Anodized and Engraved

### Specifications

Part Number	Panel Type	Connector Format	Number of Positions	Dimensions	Additional Features
FP1-xxST	Flat	ST Feedthrough	6, 8, 10, or 12	1RU: 1.75"H x 19"W	Metal Dust Caps
FC1-xxST	Chassis	ST Feedthrough	6, 8, 10, or 12	1RU: 1.75"H x 19"W x 3"D	Metal Dust Caps
FP1-xx-SCD-IS	Flat	SC Duplex Feedthrough	4, 6 or 8	1RU: 1.75"H x 19"W	Internal Shutter
FC1-xx-SCD-IS	Chassis	SC Duplex Feedthrough	4, 6 or 8	1RU: 1.75"H x 19"W x 3"D	Internal Shutter
FP1-xx-LCD-IS	Flat	LC Duplex Feedthrough	6, 8, 10, or 12	1RU: 1.75"H x 19"W	Internal Shutter
FC1-xx-LCD-IS	Chassis	LC Duplex Feedthrough	6, 8, 10, or 12	1RU: 1.75"H x 19"W x 3"D	Internal Shutter

Custom Versions Available: Call Sales for More Information.




## Panel Mount Feedthrough Connectors

Panel mount feedthrough connectors provide precision alignment and mating between two cable mount connectors. These connectors do not contain a ceramic ferrule or optical fiber elements. Terminated cables must be mated to both sides of the panel mount feedthrough to complete the interconnect. General purpose, industry standard ST and internal-shuttered SC and LC formats are available.

### Features & Benefits

- Panel Mount Configurations
- ST and Internal-Shuttered SC and LC Formats
- Zirconia Sleeves
- Precision Optical Alignment

### Specifications

Connector Format	Part Number	Alignment Sleeve	Manufacturer	Mating
 ST Feedthrough	<b>216-101-E</b>	Zirconia (Ceramic)	SENKO®	Couples Two Male, Cable Mount STs
 SC Feedthrough - Duplex	<b>242-201-1A</b>	Zirconia (Ceramic)	SENKO®	Couples Four Male, Cable Mount SCs
 LC Feedthrough - Duplex (SC Footprint)	<b>988-3511-A</b>	Zirconia (Ceramic)	SENKO®	Couples Four Male, Cable Mount LCs

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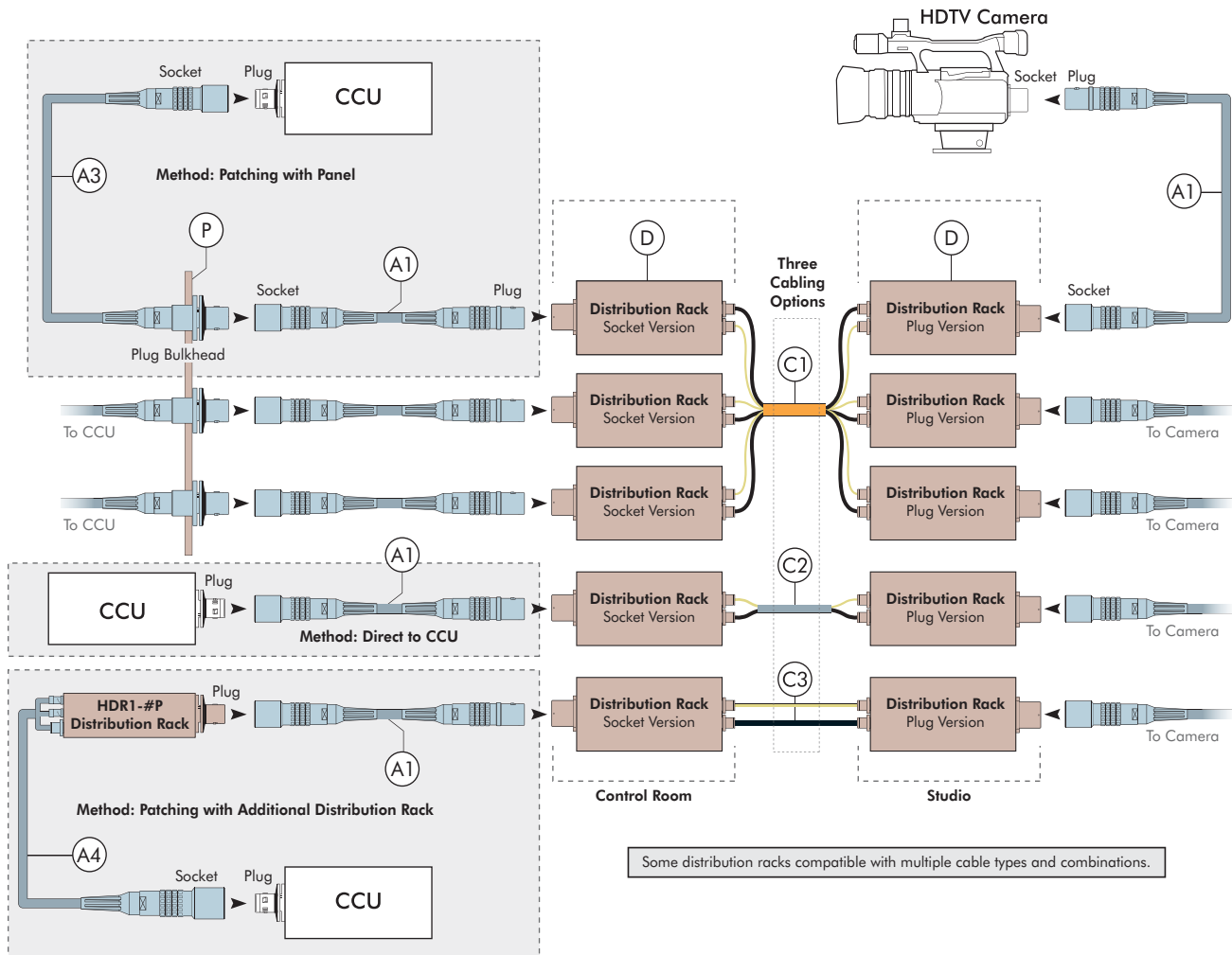


## SMPT 304/311 Hybrid Fiber Distribution Rack Workflow

Gepco® Brand distribution racks offer an exceptionally flexible and modular solution to the field deployment and installation of permanent installation SMPTE 304 hybrid camera cables. With the Distribution Rack method, SMPTE 304 connectors are broken out to separate electrical and optical elements on the back of the distribution rack. These separate elements can then be readily terminated to fiber and electrical cable.

### Features & Benefits

- Easy to Field-Install and Terminate
- Modular Channels Can Be Reconfigured Onsite
- Replaceable Contact Jumpers for Field Serviceability
- Uses Cost-Effective, General Purpose Fiber and Electrical Cables



P.800.966.0069 P.847.795.9555 F.847.795.8770 www.gepco.com

# NETWORK, AUTOMATION & LIGHTING CONTROL CABLES

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- Enhanced Category 6 Network
- Premium Category 6 Network
- Category 5e Network
- Enhanced Category 5e Network
- Heavy-Duty, Tactical Cat 5e Network
- Multimedia Cat 6A for Use with Crestron® Systems
- Multimedia Cat 5e for Use with Crestron® Systems
- Control Cable for Use with Crestron® Systems
- Hybrid Cable for Use with Crestron® Systems
- Control Cable for Use with AMX® Systems
- Keypad & Volume Control
- Power Cable for Use with Lutron® Homeworks® Systems
- Keypad Cable for Use with Lutron® Homeworks® Systems
- Control Cable for Use with Lutron® GRAFIK Eye® Systems
- Hybrid Cable for Use with Lutron® Sivoia® Systems
- Power and Data Cable for Use with Vantage® Systems
- Control Station Cable for Use with LiteTouch® Systems
- Enclosure & Module Cable for Use with LiteTouch® Systems
- DMX Lighting Control

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# SYSTEM-SPECIFIC DESIGNS THAT DELIVER COMPLETE DATA & CONTROL SOLUTIONS



**Low-Loss, Data-Grade Dielectric**

Data transmission requires exceptional bandwidth compared to conventional cable types. To achieve the required bandwidth and impedance characteristics, Gepco® Brand data cables utilize only low-loss, data-grade nitrogen/polymer, polyethylene or PVC dielectrics.

**Precision Impedance**

To ensure proper transmission, most data cables have specific impedance requirements to ensure matching and signal transfer. Each data cable type is designed to meet the specific impedance requirement for its application.

**Easy to Terminate**

Each cable has time-saving features such as color coded jackets, optimized conductor stranding, drain wires and easy-to-strip compounds.

**High-Purity Copper**

Cable conductors are made from stranded, tinned copper; 99.99% oxygen-free copper; or precision-drawn solid copper. These conductor types provide maximum conductivity for high-frequency data signal transmission.

**Extended Bandwidth for High-Speed Data Applications**

Gepco Brand network, automation and lighting cables feature the bandwidth and precision required for high-speed data applications such as Gigabit Ethernet, video over twisted-pair, and specialized system formats.

**System-Specific Designs**

Gepco Brand network, automation and lighting cables are produced in a variety of specific designs to provide complete solutions for almost every type of control and data system.

## Electrical Characteristics & Specifications

**Meets or Exceeds Industry Standards**

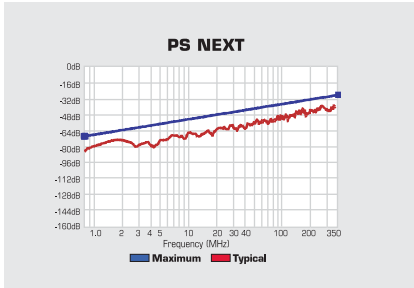
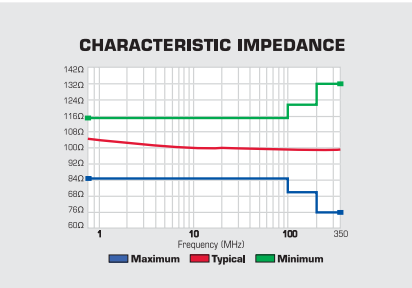
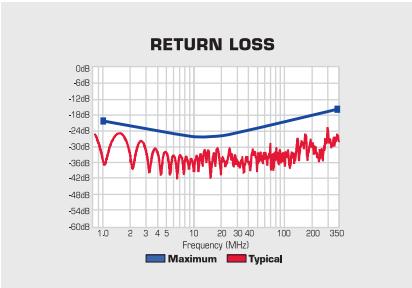
Each cable is designed to meet or exceed all relevant industry or manufacturer standards. This ensures compatibility and consistent performance in networking, touch panel, audio and video systems.

**Precision Characteristic Impedance**

Gepco Brand data cables feature a precision characteristic impedance. Impedance matching ensures low attenuation and minimal signal reflection which can result in bit-errors or jitter.

**Tested & Verified**

All reels are 100% tested and verified to ensure consistent and reliable performance in every application. Category 5e and 6 cables are ETL verified to ensure compliance with all ANSI/TIA 568-C.2 performance standards.



**NETWORK**  
**Category 6 Network**



Gepeco® Brand CT604/STD Category 6 Cables feature extended bandwidths and precision tolerances to meet the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is ETL listed and UL verified to ensure consistent performance. The TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. Available in plenum and riser constructions, Gepeco Category 6 cables may be installed in a variety of applications and environments.

**Features & Benefits**

Designed to Meet ANSI/TIA 568-C.2 Standards at a Value to Fit in Your Network Budget

Tighter Twists Over Category 5e, Reducing Network Errors

Increased Pair Separation with Thin Tape Design Minimizing Crosstalk

TRU-Mark® Print Legend with Sequential Footage

**Applications**

Digital Video

Broadband and Baseband Analog Video

IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T

155 Mp/s, 622 Mp/s ATM

ANSI X3.263: 100 Mb/s

4/16 Mb/s Token Ring

**Mechanical Specifications**

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pair Color Code	Separator	Jacket	Jacket Color Code	Min. Bend Radius	Max. Pulling Force	UL Type	Weight
CT604/STD	4	0.205" (5.21 mm)	23 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Divider	PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	32 lbs	CMR	28 lbs/Mft (42 kg/km)
Category 6 Four-Pair 250 MHz												
CT604/STDP	4	0.200" (5.08 mm)	23 AWG Solid BC	Fluoropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Divider	Plenum PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	32 lbs	CMP	28 lbs/Mft (42 kg/km)
Category 6 Four-Pair 250 MHz: Plenum												

**Electrical Specifications**

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop. (Plenum, Non-Plenum)	Temp. Rating (Installation, Operating)	Standards
CT604/STD Series	8.9 Ω/100 m (328 ft)	3.0%	100 Ω (+/-15)	45 ns/100 m	68%, 70%	0°C to +60°C, -20°C to +75°C	Meets ANSI/TIA 568-C.2, Cat 6, ISO/IEC 11801 Ed. 2.0
<b>ANSI/TIA 568-C.2 Performance</b>							
Freq. (MHz)	1	4	10	16	20	31.25	62.5 100 150 200 250 350 400 500
Insertion Loss (dB/100 m) (max)	2.0	3.8	6.0	7.6	8.5	10.7	15.4 19.8 24.7 29.0 32.8 39.8 43.0 48.9
PSACR (dB/100 m) (min)	70.3	59.3	51.3	46.7	44.3	39.2	29.9 22.5 14.9 8.8 3.5 — — —
ACR (dB/100 m) (min)	72.3	61.5	53.3	48.7	46.3	41.2	32.0 24.5 16.9 10.8 5.5 — — —
PSNEXT (dB/100 m) (min)	72.3	63.3	57.3	54.2	52.8	49.9	45.4 42.3 39.7 37.8 36.3 34.1 33.3 31.8
NEXT (dB/100 m) (min)	74.3	65.3	59.3	56.2	54.8	51.9	47.4 44.3 41.7 39.8 38.3 36.1 35.3 33.8
PSACRF (dB/100 m) (min)	64.8	52.8	44.8	40.7	38.8	34.9	28.9 24.8 21.3 18.8 16.8 13.9 12.8 10.8
ACRF (dB/100 m) (min)	67.8	55.7	47.8	43.7	41.7	37.9	31.8 27.8 24.3 21.8 19.8 16.9 15.8 13.8
Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	23.6	21.5 20.1 18.9 18.0 17.3 16.3 15.9 15.2
TCL (dB/100 m) (min)	40.0	40.0	40.0	38.0	37.0	35.1	32.0 30.0 28.2 27.0 26.0 — — —
ELTCL (dB/100 m) (min)	35.0	23.0	15.0	10.9	9.0	—	— — — — — — — —

\*PSACR & ACR not specified in ANSI/TIA 568-C.2

# NETWORK Enhanced Category 6 Network



Gepco® Brand CT604/250 Enhanced Category 6 Cables feature extended bandwidths and precision tolerances to meet or exceed the latest ANSI/TIA and ISO standards. The innovative cross-web design allows for maximum pair separation, increasing key electrical performance parameters. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is ETL listed and UL verified to ensure consistent performance. The TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. Available in plenum and riser constructions, Gepco Enhanced Category 6 cables may be installed in a variety of applications and environments.

### Features & Benefits

- Innovative Cross-Web Design
- TRU-Mark® Print Legend with Sequential Footage
- Characterized up to or Beyond ANSI/TIA Standards
- Third Party Verified for Guaranteed Performance
- Rip Cord Under Jacket

### Applications

- Digital Video
- Broadband and Baseband Analog Video
- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T
- 155 Mp/s, 622 Mp/s ATM
- ANSI X3.263: 100 Mb/s
- 4/16 Mb/s Token Ring

### Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation	Pair Color Code	Separator	Jacket	Jacket Color Code	Min. Bend Radius	Max. Pulling Force	UL Type	Weight
CT604/250	4	0.235" (5.97 mm)	23 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web	PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	32 lbs	CMR	28 lbs/Mft (42 kg/km)
Category 6 Four-Pair 250 MHz												
CT604/250P	4	0.225" (5.72 mm)	23 AWG Solid BC	Fluoropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web	Plenum PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	32 lbs	CMP	31 lbs/Mft (46 kg/km)
Category 6 Four-Pair 250 MHz: Plenum												

### Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max (Non-Plenum, Plenum)	Vel. of Prop. (Non-Plenum, Plenum)	Temp. Rating (Installation, Operating)	Standards
CT604/250 Series	9.38 Ω/100 m (328 ft)	4.0%	100 Ω (+/-15)	45 ns/100 m	68%, 70%	0°C to +60°C, -20°C to +75°C	Meets or Exceeds ANSI/TIA 568-C.2 Cat 6, ISO/IEC 11801 Ed. 2.0

Freq. (MHz)	ANSI/TIA 568-C.2 Performance (Gray Column)												Guaranteed Performance (White Column)													
	1	4	10	16	20	31.25	62.5	100	150	200	250	350	500													
Insertion Loss (dB/100 m) (max)	2.0	2.0	3.8	3.8	6.0	5.9	7.6	7.5	8.5	8.4	10.7	10.6	15.4	15.3	19.8	19.7	24.7	24.7	29.0	29.0	32.8	32.6	—	39.5	—	48.6
PSACR* (dB/100 m) (min)	70.3	75.3	59.3	64.5	51.3	56.4	46.7	51.7	44.3	49.4	39.2	44.3	29.9	35.1	22.5	27.6	14.9	20.0	8.8	13.8	3.5	8.7	—	—	—	—
ACR* (dB/100 m) (min)	72.3	77.3	61.5	66.5	53.3	58.4	48.7	53.8	46.3	51.4	41.2	46.3	32.0	37.1	24.5	29.6	16.9	22.0	10.8	15.8	5.5	10.7	—	1.7	—	—
PSNEXT (dB/100 m) (min)	72.3	77.3	63.3	68.3	57.3	62.3	54.2	59.3	52.8	57.8	49.9	54.9	45.4	50.4	42.3	47.3	39.7	44.7	37.8	42.8	36.3	41.3	—	39.2	—	36.8
NEXT (dB/100 m) (min)	74.3	79.3	65.3	70.3	59.3	64.3	56.2	61.3	54.8	59.8	51.9	56.9	47.4	52.4	44.3	49.3	41.7	46.7	39.8	44.8	38.3	43.3	—	41.2	—	38.8
PSACRF (dB/100 m) (min)	64.8	69.8	52.8	57.7	44.8	49.8	40.7	45.7	38.8	43.7	34.9	39.9	28.9	33.8	24.8	29.8	21.3	26.3	18.8	23.8	16.8	21.8	—	18.9	—	15.8
ACRF (dB/100 m) (min)	67.8	72.8	55.7	60.7	47.8	52.8	43.7	48.7	41.7	46.7	37.9	42.9	31.8	36.8	27.8	32.8	24.3	29.3	21.8	26.8	19.8	24.8	—	21.9	—	18.8
Return Loss (dB) (min)	20.0	20.0	23.0	23.6	25.0	26.0	25.0	26.0	25.0	26.0	23.6	25.0	21.5	23.5	20.1	22.5	18.9	21.6	18.0	21.0	17.3	20.5	—	19.8	—	19.0
TCL (dB/100 m) (min)	40.0	40.0	40.0	40.0	40.0	40.0	38.0	38.0	37.0	37.0	35.1	35.1	32.0	32.0	30.0	30.0	28.2	28.2	27.0	27.0	26.0	26.0	—	—	—	—
ELTCTL (dB/100 m) (min)	35.0	35.0	23.0	23.0	15.0	15.0	10.9	10.9	9.0	9.0	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	—	—	—	—

\*PSACR & ACR not specified in ANSI/TIA 568-C.2

**NETWORK**  
**Premium Category 6 Network**



Gepeco® Brand CT604/500 Premium Category 6 Cables feature extended bandwidths and precision tolerances to meet or exceed the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is ETL listed and UL verified to ensure consistent performance. The improved separator construction allows for more pair separation, while the TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. Available in plenum and riser constructions, Gepeco Premium Category 6 cables may be installed in a variety of applications and environments.

**Features & Benefits**

Engineered with Precision Balance to Offer Ultimate Headroom

High-End Optimized Performance to Support the Most Bandwidth-Intense Applications

TRU-Mark® Print Legend with Sequential Footage Characterized up to or Beyond ANSI/TIA Standards

Third Party Verified for Guaranteed Performance  
Rip Cord Under Jacket

**Applications**

Digital Video

Broadband and Baseband Analog Video

IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T

155 Mp/s, 622 Mp/s ATM

ANSI X3.263: 100 Mb/s

4/16 Mb/s Token Ring

**Mechanical Specifications**

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pair Color Code	Separator	Jacket	Jacket Color Code	Min. Bend Radius	Max. Pulling Force	UL Type	Weight
CT604/500	4	0.260" (6.60 mm)	23 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web	PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	50 lbs	CMR	30 lbs/Mft (45 kg/km)
Premium Category 6 Four-Pair 500 MHz												
CT604/500P	4	0.250" (6.35 mm)	23 AWG Solid BC	Flouropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web	Plenum PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	50 lbs	CMP	32 lbs/Mft (48 kg/km)
Premium Category 6 Four-Pair 500 MHz: Plenum												

**Electrical Specifications**

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop. (Non-Plenum, Plenum)	Temp. Rating (Installation, Operating)	Standards
CT604/500 Series	8.9 Ω/100 m (328 ft)	3.0%	100 Ω (+/-15)	45 ns/100 m	70%, 72%	0°C to +60°C, -20°C to +75°C	Meets or Exceeds ANSI/TIA 568-C.2 Cat 6, ISO/IEC 11801 Ed. 2.0

Freq. (MHz)	ANSI/TIA 568-C.2 Performance (Gray Column)										Guaranteed Performance (White Column)													
	1	4	10	16	20	31.25	62.5	100	200	250	350	500	1	4	10	16	20	31.25	62.5	100	200	250	350	500
Insertion Loss (dB/100 m) (max)	2.0	1.9	3.8	3.5	6.0	5.5	7.6	7.0	8.5	7.8	10.7	9.9	15.4	14.3	19.8	18.5	29.0	27.2	32.8	30.9	—	37.6	—	46.5
PSACR* (dB/100 m) (min)	70.3	77.4	59.3	66.8	51.3	58.8	46.7	54.2	44.3	51.9	39.2	47.0	29.9	38.0	22.5	30.8	8.8	17.5	3.5	12.4	—	3.5	—	—
ACR* (dB/100 m) (min)	72.3	79.4	61.5	68.8	53.3	60.8	48.7	56.2	46.3	53.9	41.2	49.0	32.0	40.0	24.5	32.8	10.8	19.5	5.5	14.4	—	5.5	—	—
PSNEXT (dB/100 m) (min)	72.3	79.3	63.3	70.3	57.3	64.3	54.2	61.2	52.8	59.8	49.9	56.9	45.4	52.4	42.3	49.3	37.8	44.8	36.3	43.3	—	41.1	—	38.8
NEXT (dB/100 m) (min)	74.3	81.3	65.3	72.3	59.3	66.3	56.2	63.2	54.8	61.8	51.9	58.9	47.4	54.4	44.3	51.3	39.8	46.8	38.3	45.3	—	43.1	—	40.8
PSACRF (dB/100 m) (min)	64.8	70.8	52.8	58.8	44.8	50.8	40.7	46.7	38.8	44.8	34.9	40.9	28.9	34.9	24.8	30.8	18.8	24.8	16.8	22.8	—	19.9	—	16.8
ACRF (dB/100 m) (min)	67.8	73.8	55.7	61.8	47.8	53.8	43.7	49.7	41.7	47.8	37.9	43.9	31.8	37.9	27.8	33.8	21.8	27.8	19.8	25.8	—	22.9	—	19.8
Return Loss (dB) (min)	20.0	20.0	23.0	23.0	25.0	25.0	25.0	25.0	25.0	25.0	23.6	25.0	21.5	23.5	20.1	22.1	18.0	20.0	17.3	19.3	—	18.3	—	17.2
TCL (dB/100 m) (min)	40.0	40.0	40.0	40.0	40.0	40.0	38.0	38.0	37.0	37.0	35.1	35.1	32.0	32.0	30.0	30.0	27.0	27.0	26.0	26.0	—	—	—	—
ELTCTL (dB/100 m) (min)	35.0	35.0	23.0	23.0	15.0	15.0	10.9	10.9	9.0	9.0	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	—	—	—	—

\*PSACR & ACR not specified in ANSI/TIA 568-C.2



NETWORK  
Category 5e Network



Gepco® Brand CT504/STD Category 5e Cables carry data, telephony and video signals on bandwidth up to 100 MHz. These cables have been engineered with both value and performance in mind. The category 5e design maintains a stable and consistent signal while performing out to one gigabit. Our standard compliant designs meet all of the required standards. Available in both plenum and non-plenum versions, CT504/STD features the TRU-Mark® Marking System, which sequentially marks every two feet of cable in descending order.

Features & Benefits

- Meets ANSI/TIA Standards for Category 5e
- TRU-Mark® Print Legend with Sequential Footage
- Third Party Verified for Guaranteed Performance

Applications

- Broadband and Baseband Analog Video
- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T
- 52/155 Mp/s ATM
- ANSI X3.263: 100 Mb/s

Mechanical Specifications														
Part #	# of Pairs	Nominal OD	Conductors	Insulation	Pair Color Code	Jacket	Jacket Color Code	Minimum Bend Radius	Maximum Pulling Force	UL Type	Weight			
CT504/STD	4	0.200" (5.08 mm)	24 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	25 lbs	CMR	19 lbs/Mft (28 kg/km)			
Category 5e Four-Pair														
CT504/STDP	4	0.180" (4.57 mm)	24 AWG Solid BC	Fluoropolymer/ Dual-Layer Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Plenum PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	25 lbs	CMP	21 lbs/Mft (31 kg/km)			
Category 5e Four-Pair: Plenum														
Electrical Specifications														
Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Mutual Capacitance	Prop. Delay (Skew) Max	Vel. of Prop. (Plenum, Non-Plenum)	Temp. Rating (Installation, Operating)					Standards		
CT504/STD Series	8.9 Ω/100 m (328 ft)	3.0%	100 Ω (+/-15)	17.0 pF/ft	45 ns/100 m	70%, 72%	0°C to +60°C, -20°C to +75°C					Meets or Exceeds ANSI/TIA 568-C.2 Cat 5e, ISO/IEC 11801 Ed. 2.0		
ANSI/TIA 568-C.2 Performance														
Freq. (MHz)														
	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350
Insertion Loss (dB/100 m) (max)	2.0	4.1	6.5	8.2	9.3	10.4	11.7	17.0	22.0	28.1	32.4	36.9	41.0	44.9
PSACR* (dB/100 m) (min)	60.3	49.2	40.8	36.0	33.5	30.9	28.2	18.4	10.3	1.4	—	—	—	—
ACR* (dB/100 m) (min)	63.3	52.2	43.8	39.0	36.5	33.9	31.2	21.4	13.3	4.4	—	—	—	—
PSNEXT (dB/100 m) (min)	62.3	53.3	47.3	44.2	42.8	41.3	39.9	35.4	32.3	29.4	27.8	26.3	25.1	24.1
NEXT (dB/100 m) (min)	65.3	56.3	50.3	47.2	45.8	44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.1	27.1
PSACRF (dB/100 m) (min)	60.8	48.8	40.8	36.7	34.8	32.8	30.9	24.9	20.8	17.0	14.8	12.8	11.3	9.9
ACRF (dB/100 m) (min)	63.8	51.8	43.8	39.7	37.8	35.8	33.9	27.9	23.8	20.0	17.8	15.8	14.3	12.9
Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	24.3	23.6	21.5	20.1	—	—	—	—	—

Note: Results beyond 200 MHz for reference only.  
\*PSACR & ACR not specified in ANSI/TIA 568-C.2

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NETWORK

Enhanced Category 5e Network



Gepco® Brand CT504/350 Enhanced Category 5e Cables feature extended bandwidths and precision tolerances to meet or exceed the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, the CT504/350 series offers low insertion loss, crosstalk and return loss. Every reel is ETL listed and UL verified to ensure consistent performance, while the TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. Available in plenum and riser constructions, Gepco Enhanced Category 5e cables may be installed in a variety of applications and environments.

Features & Benefits

- For Applications that Require Optimal Cat 5e Performance with Flexibility for the Future
- Performance Guaranteed to 350 MHz
- TRU-Mark® Print Legend with Sequential Footage
- Characterized up to or Beyond ANSI/TIA Standards
- Third Party Verified for Guaranteed Performance
- Rip Cord Under Jacket

Applications

- Broadband and Baseband Analog Video
- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T
- 155 Mp/s, 622 Mp/s ATM
- ANSI X3.263: 100 Mb/s
- 4/16 Mb/s Token Ring

Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation	Pair Color Code	Jacket	Jacket Color Code	Minimum Bend Radius	Maximum Pulling Force	UL Type	Weight
CT504/350	4	0.200" (5.08 mm)	24 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	25 lbs	CMR	21 lbs/Mft (31 kg/km)
<i>Enhanced Category 5e Four-Pair 350 MHz</i>											
CT504/350P	4	0.180" (4.57 mm)	24 AWG Solid BC	Fluoropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Plenum PVC	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple	1.0"	25 lbs	CMP	19 lbs/Mft (28 kg/km)
<i>Enhanced Category 5e Four-Pair 350 MHz: Plenum</i>											

Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop. (Non-Plenum, Plenum)	Temp. Rating (Installation, Operating)	Standards									
		3.0%	100 Ω (+/-15)	45 ns/100 m	70%, 72%	0°C to +60°C, -20°C to +75°C	Meets or Exceeds ANSI/TIA 568-C.2 Cat 5e, ISO/IEC 11801 Ed. 2.0									
CT504/350 Series	8.9 Ω/100 m (328 ft)	Freq. (MHz)	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350
		Insertion Loss (dB/100 m) (max)	2.0	4.0	6.4	8.1	9.2	10.3	11.6	16.8	21.7	27.7	32.0	36.4	40.5	44.3
		PSACR (dB/100 m) (min)	63.3	52.3	43.9	39.1	36.6	34.0	31.3	21.6	13.6	4.7	—	—	—	—
		ACR (dB/100 m) (min)	64.3	53.3	44.9	40.1	37.6	35.0	32.3	22.6	14.6	5.7	—	—	—	—
		PSNEXT (dB/100 m) (min)	65.3	56.3	50.3	47.2	45.8	44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.1	27.1
		NEXT (dB/100 m) (min)	66.3	57.3	51.3	48.2	46.8	45.3	43.9	39.4	36.3	33.4	31.8	30.3	29.1	28.1
		PSACRF (dB/100 m) (min)	61.0	49.0	41.0	36.9	35.0	33.0	31.1	25.1	21.0	17.2	15.0	13.0	11.5	10.1
		ACRF (dB/100 m) (min)	64.0	52.0	44.0	39.9	38.0	36.0	34.1	28.1	24.0	20.2	18.0	16.0	14.5	13.1
		Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	24.3	23.6	21.5	20.1	—	—	—	—	—

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NETWORK

Heavy-Duty Tactical Category 5e



Features & Benefits

- Unique Inner Belt Maintains Electrical Characteristics in Portable Applications
- Extra-Flexible & Low-Loss Single-Channel Versions
- 2- & 4-Channel Extra-Flexible Snake Versions
- Meets or Exceeds ANSI/TIA and/or ISO/IEC Standards for Cat 5e Cable
- Terminates with Neutrik® etherCON® Connectors or RJ45 Connectors with Boots
- 100 MHz Bandwidth

Applications

- Ethernet Network Patching
- For Portable Use or Remote Environments

The Gepco® Brand of heavy-duty tactical Category 5e cables are ideal for portable or remote patching of Ethernet networks or digital audio/video formats that utilize Cat 5e type interconnects. The CT504HD series features a unique double-jacket construction for exceptional durability. The inner jacket maintains the proper physical spacing between pairs to achieve ISO/IEC or ANSI/TIA Cat 5e specifications, while the durable TPE outer jacket protects the cable from damage or abuse. Gepco's heavy-duty Cat 5e cables are available in three types: the original CT504HD with stranded conductors for flexibility, the CT504HDX with solid conductors for low loss, and a multi-channel snake (2-channel CTS2504HDX or 4-channel CTS4504HDX) for applications that require multiple or redundant channels of Cat 5e. The CT504HD series can be terminated with either standard Cat 5e RJ45 connectors or the ruggedized Neutrik® etherCON® connectors.

Mechanical Specifications (Series)

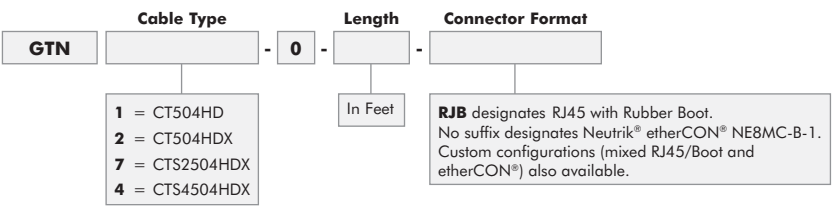
Insulation	Pair Color Code	Cat 5e Inner Jacket (Type, OD)	Cat 5e Outer Jacket
PE	White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown	Clear TPE, 0.190" (4.93 mm)	Black TPE

Cable Mechanical Specifications (Individual)

Part #	# of Pairs	Nominal OD	Conductors	Master Jacket	UL Type	Weight
CT504HD	4	0.260" (6.60 mm)	24 AWG (41x40) Stranded TC	N/A	AWM Style 21144	26 lbs/Mft (39 kg/km)
<i>Heavy-Duty Tactical Cat 5e Cable: Extra-Flexible</i>						
CT504HDX	4	0.245" (6.22 mm)	24 AWG Solid BC	N/A	AWM Style 21144	26 lbs/Mft (39 kg/km)
<i>Heavy-Duty Tactical Cat 5e Cable: Low-Loss</i>						
CTS2504HDX	2 x 4 (2 Channels of 4 Pairs)	0.599" (15.2 mm)	24 AWG Solid BC	Black, TPE	—	115 lbs/Mft (171 kg/km)
<i>2-Channel Heavy-Duty Tactical Cat 5e Snake</i>						
CTS4504HDX	4 x 4 (4 Channels of 4 Pairs)	0.650" (16.5 mm)	24 AWG Solid BC	Black, TPE	—	200 lbs/Mft (298 kg/km)
<i>4-Channel Heavy-Duty Tactical Cat 5e Snake</i>						

Cable Electrical Specifications

Part #	DCR Max	DCR Unbal. Max	Mutual Capac. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop.	Standards						
CT504HD	28.6 Ω/Mft	5%	17 pF/ft	100 Ω	45 ns/100 m	69%	ISO/IEC 11801 Cat 5e Patch Cable						
	Freq. (MHz)		<b>0.772</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>10</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>31.25</b>	<b>62.5</b>	<b>100</b>
	Insertion Loss (dB/100 m)	2.7	3.0	6.2	8.7	9.8	12.3	14.0	15.6	17.6	25.5	33.0	
	PSNEXT (dB)	64.0	62.3	53.3	48.8	47.3	44.3	42.8	41.3	39.9	35.4	32.3	
	PSACR (dB/100 m)	61.3	59.3	47.2	40.1	37.6	32.0	28.9	25.7	22.4	9.9	-0.7	
	PSELFEXT (dB/100 m)	63.0	60.8	48.7	42.7	40.8	36.7	34.7	32.8	30.9	24.8	20.8	
	RL (dB)	—	20.0	23.0	24.5	25.0	25.0	25.0	24.2	23.3	20.7	19.0	
CT504HDX CTS2504HDX CTS4504HDX	28.6 Ω/Mft	5%	17 pF/ft	100 Ω	45 ns/100 m	69%	Meets or Exceeds ANSI/TIA 568-C.2 Cat 5e, ISO/IEC 11801						
	Freq. (MHz)		<b>0.772</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>10</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>31.25</b>	<b>62.5</b>	<b>100</b>
	Insertion Loss (dB/100 m)	1.8	2.0	4.1	5.8	6.5	8.2	9.3	10.4	11.7	17.0	22.0	
	PSNEXT (dB)	64.0	62.3	53.3	48.8	47.3	44.3	42.8	41.3	39.9	35.4	32.3	
	PSACR (dB/100 m)	62.2	60.3	49.2	43.0	40.8	36.1	33.5	30.9	28.2	18.4	10.3	
	PSELFEXT (dB/100 m)	63.0	60.8	48.7	42.7	40.8	36.7	34.7	32.8	30.9	24.8	20.8	
	RL (dB)	—	20.0	23.0	24.5	25.0	25.0	25.0	24.3	23.6	21.5	20.1	



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NETWORK

Multimedia Cat 6A Shielded Cable for Use with Crestron® Systems



The Gepco® Brand CT104/SDM Multimedia Cat 6A Cable for use with Crestron® Systems is a shielded or foiled-twisted pair (F/UTP) cable for 10-Gigabit Ethernet applications, requiring grounding and providing industry-leading protection from external cable noise sources, also known as alien crosstalk (PSANEXT and PSAACRF). This series features extended bandwidth and precision tolerances to meet or exceed the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is UL verified and UL safety listed to ensure consistent performance, while the TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. CT104/SDM Multimedia Cable is available in plenum and riser constructions.

Features & Benefits

- Supports 10-Gigabit Ethernet Applications
- Provides Industry-Leading Protection from External Cable Noise Sources
- Internal Separator for Optimized Internal Pair Geometry Yielding Superior Electrical Performance While Maintaining Flexibility
- Unique Cross-Web Stabilizes Each Pair to Create a Smaller, Round Cable Profile
- TRU-Mark® Print Legend with Sequential Footage

Applications

- IEEE 802.3 10G BASE-T, 100 BASE-T
- 100 BASE-TX, 10 BASE-T, 1000 BASE-TX
- 155 Mb/s ATM
- IEEE 802.3af for PoE
- IEEE 802.3at for PoE Plus
- ANSI X3.263: 100Mb/s

Mechanical Specifications

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pair Color Code	Separator/ Core Tape	Shield	Drain Wire	Jacket	Min. Bend Radius	Max Pulling Force	UL Type	Weight
CT104/SDM	4	0.310" (7.87 mm)	23 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web/ Polypropylene	Polyester-Backed Aluminum Foil (Aluminum Side In)	24 AWG (7x32) TC	PVC, Black, White, Blue	1.25"	40 lbs	CMR	42 lbs/Mft (63 kg/km)
<i>Multimedia Category 6A Shielded Cable for Use with Crestron® Systems</i>													
CT104/SDMP	4	0.295" (7.49 mm)	23 AWG Solid BC	Fluoropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Cross-Web/ Woven Fiberglass	Polyester-Backed Aluminum Foil (Aluminum Side In)	24 AWG (7x32) TC	Plenum PVC, Black, White, Blue	1.25"	40 lbs	CMP	46 lbs/Mft (69 kg/km)
<i>Multimedia Category 6A Shielded Cable for Use with Crestron® Systems: Plenum</i>													

Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop.	Temp. Rating (Installation, Operating)	Standards										
CT104/SDM Series	8.9 Ω/100 m (328 ft)	4.0%	100 Ω (+/-15)	35 ns/100 m	70%	0°C to +60°C, -20°C to +75°C	ANSI/TIA 568-C.2										
			Freq. (MHz)	1	4	10	16	20	31.25	62.5	100	150	200	250	300	400	500
PSACR* (dB/100 m) (min)	ANSI/TIA 568-C.2	70.2	59.5	51.4	46.8	44.4	39.4	30.4	23.2	16.0	10.2	5.2	0.9	—	—	—	—
ACR* (dB/100 m) (min)	ANSI/TIA 568-C.2	72.2	61.5	53.4	48.8	46.4	41.4	32.4	25.2	18.0	12.2	7.2	2.9	—	—	—	—
Attenuation (dB/100 m) (min)	ANSI/TIA 568-C.2	2.1	3.8	5.9	7.5	8.4	10.5	15.0	19.1	23.7	27.8	31.1	34.3	40.1	45.3	—	—
PSNEXT (dB/100 m) (min)	ANSI/TIA 568-C.2	72.3	63.3	57.3	54.2	52.8	49.9	45.4	42.3	39.7	37.8	36.3	35.1	33.3	31.8	—	—
NEXT (dB/100 m) (min)	ANSI/TIA 568-C.2	74.3	65.3	59.3	56.2	54.8	51.9	47.4	44.3	41.7	39.8	38.3	37.1	35.3	33.8	—	—
ACRF (dB/100 m) (min)	ANSI/TIA 568-C.2	64.8	52.8	44.8	40.7	38.8	34.9	28.9	24.8	21.3	18.8	16.8	15.3	12.8	10.8	—	—
PSACRF (dB/100 m) (min)	ANSI/TIA 568-C.2	67.8	55.8	47.8	43.7	41.8	37.9	31.9	27.8	24.3	21.8	19.8	18.3	15.8	13.8	—	—
Return Loss (dB) (min)	ANSI/TIA 568-C.2	20.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.9	18.0	17.3	16.8	15.9	15.2	—	—
TCL (dB/100 m) (min)	ANSI/TIA 568-C.2	40.0	40.0	40.0	38.0	37.0	35.1	32.0	30.0	28.2	27.0	26.0	25.2	24.0	23.0	—	—
	ANSI/TIA 568-C.2	67.0	67.0	67.0	67.0	67.0	67.0	65.6	62.5	59.9	58.0	56.5	56.3	53.5	52.0	—	—
PSANEXT (dB/100 m) (min)	General Cable Guaranteed	73.0	73.0	73.0	73.0	73.0	73.0	71.6	68.5	65.9	64.0	62.5	61.3	59.5	58.0	—	—
	General Cable Typical	85.0	85.0	85.0	85.0	85.0	85.0	83.6	80.5	77.9	76.0	74.5	73.3	71.5	70.0	—	—
	ANSI/TIA 568-C.2	67.0	66.2	58.2	54.1	52.2	48.3	42.3	38.2	34.7	32.2	30.2	28.7	26.2	24.2	—	—
PSANEXT (dB/100 m) (min)	General Cable Guaranteed	73.0	72.2	64.2	60.1	58.2	54.3	48.3	44.2	40.7	38.2	36.2	34.7	32.2	30.2	—	—
	General Cable Typical	85.0	84.2	76.2	72.1	70.2	66.3	60.3	56.2	52.7	50.2	48.2	46.7	44.2	42.2	—	—

\*PSACR & ACR not specified in ANSI/TIA 568-C.2

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NETWORK

Multimedia Cat 5e Cable for Use with Crestron® Systems



The Gepco® Brand CT504/SDM Multimedia Cat 5e Cable for use with Crestron® Systems features extended bandwidth and precision tolerances to meet or exceed the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is ETL verified and UL listed to ensure consistent performance, while the TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. CT504/SDM Multimedia Cable is available in plenum and riser constructions.

Features & Benefits

Supports 1080p HD Video, 1920 x 1200 WUXGA Computer, HD 7.1 Multi-Channel Audio and Ethernet Control Signals

Foil Shield Reduces Electromagnetic Interference (EMI) for Optimal Performance

Tested to 350 MHz

TRU-Mark® Print Legend with Sequential Footage

Third Party Verified for Guaranteed Performance

Applications

1000 BASE-T (Gigabit Ethernet)

E52/155 Mbps ATM

E100/10 BASE-T (IEEE 802.3)

IEEE 802.3af DTE Power (PoE)

IEEE 802.3at for PoE Plus

T1

Voice

Mechanical Specifications

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pair Color Code	Core Tape	Shield	Drain Wire	Jacket	Min. Bend Radius	Max. Pulling Force	UL Type	Weight
CT504/SDM	4	0.250" (6.35 mm)	24 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Polyester	Polyester-Backed Aluminum Foil (Aluminum Side In)	26 AWG Stranded TC	PVC, Black, White, Blue	1.0"	25 lbs	CMR	36 lbs/Mft (63 kg/km)
<i>Multimedia Category 5e Cable for Use with Crestron® Systems</i>													
CT504/SDMP	4	0.225" (5.72 mm)	24 AWG Solid BC	Fluoropolymer	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Polyester	Polyester-Backed Aluminum Foil (Aluminum Side In)	26 AWG Stranded TC	Plenum PVC, Black, White, Blue	1.0"	25 lbs	CMP	32 lbs/Mft (69 kg/km)
<i>Multimedia Category 5e Cable for Use with Crestron® Systems: Plenum</i>													

Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop. (Plenum, Non-Plenum)	Temp. Rating (Installation, Operating)	Standards																																																																																																																																							
CT504/SDM Series	8.9 Ω/100 m (328 ft)	3.0%	100 Ω (+/-15)	45 ns/100 m	72%, 70%	0°C to +60°C, -20°C to +75°C	ANSI/TIA 568-C.2, ANSI/TIA 862 (Building Automation), ISO/IEC 11801 Ed. 2.0 (Class D), ICEA S-90-661 (Category 5e)																																																																																																																																							
							<table border="1"> <thead> <tr> <th>Freq. (MHz)</th> <th>1</th> <th>4</th> <th>10</th> <th>16</th> <th>20</th> <th>25</th> <th>31.25</th> <th>62.5</th> <th>100</th> <th>155</th> <th>200</th> <th>250</th> <th>300</th> <th>350</th> </tr> </thead> <tbody> <tr> <td>PSACR* (dB/100 m) (min)</td> <td>60.3</td> <td>49.2</td> <td>40.8</td> <td>36.0</td> <td>33.5</td> <td>30.9</td> <td>28.2</td> <td>18.4</td> <td>10.3</td> <td>1.4</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>ACR* (dB/100 m) (min)</td> <td>63.3</td> <td>52.2</td> <td>43.8</td> <td>39.0</td> <td>36.5</td> <td>33.9</td> <td>31.2</td> <td>21.4</td> <td>13.3</td> <td>4.4</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Insertion Loss (dB/100 m) (max)</td> <td>2.0</td> <td>4.1</td> <td>6.5</td> <td>8.2</td> <td>9.3</td> <td>10.4</td> <td>11.7</td> <td>17.0</td> <td>22.0</td> <td>28.0</td> <td>32.4</td> <td>36.9</td> <td>41.0</td> <td>44.9</td> </tr> <tr> <td>PSNEXT (dB/100 m) (min)</td> <td>62.3</td> <td>53.3</td> <td>47.3</td> <td>44.2</td> <td>42.8</td> <td>41.3</td> <td>39.9</td> <td>35.4</td> <td>32.3</td> <td>29.4</td> <td>27.8</td> <td>26.3</td> <td>25.1</td> <td>24.1</td> </tr> <tr> <td>NEXT (dB/100 m) (min)</td> <td>65.3</td> <td>56.3</td> <td>50.3</td> <td>47.2</td> <td>45.8</td> <td>44.3</td> <td>42.9</td> <td>38.4</td> <td>35.3</td> <td>32.4</td> <td>30.8</td> <td>29.3</td> <td>28.3</td> <td>27.1</td> </tr> <tr> <td>PSACRF (dB/100 m) (min)</td> <td>60.8</td> <td>48.8</td> <td>40.8</td> <td>36.7</td> <td>34.8</td> <td>32.8</td> <td>30.9</td> <td>24.9</td> <td>20.8</td> <td>17.0</td> <td>14.8</td> <td>12.8</td> <td>11.3</td> <td>9.9</td> </tr> <tr> <td>ACRF (dB/100 m) (min)</td> <td>63.8</td> <td>51.8</td> <td>43.8</td> <td>39.7</td> <td>37.8</td> <td>35.8</td> <td>33.9</td> <td>27.9</td> <td>23.8</td> <td>20.0</td> <td>17.8</td> <td>15.8</td> <td>14.3</td> <td>12.9</td> </tr> <tr> <td>Return Loss (dB) (min)</td> <td>20.0</td> <td>23.0</td> <td>25.0</td> <td>25.0</td> <td>25.0</td> <td>24.3</td> <td>23.6</td> <td>21.5</td> <td>20.1</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table>	Freq. (MHz)	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350	PSACR* (dB/100 m) (min)	60.3	49.2	40.8	36.0	33.5	30.9	28.2	18.4	10.3	1.4	—	—	—	—	ACR* (dB/100 m) (min)	63.3	52.2	43.8	39.0	36.5	33.9	31.2	21.4	13.3	4.4	—	—	—	—	Insertion Loss (dB/100 m) (max)	2.0	4.1	6.5	8.2	9.3	10.4	11.7	17.0	22.0	28.0	32.4	36.9	41.0	44.9	PSNEXT (dB/100 m) (min)	62.3	53.3	47.3	44.2	42.8	41.3	39.9	35.4	32.3	29.4	27.8	26.3	25.1	24.1	NEXT (dB/100 m) (min)	65.3	56.3	50.3	47.2	45.8	44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.3	27.1	PSACRF (dB/100 m) (min)	60.8	48.8	40.8	36.7	34.8	32.8	30.9	24.9	20.8	17.0	14.8	12.8	11.3	9.9	ACRF (dB/100 m) (min)	63.8	51.8	43.8	39.7	37.8	35.8	33.9	27.9	23.8	20.0	17.8	15.8	14.3	12.9	Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	24.3	23.6	21.5	20.1	—	—	—	—	—
Freq. (MHz)	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350																																																																																																																																
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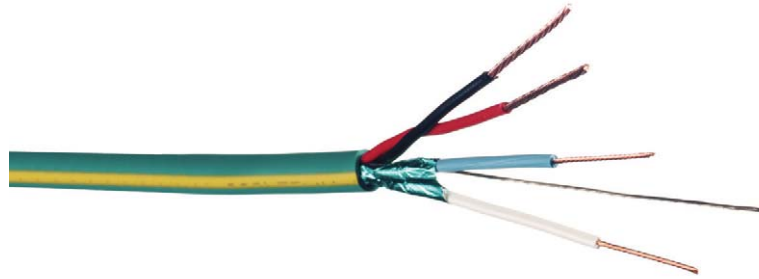
Note: Results beyond 100 MHz for reference only.  
\*PSACR & ACR not specified in ANSI/TIA 568-C.2

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AUTOMATION

Control Cable for Use with Crestron® Systems



Features & Benefits

- 22 AWG Low-Cap, Shielded Single-Pair
- Low-Loss Foam Dielectric (Data Pair)
- 18 AWG Power Conductors
- Yellow Stripe for Easy Identification
- UL Rated for Permanent Installation

Mechanical Specifications

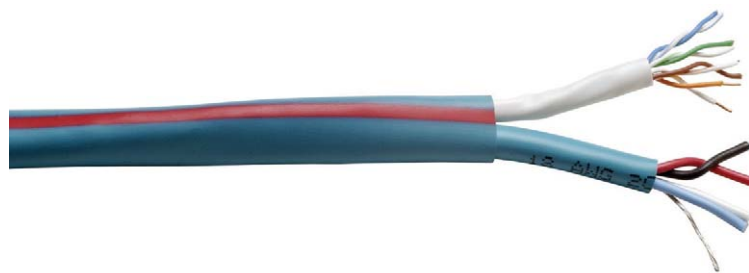
Part #	# of Pairs	Nominal OD	Conductor	Data Insulation (Type, OD, Color)	Data Shield & Drain	Power Conductors	Power Insulation	Overall Jacket	UL Type	Approx. Weight
18/22CRT	2 (One Power, One Data)	0.242" (6.15 mm)	22 AWG (7x30) Stranded BC	Foam PE, 0.022" (0.559 mm), Blue & White	100% Foil with 24 AWG (7x32) Stranded TC	18 AWG (7x26) Stranded BC	PVC, 0.010" (0.254 mm) Red & Black	PVC, Blue with Yellow Stripe	CL3R, FT-4	41 lbs/Mft (61 kg/km)
<i>Control Cable for Use with Crestron® Systems</i>										
18/22CRTP	2 (One Power, One Data)	0.195" (4.95 mm)	22 AWG (7x30) Stranded BC	Foam FEP, 0.020" (0.508 mm), Blue & White	100% Foil with 24 AWG (7x32) Stranded TC	18 AWG (16x30) Stranded BC	Plenum PVC, 0.009" (0.229 mm) Red & Black	Plenum, PVC, Blue with Yellow Stripe	CMP	29 lbs/Mft (43 kg/km)
<i>Control Cable for Use with Crestron® Systems: Plenum</i>										

Electrical Specifications

Part #	Impedance	Capacitance	Conductor DCR	Drain DCR	Velocity of Propagation	Capacitance	Power Conductor DCR
18/22CRT	95 Ω	12.5 pF/ft Between Conductors	15.3 Ω/Mft	23.8 Ω/Mft	79%	31.7 pF/ft Between Conductors	6.0 Ω/Mft
18/22CRTP	95 Ω	12.5 pF/ft Between Conductors	15.3 Ω/Mft	23.8 Ω/Mft	82%	31.7 pF/ft Between Conductors	6.7 Ω/Mft

AUTOMATION

Hybrid Cable for Use with Crestron® Systems



Features & Benefits

- Touch Panel Elements
- Cat 5e Elements
- RG6Q Coax Elements (Optional)
- Common Outer Jacket for Easy Pulling
- UL Rated for Permanent Installation

Mechanical Specifications

Part #	Control Elements (#, Color)	Cat 5e Elements (#, Color)	RG6Q Elements (#, Color)	Master Jacket (Type, Color)	Overall Diameter	UL Type	Approx. Weight
18/22CCT	1, Teal with Yellow Stripe	1, White	N/A	PVC, Teal with Red Stripe	0.524" (13.3 mm)	CL3/FT-4	98 lbs/Mft (143 kg/km)
<i>Hybrid Cable for Use with Crestron® Systems: 18/22CRT + 1 Cat 5e</i>							
18/22CCD	1, Teal with Yellow Stripe	2, One White, One Gray	N/A	PVC, Teal with Black Stripe	0.547" (13.9 mm)	CL3/FT-4	130 lbs/Mft (194 kg/km)
<i>Hybrid Cable for Use with Crestron® Systems: 18/22CRT + 2 Cat 5e</i>							
18/22CCQ	1, Teal with Yellow Stripe	4, One White, One Green, One Gray, One Blue	N/A	PVC, Teal with White Stripe	0.652" (16.6 mm)	CL3/FT-4	189 lbs/Mft (282 kg/km)
<i>Hybrid Cable for Use with Crestron® Systems: 18/22CRT + 4 Cat 5e</i>							
18/22CDC	1, Teal with Yellow Stripe	2, One White, One Gray	2, Black & White	PVC, Teal with Orange Stripe	0.750" (19.1 mm)	CL3/FT-4	177 lbs/Mft (264 kg/km)
<i>Hybrid Cable for Use with Crestron® Systems: 18/22CRT + 2 Cat 5e + 2 RG 6 Quad Coax</i>							

Touch Panel Control ELEMENT SPECIFICATIONS, See Top of Page (Part #18/22CRT).  
 Cat 5e ELEMENT SPECIFICATIONS, See Page 95.  
 RG6Q ELEMENT SPECIFICATIONS, Consult Factory for Detailed Specifications.

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AUTOMATION

Control Cable for Use with AMX® Systems



Features & Benefits

- 22 AWG Low-Cap, Shielded Single-Pair For AMX® Systems
- Low-Loss Foam Dielectric (Data Pair)
- 18 AWG Power Conductors
- UL Rated for Permanent Installation

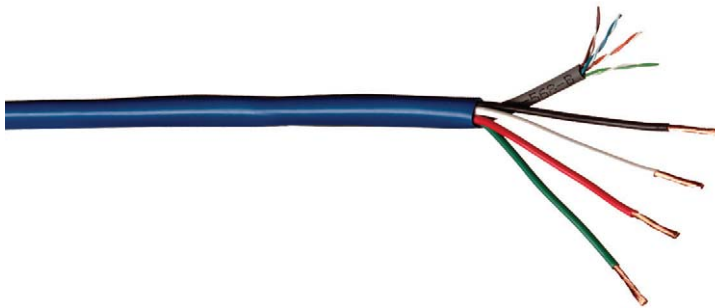
Mechanical Specifications										
Part #	# of Pairs	Nominal OD	Conductor	Data Insulation (Type, OD, Color)	Data Shield & Drain	Power Conductors	Power Insulation	Overall Jacket	UL Type	Approx. Weight
18/22AXL	2 (One Power, One Data)	0.242" (6.15 mm)	22 AWG (7x30) Stranded BC	Foam PE, 0.022" (0.559 mm), Blue & White	100% Foil with 24 AWG (7x32) Stranded TC	18 AWG (7x26) Stranded BC	PVC, 0.010" (0.254 mm), Red & Black	PVC, Black	CL3R, FT-4	41 lbs/Mft (61 kg/km)
	Control Cable for Use with AMX® Systems									
18/22AXLP	2 (One Power, One Data)	0.195" (4.95 mm)	22 AWG (7x30) Stranded BC	Foam FEP, 0.020" (0.508 mm), Blue & White	100% Foil with 24 AWG (7x32) Stranded TC	18 AWG (16x30) Stranded BC	Plenum PVC, .009" (0.229 mm), Red & Black	Plenum PVC, Black	CMP	29 lbs/Mft (43 kg/km)
	Control Cable for Use with AMX® Systems: Plenum									

Electrical Specifications							
Part #	Impedance	Capacitance	Conductor DCR	Drain DCR	Velocity of Propagation	Capacitance	Power Conductor DCR
18/22AXL	95 Ω	12.5 pF/ft Between Conductors	15.3 Ω/Mft	23.8 Ω/Mft	79%	31.7 pF/ft Between Conductors	6.0 Ω/Mft
18/22AXLP	95 Ω	12.5 pF/ft Between Conductors	15.3 Ω/Mft	23.8 Ω/Mft	82%	31.7 pF/ft Between Conductors	6.7 Ω/Mft

AUTOMATION

Keypad & Volume Control Cable



Features & Benefits

- Cat 5e Element
- Four Audio Conductors
- Common Outer Jacket with Color Stripe
- UL Rated for Permanent Installation

Mechanical Specifications						
Part #	Cat 5e Elements (#, Color)	Audio Conductors (#, Color, DCR, Capacitance)	Master Jacket (Type, Color)	Overall Diameter	UL Type	Approx. Weight
164NCAT	1, Gray	4x16 AWG (65x34), Stranded BC, Black, Red, White, Green, 4.0 Ω/Mft, 48.4 pF/ft	PVC, Teal with Gray Stripe	0.388" (9.86 mm)	CL3 & CM	93 lbs/Mft (139 kg/km)
	Keypad & Volume Control Cable: 16 AWG					
144NCAT	1, Gray	4x14 AWG (105x34), Stranded BC, Black, Red, White, Green, 2.5 Ω/Mft, 40.5 pF/ft	PVC, Blue with Gray Stripe	0.415" (10.5 mm)	CL3 & CM	125 lbs/Mft (186 kg/km)
	Keypad & Volume Control Cable: 14 AWG					

Cat 5e ELEMENT SPECIFICATIONS, See Page 95.

AMX is a registered trademark of AMX LLC.



LIGHTING CONTROL

**Power Cable for Use with Lutron® Homeworks® Systems**



**Features & Benefits**

- 18 AWG Conductors
- Two- and Four-Conductor Versions
- Shielded with Drain Wire
- Color Striped for Easy Identification
- UL Rated for Permanent Installation

**Mechanical Specifications**

Part #	# of Cond.	Nominal OD	Conductors (Type, DCR)	Insulation (Type, Wall Thick, Color Code, Capacitance)	Shield	Drain Wire (Type, DCR)	Jacket (Type, Color)	UL Type	Approx. Weight
<b>182LUTDS</b>	2	0.268" (6.81 mm)	18 AWG (7x26) Stranded BC, 6.0 Ω/Mft	PVC, 0.015" (0.381), Nylon, 0.005" (0.127 mm), 600 Volt, Black & Red, 39 pF/ft Between Conductors	100% Foil	20 AWG (7x28) Stranded TC, 10.2 Ω/Mft	PVC, Blue with Pink Stripe	TC Sunlight-Resistant, Direct Burial	44 lbs/Mft (66 kg/km)
Power Cable for Use with Lutron® Homeworks® Systems: Two-Conductor									
<b>184LUTDS</b>	4	0.314" (7.98 mm)	18 AWG (7x26) Stranded BC, 6.0 Ω/Mft	PVC, 0.015" (0.381), Nylon, 0.005" (0.127 mm), 600 Volt, Black, Red, White, Green, 39 pF/ft Between Conductors	100% Foil	20 AWG (7x28) Stranded TC, 10.2 Ω/Mft	PVC, Blue with White Stripe	TC Sunlight-Resistant, Direct Burial	69 lbs/Mft (103 kg/km)
Power Cable for Use with Lutron® Homeworks® Systems: Four-Conductor									

LIGHTING CONTROL

**Keypad Cable for Use with Lutron® Homeworks® Systems**



**Features & Benefits**

- 22 AWG Shielded Single-Pair
- 18 AWG Power Conductors
- Low-Loss PE Insulation
- Yellow Stripe for Easy Identification
- UL Rated for Permanent Installation

**Mechanical Specifications**

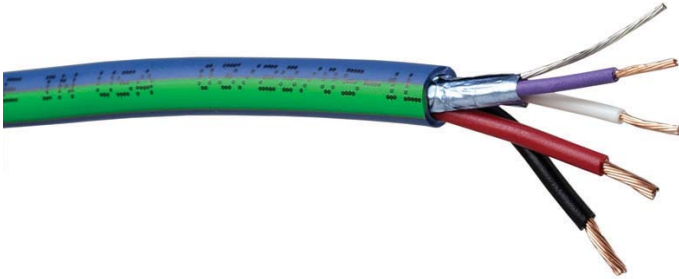
Part #	Overall Diameter	Communication Elements	Power Elements	Jacket (Type, Color)	UL Type	Approx. Weight
<b>18/22KYP</b>	0.253" (6.43 mm)	Conductors: 1 Pair 22 AWG (7x30) Stranded BC, 15.3 Ω/Mft  Insulation: PE, 0.013" (0.330 mm), White & Violet, 22 pF/ft  Shield: 100% Foil with 24 AWG (7x32) TC Drain	Conductors: 1 Pair 18 AWG (16x30) Stranded BC, 16.7 Ω/Mft  Insulation: PVC, 0.015" (0.381 mm), Black & Red	PVC, Blue with Yellow Stripe	CL3 & CM	40 lbs/Mft (60 kg/km)
Keypad Cable for Use with Lutron® Homeworks® Systems						

Lutron and Homeworks are registered trademark of Lutron Electronics Co., Inc.



LIGHTING CONTROL

Control Cable for Use with Lutron® GRAFIK Eye® Systems



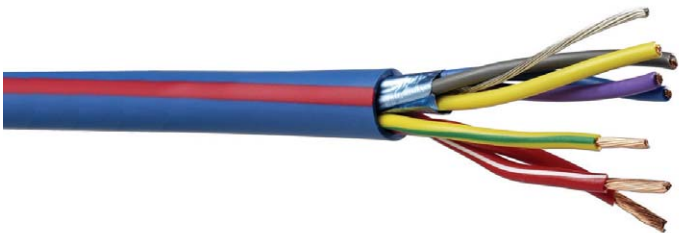
Features & Benefits

- 22 AWG Shielded Single-Pair
- 18 or 12 AWG Power Conductors
- Ground Wire (12/22LGRX Only)
- Color Stripe for Easy Identification
- UL Rated for Permanent Installation

Mechanical Specifications							
Part #	Overall Diameter	Communication Elements	Power Elements	Ground Elements	Jacket (Type, Color)	UL Type	Approx. Weight
18/22GFE	0.253" (6.43 mm)	Conductors: 1 Pair 22 AWG (7x30) Stranded BC, 15.3 Ω/Mft	Conductors: 1 Pair 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft	N/A	PVC, Blue with Green Stripe	CL3 & CM	40 lbs/Mft (60 kg/km)
		Insulation: PE, 0.013" (0.33 mm), White & Violet, 22 pF/ft	Insulation: PVC, 0.015" (0.38 mm), Black & Red				
Shield: 100% Foil with 24 AWG (7x32) TC Drain							
Control Cable for Use with Lutron® GRAFIK Eye® Systems: 18 AWG Power Conductors							
12/22LGRX	0.300" (7.62 mm)	Conductors: 1 Pair 22 AWG (7x30) Stranded BC, 15.3 Ω/Mft	Conductors: 1 Pair 12 AWG (19x25) Stranded BC, 1.8 Ω/Mft	Conductors: 1 Cond. 18 AWG (7x26) Stranded BC, 6.0 Ω/Mft	PVC, Blue with Blue Stripe	CL3 & CM	85 lbs/Mft (127 kg/km)
		Insulation: PE, 0.013" (0.33 mm), White & Violet, 22 pF/ft	Insulation: PVC, 0.015" (0.38 mm), Black & Red	Insulation: PVC, 0.010" (0.254 mm), Orange			
Shield: 100% Foil with 24 AWG (7x32) TC Drain							
Control Cable for Use with Lutron® GRAFIK Eye® Systems: 12 AWG Power Conductors with Ground Wire							

LIGHTING CONTROL

Hybrid Cable for Use with Lutron® Sivoia® Systems



Features & Benefits

- 18 AWG Shielded Conductors
- 16 AWG Power Conductors
- Ground Wire
- Red Stripe for Easy Identification
- UL Rated for Permanent Installation

Mechanical Specifications							
Part #	Overall Diameter	Communication Elements	Power Elements	Ground Elements	Master Jacket (Type, Color)	UL Type	Weight
16/18SVA	0.380" (9.65 mm)	Conductors: 4 x 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft	Conductors: 2 x 16 AWG (26x30) Stranded BC, 4.0 Ω/Mft	Conductors: 1 x 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft	PVC, Blue with Red Stripe	CL3 & CM	95 lbs/Mft (142 kg/km)
		Insulation: PE, 0.015" (0.381 mm), Violet, Yellow, Gray, Blue, 17.5 pF/ft	Insulation: PVC, 0.015" (0.381 mm), Red/White & Red	Insulation: PVC, 0.015" (0.381 mm), Green/Yellow			
Shield: 100% Foil with 20 AWG Drain Wire (10x30) TC							
Hybrid Cable for Use with Lutron® Sivoia® Systems							
16/18SVAP	0.322" (8.18 mm)	Conductors: 4 x 18 AWG (16x30) Stranded BC, 5.46 Ω/Mft	Conductors: 2 x 16 AWG (26x30) Stranded BC, 4.0 Ω/Mft	Conductors: 1 x 18 AWG (19x30) Stranded BC, 5.46 Ω/Mft	Plenum PVC, Natural with Red Stripe	CL3P or CMP	83 lbs/Mft (124 kg/km)
		Insulation: SGPVC, 0.010" (0.254 mm), Violet, Yellow, Gray, Blue, 17.5 pF/ft	Insulation: SGPVC, 0.010" (0.254 mm), Black, Red	Insulation: SGPVC, 0.010" (0.254 mm), Green			
Shield: 100% Aluminum Polyester with 20 AWG Drain Wire (10x30) TC							
Hybrid Cable for Use with Lutron® Sivoia® Systems: Plenum							

Lutron, GRAFIK Eye and Sivoia are registered trademarks of Lutron Electronics Co., Inc.



LIGHTING CONTROL

**Power and Data Cable for Use with Vantage® Systems**



**Features & Benefits**

- Low-Loss 16 AWG Conductors
- Dual-Layer Dielectric
- Power and Data are Transmitted Over a Single Pair
- Purple Jacket with Yellow Stripe for Easy Identification
- UL Rated for Permanent Installation

**Mechanical Specifications**

Part #	# of Cond.	Nominal OD	Conductor (Type, DCR)	Insulation (Type, Wall Thick, Color Code, Capacitance)	Jacket (Type, Color)	UL Type	Approx. Weight
162VANT65	2	0.285" (7.24 mm)	16 AWG (65x34) Stranded BC, 4.0 Ω/Mft	PVC, 0.016" (0.406 mm) Nylon, 0.005" (0.127 mm), Black & Red, 25.7 pF/ft Between Conductors	PVC, Violet with Yellow Stripe	(UL) TC 600 Volt or (UL) CL3 or CM 300 Volt	46 lbs/Mft (69 kg/km)
16 AWG Power and Data Cable for Use with Vantage® Systems							

LIGHTING CONTROL

**Control Station Cable for Use with LiteTouch® Systems**



**Features & Benefits**

- Four 16 AWG Conductors
- Orange Jacket for Easy Identification
- UL Rated for Permanent Installation

**Mechanical Specifications**

Part #	# of Cond.	Nominal OD	Conductors (Type, DCR)	Insulation (Type, Wall Thick, Color Code, Capacitance)	Jacket (Type, Color)	UL Type	Approx. Weight
164LTCH	4	0.300" (7.62 mm)	16 AWG (65x34) Stranded BC, 4 Ω/Mft	PVC, 0.015" (0.381 mm), Black, Blue, Red, White	PVC, Orange	CL3/PLTC	64 lbs/Mft (95 kg/km)
Control Station Cable for Use with LiteTouch® Systems							

LIGHTING CONTROL

**Enclosure & Module Cable for Use with LiteTouch® Systems**



**Features & Benefits**

- Four 22 AWG Conductors
- Foil Shield with Drain Wire
- UL Rated for Permanent Installation

**Mechanical Specifications**

Part #	# of Cond.	Nominal OD	Conductors (Type, DCR)	Insulation (Type, Wall Thick, Color Code, Capacitance)	Shield	Drain Wire (Type, DCR)	Jacket (Type, Color)	UL Type	Approx. Weight
224SLTCH	4	0.222" (5.64 mm)	22 AWG (7x30) Stranded BC, 15.3 Ω/Mft	PVC, 0.015" (0.381 mm), Black, Red, White & Green, 35 pF/ft Between Conductors	100% Foil	24 AWG (7x32) Stranded BC, 23.8 Ω/Mft	PVC, Green	CL3 & CM	32 lbs/Mft (48 kg/km)
Enclosure & Module Cable for use with LiteTouch® Systems									

Vantage is a registered trademark of Legrand Home Systems, Inc. LiteTouch is a registered trademark of LiteTouch, Inc.

**LIGHTING CONTROL**  
**DMX Lighting Control Cable**



The Gepco® Brand DLC series lighting control cable is a true DMX cable with an exceptionally durable and flexible construction. The DLC224 and DLC222 meets the USITT standards for DMX512 cable specifications—120 Ω impedance, low capacitance, and double (foil and braid) shield. Unlike conventional cables that are not intended for data transmission, the DLC series offers reliable data transfer through its data-specific design. In addition, the DLC series features all-weather, extra-flexible jacket materials that are tough, abrasion-resistant and remain flexible in hot or cold temperature environments.

**Features & Benefits**

- True DMX512 Construction (DLC224 & DLC222)
- Low-Capacitance Data Pairs
- Double Shield (Foil & Braid)
- Drain Wire for Easy Shield Termination
- Color-Coded Conductors for Easy Identification
- Meets or Exceeds USITT Standards (DLC224 & DLC222)
- One- or Two-Pair Designs Available
- Durable, Flexible, All-Weather Jacket

**Applications**

- DMX512 Lighting Control (DLC224)
- Remote or Permanent Installation

**Mechanical Specifications**

Part #	# of Cond.	Nominal OD	Conductors	Insulation (Type, Wall, Color Code)	Shield	Drain Wire	Jacket	Approx. Weight
<b>DLC122</b>	2	0.245" (6.22 mm)	22 AWG (7x30) Stranded TC	Foam PE, 0.025" (0.635 mm), Black & White	100% Foil, 90% TC Braid	22 AWG (7x30) Stranded TC	Flexible Durable PU, Black	33 lbs/Mft (49 kg/km)
<i>DMX Lighting Control Cable: 1 Pair</i>								
<b>DLC222</b>	4	0.278" (7.06 mm)	22 AWG (7x30) Stranded TC	Foam PE, 0.025" (0.635 mm), Black & White, Red & Blue	100% Foil, 90% TC Braid	22 AWG (7x30) Stranded TC	Flexible Durable PU, Black	47 lbs/Mft (70 kg/km)
<i>DMX512 Lighting Control Cable: 2 Pair</i>								
<b>DLC124</b>	2	0.241" (6.12 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.020" (0.508 mm), Black & White	100% Foil, 90% TC Braid	24 AWG (7x32) Stranded TC	Flexible All-Weather TPE, Black	33 lbs/Mft (49 kg/km)
<i>DMX Lighting Control Cable: 1 Pair</i>								
<b>DLC224</b>	4	0.270" (6.86 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.020" (0.508 mm) Black & White, Red & Blue	100% Foil, 90% TC Braid	24 AWG (7x32) Stranded TC	Flexible All-Weather TPE, Black	44 lbs/Mft (66 kg/km)
<i>DMX512 Lighting Control Cable: 2 Pair</i>								

**Electrical Specifications**

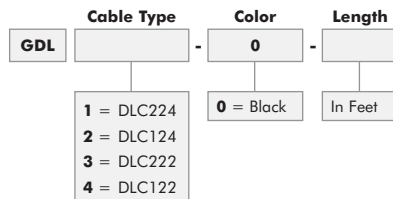
Part #	Capacitance	Characteristic Impedance	Cond. DCR	Shield & Drain DCR
DLC122	10.4 pF/ft Between Conductors 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	14.7 Ω/Mft	3.2 Ω/Mft
DLC222	10.4 pF/ft Between Conductors 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	14.7 Ω/Mft	2.5 Ω/Mft
DLC124	10.4 pF/ft Between Conductors, 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	23.4 Ω/Mft	3.8 Ω/Mft
DLC224	10.4 pF/ft Between Conductors, 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	23.4 Ω/Mft	2.9 Ω/Mft

**Recommended Pinout for 5-Pin XLR:**

- Pin 1 - Shield
- Pin 2 - Black
- Pin 3 - Red
- Pin 4 - Blue
- Pin 5 - White

**Recommended Pinout for 3-Pin XLR:**

- Pin 1 - Shield
- Pin 2 - Black
- Pin 3 - White



**Connectors**  
Neutrik® 5-Pin XLRs, (1) Male NC5MX and (1) Female NC5FX  
  
Neutrik® 3-Pin XLRs, (1) Male NC3MX and (1) Female NC3FX

Neutrik is a registered trademarks of Neutrik AG.



## TOURING & STAGE LIGHTING CABLES

Page	Broadcast	Commercial AV	Assemblies
108	•	•	•
109	•	•	•
110	•	•	•
111		•	
111		•	
112		•	
112		•	
113		•	
113		•	

### In This Section:

RunONE™ Powered Cables: Professional

RunONE™ Powered Cables: Touring

DMX Lighting Control

Portable Power Cord: Carol® Brand Super Vu-Tron® Entertainment & Stage Lighting Cable  
105°C 600 Volt, UL Type SC and CSA Type PPC

Portable Power Cord: Carol® Brand Super Vu-Tron® Single Conductor Type W Extra-Flex Cable  
90°C 2000 Volt, UL and CSA Type W

Portable Power Cord: Carol® Brand Super Vu-Tron® Supreme Types SJOOW/SOOW Cord  
105°C 300 and 600 Volt, UL/CSA Portable Cord

Portable Power Cord: Carol® Brand HMI Lighting Cable  
90°C 600 Volt, UL and CSA Type SOOW

Portable Power Cord: Carol® Brand Carolprene® Types SJOOW/SOOW Cord  
90°C 600 Volt, UL/CSA Portable Cord

Portable Power Cord: Carol® Brand Lighting Cable for Socapex\* Connector Applications  
105°C 600 Volt, 12 and 14 AWG, 14 or 19 Conductor, UL and CSA AWM

\*Socapex is a trademark of Amphenol Corporation.

# RUGGED & UNIQUE DESIGNS THAT DELIVER PERFORMANCE FOR PORTABLE STAGE APPLICATIONS



## RunONE™ Powered Cable

Saving time and hassle by allowing the user to replace multiple cables with a single, neat solution, each RunONE cable combines power with two, eight or 12 channels of 110  $\Omega$  balanced audio for line level, mic level or digital AES signals and can be used for self-powered speakers, staging applications and DMX lighting control.

## Carol® Brand Portable Power Cord

Carol® Brand Portable Power Cord is designed to deliver temporary power to television and theater sets, mobile broadcast trucks, concerts, sporting events and other sites with the lowest possible electrical loss and failures.

## DMX Lighting Control Cable

Ideal for heavy production use, rigging and touring conditions, Gepco Brand DLC122 and DLC124 are designed with 22 AWG conductors for use in extended distance runs without signal loss and feature an abrasion-resistant, yet flexible, jacket.

## Application-Specific Jackets

Jacket compounds are specified for each cable type based upon the application. Each compound type has a unique combination of flexibility, abrasion resistance and temperature properties.

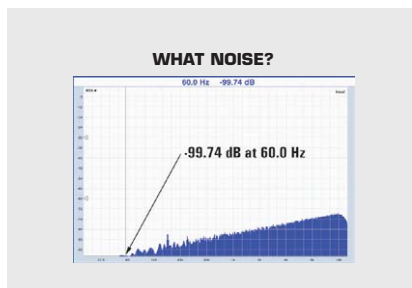
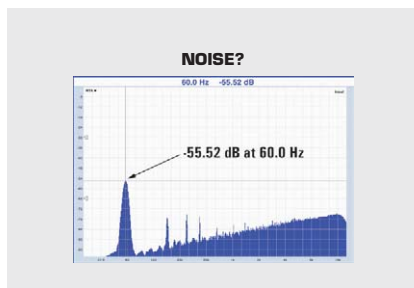
## Indoor/Outdoor Use

Gepco® Brand and Carol® Brand touring and stage lighting cables are designed for indoor or outdoor use including the hostile environments found at live sounds venues.

## Electrical Characteristics & Specifications

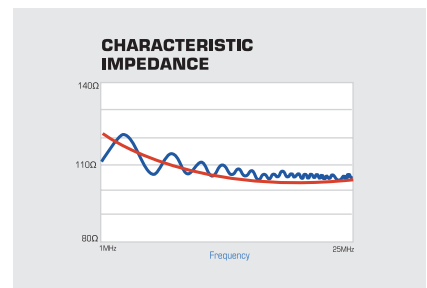
### RunONE™ Powered Cables: Noise? What Noise?

Saving time and hassle while improving performance, Gepco Brand RunONE powered cables are designed with shielding to protect the audio signal from picking up the electromagnetic noise that can be introduced from the current in the power cable. Conventional Method: The first graph below shows the typical noise from bundled power and audio cables. RunONE: The second graph shows the reduced noise from RunONE powered cables.



### Precision 110 $\Omega$ Impedance

Digital audio cables feature a 110  $\Omega$  characteristic impedance. Impedance matching ensures low attenuation and minimal signal reflection, which can result in bit-errors or jitter.



## RunONE™ Powered Cables: Professional



Gepco® Brand RunONE™ Powered Cables combine audio and power, along with optional data, under a single durable, yet flexible jacket. Providing a portable and neat solution, RunONE cables save time and hassle. Each cable combines power with two, eight or 12 channels of 110 Ω balanced audio for line level, mic level or digital AES signals and can be used for self-powered speakers, staging applications and DMX lighting control. Additional configurations include two channels of Category 5e type cable that can be used for data drops or digital audio transmission in remote power and audio applications. Shielding around the power channels eliminates power noise from interrupting the audio/data signal, ensuring high-quality performance.

## Features &amp; Benefits

## Audio

Precision 110 Ω Impedance  
Low-Density Polyethylene Insulation

## Power

Specialized Electrical-Only Design  
Reduces Interference and EMI  
Shielded Design with Tinned Copper Drain Wire

## Applications

For Portable Use or Remote Environment  
Self-Amplified Speakers  
Audio + Power Snakes for Stage or FOH  
DMX Lighting Control  
AES3 Digital Audio  
Microphone or Line Level Balanced  
Analog Audio

## Power Mechanical Specifications

Conductor	Insulation (Type, Wall, Color)	Shield	Drain	Jacket (Type, OD)
14 AWG (41x30) Stranded BC	PVC, 0.016" (0.41 mm) and Nylon, 0.005" (0.127 mm) Black, White and Green	100% Foil	18 AWG (16x30) Stranded TC	PVC, 0.349" (8.86 mm)

## Audio Mechanical Specifications

Conductor	Insulation (Type, Wall, Color)	Shield	Drain	Filler	Jacket (Type, OD)
24 AWG (7x32) Stranded TC	LDPE, 0.021" (0.53 mm), Black and White	100% Foil	22 AWG (7x30) Stranded TC	Polyethylene Rod	PVC, 0.184" (4.67 mm)

## Data Mechanical Specifications

Conductor	Insulation (Type, Wall, Color)	Pair Color Code	Shield	Drain	Jacket (Type, OD)
24 AWG Solid BC	Polyolefin	Blue-White/Blue; Orange-White/Orange; Green-White/Green; Brown-White/Brown	100% Foil	26 AWG (7x34) Solid TC	PVC, 0.300" (7.62 mm)

## Overall Mechanical Specifications

Master Jacket (Type, Color)	UL Type
Flexible PVC, Black	AWM 2464

## Individual Mechanical Specifications

Part #	# of Power	Power Color Code	# of Audio	Audio Color Code	# of Data	Data Color Code	OD	Weight
PA2	1 x 3 Conductor	Black	2 Pair	Red and White	—	—	0.645" (16.4 mm)	206 lbs/Mft (307 kg/km)
PA2C	1 x 3 Conductor	Black	2 Pair	Red and White	2 Cat 5e	Black & Gray	0.830" (21.1 mm)	271 lbs/Mft (404 kg/km)
PA8	1 x 3 Conductor	Black	8 Pair	Base 10	—	—	0.907" (23.0 mm)	339 lbs/Mft (505 kg/km)
PA12	1 x 3 Conductor	Black	12 Pair	Base 10	—	—	1.006" (25.6 mm)	424 lbs/Mft (632 kg/km)
PA12C	1 x 3 Conductor	Black	12 Pair	Base 10	2 Cat 5e	Black & Gray	1.140" (29.0 mm)	492 lbs/Mft (733 kg/km)

## Audio Electrical Specifications

Capacitance	Impedance	Conductor DCR	Drain DCR
15 pF/ft between conductors, 27 pF/ft between one conductor and other tied to shield	110 Ω	25.6 Ω/Mft	15.3 Ω/Mft

## Power Electrical Specifications

Capacitance	Conductor DCR	Drain DCR
51 pF/ft between conductors, 93 pF/ft between one conductor and other tied to shield	2.5 Ω/Mft	6.45 Ω/Mft

## Data Electrical Specifications

DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Prop. Delay (Skew) Max	Vel. of Prop. (Non-Plenum, Plenum)	Temp. Rating (Installation, Operating)										
	3.0%	100 Ω (+/-15)	45 ns/100 m	70%, 72%	0°C to +60°C, -20°C to +75°C										
8.9 Ω/100 m (328 ft)	Freq. (MHz)	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350
	Insertion Loss (dB/100 m) (max)	2.0	4.1	6.5	8.2	9.3	10.4	11.7	17.0	22.0	28.1	32.4	36.9	41.0	44.9
	PSACR (dB/100 m) (min)	60.3	49.2	40.8	36.0	33.5	30.9	28.2	18.4	10.3	1.4	—	—	—	—
	ACR (dB/100 m) (min)	63.3	52.2	43.8	39.0	36.5	33.9	31.2	21.4	13.3	4.4	—	—	—	—
	PSNEXT (dB/100 m) (min)	62.3	53.3	47.3	44.2	42.8	41.3	39.9	35.4	32.3	29.4	27.8	26.3	25.1	24.1
	NEXT (dB/100 m) (min)	65.3	56.3	50.3	47.2	45.8	44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.1	27.1
	PSACRF (dB/100 m) (min)	60.8	48.8	40.8	36.7	34.8	32.8	30.9	24.9	20.8	17.0	14.8	12.8	11.3	9.9
	ACRF (dB/100 m) (min)	63.8	51.8	43.8	39.7	37.8	35.8	33.9	27.9	23.8	20.0	17.8	15.8	14.3	12.9
	Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	24.3	23.6	21.5	20.1	—	—	—	—	—

\*Values are for reference only.

## RunONE™ Powered Cables: Touring



The Touring Line of Gepeco® Brand RunONE™ Powered Cables combine audio and power under a single durable, yet flexible jacket. Providing a portable and neat solution, RunONE cables save time and hassle. Each cable combines power with two, eight or 12 channels of 110 Ω balanced audio for line level, mic level or digital AES signals and can be used for self-powered speakers, staging applications and DMX lighting control. Shielding around the power channels eliminates power noise from interrupting the audio/data signal, ensuring high-quality performance. In addition, the RunONE Touring line uses 12 AWG power for extended distance and overall shielding for extra EMI protection.

### Features & Benefits

#### Audio

- Precision 110 Ω Impedance
- Low-Density Polyethylene Insulation

#### Power

- Specialized Electrical-Only Design
- Reduces Interference and EMI
- Shielded Design with Tinned Copper Drain Wire
- 12 AWG Power for Extended Distance and Overall Shield for Extra EMI Protection (Touring Line)

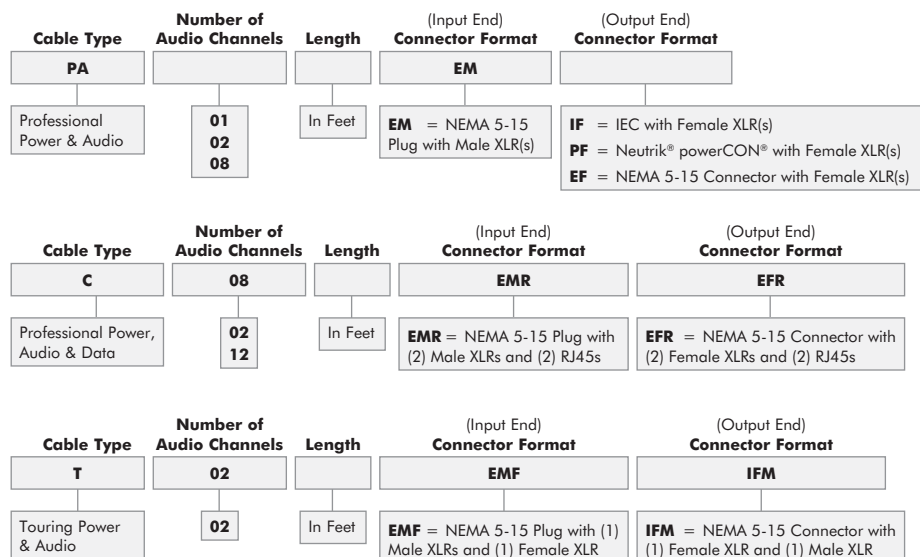
### Applications

- For Portable Use or Remote Environment
- Self-Amplified Speakers
- Audio + Power Snakes for Stage or FOH
- DMX Lighting Control
- AES3 Digital Audio
- Microphone or Line Level Balanced
- Analog Audio

Power Mechanical Specifications												
Conductor	Insulation (Type, Wall, Color)				Shield	Drain	Jacket (Type, OD)					
12 AWG (105x32) Stranded BC	PVC, 0.016" (0.41 mm) and Nylon, 0.005" (0.127 mm) Black, White and Green				100% Foil	18 AWG (7x26) Stranded TC	PVC, 0.396" (10.1 mm)					
Audio Mechanical Specifications												
Conductor	Insulation (Type, Wall, Color)				Shield	Drain	Filler	Jacket (Type, OD)				
24 AWG (7x32) Stranded TC	LDPE, 0.021" (0.533 mm), Black and White				100% Foil	22 AWG (7x30) Stranded TC	Polyethylene Rod	PVC, 0.184" (4.67 mm)				
Overall Mechanical Specifications												
Part #	# of Power	Power Color Code	# of Audio	Audio Color Code	Shield	Drain	OD	Master Jacket (Type, Color)	UL Type	Weight		
PA2T	1 x 3 Conductor	Black	2 Pair	Red and White	100% Foil	16 AWG (19x29) Stranded TC	0.645" (16.4 mm)	Flexible PVC, Black	AWM 2464	206 lbs/Mft (307 kg/km)		
Power Electrical Specifications												
Capacitance					Conductor DCR			Drain DCR				
60 pF/ft between conductors, 108 pF/ft between one conductor and other tied to shield					1.58 Ω/Mft			4.31 Ω/Mft				
Audio Electrical Specifications												
Capacitance					Impedance			Conductor DCR			Drain DCR	
15 pF/ft between conductors, 27 pF/ft between one conductor and other tied to shield					110 Ω			25.6 Ω/Mft			15.3 Ω/Mft	



Other assembly configurations available upon request.



Neutrik and powerCON are registered trademarks of Neutrik AG.

## DMX Lighting Control Cable



The Gepco® Brand DLC series lighting control cable is a true DMX cable with an exceptionally durable and flexible construction. The DLC224 and DLC222 meets the USITT standards for DMX512 cable specifications—120 Ω impedance, low capacitance, and double (foil and braid) shield. Unlike conventional cables that are not intended for data transmission, the DLC series offers reliable data transfer through its data-specific design. In addition, the DLC series features all-weather, extra-flexible jacket materials that are tough, abrasion-resistant and remain flexible in hot or cold temperature environments.

## Features &amp; Benefits

True DMX512 Construction (DLC224 & DLC222)

Low-Capacitance Data Pairs

Double Shield (Foil & Braid)

Drain Wire for Easy Shield Termination

Color-Coded Conductors for Easy Identification

Meets or Exceeds USITT Standards (DLC224 & DLC222)

One- or Two-Pair Designs Available

Durable, Flexible, All-Weather Jacket

## Applications

DMX512 Lighting Control (DLC224)

Remote or Permanent Installation

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductors	Insulation (Type, Wall, Color Code)	Shield	Drain Wire	Jacket	Approx. Weight
<b>DLC122</b>	2	0.245" (6.22 mm)	22 AWG (7x30) Stranded TC	Foam PE, 0.025" (0.635 mm), Black & White	100% Foil, 90% TC Braid	22 AWG (7x30) Stranded TC	Flexible Durable PU, Black	33 lbs/Mft (49 kg/km)
DMX Lighting Control Cable: 1 Pair								
<b>DLC222</b>	4	0.278" (7.06 mm)	22 AWG (7x30) Stranded TC	Foam PE, 0.025" (0.635 mm), Black & White, Red & Blue	100% Foil, 90% TC Braid	22 AWG (7x30) Stranded TC	Flexible Durable PU, Black	47 lbs/Mft (70 kg/km)
DMX512 Lighting Control Cable: 2 Pair								
<b>DLC124</b>	2	0.241" (6.12 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.020" (0.508 mm), Black & White	100% Foil, 90% TC Braid	24 AWG (7x32) Stranded TC	Flexible All-Weather TPE, Black	33 lbs/Mft (49 kg/km)
DMX Lighting Control Cable: 1 Pair								
<b>DLC224</b>	4	0.270" (6.86 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.020" (0.508 mm), Black & White, Red & Blue	100% Foil, 90% TC Braid	24 AWG (7x32) Stranded TC	Flexible All-Weather TPE, Black	44 lbs/Mft (66 kg/km)
DMX512 Lighting Control Cable: 2 Pair								

## Electrical Specifications

Part #	Capacitance	Characteristic Impedance	Cond. DCR	Shield & Drain DCR
DLC122	10.4 pF/ft Between Conductors 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	14.7 Ω/Mft	3.2 Ω/Mft
DLC222	10.4 pF/ft Between Conductors 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	14.7 Ω/Mft	2.5 Ω/Mft
DLC124	10.4 pF/ft Between Conductors, 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	23.4 Ω/Mft	3.8 Ω/Mft
DLC224	10.4 pF/ft Between Conductors, 18.7 pF/ft Between One Conductor and Other Tied to Shield	120 Ω	23.4 Ω/Mft	2.9 Ω/Mft

## Recommended Pinout for 5-Pin XLR:

Pin 1 - Shield  
Pin 2 - Black  
Pin 3 - Red  
Pin 4 - Blue  
Pin 5 - White

## Recommended Pinout for 3-Pin XLR:

Pin 1 - Shield  
Pin 2 - Black  
Pin 3 - White



GDL	Cable Type	Color	Length
		0	
	1 = DLC224 2 = DLC124 3 = DLC222 4 = DLC122	0 = Black	In Feet

## Connectors

Neutrik® 5-Pin XLRs, (1) Male NC5MX and (1) Female NC5FX

Neutrik® 3-Pin XLRs, (1) Male NC3MX and (1) Female NC3FX

Neutrik is a registered trademarks of Neutrik AG.



**Portable Power Cord**

**Carol® Brand Super Vu-Tron® Entertainment & Stage Lighting Cable**

105°C 600 Volt, UL Type SC and CSA Type PPC



Carol® Brand Super Vu-Tron® Cable is designed to deliver power to an entertainment site with the lowest possible electrical loss. It is manufactured for ease of handling, includes a thermoset jacket for added durability and has 30 AWG Class K stranding for maximum flexibility.

**Specifications**

Part #	AWG Size	Conductor Stranding	Nominal OD	Current Amps <sup>1</sup>	Approx. Net Weight lbs/Mft	Std. Ctn.
01109*	8	168/30	0.385" (9.78 mm)	80	110	1000'
01108	6	259/30	0.420" (10.67 mm)	105	152	1000'
01107	4	416/30	0.475" (12.07 mm)	140	215	1000'
01106	2	655/30	0.520" (13.21 mm)	190	296	1000'
01105	1	827/30	0.575" (14.61 mm)	220	360	1000'
01104	1/0	1042/30	0.600" (15.24 mm)	260	424	1000'
01103	2/0	1316/30	0.645" (16.38 mm)	300	513	1000'
01102*	3/0	1660/30	0.715" (18.16 mm)	350	644	1000'
01101	4/0	2062/30	0.765" (19.43 mm)	405	824	1000'

(1) NEC Table 400.5(A)(2)

\* Non-stock item; minimum quantity purchase required.

<sup>(2)</sup> Actual shipping weight may vary.

**Features**

- Water- and Sunlight-Resistant
- Designed to Withstand Severe Environmental Conditions
- Withstands Exposure to Oil, Acids, Alkalies, Heat, Flame, Moisture and Chemicals
- Meets or Exceeds Flame Test Requirements of CSA and UL

**Applications**

Portable Power Systems  
 Entertainment Industry Activities Such as Theater, Television, Nightclubs, Motion Pictures, Mobile Communication Vans, Spotlights, Sound Systems and Other Similar Applications Requiring Temporary Power

**Industry Approvals:**

- UL Certified
- CSA Certified
- RoHS Compliant

**Portable Power Cord**

**Carol® Brand Super Vu-Tron® Single Conductor Type W Extra-Flex Cable**

90°C 2000 Volt, UL and CSA Type W



Carol® Brand Super Vu-Tron® Type W Extra-Flex Cable is the perfect choice for temporary power cable identification and tracking while on location.

**Specifications**

Part #	AWG Size	Conductor Stranding	Nominal OD	Current Amps <sup>1</sup>	Approx. Net Weight lbs/Mft	Std. Ctn.
80611*	8	168/30	0.440" (11.180 mm)	80	149	1000'
80621	6	259/30	0.530" (13.460 mm)	105	205	1000'
80631	4	416/30	0.585" (14.860 mm)	140	264	1000'
80641	2	655/30	0.650" (16.510 mm)	190	370	1000'
80651	1	827/30	0.730" (18.540 mm)	220	479	1000'
80661*	1/0	1042/30	0.750" (19.050 mm)	260	535	1000'
80671*	2/0	1316/30	0.825" (20.960 mm)	300	653	1000'
80681*	3/0	1660/30	0.855" (21.720 mm)	350	755	1000'
80691	4/0	2062/30	0.980" (24.890 mm)	405	1056	1000'
80701*	250 kcmil	2496/30	1.020" (25.908 mm)	455	1150	1000'

(1) Ampacities based on 90°C conductor and 30°C ambient temperature, based on Table 310-17 and Table 400.5(A)(2) in the National Electrical Code for single conductor cables.

\* Non-stock item; minimum quantity purchase required.

<sup>(2)</sup> Actual shipping weight may vary.

**Features**

- Vivid Colors & Custom Print Legends Available
- Water- and Sunlight-Resistant
- Ultra-Durable, Superior Flex Design for Long Life and to Withstand Severe Environmental Conditions
- Withstands Exposure to Oil, Acids, Alkalies, Heat, Flame, Moisture and Chemicals
- Meets or Exceeds Flame Test Requirements of MSHA, CSA and UL

**Applications**

Portable Power Systems  
 Entertainment Industry Activities Such as Theater, Television, Nightclubs, Motion Pictures, Mobile Communication Vans, Spotlights, Sound Systems and Other Similar Applications Requiring Temporary Power  
 Permanent Wiring of 2000 Volt Power Supplies, Hoists, Cranes and Other Applications

**Industry Approvals:**

- UL Type W
- CSA Type W
- MSHA Approved
- RoHS Compliant

## Portable Power Cord

### Carol® Brand Super Vu-Tron® Supreme Types SJOOW/SOOW Cord

105°C 300 and 600 Volt, UL/CSA Portable Cord



When you require superior portable power cable for the best quality performance, select Carol® Brand Super Vu-Tron® Supreme Types SJOOW and SOOW Cord. General Cable manufactures this with all the features and benefits you demand and expect for extreme entertainment applications and venues.

#### Specifications

Part #	# of Cond.	AWG Size	Conductor Stranding	Nominal OD	Current Amps <sup>1</sup>	Approx. Net Weight lbs/Mft	Std. Ctn.
<b>TYPE SJOOW - 300 VOLT - UL/CSA</b>							
02601	2	18	41/34	0.310" (7.87 mm)	10	60	1000 <sup>2</sup>
02602	3	18	41/34	0.320" (8.13 mm)	10	70	1000 <sup>2</sup>
02603	4	18	41/34	0.345" (8.76 mm)	7	85	250 <sup>2</sup>
02604	2	16	65/34	0.315" (8.00 mm)	13	67	1000 <sup>2</sup>
02605	3	16	65/34	0.335" (8.51 mm)	13	83	250 <sup>2</sup>
02606	4	16	65/34	0.370" (9.40 mm)	10	100	250 <sup>2</sup>
02607	2	14	105/34	0.370" (9.40 mm)	18	90	250 <sup>2</sup>
02608	3	14	105/34	0.375" (9.53 mm)	18	114	250 <sup>2</sup>
02609	4	14	105/34	0.405" (10.29 mm)	15	132	250 <sup>2</sup>
<b>TYPE SOOW - 600 VOLT - UL/CSA</b>							
02631*	2	18	41/34	0.365" (9.27 mm)	10	75	250 <sup>2</sup>
02632	3	18	41/34	0.375" (9.53 mm)	10	84	250 <sup>2</sup>
02633*	4	18	41/34	0.400" (10.16 mm)	7	110	250 <sup>2</sup>
02634	2	16	65/34	0.370" (9.40 mm)	13	86	250 <sup>2</sup>
02635	3	16	65/34	0.395" (10.03 mm)	13	105	250 <sup>2</sup>
02636	4	16	65/34	0.425" (10.80 mm)	10	127	250 <sup>2</sup>
02621	5	16	65/34	0.515" (13.08 mm)	8	181	250 <sup>2</sup>
02637*	2	14	105/34	0.510" (12.95 mm)	18	155	250 <sup>2</sup>
02638	3	14	105/34	0.525" (13.34 mm)	18	176	250 <sup>2</sup>
02639	4	14	105/34	0.575" (14.61 mm)	15	218	250 <sup>2</sup>
02622*	5	14	105/34	0.675" (17.15 mm)	12	285	250 <sup>2</sup>
02641*	2	12	168/34	0.590" (14.99 mm)	25	200	250 <sup>2</sup>
02642	3	12	168/34	0.600" (15.24 mm)	25	243	250 <sup>2</sup>
02643	4	12	168/34	0.650" (16.51 mm)	20	295	250 <sup>2</sup>
02623*	5	12	168/34	0.730" (18.54 mm)	16	315	250 <sup>2</sup>
02645	3	10	259/34	0.660" (16.76 mm)	30	299	250 <sup>2</sup>
02646	4	10	259/34	0.710" (18.03 mm)	25	413	250 <sup>2</sup>
02624*	5	10	259/34	0.770" (19.56 mm)	20	432	250 <sup>2</sup>

\* Non-stock item; minimum quantity purchase required.

(1) Green conductor for grounding only. Ampacities based on NEC Table 400.5(A)(1).

(2) Actual shipping weight may vary.

#### Features

Excellent Flexibility in Cold Temperatures

Lasts Longer in Flex Applications (Extra-Flexible Class M Stranding)

Integral Flexfill®

Ozone-, Sunlight (UV)-, Water-\* and Weather-Resistant

Withstands Exposure to Oil, Acids, High Heat, Flame, Moisture and Chemicals

Excellent Abrasion and Cut Resistance

Black Jacket; High-Visibility Yellow Jacket Also Available

Tinned Copper Conductors – Corrosion/Oxidation-Resistant

UL Listed and CSA Certified for Indoor and Outdoor Use

\*Suitable for Immersion in Water if Properly Sealed and Terminated

#### Applications

Machine and Power Tools

Motor Leads

Portable Machinery

Cranes

Where Water Immersion is Required

Severe Environment OEM/MRO Applications

#### Industry Approvals:

- UL Flexible Cord – UL 62
- CSA Flexible Cord – C22.2-49
- MSHA Approved
- OSHA Acceptable
- RoHS Compliant

## Portable Power Cord

### Carol® Brand HMI Lighting Cable

90°C 600 Volt, UL and CSA Type SOOW



OEM constructions and custom designs are available upon request.

#### Applications

For Power Supply from Ballast to HMI Lamp Head

Jacketed and Unjacketed Constructions

Available in 7 and 9 Conductors

**Portable Power Cord**

**Carol® Brand Carolprene® Types SJOOW/SOOW Cord**

90°C 600 Volt, UL/CSA Portable Cord



Carol® Brand Carolprene® is the solution for standard applications where portable power is required. Carolprene rubber cord meets the standards for commercial and industrial applications and is approved for both indoor and outdoor use.

**Specifications**

Part #	# of Cond.	AWG Size	Conductor Stranding	Nominal OD	Current Amps <sup>1</sup>	Approx. Net Weight lbs/Mft	Std. Ctn.
<b>TYPE SJOOW - 300 VOLT - UL/CSA</b>							
01311	3	18	16/30	0.305" (7.75 mm)	10	60	1000'
01344	4	18	16/30	0.330" (8.38 mm)	7	72	250'
01342	3	16	26/30	0.330" (8.38 mm)	13	72	250'
01343	4	16	26/30	0.365" (9.27 mm)	10	89	250'
01360	3	14	41/30	0.370" (9.40 mm)	18	100	250'
01364	4	14	41/30	0.410" (10.41 mm)	15	128	250'
01380	3	12	65/30	0.430" (10.92 mm)	25	136	250'
01381	4	12	65/30	0.475" (12.07 mm)	20	177	250'
01383	3	10	104/30	0.580" (14.73 mm)	30	236	250'
01384	4	10	104/30	0.655" (16.64 mm)	25	296	250'
<b>TYPE SOOW - 600 VOLT - UL/CSA</b>							
02769	3	18	16/30	0.365" (9.27 mm)	10	80	250'
02770	4	18	16/30	0.390" (9.91 mm)	7	94	250'
02765	3	16	26/30	0.390" (9.91 mm)	13	94	250'
02766	4	16	26/30	0.420" (10.67 mm)	10	114	250'
02762	3	14	41/30	0.535" (13.59 mm)	18	171	250'
02768	4	14	41/30	0.575" (14.61 mm)	15	209	250'
02725	3	12	65/30	0.595" (15.11 mm)	25	223	250'
02726	4	12	65/30	0.650" (16.51 mm)	20	276	250'
02728	3	10	104/30	0.660" (16.76 mm)	30	289	250'
02727	4	10	104/30	0.715" (18.16 mm)	25	351	250'

Cord furnished with UL and CSA labels.

(1) Green conductor for grounding only. Ampacities based on NEC Table 400.5(A)(1).

<sup>(S)</sup> Actual shipping weight may vary.

**Features**

- Excellent Resistance to Oil and Moisture
- Good Tensile Strength, Elongation and Aging Characteristics
- High Flexibility
- Ozone-, Sunlight (UV)-, Water-\* and Weather-Resistant
- Excellent Abrasion Resistance
- Black Jacket; High-Visibility Yellow Jacket Also Available

UL Listed and CSA Certified for Indoor and Outdoor use

\*Suitable for Immersion in Water if Properly Sealed and Terminated

**Applications**

- Portable Tools, Equipment and Appliances
- Small Motors and Associated Machinery
- OEM/MRO Applications
- OSHA VPP Safety
- Construction Site Power

**Industry Approvals:**

- UL Flexible Cord – UL 62
- CSA Flexible Cord – C22.2-49
- MSHA Approved
- OSHA Acceptable
- RoHS Compliant

**Portable Power Cord**

**Carol® Brand Lighting Cable for Socapex\* Connector Applications**

105°C 600 Volt, 12 and 14 AWG, 14 or 19 Conductor, UL and CSA AWM



OEM constructions and custom designs are available upon request.

\*SOCAPEX is a trademark of Amphenol Corporation.

**Industry Approvals:**

- UL AWM Style 4431 (Rubber)
- UL AWM Style 2586 (PVC)
- UL AWM Style 20328 (TPE)
- CSA AWM I/II A/B
- RoHS Compliant

**Features**

- Excellent Resistance to Oil and Moisture
- High Flexibility
- Ozone-, Sunlight (UV)-, Water- and Weather-Resistant
- Withstands Exposure to Oil, Acids, High Heat, Flame, Moisture and Chemicals
- Excellent Abrasion and Cust Resistance
- UL Recognized and CSA Certified for Indoor and Outdoor Use

**Applications**

- Stage Lighting Cable
- For Portable Use or Remote Environments
- Compatible with All Industry Standard Connectors; Primary Applications are Stage Lighting and Audio (PA Systems/Amplifiers)

## SPECIALTY CABLES

Page	Water-Resistant	ABS/Shipboard	LSZH
116	•		
117	•		
118	•		
119	•		
120	•		
121	•		
122	•		
123		•	•
124		•	•
125		•	•
126		•	•
127		•	•
128		•	•
129		•	•
130			•
131			•
132			•
132			•
133			•

### In This Section:

- HydroBloc™ Multi-Pair Individually Shielded Cables
- HydroBloc™ Shielded & Unshielded Cables
- HydroBloc™ Multi-Conductor Shielded Cables
- HydroBloc™ Multi-Conductor Unshielded Cables
- HydroBloc™ FPL or PLTC Shielded Cables
- HydroBloc™ FPL or PLTC Unshielded Cables
- HydroBloc™ Coaxial Cables
- ABS Data and Power Cable
- ABS 22 AWG Audio and Control Cable with Individually Shielded Pairs
- ABS Unshielded Speaker and Control Cable
- ABS High-Definition Coax
- ABS Broadband & Antenna Coax
- ABS Category 6 Network
- ABS Category 5e Network
- LSZH Analog Audio Multi-Pair: 24 AWG
- LSZH Digital Audio Multi-Pair: 24 AWG
- LSZH Analog Audio Single-Pair: 22 AWG
- LSZH Digital Audio Single-Pair: 24 & 26 AWG
- LSZH High-Definition SDI Coax

# SPECIALTY CABLES FOR WET LOCATIONS AND MARKETS REQUIRING LOW-SMOKE, ZERO-HALOGEN



**Water-Blocked Constructions**

The advanced water-blocked construction of Gepco® Brand HydroBloc™ cables utilizes advanced two-ply water-blocking tape and water-swellaible fillers to prevent transverse and longitudinal water ingress.

**Application-Specific Jackets**

Jacket compounds are specified for each cable type based upon the application. The jackets on Gepco Brand HydroBloc cables offer sunlight and moisture resistance, while the low-smoke, zero-halogen jackets on Shipboard cables provide flame resistance, low-smoke release and reduced toxicity.

**TactiCel™ Strong Cell Technology Dielectric**

Gepco Brand HydroBloc and Shipboard video cables use TactiCel, a proprietary gas-injection process that blends nitrogen and plastic polymers to produce a dielectric that reduces the high-frequency attenuation, while maintaining uniform cell structure, low return loss and exceptional crush resistance.

**Precision Pair Twisting & Balancing**

The frequency and consistency of the pair twisting determines the noise rejection of audio cables. Gepco balanced pairs are twisted to a tight and uniform lay to maximize common-mode noise rejection.

**Low-Loss, Data-Grade Dielectric**

Data transmission requires exceptional bandwidth compared to conventional cable types. To achieve the required bandwidth and impedance characteristics, Gepco® Brand data cables utilize only low-loss, data-grade nitrogen/polymer, polyethylene, or PVC dielectrics.

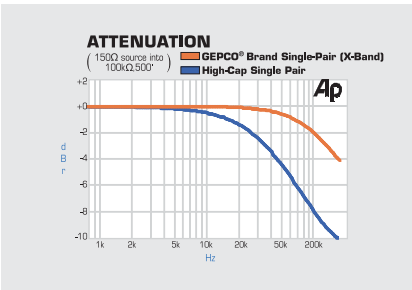
**High-Purity Copper**

Most coax cable conductors are made from corrosion-resistant tinned copper or 99.999% oxygen-free copper. These conductor types are easy to solder and maximize conductivity.

## Electrical Characteristics & Specifications

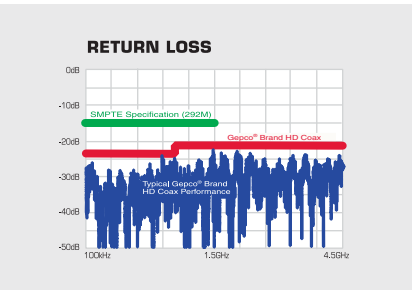
**Bandwidth & Low Attenuation**

The low-loss dielectric compounds and conductors minimize loss. Compared to other types, Gepco audio cables have less attenuation and greater bandwidth.



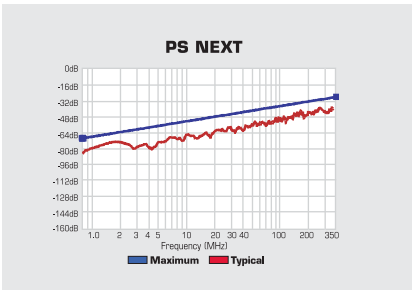
**Meets or Exceeds Standards & 100% Sweep Tested**

HD coax meets/exceeds SMPTE 424, 292 or 259 standards for digital video cable including specifications for return loss, impedance, attenuation and bandwidth performance.



**Tested & Verified**

All reels are 100% tested and verified to ensure consistent and reliable performance in every application. Category 5e and 6 cables are ETL verified to ensure compliance with all ANSI/TIA 568-C.2 performance standards.



## WATER-RESISTANT

## HydroBloc™ Multi-Pair Individually Shielded Cables



Ideal for general purpose data or machine control applications, the Gepco® Brand HydroBloc™ HBSP series features multiple shielded twisted-pairs under a single round jacket. Each pair is individually shielded and is easy to terminate. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swellaible fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Ripcord for Ease of Stripping Jacket
- Individual Pair Shields
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Data or Multi-Pair Audio
- Communications & Power-Limited Circuits

## Mechanical Specifications (Series)

Conductors	Insulation	Pair Shield	Pair Drain	Master Jacket	UL Type
22 AWG (7x30) Stranded BC	PVC, 0.010" (0.254 mm)	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CM/CL3

## Mechanical Specifications (Individual)

Part Number	# of Pairs	Color Code	Nominal OD	Approx. Weight
HBSP222	2	Black/Red & Red, Black/White & White	0.355" (9.02 mm)	44 lbs/Mft (65 kg/km)
HBSP224	4	Black/Red & Red, Black/White & White, Black/Green & Green, Black/Blue & Blue	0.414" (10.52 mm)	79 lbs/Mft (118 kg/km)
HBSP226	6	Black/Red & Red, Black/White & White, Black/Green & Green, Black/Blue & Blue, Black/Yellow & Yellow, Black/Brown & Brown	0.505" (12.83 mm)	101 lbs/Mft (150 kg/km)

## Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
50 pF/ft Between Conductors, 91 pF/ft Between One Conductor and Other Tied to Shield	15.3 Ω/Mft	23.8 Ω/Mft

## WATER-RESISTANT

## HydroBloc™ Shielded &amp; Unshielded Cables



The Gepco® Brand HydroBloc™ shielded/unshielded speaker and control cables are ideal for permanent installation in wet locations. The conductors consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand shielded and unshielded speaker and control cables are available in 20 and 22 AWG. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swallowable fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Ripcord for Ease of Stripping Jacket
- Bare Copper Conductors
- Superior PVC Insulation
- 20 and 22 AWG Versions
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Speaker Interconnections
- General Purpose Audio
- Communications & Power-Limited Circuits

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
HBS2230	3 (2 Shielded, 1 Unshielded)	0.235" (5.97 mm)	22 AWG Solid BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green	100% Foil	24 AWG Solid TC	PVC, Gray	CM/CL3	25 lbs/Mft (37 kg/km)
HBS223	3 (2 Shielded, 1 Unshielded)	0.217" (5.51 mm)	22 AWG (7x30) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CM/CL3	25 lbs/Mft (37 kg/km)
HBS2240	4 (2 Shielded, 2 Unshielded)	0.237" (6.02 mm)	22 AWG Solid BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green, White	100% Foil	24 AWG Solid TC	PVC, Gray	CM/CL3	29 lbs/Mft (43 kg/km)
HBS224	4 (2 Shielded, 2 Unshielded)	0.250" (6.35 mm)	22 AWG (7x30) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green, White	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CM/CL3	33 lbs/Mft (48 kg/km)
HBS203	3 (2 Shielded, 1 Unshielded)	0.271" (6.88 mm)	20 AWG (7x28) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CM/CL3	33 lbs/Mft (49 kg/km)
HBS204	4 (2 Shielded, 2 Unshielded)	0.273" (6.93 mm)	20 AWG (7x28) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green, White	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CM/CL3	40 lbs/Mft (60 kg/km)

## Electrical Specifications

Part #	Cond. DCR	Capacitance
HBS2230	16.2 Ω/Mft	50 pF/ft Between Conductors, 89 pF/ft Between One Conductor and Others Tied to Shield
HBS223	15.3 Ω/Mft	55 pF/ft Between Conductors, 99 pF/ft Between One Conductor and Others Tied to Shield
HBS2240	16.5 Ω/Mft	50 pF/ft Between Conductors, 89 pF/ft Between One Conductor and Others Tied to Shield
HBS224	15.3 Ω/Mft	55 pF/ft Between Conductors, 99 pF/ft Between One Conductor and Others Tied to Shield
HBS203	10.1 Ω/Mft	61 pF/ft Between Conductors, 109 pF/ft Between One Conductor and Others Tied to Shield
HBS204	10.1 Ω/Mft	61 pF/ft Between Conductors, 109 pF/ft Between One Conductor and Others Tied to Shield

## WATER-RESISTANT

## HydroBloc™ Multi-Conductor Shielded Cables



The Gepco® Brand HydroBloc™ multi-conductor shielded speaker and control cables are ideal for permanent installation in wet locations. The conductors consist of stranded or solid bare copper conductors that are insulated with a PVC insulation compound. For added noise rejection and suppression, the conductors are shielded with a durable 100% foil/Mylar® and tinned copper drain wire. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand shielded speaker and control cables are available in 18 through 22 AWG. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swellable fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Ripcord for Ease of Stripping Jacket
- Bare Copper Conductors
- Superior PVC Insulation
- Foil Shield with Drain Wire
- 18 Through 22 AWG Versions
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Speaker Interconnections
- General Purpose Audio
- Communications & Power-Limited Circuits

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
HBS2220	2	0.192" (5.00 mm)	22 AWG Solid BC	PVC, 0.010" (0.254 mm)/ Black, Red	100% Foil	24 AWG Solid TC	PVC, Gray	CM/CL3	22 lbs/Mft (33 kg/km)
			22 AWG Solid x 2 HydroBloc™ CM/CL3 Water-Resistant Cable: Shielded						
HBS222	2	0.202" (5.13 mm)	22 AWG (7x30) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CM/CL3	26 lbs/Mft (40 kg/km)
			22 AWG Stranded x 2 HydroBloc™ CM/CL3 Water-Resistant Cable: Shielded						
HBS202	2	0.220" (5.59 mm)	20 AWG (7x28) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CM/CL3	27 lbs/Mft (40 kg/km)
			20 AWG Stranded x 2 HydroBloc™ CM/CL3 Water-Resistant Cable: Shielded						
HBS182	2	0.236" (5.99 mm)	18 AWG (7x26) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CM/CL3	33 lbs/Mft (50 kg/km)
			18 AWG Stranded x 2 HydroBloc™ CM/CL3 Water-Resistant Cable: Shielded						
HBS186	6	0.302" (7.67 mm)	18 AWG (7x26) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red, White, Green, Brown, Blue	100% Foil	22 AWG (7x30) Stranded TC	PVC, Gray	CM/CL3	67 lbs/Mft (100 kg/km)
			18 AWG Stranded x 4 HydroBloc™ CM/CL3 Water-Resistant Cable: Shielded						

## Electrical Specifications

Part #	Cond. DCR	Capacitance
HBS2220	16.5 Ω/Mft	49 pF/ft Between Conductors, 89 pF/ft Between One Conductor and Other Tied to Shield
HBS222	15.3 Ω/Mft	55 pF/ft Between Conductors, 99 pF/ft Between One Conductor and Other Tied to Shield
HBS202	10.1 Ω/Mft	61 pF/ft Between Conductors, 109 pF/ft Between One Conductor and Other Tied to Shield
HBS182/HBS186	6.4 Ω/Mft	70 pF/ft Between Conductors, 126 pF/ft Between One Conductor and Others Tied to Shield

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## WATER-RESISTANT

## HydroBloc™ Multi-Conductor Unshielded Cables



The Gepco® Brand HydroBloc™ multi-conductor unshielded speaker and control cables are ideal for permanent installation in wet locations. The conductors consist of stranded or solid bare copper conductors that are insulated with a PVC insulation compound. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. Gepco Brand unshielded speaker and control cables are available in 16 through 22 AWG. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swellaible fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Ripcord for Ease of Stripping Jacket
- Bare Copper Conductors
- Superior PVC Insulation
- 16 Through 22 AWG Versions
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Speaker Interconnections
- General Purpose Audio
- Communications & Power-Limited Circuits

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Jacket (Type, Colors)	UL Type	Approx. Weight
HBU2240	4	0.191" (4.85 mm)	22 AWG Solid BC	PVC, 0.010" (0.254 mm)/ Black, Red, Green, White	PVC, Gray	CM/CL3	26 lbs/Mft (39 kg/km)
HBU182	2	0.211" (5.36 mm)	18 AWG (7x26) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red	PVC, Gray	CM/CL3	29 lbs/Mft (44 kg/km)
HBU162	2	0.228" (5.79 mm)	16 AWG (19x29) Stranded BC	PVC, 0.010" (0.254 mm)/ Black, Red	PVC, Gray	CM/CL3	33 lbs/Mft (50 kg/km)

## Electrical Specifications

Part #	Cond. DCR	Capacitance
HBU2240	16.5 Ω/Mft	49 pF/ft
HBU182	6.4 Ω/Mft	40 pF/ft
HBS162	4.5 Ω/Mft	43 pF/ft

## WATER-RESISTANT

## HydroBloc™ FPL or PLTC Shielded Cables



The Gepco® Brand HydroBloc™ multi-conductor shielded speaker and control cables are ideal for permanent installation in wet locations. The conductive elements consist of stranded, bare copper conductors that are insulated with a PVC insulation compound and nylon covering. For added noise rejection and suppression, the conductors are shielded with a durable 100% foil/Mylar® and tinned copper drain wire. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. These cables are available in 12 through 18 AWG. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swellable fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Ripcord for Ease of Stripping Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Bare Copper Conductors
- Superior PVC Insulation & Nylon Covering
- Foil Shield with Drain Wire
- 12 Through 18 AWG Versions
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Speaker Interconnections
- General Purpose Audio
- Control
- Power-Limited Circuits
- Power-Limited Fire Alarm Circuits
- Power-Limited Tray Cable PLTC
- Direct Burial

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
HBS184T	4	0.355" (9.02 mm)	18 AWG (7x26) Stranded BC	PVC & Nylon, 0.021" (0.53 mm)/ Black, Red, Brown, Blue	100% Foil	22 AWG (7x30) Stranded TC	PVC, Black	FPL/PLTC	71 lbs/Mft (105 kg/km)
			18 AWG x 4 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						
HBS182T	2	0.310" (9.87 mm)	18 AWG (7x26) Stranded BC	PVC & Nylon, 0.021" (0.53 mm)/ Black, Red	100% Foil	22 AWG (7x30) Stranded TC	PVC, Black	FPL/PLTC	46 lbs/Mft (68 kg/km)
			18 AWG x 2 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						
HBS164T	4	0.392" (9.96 mm)	16 AWG (7x24) Stranded BC	PVC & Nylon, 0.021" (0.53 mm)/ Black, Red, Brown, Blue	100% Foil	20 AWG (7x28) Stranded TC	PVC, Black	FPL/PLTC	82 lbs/Mft (123 kg/km)
			16 AWG x 4 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						
HBS162T	2	0.320" (8.13 mm)	16 AWG (7x24) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	100% Foil	20 AWG (7x28) Stranded TC	PVC, Black	FPL/PLTC	60 lbs/Mft (89 kg/km)
			16 AWG x 2 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						
HBS142T	2	0.347" (8.81 mm)	14 AWG (19x27) Stranded BC	PVC & Nylon, 0.021" (0.53 mm)/ Black, Red	100% Foil	16 AWG (19x29) Stranded TC	PVC, Black	FPL/PLTC	76 lbs/Mft (113 kg/km)
			14 AWG x 2 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						
HBS122T	2	0.391" (9.93 mm)	12 AWG (19x25) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	100% Foil	14 AWG (19x27) Stranded TC	PVC, Black	FPL/PLTC	104 lbs/Mft (155 kg/km)
			12 AWG x 2 HydroBloc™ FPL/PLTC Water-Resistant Cable: Shielded						

## Electrical Specifications

Part #	Cond. DCR	Capacitance
HBS184T, HBS182T	6.4 Ω/Mft	37 pF/ft Between Conductors, 68 pF/ft Between One Conductor and Other Tied to Shield
HBS164T, HBS162T	4.0 Ω/Mft	43 pF/ft Between Conductors, 77 pF/ft Between One Conductor and Other Tied to Shield
HBS142T	2.5 Ω/Mft	50 pF/ft Between Conductors, 90 pF/ft Between One Conductor and Other Tied to Shield
HBS122T	1.6 Ω/Mft	58 pF/ft Between Conductors, 105 pF/ft Between One Conductor and Other Tied to Shield

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## WATER-RESISTANT

## HydroBloc™ FPL or PLTC Unshielded Cables



The Gepco® Brand HydroBloc™ multi-conductor unshielded speaker and control cables are ideal for permanent installation in wet locations. The conductors consist of stranded, bare copper conductors that are insulated with a PVC insulation compound. The outer jacket is extruded from a low-friction PVC that is easy to install and pull through conduit. These cables are available in 12 through 18 AWG. With advanced water-blocked construction, the HydroBloc line utilizes a two-ply water-blocking tape and water-swellaible fillers to prevent transverse and longitudinal water ingress.

## Features &amp; Benefits

- Advanced Water-Blocked Construction
- Sunlight- and Moisture-Resistant Jacket
- Ripcord for Ease of Stripping Jacket
- Cables Comply with TIA-455-82-B Water Penetration Test
- Bare Copper Conductors
- Superior PVC Insulation & Nylon Covering
- 12 Through 18 AWG Versions
- UL Rated

## Applications

- In Wet Locations Inside Conduit
- Indoor/Outdoor Use
- Low Voltage Industrial Process Control
- Power-Limited Circuits
- Power-Limited Fire Alarm Circuits
- Power-Limited Tray Cable PLTC
- Speaker Level Audio
- Direct Burial

Mechanical Specifications							
Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Jacket (Type, Colors)	UL Type	Approx. Weight
HBU184T	4	0.323" (8.20 mm)	18 AWG (7x26) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red, Brown, Blue	PVC, Black	FPL/PLTC	64 lbs/Mft (95 kg/km)
HBU182T*	2	0.277" (7.04 mm)	18 AWG (7x26) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	PVC, Black	FPL/PLTC	40 lbs/Mft (59 kg/km)
HBU164T	4	0.350" (8.89 mm)	16 AWG (7x24) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red, Brown, Blue	PVC, Black	FPL/PLTC	76 lbs/Mft (113 kg/km)
HBU162T*	2	0.299" (7.59 mm)	16 AWG (7x24) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	PVC, Black	FPL/PLTC	52 lbs/Mft (78 kg/km)
HBU144T	4	0.380" (9.65 mm)	14 AWG (19x27) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red, Brown, Blue	PVC, Black	FPL/PLTC	102 lbs/Mft (152 kg/km)
HBU142T*	2	0.324" (8.23 mm)	14 AWG (19x27) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	PVC, Black	FPL/PLTC	64 lbs/Mft (96 kg/km)
HBU122T*	2	0.369" (9.40 mm)	12 AWG (19x25) Stranded BC	PVC & Nylon, 0.021" (0.533 mm)/ Black, Red	PVC, Black	FPL/PLTC	86 lbs/Mft (128 kg/km)

Electrical Specifications		
Part #	Cond. DCR	Capacitance
HBU184T, HBU182T	6.4 Ω/Mft	25 pF/ft
HBU164T, HBU162T	4.0 Ω/Mft	28 pF/ft
HBU144T, HBU142T	2.5 Ω/Mft	30 pF/ft
HBU122T	1.6 Ω/Mft	34 pF/ft

\*Two (2) conductor constructions will have two PVC rod fillers in the core to help withstand the rigors during operation.

## WATER-RESISTANT

## HydroBloc™ Coaxial Cables



**TactiCel™**  
Strong Cell Technology

The Gepco® Brand HydroBloc™ high-definition & CATV video coax series for wet locations features a precision center conductor, TactiCel™ gas-injected foam dielectric, excellent crush resistance, and broadband shielding. The gas-injected foam dielectric and precision process control are critical factors in achieving superior electrical performance including faster velocity of propagation, tight impedance tolerance, low attenuation and low structural return loss across the entire 4.5 GHz bandwidth (HD Coax). Conductive elements consist of a precision-drawn solid copper center conductor with 100% foil shield (HD Coax) and 95% braid coverage for complete broadband shielding. The water-blocked construction with a two-ply water-blocking tape prevents transverse and longitudinal water ingress.

## Features &amp; Benefits

Advanced Water-Blocked Construction

Sunlight- and Moisture-Resistant Jacket

Cables Comply with TIA-455-82-B Water Penetration Test

Precision 75 Ω Impedance

4.5 GHz Bandwidth for HDTV/1 GHz Bandwidth for CCTV

High Velocity of Propagation

100% Sweep Tested

Full-Copper Braid Shield

## Applications

In Wet Locations Inside Conduit

Indoor/Outdoor Use

High-Definition or Standard Definition Serial Digital Video (HBS201HD)

High-Resolution Analog Video

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket (Type, Colors)	UL Type	Approx. Weight
<b>HBS201HD</b>	1	0.242" (6.15 mm)	20 AWG Solid BC	Gas-Injected Foam PE, 0.142" (3.61 mm)	95% TC Braid, 100% Foil	PVC, Black	CM/CL2	36 lbs/Mft (54 kg/km)
20 AWG HydroBloc™ Water-Resistant HD Coax								
<b>HBS201</b>	1	0.240" (6.10 mm)	20 AWG Solid BC	Gas-Injected Foam PE, 0.142" (3.61 mm)	95% BC Braid	PVC, Black	CM/CL2	36 lbs/Mft (54 kg/km)
20 AWG HydroBloc™ Water-Resistant Coax								
<b>HBS181</b>	1	0.278" (7.06 mm)	18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% BC Braid	PVC, Black	CM/CL2	47 lbs/Mft (70 kg/km)
18 AWG HydroBloc™ Water-Resistant Coax								

## Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)												
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
HBS201HD	75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft	10.2 Ω	3.5 Ω	83%	0.28	0.53	0.86	2.05	2.71	3.80	4.38	6.40	7.57	9.29	11.5	13.5	16.5
Part #	Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)												
							1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
HBS201	75 Ω (+/-2)	>15 dB	16.2 pF/ft	10.2 Ω	3.4 Ω	83%	0.23	0.78	1.79	2.56	3.70	5.34	7.10	8.01	8.51	—	—	—	—
HBS181	75 Ω (+/-2)	>15 dB	16.0 pF/ft	6.4 Ω	2.8 Ω	83%	0.19	0.64	1.48	2.15	3.09	4.51	6.12	7.00	7.40	—	—	—	—

## ABS/SHIPBOARD

## ABS Data and Power Cable



The ABS Type approved 18/22CRTSB cable provides the communications network for multimedia controls in a Low-Smoke, Zero-Halogen (LSZH) construction. Its 22 AWG shielded pair construction with high-grade, low-loss dielectric can serve as a communications circuit while the 18 AWG unshielded pair can power low-voltage devices.

## Features &amp; Benefits

- Tinned Copper Conductors
- 22 AWG Low-Cap, Shielded Single-Pair
- Low-Loss Foam Dielectric (Data Pair)
- 18 AWG Power Conductors
- LSZH Construction
- UL Rated for CMG-LS

## Applications

- Communications
- Low-Voltage Power Bus for Tuners
- Multimedia Control Panels/Devices
- Shipboard and Offshore

## Mechanical Specifications

Part #	# of Pairs	Nominal OD	Cond.	Data Insulation (Type, OD, Color)	Data Shield & Drain	Power Conductors	Power Insulation	Overall Jacket	Temp. Rating	UL Type	Approx. Weight
18/22CRTSB	2 (One Power, One Data)	0.242" (6.15 mm)	22 AWG (7x30) Stranded TC	Foam Polyolefin, 0.022" (0.559 mm), Blue & White	100% Foil with 24 AWG (7x32) Stranded TC	18 AWG (16x30) Stranded TC	PP, 0.010" (0.254 mm) Red & Black	Flame-Retardant, LSZH Polyolefin, Black	-20°C to +75°C	CMG-LS	44 lbs/Mft (66 kg/km)
ABS/Shipboard Control Cable											

## Electrical Specifications

Part #	Data Pair					Power Pair	
	Impedance	Capacitance	Conductor DCR	Drain DCR	Velocity of Propagation	Capacitance	Power Conductor DCR
18/22CRTSB	100 Ω	15.0 pF/ft Between Conductors	16.0 Ω/Mft	23.8 Ω/Mft	79%	35.0 pF/ft Between Conductors	6.7 Ω/Mft

## ABS/SHIPBOARD

## ABS 22 AWG Audio and Control Cable with Individually Shielded Pairs



Gepco® Brand 22 AWG single- and multi-pair balanced audio cables, which are Low-Smoke, Zero-Halogen (LSZH) and ABS Type approved, feature stranded tinned-copper conductors that are easy to solder or punch-down. Intended for permanent installation, these products feature a high-grade polypropylene dielectric that is used to minimize high-frequency attenuation. Excellent process control and tight pair twisting achieve superior noise rejection. The 22 AWG conductors offer low DCR, and the foil shield with same gauge drain wire provides low DCR while facilitating quick shield termination. The Gepco Brand 22 AWG single- and multi-pair audio cables are ideal for punch-down, rack wiring and extended-distance runs of mic level signals.

## Features &amp; Benefits

- Low Attenuation
- Low Crosstalk (Multi-Pair)
- Easy to Terminate
- Polypropylene Dielectric
- Easy-Strip, Bonded Foil Shield (EZ Versions)
- LSZH Polyolefin Jacket, UV-Resistant
- CMG-LS
- TRU-Mark® Print Legend with Sequential Footage

## Applications

- Microphone or Line Level Balanced Analog Audio
- Patchbay, Rack or Console Permanent Installation Wiring
- Ideal for Extended-Distance Runs
- Communication Cables on Shipboard

## Mechanical Specifications (Individual)

Part #	# of Pairs	Nominal OD	Conductors	Insulation (Wall/Color Code)	Shield	Drain Wire	Jacket (Type, Colors)	Temperature Rating	UL Type	Approx. Weight
61801EZSB	1	0.170" (4.11 mm)	22 AWG (7x30) Stranded TC	PP, 0.010" (0.25 mm)/ Red & Black	100% Foil (Bonded)	22 AWG (7x30) Stranded TC	Flame-Retardant, LSZH Polyolefin, Black	-30°C to +105°C	CMG-LS	18 lbs/Mft (27 kg/km)
6600SB	2	0.203" (5.16 mm)	22 AWG (7x30) Stranded TC	PP, 0.010" (0.25 mm)/ Black & Red, Green & White	100% Foil (Each Pair)	24 AWG (7x32) Stranded TC (Common Drain)	Flame-Retardant, LSZH Polyolefin, Black	-30°C to +105°C	CMG-LS	28 lbs/Mft (41 kg/km)
6603SB	3	0.280" (7.11 mm)	22 AWG (7x30) Stranded TC	PP, 0.010" (0.25 mm)/ Black & Red, Black & White, Black & Green	100% Foil (Each Pair)	24 AWG (19x34) Stranded TC (Common Drain)	Flame-Retardant, LSZH Polyolefin, Black	-30°C to +105°C	CMG-LS	47 lbs/Mft (69 kg/km)

## Electrical Specifications

Part #	Capacitance	Cond. DCR	Shield DCR
61801EZSB	35 pF/ft Between Conductors, 62 pF/ft Between One Conductor and Other Tied to Shield	16.0 Ω/Mft	10.9 Ω/Mft
6600SB	35 pF/ft Between Conductors, 62 pF/ft Between One Conductor and Other Tied to Shield	16.0 Ω/Mft	10.6 Ω/Mft
6603SB	30 pF/ft Between Conductors, 55 pF/ft Between One Conductor and Other Tied to Shield	16.0 Ω/Mft	10.6 Ω/Mft

## ABS/SHIPBOARD

## ABS Unshielded Speaker and Control Cable



Gepco® Brand Low-Smoke, Zero-Halogen (LSZH) UL Listed and ABS Type approved unshielded speaker and control cable is for permanent installation in conduit, walls, ceilings or on shipboard. The conductive elements consist of stranded, tinned copper conductors that are insulated with a polypropylene-based insulation compound. The LSZH polyolefin outer jacket is easy to install and pull through conduit.

## Features &amp; Benefits

LSZH Construction  
 Tinned Copper Conductors  
 Polypropylene-Based Insulation  
 12 & 14 AWG Versions  
 LSZH Polyolefin Jacket, UV-Resistant  
 CMG-LS  
 TRU-Mark® Print Legend with Sequential Footage

## Applications

Speaker Interconnections  
 General Purpose Audio  
 Control and Communications Circuits on Shipboard

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Wall, Color Code)	Jacket (Type, Colors)	Temperature Rating	UL Type	Approx. Weight
<b>SSU122SB</b>	2	0.340" (18.6 mm)	12 AWG (65x30) Stranded TC	PP, 0.011" (0.279 mm)/ Black & Red	Flame-Retardant, LSZH Polyolefin, Black	-20°C to +75°C	CMG-LS	82 lbs/Mft (121 kg/km)
<i>ABS/Shipboard 12 x 2 AWG Speaker and Control Cable</i>								
<b>SSU124SB</b>	4	0.387" (9.8 mm)	12 AWG (65x30) Stranded TC	PP, 0.011" (0.279 mm)/ Black, Red, White & Green	Flame-Retardant, LSZH Polyolefin, Black	-20°C to +75°C	CMG-LS	138 lbs/Mft (203 kg/km)
<i>ABS/Shipboard 12 x 4 AWG Speaker and Control Cable</i>								
<b>SSU142SB</b>	2	0.300" (7.6 mm)	14 (41x30) AWG Stranded TC	PP, 0.011" (0.279 mm)/ Black & Red	Flame-Retardant, LSZH Polyolefin, Black	-20°C to +75°C	CMG-LS	61 lbs/Mft (90 kg/km)
<i>ABS/Shipboard 14 x 2 AWG Speaker and Control Cable</i>								
<b>SSU144SB</b>	4	0.340" (8.65 mm)	14 (41x30) AWG Stranded TC	PVC, 0.011" (0.279 mm)/ Black, Red, White & Green	Flame-Retardant, LSZH Polyolefin, Black	-20°C to +75°C	CMG-LS	92 lbs/Mft (135 kg/km)
<i>ABS/Shipboard 14 x 4 AWG Speaker and Control Cable</i>								

## Electrical Specifications

Part #	Cond. DCR
SSU122SB, SSU124SB	1.59 Ω/Mft
SSU142SB, SSU144SB	2.53 Ω/Mft

## ABS/SHIPBOARD

## ABS High-Definition Coax



**TactiCel™**  
Strong Cell Technology

The Low-Smoke, Zero Halogen (LSZH) ABS Type approved, high-definition video coax cables have been engineered to feature a 4.5 GHz bandwidth (for HDTV transmission), a TactiCel™ gas-injected foam dielectric, lower attenuation, excellent crush resistance and easy termination. The gas-injected dielectric and precision process control are critical factors in achieving superior electrical performance including faster velocity of propagation, tight impedance tolerance, low attenuation and low structural return loss across the entire 4.5 GHz bandwidth. Conductors consist of a precision-drawn solid copper center conductor and a 95% braid with 100% foil shield for complete broadband shielding.

## Features &amp; Benefits

- Ultra-Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel Gas-Injected Foam Dielectric
- 100% Sweep Tested
- 95% Braid & 100% Foil Shield
- LSZH Polyolefin Jacket

## Applications

- High-Definition or Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Digital Audio (AES3id, SPDIF or Word Clock)
- Shipboard

## Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket (Type, Colors)	Temperature Rating	UL Type	Approx. Weight
<b>VHD1100SB</b>	1	0.401" (10.2 mm)	14 AWG Solid BC	Gas-Injected Foam PE, 0.282" (7.16 mm)	95% TC Braid, 100% Foil	Flame-Retardant, LSZH Polyolefin, Black	-30°C to +75°C	CMG-LS	82 lbs/Mft (120 kg/km)
Extended-Distance RG 11 HD Coax									
<b>VSD2001SB</b>	1	0.275" (6.99 mm)	18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% TC Braid, 100% Foil	Flame-Retardant, LSZH Polyolefin, Black	-30°C to +75°C	CMG-LS	47 lbs/Mft (69 kg/km)
Low-Loss RG 6 HD Coax									

## Electrical Specifications

Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Nominal Attenuation (dB per 100 ft)												
							1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz
VHD1100SB	75 Ω (+/-2)	>23 dB, >21 dB	16.2 pF/ft	2.5 Ω	1.5 Ω	84%	0.14	0.28	0.43	1.02	1.40	1.92	2.25	3.30	3.86	4.73	5.80	6.72	8.75
VSD2001SB	75 Ω (+/-2)	>23 dB, >21 dB	16.2 pF/ft	6.4 Ω	2.8 Ω	82%	0.24	0.45	0.72	1.60	2.10	2.97	3.43	4.95	5.89	7.33	9.14	10.67	13.29



ABS/SHIPBOARD

ABS Broadband & Antenna Coax



Gepco® Brand Low-Smoke, Zero Halogen (LSZH) ABS Type approved general purpose coax cable is for use in closed circuit or analog video distribution and impedance matching coax for systems such as thinnet, VSAT or wireless. The cables in this series utilize a low-loss, TactiCel™ gas-injected foam dielectric that is electrically superior to conventional solid types, yet remains highly crush-resistant and helps maintains proper impedance. Composite cable has a Power pair in parallel with the coax to serve as Video/Audio cable

Features & Benefits

- Precision Impedance
- 1 GHz or 3 GHz Bandwidth
- High Velocity of Propagation
- Gas-Injected Foam Polyethylene Dielectric
- 100% Sweep Tested
- Low Attenuation & Return Loss

Applications

- Networking
- Wireless Systems
- VSAT
- CCTV
- Security Cameras
- General Distribution
- Audio/Video
- Shipboard and Offshore

Mechanical Specifications

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Power Pair (Type, Insulation, Jacket (Type, Colors))	Temp. Rating	UL Type	Approx. Weight
V18/2PZSB	1 Coax 2 Power	0.275" x 0.186"/0.530" (6.99 mm x 4.72 mm)/ (13.5 mm)	18 AWG Solid BC	Gas-Injected Foam PE, 0.180" (4.57 mm)	95% BC Braid	(2) 18 AWG (7x26) Stranded BC, 0.010" (0.25 mm), Polypropylene, Black & Red	-30°C to +75°C	CMG-LS	74 lbs/Mft (109 kg/km)
ABS/Shipboard Coax: Siamese with 1 RG 6 18 AWG + 2 Conductor Power 18 AWG									
VB1860SB	1	0.274" (6.96 mm)	18 AWG Copper Clad Steel	Gas-Injected Foam PE, 0.180" (4.57 mm)	60% AL Braid, 100% Foil	—	-30°C to +75°C	CMG-LS	34 lbs/Mft (50 kg/km)
ABS/Shipboard Coax: RG6 CATV									
V5010SB	1	.405" (10.29 mm)	10 AWG Solid BC	Gas-Injected Foam PE, 0.285" (7.24 mm)	100% Foil 95% TC Braid	—	-30°C to +75°C	CMG-LS	98 lbs/Mft (144 kg/km)
ABS/Shipboard Coax: RF400 RG8 Low Loss 50 Ω Wireless									

Coax Electrical Specifications

Part #	Imped.	Return Loss	Capac.	Cond. DCR per Mft	Shield DCR per Mft	Vel. of Prop.	Attenuation (dB per 100 ft)														
							1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz	1.2 GHz	1.45 GHz	2.25 GHz	3 GHz		
V18/2PZSB	75 Ω (+/-3)	1-455 MHz: >17 dB 455 MHz-2.4 GHz: >15 dB	16.3 pF/ft	6.4 Ω	3.1 Ω	83%	0.20	0.64	1.46	2.10	3.00	4.30	5.80	6.70	7.10	—	—	—	—		
VB1860SB	75 Ω (+/-3)	5 MHz-1 GHz: >20 dB 1 GHz-2.25 GHz: >15 dB 2.25 GHz-3 GHz: >10 dB	16.2 pF/ft	28.0 Ω	9.0 Ω	83%	0.34	0.81	1.51	2.10	2.83	4.00	5.30	6.55	6.59	7.57	8.80	10.10	11.79		
V5010SB	50 Ω (+/-3)	>15 dB (100kHz-1.8GHz)	24.0 pF/ft	.92 Ω	1.4 Ω	83%	0.11	0.35	0.83	1.20	1.77	2.63	3.50	3.98	4.25	—	—	—	—		

Power Electrical Specifications

Part #	Capacitance	Cond. DCR
V18/2PZSB	24 pF/ft Between Conductors	7.2 Ω/Mft

## ABS/SHIPBOARD

## ABS Category 6 Network



Gepco® Brand CT604/STDSB Category 6 Cables feature extended bandwidths and precision tolerances to meet the latest ANSI/TIA and ISO standards. Designed to deliver reliability in leading-edge networking, data and video applications, every reel is ETL listed and UL verified to ensure consistent performance. The TRU-Mark® Marking System sequentially marks every two feet of cable in descending order. This Low-Smoke, Zero-Halogen (LSZH) Cat 6 cable is C(ETL)US listed and ABS Type approved.

## Features &amp; Benefits

Designed to Meet ANSI/TIA 568-C.2 Standards at a Value to Fit in Your Network Budget

Tighter Twists Over Category 5e, Reducing Network Errors

Increased Pair Separation with Thin Tape Design Minimizing Crosstalk

TRU-Mark® Print Legend with Sequential Footage LSZH Jacket

## Applications

Digital Video

Broadband and Baseband Analog Video

IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T

155 Mp/s, 1.2 Gb/s ATM

ANSI X3.263: 100 Mb/s

IEEE 802.3af DTE Power (PoE)

IEEE 802.3at for PoE Plus

In Vessels Quarters Area

In Cable Tray as an Interconnect Cable

## Mechanical Specifications

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pair Color Code	Separator	Jacket	Min. Bend Radius	Max. Pulling Force	UL Type	Weight
CT604/STDSB	4	0.230" (5.84 mm)	23 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Divider	Flame-Retardant, LSZH Polyolefin, Black	2.0"	32 lbs	CMG	29 lbs/Mft (43 kg/km)

ABS/Shipboard Category 6 Four-Pair 250 MHz

## Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Mutual Capacitance	Prop. Delay (Skew) Max	Vel. of Prop.	Temp. Rating (Installation, Operating)	Standards
CT604/STDSB	9.38 Ω/100 m (328 ft)	3.0%	100 Ω (+/- 15)	17 pF/ft	45 ns/100 m	68%	0°C to +60°C, -20°C to +75°C	Meets ANSI/TIA 568-C.2, Cat 6, ISO/IEC 11801 Ed. 2.0

## ANSI/TIA 568-C.2 Performance

Freq. (MHz)	1	4	10	16	20	31.25	62.5	100	150	200	250	350	400	500
Insertion Loss (dB/100 m) (max)	2.0	3.8	6.0	7.6	8.5	10.7	15.4	19.8	24.7	29.0	32.8	39.8	43.0	48.9
PSACR* (dB/100 m) (min)	70.3	59.3	51.3	46.7	44.3	39.2	29.9	22.5	14.9	8.8	3.5	—	—	—
ACR* (dB/100 m) (min)	72.3	61.5	53.3	48.7	46.3	41.2	32.0	24.5	16.9	10.8	5.5	—	—	—
PSNEXT (dB/100 m) (min)	72.3	63.3	57.3	54.2	52.8	49.9	45.4	42.3	39.7	37.8	36.3	34.1	33.3	31.8
NEXT (dB/100 m) (min)	74.3	65.3	59.3	56.2	54.8	51.9	47.4	44.3	41.7	39.8	38.3	36.1	35.3	33.8
PSACRF (dB/100 m) (min)	64.8	52.8	44.8	40.7	38.8	34.9	28.9	24.8	21.3	18.8	16.8	13.9	12.8	10.8
ACRF (dB/100 m) (min)	67.8	55.7	47.8	43.7	41.7	37.9	31.8	27.8	24.3	21.8	19.8	16.9	15.8	13.8
Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.9	18.0	17.3	16.3	15.9	15.2
LCL (dB/100 m) (min)	40.0	40.0	40.0	38.0	37.0	35.1	32.0	30.0	28.2	27.0	26.0	—	—	—
ELTCTL (dB/100 m) (min)	35.0	23.0	15.0	10.9	9.0	—	—	—	—	—	—	—	—	—

Note: Results beyond 250 MHz for reference only.  
\*PSACR & ACR not specified in ANSI/TIA 568-C.2

## ABS/SHIPBOARD

## ABS Category 5e Network



Gepco® Brand CT504/STDSB Category 5e Cables are designed to deliver premier audio, video and data communications capabilities aboard ships. ETL confirmed and ABS Type approved, CT504/STDSB offers low insertion loss, crosstalk and return loss and will perform reliably in marine and offshore environments.

## Features &amp; Benefits

Designed to Deliver Premier Audio, Video & Data Communications

Tested to 350 MHz

TRU-Mark® Print Legend with Sequential Footage

LSZH Jacket

## Applications

Broadband and Baseband Analog Video

IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T

52/155 Mp/s ATM

ANSI X3.263: 100 Mb/s

## Mechanical Specifications

Part #	# of Pairs	Nominal OD	Conductors	Insulation	Pair Color Code	Jacket	Minimum Bend Radius	Maximum Pulling Force	UL Type	Weight
CT504/STDSB	4	0.260" (6.60 mm)	24 AWG Solid BC	Polyolefin	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown	Flame-Retardant, LSZH Polyolefin, Black	2.0"	25 lbs	CMG-LS	32 lbs/Mft (48 kg/km)

ABS/Shipboard Category 5e Four-Pair 100 MHz

## Electrical Specifications

Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Mutual Capacitance	Prop. Delay (Skew) Max	Vel. of Prop.	Temp. Rating (Installation, Operating)	Standards						
CT504/STDSB	9.38 Ω/100 m (328 ft)	5.0%	100 Ω (+/-15)	17 pF/ft	45 ns/100 m	69%	0°C to +60°C, -20°C to +75°C	Meets or Exceeds ANSI/TIA 568-C.2 Cat 5e, ISO/IEC 11801 Ed. 2.0						
<b>ANSI/TIA 568-C.2 Performance</b>														
Freq. (MHz)														
Insertion Loss (dB/100 m) (max)	2.0	4.1	6.5	8.2	9.3	10.4	11.7	17.0	22.0	28.1	32.4	36.9	41.0	44.9
PSACR* (dB/100 m) (min)	60.3	49.2	40.8	36.0	33.5	30.9	28.2	18.4	10.3	1.4	—	—	—	—
ACR* (dB/100 m) (min)	63.3	52.2	43.8	39.0	36.5	33.9	31.2	21.4	13.3	4.4	—	—	—	—
PSNEXT (dB/100 m) (min)	62.3	53.3	47.3	44.2	42.8	41.3	39.9	35.4	32.3	29.4	27.8	26.3	25.1	24.1
NEXT (dB/100 m) (min)	65.3	56.3	50.3	47.2	45.8	44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.1	27.1
PSACRF (dB/100 m) (min)	60.8	48.8	40.8	36.7	34.8	32.8	30.9	24.9	20.8	17.0	14.8	12.8	11.3	9.9
ACRF (dB/100 m) (min)	63.8	51.8	43.8	39.7	37.8	35.8	33.9	27.9	23.8	20.0	17.8	15.8	14.3	12.9
Return Loss (dB) (min)	20.0	23.0	25.0	25.0	25.0	24.3	23.6	21.5	20.1	—	—	—	—	—

Note: Results beyond 100 MHz for reference only.

\*PSACR & ACR not specified in ANSI/TIA 568-C.2

## LOW-SMOKE, ZERO-HALOGEN

## LSZH Analog Audio Multi-Pair: 24 AWG



This Low-Smoke, Zero-Halogen (LSZH) version of the Gepco® Brand GA724 multi-pair series is designed for low noise and attenuation and is durable, easy to terminate and EU compliant low-smoke zero-halogen. A high-grade polyethylene dielectric minimizes high frequency attenuation, while excellent process control and tight pair twisting achieve superior noise rejection. Color-coded and alphanumerically printed pairs facilitate easy channel identification. The 24 AWG conductors are easier to terminate while still maintaining low DCR.

## Features &amp; Benefits

- Flame-Resistant
- Low-Smoke Release & Reduced Toxicity
- Low Attenuation & Crosstalk
- Flexible
- Easy to Terminate
- Polyethylene Dielectric
- Easy-Strip Bonded Foil Shield
- Individually Shielded & Jacketed Pairs
- Color-Coded & Alphanumeric Pair Identification
- Additional Overall Foil Shield

## Applications

- Microphone or Line Level Balanced Analog Audio
- Studio Interconnect, Portable Snakes or Permanent Installation
- Ideal for Patchbay Wiring & Multi-Pin Cable Assemblies
- Shipboard

## Meets IEC Standards:

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

## Mechanical Specifications (Series)

Conductors	Insulation (Wall/Color Code)	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/ Color Code	Overall Shield	Overall Common Drain	Master Jacket	Flame Resistance
24 AWG (7x32) Stranded TC	PE, 0.008" (0.20 mm)/ Red & Black	100% Foil (Bonded)	24 AWG (7x32) Stranded TC	FRNC/LSZH, 0.115" (2.92 mm)/ Base 10 (See Color Code Chart 1, Page 142)	100% Foil	20 AWG (19x32) Stranded TC	FRNC/LSZH	FRNC-C

## Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Bend Radius	Approx. Weight
GA72404GFCLS	4	0.405" (10.29 mm)	4.05" (102.9 mm)	88 lbs/Mft (131 kg/km)
GA72408GFCLS	8	0.500" (12.70 mm)	5.00" (127.0 mm)	134 lbs/Mft (200 kg/km)
GA72412GFCLS	12	0.595" (15.11 mm)	5.95" (151.1 mm)	198 lbs/Mft (295 kg/km)
GA72416GFCLS	16	0.664" (16.87 mm)	6.64" (168.7 mm)	225 lbs/Mft (335 kg/km)
GA72426GFCLS	26	0.830" (21.08 mm)	8.30" (210.8 mm)	363 lbs/Mft (544 kg/km)
GA72432GFCLS	32	0.890" (22.61 mm)	8.90" (226.1 mm)	423 lbs/Mft (630 kg/km)
GA72448GFCLS	48	1.052" (26.72 mm)	10.52" (267.2 mm)	737 lbs/Mft (1098 kg/km)

## Electrical Specifications

Capacitance	Cond. DCR	Drain DCR	Overall Common DCR
28 pF/ft (92 pF/m) Between Conductors, 51 pF/ft (67 pF/m) Between One Conductor and Other Tied to Shield	23.8 Ω/Mft (78 Ω/km)	23.8 Ω/Mft (78 Ω/km)	8.9 Ω/Mft (29 Ω/km)

## LOW-SMOKE, ZERO-HALOGEN

## LSZH Digital Audio Multi-Pair: 24 AWG



The Low-Smoke, Zero-Halogen (LSZH) version of the DS4 series of AES/EBU digital audio multi-pair features an extended 25 MHz bandwidth, ultra-low attenuation, mechanical stability, a precision 110  $\Omega$  impedance and is EU-compliant LSZH. With the lowest available attenuation and precision impedance specifications, the DS4 series allows for longer runs of AES3 format digital audio over twisted-pair cable. The extended 25 MHz bandwidth is compliant with the 2003 revision of the AES3 standard for transmission of digital audio at sampling rates up to 192 kHz. Color-coded and alphanumerically printed pairs facilitate easy channel identification and minimize crosstalk.

## Features &amp; Benefits

Flame-Resistant  
 Low-Smoke Release & Reduced Toxicity  
 Precision 110  $\Omega$  Impedance  
 25 MHz Bandwidth for 192 kHz Sampling Rates  
 Flexible  
 Gas-Injected Foam Dielectric  
 Stabilizing Polyethylene Rod  
 Individually Shielded & Jacketed Pairs  
 Color-Coded & Alphanumeric Pair Identification  
 LSZH Jacket

## Applications

AES3 Digital Audio  
 Extended Bandwidth Analog Audio  
 Studio Interconnect, Permanent Installation or Portable Snakes  
 Ideal for Extended-Distance Runs  
 Shipboard

## Meets IEC Standards:

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

## Mechanical Specifications (Series)

Conductors	Dielectric/ Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/ Color Code	Master Jacket	Flame Resistance
24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/White & Black	100% Foil	22 AWG (7x30) Stranded TC	FRNC/LSZH, 0.180" (4.57 mm)/Base 10 (See Color Code Chart 1, Page 142)	FRNC/LSZH, Black or Green	FRNC-C

## Mechanical Specifications (Individual)

Part Number	# of Pairs	Nominal OD	Bend Radius	Approx. Weight
DS404LS	4	0.620" (15.75 mm)	6.20" (157.5 mm)	159 lbs/Mft (237 kg/km)
DS408LS	8	0.815" (20.70 mm)	8.15" (207.0 mm)	291 lbs/Mft (428 kg/km)
DS412LS	12	0.995" (25.27 mm)	9.95" (252.7 mm)	403 lbs/Mft (592 kg/km)

## Electrical Specifications

Impedance	Capacitance	Cond. DCR	Drain DCR	Attenuation - dB per 100 ft (30.5 m)				
				1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
110 $\Omega$	11 pF/ft (30 pF/m) Between Conductors, 21 pF/ft (69 pF/m) Between One Conductor and Other Tied to Shield	23.8 $\Omega$ /Mft (78 $\Omega$ /km)	15.3 $\Omega$ /Mft (50.2 $\Omega$ /km)	0.09	1.30	1.60	2.15	4.10

## LOW-SMOKE, ZERO-HALOGEN

## LSZH Analog Audio Single-Pair: 22 AWG



The industry-standard for balanced audio cable for permanent installation, Gepco® Brand 61801EZLS 22 AWG single-pair audio cable features stranded tinned-copper conductors that are easy to solder or punch-down. Excellent process control and tight pair twisting ensure superior noise rejection, while the high-grade polyethylene dielectric minimizes high-frequency attenuation. The 22 AWG conductors offer the lowest DCR available in any Gepco Brand single-pair product, and the foil shield with same gauge drain wire facilitates quick shield termination. Ideal for punch-down, rack wiring and extended-distance runs of mic level signals, 61801EZLS is EU-compliant low-smoke zero-halogen.

## Features &amp; Benefits

Flame-Resistant  
Low-Smoke Release & Reduced Toxicity  
Easy-Strip, Bonded Foil Shield; Easy to Terminate

## Applications

Microphone or Line Level Balanced Analog Audio  
Patchbay, Rack or Console Permanent Installation  
Wiring

Ideal for Extended-Distance Runs

Shipboard

## Meets IEC Standards:

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

## Mechanical Specifications

Part #	# of Pairs	Nom. OD	Conductors	Dielectric (Wall/Colors)	Shield	Drain	Jacket	Flame Resistance	Bend Radius	Operating Temp. Range	Max. Pull Tension	Approx. Weight
61801EZLS	1	0.138" (3.5 mm)	22 AWG (7x30) Stranded TC	PE, 0.008" (0.2 mm)/ Red & Black	100% Foil (Bonded)	22 AWG (7x30) Stranded TC	FRNC/LSZH Black & Green	FRNC-C	1.38" (35 mm)	-30°C to +75°C -22°F to 167°F	121.4 N	15 lbs/Mft (22 kg/km)

LSZH Analog Audio Single-Pair: Easy Strip

## Electrical Specifications

Capacitance	Cond. DCR	Drain DCR
35 pF/ft (112 pF/m) Between Conductors, 67 pF/ft (203 pF/m) Between One Conductor and Other Tied to Shield	15.3 Ω/Mft (50 Ω/km)	15.3 Ω/Mft (50 Ω/km)

## LOW-SMOKE, ZERO-HALOGEN

## LSZH Digital Audio Single-Pair: 24 &amp; 26 AWG



The Gepco® Brand AES/EBU digital audio twisted-pair cables feature an extended 25 MHz bandwidth, low attenuation, mechanical stability and a precision 110 Ω impedance. The extended 25 MHz bandwidth is compliant with the AES3 standard for transmission of digital audio at sampling rates up to 192 kHz. Available 24 and 26 AWG versions, Gepco Brand AES/EBU digital audio cables are EU-compliant low-smoke zero-halogen.

## Features &amp; Benefits

Flame-Resistant  
Low-Smoke Release & Reduced Toxicity  
Precision 110 Ω Impedance  
25 MHz Bandwidth for 192 kHz Sampling Rates  
Stabilizing Polyethylene Rod

## Applications

AES3 Digital Audio  
Extended Bandwidth Analog Audio  
Time Code  
Shipboard

## Meets IEC Standards:

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

## Mechanical Specifications

Part #	# of Pairs	Nom. OD	Conductors	Dielectric (Wall/Colors)	Fillers	Shield	Drain	Jacket	Flame Resistance	Bend Radius	Operating Temp. Range	Max. Pull Tension	Approx. Weight
DS401LS	1	0.180" (4.6 mm)	24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.5 mm)/White & Black	Solid Virgin Polyethylene Rod	100% Foil	22 AWG (7x30) Stranded TC	FRNC/LSZH Black & Green	FRNC-C	1.8" (45.7 mm)	-30°C to +75°C -22°F to 167°F	88.9 N	13lbs/Mft (19 kg/km)
LSZH Wide Bandwidth 110 Ω Digital Audio Single-Pair: Easy Strip													
DS601LS	1	0.143" (3.6 mm)	26 AWG (7x34) Stranded TC	Foam PP, 0.015" (0.4 mm)/White & Black	Solid Virgin Polyethylene Rod	100% Foil	24 AWG (7x32) Stranded TC	FRNC/LSZH Black & Green	FRNC-C	1.4" (35.7 mm)	-30°C to +75°C -22°F to 167°F	53.4 N	10 lbs/Mft (15 kg/km)
LSZH Thin Profile 110 Ω Digital Audio Single-Pair													

## Electrical Specifications

Part #	Impedance	Capacitance	Cond. DCR	Drain DCR	Attenuation - dB per 100 ft (30.5 m)				
					1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
DS401LS	110 Ω	11 pF/ft (36 pF/m) Between Conductors, 21 pF/ft (69 pF/m) Between One Conductor and Other Tied to Shield	23.8 Ω/Mft (78 Ω/km)	15.3 Ω/Mft (50 Ω/km)	0.90	1.30	1.60	2.15	4.10
DS601LS	110 Ω	14 pF/ft (46 pF/m) Between Conductors, 27 pF/ft (89 pF/m) Between One Conductor and Other Tied to Shield	38.5 Ω/Mft (126 Ω/km)	23.8 Ω/Mft (78 Ω/km)	1.25	1.85	2.40	3.16	4.20

## LOW-SMOKE, ZERO-HALOGEN

## LSZH High-Definition SDI Coax



**TactiCel™**  
Strong Cell Technology

Gepco now offers what precision high-performance cable broadcasters all over the world depend on ... EU-Compliant Low-Smoke, Zero-Halogen (LSZH) Cabling Solutions. Re-engineered using advanced jacket compounds that offer flame resistance, low-smoke production and reduced toxicity, Gepco LSZH Video cables deliver exceptional quality while complying with IEC and RoHS standards.

The Gepco® Brand LSZH high-definition video coax series has been designed to feature a 4.5 GHz bandwidth (for HDTV transmission), TactiCel™ gas-injected foam dielectric, lower attenuation, excellent crush resistance and easy termination. The gas-injected dielectric and precision process control are critical factors in achieving superior electrical performance including faster velocity of propagation, tight impedance tolerance, low attenuation and low structural return loss across the entire 4.5 GHz bandwidth.

## Features &amp; Benefits

- Flame-Resistant
- Low-Smoke Release & Reduced Toxicity
- Easy-Strip, Bonded Foil Shield; Easy to Terminate
- Flame-Resistant
- Low-Smoke Production & Reduced Toxicity
- Low Attenuation & Return Loss
- Precision 75 Ω Impedance
- 4.5 GHz Bandwidth for HDTV
- High Velocity of Propagation
- TactiCel™ Gas-Injected Foam Dielectric
- Full-Copper Braid & Foil Shield
- 100% Sweep Tested

## Applications

- High-Definition or Standard-Definition Serial Digital Video
- High-Resolution Analog Video
- Digital Audio (AES3id, SPDIF or Word Clock)

## Meets IEC Standards:

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

Mechanical Specifications																			
Part #	# of Cond.	Nom. OD	Conductor	Insulation (Type, OD)	Shield	Jacket (Type, Colors)	Flame Resistance	Bend Radius	Operating Temp. Range	Max. Pull Tension	Approx. Weight								
VHD1100LS	1	0.405" (10.3 mm)	14 AWG Solid BC, 0.063" (1.6 mm)	Gas-Injected Foam PE, 0.285" (7.2 mm)	95% TC Braid, 100% Foil	FRNC/LSZH Black & Green	FRNC-C	4.05" (102 mm)	-30°C to +75°C -22°F to 167°F	441.3 N	76 lbs/Mft (113 kg/km)								
LSZH Extended-Distance RG 11 HD Coax																			
VSD2001LS	1	0.272" (6.9 mm)	18 AWG Solid BC, 0.039" (1.0 mm)	Gas-Injected Foam PE, 0.180" (4.6 mm)	95% TC Braid, 100% Foil	FRNC/LSZH Black & Green	FRNC-C	2.75" (69.9 mm)	-30°C to +75°C -22°F to 167°F	306.9 N	42 lbs/Mft (62 kg/km)								
LSZH Low-Loss RG 6 HD Coax																			
VPM2000LS	1	0.242" (6.2 mm)	20 AWG Solid BC, 0.031" (0.8 mm)	Gas-Injected Foam PE, 0.146" (3.7 mm)	95% TC Braid, 100% Foil	FRNC/LSZH Black & Green	FRNC-C	2.50" (63.5 mm)	-30°C to +75°C -22°F to 167°F	275.3 N	35 lbs/Mft (52 kg/km)								
LSZH Standard RG 59 HD Coax																			
VDM230ELS	1	0.164" (4.5 mm)	23 AWG Solid BC, 0.024" (0.6 mm)	Gas-Injected Foam PE, 0.11" (2.8 mm)	95% TC Braid, 100% Foil	FRNC/LSZH Black & Green	FRNC-C	1.50" (38 mm)	-30°C to +75°C -22°F to 167°F	181.7 N	23 lbs/Mft (34 kg/km)								
LSZH Miniature HD/SDI Coax: 23 AWG Solid																			
Electrical Specifications																			
Part #	Return Loss (100 kHz-1 GHz), Imped. (+/-2)	Capac. (1 GHz-4.5 GHz)	Cond. DCR	Shield DCR	Vel. of Prop.	Nominal Attenuation - dB per 100 ft (30.5 m)													
						1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz	
VHD1100LS	75 Ω (+/-2)	>23 dB, >21 dB	16.2 pF/ft (53 pF/m)	2.5 Ω/Mft (8 Ω/km)	1.5 Ω/Mft (5 Ω/km)	84%	0.14	0.28	0.43	1.02	1.40	1.92	2.25	3.30	3.86	4.73	5.80	6.72	8.75
VSD2001LS	75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft (54 pF/m)	6.4 Ω/Mft (21 Ω/km)	2.8 Ω/Mft (9 Ω/km)	83%	0.22	0.43	0.70	1.60	2.10	2.96	3.40	4.95	5.87	7.30	9.13	10.65	13.28
VPM2000LS	75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft (54 pF/m)	10.2 Ω/Mft (34 Ω/km)	3.5 Ω/Mft (12 Ω/km)	83%	0.28	0.53	0.86	2.05	2.71	3.80	4.38	6.40	7.57	9.29	11.57	13.36	16.39
VDM230ELS	75 Ω (+/-2)	>23 dB, >21 dB	16.3 pF/ft (54 pF/m)	20.4 Ω/Mft (67 Ω/km)	4.0 Ω/Mft (13 Ω/km)	82%	0.39	0.85	1.28	3.25	4.10	5.80	6.66	10.00	11.25	13.93	17.21	19.87	24.52

## Audio, Video, Fiber and Custom Assemblies

### General Cable

manufactures a complete range of Gepco Brand cable assemblies made from an extensive line of audio, video and data cables. Gepco® Brand

### Audio, Video, Fiber and Custom Assemblies

are hand-terminated in the U.S.A with premium connectors and can be produced in standard or custom configurations.

### Cable Types for Almost Any Application

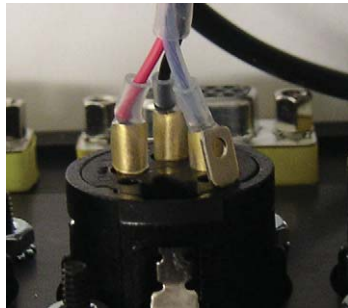
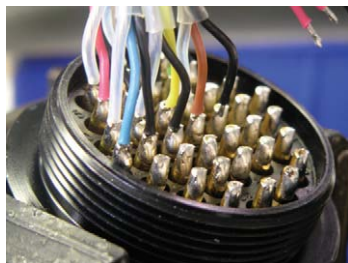
Our audio, video and fiber cable assemblies can be produced from almost any of Gepco's broad range of cables and distributed connector brands. From multi-pair audio snakes to precision video cables, from component video snakes to hybrid fiber camera cables, Gepco can provide cable assembly solutions for almost any professional audio or video application.

### Premium Connectors and Specialty Components

Gepco utilizes only professional-quality connectors from a range of industry-proven connector manufacturers. LEMO®, Neutrik®, ADC® and Kings® are just a few of the many brands of connectors that Gepco stocks and can readily terminate to almost any of Gepco's cable types.

### Standard and Custom Capabilities

Each assembly is built to order at Gepco; therefore, cable assemblies may easily be produced in custom configurations. Custom pin-outs and lengths can be made just as easily as standard configurations. This allows for proper interfacing with a variety of connector options while providing a clean installation devoid of excess cable. Once terminated, Gepco's assemblies are 100% quality inspected and tested to ensure the performance and reliability required for the most demanding applications.



## AUDIO ASSEMBLIES & BREAKOUT SYSTEMS

*Cables terminated with connectors for professional audio applications*

### Industry-Proven Termination Methods

Gepco audio cable assemblies are built with durable and field-proven termination methods. Most audio connectors are hand-soldered—providing a more robust connection than cheaper, over-molded insulation displacement contacts—and have heat shrink, sleeving, and rugged strain-relief systems. These methods and materials significantly increase the operating life of the cable and allow for field reparability or modification. Most contacts are also available in gold-plated versions to provide superior conductivity and tarnish resistance.



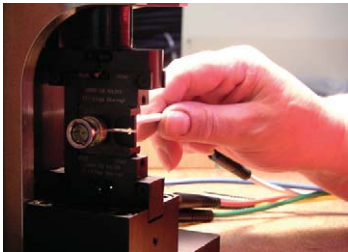
### Gepco audio assemblies and breakout systems include:

Microphone	110 Ohm Digital Audio Single-Pair	DT12 Snakes
Speaker	110 Ohm Digital Audio Snakes	DT12 Fanouts
Guitar/Instrument	GEP-FLEX Multi-Pair Audio Snakes	DT12 Breakout Boxes
Patchcords	X-Band Multi-Pair Audio Snakes	Stage Box Snakes

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ADC is a registered trademark of ADC Telecommunication, Inc. Kings is a registered trademark of Kings Electronics Company, Inc.



## Audio, Video, Fiber and Custom Assemblies



### VIDEO ASSEMBLIES & BREAKOUT SYSTEMS

*Cables terminated with connectors for professional video applications*

#### Precision Termination Methods

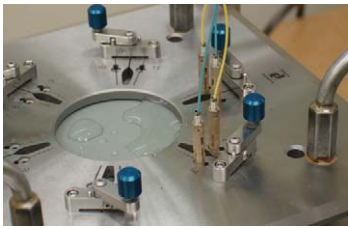
Gepco video cable assemblies are also built with durable and proven termination methods. Most video connector types are terminated by hand, utilizing precision automated strippers and crimpers to achieve the exact mechanical specifications of the individual connector type.

Since mechanical integrity is the foundation of the electrical performance, this high degree of precision ensures repeatability, exceptionally low insertion loss and return loss, and precision characteristic impedance.



#### Gepco video assemblies and breakout systems include:

- |                              |                                        |
|------------------------------|----------------------------------------|
| Single-Channel Coax          | VGA Breakout                           |
| SVHS/HDMI/DVI                | V-CON Multi-Channel                    |
| Patchcords                   | V-CON Multi-Channel Breakout Boxes     |
| HD Video Snakes              | V-CON Multi-Channel Distribution Racks |
| Composite Audio/Video Snakes | Triax Camera                           |



### FIBER OPTIC ASSEMBLIES & BREAKOUT SYSTEMS

*Cables terminated with connectors for professional HD camera applications*

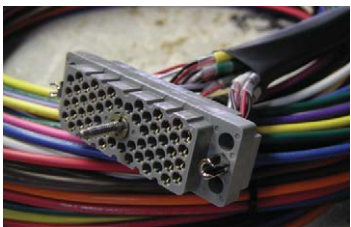
#### Machine-Polished Fiber Contacts

Gepco fiber cable assemblies feature multi-stage, machine-polished fiber contacts for superior performance. This process achieves the low attenuation and return loss required for high-speed uncompressed HD video transmission. In addition, all contacts are optically tested and verified for consistent performance.



#### Gepco video assemblies and breakout systems include:

- |                                   |                                          |
|-----------------------------------|------------------------------------------|
| SMPT 304/311 Hybrid Fiber Optic   | Hybrid Fiber Breakout Boxes & Racks      |
| Hybrid Fiber Breakout             | Hybrid Fiber Fusion Splice Boxes & Racks |
| Neutrik® opticalCON®              | SMPT Field and Studio Boxes              |
| TAC-4 & TAC-12                    | V-CON Multi-Channel Distribution Racks   |
| ST/SC/LC Tactical Snakes          | Modular Hybrid Fiber & Triax Panels      |
| ST/SC/LC Permanent Install Snakes | Feedthrough Panels and Chassis           |



### CUSTOM ASSEMBLIES, PANELS AND HARNESSING

*Cable assemblies, panels, harnesses and pre-wires manufactured to customer specifications*

In addition to Gepco's standard audio, video and fiber assemblies, which may be customized, Gepco also has the ability to provide other highly customized assemblies or pre-wires. These assemblies are fabricated with the same proven methods used in the standard audio, video and fiber assemblies and utilize the same diverse range of connector brands and options.



#### Examples of Gepco assemblies, panels and harnessing include:

- |                                                         |                                                                |
|---------------------------------------------------------|----------------------------------------------------------------|
| Patchbay Harnessing                                     | Customized Breakout Boxes                                      |
| Multi-Pin Assemblies                                    | High-Volume OEM Supplier                                       |
| Blunt at One End for Permanent Installation on Location | Multiple Cable Types Under a Single Expandable Sleeving Jacket |
| Pre-Wired Custom Panels                                 | Cable Repairs                                                  |



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## EASY AS 1-2-3



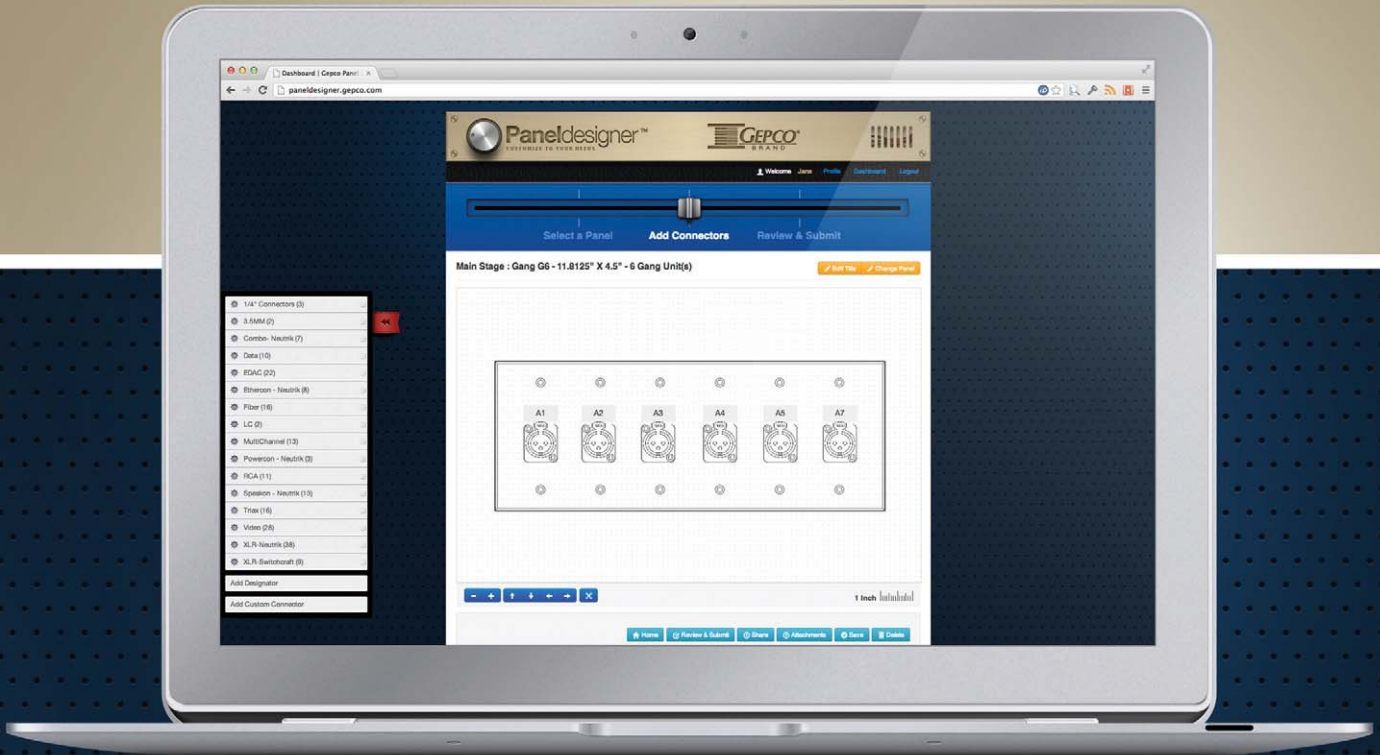
**1** Open your browser and navigate to:  
<http://xref.gepco.com>



**2** Click the start button.



**3** Enter competing part number and submit to find Gepco<sup>®</sup> Brand equivalent products along with their specs.



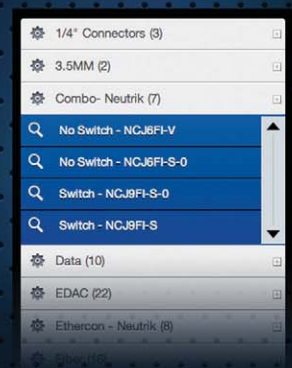
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- ✓ Expandable Menus Provide Easy Reference for Connectors Available
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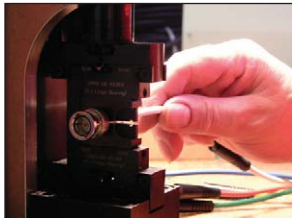




Since 1981, Gepco<sup>®</sup> has been committed to the development and manufacture of cable and connectivity products for the broadcast and professional A/V markets. Through continual involvement in technology and by listening closely to its customers, Gepco has developed a collection of unique and innovative solutions for the professional broadcast market. Now, Gepco extends this exceptional quality and excellence—that has delivered confidence and performance to the broadcast industry—into commercial applications.

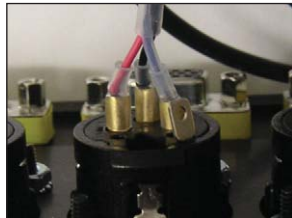
Excellence starts with innovative design. Produced with the same technology and process control utilized in the manufacture of cables for broadcast applications, the Gepco<sup>®</sup> Brand Commercial A/V line provides an unrivaled level of performance to the Commercial A/V Market. With integrated design, manufacturing, and quality control, Gepco delivers exceptional electrical and mechanical specifications to meet or exceed the requirements for the leading-edge audio, video, data and control formats found in Commercial A/V systems.

When demanding Commercial A/V applications require a pure, undiluted signal for exceptional results, Gepco Brand is the solution.



### Custom Assembly Capabilities

Gepco's complete range of cable assemblies are made from an extensive line of Gepco<sup>®</sup> Brand audio and video products. Gepco Audio, Video and Custom Assemblies are hand-terminated in the U.S.A. with premium connectors and may be produced in standard or custom configurations.



### Cable Types for Almost Any Application

Our audio and video assemblies can be manufactured from almost any of Gepco's broad range of cables and industry-standard connectors. From microphone cables to component video snakes, Gepco provides cable assembly solutions for almost any commercial audio or video application.



### Standard and Custom Capabilities

Each assembly is built to order, therefore, cable assemblies may easily be produced in custom configurations. Custom pin-outs and lengths can be made just as easily as standard configurations. This allows for proper interfacing with a variety of connector options while providing a clean installation devoid of excess cable.

# Audio Cable

Every component in an audio system is crucial, especially for the integrity and quality of the cable interconnections. The audio cable directly affects the power distribution, imaging and response of the audio signal. Through utilization of premium-grade compounds, high-purity copper conductors and precision tolerances, the Gepco® Brand commercial line of audio cables reduces loss, minimizes noise and ensures a true, clear and accurate signal transfer from microphone signal inputs all the way through to speaker outputs.

Cable Solution	Description	Page
<b>Microphone Cable</b>		
MM1024*	26 (30x40) AWG TC 4 Cond, 95% TC Braid, Quad Star, PVC Black (*Not UL Rated)	20
MP1201*	24 (41x40) AWG BC 4 Cond, 95% TC Braid, Quad Star, PVC Black (*Not UL Rated)	20
MP1022*	24 (41x40) AWG TC 2 Cond, 95% TC Braid, PVC Black (*Not UL Rated)	21
M1042*	20 (26x34) AWG TC 2 Cond 95% TC Braid, TPE Black (*Not UL Rated)	18
<b>Guitar/Musical Instruments Cables - Low Capacitance</b>		
GLC20*	20 (41x36) AWG BC 1 Cond 95% BC Braid, PVC Black (*Not UL Rated)	17
<b>Plenum Cable Solution</b>		
<b>Non-Plenum Cable Solution</b>		
<b>Description</b>		
<b>High-Grade Line Level Audio</b>		
SSS222P	SSS222R 22 (7x30) AWG BC 1 Pr, Foil Shield, PVC Natural CMP/Gray CMR	13
SSS202P	SSS202R 20 (7x28) AWG BC 1 Pr, Foil Shield, PVC Natural CMP/Gray CMR	13
<b>Premium Line Level Audio</b>		
72401EZ	24 (7x32) AWG TC 1 Pr, Foil Shield, PVC Multiple Colors CM	15
61801HS	61801EZ 22 (7x30) AWG TC 1 Pr, Foil Shield, PVC White CMP/Multiple Colors CMR	14
<b>Line Level Audio Snake</b>		
GA72402GFC	24 (7x32) AWG TC 2 Pr, Ind Shielded, TPE Black CM	7
GA72404GFC	24 (7x32) AWG TC 4 Pr, Ind Shielded, TPE Black CM	7
GA72408GFC	24 (7x32) AWG TC 8 Pr, Ind Shielded, TPE Black CM	7
GA72412GFC	24 (7x32) AWG TC 12 Pr, Ind Shielded, TPE Black CM	7
GA72416GFC	24 (7x32) AWG TC 16 Pr, Ind Shielded, TPE Black CM	7
GA72426GFC	24 (7x32) AWG TC 26 Pr, Ind Shielded, TPE Black CM	7
GA72432GFC	24 (7x32) AWG TC 32 Pr, Ind Shielded, TPE Black CM	7
GA61802GFC	22 (7x30) AWG TC 2 Pr, Ind Shielded, TPE Blue CMR	6
6604HS	GA61804GFC 22 (7x30) AWG TC 4 Pr, Ind Shielded, PVC White CMP/TPE Blue CMR	12, 6
6606HS	GA61806GFC 22 (7x30) AWG TC 6 Pr, Ind Shielded, PVC White CMP/TPE Blue CMR	12, 6
6608HS	GA61808GFC 22 (7x30) AWG TC 8 Pr, Ind Shielded, PVC White CMP/TPE Blue CMR	12, 6
6612HS	GA61812GFC 22 (7x30) AWG TC 12 Pr, Ind Shielded, PVC White CMP/TPE Blue CMR	12, 6
GA61816GFC	22 (7x30) AWG TC 16 Pr, Ind Shielded, TPE Blue CMR	6
GA61820GFC	22 (7x30) AWG TC 20 Pr, Ind Shielded, TPE Blue CMR	6
GA61826GFC	22 (7x30) AWG TC 26 Pr, Ind Shielded, TPE Blue CMR	6
GA61832GFC	22 (7x30) AWG TC 32 Pr, Ind Shielded, TPE Blue CMR	6
<b>AES EBU Digital Audio</b>		
DS601	26 (7x34) AWG TC 1 Pr, Foil Shield, PVC Black CM	35
DS601D	26 (7x34) AWG TC 2 Pr Zip, Foil Shield, PVC Black/Red Stripe CM	35
DS604	26 (7x34) AWG TC 4 Pr, Foil Shield, Outer Jacket TPE Black CM	33
DS608	26 (7x34) AWG TC 8 Pr, Foil Shield, Outer Jacket TPE Black CM	33
DS612	26 (7x34) AWG TC 12 Pr, Foil Shield, Outer Jacket TPE Black CM	33
DS616	26 (7x34) AWG TC 16 Pr, Foil Shield, Outer Jacket TPE Black CM	33
DS624	26 (7x34) AWG TC 24 Pr, Foil Shield, Outer Jacket TPE Black CM	33
DS401TS	DS401 24 (7x32) AWG TC 1 Pr, Foil Shield, PVC White CMP/Black or Violet CMR	34
DS401D	24 (7x32) AWG TC 2 Pr, Zip Foil Shield, PVC Violet with Red Stripe CMR	34
DS404	24 (7x32) AWG TC 4 Pr, Foil Shield, Outer Jacket TPE Violet CMR	32
DS408	24 (7x32) AWG TC 8 Pr, Foil Shield, Outer Jacket TPE Violet CMR	32
DS412	24 (7x32) AWG TC 12 Pr, Foil Shield, Outer Jacket TPE Violet CMR	32

Plenum Cable Solution	Riser Cable Solution	Description	Page
<b>Speaker and Control Cable - Unshielded</b>			
SSU182P	SSU182R	18 (7x26) AWG BC 2 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU162P	SSU162R	16 (19x29) AWG BC 2 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU142P	SSU142R	14 (19x27) AWG BC 2 Cond, PVC Natural or Gray CL3P/Gray CL3R	27, 26
SSU122P	SSU122R	12 (19x25) AWG BC 2 Cond, PVC Natural or Gray CL3P/Gray CL3R	27, 26
SSU102P	SSU102R	10 (65x28) AWG BC 2 Cond, PVC Natural or Gray CL3P/Gray CL2R	27, 26
SSU224P	SSU224R	22 (7x30) AWG BC 4 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU204P	SSU204R	20 (7x28) AWG BC 4 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU184P	SSU184R	18 (19x29) AWG BC 4 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU164P	SSU164R	16 (19x29) AWG BC 4 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
SSU144P	SSU144R	14 (19x27) AWG BC 4 Cond, PVC Natural or Gray CL3P/Gray CL3R	27, 26
SSU124P	SSU124R	12 (19x25) AWG BC 4 Cond, PVC Natural or Gray CL3P/Gray CL3R	27, 26
SSU226P	SSU226R	22 (7x30) AWG BC 6 Cond, PVC Natural or Gray CMP/Gray CMR	27, 26
<b>Speaker and Control Cable - Shielded</b>			
SSS182P	SSS182R	18 (7x26) AWG BC 2 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS162P	SSS162R	16 (19x29) AWG BC 2 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS142P	SSS142R	14 (19x27) AWG BC 2 Cond, Foil Shield, PVC Nat or Gray CL3P/Gray CL3R	29, 28
SSS122P	SSS122R	12 (19x25) AWG BC 2 Cond, Foil Shield, PVC Nat or Gray CL3P/Gray CL3R	29, 28
SSS224P	SSS224R	22 (7x30) AWG BC 4 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS204P	SSS204R	20 (7x28) AWG BC 4 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS184P	SSS184R	18 (7x26) AWG BC 4 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS164P	SSS164R	16 (19x29) AWG BC 4 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
SSS144P	SSS144R	14 (19x27) AWG BC 4 Cond, Foil Shield, PVC Nat or Gray CL3P/Gray CL3R	29, 28
SSS124P	SSS124R	12 (19x27) AWG BC 4 Cond, Foil Shield, PVC Nat or Gray CL3P/Gray CL3R	29, 28
SSS226P	SSS226R	22 (7x30) AWG BC 6 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR	29, 28
<b>Cable Solution</b>			
<b>Description</b>			
<b>Speaker Cable - Unshielded Indoor/Outdoor Direct Burial - OFC</b>			
SSPUB162	16 (65x34) AWG OFC BC 2 Cond, PVC White or Black CM/CL3/PLTC		24
SSPUB142	14 (105x34) AWG OFC BC 2 Cond, PVC White, Violet or Black CL3/PLTC		24
SSPUB164	16 (65x34) AWG OFC BC 4 Cond, PVC Teal CM/CL3/PLTC		24
SSPUB144	14 (105x34) AWG OFC BC 4 Cond, PVC Blue CL3/PLTC		24
<b>Speaker Cable - Unshielded Indoor/Outdoor Direct Burial</b>			
SSUB162	16 (65x34) AWG BC 2 Cond, PVC White or Black CM/CL3		24
SSUB142	14 (41x30) AWG BC 2 Cond, PVC White or Black CL3		24
SSUB122	12 (105x32) AWG BC 2 Cond, PVC White or Black CL3		24
SSUB164	16 (65x34) AWG BC 4 Cond, PVC White or Black CL3		24
SSUB144	14 (41x30) AWG BC 4 Cond, PVC White or Black CL3		24
SSUB124	12 (105x32) AWG BC 4 Cond, PVC White or Black CL3		24
<b>Cable Solution</b>			
<b>Description</b>			
<b>Speaker Cable - High Definition - OFC</b>			
GSC1220FC*	12 (259x36) AWG OFC BC, Zip, PVC Transparent (*Not UL Rated. Not for use within walls.)		22
GSC1020FC*	10 (423x36) AWG OFC BC, Zip, PVC Transparent (*Not UL Rated. Not for use within walls.)		22



## Video Cable

The visual image is the core of any video system. Modern high resolution and High Definition video formats now demand an even greater degree of quality and bandwidth from the cable interconnect system. To bring a higher level of performance to commercial video applications, the Gepco® Brand commercial line of video cables are made using the same techniques and materials used in professional, studio-grade video coax. Every Gepco Brand video cable is built to exacting electrical and mechanical specifications then comprehensively tested and verified. As a result, the video image is transmitted with minimal loss or errors, delivering exceptionally true and clear images. Through precision, Gepco Brand video cables deliver your clearest vision.

Plenum Cable Solution	Non-Plenum Cable Solution	Description	Page
<b>Broadband Coax - CATV - MATV - DBS</b>			
C3524	C5886	RG 6 18 AWG Solid CCS, Bonded Foil, 80% AL Braid CMP/60% AL Braid CMR, PVC Natural CMP/Black CMR	—
C3525	C5889	RG 6 18 AWG Solid CCS, Quad-Shield Dual Foil, 60%/40% AL Braid, PVC Natural CMP/Black CMR	—
495027	395029	RG 11 14 AWG Solid BC, Dual Foil, 95% TC Braid, PVDF Natural CMP/PVC Black or White CMR	—
C3529	C5044	RG 11 14 AWG Solid CCS, Quad-Shield Dual Foil, 60%/40% AL Braid, PVDF White CMP/PVC Black CM	—
<b>High Definition Coax - HDTV - Serial Digital Interface - SDI</b>			
VSD2001TS	VSD2001	RG 6 18 AWG Solid BC, Foil, 95% TC Braid, PVC White CMP/Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White CMR	38
VHD1100TK	VHD1100	RG 11 14 AWG Solid BC, Foil, 95% TC Braid, PVDF White CMP/PVC Black CMR	38
VPM2000TS	VPM2000	RG 59 20 AWG Solid BC, Foil, 95% TC Braid, PVC White CMP/Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White CMR	38
VDM230TS	VDM230	Mini 23 AWG Solid BC, Foil, 95% TC Braid, PVC Black or White CMP/Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White CMR	40
	VDM250	Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, PVC Black CMR	40
	VDM250D*	Dual Coax Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, PVC Black (*Not UL Rated)	40
<b>Component Video RGB Coax Cable</b>			
SV253SP	SV253SR	3 Coax Mini 25 AWG Solid BC, Foil, 95% TC Braid, Red, Green Blue, Outer Jacket PVC White CMP/Black CMR	45, 47
SV254SP	SV254SR	4 Coax Mini 25 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, Outer Jacket PVC White CMP/Black CMR	45, 47
SV255SP	SV255SR	5 Coax Mini 25 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Outer Jacket PVC White CMP/Black CMR	45, 47
	SV256SR	6 Coax Mini 25 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black, Outer Jacket PVC Black CMR	47
	SV253STR	3 Coax Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, Red, Green, Blue, Outer Jacket TPE Black CM	46
	SV254STR	4 Coax Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, Outer Jacket TPE Black CM	46
	SV255STR	5 Coax Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Outer Jacket TPE Black CM	46
	SV256STR	6 Coax Mini 25 (7x33) AWG BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black, Outer Jacket TPE Black CM	46
	VS32001	3 Coax RG 6 18 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Outer Jacket TPE Black CMR	54
	VS42001	4 Coax RG 6 18 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, Outer Jacket TPE Black CMR	54
	VS52001	5 Coax RG 6 18 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Outer Jacket TPE Black CMR	54
	VS62001*	6 Coax RG 6 18 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black, Outer Jacket TPE Black (*Not UL Rated)	54
<b>Composite Cable - Video + Audio or Data</b>			
RGB62TS		6 Coax Mini 26 (7x34) AWG TC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black + 22 (7x30) AWG TC 2 Pr, Outer Jacket PVC White CL2P	48
	RGB62	6 Coax Mini 26 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black + 24 (7x32) AWG TC 2 Pr, Outer Jacket Flexible TPE Black CM	48
RGB644TS		6 Coax Mini 26 (7x34) AWG TC, Foil, 95% TC Serve, Red, Green, Blue, Yellow, White, Black + 26 (7x34) AWG TC 4 Pr + 4 Power 20 (7x28) AWG TC, Outer Jacket PVC White CL2P	49
	RGB644	6 Coax Mini 26 AWG Solid BC, Foil, 95% TC Braid, Red, Green, Blue, Yellow, White, Black + 26 (7x34) AWG TC 4 Pr + 4 Power 20 (7x28) AWG TC, Outer Jacket Flexible TPE Black CM	49
	VA2/2TP*	2 Coax Mini 25 (7x33) BC, Foil, 95% TC Braid, Black, White + 22 (7x30) AWG TC 2 Pr, Outer Jacket TPE Black (*Not UL Rated)	56
	VA2/3TP*	2 Coax Mini 25 (7x33) BC, Foil, 95% TC Braid, Black, White + 22 (7x30) AWG TC 3 Pr, Outer Jacket TPE Black (*Not UL Rated)	56
	VA2/3*	2 Coax 20 AWG Solid BC, Foil, 95% TC Braid, Black, White + 22 (7x30) AWG TC 3 Pr, Outer Jacket TPE Black (*Not UL Rated)	57
	VA2/4*	2 Coax 20 AWG Solid BC, Foil, 95% TC Braid, Black, White + 22 (7x30) AWG TC 4 Pr, Outer Jacket TPE Black (*Not UL Rated)	57
	VA2/5*	2 Coax 20 AWG Solid BC, Foil, 95% TC Braid, Black, White + 22 (7x30) AWG TC 5 Pr, Outer Jacket TPE Black (*Not UL Rated)	57
<b>Low Skew Video Cable</b>			
E3842S	E1842S	4 UTP 24 AWG Solid BC 2.2nS/100m, PVC Green CMP/Maroon CMR	—
E3843S	E1843S	4 UTP 23 AWG Solid BC 2.2nS/100m, PVC Green CMP/Maroon CMR	—
<b>CCTV - Coax</b>			
495035	395011	RG 6 18 AWG Solid BC, 95% BC Braid, PVC Natural CMP/Black or White CMR	—
495028	C1142	RG 59 20 AWG Solid BC, 95% BC Braid, PVC Natural CMP/Black CM	—
	C8025	Siamese RG 59 22 AWG BC, 95% BC Braid + 22 (7x30) AWG, Foil, PVC Black CM	—
C8030	C8028	Siamese RG 59 20 AWG Solid BC, 95% BC Braid + 18 (7x26) AWG UTP, PVC Natural CMP/Black CM	—
<b>50 Ω Coax</b>			
	C5779	50 Ω RG 58 20 (19x32) AWG TC, Bonded Foil, 81% TC Braid, PVC Gray CM	—

# Automation & Lighting Control Cable

The cabling backbone of any automation and lighting control system must meet an exceptionally high performance level to ensure that the system operates reliably and at full data rates. Produced in a variety of specialized and general purpose designs, Gepeco® Brand automation and lighting control cables deliver solutions for a multitude of cross-platform and manufacturer-specific standards and systems. As with all other Gepeco Brand cables, each cable is a leading-edge design and features comprehensive quality verification to deliver the foundation and bandwidth for commercial automation and control system integration.

Plenum Cable Solution	Non-Plenum Cable Solution	Description	Page
<b>Digital Media Cables</b>			
CT504/SDMP	CT504/SDM	Multimedia Cat 5e Cable for Use with Crestron® Systems - 24 AWG BC 4 Pr, Foil Shield, PVC Blue, White or Black CMP/PVC Blue, White or Black CMR	98
CT104/SDMP	CT104/SDM	Multimedia Cat 6A Cable for Use with Crestron® Systems - 23 AWG BC 4 Pr, Foil Shield, PVC Blue, White or Black CMP/PVC Blue, White or Black CMR	98
<b>Automation Control Cables</b>			
18/22AXLP	18/22AXL	For Use with AMX® Systems - 22 (7x30) AWG BC 1 Pr, Foil Shield + 18 (7x26) AWG BC 1 Pr, Unshielded, PVC Black CMP/Black CL3R/FT-4	101
18/22CRTP	18/22CRT	For Use with Crestron® Systems - 22 (7x30) AWG BC 1 Pr, Foil Shield + 18 (7x26) AWG BC 1 Pr, Unshielded, PVC Blue with Yellow Stripe CMP/CL3R,FT-4	100
	18/22CCT	Hybrid Cables for Use with Crestron® Systems - 1 18/22CRT + 1 Cat 5e, PVC Teal with Red Stripe CL3/FT-4	100
	18/22CCD	Hybrid Cables for Use with Crestron® Systems - 1 18/22CRT + 2 Cat 5e, PVC Teal with Black Stripe CL3/FT-4	100
	18/22CCQ	Hybrid Cables for Use with Crestron® Systems - 1 18/22CRT + 4 Cat 5e, PVC Teal with White Stripe CL3/FT-4	100
	18/22CDC	Hybrid Cables for Use with Crestron® Systems - 1 18/22CRT + 2 Cat 5e + 2 RG 6 Quad Coax, PVC Teal with Orange Stripe CL3/FT-4	100
	164NCAT	Keypad Volume Control - 16 (65x34) AWG BC 4 Cond + 1 Cat 5e, PVC Teal with Gray Stripe CM/CL3	101
	144NCAT	Keypad Volume Control - 14 AWG (105x34) BC 4 Cond + 1 Cat 5e, PVC Blue with Gray Stripe CM/CL3	101
<b>Lighting Control Cables</b>			
	164LTCH	Control Station Cable for Use with LiteTouch® Systems - 16 (65x34) AWG BC 4 Cond, PVC Orange CL3/PLTC	104
	224SLTCH	Enclosure & Module Cable for Use with LiteTouch® Systems - 22 (7x30) AWG BC 4 Cond, Foil Shield, PVC Green CM/CL3	104
	182LUTDS	Power Cable for Use with Lutron® Homeworks® Systems - 18 (7x26) AWG BC 2 Cond, Foil Shield, PVC Blue with Pink Stripe TC	102
	184LUTDS	Power Cable for Use with Lutron® Homeworks® Systems - 18 (7x26) AWG BC 4 Cond, Foil Shield, PVC Blue with White Stripe TC	102
	18/22KYP	Keypad Cable for Use with Lutron® Homeworks® Systems - 22 (7x30) AWG BC 1 Pr, Foil Shield + 18 (16x30) AWG BC 1 Pr, PVC Blue with Yellow Stripe CM/CL3	102
	12/22LGRX	Control Cable for Use with Lutron® GRAFIK Eye® Systems - 22 (7x30) AWG BC 1 Pr, Foil Shield + 12 (19x25) AWG BC 1 Pr + Ground, PVC Blue with Blue Stripe CM/CL3	103
	18/22GFE	Control Cable for Use with Lutron® GRAFIK Eye® Systems - 22 (7x30) AWG BC 1 Pr, Foil Shield + 18 (16x30) AWG BC 1 Pr, PVC Blue with Green Stripe CM/CL3	103
	16/18SVA	Hybrid Cable for Use with Lutron® Sivoia® Systems - 18 (16x30) AWG BC 4 Cond, Foil Shield + 16 (26x30) AWG BC 2 Cond + Ground, PVC Blue with Red Stripe CM/CL3	103
	16/18SVAP	Hybrid Cable for Use with Lutron® Sivoia® Systems - 18 (16x30) AWG BC 4 Cond, Foil Shield + 16 (26x30) AWG BC 2 Cond + Ground, PVC Natural with Red Stripe CL3P/CMP	103
	162VANT65	Power & Data Cable for Use with Vantage® Systems - 16 (65x34) AWG BC 2 Cond, PVC Violet with Yellow Stripe CL3/CM/TC	104
<b>DMX Lighting Control Cables</b>			
	DLC124	DMX Lighting Control - 24 (7x32) AWG TC 1 Pr, Foil, 90% TC Braid, TPE Black	105
	DLC224	DMX512 Lighting Control - 24 (7x32) AWG TC 2 Pr, Foil, 90% TC Braid, TPE Black	105
	DLC122	DMX Lighting Control - 22 (7x30) AWG TC 1 Pr, Foil, 90% TC Braid, PU Black	105
	DLC222	DMX512 Lighting Control - 22 (7x30) AWG TC 2 Pr, Foil, 90% TC Braid, PU Black	105

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## Powered Cable

Through research and technology, Gepeco provides a portable, all-in-one solution for applications requiring audio or data along with power while protecting the signal from noise. Gepeco® Brand RunONE™ Powered Cables combine audio and power, along with optional data, under a single durable, yet flexible jacket. Saving time and hassle by allowing the user to replace multiple cables with a single, neat solution, each RunONE cable combines power with two, eight or 12 channels of 110 Ω balanced audio for line level, mic level or digital AES signals and can be used for self-powered speakers, staging applications and DMX lighting control.

Cable Solution	Description	Page
<b>Powered Cable - Bulk</b>		
PA2	14 (41x30) AWG BC Power + 2 Pr 24 (7x32) AWG TC AES/EBU Audio, PVC Black AWM 2464	108, 109
PA8	14 (41x30) AWG BC Power + 8 Pr 24 (7x32) AWG TC AES/EBU Audio, PVC Black AWM 2464	108, 109
PA12	14 (41x30) AWG BC Power + 12 Pr 24 (7x32) AWG TC AES/EBU Audio, PVC Black AWM 2464	108, 109
PA2C	14 (41x30) AWG BC Power + 2 Pr 24 (7x32) AWG TC AES/EBU Audio + 2 Cat 5e, PVC Black AWM 2464	108, 109
PA12C	14 (41x30) AWG BC Power + 12 Pr 24 (7x32) AWG TC AES/EBU Audio + 2 Cat 5e, PVC Black AWM 2464	108, 109
PA2T	12 (105x32) AWG BC Power + 2 Pr 24 (7x32) AWG TC AES/EBU Audio, PVC Black AWM 2464	



## Appendix A: Color Codes

Color Code Chart 1 - Pair Colors

Pair Number	Color	Pair Number	Color	Pair Number	Color	Pair Number	Color
1	Brown	9	White	17	Violet	25	Green
2	Red	10	Black	18	Gray	26	Blue
3	Orange	11	Brown	19	White	27	Violet
4	Yellow	12	Red	20	Black	28	Gray
5	Green	13	Orange	21	Brown	29	White
6	Blue	14	Yellow	22	Red	30	Black
7	Violet	15	Green	23	Orange	31	Brown
8	Gray	16	Blue	24	Yellow	32	Red

Color Code Chart 2 - Pair Colors

Pair Number	Color	Pair Number	Color	Pair Number	Color	Pair Number	Color
1	Black Paired with Red	11	Red Paired with Yellow	20	White Paired with Yellow	29	Purple Paired with Orange
2	Black Paired with White	12	Red Paired with Brown	21	White Paired with Brown	30	Purple Paired with Red
3	Black Paired with Green	13	Red Paired with Orange	22	White Paired with Orange	31	Purple Paired with White
4	Black Paired with Blue	14	Green Paired with White	23	Blue Paired with Yellow	32	Purple Paired with Dark Green
5	Black Paired with Yellow	15	Green Paired with Blue	24	Blue Paired with Brown	33	Purple Paired with Light Blue
6	Black Paired with Brown	16	Green Paired with Yellow	25	Blue Paired with Orange	34	Purple Paired with Yellow
7	Black Paired with Orange	17	Green Paired with Brown	26	Brown Paired with Yellow	35	Purple Paired with Brown
8	Red Paired with White	18	Green Paired with Orange	27	Brown Paired with Orange	36	Purple Paired with Black
9	Red Paired with Green	19	White Paired with Blue	28	Orange Paired with Yellow	37	Gray Paired with White
10	Red Paired with Blue						

Color Code Chart 3 - Pair Colors

Pair Number	Color	Pair Number	Color	Pair Number	Color
1	Black Paired with Black/White	5	Brown Paired with White/Brown	9	Purple Paired with White/Purple
2	White Paired with White/Black	6	Blue Paired with White/Blue	10	Gray Paired with White/Gray
3	Red Paired with White/Red	7	Orange Paired with White/Orange	11	Pink Paired with White/Pink
4	Green Paired with White/Green	8	Yellow Paired with White/Yellow	12	Tan Paired with White/Tan
				Plus 1	Green/Yellow

Color Code Chart 4 - Pair Colors

Pair Number	Color	Pair Number	Color	Pair Number	Color
1	Blue	5	Slate	9	Yellow
2	Orange	6	White	10	Violet
3	Green	7	Red	11	Pink (Rose)
4	Brown	8	Black	12	Aqua

Color Code Chart 5 - Jacket Colors

Jacket Color Code Number	Color	Jacket Color Code Number	Color
0	Black	5	Green
1	Brown	6	Blue
2	Red	7	Violet
3	Orange	8	Gray
4	Yellow	9	White



## Appendix B: Wire Gauge Specifications

AWG	Strand	Approx. O.D.		Circular ML Area	Weight		DCR Ω/Mft
		Inches	mm		Lbs/Mft	kg/km	
40	Solid	.003	.08	9.61	.030	.04	1048.85
39	Solid	.004	.09	12.20	.038	.06	831.68
38	Solid	.004	.10	15.72	.048	.07	659.73
37	Solid	.005	.11	19.83	.061	.09	523.00
36	Solid	.005	.13	25.00	.076	.11	414.84
36	7/44	.006	.15	28.00	.085	.12	378.82
35	Solid	.006	.14	31.52	.095	.14	329.03
34	Solid	.006	.16	39.75	.120	.18	260.91
34	7/42	.007	.19	43.75	.132	.19	238.23
33	Solid	.007	.18	50.13	.152	.23	206.88
32	Solid	.008	.20	63.21	.191	.28	164.07
32	7/40	.008	.20	67.27	.203	.30	149.84
32	19/44	.009	.22	76.00	.230	.34	139.57
31	Solid	.009	.23	79.70	.241	.36	130.13
30	Solid	.010	.25	100.50	.304	.45	103.19
30	7/38	.012	.30	112.00	.339	.50	94.25
30	19/42	.012	.30	118.75	.359	.53	87.77
29	Solid	.011	.29	126.70	.384	.57	81.85
28	Solid	.013	.32	159.80	.484	.72	64.90
28	7/36	.015	.38	141.75	.529	.78	59.26
28	19/40	.016	.40	182.59	.553	.82	55.20
27	Solid	.014	.36	201.50	.610	.91	51.47
27	7/35	.018	.45	219.52	.664	.98	47.00
26	Solid	.016	.40	253.00	.769	1.14	40.81
26	19/38	.020	.50	304.00	.920	1.36	34.72
26	7/34	.019	.48	277.83	.841	1.25	37.27
25	Solid	.018	.46	320.40	.970	1.44	32.37
25	7/33	.021	.53	343.00	1.113	1.66	29.55
24	Solid	.020	.51	404.00	1.223	1.82	25.67
24	7/32	.024	.60	448.00	1.356	2.01	23.44
24	10/34	.023	.58	396.90	1.201	1.78	26.09
24	19/36	.024	.60	475.00	1.430	2.12	21.83
24	41/40	.023	.58	384.40	1.160	1.72	25.58
23	Solid	.023	.57	511.50	1.542	2.29	20.36
22	Solid	.025	.64	640.40	1.945	2.89	16.14
22	7/30	.030	.76	700.00	2.120	3.15	14.74
22	19/34	.031	.78	754.11	2.280	3.39	13.73
22	26/36	.030	.76	650.00	1.970	2.93	15.96
21	Solid	.029	.72	812.10	2.452	3.65	12.80
20	Solid	.032	.81	1,020.0	3.092	4.60	10.15
20	7/28	.038	.96	1,111.0	3.490	5.19	9.27
20	10/30	.035	.88	1,000.0	3.025	4.50	10.32
20	19/32	.037	.93	1,216.0	3.680	5.47	8.64
20	26/34	.036	.91	1,031.9	3.120	4.64	10.03
20	41/36	.036	.91	1,025.0	3.100	4.61	10.12
19	Solid	.040	.91	1,200.0	3.899	5.80	8.05
18	Solid	.040	1.02	1,620.0	4.917	7.32	6.39
18	7/26	.048	1.21	1,759.60	5.360	7.97	5.83
18	16/30	.047	1.19	1,600.0	4.840	7.20	6.45

AWG	Strand	Approx. O.D.		Circular ML Area	Weight		DCR Ω/Mft
		Inches	mm		Lbs/Mft	kg/km	
18	19/30	.049	1.24	1,900.0	5.750	8.55	5.43
18	41/34	.047	1.19	1,627.3	4.920	7.32	6.36
18	65/36	.047	1.19	1,625.0	4.910	7.30	6.38
17	Solid	.045	1.15	2,050.0	6.200	9.23	5.06
16	Solid	.051	1.29	2,583.0	7.818	11.63	4.02
16	7/24	.060	1.52	2,828.0	8.560	12.73	3.67
16	65/34	.059	1.49	2,579.9	7.810	11.62	4.01
16	26/30	.059	1.49	2,600.0	7.870	11.71	3.97
16	19/29	.058	1.47	2,426.3	7.350	10.93	4.31
16	105/36	.059	1.49	2,625.0	7.950	11.83	3.95
15	Solid	.057	1.45	3,260.0	9.858	14.67	3.18
14	Solid	.064	1.63	4,107.0	12.43	18.50	2.53
14	7/22	.073	1.85	4,480.0	13.56	20.17	2.31
14	19/27	.073	1.85	3,830.4	11.59	17.24	2.71
14	41/30	.073	1.85	4,100.0	12.40	18.45	2.52
14	105/34	.073	1.85	4,167.5	12.61	18.76	2.48
13	Solid	.072	1.83	5,178.0	15.68	23.33	2.00
12	Solid	.081	2.05	6,530.0	19.77	29.42	1.59
12	7/20	.096	2.43	7,168.0	21.69	32.27	1.45
12	19/25	.093	2.36	6,087.6	18.43	27.42	1.70
12	65/30	.095	2.41	6,500.0	19.66	29.25	1.59
12	165/34	.095	2.41	6,548.9	19.82	29.49	1.58
11	Solid	.091	2.30	8,234.0	24.92	37.08	1.26
10	Solid	.102	2.60	10,380.0	31.43	40.77	1.00
10	37/26	.115	2.92	9,353.6	28.31	42.12	1.10
10	49/27	.116	2.94	9,878.4	29.89	44.47	1.05
10	105/30	.116	2.94	10,530.0	31.76	47.26	0.98
8	49/25	.147	3.73	15,699.9	47.53	70.72	0.66
8	133/29	.147	3.73	16,984.1	51.42	76.51	0.62
8	655/36	.147	3.73	16,625.0	49.58	73.78	0.63
6	133/27	.184	4.67	26,812.8	81.14	120.74	0.39
6	259/30	.184	4.67	25,900.0	78.35	116.59	0.40
6	1050/36	.184	4.67	26,250.0	79.47	118.25	0.40
4	133/25	.232	5.89	42,613.0	129.01	191.98	0.24
4	259/27	.232	5.89	52,214.4	158.02	235.15	0.20
4	1666/36	.232	5.89	41,650.0	126.10	187.64	0.25
2	133/23	.292	7.41	67,936.4	205.62	305.98	0.39
2	259/26	.292	7.41	65,475.2	198.14	294.85	0.16
2	665/30	.292	7.41	66,500.0	201.16	299.34	0.16
1	817/30	.328	8.33	81,700.0	247.10	367.71	0.13
1	2019/34	.328	8.33	83,706.2	253.29	376.92	1.30
1/0	133/21	.368	9.34	108,035.9	327.05	486.68	0.10
1/0	259/24	.368	9.34	104,636.0	316.76	471.37	0.10
2/0	133/20	.414	10.51	136,192.0	412.17	613.35	0.08
2/0	259/23	.414	10.51	132,297.2	400.41	595.85	0.08
3/0	259/22	.464	11.78	163,195.0	501.70	746.58	0.06
3/0	427/24	.464	11.78	172,508.0	522.20	777.08	0.06
4/0	259/21	.522	13.25	210,385.7	638.88	950.71	0.05
4/0	427/23	.522	13.25	218,111.6	660.01	982.16	0.05

## Appendix C: Conduit Capacity Chart

Conduit Capacity Chart											
Conduit Trade Size		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
I.D. Inches		0.622	0.824	1.049	1.380	1.610	2.067	2.731	3.356	3.834	4.334
Internal Area, In <sup>2</sup>		0.304	0.533	0.864	1.496	2.036	3.356	5.858	8.846	11.545	14.753
1 Conductor (53% fill)		0.161	0.283	0.458	0.793	1.079	1.778	3.105	4.688	6.119	7.819
2 Conductors (31% fill)		0.094	0.165	0.268	0.464	0.631	1.040	1.816	2.742	3.579	4.573
Conductors (40% fill)		0.122	0.213	0.346	0.598	0.814	1.342	2.343	3.538	4.618	5.901
Cable OD Inches	Cable Area In <sup>2</sup>	Numbers listed below are based on the 2008 NEC (40% fill ) for 3 or more non-lead covered cables.									
0.100	0.008	15	26	43	76	104	170	244	375	504	648
0.125	0.012	9	17	27	48	66	109	156	240	322	414
0.150	0.018	6	11	19	33	46	75	108	166	224	288
0.175	0.024	5	8	14	24	34	55	79	122	164	211
0.200	0.031	3	6	10	19	26	42	61	93	126	162
0.225	0.040	3	5	8	15	20	33	48	74	99	128
0.250	0.049	1	4	6	12	16	27	39	60	80	103
0.275	0.059	1	3	5	10	13	22	32	49	66	85
0.300	0.071	1	2	4	8	11	18	27	41	56	72
0.325	0.083	1	1	4	7	9	16	23	35	47	61
0.350	0.096	1	1	3	6	8	13	19	30	41	52
0.375	0.110	1	1	3	5	7	12	17	26	35	46
0.400	0.126	1	1	2	4	6	10	15	23	31	40
0.425	0.142	1	1	1	4	5	9	13	20	27	35
0.450	0.159	1	1	1	3	5	8	12	18	24	32
0.475	0.177	0	1	1	3	4	7	10	17	22	28
0.500	0.196	0	1	1	3	4	6	9	15	20	25
0.525	0.216	0	1	1	2	3	6	8	13	18	23
0.550	0.238	0	1	1	1	3	5	8	12	16	21
0.575	0.260	0	1	1	1	3	5	7	11	15	19
0.600	0.283	0	0	1	1	2	4	6	10	14	18
0.625	0.307	0	0	1	1	2	4	6	9	12	16
0.650	0.332	0	0	1	1	1	4	5	8	11	15
0.675	0.358	0	0	1	1	1	3	5	8	11	14
0.700	0.385	0	0	1	1	1	3	5	7	10	13
0.725	0.413	0	0	1	1	1	3	4	7	9	12
0.750	0.442	0	0	1	1	1	3	4	6	8	11
0.775	0.472	0	0	0	1	1	2	4	6	8	10
0.800	0.503	0	0	0	1	1	2	3	5	7	10
0.825	0.535	0	0	0	1	1	1	3	5	7	9
0.850	0.567	0	0	0	1	1	1	3	5	6	8
0.875	0.601	0	0	0	1	1	1	3	4	6	8
0.900	0.636	0	0	0	1	1	1	3	4	6	8
0.925	0.672	0	0	0	1	1	1	2	4	5	7
0.950	0.709	0	0	0	1	1	1	2	4	5	7
0.975	0.747	0	0	0	1	1	1	1	3	5	6
1.000	0.785	0	0	0	1	1	1	1	3	5	6
1.025	0.825	0	0	0	0	1	1	1	3	4	6
1.050	0.866	0	0	0	0	1	1	1	3	4	5
1.075	0.908	0	0	0	0	1	1	1	3	4	5

Notice: 1. The reader is cautioned to consult the 2011 NEC for specific information regarding conduit fill.  
 2. This Conduit Capacity Chart should only be used as a guide when attempting to estimate conduit fill.  
 3. For additional information, the reader should refer to the 2011 National Electrical Code, Chapter 9.

## Appendix D: Diameter of Cable Bundles

Diameter of Cable Bundles	
Number of Cables	Factor
2	2.0
3	2.154
4	2.154
5	2.7
6	3.0
7	3.0
10	4.0
12	4.155
16	4.7
19	5.0
27	6.155
37	7.0
41	8.0
61	9.0

O.D. of Cable Bundle = O.D. of Cable x Factor

For bundles not on above chart, use the following equation:

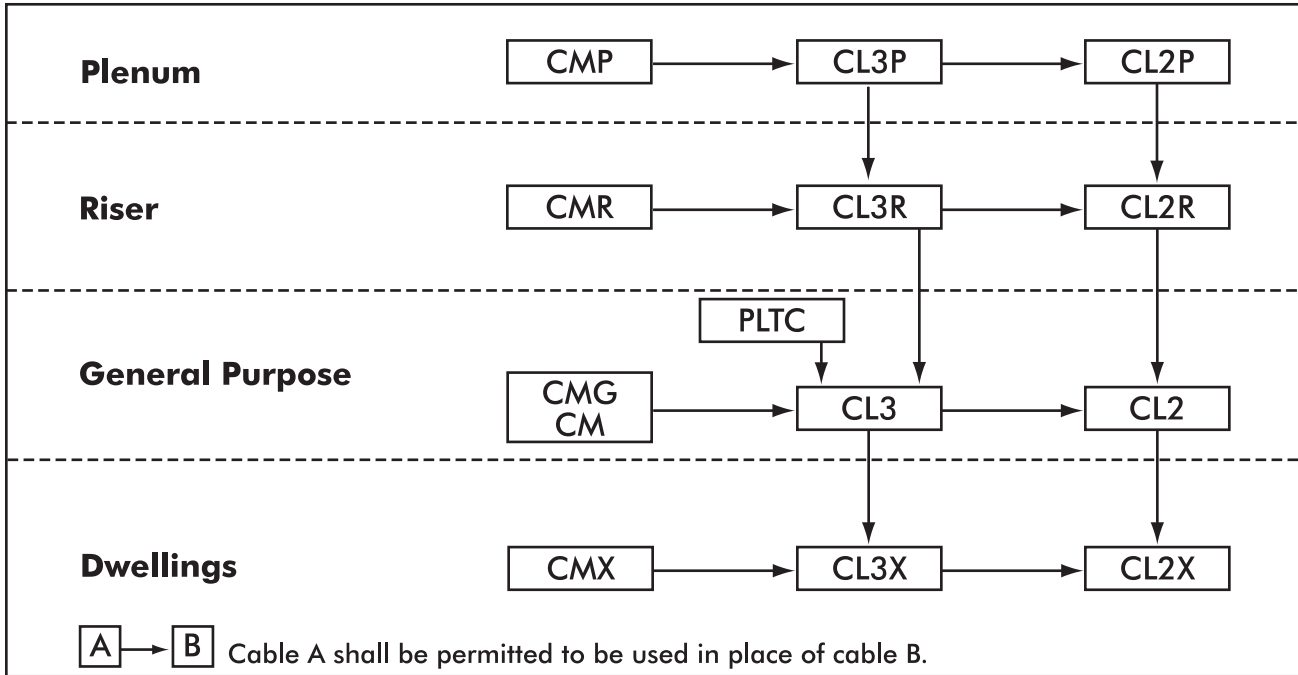
O.D. of Cable Bundle = 1.155 x O.D. of Cable x  $\sqrt{n}$   
 (where n is the number of cables)

These equations are only for cable bundles comprised of cables that have the same outer diameter.

The finished O.D. of the bundle is based upon the most efficient and compact grouping of the individual cables. This diameter can be larger if done incorrectly.

Note: These equations are only to be used to calculate diameter, not the maximum fill allowed in a conduit.

## Appendix E: NEC Cable Substitution Hierarchy



### Cable Uses and Permitted Substitutions

Cable Type	Use	Permitted Substitutions
CMP	Communications Plenum Cable	---
CL3P	Class 3 Plenum Cable	CMP
CL2P	Class 2 Plenum Cable	CMP, CL3P
CMR	Communications Riser Cable	*CMP
CL3R	Class 3 Riser Cable	CMP, CL3P, CMR
CL2R	Class 2 Riser Cable	CMP, CL3P, CL2P, CMR, CL3R
PLTC	Power-Limited Tray Cable	---
CMG	Communications Cable, General Purpose	*CMP, CMR
CM	Communications Cable, General Purpose	*CMP, CMR, CMG
CL3	Class 3 Cable	CMP, CL3P, CMR, CL3R, CMG, CM, PLTC
CL2	Class 2 Cable	CMP, CL3P, CL2P, CMR, CL3R, CL2R, CMG, CM, PLTC, CL3
CMX	Communications Cable, Limited Use	*CMP, CMR, CMG, CM
CL3X	Class 3 Cable, Limited Use	CMP, CL3P, CMR, CL3R, CMG, CM, PLTC, CL3, CMX
CL2X	Class 2 Cable, Limited Use	CMP, CL3P, CL2P, CMR, CL3R, CL2R, CMG, CM, PLTC, CL3, CL2, CMX, CL3X

\* Substitution allowed by Article 800 only

**Plenum** - Cables installed in ducts, plenums, and other spaces used for environmental air.

**Riser** - Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft.

**General Purpose** - For use in locations other than risers or plenums.

**Dwellings** - Cables for use in one, two or multi-family dwellings and in raceways.

Information is from Articles 800 and 725 of the 2011 National Electrical Code. Please consult these articles for details regarding specific applications.

## Appendix F: BNC &amp; RCA Connector Cross Reference

BNC & RCA Connector Cross Reference						
Gepco® Brand Cable Part Number	BNC Connectors			RCA Connectors		
	Kings®	ADC®	Gepco®	Kings®	ADC®	Canare®
SV253STR, SV254STR, SV255STR, SV256STR	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
SV253SR, SV254SR, SV255SR, SV256SR	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
SV253SP, SV243SP, SV253SP	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
RGB62	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
RGB62TS	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
RGB644	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
RGB644TS	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
RGB6C5, RGB6C52	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
RGB6C5TS	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
VA2/2TP, VA2/3TP	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
VA2/3, VA2/4, VA2/5	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VB1860/VB1890	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VB1890TS	2065-10-9	BNC-10	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VB2095	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
V5020	755-114-9	N/A	N/A	N/A	N/A	N/A
VC1460/VB1490TK	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
VC1895	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VC1895TS	2065-10-9	BNC-10	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VC2095 Series (Non-Plenum)	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VC2095TS	2065-2-9	BNC-6	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VDM230, VS5230	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
VDM250	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
VDM250D	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
VDM260	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
VE61859M	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VHD1100, VHD1100PEF	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
VHD1100F	N/A	N/A	BNC-XL-6	N/A	N/A	N/A
VHD1100TK	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
VHD1300	N/A	N/A	BNC-XL-6	N/A	N/A	N/A
VHD2001M	2065-10-9	BNC-8	BNC-XL-3	N/A	N/A	N/A
VHD2000M	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VHD7000	2065-12-9	BNC-27	N/A	N/A	N/A	N/A
VJ59U	2065-7-9	BNC-2	N/A	N/A	N/A	N/A
VP618M	2065-6-9	BNC-4	N/A	N/A	N/A	RCAP-C77
VP618PE	2065-6-9	BNC-4	N/A	N/A	N/A	RCAP-C77
VPM2000	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VPM2000TS/TK	2065-2-9	BNC-6	BNC-XL-2	3345-1-9	N/A	RCAP-C4F
VRC13	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VRC618	2065-2-9	BNC-1	N/A	3345-1-9	CRCA-1	RCAP-C4F
VS102000, VS52000	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
VS102001	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VS10230, VS12230, VS16230	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25F
VS32001, VS42001, VS52001	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VS57000	2065-12-9	BNC-27	N/A	N/A	N/A	N/A
VSD2001, VSD2001PEF	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VSD2001TS	2065-10-9	BNC-10	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53

## Appendix F: DIN Connector Cross Reference

DIN Connector Cross Reference		
Gepco® Brand Cable Part Number	Kings®	Gepco®
VDM230, VDM230TS, VDM250, VDM250D, VS5230, VS10230, VS12230, VS16230	0345-E00-C7202N	DIN1023-23 (9911-NS731)
VDM260	N/A	DIN1023-26 (9911-NS700)
VPM2000, VHD2000M, VS52000, VS102000	0345-E00-C7101N	N/A

Kings is a registered trademark of Kings Electronics Company, Inc. ADC is a registered trademark of ADC Telecommunication, Inc. Canare is a registered trademark of Canare Electric Co., Ltd.

## Appendix F: F-Type Connector Cross Reference

F Connector Reference Chart			
Gepco® Brand Cable Part Number	AIM®	Canare®	ADC®
VA2/3, VA2/4, VA2/5	25-7030	FP-C4F	CF-1
VE61859M	N/A	FP-C4F	CF-1
VHD2000M	N/A	FP-C4F	CF-1
VHD1100, VHD1100TK, VHD1100PEF	25-7190	FP-C71	N/A
VJ59U	25-7030	FP-C4	N/A
VP618M	N/A	FP-C51	N/A
VP618PE	N/A	FP-C51	N/A
VPM2000	25-7030	FP-C4F	CF-1
VPM2000TS/TK	25-7049	N/A	N/A
VRC618, VRC13	N/A	FP-C4F	CF-1
VRC618, VRC13	N/A	FP-C4F	CF-1
VS102000, VS52000	25-7030	FP-C4F	CF-1
VS32001, VS42001, VS52001	25-7032	FP-C53	CF-8
VSD2001, VSD2001PEF	25-7032	FP-C53	CF-8
VS102001	25-7032	FP-C53	CF-8
VSD2001TS	25-7047	FP-C55	N/A
VB2095	25-7030	FP-C4F	CF-1
VC2095 Series (Non-Plenum)	25-7030	FP-C4F	CF-1
VC2095TS	25-7049	N/A	N/A
VB1860/VB1890	25-7032	FP-C53	CF-8
VB1890TS	25-7047	FP-C55	N/A
VB18Q	25-7034	N/A	N/A
VB18QTS	25-7047	N/A	N/A
VC1895	25-7032	FP-C53	CF-8
VC1895TS	25-7047	FP-C55	N/A
VB1460/VB1490TK	25-7190	FP-C71	N/A

## Appendix F: Camera Cable Connector Cross Reference

Triax Connector Reference Chart											
Gepco Part Number	Kings® Part Numbers						ADC® Part Numbers				
	Male Tri-Loc® Cable Mount	Female Tri-Loc® Cable Mount	Male Tri-Loc® Panel Mount	Female Tri-Loc® Panel Mount	Female Tri-Loc® Panel Mount (rear mount)	Die	Tool	Male ProAx™ Cable Mount	Female ProAx™ Cable Mount	Die	Tool
LVT61811	7705-3	7703-3	7702-3	7702-6	7702-9	KTH-2041	KTH-1000	TCP-C12	TCJ-C12	TD-C	WT-2 or WT-3
LVT61859	7705-2	7703-2	7702-2	7702-5	7702-8	KTH-2002	KTH-1000	TCP-B38	TCJ-B38	TD-BEF	WT-2 or WT-3
LVT61859S	7705-2	7703-2	7702-2	7702-5	7702-8	KTH-2002	KTH-1000	TCP-B38	TCJ-B38	TD-BEF	WT-2 or WT-3
VT61811	7705-1	7703-1	7702-1	7702-4	7702-7	KTH-2040	KTH-1000	TCP-A12	TCJ-A12	TD-ADH	WT-2 or WT-3
VT61811PE	7705-1	7703-1	7702-1	7702-4	7702-7	KTH-2040	KTH-1000	TCP-A12	TCJ-A12	TD-ADH	WT-2 or WT-3
VT61811TK	7705-6	7703-8	7702-14	7702-15	N/A	KTH-2040	KTH-1000	TCP-D38	TCJ-D38	TD-ADH	WT-2 or WT-3
VT61859	7705-2	7703-2	7702-2	7702-5	7702-8	KTH-2002	KTH-1000	TCP-B38	TCJ-B38	TD-BEF	WT-2 or WT-3

Note: All ADC cable mount ProAx™ connectors can be converted to panel mount types with optional hardware.

Lemo Hybrid Fiber Connector Reference Chart							
Gepco Part Number	Lemo® Part Numbers						
	Cable Mount		Panel Mount		Fiber Contacts		
	Plug	Socket	Plug	Socket	Socket (Round)	Plug	Socket
HDC920, HDC920R, HDC160	FUW.3K.93C.TLMC96	PUW.3K.93C.TLCC96	FMW.3K.93C.TLMC96Z	PBW.3K.93C.TLCC96Z	PEW.3K.93C.TLCC96Z	PSS.F2.BB2.LCE30	FFS.F2.BB2.LCE30
HDC120P	FUW.3K.93C.TLMC12	PUW.3K.93C.TLCC12	—	—	—	PSS.F2.BB2.LCE30	FFS.F2.BB2.LCE30

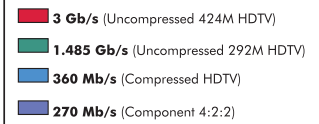
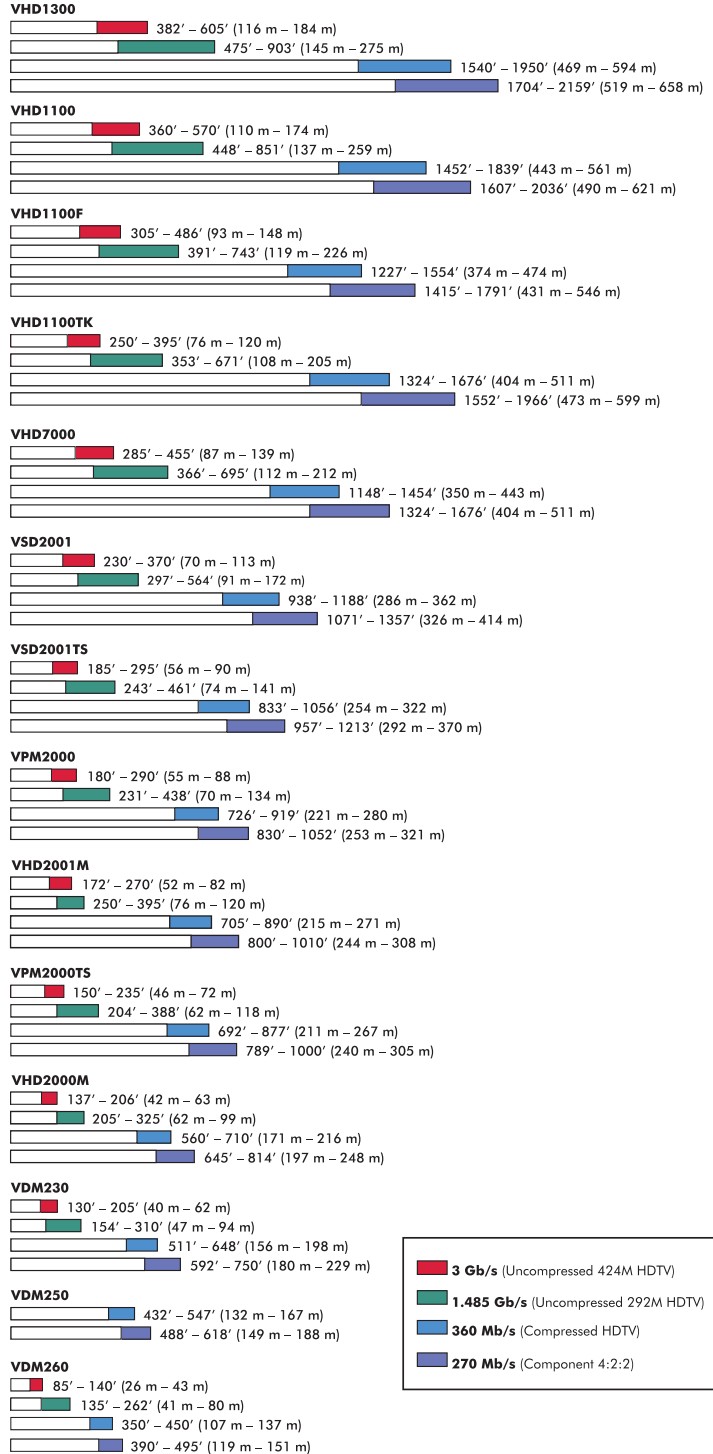
Canare® Hybrid Fiber Connector Reference Chart				
Gepco Part Number	Canare® Part Numbers			
	Cable Mount		Panel Mount	
	Plug	Socket	Plug	Socket
HDC920, HDC920R	FCF	FCM	FCFRC	FCMRC

AIM is a registered trademark of AIM Electronics Corporation. Canare is a registered trademark of Canare Electric Co., Ltd. ADC and ProAx are trademarks of ADC Telecommunication, Inc. Kings and Tri-Loc are registered trademarks of Kings Electronics Company, Inc. LEMO is a registered trademark of Interlemon Holding, S.A.

## Appendix G: Serial Digital Coax Distances

Maximum values represent the approximate range at which the bit error rate “cliff region” will occur.

In every system the quality of the output pulse, the amount of loss that can be compensated for by the receiver, the number of passive connectors and patch points and the exact amount of cable loss will vary. Because of this, the exact maximum cable length possible will vary. The graphs to the right do not represent the exact cable length possible; they only serve as a guide in selecting the appropriate cable type. When installing a cable in a system and it is approaching its maximum range, it is highly recommended that individual system testing and research be done.



## Appendix H: Glossary

**Alum**—Aluminum.

**Alum/Polyester Tape**—Conductive aluminum foil bonded to a non-conductive polyester tape. Provides for improved flex-life and allows for cables without pair jackets to have isolated shields.

**Annealed Wire**—Wire, which after final draw-down, has been heated and slowly cooled to remove the effects of cold working.

**Attenuation**—The decrease in magnitude of a wave as it travels through any transmitting medium, such as cable or circuitry. Attenuation is measured as a ratio or as the logarithm of a ratio (decibel).

**AWG**—American Wire Gauge. A wire diameter specification. The higher the AWG number, the smaller the wire diameter.

**AWM**—Designation for appliance wiring material.

**Balanced Circuit**—A circuit so arranged that the impressed voltages on each conductor of the pair are equal in magnitude but opposite in polarity with respect to ground.

**Bandwidth**—The difference between the upper and lower limits of a given band of frequencies. Expressed in Hertz.

**BC**—Bare copper.

**BCCS**—Bare copper clad steel.

**Bel**—A unit that represents the logarithm of the ratio of two levels. The number of bels is equal to the logarithm<sub>10</sub> of (P1/P2) 2 logarithm<sub>10</sub> (11/12). See dB.

**Braid**—A textile or metallic group of filaments interwoven into a cylindrical structure to form a covering over one or more wires or flattened into a strap.

**Capacitance**—Storage of electrically separated charges between two plates having different potentials. The value depends largely on the surface area of the plates and the distance between them. The unit of measurement is expressed in farads.

**Capacitance, Mutual**—The capacitance between two conductors with all other conductors, including shield, short circuited to ground.

**Cellular FEP**—Expanded or “foam” FEP (fluorinated ethylene-propylene) consisting of individual closed cells of inert gas suspended in an FEP medium. This results in a reduction of the dielectric constant and an increase in the velocity of propagation percentage.

**Cellular Polyethylene**—Expanded or “foam” polyethylene, consisting of individual closed cells of inert gas suspended in a polyethylene medium, resulting in a reduction of dielectric constant and an increase in velocity of propagation (%).

**Circular Mil**—The area of a circle one mil (.001”) in diameter; 7.845 x 107 sq. in. Used in expressing wire cross sectional area.

**Coax**—coaxial.

**Coaxial Cable**—A cable consisting of two cylindrical conductors with a common axis, separated by a dielectric.

**Common Mode**—Noise, caused by a difference in “ground potential”. By grounding at either end rather than both (usually grounded at one source) one can reduce this interference.

**Compound**—An insulating or jacketing material made by mixing two or more ingredients.

**Conductor**—A material suitable for carrying electrical current.

**Crosstalk**—A type of interference caused by signals from one circuit being coupled into adja-

cent circuits.

**dB**—Decibel(s).

**DCR**—Direct current resistance.

**Dielectric**—Any insulating material between two conductors which permits electrostatic attraction and repulsion to take place across it.

**Dielectric Constant**—Also called permittivity. That property of a dielectric which determines the amount of electrostatic energy that can be stored by the material when a given voltage is applied to it. Actually, the ratio of the capacitance of a capacitor using the dielectric to the capacitance of an identical capacitor using a vacuum as a dielectric.

**Elastomer**—A class of long chain polymers capable of being crosslinked to produce elastic compounds, e.g., polychloroprene and ethylene propylene rubber.

**Electromagnetic**—Referring to the combined electric and magnetic fields associated with movements of electrons through conductors.

**EMI**—Electromagnetic interference.

**Farad**—Unit of capacitance whereby a charge of one coulomb produces a one volt potential difference.

**FEP**—(fluorinated ethylene-propylene) A fluorocarbon extrudable resin with good electrical insulating properties and chemical and heat resistance.

**Flex-life**—The measurement of the ability of a conductor or cable to withstand repeated bending.

**ft**—Feet.

**GEP-FLEX**—Gepco® Brand TPE jacket compound that is extra-flexible, durable, and UL Listed. Remains flexible in high/low temperature environments.

**Halar®**—Registered trademark, Ausimont, U.S.A., Inc.

**Impedance**—The total opposition a circuit, cable, or component offers to alternating current. It includes both resistance and reactance and is generally expressed in ohms.

**Impedance, Characteristic**—In a transmission cable of infinite length, the ratio of the applied voltage to the resultant current at the point the voltage is applied. Or, the impedance which makes a transmission cable seem infinitely long, when connected across the cable’s output terminals. For a wave guide, it is the ratio of rms voltage to the total rms longitudinal current at certain points on a diameter, when the wave guide is match-terminated.

**Insertion Loss**—A measure of the attenuation of a device by determining the output of a system before and after the device is inserted into the system.

**Insulation**—A material having good dielectric properties which is used to separate close electrical components, such as cable conductors and circuit components.

**Jacket**—Pertaining to wire and cable, the outer sheath which protects against environment and may also provide additional insulation.

**km**—Kilometer.

**m**—Meters.

**M**—1000.

**MHz**—Megahertz (one million cycles per second). Formerly Mc.

**mm**—Millimeter.

**Mylar®**—Registered trademark of DUPONT TEIJIN

FILMS for a polyester material.

**Noise**—Any spurious or unwanted signal in a cable or electrical circuit, e.g., EMI, RFI, tape, or amplifier thermal noise.

**OHM**—The term used to express resistance in an electrical circuit where the resistance is directly proportional to the voltage and inversely proportional to the current.

**PE**—Polyethylene.

**pF**—Pico farad(s).

**Plenum**—The air return path of a central air handling system, either duct work or open space over a dropped ceiling.

**Polyethylene**—A family of insulations derived from the polymerization of ethylene gas and characterized by outstanding electrical properties, including high I.R., low dielectric constant, and low dielectric loss across the frequency spectrum. Mechanically rugged, it resists abrasion and cold flow.

**Polypropylene**—A thermoplastic similar to polyethylene but stiffer and having a higher softening point (temperature).

**Polyurethane**—A family of flexible, abrasion-resistant polymers used for harsh environment cables.

**Polyvinylchloride**—A general purpose family of insulations whose basic constituent is polyvinylchloride or its copolymer with vinyl acetate. Plasticizers, stabilizers, pigments and fillers are added in lesser quantity to improve mechanical and/or electrical properties of this material.

**PP**—Polypropylene.

**ProAx™**—Trademark of ADC Telecommunications, Inc.. Camera connector for use with triaxial cable.

**PU**—Polyurethane.

**PVC**—Polyvinylchloride.

**PVDF**—Polyvinylidene fluoride, a fluorocarbon material.

**Shield**—In cables, a metallic layer placed around a conductor to prevent electrostatic interference between the enclosed wires and external fields.

**Solid Conductor**—A conductor consisting of a single wire.

**Stranded Conductor**—A conductor composed of single solid wires twisted together, either singly or in groups.

**TC**—Tinned copper.

**Thermoplastic**—A material which softens when heated or reheated and becomes firm on cooling.

**TPE**—Thermoplastic elastomer.

**Triaxial Cable**—A cable construction having three coincident axes, such as conductor, first shield, and second shield all insulated from one another.

**Tri-Loc®**—Registered trademark of Kings Electronics, Inc. Camera connector for use with triaxial cable.

**UL**—(Underwriters Laboratories) A nonprofit independent organization which operates a listing service for electrical and electronic materials and equipment.

**Velocity of Propagation**—The speed of an electrical signal down a length of cable compared to speed in free space expressed as a percent. It is the reciprocal of the square root of the dielectric constant of the cable insulation.

## Appendix I: Competitor Cross Reference

## Belden® to Gepco® Brand

Belden®	Gepco® Brand	Belden®	Gepco® Brand	Belden®	Gepco® Brand	Belden®	Gepco® Brand	Belden	Gepco® Brand
1153A	C3529	1694A	VSD2001	5202FE	SSS164R	7789A	VSS230	B9A007	FMB6R/50
1164B	SV253STR	1694F	VHD2001M	5202U1	SSUB164	7791A	VS10230	B9A010	FMB12R/50
1167B	SV254STR	1694SB	VSD2001SB	5202UE	SSU164R	7792A	VS12230	B9A013	FMB2P/50
1172A	MM1024	1694WB	VSD2001PEF	5240U1	SSUB162	7796A	VSS2000	B9A014	FMB4P/50
1189A	C5785	1695A	VSD2001TS	5300FE	SSS182R	7798A	VS102000	B9A015	FMB6P/50
1189AP	C3525	1800B	DS401	5300UE	SSU182R	7804R	HDC920R	B9A018	FMB12P/50
1192A	MP1201	1800F	DS401M	5302FE	SSS184R	7810SB	V50105B	B9A037T	FMD2R/50
1212	CT504/350	1801B	DS401TS	5302UE	SSU184R	7855A	VHD7000	B9A038T	FMD4R/50
1213	CT504/350P	1802B	DS401D	533945	395011	7880A	DS608	B9A039T	FMD6R/50
1263B	VA2/3TP	1803F	DS404	5400FE	SSS202R	7890A	DS604	B9A042T	FMD12R/50
1277P	SV253SP	1805F	DS408	5402FE	SSS204R	7891A	DS601D	B9A043T	FMD2P/50
1277R	SV253SR	1806F	DS412	5402UE	SSU204R	7892A	DS612	B9A044T	FMD4P/50
1278P	SV254SP	1814R	GA61802GFC	543945	C1142	7893A	DS616	B9A045T	FMD6P/50
1278R	SV254SR	1815R	GA61804GFC	549945	C8028	7987P	E3842S	B9A048T	FMD12P/50
1279P	SV255SP	1816R	GA61806GFC	5500FE	SSS222R	7987R	E1842S	B9A062T	FMD24R/50
1279R	SV255SR	1817R	GA61808GFC	5502FE	SSS224R	7989P	E3843S	B9A611T	FMD24P/50
1280R	SV256SR	1818R	GA61812GFC	5502UE	SSU224R	7989R	E1843S	B9B005	FMB2R
1300SB	CT504S/STDSB	1819R	GA61816GFC	6000FE	SSS122P	8232A	VT61859	B9B006	FMB4R
1305A	CT504HD	1820R	GA61820GFC	6000UE	SSU122P	8233A	VT61811	B9B007	FMB6R
1306SB	V18/2PZSB	1822R	GA61826GFC	6002FE	SSS124P	8233WB	VT61811PEF	B9B010	FMB12R
1307A	SSPUB162	1823R	GA61832GFC	6002UE	SSU124P	82761	61801HS	B9B013	FMB2P
1308A	SSPUB164	1829P	C3524	6100FE	SSS142P	8281	VP618M	B9B014	FMB4P
1309A	SSPUB142	1829R	GA61820GFC	6100UE	SSU142P	8281F	VP618PE	B9B015	FMB6P
1310A	SSPUB144	1829R	C5886	6102FE	SSS144P	8412	M1042	B9B018	FMB12P
1314SB	SSU142SB	1855A	VDM230	6102UE	SSU144P	8413	MP1022	B9B037T	FMD2R
1315SB	SSU144SB	1855P	VDM230TS	6200FE	SSS162P	8451	SSS222R	B9B038T	FMD4R
1316SB	SSU122SB	1856A	LVT61859	6200UE	SSU162P	8461	1800	B9B039T	FMD6R
1317SB	SSU124SB	1857A	LVT61859S	6202FE	SSS164P	8471	1600	B9B042T	FMD12R
1319SB	CT604/STDSB	1858A	LVT61811	6202UE	SSU164P	8473	1400	B9B043T	FMD2P
1322R	C5889	1859A	VT61811TK	6300FE	SSS182P	8477	1200	B9B044T	FMD4P
1347A	VA2/4	1865A	VDM250	6300UE	SSU182P	8641	72401EZ	B9B045T	FMD6P
1410R	GA72408GFC	1883A	72401EZ	6302FE	SSS184P	8719	1600S	B9B048T	FMD12P
1411R	GA72412GFC	1901A	XB401	6302UE	SSU184P	8723	6600	B9B602T	FMD24R
1415R	GA72426GFC	1904A	XB404	633948	495035	8723SB	6600SB	B9B611T	FMD24P
1418B	SV255STR	1908A	XB408	6400FE	SSS202P	8760	1800S	B9W005	FSB2R
1426A	C1142	1912A	XB412	6402FE	SSS204P	87723	6600HS	B9W006	FSB4R
1502P	18/22AXLP	1916A	XB416	6402UE	SSU204P	87740	1800HS	B9W007	FSB6R
1502P	18/22CRTP	2412	CT604/250	643948	495028	87761	61801HS	B9W010	FSB12R
1502R	18/22AXL	2413	CT604/250P	649948	C8030	8777SB	6603SB	B9W013	FSB2P
1502R	18/22CRT	4812	CT604/500	6500FE	SSS222P	88723	6600HS	B9W014	FSB4P
1502SB	18/22CRTSB	4813	CT604/500P	6502FE	SSS224P	9116	C5886	B9W015	FSB6P
1504A	D61801EZGF	5000FE	SSS122R	6502UE	SSU224P	9116P	C3524	B9W018	FSB12P
1505A	VPM2000	5000UE	SSU122R	6543PA	6604HS	9116SB	VB1860SB	B9W037T	FSD2R
1505F	VHD2000M	5002FE	SSS124R	6545PA	6606HS	9154	SSS202R	B9W038T	FSD4R
1506A	VPM2000TS	5002UE	SSU124R	6546PA	6608HS	9170	VA2/5	B9W039T	FSD6R
1509C	GA72402GFC	5100FE	SSS142R	6548PA	6612HS	9180	DS601	B9W042T	FSD12R
1510C	GA72404GFC	5100UE	SSU142R	7710A	VS32001	9451	61801EZ	B9W043T	FSD2P
1512C	GA72408GFC	5102FE	SSS144R	7711A	VS42001	9451P	61801HS	B9W044T	FSD4P
1513C	GA72412GFC	5102U1	SSUB144	7712A	VSS2001	9451P	SSS222P	B9W045T	FSD6P
1514C	GA72416GFC	5102UE	SSU144R	7713A	VS102001	9451SB	61801E2SB	B9W048T	FSD12P
1517C	GA72426GFC	5140U1	SSUB142	7731A	VHD1100	9907	C5779	B9W602T	FSD24R
1518C	GA72432GFC	5200FE	SSS162R	7731SB	VHD1100SB	B9A005	FMB2R/50	B9W616T	FSD24P
1617A	C5044	5200UE	SSU162R	7732A	VHD1100TK	B9A006	FMB4R/50		

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Belden is a registered trademark of Belden, Inc.



## Appendix I: Competitor Cross Reference

### Canare® to Gepco® Brand

Canare®	Gepco® Brand	Canare®	Gepco® Brand	Canare®	Gepco® Brand	Canare®	Gepco® Brand	Canare®	Gepco® Brand
4S11	GSC134	L-2B2AT	72401EZ	L-4E4-12AT	GA61812GFC	L-7CFB	VHD1100	V3-5C	VSD2001TS
A2C3	6600	L-2E5	MP1022	L-4E4-16AT	GA61816GFC	L-7CHD	VHD1300	V3-5CFB	VS32001
DA202	DS601M	L-2T2S	XB201M	L-4E4-2AT	GA61802GFC	LF-2SM9	HDC920	V4-4CFB	VPM2000TS
DA202-2P	DS601D	L-3C2YS	VP618PE	L-4E4-4AT	GA61804GFC	LV-77S	VP618M	V4-5C	VSD2001TS
DA202-4P	DS604	L-3CFB	VDM230	L-4E4-8AT	GA61808GFC	MR202-12AT	GA72412GFC	V4-5CFB	VS42001
DA202-8P	DS608	L-4.5CHD	VSD2001	L-4E5C	MM1024	MR202-16AT	GA72416GFC	V5-3C	VP618PE
DA202AT	DS601	L-4CFB	VPM2000	L-4E6S	MP1201	MR202-2AT	GA72402GFC	V5-3CFB	VSS2000
DA206	DS401M	L-4CFTX	LVT61859	L-5CFB	VSD2001	MR202-32AT	GA72432GFC	V5-4CFB	VPM2000TS
GS-6	GLC20	L-4E3-16P	XB416	L-5CFB	VSD2001PEF	MR202-4AT	GA72404GFC	V5-5C	VSD2001TS
L-2.5CHD	VDM230	L-4E3-4P	XB404	L-5CHD	VHD7000	MR202-8AT	GA72408GFC	V5-5FCB	VSS2001
L-2.5FCB	VDM250	L-4E3-8P	XB408	L-6CHD	VHD1100	V3-4CFB	VPM2000TS		

### West Penn to Gepco® Brand

West Penn	Gepco® Brand	West Penn	Gepco® Brand	West Penn	Gepco® Brand	West Penn	Gepco® Brand	West Penn	Gepco® Brand
224	SSU182R	252825	VDM250D	3244	SSS184R	AQ296	HBS122T	C2415	18/22CCT
225	SSU162R	25291B	SSS222P	3245	SSS164R	AQ3244	HBS184T	C2425	18/22CCD
226	SSU142R	25292B	SSS202P	3270	SSS226R	AQ3245	HBS164T	D2401	72401EZ
227	SSU122R	25293B	SSS182P	3CRGB	SV253SR	AQC189	HBHD201	D25350	18/22CRTP
241	SSU224R	25294B	SSS162P	454	61801EZ	AQC224	HBU182	D25454	61801HS
242	SSU204R	25295B	SSS142P	5CRGB	SV255SR	AQC225	HBU162	DA2401	DS401
244	SSU184R	25296B	SSS122P	6100	C5886	AQC240	HBU2240	DA2402	DS401D
245	SSU164R	253241B	SSS224P	6300	C5889	AQC290	HBS2220	DA252401	DS401TS
246	SSU144R	253270B	SSS226P	6350	VSD2001	AQC291	HBS222	HA1624	164NCAT
248	SSU124R	253544B	SSS184P	77350	18/22CRT	AQC292	HBS202	HA225	SSPUB162
25806	495035	25488B	SSU124P	806	395011	AQC293	HBS182	HA226	SSPUB142
25815	495028	256100	C3524	815	C1142	AQC3186	HBS186	HA245	SSPUB164
25819	VPM2000TS	256300	C3525	819	VPM2000	AQC351	HBS2230	HA246	SSPUB144
25224B	SSU182P	256350	VSD2001TS	AQ224	HBU182T	AQC352	HBS223	HA825	VDM230
25225B	SSU162P	270	SSU226R	AQ225	HBU162T	AQC355	HBS2240	HD25825	VDM230TS
25226B	SSU142P	2815B	C8028	AQ226	HBU142T	AQC357	HBS224	M58813	E1842S
25227B	SSU122P	291	SSS222R	AQ227	HBU122T	AQC358	HBS203	M58814	E3842S
25241B	SSU224P	292	SSS202R	AQ244	HBU184T	AQC359	HBS204	WP4546	GA61806GFC
25242B	SSU204P	293	SSS182R	AQ245	HBU164T	AQC430	HBSP222	WP4548	GA61808GFC
25244B	SSU184P	294	SSS162R	AQ246	HBU144T	AQC432	HBSP226	WP45412	GA61812GFC
25245B	SSU164P	295	SSS142R	AQ293	HBS182T	AQC439	HBSP224	WP6355	VSS2001
25246B	SSU144P	296	SSS122R	AQ294	HBS162T	AQC806	HBS181	WP8253	SV253STR
25270B	SSU226P	3011	SSS204R	AQ295	HBS142T	AQC815	HBS201	WP8255	SV255STR
252815	C8030	3241	SSS224R						

### Crestron® to Gepco® Brand

Crestron®	Gepco® Brand	Crestron®	Gepco® Brand
CRES-CAT-DC-NP	18/22CDC	CRESNET-DM-P	SSS222P
CRES-CAT-D-NP	18/22CCD	CRESNET-NP	18/22CRT
CRES-CAT-NP	18/22CCT	CRESNET-P	18/22CRTP
CRES-CAT-Q-NP	18/22CCQ	DM-CBL-8G-NP	CT504/SDM
CRESNET-DM-NP	SSS222R	DM-CBL-8G-P	CT504/SDMP

### Mohawk to Gepco® Brand

Mohawk	Gepco® Brand
M96921	HDC920R
M96924	FSD2P, HDP221

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Canare is a registered trademark of Canare Electric Co., Ltd. Crestron is a registered trademark of Crestron Electronics, Inc.



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01103	111	6600	13	FSB**P	74	HBU182	119	SSS142R	28	VBB10	51
01104	111	6600HS	13	FSB**R	74	HBU182T	121	SSS144P	29	VBB12	51
01105	111	6600SB	124	FSB**T	70	HBU184T	121	SSS144R	28	VBB16	51
01106	111	6603SB	124	FSC-SC	77	HBU2240	119	SSS162P	29	VCON3FC	50
01107	111	6604HS	12	FSD**P	74	HDB	77	SSS162R	28	VCON3MP	50
01108	111	6606HS	12	FSD**R	74	HDC3R	68	SSS164P	29	VCON5FC	50
01109	111	6608HS	12	FSD**T	70	HDC120P	66	SSS164R	28	VCON5MP	50
1200	25	6612HS	12	GA61802GFC	6	HDC160	67	SSS182P	29	VCON6FC	50
1200HS	25	61801EZ	14	GA61804GFC	6	HDC720HD	63	SSS182R	28	VCON6MP	50
01311	113	61801EZLS	132	GA61806GFC	6	HDC920	64	SSS184P	29	VCON10FC	50
01342	113	61801EZSB	124	GA61806PEF	8	HDC920HD	65	SSS184R	28	VCON10MP	50
01343	113	61801HS	14	GA61808GFC	6	HDC920HDG	65	SSS202P	13	VCON12FC	50
01344	113	72401EZ	15	GA61812GFC	6	HDC920PEF	64	SSS202R	13	VCON12MP	50
01360	113	80611	111	GA61812PEF	8	HDC920R	64	SSS204P	29	VCON16FC	50
01364	113	80621	111	GA61816GFC	6	HDP221	69	SSS204R	28	VCON16MP	50
01380	113	80631	111	GA61820GFC	6	HDR1	80	SSS222P	13	VDM230	40
01381	113	80641	111	GA61826GFC	6	HDR1-EKIT-NM	80	SSS222R	13	VDM230ELS	133
01383	113	80651	111	GA61832GFC	6	HDR1-EKIT-NS	80	SSS224P	29	VDM230LT	41
01384	113	80661	111	GA72402GFC	7	HDR1-EKIT-P	80	SSS224R	28	VDM230TS	40
1400	25	80671	111	GA72404GFC	7	HDR1-EKIT-S	80	SSS226P	29	VDM250	40
1400HS	25	80681	111	GA72404GFCLS	130	HMD	78	SSS226R	28	VDM250D	40
1600	25	80691	111	GA72408GFC	7	HMD-EKIT-NM	78, 79	SSU102P	27	VDR3*	50
1600HS	25	80701	111	GA72408GFCLS	130	HMD-EKIT-NS	78, 79	SSU102R	26	VDR3*S	50
1800	25	988-3511-A	87	GA72412GFC	7	HMD-EKIT-P	78, 79	SSU122P	27	VDR5*	50
1800HS	25	CT104/SDM	98	GA72412GFCLS	130	HMD-EKIT-S	78, 79	SSU122R	26	VDR5*S	50
02601	112	CT104/SDMP	98	GA72412TP	8	HMP8	82	SSU122SB	125	VDR10*	50
02602	112	CT504/350	96	GA72416GFC	7	HMP8-AJ	83	SSU124P	27	VE61859M	43
02603	112	CT504/350P	96	GA72416GFCLS	130	HMP8-AP	83	SSU124R	26	VHD1100	38
02604	112	CT504HD	97	GA72426GFC	7	HMP8-B	83	SSU124SB	125	VHD1100F	38
02605	112	CT504HDX	97	GA72426GFCLS	130	HMP8-EKIT-P	82	SSU142P	27	VHD1100LS	133
02606	112	CT504/SDM	99	GA72432GFC	7	HMP8-EKIT-S	82	SSU142R	26	VHD1100PEF	39
02607	112	CT504/SDMP	99	GA72432GFCLS	130	HMP8-F	83	SSU142SB	125	VHD1100SB	126
02608	112	CT504/STD	95	GA72448GFCLS	130	HMP8-LB	83, 84	SSU144P	27	VHD1100TK	38
02609	112	CT504/STDP	95	GHF12B	66	HMP8-N	83	SSU144R	26	VHD1300	38
02621	112	CT504/STDSB	129	GHF16A	67	HMP8-RP	83	SSU144SB	125	VHD2000M	42
02622	112	CT604/250	93	GHF92A	64	HMP8-S	83	SSU162P	27	VHD2001M	42
02623	112	CT604/250P	93	GHF92B	64, 86	HMP-B	84	SSU162R	26	VHD7000	38
02624	112	CT604/500	94	GHF92HD	65	HMPF	84	SSU164P	27	VMC3-length	51
02631	112	CT604/500P	94	GHF92HDX	65	HMP-N	84	SSU164R	26	VMC5-length	51
02632	112	CT604/STD	92	GHF92HDX	65	GHF92HDX	65	SSU182P	27	VMC6-length	51
02633	112	CT604/STDP	92	GHF92HDX	65	GHF92HDX	65	SSU182R	26	VMC10-length	51
02634	112	CT604/STDSB	128	GHP	69	GHP	69	SSU184P	27	VMC12-length	51
02635	112	CTS2504HDX	97	GLC20	17	GLC20	17	SSU184R	26	VMC16-length	51
02636	112	CTS4504HDX	97	GNO	72	GNO	72	SSU202P	27	VP618M	44
02637	112	D61801EZGF	14	GSC102OFC	22	GSC102OFC	22	SSU202R	26	VP618PE	44
02638	112	D72401EZGF	15	GSC122OFC	22	GSC122OFC	22	SSU204P	27	VPM2000	38
02639	112	DLC122	105, 110	GSC132	23	GSC132	23	SSU204R	26	VPM2000LS	133
02641	112	DLC124	105, 110	GSC134	23	GSC134	23	SSU222P	27	VPM2000TS	38
02642	112	DLC222	105, 110	GSC138	23	GSC138	23	SSU222R	26	VS230	52
02643	112	DLC224	105, 110	GSKIT-BKFBR-L	76, 78, 79	GSKIT-BKFBR-L	76, 78, 79	SSU224P	27	VS5230	52
02645	112	DS401	34	GSKIT-BKFBR-S	76, 78, 79	GSKIT-BKFBR-S	76, 78, 79	SSU224R	26	VS6230	52
02646	112	DS401D	34	GSKIT-HDC3R	76, 78, 79	GSKIT-HDC3R	76, 78, 79	SSU226P	27	VS10230	52
02725	113	DS401LS	132	GSKIT-HDP221P	76, 77, 78, 79	GSKIT-HDP221P	76, 77, 78, 79	SSU226R	26	VS12230	52
02726	113	DS401M	34	GSRHDC3R	68	GSRHDC3R	68	SSUB122	24	VS16230	52
02727	113	DS401TS	34	HBP1-*U	85	HBP1-*U	85	SSUB124	24	VS32001	54
02728	113	DS404	32	HBP2-*U	85	HBP2-*U	85	SSUB142	24	VS42001	54
02762	113	DS404LS	131	HBPA-*U	85	HBPA-*U	85	SSUB144	24	VS52000	53
02765	113	DS408	32	HBS122T	120	HBS122T	120	SSUB162	24	VS52001	54
02766	113	DS408LS	131	HBS142T	120	HBS142T	120	SSUB164	24	VS57000	55
02768	113	DS412	32	HBS162T	120	HBS162T	120	SV2535P	45	VS102000	53
02769	113	DS412LS	131	HBS164T	120	HBS164T	120	SV2535R	47	VS102001	54
02770	113	DS601	35	HBS181	122	HBS181	122	SV2535STR	46	VSD2001	38
12/22LGRX	103	DS601D	35	HBS182	118	HBS182	118	SV2545P	45	VSD2001LS	133
16/18SVA	103	DS601LS	132	HBS182T	120	HBS182T	120	SV2545R	47	VSD2001PEF	39
16/18SVAP	103	DS601M	35	HBS184T	120	HBS184T	120	SV2545STR	46	VSD2001SB	126
18/22AXL	101	DS604	33	HBS186	118	HBS186	118	SV2555P	45	VSD2001TS	38
18/22AXLP	101	DS608	33	HBS201	122	HBS201	122	PA2	108	VT61811	61
18/22CCD	100	DS612	33	HBS201HD	122	HBS201HD	122	PA2C	108	VT61811PEF	61
18/22CCQ	100	DS616	33	HBS202	118	HBS202	118	PA2T	109	VT61811TK	61
18/22CCT	100	DS624	33	HBS203	117	HBS203	117	PA8	108	VT61859	61
18/22CDC	100	DT61812	10	HBS204	117	HBS204	117	PA12	108	XB20UB	17
18/22CRT	100	DTBXS912FNMFG	11	HBS222	118	HBS222	118	PA12C	108	XB201DBM	19
18/22CRTP	100	DTBXS912FNMNG	11	HBS223	117	HBS223	117	RGB62	48	XB201M	19
18/22CRTSB	123	DTBXS1624FYMFG	11	HBS224	117	HBS224	117	RGB62TS	48	XB401	16
18/22GFE	103	FC1-xx-LCD-IS	87	HBS2220	118	HBS2220	118	RGB644	49	XB401FB	16
18/22KYP	102	FC1-xx-SCD-IS	87	HBS2230	117	HBS2230	117	RGB644TS	49	XB404	9
144NCAT	101	FC1-xxST	87	HBS2240	117	HBS2240	117	SMPT-304TS	62	XB408	9
162VANT65	104	FMB**P	75	HBSP222	116	HBSP222	116	SSPUB142	24	XB412	9
164LTCH	104	FMB**R	75	HBSP224	116	HBSP224	116	SSPUB144	24	XB416	9
164NCAT	101	FMB**T	71	HBSP226	116	HBSP226	116	SSPUB162	24		
182LUTDS	102	FMD**P	75	HBU122T	121	HBU122T	121	SSPUB164	24		
184LUTDS	102	FMD**R	75	HBU142T	121	HBU142T	121	SSS122P	29		
216-101-E	87	FMD**T	71	HBU144T	121	HBU144T	121	SSS122R	28		
224SLTCH	104	FP1-xx-LCD-IS	87	HBU162	119	HBU162	119	SSS124P	29		



# Corporate Social Responsibility

## CREATING SHARED VALUE

General Cable believes corporate social responsibility (CSR) is about creating shared value. That means keeping a dual focus in our business decisions: what is good for us as a company and what contributes to the greater good of the communities in which we live and work.



### **SAFETY**

#### **Working safer by working together**

General Cable has one worldwide safety vision and goal – **ZERO & BEYOND**. We measure safety performance globally, share best practices and implement sound health and safety management systems. Many of our facilities worldwide are OHSAS 18001 (safety management system) certified. All North American facilities have implemented an equivalent health and safety management system. General Cable was a pioneer in obtaining the OHSAS 18001 Certificate for Occupational Health and Safety Management Systems in Europe and North Africa.



### **SUSTAINABILITY**

#### **Responsible practices in daily operations**

As a global leader in the wire and cable industry, General Cable recognizes its role and responsibility in promoting sustainability. Our strongest business value is continuous improvement in all areas of our company. Across our many businesses, the quest to introduce new and better products through continuous improvement in environmental designs reflects our commitment to achieving industry-leading standards and responding proactively to global environmental issues. General Cable was the first cable manufacturer to obtain certification for its environmental management system, in accordance with the ISO 14001 and EMAS Standards.



### **CITIZENSHIP**

#### **A commitment to being good citizens**

Being responsible citizens in our communities is of the utmost importance to us. Unequivocal honesty, integrity, forthrightness and fair dealing have long been part of General Cable's core values and are expected globally in all of our business relationships with our customers, employees, suppliers, neighbors and competitors. Our company leaders and employees strive to make a difference throughout a host of volunteer activities and financial support, improving the communities in which we live and work.



### **INNOVATION**

#### **Technologies that power and connect the world**

General Cable is delivering innovation that matters. We are focusing on R&D expertise and investing in developing wire and cable solutions that meet the challenges confronting our customers and the world. In working together and using all the ingenuity and creativity we have, we will reach the goal of being the preeminent supplier of wire and cabling solutions in the industry, both with green constructions and designs for the ever-growing renewable energy market.



A commitment to achieving industry-leading standards and responding proactively to environmental global issues.



Visit [www.GeneralCableCSR.com](http://www.GeneralCableCSR.com) to learn more.

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info@generalcable.com



A commitment to achieving industry-leading standards and responding proactively to environmental global issues.

## Global Reach



General Cable serves customers through a global network of 57 manufacturing facilities in 26 countries and sales representatives and distribution centers worldwide. The Company is solely dedicated to the production of high-quality energy, industrial, specialty and communications wire and cable products. In addition to its breadth of product line and strong brand recognition, the Company offers competitive strengths in such areas as technology, manufacturing, distribution and logistics, and sales and customer service. This combination enables General Cable to better serve its customers as they expand into new geographic markets.



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