

# Cabling Solutions

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









# 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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# **TABLE OF CONTENTS**

ANALOG AUDIO CABLES 4-29

Multi-Pair Guitar/Instrument Cable

Single & Dual-Pair Speaker Cable
Microphone Cable DT12 Breakout

DIGITAL AUDIO CABLES 30-35

110  $\Omega$  AES/EBU Multi-Pair 110  $\Omega$  AES/EBU Single-Pair

VIDEO CABLES 36-57

High-Definition Coax Video Snakes
Analog Coax Composite A/V

Precision Video Coax V-CON Multi-Channel Video

Component RGB

CAMERA & FIBER OPTIC SOLUTIONS

Triax Multi-Mode Fiber
Hybrid Fiber SMPTE Tester

HD Electrical Boxes, Racks & Panels

Tactical Fiber SMPTE 304/311 Workflows

Single-Mode Fiber

NETWORK, AUTOMATION & LIGHTING CONTROL CABLES 90-105

Category 6 Automation
Category 5e Lighting Control
Heavy-Duty Tactical Cat 5e DMX Lighting

TOURING & STAGE LIGHTING CABLES 106-113

DMX Lighting Portable Power Cords

RunONE™ Powered Cables

SPECIALTY CABLES 114-133

HydroBloc™ Water-Resistant Cables

ABS/Shipboard

Low-Smoke, Zero Halogen (LSZH)

CABLE ASSEMBLIES GUIDE 134-135

Audio Assemblies and Breakout Systems Video Assemblies and Breakout Systems Fiber Optic Assemblies and Breakout Systems Custom Assemblies, Panels and Harnessing CUSTOMER TOOLS 136-137

Mobile X-Ref & Product Directory

Panel Designer

COMMERCIAL A/V GUIDE 138-141

**Audio Cables** 

Video

Automation & Lighting Control RunONE™ Powered Cables

APPENDIX 142-152

Color Codes

Wire Gauge Specifications Conduit Capacity Chart Diameter of Cable Bundles

NEC Cable Substitution Hierarchy

Connector Cross Reference Serial Digital Coax Distances

Glossary

58-89

Competitor Cross Reference

Index

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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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**

8 8 8 9 10 11 12 13 13 14 15 16 17 17 18 19 20 21 22 22 23 24 24 25 26 27 28 29	• • • • • • • • • • • • • • • • • • •	• • Commercial A/V	• • • Assemblies
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# In This Section:

Multi-Pair: GEP-FLEX 22 AWG Multi-Pair: GEP-FLEX 24 AWG Multi-Pair: Thin-Profile 12-Pair Multi-Pair: Direct Burial Multi-Pair: X-Band

Multi-Pair: Heavy-Duty 12-Channel

DT12 Breakout Box Multi-Pair: Plenum Two-Pair Shielded

High-Grade Line Level Audio Single- & Dual-Pair: 22 AWG Single- & Dual-Pair: 24 AWG

X-Band Single-Pair

Guitar/Instrument: Low Capacitance Guitar/Instrument: X-Band Dual Shield

Microphone: Heavy-Duty Microphone: X-Band Microphone: Quad Star Microphone: Thin Profile Speaker: High Definition

Speaker: High-Bandwidth HBW Series Speaker: Portable Multi-Conductor

Speaker: Indoor/Outdoor Direct Burial High-Resolution

Speaker: Indoor/Outdoor Direct Burial Speaker: Permanent Installation, Unshielded Speaker and Control: Unshielded Riser 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.

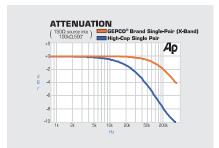
# **Easy to Terminate**

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

# **Electrical Characteristics & Specifications**

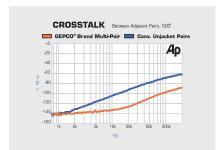
# **Bandwidth & Low Attenuation**

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 commonmode noise rejection.





# 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 & 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

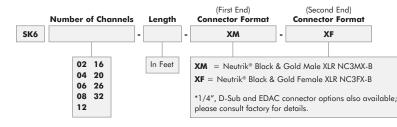
Ideal for Extended-Distance Runs

Conductors	Insulation/ Color Code	Pair Shield	Pair Drain	Pair Ja (Type, C Color C	OD)/	Overall Shield	Overall Common Drain	Master Jacket	UL Type
22 AWG (7x30) Stranded TC	PE, 0.010", (0.254 mm) V Red & Black	Vall/ 100% Foil	22 AWG (7x30) Stranded TC	Base 10	40" (3.56 mm)/ (See Color nart 1, Page 142)	100% Foil	16 AWG (19x29) Stranded TC 20 AWG (7x28) Stranded TC f GA61802GFC		CMR
Mechanical S	pecifications	(Individual)							
Part Number	# of Pairs	Nominal OD	Approx. Weigh	nt	Part Number	# of Pa	irs Nominal OD	Approx. Weigl	ht
GA61802GFC	2	0.360" (9.1 mm)	67 lbs/Mft (100	) kg/km)	GA61816GFC	16	0.710" (18.0 mm)	263 lbs/Mft (39:	2 kg/km)
GA61804GFC	4	0.400" (10.2 mm)	95 lbs/Mft (142	2 kg/km)	GA61820GFC	20	0.800" (20.3 mm)	315 lbs/Mft (46	9 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 (57	7 kg/km)
GA61808GFC	8	0.570" (14.5 mm)	159 lbs/Mft (237	7 kg/km)	GA61832GFC	32	0.935" (23.7 mm)	497 lbs/Mft (74	1 kg/km)
GA61812GFC	12	0.635" (16.1 mm)	217 lbs/Mft (323	3 ka/km)					

GADIBIZOFC 12 0.033 (10.1 IIIIII) 21	/ IDS/MII (323 Kg/KIII)		
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

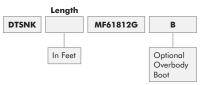






# DT12 Snake





# Connectors

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

Neutrik is a registered trademark of Neutrik AG.





# 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

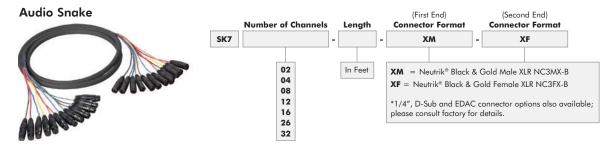
CM Rated

# **Applications**

Microphone or Line Level Balanced Analog Audio Studio Interconnect, Portable Snakes or Permanent Installation

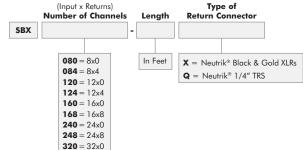
Ideal for Patchbay Wiring & Multi-Pin Cable Assemblies

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" ( Wall/Red &		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	СМ
Mechanical Sp	ecifications (	Individu	al)						
Part Number	# of Pairs	Nomino	ıl OD	Approx. Weight	Part Number	# of Pairs	Nominal OD	Approx. Weigh	ıt
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 Spec	ifications								
Capacitance				Cond. DCR	Drain DCR		Overall Cor	nmon DCR	
28 pF/ft Between (	Conductors			23.8 Ω/Mft	23.8 Ω/Mft		8.9 Ω/Mft		









# Chassis

1/8" Aluminum (Black Anodized) with Rubber Feet, Metal Handle and Steel Mesh Cord Grip.

Other configurations also available as a custom build. Please consult factory for details.







# 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

Installation

# **Applications**

Microphone or Line Level Balanced Analog Audio Studio Interconnect, Portable Snakes or Permanent

Ideal for Patchbay Wiring & Multi-Pin Cable
Assemblies

Mechanica	l Specif	ications								
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	СМ	110 lbs/Mft (164 kg/km)
Electrical S	pecifico	ations								
Capacitance				Cond. DCR		Drain DCR		Overall Comm	on DCR	
25 pF/ft Betwee			Other Tied to Shie	ld 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

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 (Ind	ividual)					
Part Number		# of Pairs		Nominal OD		Approx. Weight	
GA61806PEF		6		0.475" (12.1 mm)		118 lbs/Mft (176 kg	g/km)
GA61812PEF		12		0.635" (16.1 mm)	1	220 lbs/Mft (328 kg	g/km)
Electrical Sp	ecifications						
Capacitance			Cond. DCR	Drain DCR		Overall Common	DCR
26 pF/ft Betwee	n Conductors, n One Conductor and O	ther Tied to Shield	15.3 Ω/Mft	15.3 Ω/Mft		4.5 Ω/Mft	





9

# 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

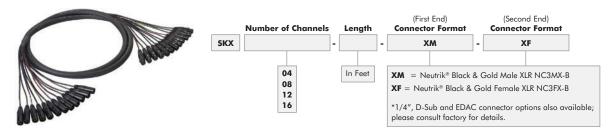
Pair Jackets with Alphanumeric Print & Color Coded Stripe

G-Flex Master Jacket

# **Applications**

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

Conductors	Insulation/ Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, OD)/Color Co	ode	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 0.1 Black with Base 10 Re Alphanumeric Print Inv	sistor Color Coded Stripe	Ultra-Flexible G-Flex PVC, Black
Mechanical Specific	ations (Individual)					
Part Number	# of Pairs		Nom	inal OD	Approx. Weig	ht
XB404	4		0.490	)" (12.4 mm)	115 lbs/Mft (17	1 kg/km)
XB408	8		0.580	" (14.7 mm)	176 lbs/Mft (26	2 kg/km)
KB412	12		0.738	" (18.7 mm)	270 lbs/Mft (40	2 kg/km)
XB416	16		0.785	i" (19.9 mm)	320 lbs/Mft (47	7 kg/km)
<b>Electrical Specificat</b>	ions					
Capacitance			Cond. DCR		Shield & Drain D	CR
17.5 pF/ft Between Conductors, 31 pF/ft Between One Conductor and Other Tied to Shield			27.5 Ω/Mft		6 Ω/Mft	









# 10

# 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

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)
Electrica	l Specifi	ications							
Capacitan	ice				Cond. DCR	<u> </u>	Dr	ain DCR	
26 pF/ft Be	tween Cor		nd Other Tied to S	hield	14.3 Ω/Mft		14	.3 Ω/Mft	

# DT12 Snake



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

Mylar is a registered trademark of DUPONT TEIJIN FILMS.





# **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 Specif	fications				
Part #	# of Channels	Connectors	Chassis Dimensions	Chassis Material	Comments
Standard DT12 Bre Standard Single-Pair:					
		(12) Neutrik® NC3FD-L-1-B Female XLRs	4.5" High x 5.25" Wide x 9" Long	1/8" Extruded Aluminum,	Wired "straight through" from XLRs to DT12.
DTBXS912FNMNG	12	(1) Gepco Male G37MP DT12 Multi-pin Connector	(11.4 cm High x 13.3 cm Wide x 22.9 cm Long)	Black Anodized	Ground lifts or trans- former isolation available as a custom option.
Feed Through DT12 Male Multi-Pin to 12 F		<b>Box</b> with Multi-Pin Feedthrough			
		(12) Neutrik® NC3FD-L-1-B Female XLRs	4.5" High x 5.25" Wide x 9" Long	1/8" Extruded Aluminum,	Wired "straight through" from XLRs to DT12.
DTBXS912FNMFG	12	(1) Gepco Male G37MP DT12 Multi-pin Connector (1) Gepco Female G37FP DT12 Multi-pin Connector	(11.4 cm High x 13.3 cm Wide x 22.9 cm Long)	Black Anodized	Ground lifts or trans- former isolation available as a custom option.
Feed Through/XLR Male Multi-Pin to 12 F		Breakout Box with Male XLR-Split and Multi-Pin Feedthrough			
		(12) Neutrik® NC3FD-L-1-B Female XLRs (12) Neutrik® NC3MD-L-1-B Male XLRs	4.5" High x 5.25" Wide x 16" Long	1/8" Extruded Aluminum.	Wired "straight through" from XLRs to DT12.
TBXS1624FYMFG	12	(1) Gepco Male G37MP DT12 Multi-pin Connector (1) Gepco Female G37FP DT12 Multi-pin Connector	(11.4 cm High x 13.3 cm Wide x 40.6 cm Long)	Black Anodized	Ground lifts or trans- former isolation available as a custom option.

# DT12 Snake

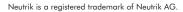
See pages 6 and 10 for DT12 Snake Assemblies.

# **DT12 Fanout**

See page 21 for DT12 Fanout Assemblies.





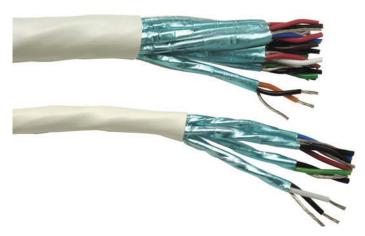








# Multi-Pair: Plenum



# **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 multipair 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 Sp	ecifications (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	СМР	
Mechanical Sp	ecifications (Individual	)					
Part Number	# of	Pairs	Nominal OD		Approx. W	eight	
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 Speci	ifications						
Capacitance		Cond. DCR			Drain DCR		
28 pF/ft Between C 52 pF/ft Between C	nen Conductors, ten One Conductor and Other Tied to Shield				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 tinned-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

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	СМ	21 lbs/Mft (31 kg/km)
	Audio/Contr	ol 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	СМР	22 lbs/Mft (33 kg/km)
	Audio/Contr	ol Two-Pair: Plenu	m						
Electric	al Specifica	ations							
Part #	Сарс	acitance					Cond. DCR	D	rain DCR
6600	20 nl	E/ft Between Cond	luctors 53 pE/ft Bet	ween One Conductor and Other Tier	to Shield		15.3 O/Mft	2	3.8.0/Mft

# **High-Grade Line Level Audio**

6600HS



27 pF/ft Between Conductors, 50 pF/ft Between One Conductor and Other Tied to Shield

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**

15.3 Ω/Mft

23.8 Ω/Mft

**Economical Construction** 

Bare Copper Conductors

**PVC** Insulation

Foil Shield with Drain Wire

12 Through 22 AWG Versions

**UL** Rated

# **Applications**

General Purpose Audio

Control

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SS202R	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 AW	G High-Grade Li	ine 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 AW	G High-Grade Li	ine Level Audio Cable:	Plenum					
5SS222R	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 AW	G High-Grade Li	ine 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 AW	G High-Grade Li	ine Level Audio Cable:	Plenum					
Electrico	ıl Speci	fications							
Part #		Ca	pacitance				Cond.	DCR	
SSS202R		53.	2 pF/ft Between Cond	uctors, 95.7 pF/ft Between One Co	nductor and	Other Tied to Shield	10.5 Ω	/Mft	
SSS202P		50.	9 pF/ft Between Cond	uctors, 91.6 pF/ft Between One Co	nductor and	Other Tied to Shield	10.5 Ω	/Mft	
SSS222R		4.4	6 pF/ft Between Cond	Other Tirel to Child	16.9 Ω	/A A EL			

45.6 pF/ft Between Conductors, 82.0 pF/ft Between One Conductor and Other Tied to Shield

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SSS222P



16.9 Ω/Mft

# 14

# Single- & 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 & Benefits**

Low Attenuation

Low Crosstalk

Easy to Terminate

Polyethylene or Halar® Dielectric

Easy-Strip, Bonded Foil Shield (EZ Versions)

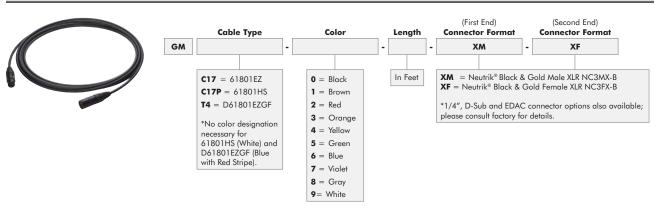
CMR Riser or CMP Plenum Rated

# **Applications**

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

Ideal for Extended-Distance Runs

Conductors					Drain Wire			
22 AWG (7x30)	Stranded	I TC			22 AWG (7x30	) Stranded TC		
Mechanical	Specif	ications (Individual	l)					
Part #	# of Pairs	Nominal OD	Insulation/ Color Code	Shield	Jacket	Jacket Colors	UL Type	Approx. Weight
61801EZ	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)
	Standa	rd Single-Pair: Easy Strip						
D61801EZGF	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)
	Flexible	e Dual-Pair: Easy Strip						
61801HS	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)
	Plenum	Single-Pair						
Electrical S	ecifico	itions						
Part #		Capacita	nce		Cond. DCR	Drai	in DCR	
61801			letween Conductors, letween One Conductor and Other Tie	ed to Shield	15.3 Ω/Mft	15.3	Ω/Mft	
61801EZ / D6	1801EZG		letween Conductors, letween One Conductor and Other Tie	ed to Shield	15.3 Ω/Mft	15.3	Ω/Mft	
61801HS			letween Conductors, letween One Conductor and Other Tie	ed to Shield	15.3 Ω/Mft	15.3	Ω/Mft	



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# Single- & Dual-Pair: 24 AWG



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.

# **Features & Benefits**

Thin Profile

Low Attenuation

Low Crosstalk

Easy to Terminate

Polyethylene Dielectric

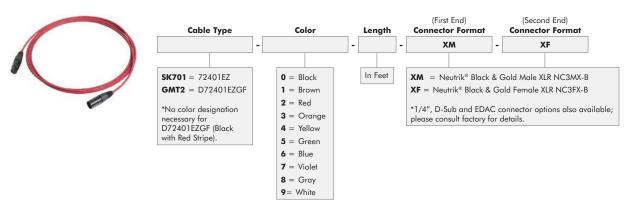
Easy-Strip, Bonded Foil Shield

CM Rated

# **Applications**

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

maintaining	IOW DCR.							
Mechanical	Specificat	ions (Series)						
Conductors					Drain Wire			
24 AWG (7x32)	Stranded TC				24 AWG (7x32) S	Stranded TC		
Mechanical	Specificat	ions (Individual)						
Part #	# of Pairs	Nominal OD	Insulation/ Color Code	Shield	Jacket	Jacket Colors	UL Type	Approx. Weight
72401EZ	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	СМ	10 lbs/Mft (15 kg/km)
	Thin Prof	ile Single-Pair: Easy Strip						
D72401EZGF	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	СМ	22 lbs/Mft (33 kg/km)
	Thin Prof	ile Dual-Pair: Extra Flexible &	Easy Strip					
Electrical Sp	ecificatio	ns						
Capacitance				Cond.	DCR		Drain DCR	
28 pF/ft Between 51 pF/ft Between		s, uctor and Other Tied to Shie	ld	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

Mechan	ical Sp	ecification	ıs					
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)
	X-Band	24 AWG Sin	gle-Pair					
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)
	X-Band	24 AWG Sin	gle-Pair: Dual Shield					
Electrico	ıl Speci	ifications						
Capacita	nce			Cond. DCR			Shield & Dra	in DCR
		Conductors, ne Conducto	r 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

Mechai	nical Specific	cations					
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)
Electric	al Specificat	ions					
Impeda	nce			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

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)
Electrica	I Specificat	ions					
Impedan	ce			Capacitance		Cond. I	DCR

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**

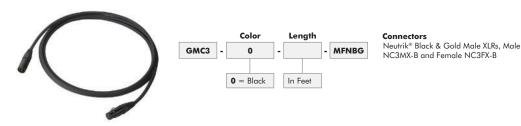
Microphone or Line Level Balanced Analog Audio

Portable Microphone Cables

Hostile Environments

Ideal for Extended-Distance Runs

Mechan	ical Speci	ifications						
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)
Electrico	ıl Specific	ations						
Capacita	nce				Cond. DCR		Drain DCR	
	etween Cond etween One		Other Tied to Shield		10.1 Ω/Mft		16.1 Ω/Mft	









# 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

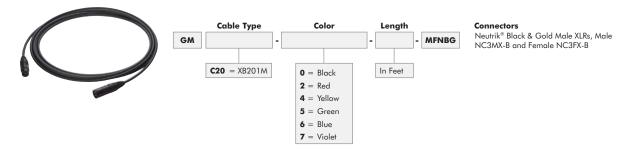
# **Applications**

Microphone or Line Level Balanced Analog Audio

High-Bandwidth Audio Interconnects

Portable Stage or Studio Microphone Cable

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)
	X-Band 2	22 AWG Microp	hone Cable					
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)
	X-Band 2	22 AWG Microp	hone Cable: Dual Braid					
Electrical S	Specifico	ations						
Capacitance						Cond. D	CR	



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# Microphone: Quad Star



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.

# **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

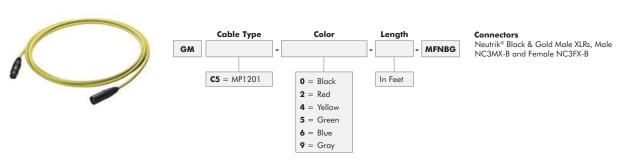
# **Applications**

Microphone or Line Level Balanced Analog Audio Portable Microphone Cables

Ideal for Use in High EMI Environments

Long-Frame or Bantam Patchcords

Part #	# of Cond.	Nominal OD	Conductors	Insulation/ Color Code	Shield	Drain Wire	Jacket	Jacket Colors	Approx. Weight
MP1201	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)
	Standar	d Quad Star							
MM1024	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)
	Thin Pro	ofile Quad Sta	ar						
Electrical	Specific	ations							
Part #		(	Capacitance			Cond. DCR		Drain DCR	
MP1201			39 pF/ft Between Cond 57 pF/ft Between One	ductors, Conductor and Other Tied to Shi	eld	25.6 Ω/Mft		25.6 Ω/Mft	
MM1024			32 pF/ft Between Cond	ductors, Conductor and Other Tied to Shi	eld	34.4 Ω/Mft		_	









# 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

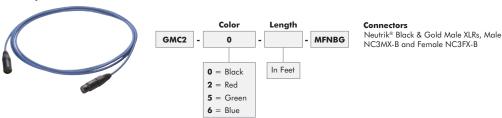
Portable Microphone Cables

Balanced Equipment Interconnect

Long-Frame or Bantam Patchcords

Part #	# of Pairs	ifications  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)
Electrica	Specifi	cations							
Capacitan	ce				Cond. I	OCR		Drain DCR	
20 pF/ft Be 37 pF/ft Be			d Other Tied to Shield	ı	25.6 Ω/	Mft		25.6 Ω/Mft	

# Microphone



# **DT12 Fanout**





DTFAN36M12FG

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

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

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# **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

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 Sp	ecifications					
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

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-Bandw	idth 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-Bandw	idth OFC Speaker Cable				
22HBW	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-Bandw	idth OFC Speaker Cable				
24HBW	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-Bandw	idth OFC Speaker Cable				
Electrical	Specifica	tions					
Part #			Cond. DCR		Capacitance		
142HBW/14	44HBW		2.5 Ω/Mft		20 pF/ft		
122HBW/12	24HBW		1.5 Ω/Mft		20 pF/ft		





# **Speaker: Portable Multi-Conductor**



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.

#### **Features & Benefits**

Easy-to-Handle Round Construction

Low Loss

Extra Flexible

Heavy-Gauge Conductors

All-Weather TPE Master Jacket

# **Applications**

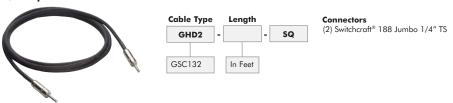
Speaker-to-Amplifier Interconnect

Portable Speaker Cables

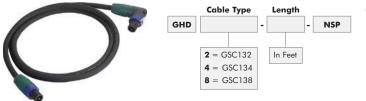
Ideal for Use with Neutrik® speakON® Connectors

Conductors		Insulatio	n Jack	et (Type, Colors)
13 AWG (52x30) S	Stranded BC	PVC, 0.02	14" (0.610 mm) TPE, I	Black
Mechanical Sp	ecifications (Indiv	idual)		
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, Yell	ow 259 lbs/Mft (386 kg/km)
Electrical Spec	ifications			
Cond. DCR				
2.2 Ω/Mft				





# SpeakON® Speaker



# Connectors

Neutrik® speakON® NL2FC, NL4FC or NL8FC

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



Gepco® Brand direct burial high-resolution speaker cables feature 99.99% oxygenfree 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

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)		
	16 AWG x 2 High-Resolution OFC Indoor/Outdoor Direct Burial Speaker Cable								
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)		
	16 AWG x 4 High-Resolution OFC Indoor/Outdoor Direct Burial Speaker Cable								
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)		
	14 AWG x 2 High-Resolution OFC Indoor/Outdoor Direct Burial Speaker Cable								
SPUB144	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)		
	14 AWG x 4 High-Resolution OFC Indoor/Outdoor Direct Burial Speaker Cable								
Electrical S	Specifications								
Part #					Cond. DCR				
SSPUB162, SS	SPUB164			4	1.0 Ω/Mft				
SSPUB142, SS	SPUB144			2	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

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)					
	16 AWG x 2 Indoor/Outdoor Direct Burial Speaker Cable											
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)					
	16 AWG x	16 AWG x 4 Indoor/Outdoor Direct Burial Speaker Cable										
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)					
	14 AWG x	2 Indoor/Outdoor Dire	ect Burial Speaker Cable									
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)					
	14 AWG x	14 AWG x 4 Indoor/Outdoor Direct Burial Speaker Cable										
SUB122	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)					
	12 AWG x	2 Indoor/Outdoor Dire	ct Burial Speaker Cable									
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)					
	12 AWG x Indoor/Outdoor Direct Burial 4 Speaker Cable											
Electrical :	Specificatio	ns										
Part #					Cond. DCR							
SSUB162, SS	JB164				4.0 Ω/Mft							
SSUB142, SS	JB144				2.5 Ω/Mft							



SSUB122, SSUB124



# Speaker: Permanent Installation, Unshielded



Gepco® 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

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	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: F	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	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	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	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	СМ	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	СМР	28 lbs/Mft (42 kg/km)					
	18 AWG	Speaker Cable: F	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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# 26

# 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

Control

# **Applications**

Speaker Interconnections General Purpose Audio

Mechani	ical Spe	cifications							
Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SSU102R	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)
	10 AW	G Speaker Cable:	Riser						
SSU122R	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)
SSU124R	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)
	12 AW	Speaker and Co	ontrol Cable: Riser						
SSU142R	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)
SSU144R	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)
	14 AWC	G Speaker and Co	ontrol Cable: Riser						
SSU162R	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)
SSU164R	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)
	16 AW	G Speaker and Co	ontrol Cable: Riser						
SSU182R	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)
SSU184R	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)
	18 AWC	G Speaker and Co	ontrol Cable: Riser						
SSU202R	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)
SSU204R	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)
	20 AW	G Speaker and Co	ontrol Cable: Riser						
SSU222R	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)
SSU224R	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)
SSU226R	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)
	22 AW0	G Speaker and Co	ontrol Cable: Riser						

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





# 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

SU102P SU122P	10 AW	0.305" (7.75 mm) G Speaker Cable	10 AWG (65x28)		Shield	Wire	(Type, Colors)	Type	Weight		
		G Speaker Cable	Stranded BC	PVC, 0.012" (0.30 mm) Wall/ Black & Red			PVC, Natural (Gray by Request)	CL2P	81 lbs/Mft (121 kg/km)		
	2		e: Plenum								
		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)		
5U124P	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)		
	12 AWG Speaker and Control Cable: Plenum										
SU142P	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)		
SU144P	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		
	14 AWC	G Speaker and (	Control Cable: Plenum								
SU162P	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)	СМР	25 lbs/Mft (37 kg/km)		
SU164P	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)	СМР	44 lbs/Mft (66 kg/km)		
	16 AW	G Speaker and (	Control Cable: Plenum								
SU182P	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)	СМР	18 lbs/Mft (27 kg/km)		
SU184P	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)	СМР	31 lbs/Mft (46 kg/km)		
	18 AWC	G Speaker and (	Control Cable: Plenum								
SU202P	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)	СМР	13 lbs/Mft (19 kg/km)		
5U204P	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)		
	20 AWG Speaker and Control Cable: Plenum										
SU222P	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)	СМР	10 lbs/Mft (15 kg/km)		
5U224P	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)	СМР	16 lbs/Mft (24 kg/km)		
5U226P	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)	СМР	22 lbs/Mft (33 kg/km)		
	22 AW0	G Speaker and (	Control Cable: Plenum								
lectric <u>al</u>	Speci	fications									

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





# 28

# Speaker and Control: Shielded Riser



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

art #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
SS122R	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)
SS124R	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)
	12 AW	G Shielded Spe	aker and Control Cab	ole: Riser					
SS142R	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)
SS144R	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)
	14 AW	G Shielded Spe	aker and Control Cab	ole: Riser					
SS162R	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)
SS164R	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)
	16 AW	G Shielded Spe	aker and Control Cab	ole: Riser					
SS182R	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)
SS184R	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)
	18 AW	G Shielded Spe	aker and Control Cab	ole: Riser					
SS204R	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)
	20 AW	G Shielded Spe	aker and Control Cab	ole: Riser					
SS224R	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)
SS226R	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)

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







# 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

Mechanic	cal Speci	fications											
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)				
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 AW	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 AW(	3 Shielded Spec	aker and Control Cab	le: 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 AW0	G Shielded Spec	aker and Control Cab	le: 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 AW0	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 AW	G Shielded Spec	aker and Control Cab	le: 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 AW0	3 Shielded Spec	aker and Control Cab	le: Plenum									

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/M <del>ft</del>
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

40.8 pF/ft Between Conductors, 73.4 pF/ft Between One Conductor and Other Tied to Shield

40.8 pF/ft Between Conductors, 73.4 pF/ft Between One Conductor and Other Tied to Shield

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SSS224P

SSS226P

**Electrical Specifications** 



16.9 Ω/Mft

16.9 Ω/Mft



# DIGITAL AUDIO CABLES

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

# 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 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 highfrequency data signal transmission.

# **Easy to Terminate**

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

# **Electrical Characteristics & Specifications**

# **Low Jitter & Pulse Rounding**

Original Bit Pulse

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

# **PULSE ROUNDING** Pulse Through 110 Ω Digital Audio Cable Pulse Through Analog Audio Cable

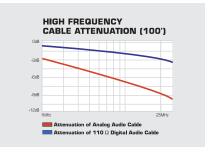
# Precision 110 $\Omega$ Impedance

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.





# 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  $\Omega$  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  $\Omega$  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

CMR Riser Rated

# **Applications**

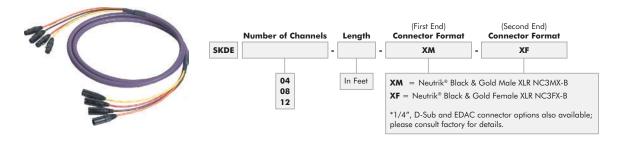
**AES3 Digital Audio** 

Extended Bandwidth Analog Audio

Studio Interconnect, Permanent Installation or Portable Snakes

Ideal for Extended-Distance Runs

Conductors	Dielectric/ Color Code	Pair Shield	Pair Drain	Pair Jacket (Type, O Color Code	<b>D)</b> /	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) (See Color Code Chart			P-FLEX , Violet	C	CMR
Mechanical Spe	cifications (Individual)								
Part Number	# of Pairs		Nom	ninal OD			Approx.	Weight	
D\$404	4		0.62	0" (15.75 mm)			125 lbs/	Mft (186 kg	g/km)
D\$408	8		0.81	5" (20.70 mm)			260 lbs/	Mft (387 kg	g/km)
DS412	12		0.99	5" (25.27 mm)			380 lbs/	Mft (566 kg	g/km)
Electrical Specif	fications								
			Cond.	Drain	A	Attenuation (dB per 100 ft)			
Impedance	Capacitance		DCR	DCR	1 MHz	3 MHz	6 MHz	12 MHz	25 MH
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









# 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  $\Omega$  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  $\Omega$  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**

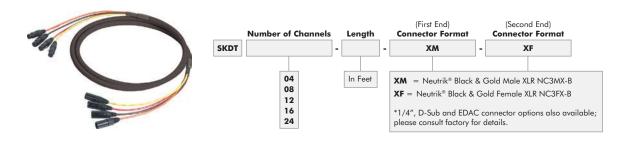
**AES3 Digital Audio** 

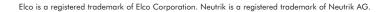
Extended Bandwidth Analog Audio

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				Mast	<b>UL Type</b>				
26 AWG (7x34) Stranded TC	Foam PP, 0.015" (0.381 mm) Wall/White & Black	24 AWG (7x32) Stranded TC	PVC, 0.143" (3.63 mm)/Base 10 (See Color Code Chart 1, Page 142)			GEP-FLEX TPE, Black				
Mechanical S	pecifications (Individual)									
Part Number	# of Pai	rs		Nominal OD		Approx. \	Weight			
DS604	4			0.435" (11.05 mm)		65 lbs/M	lft (97 kg/km	1)		
DS608	8			0.560" (14.22 mm)		140 lbs/M	lft (209 kg/k	m)		
DS612	12			0.685" (17.40 mm)		200 lbs/M	lft (298 kg/k	m)		
DS616	16			0.785" (19.94 mm)		270 lbs/M	lft (402 kg/k	m)		
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 of	and Other Tied to Shield	38.5 Ω/Mft	23.8 Ω/Mft	1.25 1.85	2.40	3.16	4.20		



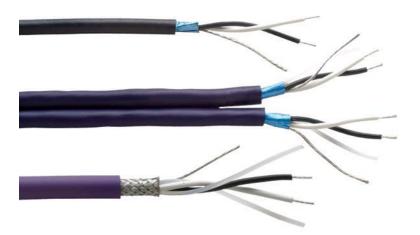






# 34

# 110 $\Omega$ 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  $\Omega$  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 & Benefits**

Precision 110  $\Omega$  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

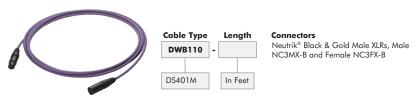
Time Code

Studio Interconnect, Permanent Installation or Portable Cables

Ideal for Extended-Distance Runs

Mechar	Mechanical Specifications									
Part #	# of Pairs	Nominal OD	Conductors	Dielectric/ Color Code	Fillers	Shield	Drain	Jacket	UL Type	Approx. Weight
D\$401	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)
	Wide I	Bandwidth Single-Pair: Pe	ermanent Install.	Easy Strip & Termination						
D\$401D	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)
	Wide I	Bandwidth Dual-Pair: Per	manent Install. E	asy Strip & Termination						
D\$401M	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)
	Wide I	Bandwidth Single-Pair: Ex	tra Flexible							
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	СМР	13 lbs/Mft (19 kg/km)
	Wide I	Bandwidth Sinale-Pair: Pl	enum							

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



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# 110 $\Omega$ 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  $\Omega$  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 shortto-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  $\Omega$  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

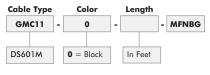
Ideal for Rack Wiring or Patchcords

Part #	# of Pairs	Nominal OD	Conductors	Dielectric Color Code	Fillers	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
DS601	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	СМ	10 lbs/Mft (15 kg/km)
	Thin P	rofile 110 Ω Single-Pair								
DS601D	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	СМ	21 lbs/Mft (31 kg/km)
	Thin P	rofile 110 Ω Single-Pair								
DS601M	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)

Thin	Profile	110 Ω	Dual-Pair

Electrical Spec	cifications								
						Attenuat	ion (dB p	er 100 ft)	
Part #	Impedance	Capacitance	Cond. DCR	Drain DCR	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

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# VIDEO CABLES

Page	• • • • • • • • • • • • • • • • • • •	Commercial A/V	Assemblies
38	•	•	•
39	•		
40	•	•	•
41	•		
42	•		•
39 40 41 42 43 44 45 46 47	•		
44	•		
45	•	•	•
46	•	•	•
47	•	•	•
48	•	•	
49	•	•	
50	•		
51 52 53 54 55 56	•		•
52	•		•
53	•		•
54	•		•
55	•		•
56	•	•	•
57	•	•	•

# 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**

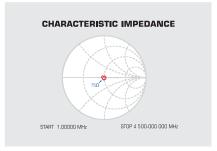
# Meets or Exceeds Standards & 100% Sweep Tested

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



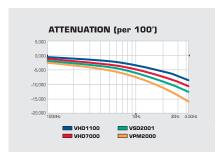
#### **Precision Impedance Tolerances**

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



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  $\Omega$  Impedance

4.5 GHz Bandwidth for HDTV

High Velocity of Propagation

TactiCel Gas-Injected Foam Dielectric

100% Sweep Tested

Full-Copper Braid & Foil Shield

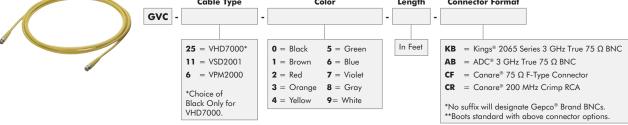
#### **Applications**

High-Definition or Standard-Definition Serial Digital Video

High-Resolution Analog Video

Digital Audio (AES3id, SPDIF or Word Clock)

Mechanica	al Specifico	ations																		
Part #	# of Cond.	Nominal OD	Conducto	Insul or (Type	ation , OD)		Shield		Jack Type		Jacket Colors						IL ype		orox. ight	
VHD1300	1 Extended-	0.400" (10.2 mm) Distance 13	13 AWG Solid BC	0.287	njected Foo " (7.29 mn		92% TC E 100% Foi		PVC		Black, F	urple				C	MR		bs/Mft 7 kg/kn	1)
VHD1100	1	0.405" (10.3 mm) Distance RG	14 AWG Solid BC	Gas-I 0.285	njected Foo " (7.24 mn		95% TC E 100% Foi		PVC		Black, (	Others	by Spe	cial O	rder	C	MR		bs/Mft 3 kg/kn	1)
VHD1100F	1	0.400" (10.2 mm)	14 AWG Stranded	(19x27) Gas-I BC 0.287	njected Foo " (7.29 mn		92% TC E 100% Foi		TPE		Purple					_			bs/Mft 2 kg/kn	1)
VHD1100TK	1	Distance RG 0.346" (8.79 mm) Distance RG	14 AWG Solid BC	Gas-I 0.285	njected Foo " (7.24 mn		95% TC E 100% Foi		PVDF	= ,	White,	Others	by Sp	ecial C	Order	C	MP		bs/Mft 6 kg/kn	1)
VHD7000	1	0.320" (8.13 mm) Distance RG	16 AWG Solid BC	Gas-I 0.223	njected Foo " (5.66 mn		95% TC E 100% Foi		PVC		Black, (	Others	by Spe	cial O	rder	C	MR		bs/Mft kg/km)	
VSD2001	1	0.272" (6.91 mm) RG 6 HD Co	18 AWG Solid BC	Gas-I	njected Foo " (4.57 mn		95% TC E 100% Foi		PVC		Black, E Green,					ow, c	MR		bs/Mft kg/km)	
VSD2001TS	1	0.237" (6.02 mm) RG 6 HD Co	18 AWG Solid BC		njected Foo " (4.32 mn		95% TC E 100% Foi		Plenu	, mu	White,	Others	by Sp	ecial C	Order	C	MP		bs/Mft kg/km)	
VPM2000	1	0.242" (6.15 mm) RG 59 HD C	20 AWG Solid BC		njected Foo " (3.71 mn		95% TC E 100% Foi		PVC		Black, E Green,					ow, c	MR		bs/Mft kg/km)	
VPM2000TS	1	0.200" (5.08 mm)	20 AWG Solid BC	0.135	njected Foo " (3.43 mn		95% TC E 100% Foi		Plenu		White, Special					C	MP		bs/Mft kg/km)	
Electrical S		RG 59 HD C	.oax: Pienui	n																
Liecifical	pecifican				Cond.	Shield	Vel.				No	ninal	Δtten	uatio	n (dB	ner 1	00 ft)			
Part #	Impedance		z-1 GHz),	Capacitance	DCR	DCR per Mft	of	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135	270	360	720	1	1.5 GHz	2.25 GHz	3 GHz	4.5 GH
VHD1300	75 Ω (+/-2)			15.0 pF/ft	2.0 Ω	1.5 Ω	89%	0.13	0.27		0.95		1.79				4.43		6.29	8.2
VHD1100	75 Ω (+/-2)			16.2 pF/ft	2.5 Ω	1.5 Ω	84%	_			1.02						4.73		6.72	
VHD1100F	75 Ω (+/-2)			16.2 pF/ft	2.7 Ω	1.5 Ω	85%	0.07			1.12						5.34		7.73	
	75 Ω (+/-2)			16.0 pF/ft	2.5 Ω	1.5 Ω	84%	0.14		_	1.04		_		_	_			10.14	
VHD7000	75 Ω (+/-2)			16.2 pF/ft	4.0 Ω	1.9 Ω	84%	_			1.28						5.89		8.40	_
VSD2001 VSD2001TS	75 Ω (+/-2) 75 Ω (+/-2)			16.3 pF/ft 16.0 pF/ft	6.4 Ω	2.8 Ω 2.8 Ω	83% 84%				1.60								10.65	
VPM2000	$75 \Omega (+/-2)$			16.0 pF/ft	10.2 Ω	3.5 Ω	83%	_			2.05								13.36	
VPM2000TS	75 Ω (+/-2)			16.0 pF/ft	10.2 Ω	3.5 Ω	84%												17.50	
				Cable Ty	oe.		Color			Lei	ngth	Co	nnect	or Fo	rmat					



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# **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  $\Omega$  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 S	pecificatio	ns						
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)
	Low-Loss F	RG 11 HD Coax: Di	rect Burial					
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)
	Low-Loss F	RG 6 HD Coax: Dire	ect Burial					

Electrical :	speciticatio	ns																	
		Return Loss		Cond.	Shield	Vel.				No	minal	Atten	uatio	n (dB	per 1	00 ft)			
		(100 kHz-1 GHz),		DCR	DCR	of	1	3.6	10	71.5	135	270	360	720	1	1.5	2.25	3	4.5
Part #	Impedance	(1 GHz-4.5 GHz)	Capacitance	per Mft	per Mft	Prop.	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	GHz	GHz	GHz	GHz	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





#### Miniature HDTV/SDI Coax



Tacti©el™ 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)

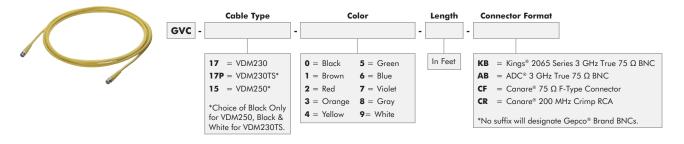
Standard-Definition Serial Digital Video

Digital Audio (AES3id or SPDIF)

High-Resolution Analog Video

Ideal for Remote Broadcast Interconnect

Part #	# of   Cond.	Nominal OD	Conductor	Insulation (Type, OD)		Shield		Jack Type		Jack Colo						L ype	Appr Weig	
VDM230		0.164" (4.17 mm)	23 AWG Solid BC	Gas-Injected Foar 0.100" (2.54 mm		95% TC 100% F		PVC					, Orang t, Gray,	ge, Yello , White	ow, c	MR	18 lbs (27 kg	
	Miniatur	e HD/SDI Coax: 23 AW	G Solid															
VDM230TS		0.164" (4.17 mm)	23 AWG Solid BC	Gas-Injected Foar 0.099" (2.51 mm		95% TC 100% F		Plen		Black	, Whit	е			С	MP	22 lbs (33 kg	
	Miniatur	e HD/SDI Coax: 23 AW	G Solid Plenum															
VDM250		0.154" (3.91 mm)	25 AWG (7x33) Stranded BC	Gas-Injected Foar 0.099" (2.51 mm		95% TC 100% F		PVC		Black	:				С	MR	16 lbs (24 kg	
	Miniatur	e SDI Coax: 25 AWG St	randed															
VDM250D	')	0.154" x 0.315" (3.91 mm x 8.00 mm)	25 AWG (7x33) Stranded BC	Gas-Injected Foar 0.099" (2.51 mm		95% TC 100% Fo	,	Flexi Matt	ble e PVC	Black	:				_	_	33 lbs (49 kg	,
	Miniatur	e SDI or SVHS Coax: Du	al 25 AWG Strand	ded														
Electrical	Specific	ations																
		Return Loss		Cond. DCR	Vel.					Atte	nuati	on (dB	per 1	00 ft)				
Part #	Impedan	(100 kHz-1 GHz		per Mft/Shield	of	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 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	_	_	_	



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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  $\Omega$  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

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Type, OD)	Shield	Jacket Type	Jacket Colors		Max Pull Ten		BNC Conne Pull-O Streng	Off		e Bend Mand		Bendir Endur Twistir Endur	ance/ ng	UL Type		orox. ight
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, Br Red, Ord Yellow, G Blue, Vic Gray, W	ange, Green, olet,	36 I (16.	lbs 3 kg)	43.6 lb (19.8 k Averag	(g)	Passe	d at -3	0°C	Passed Cracks Shield	in	СМ		bs/Mft kg/km)
	Ultra-L	ightweight /	Miniature HDT	V/SDI Coax: 23	AWG Solid															
Electrical	Specif	fications																		
					Cond.	Shield				N	ominal	Atter	nuatio	n – dl	per	100 ft	(30.5	m)		
Impedance	Trans	sfer (1	eturn Loss 00 kHz-1.6 .6 GHz-4.5		per Mft	DCR per Mft (305 m)	Vel. of Prop.	1 ; MHz M	3.6 MHz		71.5 1 MHz A		270 MHz	360 MHz	720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GHz





**Mechanical Specifications** 



# Extra-Flexible High-Definition SDI Coax



Tacti©el™
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 & Benefits**

Extra Flexible

4.5 GHz Bandwidth

Low Attenuation & Return Loss

Precision 75  $\Omega$  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)

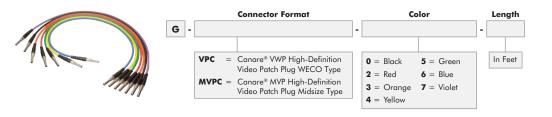
High-Resolution Analog Video

Portable Cables

**Patchcords** 

Part #	# of Cond.	Nominal OD	Conduc	tor		nsulation Type, OD)			Shiel	d		Jacke Type	et	Jack Cold					Appro: Weigh	
VHD2000M	1	0.242" (6.15 mm)		6 (19x34) d BC (Compac		as-Injected I .146" (3.71		Ε,		TC Bra TC Bra		Flexibl PVC	е			Orang een, Blu	je, Je, Viole		33 lbs/ (49 kg/	
	Extra-Flexi	ble RG 59 HD	Coax																	
VHD2001M	1	0.275" (6.99 mm)		6 (19x32) d BC (Compac		Gas-Injected I .182" (4.62		E,	95% TC Braid, Flexible Black PVC Black										45 lbs/ (67 kg/	
	Extra-Flexi	ble RG 6 HD C	Coax																	
Electrical :	Specification	ons																		
		Return Loss			Cond.	Shield	Vel.				No	minal	Atten	vatio	n (dB	per 10	0 ft)			
Part #	Impedance	(100 kHz-1	GHz),	Capacitance	DCR per Mf	DCR	of	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz		720 MHz	1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GH:
VHD2000M	75 Ω (+/-3)	>20 dB, >1	5 dB 1	7 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	24.8
																				-





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# **Extra-Flexible Analog Coax**



Tacti©el™ 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  $\Omega$  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

Part #	# of Cond.	Nominal OD	Conductors	Insulat	ion (Type	, Wall)	Shield		Jacket (Ty	pe, Colo	rs)	Approx. V	Veight
VE61859M	1	0.242" (6.15 mm)	21 AWG (19x34) Stranded BC (Compact)		ected Foan (3.71 mm)		95% BC B	raid	Flexible Mo PVC, Black			60 lbs/Mft [89 kg/km]	)
Electrical S	Specifications						Δ.	ttenuati	on (dB per	100 ft)			
			Cond. DCR	Vel.		10			<u> </u>				_
Impedance	Return Los (100 kHz-	~	per Mft/Shield nce DCR per Mft	of Prop.	1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	GH <sub>2</sub>







# **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  $\Omega$  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  $\Omega$  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)

							(VP6	18M)						
Mechar	nical Specific	ations (Individual	)											
Part #	# of Cond.	Nominal OD	Conducto	r	Insulation (Type, OD)		S	hield		Jac (Ty <sub>l</sub>	ket pe, Color	·s)	Approx Weight	
VP618PE	1	0.304" (7.72 mm)	20 AWG Solid BC		PE, 0.198" (5	.03 mm)		ouble Bro 8% & 96%		PE,	Black		75 lbs// (112 kg	
	20 AWG	Precision Coax												
VP618M	1	0.304" (7.72 mm)	22 AWG (1 Stranded B	9x34) C (Compact)	PE, 0.192" (4	.88 mm)		ouble Bro 5% & 93%			ible Matte C, Black	:	78 lbs// (116 kg	
	22 AWG	Precision Coax: Extra F	Flexible											
Electric	al Specificati	ons												
				Cond DCR	Vel.			Att	tenuatio	n (dB pe	r 100 ft)			
Part #	Impedance	Return Loss (100 kHz-1 GHz)	Capacitance	per Mft/ Shield		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





VIDEO CABLES

# Component RGB: Miniature Plenum



Tactiee

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  $\Omega$  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

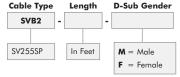
#### **Applications**

High-Resolution RGB Component Analog Video Permanent Installation

Conductors	Insulation (Type	, OD)	Shield	Coax Jacket (T	ype, OD)	Mas	ter Jacket		UL Type
25 AWG Solid BC	Foam FEP, 0.074'	(1.88 mm)	100% Foil, 95% TC Spiral Se	rve Flouropolymer, (	0.106" (2.69 mm)	Plenu	ım PVC, Whi	te	СМР
Mechanical S	pecifications (Indi	vidual)							
Part #	# of Coaxials	Color Co	de		Nor	ninal OD	Ар	prox. Weigh	ıt
SV253SP	3	Red, Gree	en, Blue		0.26	3" (6.68 mm	n) 47	lbs/Mft (73 k	g/km)
SV254SP	4	Red, Gree	en, Blue, Yellow		0.28	33" (7.19 mm	n) 57	lbs/Mft (98 k	g/km)
SV255SP	5	Red, Gree	en, Blue, Yellow, White		0.31	5" (8.00 mm	68 lbs/Mft (124 kg/km		
Electrical Spe	cifications								
	Return Loss			At	tenuation (	dB per 100	ft)		
	(1 MHz-455 MHz), (455 MHz-1 GHz)	Capacita	Cond. DCR ince per Mft	Shield DCR per Mft	of Prop.	100 MHz	200 MHz	400 MHz	1 GHz
75 Ω (+/-3)	>20 dB, >15 dB	16.0 pF/f	t 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  $\Omega$  BNCs (BNC-16) with Shrink Tube Strain Relief

# Component RGB



#### Connectors

ADC® 3 GHz True 75  $\Omega$  BNCs (BNC-16) with Shrink Tube Strain Relief

ADC is a registered trademark of ADC Telecommunication, Inc.







# Component RGB: Miniature 25 AWG Stranded



Tacti©e|™ 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  $\Omega$  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

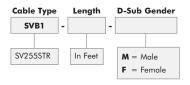
Digital Audio (AES3id or SPDIF)

Studio Interconnect, Portable Snakes or Permanent Installation

Conductors	In	sulation (Type, OD)	S	hield	(	Coax Jac	ket (Typ	e, OD)	Mas	ter Jack	et	UL Ty	ре
25 AWG (7x33) St	tranded BC Ga	as-Injected Foam PE, 0.099"	(2.51 mm) 9	5% TC Braid, 100%	Foil P	VC, 0.15	4" (3.91	mm)	GEP	-FLEX TPE	, Black	СМ	
Mechanical S	pecifications (In	ndividual)											
Part #	# of Coax	cials Color	Code		N	ominal (	OD			Арр	rox. W	eight	
SV253STR	3	Red, G	reen, Blue		0.4	460" (11.	.7 mm)			80 I	bs/Mft (	119 kg/k	km)
SV254STR	4	Red, G	reen, Blue, Yellow		0.4	470" (11.	.9 mm)			110	bs/Mft (	164 kg/k	km)
SV255STR	5	Red, G	reen, Blue, Yellow, V	Vhite	0.:	560" (14	.2 mm)			130 I	bs/Mft (	194 kg/k	km)
SV256STR	6	Red, G	reen, Blue, Yellow, V	Vhite, Black	0.5	575" (14.	.6 mm)			160 I	bs/Mft (	238 kg/k	km)
Electrical Spe	cifications												
		Cond. DCR		Vel.			At	enuatio	n (dB po	er 100 fl	)		
Impedance	Return Loss (100 kHz-1 G	GHz) Capacitance	per Mft/Shie DCR per Mft	eld of	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GH
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	12.8



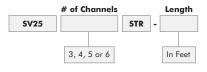




## Connectors

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

# Component RGB



#### Connectors

Kings  $^{\! @}$  3 GHz True 75  $\Omega$  High-Definition BNCs (2065-11-9) with Rubber Boots

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





VIDEO CABLES

# 47

# Component RGB: Miniature 25 AWG Solid



**Tacti©**el'

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.

#### **Features & Benefits**

Ultra-Thin Profile

Low Attenuation & Return Loss

Precision 75  $\Omega$  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

Conductors	Insulation (Type	, OD)	Shield		C	oax Jac	ket (Ty	pe, OD	)	Master .	Jacket		ι	IL Typ	е	
25 AWG Solid BC	Gas-Injected Foam	n PE, 0.074" (1.88 mi	n) 95% TC Braid,	100% Foil	P\	VC, 0.11	5"			PVC, Blac	ck		C	CMR		
Mechanical Sp	ecifications (Indiv	idual)														
Part #	# of Coaxials	Color C	ode				No	minal (	OD			Approx	k. Weig	jht		
SV253SR	3	Red, Gr	een, Blue				0.3	325" (8.2	26 mm)			68 lbs	s/Mft (1	01 kg/	km)	
SV254SR	4	Red, Gr	Red, Green, Blue, Yellow					365" (9.2	27 mm)			79 lbs	s/Mft (1	18 kg/	km)	
SV255SR	5	Red, Gr	Red, Green, Blue, Yellow, White					105" (10	.3 mm)			90 lbs	s/Mft (1	34 kg/	km)	
SV256SR	6	Red, Gr	een, Blue, Yellow, Wh	ite, Black		0.440" (11.2 mm)						105 lbs/Mft (156 kg/km)				
Electrical Spec	ifications															
		Cond. DCR Vel						Atte	nuatior	ı (dB pe	r 100 f	t)				
Impedance	Return Loss (100 kHz-3 GHz)	Capacitance	per Mft/Shield DCR per Mft	of Prop.	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GHz	2.25 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  $\Omega$  High-Definition BNCs (2065-11-9) with Rubber Boots

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





# 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

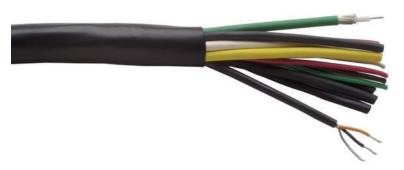
Portable Applications

Overall	Specificati	ons																	
Part #	•	# of	Audio Pa	irs		verall . ype, O		et					UL Ty	pe		Арр	rox. W	eight	
RGB62		6 2			Fle	exible TF	PE, 0	.430″	(10.9	mm)			СМ			85 lk	os/Mft (	127 kg/	/km)
		Component RGBHVC with 2 I	Balanced A	udio Pairs															
RGB62TS	5	6 2			Ple	enum P\	VC, 0	.370′	' (9.40	mm)			CL2P			68 lk	os/Mft (	101 kg/	′km)
		Component RGBHVC with 2 L	Balanced A	udio Pairs: Pler	num														
Coaxial	Element M	lechanical Specificatio	ns																
Part #	Conduc (Type,		sulation ype, OD)		Shield			Jack (Typ	et e, OD)	)	Col	or Co	de		lm	pedan	ce	Vel. o Prop.	
RGB62	26 AWC 40.5 Ω/		as-Injected 074" (1.88		100% Fo 95% TC				0.114′ ) mm)	,		, Gree ow, W		e, Black	75	Ω		80%	
RGB62TS	26 AWC 38.5 Ω/		am FEP, 072" (1.83	mm)	100% Fo 95% TC				ım PVC 2" (2.5			, Gree ow, W		e, Black	75	Ω		85%	
Coaxial	Element El	lectrical Specifications																	
				Cond. DCR	Ve	l	_				Atte	nuati	on (dl	B per 1	100 ft)				
Part #	Impedance	Return Loss	Capac.	per Mft/Shid DCR per Mft		op. MI		33.6 NHz	10 MHz		135 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	2 809	% 0.5	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 859	% 0.9	90	1.40	2.08	4.90	6.65	9.45	11.0	16.7	20.5	_	-	_	_
Audio F	Pair Specific	cations																	
Part #	Conducto (Type, D		Insulatio		Insulat Color C				Shield	d				Jack (Typ	et e, OD)			icket olor Co	de
RGB62	24 AWG 23.8 Ω/ <i>N</i>	(7x32) Stranded TC, Wft	PE, 0.040 (1.02 mm		Red & B White &					Foil wi					0.130″ ) mm)			One Red, One Black	
RGB62TS	22 AWG 15.3 Ω/N	(7x30) Stranded TC, Aft	Plenum P' 0.044" (1	/	Red & B White &					Foil wi					ım PVC 2" (2.59			ne Red, ne Blac	





# Component RGB with 4 Audio Pairs & 4 Power Conductors



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.

#### **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

Overall S	pecification	าร																		
Part #	# of Coaxials	# of A	ludio P	airs	# of Po	wer (	Conduct	tors		all Jac e, OD)	ket			U	L Type	,	Appro	x. Wei	ght	
RGB644	6	4			4				Flexib	le TPE,	0.565"	(14.4	mm)	С	М		125 lb	s/Mft (1	86 kg/	km)
	Componer	nt RGBHVC with 4 Aud	dio Pairs	& 4 Pow	er Conducto	rs														
RGB644TS	6	4			4				Plenu	m PVC,	0.415	(10.5	mm)	С	L2P		105 lb	s/Mft (1	56 kg/	km)
	Componer	nt RGBHVC with 4 Aud	dio Pairs	& 4 Pow	er Conducto	rs: Plei	num													
Coaxial E	lement Spe	cifications																		
Part #	Conducto (Type, D			lation e, OD)		Shie	ld		Jacke (Type,			(	Color	Code		ı	mpedo	ınce	Vel. Prop	
RGB644	26 AWG : 40.5 Ω/M			Injected F 4" (1.88 i			6 Foil, TC Braid	d	PVC, 0 (2.90 r				Red, G Black,		Blue, , White	7	′5 Ω		80%	
RGB644TS	26 AWG 38.5 Ω/M	(7x34) Stranded TC, lft		n FEP, 2" (1.83 i	mm)		6 Foil, TC Serv	e	Plenum 0.102"	PVC, (2.59)	mm)		Red, G Black,		Blue, , White	7	5 Ω		85%	
Coaxial E	lement Ele	ctrical Specificati	ons																	
					Cond. DC	R	Vel.					Atte	nuatio	on (dE	per 1	00 ft)				
Part #	Impedance	Return Loss		Capac.	per Mft/S DCR per l			1 MHz	33.6 MHz	10 MHz	71.5 MHz					1 GHz	1.5 GHz	2.25 GHz	3 GHz	4.5 GH:
RGB644		100 kHz-1 GHz: >23 1 GHz-4.5 GHz: >19		16.8 pF/ft	40.5 Ω/7.0	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	34.5
RGB644TS	/5 () (±/-3)	100 kHz-455 MHz: > 455 MHz-1 GHz: >1:		16.0 pF/ft	38.5 Ω/18	3.0 Ω	85%	0.90	1.40	2.08	4.90	6.65	9.45	11.0	16.7	20.5	_	_	_	-
Audio Pa	Pair Specifications										Po	wer (	Cond	uctor	Spec	ificati	ons			
Part #	Conductors Insulation Jacket (Type, DCR) (Type, OD, Color) Shield (Type, OD)				Jacket Conductors Color Code (Type, DCR)				-	nsulat Type, (			Color	Code						
RGB644	26 AWG (7) Stranded TC 38.5 Ω/Mft			100% F 26 AW TC Dra	G (7x34)		, 0.090" 9 mm)		own, Re		Stra	AWG (i nded T I Ω/Mf	c, ´		VC, 0.0			Red, V Green	White, E	3lack,
RGB644TS	26 AWG (7) Stranded TC 38.5 Ω/Mft			100% F 26 AW TC Dra	G (7x34)	0.09	um PVC 20" 9 mm)	Br	own, Re		Stra	AWG (i nded T	C,		lenum .053"	PVC, [1.35 m	m)	Red, V Green	White, E	3lack,







# V-CON Multi-Channel Video Connector System

# VCON connectors





Setting the standard in multichannel 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 Specification	ons
Structural Return Loss	-15 dB, 1 MHz-4.5 GHz
Insertion Loss	0.25 dB
Cable Termination Type	VDM230 Type 23 AWG Solid

Part Number	# of Channels	Gender	Туре	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 S	pecifications				
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*	5	3, 5, 6	2	Male - Small Type 24	Female
VDR3*	3	10, 12, 16	2	Male - Large Type 36	Female
VDR3*	3	3 5 6	2	Male - Small Type 24	Female

<sup>\* =</sup> Number of Channels per V-CON





VIDEO CABLES

# 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 S	pecifications			
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 Speci	fications			
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.







# Video Snake: High-Definition Miniature 23 AWG





Designed for multi-channel digital or analog video interconnect, the Gepco® 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 Gepco 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  $\Omega$  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**

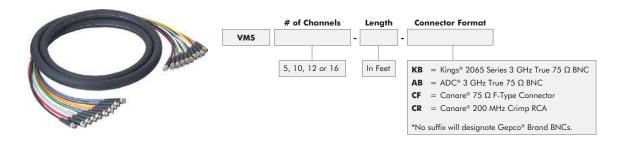
High-Definition or Standard-Definition Serial Digital Video

Digital Audio (AES3id or SPDIF)

High-Resolution Analog Video

Portable Snakes

Mechanical	Specifications (S	eries)																
Conductors	Insulation (	Type, OD)	Shield				Coax	Jacket	(Туре	e, OD)				Masi	ter Jac	ket		
23 AWG Solid B	C Gas-Injected	Foam PE, 0.100" (2	2.54 mm) 95% TC	C Braid, 100%	Foil		PVC, 0	0.164"	(4.17 r	mm)				TPE,	Black			
Mechanical	Specifications (I	ndividual)																
Part #	# of Coaxials	Color Code								Nomi	inal O	D	А	pprox.	Weigh	nt		
V53230	3	Red, Green, Blue	e							0.453	" (11.5	mm)	1	92 lbs/ <i>l</i>	Vft (286	6 kg/kn	n)	
V\$5230	5	Red, Green, Blue	e, Yellow, White							0.570	" (14.5	mm)	1	50 lbs//	Mft (224	1 kg/kn	n)	
V\$6230	6	Red, Green, Blue	e, Yellow, White, Blac	k						0.599	" (15.2	2 mm)	1	70 lbs/i	Mft (253	8 kg/kn	n)	
VS10230	10	Brown, Red, Ord	0.785	" (19.9	mm)	3	15 lbs//	Mft (469	kg/kn	n)								
VS12230	12	Brown, Red, Ord	Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White, Black, Beige, Pink 0.800" (20.3 mm) 375 lbs/Mft (5												Mft (559	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 mr									ō mm)	5	00 lbs//	Wft (745	ī kg/kn	٦)		
Electrical Sp	ecifications																	
	Return Loss		Cond. DCR	Vel.					Atte	enuati	on (dE	3 per 1	100 ft)					
Impedance	(100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	per Mft/Shield DCR per Mft	of Prop.	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 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	



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VIDEO CABLES

# 53

# Video Snake: High-Definition RG 59



**Tacti©**el<sup>®</sup>

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 highresolution 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  $\Omega$  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

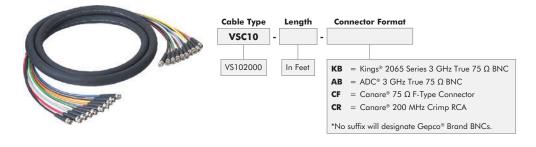
Digital Audio (AES3id or SPDIF)

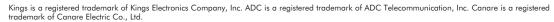
High-Resolution RGB Component Analog Video

Studio Interconnect, Portable Snakes or Permanent Installation

Ideal for Extended-Distance Runs

Mechanical	Specifications (Se	eries)															
Conductors	Insulation	(Type, OD)	S	hield			(	Coax J	acket (	Туре,	OD)			Maste	er Jack	et	
20 AWG Solid E	BC Gas-Injected	d Foam PE, 0.146	" (3.71 mm) 9	5% TC Braid, 1	00% Foi	1	F	VC, 0.2	242" (6	.15 m	m)			TPE, B	Black		
Mechanical	Specifications (In	dividual)															
Part #	# of Coaxials	Color Code						N	lomino	ıl OD		Α	pprox	. Weig	jht		
VS52000	5	Red, Green, I	Blue, Yellow, White				0.	.745" (	18.9 m	ım)	20	60 lbs/	'Mft (38	37 kg/k	m)		
VS102000	10	Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black 1.10" (27.									n)	52	20 lbs/	'Mft (77	75 kg/k	m)	
Electrical S	pecifications																
	Return Loss		Cond. DCR	Vel.					Atter	nuatio	n (dB	per 1	00 ft)				
Impedance	(100 kHz-1 GHz), (1 GHz-4.5 GHz)	Capacitance	per Mft/Shield DCR per Mft	of Prop.	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz		1 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











# Video Snake: High-Definition RG 6



Tacti©el™

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  $\Omega$  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

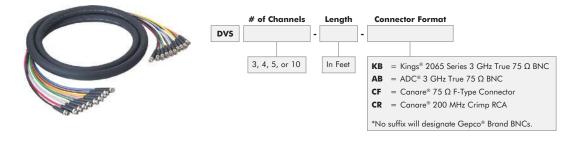
Digital Audio (AES3id or SPDIF)

High-Resolution RGB Component Analog Video

Studio Interconnect, Portable Snakes or Permanent Installation

Ideal for Extended-Distance Runs

Mechani	cal Spec	ifications (Se	eries)															
Conductors		Ins	sulation (Type, Ol	D)		s	hield					(	Coax Jo	acket (	Туре,	OD)		
18 AWG Sol	lid BC	Ga	s-Injected Foam PE	, 0.180" (4.57 mm)		9	5% TC	Braid,	100%	Foil		P	VC, 0.:	272" (6	.91 m	m)		
Mechani	cal Spec	ifications (In	dividual)															
Part #	# of Coaxials	Color Code				No OD	minal )		Ma	ıster Jo	acket		UI	L Type	Арр	rox. V	Veight	
VS32001	3	Red, Green, E	Blue			0.7	35" (18	3.7 mm	) Rise	er GEP-	FLEX T	PE, Bla	ck C/	MR	182	lbs/M	t (271 l	кg/km)
VS42001	4	Red, Green, E	Blue, Yellow			0.7	90" (20	0.1 mm	) Rise	er GEP-	FLEX T	PE, Bla	ck C/	MR	230	lbs/M	1 (342	kg/km)
VS52001	5	Red, Green, E	Blue, Yellow, White			0.8	45" (2	1.5 mm	n) Rise	er GEP-	FLEX T	PE, Bla	ck C/	MR	295	lbs/M	1 (440	kg/km)
VS102001	10	Brown, Red, O	Orange, Yellow, Gr	een, Blue, Violet, Gray,	White, Blac	k 1.2	5" (31.	8 mm)	TPE	, Black			_	_	600	lbs/M	t (894 l	kg/km)
Electrical	Specific	ations																
	Retu	ırn Loss		Cond. DCR	Vel.					Atter	nuatio	n (dB	per 10	00 ft)				
Impedance	(100	kHz-1 GHz), Hz-4.5 GHz)	Capacitance	per Mft/Shield DCR per Mft	of Prop.	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	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



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# Video Snake: High-Definition RG 7



Tacti©el<sup>™</sup>
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  $\Omega$  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

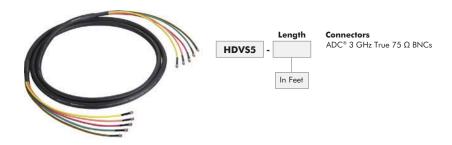
Digital Audio (AES3id or SPDIF)

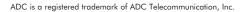
High-Resolution RGB Component Analog Video

Portable Snakes

Mechanic	al Specific	ations							
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 Sp	ecifications																
	Return Loss		Cond. DCR	Vel.					Atter	vatio	n (dB	per 10	00 ft)				
	(100 kHz-1 GHz),		per Mft/Shield	of	1	3.6		71.5							2.25	_	
Impedance	(1 GHz-4.5 GHz)	Capacitance	DCR per Mft	Prop.	MHZ	MHZ	MHZ	MHz	MHZ	MHZ	MHZ	MHZ	GHZ	GHZ	GHZ	GHZ	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









# 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

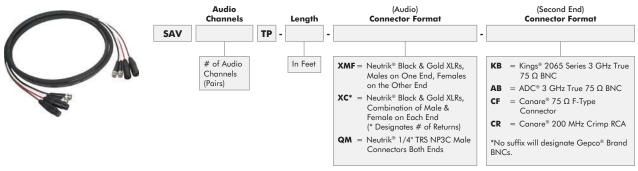
High-Resolution Analog Video

Microphone or Line Level Balanced Analog Audio

Portable Snakes

Ideal for ENG or Electronic Field Production

Conductor		Insulation (Ty	pe, OD)		Shield				Co	ax Jacke	t (Type,	OD)		
25 AWG (7x33)	Stranded BC	Gas-Injected Fo	oam PE, 0.09	99" (2.29 mm)	95% TC Braid	d, 100% F	oil		PV	C, 0.154"	(3.91 m	m)		
Single-Pair	Mechanical Sp	ecifications												
Conductor		Insulation (Type	e, OD)	Color Code	Shield		Dr	ain			Ja	cket (T	ype, OD	))
22 AWG (7x30)	Stranded TC	PE, 0.008" (0.20	mm)	Red & Black	100% Foil (E	Bonded)	22	AWG (7	x30) Stra	nded TC	PV	C, 0.13	8" (3.51	mm)
Overall Me	chanical Specif	ications												
Overall Shield	ıl.		Overd	ıll Common Drain			ı	Naster .	Jacket					
100% Foil			20 AW	'G (10x30), Stranded T	·C		1	PE, Blac	k					
Individual	Mechanical Spe	cifications												
Part #	# of Coaxials	Coax Color Co	de	# of Single Pairs	Single-Pa	ir Color	Code		Nominal	OD	Ар	prox. W	/eight	
VA2/2TP	2	Black & White		2	Brown & Re	ed (Base 1	0)	(	0.430" (1	0.9 mm)	95	(142 kg/	/km)	
VA2/3TP	2	Black & White		3	Brown, Red	& Orang	je (Base	10) (	0.485" (1	2.3 mm)	115	(171 kg/	/km)	
Coax Electr	ical Specificatio	ons												
				Cond. DCR	Vel.			At	tenuatio	ition (dB per 100 ft)				
Impedance	Return Loss (100 kHz-1		acitance	per Mft/Shield DCR per Mft	of Prop.	1 MHz	3.6 MHz	10 MHz	71.5 MHz	135 MHz	270 MHz	360 MHz	720 MHz	1 GH:
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	12.8
Single-Pair	Electrical Spec	ifications												
Capacitance					Cond. DCR					0	rain DC	R		
34 pF/ft Betwee	en Conductors, en One Conductor o	101 7 1 0			15.3 Ω/Mft					1	5.3 Ω/M	ft		



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VIDEO CABLES

# Composite A/V: Low Loss



Tacti©e|™ Strong Cell Technology

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

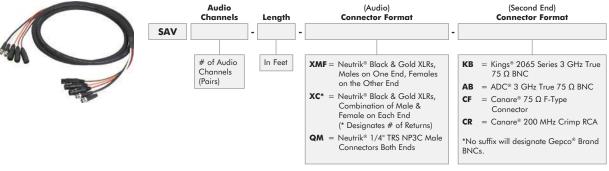
High-Resolution Analog Video

Microphone or Line Level Balanced Analog Audio

Portable Snakes

Ideal for ENG or Electronic Field Production

Conductor		li li	nsulation (Type	e, OD)		Shield						Co	ax Ja	cket (1	Гуре, С	D)			
20 AWG Solid	BC	C	Gas-Injected Foar	n PE, 0.146"	(3.71 mm)	95% TO	C Braid,	100%	Foil			PV	C, 0.2	42" (6.	15 mm				
Single-Pai	r Mechanical S	specif	fications																
Conductor		In	sulation (Type,	OD)	Color Code	е	Shield				Drain					Jack	et (Typ	e, OD	)
22 AWG (7x30	) Stranded TC	PE	, 0.008" (0.20 m	ım)	Red & Black	(	100% F	oil (Bo	nded)	2	2 AWC	9 (7x30	)) Strar	nded TO	0	PVC,	0.138"	(3.51	mm)
Overall M	echanical Spec	ificat	ions																
Overall Shie	d			Overal	l Common I	Drain					Mas	ter Ja	cket						
100% Foil				20 AWC	3 (10x30), Str	anded TC					TPE,	Black							
Individua	l Mechanical S	pecif	ications																
Part #	# of Coaxials	Coa	x Color Code	# of Sin	gle Pairs	Single-	Pair C	olor C	ode			Non	ninal (	OD	ı	Approx	. Weig	ht	
VA2/3	2	Blacl	k & White	3		Brown,	Red & C	Orange	(Base	10)		0.61	5" (15	.6 mm)	) 1	68 lbs,	/Mft (25	i0 kg/k	m)
VA2/4	2	Black	k & White	4		Brown,	Red, Or	ange 8	& Yello	w (Base	10)	0.63	0" (16	.0 mm)	) 1	73 lbs,	/Mft (25	8 kg/k	m)
VA2/5	2	Black	k & White	5		Brown, & Green			Yellow			0.64	0" (16	.3 mm)	) 1	86 lbs,	/Mft (27	77 kg/k	m)
Coax Elect	rical Specificat	ions																	
	Return Loss			Cond. DC	:R	Vel.					Atte	nuatio	on (dE	per 1	100 ft)				
Impedance	(100 kHz-1 ( (1 GHz-4.5 (	• • • • • • • • • • • • • • • • • • • •	Capacitance	per Mft/S DCR per	hield	of Prop.	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 GH
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	16.3
Single-Pai	r Electrical Sp	ecifico	ations																
Capacitance							Cond.	DCR							Drai	n DCR			
	een Conductors, een One Conducto	and C	Other Tied to Ship	7ld			15.3 Ω	2/Mft							15.3	Ω/Mft			



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# **CAMERA & FIBER OPTIC SOLUTIONS**

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#### In This Section:

Cable: Flexible Studio/Remote Triax
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: 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: HMP8-Bxx SMPTE 304 Breakout Rack

Distribution: HMP8-Bxx SMPTE 304 Breakout Rack

**Distribution**: Modular Isolation Panel System **Distribution**: Hybrid Fiber Blank Panels

Assamblian Library Panels Assamblian

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.

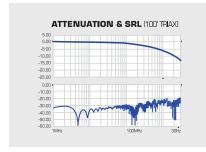
#### **Heat-Resistant**

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**

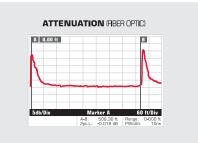
#### **Meets or Exceeds SMPTE Standards**

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.



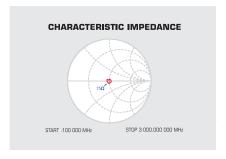
#### **Low Attenuation**

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



#### **Precision Impedance**

Triaxial cables have a precision 75  $\,\Omega$  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 $^{\text{TM}}$ , a low-loss, gas-injected polyethylene dielectric. The unique gas injection process achieves low attenuation, a precision 75  $\Omega$  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 & 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**

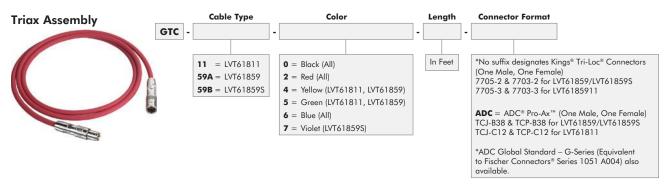
Digital or Analog Video Camera-to-CCU

Portable Cables

Studio or Remote Environments

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)
	Extende	d-Distance RG	11 Flexible Triax							
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)
	Thin Pro	file RG 59 Flex	ible Triax							
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)
	Thin Pro	file RG 59 Flex	ible Triax: Stranded							

Electrical	Specificatio	ns																
					Inner Shield				ı	Nomin	al At	enua	tion (	dB pe	r 100	ft)		
Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-3 GHz)	Capacitance	Cond. DCR per Mft	DCR per Mft/ Outer Shield DCR per Mft	Vel. of Prop.	1 MHz	3.6 MHz						720 MHz		1.5 GHz	2.25 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 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**



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  $^{\text{TM}}$ , a low-loss, gas-injected polyethylene dielectric. These processed materials achieve low attenuation, a precision 75  $\Omega$  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  $\Omega$  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

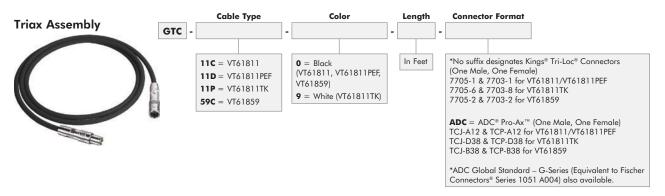
#### **Applications**

Digital or Analog Video Camera-to-CCU Interconnect

Permanent Installation

Mechanical	Specific	cations								
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)
	Extende	d-Distance RG 1	l Triax							
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)
	Extended	d-Distance RG 1	Triax: Direct Bu	rial						
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	СМР	122 lbs/Mft (182 kg/km)
	Extended	d-Distance RG 1	1 Triax: Plenum							
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)
	Thin Pro	file RG 59 Triax								

Electrical :	Specification	S																
					Inner Shield				N	lomin	al Att	enua	tion (	dB pe	r 100	ft)		
Part #	Impedance	Return Loss (100 kHz-1 GHz), (1 GHz-3 GHz)	Capacitance	Cond. DCR per Mft	DCR per Mft/ Outer Shield DCR per Mft	Vel. of Prop.	1 MHz	3.6 MHz		71.5 MHz					1 GHz	1.5 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-to-Coax Adapters**

Triax-to-coax adapters are manufactured from true 75  $\Omega$  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.



Parts	
Part #	Description
тсм	Male Tri-Loc® to Female BNC
TCF	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**

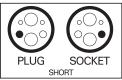
Compact, Hand-Held Design
Compatible with All SMPTE 304 Standard Cables
Rechargeable Battery Lasts for More than 40 Hours
Tests Both Electrical and Optical Circuits
Checks All Conductors (Pin for Pin) and Fibers
Ruggedized ABS Plastic Carrying Case
Intuitive Diagnostic OLED Backlit Display

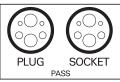
- Easily Seen in Direct Sunlight or at Night
- Graphically Depicts Which Contact is Defective or Pinned Out Incorrectly

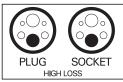
#### **Applications**

HD Trucks
Sports/Events Broadcasting
Fixed or Mobile Facilities

Specificatio	ns						
Part Number	Set	Frame	Connectors	Display	Insertion Loss	Return Loss	Accessories Included
SMPTE-304TS Complete Test Set	(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

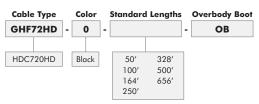
Studio or Remote Environments

High-Definition Steadicams®

Part #	Nominal OI	) Master	Jacket (Type, Colors	) Overall Shield	I	Approx. Weight
HDC720HD	7.2 mm	Polyureth	nane, Black	100% Foil with	2 x 18 AWG (7x26) Stranded	TC 54 lbs/Mft (80 kg/km)
	Heavy-Duty	7.2 mm Hybrid Came	era Cable			
Mechanical Sp	ecifications (C	omponents)				
Component	Numbe	r Type			Insulation (Type, OD)	Color Code
Optical	2		Mode Bend-Insensitive n Mode Field, 125µm (		CPE Fiber Coating, Kevlar® Wrap, Tight Tube PVC Jacket, 0.062" (1.57 mm) Finished	One Blue, One Yellow O.D.
Signal	2	24 AW	'G (7x32) Stranded TC		PE, 0.045" (1.14 mm)	One Red, One Gray
Auxiliary	2	16 AW	'G (65x34) Stranded To	0	PE, 0.079" (2.01 mm)	One Black, One White
Strength Member	1	Kevlar <sup>4</sup>	Strength Member		PE, 0.072" (1.83 mm)	Yellow
Electrical & Op	tical Specifica	tions				
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





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. Steadicam is a registered trademark of the Tiffen Company.







# 9.2 mm 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 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)

Meenanical 5	pecifications (Ge	·							
Part #	Nominal OD	Mas	ter Jacket (Ty	rpe, Colors)	Overall Shield	UL Type	Appro	ox. Weight	
HDC920	9.2 mm	Flexi	ole TPE, Black		95% TC Braid		90 lbs/Mft (134 kg/km)		
	Extra-Flexible 9.2	mm Hybrid Camera	Cable						
HDC920R	9.2 mm	PVC,	Black		95% TC Braid	CMR	91 lbs	/Mft (140 kg/km)	
	Permanent Install	9.2 mm Hybrid Came	era Cable						
HDC920PEF	9.2 mm	PE, B	lack		95% TC Braid		85 lbs	/Mft (127 kg/km)	
	Direct Burial 9.2 r	mm Hybrid Fiber Cam	era Cable						
Mechanical S	pecifications (Co	mponents)							
Component	Number	Туре			Insulation (Type, OD)		Color Code		
Optical	2		lode 8.3µm Ma Cladding	ode Field,	CPE Tight Buffer, 0.9 mm		One Blue, Or	ne Yellow	
Signal	2	24 AWG	(7x32) Strande	ed TC	PE, 0.045" (1.14 mm)		One Red, On	ie Gray	
Auxiliary	4	20 AWG	(19x32) Stran	ded TC	PE, 0.060" (1.52 mm)		Two White, Tv	wo Black	
Strength Member	1	16 AWG	Stranded Stee	l	PVC, 0.084" (2.13 mm)		One White		
Electrical & O	ptical Specificat	ions							
Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperat		SMPTE Standard	
<0.70 dB/km	23.8 Ω/Mft	9.7 Ω/Mft	5.4 Ω/Mft	>10M Ω/km	3000 Volts RMS	-40°C to +	-75°C	311 Compliant	

#### 9.2 mm Portable, Extra-Flexible

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



# GHF92A HDC920

**Cable Type** Color Standard Lengths **Overbody Boot** 0 50 328 Black 1001 500 164 656′

250

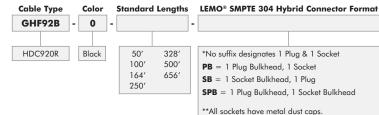
Connectors LEMO® SMPTE 304 Hybrid Connectors -1 Plug, 1 Socket with Metal Dust Caps

# 9.2 mm Permanent Install

#### **Features**

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





LEMO is a registered trademark of Interlemo 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

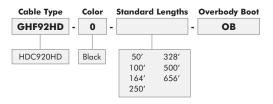
Part #	Nominal OD		Master Jack	cet (Type, Colors)		Overall Shie	ld #	Approx. Weight		
HDC920HD	9.2 mm		Polyurethane,	Black		95% TC Braid	ç	5 lbs/Mft (142 kg/km)		
	Heavy-Duty 9.2	2 mm Hybrid Came	ra Cable							
HDC920HDG	9.2 mm		Polyurethane,	Black		95% TC Braid	1	00 lbs/Mft (149 kg/km)		
	Glossy Heavy-l	Outy 9.2 mm Hybrid	d Camera Cable							
Mechanical Sp	ecifications (Cor	nponents)								
Component	Number	Туре			Insulation (Type,	OD)	Color Code			
Optical	2		Single-Mode Fiber Optic (8.3μm Mode Field, 125μm Cladding)					Yellow		
Signal	2	24 AW	G (7x32) Stranded 1	ГС	PE, 0.045" (1.14 m	ım)	One Red, One	One Red, One Gray		
Auxiliary	4	20 AW	G (19x32) Stranded	TC	PE, 0.060" (1.52 m	ım)	Two White, Two	Black		
Strength Member	1	16 AW	G Stranded Steel		PVC, 0.084" (2.13	mm)	One White			
Electrical & Op	tical Specificati	ons								
Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Sigi		perating emperature	SMPTE Standard		
<0.70 dB/km	23.8 Ω/Mft	9.7 Ω/Mft	5.4 Ω/Mft	>10M Ω/km	3000 Volts RMS		0°C to +75°C 0 0 to 95% humidit	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





#### Connectors

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









# 12 mm Heavy-Duty Hybrid Fiber Optic



Gepco® 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

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

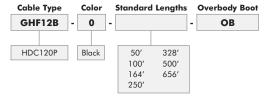
Part #	Nominal OD		Master Jac	ket (Type, Colors)	01	erall Shield	Approx. Weight		
HDC120P	12.0 mm		Polyurethan	e, Black	95	% TC Braid	135 lbs/Mi	t (201 kg/km)	
	Heavy-Duty 12 n	nm Hybrid Fiber Cai	mera Cable						
Mechanical Sp	ecifications (C	omponents)							
Component	Numbe	r Type			Insulation (Type	, OD)	Color Code		
Optical	2		-Mode Fiber Opt m Mode Field, 12		CPE Fiber Coating Kevlar® Wrap, Tight Tube PVC Ja 0.062" (1.57 mm)	cket,	One Blue, O	ne Yellow	
Signal	2	24 AV	VG (19x36) Stran	ded TC	PE, 0.044" (1.11 i	nm)	One Red, One Gray		
Auxiliary	2	16 AV	VG (65x34) Stran	ded TC	PE, 0.084" (2.13 i	nm)	One White, 0	One Black	
Strength Member	1	16 AV	VG Stranded Stee	·I	PVC, 0.087" (2.21	mm)	One White		
Electrical & O	ptical Specifica	tions							
Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signo	Dielectric Strength al) (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 @ 20°C, 60	RMS Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceed	

#### 12 mm Portable, Heavy-Duty

#### Features

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





#### Connectors

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









# 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

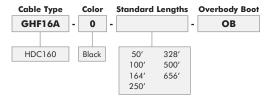
Part #	Nominal OD	Inner Jacket (Ty	pe, Colors, Diamete	r) Outer Jacket (	Outer Jacket (Type, Colors) Overall S		Shield Approx. Weight			
HDC160	16.0 mm	Flexible PVC, Blac	k, 9.2 mm	Polyurethane, Bl	Polyurethane, Black 95% TC Bro			ft (291 kg/km)		
	Extra-Flexible 16 mr	n Hybrid Camera Ca	ble							
Mechanical :	Specifications (C	omponents)								
Component	Numbe	er Type			Insulation (Type	e, OD)	Color Code			
Optical	2		Mode 8.3 $\mu$ m Mode Field Cladding	ld,	CPE Tight Buffer,	0.9 mm	One Blue, O	ne Yellow		
Signal	2	24 AW	G (7x32) Stranded TC		PE, 0.045" (1.14	mm)	One Red, Or	e Gray		
Auxiliary	4	20 AW	G (19x32) Stranded TC		PE, 0.060" (1.52	mm)	Two White, T	Two White, Two Black		
Strength Member	1	16 AW	G Stranded Steel		PVC, 0.084" (2.1	3 mm)	One White			
Electrical &	Optical Specifica	tions								
Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Si		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 RM @ 20°C, 60 H		-40°C to +75°C (@ 0 to 95% humidity)	311 Compliant (Meets or Exceed		

#### 16 mm Portable, Heavy-Duty

#### Features

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





Connectors

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









# 3-Channel Permanent-Installation Hybrid Fiber



Gepco® 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

	ace for easy installo		uit.						
Mechanica Part #	Il Specifications (Ge Nominal OD	eneral)	Master Jacket	(Type, Colors)		UL Type	Approx. Weight		
HDC3R	0.600" (15.2 mm) 3-Channel Hybrid	) Fiber Camera Cable	PVC, Orange with Yellow Stripe			CMR	170 lbs/Mft (253 kg/km)		
Mechanica	ıl Specifications (Co	mponents)							
Component	Number	Туре		Insulation (Type	, o	D)	Color Code		
Optical	6 (3 Groups of 2)	Single-Mode Fiber Op (8.3µm Mode Field, 1					acket, Yellow with Alphanumeric Print		
ignal	6 (3 Groups of 2)	24 AWG (17x32) Stro	inded TC	PVC, 0.040" (1.02	2 m	m)	One Red, One Gray (Solid or with Yellow or Orange Stripe)		
Auxiliary	6 (3 Groups of 2)	18 AWG (19x30) Stro	inded TC	PVC, 0.082" (2.08	8 m	m)	One White, One Black (Solid or with Yellow or Orange Stripe)		
Electrical &	& Optical Specificati	ions							
Fiber Attenuation	Signal Conducto DCR	Power Conductor DCR				Dielectric Strength (Power or Signal)	Operating Temperature		
<0.70 dB/km @ 1310/1550	23.8 Ω/M	lft 6.0 Ω/Mft	>	10M Ω/km		3000 Volts RMS @ 20°C, 60 Hz for 1	-40°C to +75°C min. (@ 0 to 95% humidity)		
Cable		-irst End) r <b>Breakout</b>	(First E Electrical B			(Second End) Fiber Breakout	(Second End) Electrical Breakout		
GSRHDC3R	In Feet   ST = ST   SC = SC   LC = LC   DSC =   DLC =   DLC =   DLC   SC   DLC   DLC   SC   DLC   DLC   SC   DLC   DLC	C UPC Duplex SC UPC Duplex LC UPC  Re  F =  G	undard Gender = 5-Pin AMP® Meta with HDR1 & HMM = 8-Pin AMP® CPC = 6-Pin AMP® MATE = 5-Pin AMP® Rever In-Line or Panel M = 8-Pin AMP® Rever In-Line = 8-Pin AMP® Rever Panel Mount = 6-Pin AMP® Rever	P8-Bxx Racks)  -N-LOK® Cap  se Gender CPC – tount se Gender CPC – se Gender CPC –		ST = ST UPC SC = SC UPC LC = LC UPC DSC = Duplex SC UPC DLC = Duplex LC UPC	Standard Gender  A = 5-Pin AMP® Metal CPC (for Mating with HDR1 & HMP8-Bxx Racks)  B = 8-Pin AMP® CPC  C = 6-Pin AMP® MATE-N-LOK® Cap  D = Blunt  Reverse Gender  E = 5-Pin AMP® Reverse Gender CPC - In-Line or Panel Mount  F = 8-Pin AMP® Reverse Gender CPC - Panel Mount  H = 6-Pin AMP® Reverse Gender CPC - Panel Mount		

Kevlar is a registered trademark of E. I. du Pont de Nemours and Company. AMP and MATE-N-LOK are registered trademarks of Whitaker Corporation

**Electrical Breakout Connector Options** 

Standard Gender



Fiber Breakout Connector Options

Analed polished versions are available by request



Reverse Gender

# **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**

(@ 0 to 95% humidity)

Interconnection of Electrical Contacts from CCUs to HD Cameras

For Permanent Installation Environments

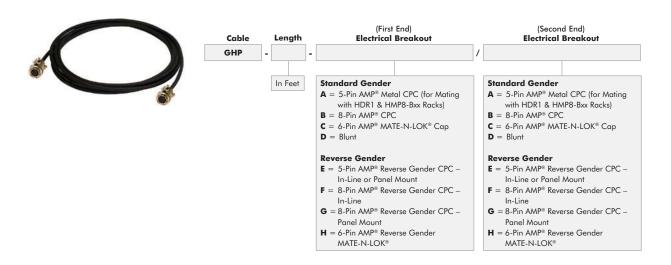
Used in Conjunction with Single-Mode Indoor

Ideal for Use with Gepco® Brand Hybrid Fiber Distribution Solutions

Specifications for SMPTE 311

Mechan	ical Specifica	itions									
Part #	# of Conductors	Nominal OD	Auxiliary Conductors	Auxiliary Insulation (Type, OD)	Signal Condu		Signal Insulation	Shield	Jacket (Type, Colors)	UL Type	Approx. Weight
HDP221	2 Auxiliary 2 Signal	0.315" (8.0 mm)	16 AWG (65x34) Stranded TC	PE, 0.020" (0.51 mm)			PE, 0.015" (0.38 mm)	90% TC Braid	PVC, Black	CMR	76 lbs/Mft (113 kg/km)
	Single-Channe										
Electrica	ıl & Optical S	ipecificati	ons								
Signal Conductor DCR	nductor Condu		Shield DCR	Insulation Resistance (Power or Signa	al)	Dielectric Strength (Power or Signo		Operating gnal) Temperature		SMPTE Standard	
15.3 Ω/Mft	4.5 Ω/Mft 2.6 Ω/Mft		>10M Ω/km	>10M Ω/km 3000 Volts		s RMS			Compliant with Electrical		

@ 20°C, 60 Hz for 1 min.



#### **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

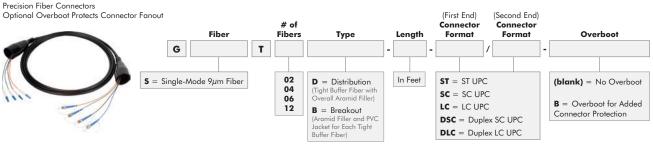
Digital Video, Audio or Networking

		pe Mode Field Diameter					Cladding Diameter				Maximum Attenuation			
iingle-Mode			8.3μm				125µm			≤ 0.50 dB/Km @ 1310/1550nm				
Mechani	ical Specific	ations												
							Num	Number		Tensile Load Minimum Bend Radius				
	Fiber Buffer	Outer Jacket	Crush Resistance	Impact Resistance	Flex Resistance	Operating Temp.	Storage Temp.	of Elements	Nominal OD	Short Term	Long Term	Installation (Pulling)	Operating	Weight
					2000 Cycles	to		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)
FSD**T	N 1 (0.0 mm OD)	Coating PU, 44 nm OD) Black N/ Overall					-70°C	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)
of Elements v							+85°C	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 Fib	er: Distributio	on										
	Acrylate Tight							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)
F3D**I	Buffer Coating (0.9 mm OD)	PU,	440	200	2000	-55°C	-70°C	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)
of Elements	with Aramid	n Aramid Black N er & PVC Black N pe Jacket		Impacts	oacts Cycles	to +85°C	to +85°C	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)

# ST/SC/LC Tactical Snake Assemblies

#### Features

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







## **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

_							el 11:	<b>-</b> : .				• • • •			
Туре			Mo	de Field Dia	meter		Claddin	g Diamete	r	Maximum Attenuation					
Multi-Mode	:		62	62.5µm								3.50 dB/Km @ 850nm, 1.00 dB/Km @ 1550nm			
Mechan	ical Specific	cations													
								Number		Tensile	Load	Minimum B	end Radius		
Part #	Fiber Buffer	Outer Jacket	Crush Resistance	Impact Resistance		Operating Temp.	Storage Temp.	of Elements	Nominal OD	Short Term	Long Term	Installation (Pulling)	Operating	Weight	
								2	0.200" (5.1 mm)	1,800 lbs	600 lbs	3.2" (81 mm)	1.6" (41 mm)	15 lbs/Mf (22 kg/km)	
	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	PU,	440	200 Impacts	2000 Cycles	-55°C to +85°C	-70°C to +85°C	4	0.220" (5.6 mm)	1,800 lbs	600 lbs	3.6" (91 mm)	1.8" (46 mm)	19 lbs/Mf (28 kg/km)	
		<sup>)</sup> Black N,	N/cm					6	0.240" (6.1 mm)	1,800 lbs	600 lbs	3.8" (97 mm)	1.9" (48 mm)	19 lbs/Mf (28 kg/km)	
	Aramia rinei							12	0.260" (6.6 mm)	2,100 lbs	700 lbs	4.2" (107 mm)	2.1" (53 mm)	34 lbs/Mf (51 kg/km)	
	Tactical Multi-	Mode Fil	ber: Distributio	n											
	Acrylate Tight							2	0.260" 6.6 mm)	2,200 lbs	550 lbs	4.2" (107 mm)	2.1" (53 mm)	21 lbs/Mf (31 kg/km)	
FMB**T	Buffer Coating (0.9 mm OD)	PU,	440	200	2000	-55°C	-70°C	4	0.290" (7.4 mm)	2,200 lbs	550 lbs	4.6" (117 mm)	2.3" (58 mm)	28 lbs/Mf (43 kg/km)	
*=Number of Elements	with Aramid	Black	N/cm	Impacts	Cycles	to +85°C	to +85°C	6	0.340" (8.6 mm)	2,400 lbs	600 lbs	5.4" (137 mm)	2.7" (69 mm)	36 lbs/Mf (53 kg/km)	
	for Each Fiber							12	0.480" (12.2 mm)	4,800 lbs	1,200 lbs	7.6" (193 mm)	3.8" (97 mm)	65 lbs/Mf (97 kg/km)	

#### ST/SC/LC Tactical Snake Assemblies

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

Optional Overboot Protects Connector Fanout



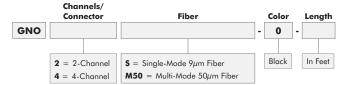




## Neutrik® opticalCON® Fiber Optic Cable Assemblies



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.









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:  $-40^{\circ}C$  to  $+75^{\circ}C$ 

Minimum Bend Radius: 5 cm

#### **Optical Performance Specifications**

Type: LC-UPC (Straight Polish)

**Fiber Type:**  $9\mu \text{m}$  Single-Mode Fiber or  $50\mu \text{m}$  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 optical CON  $^{\!\circ}$  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 <sup>®</sup> Conn	ector Specifications			
Part Number	Connector Description	Fiber	Shell Ground Contact	Mating
NO2-4FDW-A	Panel Mount opticalCON®	2	_	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
NO2-4FDW-1-A	Panel Mount opticalCON®	2	1	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
NO4FDW-A	Panel Mount opticalCON®	4	_	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
NAO2M-H1W-A	Coupler opticalCON®, Black	2 x LC-Duplex Multi-Mode PC	_	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
NAO2S-H1W-A	Coupler opticalCON®, Blue	2 x LC-Duplex Single-Mode PC	_	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
NAO2SA-H1W-A	Coupler opticalCON®, Green	2 x LC-Duplex Single-Mode PC	_	Mates with In-Line 2-Channel Neutrik® opticalCON® or Standard Duplex LC
NAO4MW-A	Coupler opticalCON®, Black	4 x Multi-Mode PC	_	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
NAO4SW-A	Coupler opticalCON®, Blue	4 x Single-Mode PC	_	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
NAO4SAW-A	Coupler opticalCON®, Green	4 x Single-Mode APC	_	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC
NAO4SAW-AX	Coupler opticalCON®, Red	4 x Single-Mode APC	_	Mates with In-Line 4-Channel Neutrik® opticalCON® or Standard LC

Neutrik and optical CON are registered trademarks of Neutrik AG.

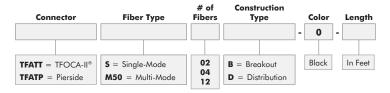




#### TFOCA-II® and Pierside Assemblies



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.



## **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.



#### 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

**Cable Type:** Tactical Single-Mode  $9.2\mu m$  or Tactical Multi-Mode  $50\mu m$ 

**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  $9.2\mu m$  or Tactical Multi-Mode  $50m\mu/125m\mu$ 

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







## 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**

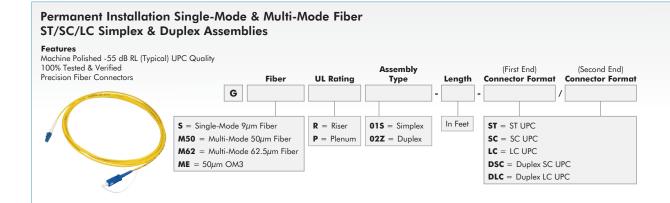
Interconnection of Video & Audio Data for Multiple HD Cameras

For Permanent Installation

Indoor/Outdoor Use

Fiber Spe	ecifications													
Туре		Mode	Field Diameter		Clade	ding Diame	ter	Maximum Attenuation						
Single-Mode	e	8.3µm			125μι	m				≤ 0.70	dB/Km @ 1:	310/1550nm		
Mechani	cal Specifications													
					Maximum	Tension	M	linimum E	Bend	Radius				
Part #	Fiber Buffer	Number of Elements	Nominal OD	Outer Jacket	Installation (Pulling)	Operating	Installation (Pulling)		Operating		— Weight		UL Type	
*=Number of Elements	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2 4 6 12	0.180" (4.6 mm) 0.200" (5.1 mm) 0.220" (5.6 mm) 0.260" (6.6 mm)	PVC PVC PVC	310 lbs 310 lbs 310 lbs 600 lbs	100 lbs 100 lbs 100 lbs 135 lbs	2.7" 3.0" 3.3" 3.9"	(69 mm) (76 mm) (84 mm) (99 mm)	1.8" 2.0" 2.2" 2.6"	(46 mm) (51 mm) (56 mm) (66 mm)	14 lbs/Mft 17 lbs/Mft 19 lbs/Mft 25 lbs/Mft	(21 kg/km) (25 kg/km) (28 kg/km) (37 kg/km)	OFNR	
	Single-Mode Distribution		0.200 (0.0 11111)	110	000 103	105 153	0.7	(77 11111)	2.0	(oo min)	23 103/1411	(07 kg/kiii)		
*=Number of Elements	Acrylate Tight Buffer Coating (0.9 mm OD) with Overall Aramid Filler	2 4 6	0.160" (4.1 mm) 0.180" (4.6 mm) 0.200" (5.1 mm) 0.220" (5.6 mm)	Plenum PVC Plenum PVC Plenum PVC Plenum PVC	270 lbs 270 lbs 310 lbs 400 lbs	90 lbs 90 lbs 100 lbs 135 lbs	2.4" 2.7" 3.0" 3.3"	(61 mm) (69 mm) (76 mm) (84 mm)	1.6" 1.8" 2.0" 2.2"	(41 mm) (46 mm) (51 mm) (56 mm)	9 lbs/Mft 11 lbs/Mft 15 lbs/Mft 19 lbs/Mft	(13 kg/km) (16 kg/km) (22 kg/km) (28 kg/km)	OFNP	
	Single-Mode Distribution		` '	1101101111110	100 100	100 100	0.0	(0 1 11111)		(50 11111)	17 10377111	(20 kg/km)		
FSB**R	Acrylate Tight Buffer Coating (0.9 mm OD)	1 (Simplex) 2 (Duplex)	0.110" (2.8 mm) 0.110" x 0.230" (2.8 mm x 5.8 mm)	PVC PVC	110 lbs 220 lbs	70 lbs 110 lbs	2.0"	(51 mm) (51 mm)	1.2"	(30 mm)	5 lbs/Mft 11 lbs/Mft	(7 kg/km) (16 kg/km)		
*=Number of Elements	with Aramid Filler & PVC Tube Jacket for Each Fiber	2 4 6	0.280" (7.1 mm) 0.310" (7.9 mm) 0.370" (9.4 mm) 0.490" (12.4 mm)	PVC PVC PVC	270 lbs 450 lbs 670 lbs	110 lbs 180 lbs 270 lbs 560 lbs	4.2" 4.7" 5.6" 7.4"	(107 mm) (119 mm) (142 mm) (188 mm)	2.8" 3.1" 3.7" 4.9"	(71 mm) (79 mm) (94 mm) (124 mm)	34 lbs/Mft 44 lbs/Mft 55 lbs/Mft 101 lbs/Mft	(51 kg/km) (66 kg/km) (82 kg/km) (150 kg/km)	OFNR	
	Single-Mode Breakout:		(,,					(100)	1	(	1	(144.18))		
FSB**P	Acrylate Tight Buffer Coating (0.9 mm OD)	1 (Simplex) 2 (Duplex)	0.110" (2.8 mm) 0.110" x 0.230" (2.8 mm x 5.8 mm)	Plenum PVC Plenum PVC	110 lbs 220 lbs	70 lbs 110 lbs	2.0"	(51 mm) (51 mm)	1.2"	(30 mm)	6 lbs/Mft 12 lbs/Mft	(9 kg/km) (18 kg/km)		
*=Number of Elements	with Aramid Filler & Plenum PVC or PVDF Tube Jacket for Each Fiber	2 4 6	0.240" (6.1 mm) 0.240" (6.1 mm) 0.280" (7.1 mm) 0.390" (9.9 mm)	PVDF PVDF PVDF	360 lbs 360 lbs 540 lbs	90 lbs 90 lbs 130 lbs 270 lbs	3.6" 3.6" 4.2" 5.9"	(91 mm) (91 mm) (107 mm) (150 mm)	3.6" 3.6" 4.2"	(91 mm) (91 mm) (107 mm) (150 mm)	23 lbs/Mft 23 lbs/Mft 32 lbs/Mft 63 lbs/Mft	(34 kg/km) (34 kg/km) (48 kg/km) (94 kg/km)	OFNP	

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.







## Multi-Mode Fiber Optic: Permanent Installation



The Gepco® 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

Туре		Mode	Field Diameter	r	Clade	ding Diame	ter		Maximum Attenuation						
Multi-Mode		62.5μr	n		125μι	m			3.50 dB/Km @ 850nm, 1.00 dB/Km @ 1550nm						
Mechani	cal Specifications														
					Maximum Tension			linimum E	Bend	Radius					
art #	Fiber Buffer	Number of Elements	Nominal OD	Outer Jacket	Installation (Pulling)	Operating		allation ing)	Оре	erating	w	eight	UL Type		
FMD**R	Acrylate Tight Buffer	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)			
	Coating (0.9 mm OD)	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)	OFNR		
*=Number	with Overall	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)	OTTAK		
of Elements	Aramid Filler	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	n: Riser Rated													
FMD**P	Acrylate Tight Buffer	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)			
	Coating (0.9 mm OD)	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)	OFNP		
*=Number	with Overall	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)	OFINE		
of Elements	Aramid Filler	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	n: Plenum Rate	d												
		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)			
FMB**R	Acrylate Tight Buffer Coating (0.9 mm OD)	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)			
	with Aramid Filler &	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)	OFNR		
*=Number of Elements	PVC Tube Jacket for	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)			
OI LIGITICIIIS	Each Fiber	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													
	4 1 - Ti 1 - D "	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)			
FMB**P	Acrylate Tight Buffer Coating (0.9 mm OD)	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)			
	with Aramid Filler &	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)	OFNP		
*=Number of Elements	Plenum PVC or PVDF Tube Jacket for Each	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)			
Liements	Fiber	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)			
	1 1001	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)			

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 Snake Assemblies Features Machine Polished -55 dB RL (Typical) UPC Quality # of (First End) (Second End) Fiber **UL** Rating **Fibers** Туре Length **Connector Format Connector Format** 100% Tested & Verified Precision Fiber Connectors G 01 In Feet $\mathbf{S} = \text{Single-Mode } 9\mu\text{m Fiber}$ R = Riser **D** = Distribution ST = ST UPC 02 (Tight Buffer Fiber with Overall Aramid Filler) $M50 = Multi-Mode 50\mu m$ Fiber P = Plenum SC = SC UPC 04 $M62 = Multi-Mode 62.5 \mu m$ Fiber LC = LC UPC 06 **B** = Breakout $ME = 50\mu m \text{ OM3}$ (Aramid Filler and PVC Jacket for Each Tight DSC = Duplex SC UPC **DLC** = Duplex LC UPC







## **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

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.



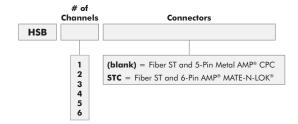
Rugged, Twist-and-Lock, 5-Pin Electrical and ST Fiber Breakout



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:  $11.5" L \times 5.5" W \times 2.5" H$ 

#### **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
Compatibility Note:	Kits for One Strain Relief
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
Compatibility Note:	For HSB Splice Boxes
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
Compatibility Note:	For HMP8 Panels and HSB Boxes
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

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#### **SMPTE Field and Studio Boxes**



#### **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:**

SMPTE 304 LEMO® Stainless Steel Connector (Plug or Socket) SMPTE 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 (SMPTE 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"

#### **Features & Benefits**

Field Box for SMPTE 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, SMPTE 311 or 3-Channel Hybrid Cables

Available in 1-, 2- or 3-Channel Configurations

#### **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 SMPTE 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

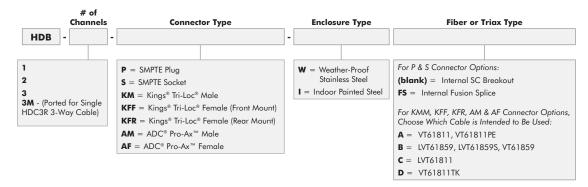
 $\mathbf{318}\text{-}\mathbf{191}\text{-}\mathbf{627}$  - Field Term SC Connector for  $900\mu\text{m}$  - Quick





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 ordered or expanded with SMPTE 304 plug, SMPTE 304 socket, or Neutrik $^{\circ}$  opticalCON $^{\circ}$  format connectors, with future connector modules available as they are released.



Expandable, Electrically Isolated Connector Modules



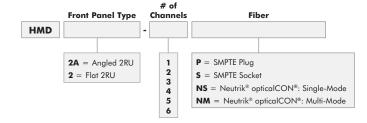
Terminate Mating Cable with SC Connector Options



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:**  $2RU-3.5" H \times 19" W \times 5.75" D$ 

#### **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
Compatibility Note:	Kits for One Strain Relief
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
Compatibility Note:	For HMD and HMS Frames
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 ordered or expanded with SMPTE 304 Plug, SMPTE 304 Socket, or Neutrik® opticalCON® format connectors, with future connector modules available as they are released.



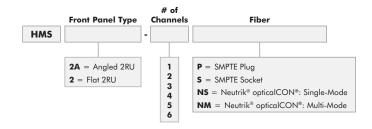
Rear Ports with Integrated Cable Strain Relief and Seal



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

-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:

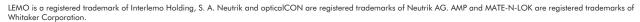
(6) Ports for Electrical/Hybrid Fiber Cable (2) Ports for Fiber/3-Channel Hybrid Fiber Cable

#### **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
Compatibility Note: k	Cits for One Strain Relief
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
Compatibility Note: F	or HMD and HMS Frames
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







## 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.

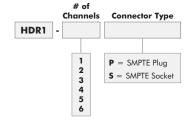
All positions on the HDR1 are completely electrically isolated by nonconductive connector mounts on the front, and the hybrid connector shells are wired to isolated pins on the rear of the chassis. For custom user-labeling and identification, each position features a designation strip. Available with 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  $\times$  19" W  $\times$  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

HDR1-EKIT-S

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

SMPTE Socket Expansion Module Kit

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## 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

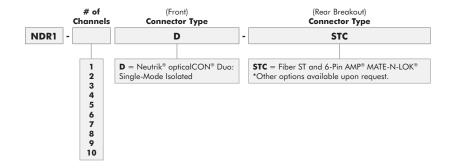
#### Optical Connector Specifications: Neutrik® opticalCON®: Single-Mode Isolated ST Breakout: 2 per Channel (2 Fibers) -55 dB Typical RL, 0.4 dB Max IL

Electrical Breakout:

6-Pin AMP® MATE-N-LOK®

Included Accessories:

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











## HMP8-Bxx SMPTE 304 Breakout Rack



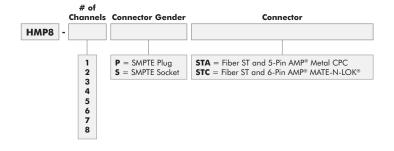
The Gepco® Brand HMP8-Bxx is a completely terminated and loaded version of the HMP8 Modular Panel (opposite page). Positions are loaded with factory terminated SMPTE 304 connectors, which break out to ST fiber and electrical connectors that are mounted in the rear connector panel attachment. Choose from 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 Acce	ssories
Part Number	Description
Compatibility Note:	For HMP8 Frames
HMP8-EKIT-P	LEMO® SMPTE 304 Plug Expansion Kit
HMP8-EKIT-S	LEMO® SMPTE 304 Socket Expansion Kit
Compatibility Note:	For HMP8 Panels and HSB Boxes
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







**Features & Benefits** 

All-Metal Frame

Panel Attachments

**HMP8-F Dimensions:** 

**Electrically Isolated Connectors** 

Nonconductive Plastic Modules

Neutrik® opticalCON® Mounts

Custom Engraving Optional

**Mechanical Specifications** 

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

Custom Configurable 8-Position Frame

Optional Rear Connector or Lacing Bar

Angled Front Panel Reduces Cable Bend Radius

ADC® ProAx®, Kings® Tri-Loc®, SMPTE 304, and

## **HMP8 Modular Hybrid Fiber and Triax Panel**



The Gepco® 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



HMP8-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)

Neutrik and optical CON are registered trademarks of Neutrik AG. ADC and ProAx are registered trademarks of ADC Telecommunication, Inc. Kings and Tri-Loc are registered trademarks of Kings Electronics Company, Inc. AMP is a registered trademark of Whitaker Corporation.





## **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.



7-Position Modular Panel



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



HMP8-LB



HMP-S SMPTE Universal



HMP-N Neutrik<sup>6</sup> opticalCON® Mount



HMP-T Kings® Triax



нмр-в 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)

Neutrik and opticalCON are registered trademarks of Neutrik AG. Kings and Tri-Loc are registered trademarks of Kings Electronics Company, Inc. AMP is a registered trademark of







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:







In-Line Breakout (See 86)



Internal Breakout (See 86)

LEMO is a trademark of Interlemo Holding, S.A.







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



Gepco® 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 Gepco HDR1 or HMP8-Bxx distribution rack.

Gepco® 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 Gepco 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**

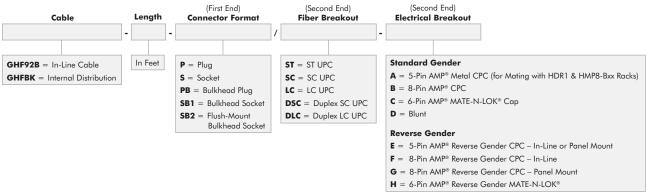
Riser Rated 311 Hybrid Cable for Permanent Installation

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**





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





## Feedthrough Panels & Chassis



Gepco® Brand's series of feedthrough panels provides a convenient, preengineered 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
OF	ST Feedthrough	216-101-E	Zirconia (Ceramic)	SENKO®	Couples Two Male, Cable Mount STs
A A	SC Feedthrough - Duplex	242-201-1A	Zirconia (Ceramic)	SENKO®	Couples Four Male, Cable Mount SCs
	LC Feedthrough - Duplex (SC Footprint)	988-3511-A	Zirconia (Ceramic)	SENKO®	Couples Four Male, Cable Mount LCs

Senko is a registered trademark of SENKO Advanced Compnents, Inc.







# SMPTE 304/311 Hybrid Fiber Direct Cable Termination Workflow

The Direct Cable termination method is achieved with panel mount SMPTE 304 hybrid fiber connectors directly terminated onto the hybrid cable that permanently interconnects between panels, junction boxes, and control room racks. Panel mount SMPTE 304 connectors offer the lowest overall insertion-loss at each breakout point. Panel mount connectors must be field- or factory-terminated and installed onsite with the DCS.3K.175.72LN installation tool.

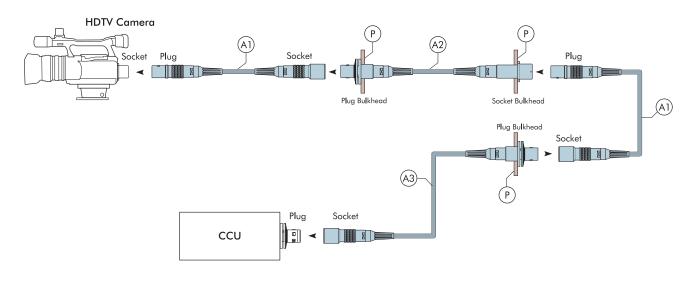
#### **Features & Benefits**

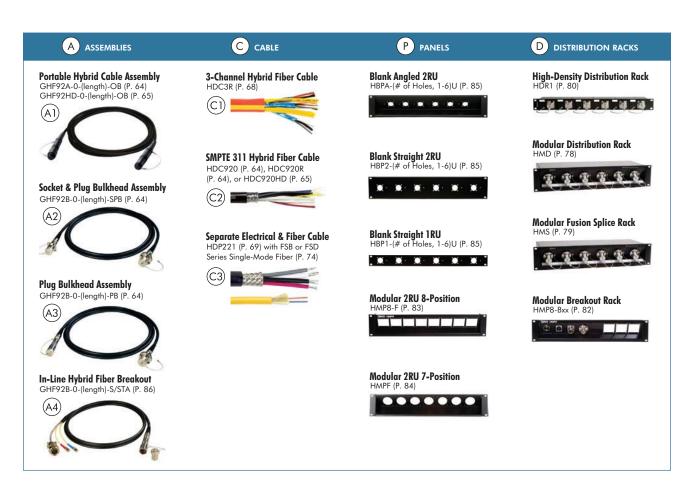
Lowest System Attenuation

Utilizes SMPTE 304 Panel Mount Connectors

Field Terminated or Factory Terminated (If Installed with Body Removal and Installation Adapter)

Blank Panels Available in Straight or Angled Configurations









# SMPTE 304/311 Hybrid Fiber Distribution Rack Workflow

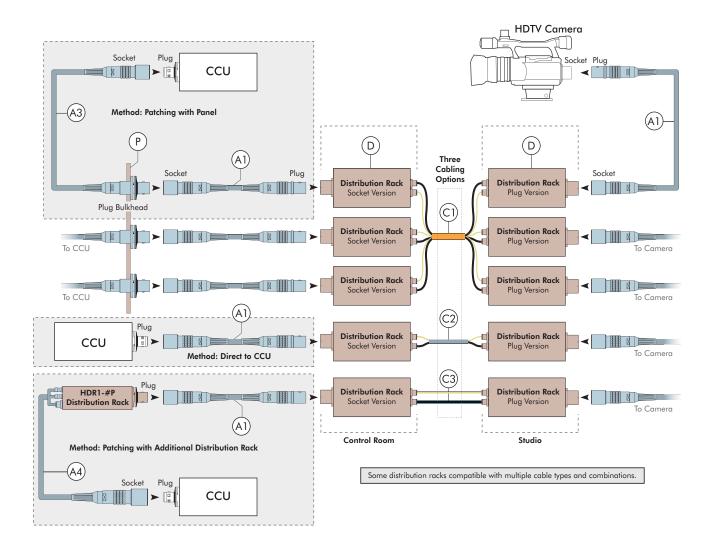
Gepco® Brand distribution racks offer an exceptionally flexible and modular solution to the field deployment and installation of permanent installation SMPTE hybrid camera cables. With the Distribution Rack method, SMPTE 304 connectors are broken out to separate electrical and optical elements on the 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









# NETWORK, AUTOMATION & LIGHTING CONTROL CABLES

92 93 94 95 96 97 98 99 100 101 101 102 102 103 103 104 104 104	• • • Broadcast	• • • • • • • • • • • • • • • • • • •	Assemblies
92	•	•	
93	•	•	
94	•	•	
95	•	•	
96	•	•	
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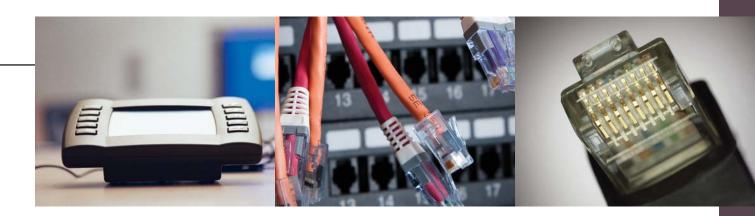
#### In This Section:

Category 6 Network 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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AMX is a registered trademark of AMX LLC.
Lutron, Homeworks, GRAFIK Eye and Sivoia are registered trademarks of Lutron Electronics Co., Inc.
Vantage is a registered trademark of Legrand Home Systems, Inc.



# 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.

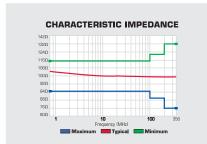
#### **Precision Characteristic Impedance**

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



Gepco® 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, Gepco 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

Part #	# of Pairs	Nomina OD	l Cond.	Insulation		Pair Color Code		Separ	Separator Jacket			Jacket Color Code		Min. Bend Radius	Max. Pulling Force	UL Type	Weig	ht
CT604/STD	4	0.205" (5.21 mn	23 AWG n) Solid BC	Polyolefin	C	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown		Divider		PVC G		Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple		1.0"	32 lbs	CMR	28 lb: (42 kç	
	Category 6 Four-Pair 250 MHz																	
CT604/STDP	4 0.200" 23 AWG (5.08 mm) Solid BC		23 AWG n) Solid BC	Flouropoly	mer C	Blue-White/Blue Orange-White/Orange Green-White/Green Brown-White/Brown		Divider		Plenum PVC	Ord Gre	Black, White, Red, Orange, Yellow, Green, Blue, Gray, Pink, Purple		1.0"	32 lbs	СМР	28 lb: (42 kg	
	Catego	ory 6 Four-P	air 250 MHz:	Plenum														
Electrical :	specific	ations																
Part #	DCR M @ 20°0		OCR Unbal. Max	Char. Imped.		Prop.		Vel. of Prop. (Installation (Plenum, Non-Plenum) Operating					tion,	Sta	ndards			
CT604/STD Series	8.9 Ω/ (328 ft)		3.0%	100 Ω (+	00 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							
												C.2 Perform						
		Freq. (			1	4	10		20	31.25	62.5	100	150	200	250	350	400	500
			on Loss (dB/100 n		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.
			(dB/100 m) (min)		70.3	59.3 61.5			14.3 16.3	39.2	29.9	22.5	14.9	8.8	3.5	_	_	
			B/100 m) (min)		72.3 72.3	61.5			16.3 52.8	41.2	32.0 45.4	24.5	16.9	10.8 37.8	5.5	- 24.1	33.3	31
			T (-IR /100 ) * !			03.3			54.8	51.9	45.4	44.3	41.7	37.8	36.3 38.3	34.1	35.3	31
		PSNEX	T (dB/100 m) (min	1)		65.2	50.2				47.4	44.3	41.7	37.0	30.3			
		PSNEXT (	dB/100 m) (min)		74.3	65.3 52.8				_	28.9	24.8	21.3	18.8	16.8	13.9	12.8	
		PSNEX NEXT (				65.3 52.8 55.7	44.8	40.7	38.8 41.7	34.9 37.9	28.9 31.8	24.8 27.8	21.3 24.3	18.8 21.8	16.8 19.8	13.9	12.8	10
		PSNEXT (I PSACRI ACRF (I	dB/100 m) (min) F (dB/100 m) (min		74.3 64.8	52.8	44.8 47.8	40.7 43.7	38.8	34.9								10 13
		PSNEXT (I PSACRI ACRF (I Return	dB/100 m) (min) F (dB/100 m) (min dB/100 m) (min)		74.3 64.8 67.8	52.8 55.7	44.8 47.8 25.0	40.7 43.7 25.0	38.8 41.7	34.9 37.9	31.8	27.8	24.3	21.8	19.8	16.9	15.8	10. 13.

<sup>\*</sup>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

Mechanic	al Specific	cations																							
Part #		lominal D	Con	ductor	s In:	sulation		Pair Color C	ode		Sej	parat	or .	Jacket		cket lor Co	de		Min. Bend Radius	Max. Pulli Force	ng	UL Type	W	/eigh	t
CT604/250	1	.235″ 5.97 mm)	23 A Solid	AWG BC	Ро	lyolefin		Blue-Wh Orange- Green-W Brown-W	White/ /hite/G	Orang Green	ge Cro	oss-We	eb l	PVC	Oı Gı	ange,	hite, Re Yellow lue, Gr ole	,	1.0"	32 lb	s	CMR		8 lbs/i 12 kg/	
	Category	6 Four-Po	ir 250	MHz																					
CT604/250P		.225″ 5.72 mm)	23 A Solid	WG BC	Flo	ouropoly	ner	Blue-Wh Orange- Green-W Brown-W	White/ /hite/G	Orang Green	ge Cro	oss-We		Plenum	Oı Gı	ange,	hite, Re Yellow lue, Gr ole	,	1.0"	32 lb	s	СМР		1 lbs/i 16 kg/	
	Category	6 Four-Po	ir 250	MHz: F	lenum																				
Electrical	Specifico	ations																							
Part #	DCR Max @ 20°C		DCR Unbe		har. mped	ı.	(Sk	op. Delo cew) Mo on-Pler	х	lenui	(I		f Prop Plenui m)		(Inst	p. Rat allation	on,		Standa	ırds					
CT604/250 Series	9.38 Ω/100 (328 ft)	0 m	4.0%	-	00 Ω	(+/-15)	45	ns/100	m		6	8%. 7	0%			to +6 C to +			Meets o						?
								ANSI/TIA	568-C.2	Perfor	mance (	Gray C		Guarai	teed Per	forman	e (Whit	e Colu	mn)						
Freq. (MHz)			1	4		10	,	ANSI/TIA 16	568-C.2		mance (	•		Guarai	teed Per		e (Whit		mn) 00	250		350		50	0
	/100 m) (max)	2.0	2.0	3.8	3.8	10 6.0 5.					31.25	5	olumn) 62.5				•		00	<b>250</b>	2.6		39.5	50	_
Insertion Loss (db/		2.0 70.3	2.0 75.3		64.5	6.0 5. 51.3 56.	9 7	16 7.5 7.7 51.7	20	8.4 49.4	<b>31.2</b> 5	10.6	<b>62.5</b>		100 .8 19.7 .5 27.6	1	50	2	29.0 3	2.8 32	2.6		39.5	-	48
Insertion Loss (db/ PSACR* (dB/100 m	ı) (min)	70.3 72.3	2.0 75.3 77.3	3.8 59.3 61.5	64.5	6.0 5. 51.3 56. 53.3 58.	9 7 4 46 4 48	16 7.5 7.7 51.7 7.7 53.8	8.5 44.3 46.3	8.4 49.4 51.4	31.25 10.7 39.2 41.2	10.6 44.3 46.3	62.5 15.4 1 29.9 3 32.0 3	5.3 19 5.1 22 7.1 24	100 .8 19.7 .5 27.6 .5 29.6	24.7 14.9 16.9	24.7 20.0 22.0	29.0 8.8 10.8	29.0 3 13.8 15.8	2.8 32 3.5 8 5.5 10	3.7	- : 	1.7	-	48
PSACR* (dB/100 m) (	n) (min) min)	70.3 72.3 72.3	2.0 75.3 77.3 77.3	3.8 59.3 61.5 63.3	64.5 66.5 68.3	6.0 5. 51.3 56. 53.3 58. 57.3 62.	9 7 4 46 4 48 3 54	16 .6 7.5 .7 51.7 .7 53.8 .2 59.3	8.5 44.3 46.3 52.8	8.4 49.4 51.4 57.8	31.25 10.7 39.2 41.2 49.9	10.6 44.3 46.3 54.9	62.5 15.4 1 29.9 3 32.0 3 45.4 5	5.3 19 5.1 22 7.1 24 0.4 42	100 .8 19.7 .5 27.6 .5 29.6 .3 47.3	14.9 16.9 39.7	24.7 20.0 22.0 44.7	29.0 8.8 10.8 37.8	29.0 3 13.8 15.8 42.8 3	2.8 32 3.5 8 5.5 10 6.3 41	3.7	_ :	1.7	_ _	48
Insertion Loss (db/ PSACR* (dB/100 m) ACR* (dB/100 m) ( PSNEXT (dB/100 m) NEXT (dB/100 m)	n) (min) min) n) (min) (min)	70.3 72.3 72.3 74.3	2.0 75.3 77.3 77.3 79.3	3.8 59.3 61.5 63.3 65.3	64.5 66.5 68.3 70.3	6.0 5. 51.3 56. 53.3 58. 57.3 62. 59.3 64.	9 7 4 46 4 48 3 54 3 56	16 7.5 .7 51.7 .7 53.8 .2 59.3 .2 61.3	8.5 44.3 46.3 52.8 54.8	8.4 49.4 51.4 57.8 59.8	31.25 10.7 39.2 41.2 49.9 51.9	10.6 44.3 46.3 54.9 56.9	62.5 15.4 1 29.9 3 32.0 3 45.4 5	5.3 19 5.1 22 7.1 24 60.4 42 2.4 44	100 .8 19.7 .5 27.6 .5 29.6 .3 47.3 .3 49.3	24.7 14.9 16.9 39.7 41.7	24.7 20.0 22.0 44.7 46.7	29.0 8.8 10.8 37.8 39.8	29.0 3 13.8 15.8 42.8 3 44.8 3	2.8 32 3.5 8 5.5 10 6.3 41 8.3 43	3.7	- : : - :	1.7 39.2 41.2	- - -	36
Insertion Loss (db/ PSACR* (dB/100 m) ACR* (dB/100 m) ( PSNEXT (dB/100 m) ( NEXT (dB/100 m) ( PSACRF (dB/100 m)	n) (min) (min) (min) (min) (min) (min)	70.3 72.3 72.3 74.3 64.8	2.0 75.3 77.3 77.3 79.3 69.8	3.8 59.3 61.5 63.3 65.3 52.8	64.5 66.5 68.3 70.3	6.0 5. 51.3 56. 53.3 58. 57.3 62. 59.3 64. 44.8 49.	9 7 4 46 4 48 3 54 3 56 8 40	16 7.5 7.7 51.7 53.8 7.2 59.3 7.2 61.3 7.7 45.7	8.5 44.3 46.3 52.8 54.8 38.8	8.4 49.4 51.4 57.8 59.8 43.7	31.25 10.7 39.2 41.2 49.9 51.9	5 10.6 44.3 46.3 54.9 56.9 39.9	62.5 15.4 1 29.9 3 32.0 3 45.4 5 47.4 5 28.9 3	5.3 19 5.1 22 7.1 24 0.4 42 2.4 44 3.8 24	100 .8 19.7 .5 27.6 .5 29.6 .3 47.3 .3 49.3 .8 29.8	1. 24.7 14.9 16.9 39.7 41.7 21.3	24.7 20.0 22.0 44.7 46.7 26.3	29.0 8.8 10.8 37.8 39.8 18.8	29.0 3 13.8 15.8 42.8 3 44.8 3	2.8 32 3.5 8 5.5 10 6.3 41 8.3 43 6.8 21	3.7 0.7 .3 3.3	- : : - :	1.7 39.2 41.2	- - -	48 
Insertion Loss (db/ PSACR* (dB/100 m) ACR* (dB/100 m) ( PSNEXT (dB/100 m) NEXT (dB/100 m) PSACRF (dB/100 m) ACRF (dB/100 m) (	n) (min) (min) n) (min) (min) (min) (min) (min)	70.3 72.3 72.3 74.3 64.8 67.8	2.0 75.3 77.3 77.3 79.3 69.8 72.8	3.8 59.3 61.5 63.3 65.3 52.8 55.7	64.5 66.5 68.3 70.3 57.7 60.7	6.0 5. 51.3 56. 53.3 58. 57.3 62. 59.3 64. 44.8 49. 47.8 52.	9 7 4 46 4 48 3 54 3 56 8 40 8 43	16 7.5 1.7 51.7 1.7 53.8 1.2 59.3 1.2 61.3 1.7 45.7 1.7 48.7	8.5 44.3 46.3 52.8 54.8 38.8 41.7	8.4 49.4 51.4 57.8 59.8 43.7 46.7	31.25 10.7 39.2 41.2 49.9 51.9 34.9	5 10.6 44.3 46.3 54.9 56.9 39.9	62.5 15.4 1 29.9 3 32.0 3 45.4 5 47.4 5 28.9 3 31.8 3	5.3 19 5.1 22 77.1 24 0.4 42 0.4 44 2.4 44 3.8 24 6.8 27	100 .8 19.7 .5 27.6 .5 29.6 .3 47.3 .3 49.3 .8 29.8 .8 32.8	14.9 16.9 39.7 41.7 21.3 24.3	24.7 20.0 22.0 44.7 46.7 26.3 29.3	29.0 8.8 10.8 37.8 39.8 18.8 21.8	29.0 3 13.8 15.8 42.8 3 44.8 3 23.8 1 26.8 1	2.8 32 3.5 8 5.5 10 6.3 41 8.3 43 6.8 21 9.8 24	3.7 0.7 .3 3.3 .8	- : : - :	1.7 39.2 41.2 18.9 21.9	- - -	48 
Freq. (MHz) Insertion Loss (db, PSACR* (dB/100 m) ACR* (dB/100 m) ( PSNEXT (dB/100 m) ( PSNEXT (dB/100 m) ( PSACRF (dB/100 m) ( Return Loss (dB) (t TCL (dB/100 m) (m)	n) (min) (min) n) (min) (min) (min) n) (min) n) (min) min)	70.3 72.3 72.3 74.3 64.8	2.0 75.3 77.3 77.3 79.3 69.8	3.8 59.3 61.5 63.3 65.3 52.8	64.5 66.5 68.3 70.3 57.7 60.7 23.6	6.0 5. 51.3 56. 53.3 58. 57.3 62. 59.3 64. 44.8 49.	9 7 4 46 4 48 3 54 3 56 8 40 8 43 0 25	16 7.5 7.7 51.7 53.8 7.2 59.3 7.2 61.3 7.4 48.7 7.6 7.6 7.7 48.7 7.6 7.6 7.7 7.7 7.7 7.7 7.7 7	8.5 44.3 46.3 52.8 54.8 38.8	8.4 49.4 51.4 57.8 59.8 43.7	31.2: 10.7 39.2 41.2 49.9 51.9 34.9 37.9 23.6	5 10.6 44.3 46.3 54.9 56.9 39.9 42.9 25.0	62.5 15.4 1 29.9 3 32.0 3 45.4 5 47.4 5 28.9 3 31.8 3 21.5 2	5.3 19 5.1 22 7.1 24 0.4 42 2.4 44 3.8 24	.8 19.7 .5 27.6 .5 29.6 .3 47.3 .3 49.3 .8 29.8 .8 32.8 .1 22.5	1. 24.7 14.9 16.9 39.7 41.7 21.3	24.7 20.0 22.0 44.7 46.7 26.3	29.0 8.8 10.8 37.8 39.8 18.8	29.0 3 13.8 15.8 42.8 3 44.8 3 23.8 1 26.8 1	2.8 32 3.5 8 5.5 10 6.3 41 8.3 43 6.8 21	3.7 0.7 .3 1.3 .8 1.8	- : : - :	1.7 39.2 41.2	- - -	36 38 15 18

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







#### **NETWORK**

## **Premium Category 6 Network**



Gepco® 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, Gepco 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

																					•						
Mechanic	al Spec	ifications																									
Part #	# of Pairs	Nominal OD	Con	d.	Insu	latio		Pair Color	Code	•		Sepo	arato	r Ja	ıcket		Jacke Color		•	В	Nin. Send Radius	Pu	ax. Illing rce	UL Typ		Weig	,ht
CT604/500	4	0.260" (6.60 mm)	23 A Solid		Polyo	olefin		Blue-V Orang Green Brown	ge-Wh i-Whit	ite/Or e/Gree	en	Cros	s-Web	PV	′C		Black, Orang Green Pink, I	ge, Yel ı, Blue	low,	1	.0"	50	lbs	СМ	ıR	30 lb (45 k	
	Premi	um Category	6 Four	-Pair	500 A	1Hz																					
CT604/500P	4	0.250" (6.35 mm)	23 A Solid		Flou	opoly	mer	Blue-V Orang Green Brown	ge-Wh i-Whit	ite/Or e/Gree	en	Cros	s-Web	. Ple	enum	PVC	Black, Orang Green Pink, I	ge, Yel , Blue	low,	1	.0"	50	lbs	СМ	ιP	32 lb (48 k	
	Premi	um Category	6 Four	-Pair	500 A	1Hz: P	lenum	1																			
Electrical	Specifi	cations																									
Part #	DCR M		al.		Char Impe	•				. Delo w) Mo				of Pro -Plen Jm)			(Inst	o. Rat allatio	on,		Stand	dards	5				
CT604/500 Series	8.9 Ω/1 (328 ft)	00 m 3.0%	6		100 Ω	Ω (+/-	15)		45 ns	/100	m		70%,	72%				to +60 to +					ceeds /IEC 1				2
									AN	SI/TIA	568-C.:	Perfo	mance	(Gray	Colum	n) Gu	arantee	d Perfo	rmanc	e (Whi	te Colu	nn)					
Freq. (MHz)					1		4	1	0	1	6	2	0	31	.25	6	2.5	10	00	20	00	2	50	3	50	5	00
Insertion Loss (db		ax)		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)				70.3 72.3	77.4	59.3 61.5	66.8	51.3	58.8	46.7	54.2	44.3	51.9	39.2 41.2	47.0 49.0	29.9 32.0	38.0 40.0	22.5	30.8	8.8	17.5	3.5 5.5	12.4	_	3.5 5.5	_	H
PSNEXT (dB/100 m)				72.3	79.4	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)				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 n	n) (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) (n	-:1			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			_	_

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





## **NETWORK**

## Category 5e Network



Gepco® Brand CT504/STD Category 5e Cables 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

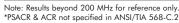
IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100

BASE-TX, 10 BASE-T

52/155 Mp/s ATM

ANSI X3.263: 100 Mb/s

Mechanic	al Spec <u>ifi</u>	cations															
Part #		Nominal OD	Conductors	Insulation	Pair Color	Code		Jacket		Jacket Color Cod	e	Minimui Bend Radius		Maximum Pulling Force	UL Type	We	eight
CT504/STD		0.200" (5.08 mm)	24 AWG Solid BC	Polyolefin	Orang Green	/hite/Blue e-White/O -White/Gre -White/Bro	en	PVC		Black, Whit Orange, Yo Green, Blu Pink, Purple	ellow, e, Gray,	1.0"		25 lbs	CMR		lbs/Mft kg/km
	Category	5e Four-Pa	ıir														
CT504/STDP	1 /1	0.180" (4.57 mm)	24 AWG Solid BC	Flouropolymer/ Dual-Layer Polyolefin	Orang Green	/hite/Blue e-White/O -White/Gre -White/Bro	en	Plenum P\	VC	Black, Whit Orange, Yo Green, Blu Pink, Purple	ellow, e, Gray,	1.0"		25 lbs	СМР		lbs/Mft kg/km
	Category	5e Four-Pa	iir: Plenum														
Electrical	Specificat	tions															
Part #	DCR Max @ 20°C	DCR U Max	nbal. Char. Imped	Mutual I. Capacitance		op. Delay kew) Max		Vel. of Pro (Plenum, I		Plenum)	(Inste	. Rating Illation, ating)	St	andards			
CT504/STD Series	8.9 Ω/100 (328 ft)	m 3.0%	100 Ω (+/-15	17.0 pF/ft	45	5 ns/100 m	1	70%, 72%				o +60°C, to +75°C		eets or Excee at 5e, ISO/IE			
									AN	ISI/TIA 568-0	.2 Perform	nance					
		Freq. (MH	·	1	4	10	16	20	25	31.25	62.5	100	155	200	250	300	350
			Loss (dB/100 m) (m		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
			IB/100 m) (min)	60.3	49.2	40.8	36.0	33.5	30.9		18.4	10.3	1.4	-			_
			100 m) (min)	63.3	52.2	43.8	39.0	36.5	33.9		21.4	13.3	4.4	-	-	-	-
			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
			/100 m) (min) IB/100 m) (min)	65.3	56.3 48.8	50.3 40.8	47.2 36.7	45.8 34.8	44.3 32.8		38.4	35.3 20.8	32.4 17.0	30.8 14.8	29.3 12.8	28.1	27.1 9.9
			100 m) (min)	63.8	51.8	43.8	39.7	34.8	35.8		27.9	23.8	20.0	17.8	15.8	14.3	12.9
			es (dR) (min)	20.0	22.0	25.0	25.0		24.3		21.5	20.0	20.0	17.0	. 5.0	14.0	/









#### **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

Part #	# of N Pairs O	ominal D	Conduct	ors Ins	ulation		air olor Code	•	J	acket	Jack Colo	et or Code		Minimum Bend Radius	Maximun Pulling Force	UL Type	Weight
CT504/350	4	200" 08 mm)	24 AWG Solid BC	Pol	yolefin	O: G:	ue-White/ range-Wh reen-White own-White	ite/Oran e/Green	ge P	VC	Orai Gree	k, White, Renge, Yellow en, Blue, G Purple	',	1.0"	25 lbs	CMR	21 lbs/Mfi (31 kg/km
	Enhanced	Category	5e Four-Pa	r 350 MI	Hz												
CT504/350P		180" 57 mm)	24 AWG Solid BC	Flo	uropolym	er G	ue-White/ range-Wh reen-White own-White	ite/Oran e/Green	ge Pl	lenum PVC	Orai Gree	k, White, Renge, Yellow en, Blue, G	',	1.0"	25 lbs	СМР	19 lbs/Mft (28 kg/km
	Enhanced	Cateaorv	5e Four-Pa	r 350 MI	Hz: Plenu	m					· ·						
Electrical	Specificat	ions															
Part #	DCR Max @ 20°C	DCR		Char. Imped.			Delay ) Max		Vel. of (Non-P Plenun	lenum,		Temp. Ro (Installat	ion,		Standards		
1411 //		3.0%		100 Ω (+/-15)		-	100 m		70%, 72	,		0°C to +6	60°C,	,	Meets or Exce Cat 5e, ISO/I		
				( . , ,											,,		
		Freq. (M		(., .,	1	4	10	16	20	25	31.25	62.5	100	155	200 25	300	
		Insertion		, , ,	1 2.0	4.0	10	<b>16</b> 8.1	<b>20</b> 9.2	<b>25</b> 10.3	<b>31.25</b>	<b>62.5</b> 16.8	100 21.7		, ,		350
CT504/350	8.9 Ω/100 ι	Insertion	iHz)	m) (max)										155 27.7	200 25	4 40.5	350
CT504/350 Series	8.9 Ω/100 i (328 ft)	Insertion PSACR (	iHz) n Loss (dB/100	m) (max)	2.0	4.0	6.4	8.1	9.2	10.3	11.6	16.8	21.7	155 27.7 4.7	<b>200 25</b> 32.0 36.	4 40.5	<b>350</b> 44.3
,		Insertion PSACR (dB	lHz) n Loss (dB/100 dB/100 m) (mir	m) (max)	2.0	4.0 52.3	6.4 43.9	8.1 39.1	9.2 36.6	10.3 34.0	11.6 31.3	16.8 21.6	21.7 13.6	155 27.7 4.7 5.7	<b>200 25</b> 32.0 36.	4 40.5	350 44.3 —
,		Insertion PSACR (d ACR (dB PSNEXT NEXT (d	hHz) n Loss (dB/100 dB/100 m) (min /100 m) (min) (dB/100 m) (min)	m) (max)	2.0 63.3 64.3	4.0 52.3 53.3	6.4 43.9 44.9	8.1 39.1 40.1	9.2 36.6 37.6	10.3 34.0 35.0	11.6 31.3 32.3	16.8 21.6 22.6	21.7 13.6 14.6	155 27.7 4.7 5.7	200 25 32.0 36. — —	4 40.5 ————————————————————————————————————	350 44.3 — — — 27.1 28.1
,		PSACR (dB PSNEXT NEXT (d	htz) n Loss (dB/100 dB/100 m) (min /100 m) (min) (dB/100 m) (m B/100 m) (min) (dB/100 m) (min)	m) (max) ii)	2.0 63.3 64.3 65.3 66.3 61.0	4.0 52.3 53.3 56.3 57.3 49.0	6.4 43.9 44.9 50.3 51.3 41.0	8.1 39.1 40.1 47.2 48.2 36.9	9.2 36.6 37.6 45.8 46.8 35.0	10.3 34.0 35.0 44.3 45.3 33.0	11.6 31.3 32.3 42.9 43.9 31.1	16.8 21.6 22.6 38.4 39.4 25.1	21.7 13.6 14.6 35.3 36.3 21.0	155 27.7 4.7 5.7 32.4 33.4 17.2	200 25 32.0 36. — — — — — — 30.8 29. 31.8 30. 15.0 13.	4 40.5 ————————————————————————————————————	350 44.3 — — 27.1 28.1 10.1
,		PSACR (dB PSNEXT NEXT (d	hHz) n Loss (dB/100 dB/100 m) (min /100 m) (min) (dB/100 m) (min)	m) (max) ii)	2.0 63.3 64.3 65.3 66.3	4.0 52.3 53.3 56.3 57.3	6.4 43.9 44.9 50.3 51.3	8.1 39.1 40.1 47.2 48.2	9.2 36.6 37.6 45.8 46.8	10.3 34.0 35.0 44.3 45.3	11.6 31.3 32.3 42.9 43.9	16.8 21.6 22.6 38.4 39.4	21.7 13.6 14.6 35.3 36.3	155 27.7 4.7 5.7 32.4 33.4 17.2	200 25 32.0 36. — — — 30.8 29. 31.8 30.	4 40.5 ————————————————————————————————————	350 44.3 — — 27.1 28.1 10.1





#### **NETWORK**





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.

#### **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

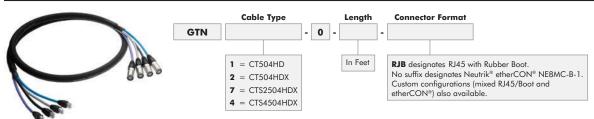
## **Applications**

**Ethernet Network Patching** 

For Portable Use or Remote Environments

Mechanica	I Specifications (Series)					
Insulation	Pair Color Code		Cat 5e Inner Jacket (	Type, OD)	Cat 5e Out	er Jacket
PE	White/Blue & Blue, Wh White/Green & Green,			mm)	Black TPE	
Cable Med	hanical Specifications (I	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)
	Heavy-Duty Tactical Cat 5e C	Cable: Extra-Flexible				
CT504HDX	4	0.245" (6.22 mm)	24 AWG Solid BC	N/A	AWM Style 21144	26 lbs/Mft (39 kg/km)
	Heavy-Duty Tactical Cat 5e C	Cable: Low-Loss				
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)
	2-Channel Heavy-Duty Taction	cal Cat 5e Snake				
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)
	4-Channel Heavy-Duty Tactic	cal Cat 5e Snake				

Cable Electri	cal Specificatio	ns											
Part #	DCR Max	DCR Unbal. Max	Mutual Capac. M	ах	Char. Imped.		Prop. De (Skew) M		Vel. of Pr	op.	Standard	s	
	28.6 Ω/Mft	5%	17 pF/ft		100 Ω		45 ns/100	) m	69%		ISO/IEC 1 Cat 5e Pat		
	Freq. (MHz)		0.772	1	4	8	10	16	20	25	31.25	62.5	100
CT504HD	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
	28.6 Ω/Mft	5%	17 pF/ft		100 Ω		45 ns/100	) m	69%			xceeds ANS D/IEC 1180	SI/TIA 568-C.2 01
CT504HDX	Freq. (MHz)		0.772	1	4	8	10	16	20	25	31.25	62.5	100
CTS2504HDX	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
CTS4504HDX	PSNEXT (dB)		64.0	62.3	53.3	48.8	47.3	44.3	42.8	41.3	39.9	35.4	32.3
2.2.231121	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

Mechan	ical :	Specif	ications																
Part #		# of   Pairs (	Nominal OD	Cond.	Insulation	Pair Cold	or Code		Separato Core Tap		Shield		Drain Wire	Jacket	Min. Bene Radi		lax ulling orce		Weight
CT104/SI	DM 4		0.310″ (7.87 mm)	23 AWG Solid BC	Polyolefin	Orai Gree	-White/Bl nge-White en-White/ vn-White/	e/Orange Green	Cross-We Polypropy		Polyester- Backed Aluminum (Aluminum Side In)	n Foil	24 AWG (7x32) TC	PVC, Black White, Blu		" 40	0 lbs	CMR	42 lbs/Mft (63 kg/km
		Multim	edia Categ	gory 6A Shie	elded Cable fo	or Use v	with Crest	ron® Syste	ms										
CT104/SI	OMP 4	1	0.295" (7.49 mm)	23 AWG Solid BC	Flouropolym	orai Gree	-White/Bl nge-White en-White/ vn-White/	e/Orange Green	Cross-We Woven Fiberglass	,	Polyester- Backed Aluminum (Aluminum Side In)	n Foil	24 AWG (7x32) TC	Plenum PV Black, Whi Blue		" 40	0 lbs	СМР	46 lbs/Mft (69 kg/km
		Multim	edia Cated	aory 6A Shie	elded Cable fo	or Use v	vith Crest	ron® Syste	ms: Plenum										
Electric	al Sa																		
Part #	D	CR Ma	x D	CR Unbal. ax	Char. Imped.		Prop. I		Vel. of	Pro		mp. R istalla	ating tion, Ope	erating)	Stand	ards			
CT104/SI Series		.9 Ω/10 328 ft)	00 m 4.	0%	100 Ω (+/-	-15)	35 ns/1	100 m	70%				-60°C, +75°C		ANSI/T	IA 568	3-C.2		
				Freq. (MHz)		1	4	10	16	20	31.25	62.5	100	150	200	250	300	4	500
	PSACR*	(dB/100 r	m) (min)	ANSI/TIA 568	3-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* (d	B/100 m)	(min)	ANSI/TIA 568		72.2	61.5	53.4		46.4	41.4	32.4		18.0	12.2	7.2	2.9		
			100 m) (min)	ANSI/TIA 568		2.1	3.8	5.9	7.5	8.4	10.5	15.0		23.7	27.8	31.1	34.3		0.1 45.3
		(dB/100		ANSI/TIA 568		72.3	63.3	57.3		52.8	49.9	45.4		39.7	37.8	36.3	35.1	_	3.3 31.8
		B/100 m)	• •	ANSI/TIA 568		74.3	65.3	59.3		54.8	51.9	47.4		41.7	39.8	38.3	37.1	_	5.3 33.8
		B/100 m) (dB/100 r		ANSI/TIA 568 ANSI/TIA 568		64.8	52.8 55.8	44.8		38.8	34.9 37.9	28.9		21.3	18.8	16.8	15.3	_	2.8 10.8 5.8 13.8
	_	Loss (dB) (		ANSI/TIA 568		20.0	23.0	25.0		25.0	23.6	21.5		18.9	18.0	17.3	16.8		5.9 15.2
	_	/100 m) (r		ANSI/TIA 568	-	40.0	40.0	40.0		37.0	35.1	32.0	_	28.2	27.0	26.0	25.2		4.0 23.0

67.0

73.0

85.0

73.0

85.0

67.0

73.0

85.0

54.3

71.6

83.6

48.3

68.5

80.5

44.2

65.9

77.9

40.7

64.0

76.0

38.2

62.5

74.5

36.2

61.3

73.3

34.7

59.5

71.5

58.0

30.2

70.0

PSANEXT (dB/100 m) (min)

PSANEXT (dB/100 m) (min)

ANSI/TIA 568-C.2

General Cable Gua

ANSI/TIA 568-C.2

General Cable Gu

General Cable Typical

67.0

73.0

85.0

72.2

73.0

85.0

64.2

73.0

85.0

73.0





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



#### **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

Part #	# of Pairs	Nominal OD	Cond.	Insulation	Pai Col	ir Ior Code		Core Ta	ре	Shield		Drain Wire	Jacket	Min. Bend Radius	Max. Pulling Force		Weight
CT504/SDM		0.250" (6.35 mm)	24 AWG Solid BC	Polyolefin	Ord Gre	e-White/Blue ange-White/C een-White/Gr wn-White/Bro	een	Polyester		Polyester- Backed Aluminur (Aluminu Side In)	n Foil	26 AWG Stranded TC	PVC, Black, White, Blue	1.0"	25 lbs	CMR	36 lbs/Mft (63 kg/km
	Multin	nedia Catego	ory 5e Cab	le for Use with	Cres	stron® Systems	5										
CT504/SDMP		0.225" (5.72 mm)	24 AWG Solid BC	Flouropolyme	Ord Gre	e-White/Blue ange-White/C een-White/Gr wn-White/Bro	een	Polyester		Polyester- Backed Aluminur (Aluminu Side In)	n Foil	26 AWG Stranded TC	Plenum PVC, Black, White, Blue	1.0"	25 lbs	СМР	32 lbs/Mft (69 kg/km
	Multin	nedia Catego	ory 5e Cab	le for Use with	Cres	stron® Systems	s: Plenu	ım									
Electrical S	pecific	ations															
	DCR Mo @ 20°C		Unbal.	Char. Imped.		Prop. Delay Skew) Max		. of Prop.		(		Rating llation, ıting)	Standards				
CT504/SDM Series	8.9 Ω/1 (328 ft)	00 m 3.0%		100 Ω (+/-15	5) 4	15 ns/100 m	72%	%, 70%				+60°C, to +75°C	ANSI/TIA 50 Automation ICEA S-90-0	), ISO/IEC	11801 E		
		Freq. (A			1	4	10	16	20	25	31.2			155 20	00 250	3	00 350
			(dB/100 m) ( B/100 m) (mi		60.3	.,,.=	40.8	36.0 39.0	33.5	30.9	28.2		10.3	1.4 -			
		ACR* (c	B/ IUU M) (MI	")	03.3	32.2	43.0	37.0	30.3	33.9	31.2	21.4	13.3	4.4 -			

Note: Results beyond 100 MHz for reference only.

Insertion Loss (dB/100 m) (max)

PSNEXT (dB/100 m) (min)

PSACRF (dB/100 m) (min)

ACRF (dB/100 m) (min)

Return Loss (dB) (min)

2.0

62.3

63.8

53.3

56.3

51.8

6.5

47.3

40.8

43.8

8.2

44.2

36.7

39.7

9.3

42.8

45.8

34.8

37.8

25.0

10.4

41.3

32.8

35.8

11.7

39.9

42.9

30.9

33.9

17.0

35.4

38.4

24.9

27.9

22.0

32.3

35.3

20.8

23.8

28.0

29.4

32.4

17.0

20.0

32.4

27.8

30.8

14.8

17.8

36.9

26.3

12.8

15.8

25.1

28.3

11.3

14.3

24.1

12.9









#### **AUTOMATION**

## Control Cable for Use with Crestron® Systems



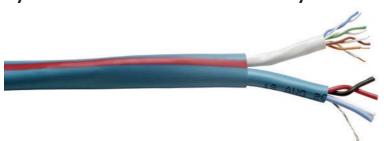
#### **Features & Benefits**

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

Mechanic	al Specificati	ons								
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)
	Control Cabl	e for Use with	Crestron® Syste	ems						
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)
	Control Cabl	e for Use with	Crestron® Syste	ems: Plenum						
Electrical	Specification	s								
Part #	Impedance	Capaci	tance	Conductor DCR	Drain DCR	Velocity of Propagation	Capacitance		Power Co	onductor DCR
18/22CRT	95 Ω	12.5 pF Between	/ft n Conductors	15.3 Ω/Mft	23.8 Ω/Mft	79%	31.7 pF/ft Between Conduc	ctors	6.0 Ω/Mft	
18/22CRTP	95 Ω	12.5 pF Betweer	/ft n Conductors	15.3 Ω/Mft	23.8 Ω/Mft	82%	31.7 pF/ft Between Conduc	ctors	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

Mechanic	al 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)
	Hybrid Cable for Use with	Crestron® Systems: 18/22CRT	+ 1 Cat 5e				
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)
	Hybrid Cable for Use with	Crestron® Systems: 18/22CRT	+ 2 Cat 5e				
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)
	Hybrid Cable for Use with	Crestron® Systems: 18/22CRT	+ 4 Cat 5e				
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)
	Hybrid Cable for Use with	Crestron® Systems: 18/22CRT	+ 2 Cat 5e + 2 RG	6 Quad Coax			

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.

Crestron is a registered trademark of Crestron Electronics, Inc.







#### **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

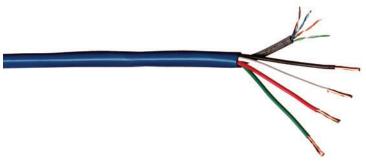
UL Rated for Permanent Installation

Mechanico	al Specificat	ions								
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 Cab	le for Use wit	h 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	СМР	29 lbs/Mft (43 kg/km)
	Control Cab	le for Use wit	h AMX® Systems:	Plenum						

Electrical	Specification	ns					
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

	(#, 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 Contr	rol 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)

Cat 5e ELEMENT SPECIFICATIONS, See Page 95.







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



#### **Features & Benefits**

18 AWG Conductors

Two- and Four-Conductor Versions

Shielded with Drain Wire

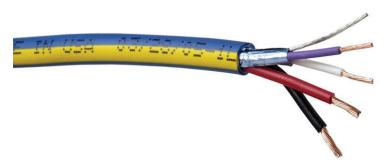
Color Striped for Easy Identification

UL Rated for Permanent Installation

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
182LUTDS	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 Co	able for Use with	Lutron® Homeworks	® Systems: Two-Conductor					
184LUTDS	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 C	able for Use with	h Lutron® Homework:	s® 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

Part #	Overall Diameter	Communication Elements	Power Elements	Jacket (Type, Color)	UL Type	Approx. Weight
18/22KYP	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 v	vith Lutron® Homeworks® Systems				









## 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

art #	Overall Diameter	Communication Elements	Power Elements	Ground Elements	Jacket (Type, Color)	UL Type	Approx. Weight
8/22GFE	0.253" (6.43 mm)	Conductors: 1 Pair 22 AWG (7x30) Stranded BC, 15.3 Ω/Mft Insulation: PE, 0.013" (0.33 mm), White & Violet, 22 pF/ft Shield: 100% Foil with 24 AWG (7x32) TC Drain	Conductors: 1 Pair 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft Insulation: PVC, 0.015" (0.38 mm), Black & Red	N/A	PVC, Blue with Green Stripe	CL3 & CM	40 lbs/Mft (60 kg/km)
	Control Cable for Use	with Lutron® GRAFIK Eye® Systems: 1	8 AWG Power Conductors				
2/22LGRX	0.300" (7.62 mm)	Conductors: 1 Pair 22 AWG (7x30) Stranded BC, 15.3 Ω/Mft Insulation: PE, 0.013" (0.33 mm), White & Violet, 22 pF/ft Shield: 100% Foil with 24 AWG (7x32) TC Drain	Conductors: 1 Pair 12 AWG (19x25) Stranded BC, 1.8 Ω/Mft Insulation: PVC, 0.015" (0.38 mm), Black & Red	Conductors: 1 Cond. 18 AWG (7x26) Stranded BC, 6.0 \( \Omega/\text{Mft} \) Insulation: PVC, 0.010" (0.254 mm), Orange	PVC, Blue with Blue Stripe	CL3 & CM	85 lbs/Mft (127 kg/km)

## 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

Part #	Overall Diameter	Communication Elements	Power Elements	Ground Elements	Master Jacket (Type, Color)	UL Type	Weight
16/185VA	0.380" (9.65 mm)	Conductors: 4 x 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft Insulation: PE, 0.015" (0.381 mm), Violet, Yellow, Gray, Blue, 17.5 pF/ft Shield: 100% Foil with 20 AWG Drain Wire (10x30) TC	Conductors: 2 x 16 AWG (26x30) Stranded BC, 4.0 Ω/Mft Insulation: PVC, 0.015" (0.381 mm), Red/White & Red	Conductors: 1 x 18 AWG (16x30) Stranded BC, 6.7 Ω/Mft Insulation: PVC, 0.015" (0.381 mm), Green/Yellow	PVC, Blue with Red Stripe	CL3 & CM	95 lbs/Mft (142 kg/km)
	Hybrid Cabl	e for Use with Lutron® Sivoia® Systems	rstems				
16/18SVAP	0.322" (8.18 mm)	Conductors: 4 x 18 AWG (16x30) Stranded BC, 5.46 Ω/Mfl Insulation: SGPVC, 0.010" (0.254 mm), Violet, Yellow, Gray, Blue, 17.5 pF/fl Shield: 100% Aluminum Polyester with 20 AWG Drain Wire (10x30) TC	Conductors: 2 x 16 AWG (26x30) Stranded BC, 4.0 \( \Omega/Mft \) Insulation: SGPVC, 0.010" (0.254 mm), Black, Red	Conductors: 1 x 18 AWG (19x30) Stranded BC, 5.46 Ω/Mft Insulation: SGPVC, 0.010" (0.254 mm), Green	Plenum PVC, Natural with Red Stripe	CL3P or CMP	83 lbs/Mft (124 kg/km)

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







## 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

Mechanica	l Specific	ations					
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 Vanta	ge® 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

Mechanic	al Specificat	ions					
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 Stat	tion Cable for Use w	ith 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

Mechanica	I Specific	cations							
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	e & Module Cabl	le for use with LiteTou	ch® Systems					

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







## **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  $\Omega$  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

Mechanic	al Specificat	ions						
Part #	# of Cond.	Nominal OD	Conductors	Insulation (Type, Wall, Color Code)	Shield	Drain Wire	Jacket	Approx. Weight
DLC122	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 Lightin	g Control Cable:	1 Pair					
DLC222	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 Lig	hting Control Cal	ble: 2 Pair					
DLC124	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 Lightin	ng Control Cable:	1 Pair					
DLC224	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 Li	ghting Control Co	ıble: 2 Pair					

DMX512	Lighting	Control	Cable:	2 Pair

Electrical Sp	pecifications			
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

Length

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

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

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



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

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

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Pin 5 - White





## **TOURING & STAGE LIGHTING CABLES**

113	113	112	112	111	111	110	109	108	Page
						•	•	•	Broadcast
•	•	•	•	•	•	•	•	•	Commercial A/V
						•	•	•	Assemblies

## 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



<sup>\*</sup>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.

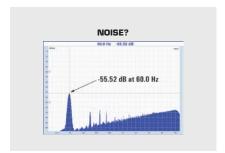
#### Indoor/Outdoor Use

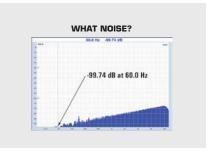
Gepco® Brand and Carol® Brand touring and stage lighting cables are designed for indoor or outdoor use including the hostile environments found at live sounds venues.

#### **Electrical Characteristics & Specifications**

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

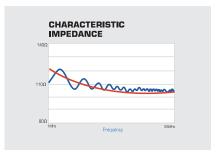
Saving time and hassle while improving performance, Gepco Brand RunONE powered cables are designed with shielding to protect the audio signal from picking up the electromagnetic noise that can be introduced from the current in the power cable. Conventional Method: The first graph below shows the typical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





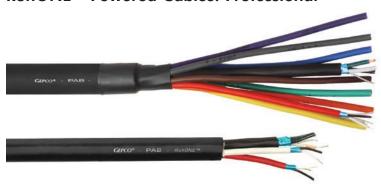
#### Precision 110 $\Omega$ Impedance

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  $\Omega$  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. 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 & Benefits**

#### Audio

Precision 110  $\Omega$  Impedance

Low-Density Polyethylene Insulation

#### Powe

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

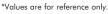
Audio + Power Snakes for Stage or FOH

DMX Lighting Control

**AES3 Digital Audio** 

Microphone or Line Level Balanced Analog Audio

Conducto	r	Insulation (Type	, Wall, Color)			Sh	ield		Drain			Jacke	t (Type, (	OD)
14 AWG (4 Stranded B		PVC, 0.016" (0.41 Black, White and C		n, 0.005" (0	0.127 mm)	10	0% Foil		18 AWG Stranded			PVC, 0 (8.86)		
Audio N	Mechanical S	ecifications												
Conductor		Insulation (Ty	pe, Wall, Colo	r)	Shield	Drain			Fille	r		Jacke	t (Type, c	OD)
24 AWG (7	7x32) Stranded To	C LDPE, 0.021" (0.	53 mm). Black	and White	100% Fo	il 22 AW	'G (7x30) S	tranded TO	. Polve	ethylene Ro	od		0.184" (4.6	
,	echanical Sp	, ,	,,				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	, , , , , ,				
onductor		lation (Type, Wall, (	Color) Pair	Color Cod	le		Shi	eld	Drain			lacke	t (Type, C	OD)
onaocioi	1 11130	idiloli (Type, Wall,	•			hite/Orange;	3111	eiu	Diam			Jucke	(Type, (	50,
4 AWG S						White/Brown	100	)% Foil	26 AWC	9 (7x34) So	olid TC	PVC, 0	).300" (7.6	62 mr
Overall	Mechanical	Specifications												
laster Ja	acket (Type, Col	or)					·	JL Type						
lexible PV	C, Black						A	WM 2464						
ndividu	val Mecha <u>nic</u>	al Specifications												
art #	# of Power	Power Color Code	# of Audio	Audio C	olor Code	# of Data	Data	Color Cod	le OD			Weight		
A2	1 x 3 Conductor	Black	2 Pair	Red and	White	_	_		0.64	5" (16.4 r	nm)	206 lbs/N	Aft (307 kç	g/km]
A2C	1 x 3 Conductor	Black	2 Pair	Red and	White	2 Cat 5e	Black	& Gray	0.83	0" (21.1 r	nm)	271 lbs/N	Aft (404 kg	a/km
	1 x 3 Conductor	Black	8 Pair	Base 10		_	_			7" (23.0 r		339 lbs/N		
	1 x 3 Conductor	Black	12 Pair	Base 10		_	_			)6" (25.6 r		424 lbs/N		
	1 x 3 Conductor	Black	12 Pair	Base 10		2 Cat 5e	Black	& Gray	1.14	0" (29.0 r	nm)	492 lbs/N	Aft (733 kç	g/km)
Audio E	lectrical Spec	ifications												
Capacita	nce		h	npedance	•	Cond	octor DCR				Drain DC	CR		
	etween conducto		1	10 Ω		25.6 Ω	2/Mft			1	I5.3 Ω/M	ıft		
		uctor and other tied to	shield				,							
	Electrical Spe	cifications												
Capacita					onductor [	OCR					Drain DC	R		
	etween conductor	rs, uctor and other tied to	shield	2	.5 Ω/Mft					6	5.45 Ω/M	.ft		
	ectrical Speci		Silicia											
DCR Max @ 20°C		OCR Inbal. Max	Char.		rop. Delay		Vel. of	Prop. lenum, Pl			Temp. R			
<u>@ 20 C</u>		.0%	Imped.		5 ns/100 m		70%, 72		enum)		0°C to +		rating)	
	Freq. (MHz)		(+/-15)	10	16	20 25	31.25	62.5	100	155	200 to	250	300	35
			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
3.9 Ω/100	DC A CD (-ID (1)		0.3 49.2	40.8		33.5 30.9	28.2	18.4	10.3	1.4	_	-	_	_
328 ft)	ACR (dB/100	m) (min) 6	3.3 52.2	43.8	39.0	36.5 33.9	31.2	21.4	13.3	4.4	-	-	-	_
020 II)	PSNEXT (dB/	100 m) (min)	2.3 53.3	47.3		42.8 41.3	39.9	35.4	32.3	29.4	27.8	26.3	25.1	2
	NEXT (dB/10		56.3	50.3		45.8 44.3	42.9	38.4	35.3	32.4	30.8	29.3	28.1	2
	PSACRF (dB/		0.8 48.8	40.8		34.8 32.8	30.9	24.9	20.8	17.0	14.8	12.8	11.3	
	ACRF (dB/10		3.8 51.8	43.8		37.8 35.8	33.9	27.9	23.8	20.0	17.8	15.8	14.3	12
		dB) (min) 2	0.0 23.0	25.0	25.0	25.0 24.3	23.6	21.5	20.1	_	_		_	_









## RunONE™ Powered Cables: Touring



The Touring Line of Gepco® 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  $\Omega$  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. 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  $\Omega$  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

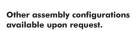
DMX Lighting Control

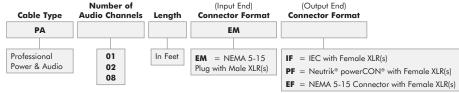
AES3 Digital Audio

Microphone or Line Level Balanced Analog Audio

Power	<sup>r</sup> Mechanical Sp	ecification:	\$							
Conduc	tor	Insula	tion (Type, W	(all, Color)		Shield	Drain	ı	Jacket	(Type, OD)
12 AWG Stranded	(105x32) I BC		.016" (0.41 mn White and Gree	n) and Nylon, 0.00 n	05" (0.127 mm)	100% Foil	18 AW Strand	/G (7x26) ed TC	PVC, 0.3 (10.1 m	
Audio	Mechanical Sp	ecifications								
Conduc	tor	Insulation	(Type, Wall,	Color)	Shield	Drain		Filler	Jacket (Type,	OD)
24 AWG	(7x32) Stranded TC	LDPE, 0.02	I" (0.533 mm),	Black and White	100% Foil	22 AWG (7x30) S	tranded TC	Polyethylene Rod	PVC, 0.184" (4	.67 mm)
Overd	III Mechanical S	Specification	าร							
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 Spec	ifications								
Capaci	tance					Conducto	or DCR	Drai	n DCR	
60 pF/fi	between conductor	s, 108 pF/ft be	tween one cond	uctor and other tie	ed to shield	1.58 Ω/M	ft	4.31	Ω/Mft	
Audio	Electrical Spec	ifications								
Capaci	tance					Impedance	Cor	nductor DCR	Drain DCR	
15 pE/fi	hetween conductor	s 27 nF/ft hetv	veen one condu	ctor and other tied	to shield	110.0	25	6 O/Mft	15.3 O/Mft	







Cable Type	Number of Audio Channels	Length	(Input End) Connector Format	(Output End) Connector Format
С	08		EMR	EFR
Professional Power, Audio & Data	02 12	In Feet	<b>EMR</b> = NEMA 5-15 Plug with (2) Male XLRs and (2) RJ45s	EFR = NEMA 5-15 Connector with (2) Female XLRs and (2) RJ45s

Cable Type	Number of Audio Channels 02	Length	(Input End) Connector Format EMF	(Output End) Connector Format  IFM
Touring Power & Audio	02	In Feet	EMF = NEMA 5-15 Plug with ( Male XLRs and (1) Female XLR	IFM = NEMA 5-15 Connector with (1) Female XLR and (1) Male XLR

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## **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  $\Omega$  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

Part #	# of Cond.	Nominal OD	Conductors	Insulation (Type, Wall, Color Code)	Shield	Drain Wire	Jacket	Approx. Weight
DLC122	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 Lightin	ng Control Cable:	1 Pair					
DLC222	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 Li	ghting Control Ca	ble: 2 Pair					
DLC124	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 Lighti	ing Control Cable:	1 Pair					
DLC224	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 L	ighting Control Co	ıble: 2 Pair					

Electrical Sp	ecifications			
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

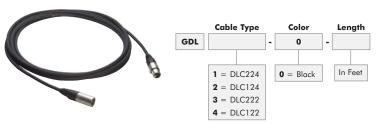
#### **Recommended Pinout for 5-Pin XLR:**

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

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

Pin 5 - White

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.





**a** 



## **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.

Specifico	itions						
Part #	AWG Size	Conductor Stranding	Nom	inal OD	Current Amps <sup>1</sup>	Approx. Net Weight Ibs/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′

<sup>(1)</sup> NEC Table 400.5(A)(2)

#### **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.

Specifico	ations						
Part #	AWG Size	Conductor Stranding	Non	ninal OD	Current Amps <sup>1</sup>	Approx. Net Weight Ibs/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'

<sup>(1)</sup> 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.

#### **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





Non-stock item; minimum quantity purchase required.

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

Non-stock item; minimum quantity purchase required

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



## 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.

Specific	ations							
Part #	# of Cond.	AWG Size	Conductor Stranding	Non	ninal OD	Current Amps <sup>1</sup>	Approx. Net Weight lbs/Mft	Std. Ctn.
			TYPE SJ	OOW - 3	00 VOLT - UL/	CSA		
02601	2	18	41/34	0.310"	(7.87 mm)	10	60	1000'
02602	3	18	41/34	0.320"	(8.13 mm)	10	70	1000'
02603	4	18	41/34	0.345"	(8.76 mm)	7	85	250'
02604	2	16	65/34	0.315"	(8.00 mm)	13	67	1000'
02605	3	16	65/34	0.335"	(8.51 mm)	13	83	250'
02606	4	16	65/34	0.370"	(9.40 mm)	10	100	250'
02607	2	14	105/34	0.370"	(9.40 mm)	18	90	250'
02608	3	14	105/34	0.375"	(9.53 mm)	18	114	250'
02609	4	14	105/34	0.405"	(10.29 mm)	15	132	250'
			TYPE SO	OW - 60	00 VOLT - UL/0	CSA		
02631*	2	18	41/34	0.365"	(9.27 mm)	10	75	250'
02632	3	18	41/34	0.375"	(9.53 mm)	10	84	250'
02633*	4	18	41/34	0.400"	(10.16 mm)	7	110	250'
02634	2	16	65/34	0.370"	(9.40 mm)	13	86	250'
02635	3	16	65/34	0.395"	(10.03 mm)	13	105	250'
02636	4	16	65/34	0.425"	(10.80 mm)	10	127	250'
02621	5	16	65/34	0.515"	(13.08 mm)	8	181	250'
02637*	2	14	105/34	0.510"	(12.95 mm)	18	155	250'
02638	3	14	105/34	0.525"	(13.34 mm)	18	176	250'
02639	4	14	105/34	0.575"	(14.61 mm)	15	218	250'
02622*	5	14	105/34	0.675"	(17.15 mm)	12	285	250'
02641*	2	12	168/34	0.590"	(14.99 mm)	25	200	250'
02642	3	12	168/34	0.600"	(15.24 mm)	25	243	250'
02643	4	12	168/34	0.650"	(16.51 mm)	20	295	250'
02623*	5	12	168/34	0.730"	(18.54 mm)	16	315	250'
02645	3	10	259/34	0.660"	(16.76 mm)	30	299	250'
02646	4	10	259/34	0.710"	(18.03 mm)	25	413	250'
02624*	5	10	259/34	0.770"	(19.56 mm)	20	432	250'

<sup>\*</sup> Non-stock item; minimum quantity purchase required.

#### **Features**

**Excellent Flexibility in Cold Temperatures** 

Lasts Longer in Flex Applications (Extra-Flexible Class M Stranding)

Integral Flexfill®

Ozone-, Sunlight (UV)-, Water-\* and Weather-

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

Jacketed and Unjacketed Constructions Available in 7 and 9 Conductors





<sup>(1)</sup> Green conductor for grounding only. Ampacities based on NEC Table 400.5(A)(1).  $^{(3)}$  Actual shipping weight may vary.



## **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.

Specific	ations							
Part #	# of Cond.	AWG Size	Conductor Strandina	Non	ninal OD	Current Amps <sup>1</sup>	Approx. Net Weight Ibs/Mft	Std. Ctn.
- 4.1. //		0.20			00 VOLT - UL/		1.00, 11111	
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'
			TYPE S	00W - 60	00 VOLT - UL/	CSA		
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).

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

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

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**

116 117 118 119 120 121 122 123	• • • • Water-Resistant	ABS/Shipboard	LSZH
116	•		
117	•		
118	•		
119	•		
120	•		
121	•		
122	•		
123		•	•
124			
125		•	•
126		•	•
127		•	•
128		•	•
125 126 127 128 129 130 131 132 132		•	
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 Single-Pair: 22 AWG
LSZH Digital Audio Single-Pair: 24 & 26 AWG



# 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-swellable 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.

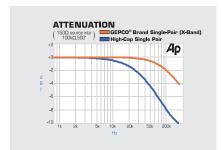
#### **High-Purity Copper**

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.





## 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-swellable fillers to prevent transverse and longitudinal water ingress.

#### **Features & 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

Conductors	Ins	ulation	Pair Shield	Pair Drain	Master Jacket	UL Type
22 AWG (7x30) Stranded BC	PVC	C, 0.010" (0.254 mm)	100% Foil	24 AWG (7x32) Stranded TC	PVC, Gray	CM/CL3
Mechanical S	pecifications	s (Individual)				
Part Number	# of Pairs	Color Code			Nominal OD	Approx. Weight
HBSP222	2	Black/Red & Red, Black/Whi	te & White		0.355" (9.02 mm)	44 lbs/Mft (65 kg/km)
HBSP224	4	Black/Red & Red, Black/Whi	te & White, Black/Green & G	reen, Black/Blue & Blue	0.414" (16.52 mm)	79 lbs/Mft (118 kg/km)
HBSP226	6	Black/Red & Red, Black/Whi Black/Yellow & Yellow, Black	te & White, Black/Green & G c/Brown & Brown	reen, Black/Blue & Blue,	0.505" (12.83 mm)	101 lbs/Mft (150 kg/km)
Electrical Spe	cifications					
Capacitance			Cone	d. DCR	Drain DCR	
50 pF/ft Between		and Other Tied to Shield	15.3	Ω/Mft	23.8 Ω/Mft	





## HydroBloc™ Shielded & 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-swellable fillers to prevent transverse and longitudinal water ingress.

#### **Features & 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

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
HB\$2230	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
	22 AWG Solid x 3 HydroBlo	c™ CM/CL3 W	ater-Resistant Cable	e: 2 Shielded & 1 Unshielded					
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)
	22 AWG Stranded x 3 Hydr	oBloc™ CM/CL	3 Water-Resistant C	Cable: 2 Shielded & 1 Unshield	led				
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)
	22 AWG Solid x 4 HydroBlo	c™ CM/CL3 W	ater-Resistant Cable	e: 2 Shielded & 2 Unshielded					
IBS224	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
	22 AWG Stranded x 4 Hydr	oBloc™ CM/CL	3 Water-Resistant C	Cable: 2 Shielded & 2 Unshield	led				
HB5203	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)
	20 AWG Stranded x 3 Hydr	oBloc™ CM/CL	3 Water-Resistant C	Cable: 2 Shielded & 1 Unshield	led				
IBS204	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)
	20 AWG Stranded x 4 Hydr	oBloc™ CM/CL	3 Water-Resistant C	Cable: 2 Shielded & 2 Unshield	led				
Electrical	Specifications								
Part #	Cond. DCR		Сар	acitance					
HBS2230	16.2 Ω/Mft		50 p	F/ft Between Conductors, 89	pF/ft Betwee	en One Conductor	and Others Tied	o Shield	
HBS223	15.3 Ω/Mft		55 p	F/ft Between Conductors, 99	pF/ft Betwee	en One Conductor	and Others Tied	o Shield	
HBS2240	16.5 Ω/Mft		50 p	F/ft Between Conductors, 89	pF/ft Betwee	en One Conductor	and Others Tied	o Shield	
HBS224	15.3 Ω/Mft		55 p	F/ft Between Conductors, 99	pF/ft Betwee	en One Conductor	and Others Tied	o Shield	
HBS203	10.1 Ω/Mft		61 p	F/ft Between Conductors, 109	pF/ft Betw	een One Conducto	r and Others Tied	to Shield	
HBS204	10.1 Ω/Mft		61 r	F/ft Between Conductors, 109	pF/ft Betw	en One Conducto	r and Others Tiec	to Shield	







## 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 & 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

Part #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Shield	Drain Wire	Jacket (Type, Colors)	UL Type	Approx. Weight
HB\$2220	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 AW	G Solid x 2 Hydr	oBloc™ CM/CL3 Wa	ter-Resistant Cable: Shielded					
HB\$222	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 AW	G Stranded x 2 I	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 AW	G Stranded x 2 I	HydroBloc™ CM/CL3	Water-Resistant Cable: Shielded					
HB\$182	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 AW	G Stranded x 2 I	HydroBloc™ CM/CL3	Water-Resistant Cable: Shielded					
IBS186	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 AW	G Stranded x 4 I	HydroBloc™ CM/CL3	Water-Resistant Cable: Shielded					
Electrical	Specific	ations							
Part #		Cond. D	CR	Capacitance					
HBS2220		16.5 Ω/	Mft	49 pF/ft Between Conductor	s, 89 pF/ft E	Between One Condu	ctor and Other Tiec	to Shield	
HBS222		15.3 Ω/	Mft	55 pF/ft Between Conductor	s, 99 pF/ft E	Between One Condu	ctor and Other Tiec	to Shield	
HBS202		10.1 Ω/	Mft	61 pF/ft Between Conductor	s, 109 pF/ft	Between One Cond	uctor and Other Tie	ed to Shield	
HBS182/HB	S186	6.4 Ω/	Mft	70 pF/ft Between Conductor	s 126 nF/ft	Between One Cond	uctor and Others Ti	ied to Shield	









## 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-swellable fillers to prevent transverse and longitudinal water ingress.

#### **Features & 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

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)
	22 AWG S	olid x 4 HydroBloc™ (	CM/CL3 Water-Resistant C	able: Unshielded			
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)
	18 AWG S	tranded x 2 HydroBlo	c™ CM/CL3 Water-Resista	nt Cable: Unshielded			
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)
	16 AWG S	tranded x 2 HydroBlo	c™ CM/CL3 Water-Resista	nt Cable: Unshielded			
Electrical	Specification	ons					
Part #			Cone	d. DCR	Capacito	ınce	
HBU2240			16.5	Ω/Mft	49 pF/ft		
HBU182			6.4	Ω/Mft	40 pF/ft		
HBS162			4.5	Ω/Mft	43 pF/ft		







## 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 & 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** 

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 AWC	x 4 HydroBloc	™ FPL/PLTC Water-Re	sistant 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 AWC	x 2 HydroBloc	™ FPL/PLTC Water-Re	sistant 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 AWC	x 4 HydroBloc	™ FPL/PLTC Water-Re	sistant 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 AWC	x 2 HydroBloc	™ FPL/PLTC Water-Re	sistant 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 AWC	x 2 HydroBloc	™ FPL/PLTC Water-Re	sistant Cable: Shielded									
HB\$122T	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 AWC	x 2 HydroBloc	™ FPL/PLTC Water-Re	sistant Cable: Shielded									
Electrica	Specific	ations											
Part #		Cond. I	OCR	Capacitance									
HBS184T, H	IBS182T	6.4 Ω/N	\ft	37 pF/ft Between Conduct	ors, 68 pF/ft	Between One Condu	ctor and Other Tied	l to Shield					
HBS164T, H	IBS162T	4.0 Ω/λ	\ft	43 pF/ft Between Conduct	ors, 77 pF/ft	Between One Condu	ctor and Other Tied	l to Shield					
HBS142T		2.5 Ω/λ	\ft	50 pF/ft Between Conduct	ors, 90 pF/ft	Between One Condu	ctor and Other Tied	to Shield					
HBS122T		1.6 Ω/Μ	Aft	58 pF/ft Between Conduct	T 1.6 Ω/Mft 58 pF/ft Between Conductors, 105 pF/ft Between One Conductor and Other Tied to Shield								







## 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-swellable fillers to prevent transverse and longitudinal water ingress.

#### **Features & 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

art #	# of Cond.	Nominal OD	Conductor	Insulation/Color Code	Jacket (Type, Colors)	UL Type	Approx. Weight
IBU184T	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)
	18 AWG >	4 HydroBloc™ FPL/I	PLTC Water-Resistant Cable	: Unshielded			
IBU182T*	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)
	18 AWG >	a 2 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
IBU164T	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)
	16 AWG	4 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
IBU162T*	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)
	16 AWG	2 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
IBU144T	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)
	14 AWG	4 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
IBU142T*	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)
	14 AWG	2 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
IBU122T*	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)
	12 AWG	a 2 HydroBloc™ FPL/F	PLTC Water-Resistant Cable	: Unshielded			
Electrical :	Specificati	ons					
Part #				Cond. DCR	Сара	ıcitance	
НВU184T, НІ	BU182T		6	.4 Ω/Mft	25 pF	-/ft	
1BU164T, HI	BU162T		4	.0 Ω/Mft	28 pF	-/ft	
НВU144T, НІ	BU142T		2	.5 Ω/Mft	30 pF	-/ft	
HBU122T			1	.6 Ω/Mft	34 pF	:/ft	

<sup>\*</sup>Two (2) conductor constructions will have two PVC rod fillers in the core to help withstand the rigors during operation.







## HydroBloc™ Coaxial Cables





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 & Benefits**

Advanced Water-Blocked Construction

Sunlight- and Moisture-Resistant Jacket

Cables Comply with TIA-455-82-B Water Penetration Test

Precision 75  $\Omega$  Impedance

 $4.5~\mathrm{GHz}$  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

Mechani	cal Specifi	cations																		
Part #		lominal DD	Conductor	Insul (Type	ation , OD)		Shield			cket ype, C	olors)		UL Typ	e			prox. eight			
HBS201HD		.242" 6.15 mm)	20 AWG Solid BC		njected Foam " (3.61 mm)		95% TC E 100% Foi		PV	C, Blac	:k		CM/	CL2			lbs/Mft kg/km			
	20 AWG F	HydroBloc™	Water-Resist	tant HD Coax																
HBS201	1 -	.240" 6.10 mm)	20 AWG Solid BC		njected Foam " (3.61 mm)		95% BC E	Iraid	PV	C, Blac	:k		CM/	CL2			lbs/Mft kg/km			
	20 AWG F	HydroBloc™	Water-Resist	tant Coax																
HBS181	1 -	.278" 7.06 mm)	18 AWG Solid BC		njected Foam " (4.57 mm)	PE,	95% BC E	Braid	PV	C, Blac	:k		CM/	CL2			lbs/Mft kg/km			
	18 AWG F	HydroBloc™	Water-Resist	tant Coax																
Electrica	l Specifica	tions																		
		Return	Loca		Cond.	Shield	Vel.				No	minal	Atten	uatio	n (dB	per 1	00 ft)			
Part #	Impedance	(100 kH	lz-1 GHz), 4.5 GHz)	Capacitance	DCR	DCR per Mf	of	1 MHz	3.6 MHz	10 MHz		135 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
					Cond.	Shield	Vel.				No	minal	Atten	uatio	n (dB	per 1	00 ft)			
Part #	Impedance	Return (100 kH	Loss lz-1 GHz)	Capacitance	DCR	DCR per Mf	of	1 MHz	10 MHz	50 MHz	100 MHz	200 MHz		700 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 & Benefits**

Tinned Copper Conductors
22 AWG Low-Cap, Shielded Single-Pair
Low-Loss Foam Dielectric (Data Pair)
18 AWG Power Conductors
LSZH Construction

## Applications

UL Rated for CMG-LS

Communications

Low-Voltage Power Bus for Tuners Multimedia Control Panels/Devices Shipboard and Offshore

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/Shipboa	rd Control Co	able								
Electrical S	pecifications										
				Data Pair					Power P	air	
Part #	Impedance	Capacit	tance	Conductor DC	R Drain DCF		ocity of pagation	Capacitance	P	ower Condi	octor DCR
18/22CRTSB	100 Ω	15.0 pF, Between	/ft Conductor	16.0 Ω/Mft	23.8 Ω/Mfl	79%		35.0 pF/ft Between Conducto	rs 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 & 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

Mechanic	al Spe	cifications	(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)
	ABS/S	Shipboard Sta	ndard Single-Pair:	Easy Strip						
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)
	ABS/S	Shipboard Au	dio/Control Two-P	air						
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)
	ABS/S	Shipboard Au	dio/Control Three-	Pair						
Electrical	Specif	ications								
Part #	Co	pacitance						Cond. DCR	Shi	ield DCR
61801EZSB	35	pF/ft Betwee	n Conductors, 62	pF/ft Between One Conductor		16.0 Ω/Mft	10.	9 Ω/Mft		
6600SB	35	pF/ft Betwee	n Conductors, 62	pF/ft Between One Conductor	and Other T	ied to Shield		16.0 Ω/Mft	10.	6 Ω/Mft
6603SB	30	pF/ft Betwee	n Conductors, 55	pF/ft Between One Conductor	and Other T	ied 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 & 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

Part #	# of Cond.	Nominal OD	Conductor	Insulation (Wall, Color Code)	Jacket (Type, Colors)	Temperature Rating	UL Type	Approx. Weight
SSU122SB	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)
	ABS/Shipb	ooard 12 x 2 AWG	Speaker and Control Ca	ble				
SSU124SB	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)
	ABS/Shipb	ooard 12 x 4 AWG	Speaker and Control Ca	ble				
SSU142SB	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)
	ABS/Shipb	ooard 14 x 2 AWG	Speaker and Control Ca	ble				
SSU144SB	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)
	ABS/Shipb	ooard 14 x 4 AWG	Speaker and Control Ca	ble				
Electrical S	pecificatio	ns						
Part #					Cond.	DCR		
SSU122SB, SSI	J124SB				1.59 🕻	2/Mft		
SSU142SB, SSI	J144SB				2.53 0	2/Mft		







#### ABS/SHIPBOARD

## **ABS High-Definition Coax**



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 & Benefits**

Ultra-Low Attenuation & Return Loss Precision 75  $\Omega$  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

Part #		Nominal OD	Conductor	Insulation (Type, OD	-	Shield	d		cket /pe, Co	olors)				empe ating	rature	•	UL Type		Approx Weight	
VHD1100SB	1	0.401" (10.2 mm)	14 AWG Solid BC	Gas-Injecte 0.282" (7.		, 95% T 100%	C Braid, Foil		ıme-Re ZH Poly				-3	0°C to	+75°	°C	CMG		82 lbs/ <i>l</i> (120 kg,	
	Extended-	Distance RG	11 HD Coax																	
VSD2001SB	1	0.275" (6.99 mm)	18 AWG Solid BC	Gas-Injecte 0.180" (4.5		, 95% T 100%	C Braid, Foil		ıme-Re ZH Poly				-3	0°C to	+75	°C	СМС		47 lbs/N (69 kg/l	
	Low-Loss	RG 6 HD Co	ЭX																	
Electrical :	Specificat	ions																		
		Return	Laca		Cond.	Shield	Vel.				Nor	ninal .	Atten	uatior	ı (dB	per 1	00 ft)			
Part #	Impedan	(100 kl	lz-1 GHz), -4.5 GHz)	Capacitance	DCR per Mft	DCR per Mft	of Prop.	1 MHz	3.6 MHz	10 MHz	71.5 MHz		270 MHz			1 GHz		2.25 GHz	_	4.5 GHz
VHD1100SB	75 Ω (+/-2	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	8.7
VSD2001SB	75 Ω (+/-2	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	13.2





#### ABS/SHIPBOARD

### **ABS Broadband & Antenna Coax**



Tacti©el™ Strong Cell Technology

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

Mechanic									er Pai	-									
Part #	# of Cond.	Nominal OD	Conductor	Insulat (Type,		Shield		(Type		lation		cet e, Col	lors)	Temp Ratin			L ype	Appr Weig	
V18/2PZSB	1 Coax 2 Power		18 AWG Solid BC	Gas-Inje Foam P (4.57 m	E, 0.180"	95% BC Brain	d	Stran 0.010 Polyp	ded BC	5 mm), ne,	Flam	ne-Reta 1 Polya k		-30°C	to +7	5°C C	MG-LS	74 lbs (109	
	ABS/SI	hipboard Coax: Siamese with	1 RG 6 18	AWG + 2	Conductor	Power 1	8 AWG												
VB1860SB	1	0.274" (6.96 mm)	18 AWG Copper Cla Steel	Gas-Inje d Foam P (4.57 m	E, 0.180"	60% AL 100% F						ne-Reta I Polya k		-30°C	to +7	5°C C	MG-LS	34 lbs (50 kg	-,
	ABS/S	hipboard Coax: RG6 CATV																	
V5010SB	1 .405" 10 AWG (10.29 mm) Copper Aluminu ABS/Shipboard Coax: RF400 RG8 Low Loss			Gas-Injo d Foam P (7.24 m	E, 0.285"	100% F 95% TC						ne-Reta I Polya k		-30°C	to +7	5°C C	MG-LS	98 lbs (144	s/Mft kg/km
	ABS/SI	hipboard Coax: RF400 RG8	Low Loss 50	Ω Wireles	s														
Coax Ele	ectrical	Specifications																	
				Cond.	Shield	Vel.					Atte	nuatio	on (dB	per 1	00 ft)				
Part #	Imped.	Return Loss	Capac.	DCR per Mft	DCR per Mft	of	1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 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 B 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	1.67 Ω	1.4 Ω	83%	0.11	0.35	0.83	1.20	1.77	2.63	3.50	3.98	4.25	-	_	_	-
Power Ele	ctrical	Specifications																	
Part #	Cap	acitance											Co	nd. D	CR				
V18/2PZSB	24 p	F/ft Between Conductors											7.	2 Ω/M	ft				







#### 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 & 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	Specifi	cations									
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/SI	nipboard Categor	ry 6 Four-Pair	250 MHz							
Electrical Sp	oecifica	tions									
							Temp. Rati	na			

Electrical 3	pecification	15															
Part #	DCR Max @ 20°C	DCR Unbal. Max	Char. Imped.	Muti	ual acitance		p. Delay ew) Max		el. of Pro	op.	Temp. R (Installa Operati	tion,	Sta	ndards			
CT604/STDSB	9.38 Ω/100 r (328 ft)	m 3.0%	100 Ω (+/- 15)	17 p	F/ft	45 r	ns/100 m	68	3%		0°C to +				TIA 568-0 EC 1180	C.2, 1 Ed. 2.0	
									ANSI	/TIA 568-	C.2 Perform	ance					
		Freq. (MHz)		1	4	10	16	20	31.25	62.5	100	150	200	250	350	400	500
	Ī	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
	Ī	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
	I	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 & 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	Specific	ations															
Part #	# of Pairs	Nominal OD	Conductors	Insulatio	on	Pair Color Co	ode		Jacket		Minim Bend Radiu		Maxim Pulling Force	Ĺ	JL Type	Weight	
CT504/STDSB	4	0.260" (6.60 mm)	24 AWG Solid BC	Polyolefin	1	Blue-Whit Orange-V Green-W Brown-W	White/Or hite/Gree	en	Flame-Rei LSZH Poly Black		2.0"		25 lbs	C	CMG-LS	32 lbs/N (48 kg/k	
	ABS/SI	nipboard Cate	gory 5e Four-Pair	100 MHz													
Electrical Sp	ecificat	ions															
_	OCR Max @ 20°C	DCR Uni Max	bal. Char. Imped.	Mutual Capacit	ance	Prop. I (Skew)		Vel.	of Prop.	(Inst	. Rating Illation, ating)		Star	ndards	5		
CT504/STDSB 9	9.38 Ω/10 328 ft)	<sup>0 m</sup> 5.0%	100 Ω (+/-15)	17 pF/ft		45 ns/1	00 m	69%			o +60°C to +75°					SI/TIA 568 01 Ed. 2.0	
									ANSI	/TIA 568-0	.2 Perform	ance					
		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/10	00 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/10	00 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/10	00 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 (d	B) (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







## 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 & 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

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

Mechanical S	pecifications (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 mi Base 10 (See Color Code Chart 1, Page 142)	n)/ 100% Foil	20 AWG (19x32) Stranded TC	FRNC/LSZH	FRNC-C
Mechanical S	pecifications (Individ	dual)						
Part Number	# of	Pairs	Nom	inal OD	Bend Radius		Approx. Weigh	t
GA72404GFCLS	4		0.405"	(10.29 mm)	4.05" (102.9 mm)	88 lb	s/Mft (131 kg/kr	٦)
GA72408GFCLS	8		0.500"	(12.70 mm)	5.00" (127.0 mm)	134 lb	s/Mft (200 kg/kr	n)
GA72412GFCLS	12		0.595"	(15.11 mm)	5.95" (151.1 mm)	198 lb	s/Mft (295 kg/kr	٦)
GA72416GFCLS	16		0.664"	(16.87 mm)	6.64" (168.7 mm)	225 lb	s/Mft (335 kg/kr	٦)
GA72426GFCLS	26		0.830"	(21.08 mm)	8.30" (210.8 mm)	363 lb	s/Mft (544 kg/kr	٦)
GA72432GFCLS	32		0.890"	(22.61 mm)	8.90" (226.1 mm)	423 lb	s/Mft (630 kg/kn	n)
GA72448GFCLS	48		1.052"	(26.72 mm)	10.52" (267.2 mm)	737 lbs.	/Mft (1098 kg/kr	٦)
Electrical Spe	cifications							
Capacitance			C	ond. DCR Dro	in DCR	Ov	erall Common	DCR
	) Between Conductors, ) Between One Conductor	and Other Tie			8 Ω/Mft Ω/km)		Ω/Mft Ω/km)	





## 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 & Benefits**

Flame-Resistant

Low-Smoke Release & Reduced Toxicity

Precision 110  $\Omega$  Impedance

25 MHz Bandwidth for 192 kHz Sampling Rates

lexible

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

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

Mechanical	Specifications (Series)									
Conductors	Dielectric/ Color Code		Pair Drain		Pair Jacket (Type, OD) Color Code	/		ister :ket	Fla Res	me istance
24 AWG (7x32) Stranded TC	Foam PE, 0.021" (0.533 mm) Wall/White & Black		22 AWG (7x30) Stranded TC		FRNC/LSZH , 0.180" (4.5 (See Color Code Chart 1,			NC/LSZH, ck or Gre		IC-C
Mechanical	Specifications (Individual)									
Part Number	# of Pairs	Nominal OD		Bend	l Radius	Δ	pprox.	Weight		
DS404LS	4	0.620" (15.75 mm)		6.20"	(157.5 mm)	1	59 lbs/ <i>l</i>	Λft (237 k	g/km)	
DS408LS	8	0.815" (20.70 mm)		8.15"	(207.0 mm)	2	91 lbs/ <i>l</i>	Λft (428 k	g/km)	
DS412LS	12	0.995" (25.27 mm)		9.95"	(252.7 mm)	4	03 lbs/ <i>l</i>	Λft (592 k	g/km)	
Electrical Sp	oecifications									
			Cond.		Drain	Attenu	ation -	dB per	100 ft (30	.5 m)
Impedance	Capacitance		DCR		DCR	1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
110 Ω	11 pF/ft (30 pF/m) Between Conductors, 21 pF/ft (69 pF/m) Between One Conduct	or and Other Tied to Sh	23.8 Ω/ <i>N</i> nield (78 Ω/km		15.3 Ω/Mft (50.2 Ω/km)	0.09	1.30	1.60	2.15	4.10







## 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 & 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

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

Mechanic	al Spe	cification	ıs									
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		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 Aud	io Single-Pair: Ec	sy Strip								
Electrical	Specif	ications										
Capacitance Cond. DCR Drain DCR												
35 pF/ft (112	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-HAOLOGEN

## LSZH Digital Audio Single-Pair: 24 & 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  $\Omega$  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 & Benefits**

Flame-Resistant

Low-Smoke Release & Reduced Toxicity

Precision 110  $\Omega$  Impedance

25 MHz Bandwidth for 192 kHz Sampling Rates

Stabilizing Polyethylene Rod

#### **Applications**

**AES3 Digital Audio** 

Extended Bandwidth Analog Audio

Time Code

Shipboard

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

Mechai	nical	Specific	ations											
Part #	# of Pairs	Nom. OD	Conductors	Dielectric (Wall/Colors)	Fillers	Shield	Drain	Jacket	Flame Resistance	Bend Radius	Operati Temp. R			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 -22°F to	+75°C { 167°F	38.9 N	13lbs/Mft (19 kg/km)
	LSZH	Wide Ban	dwidth 110 Ω Dig	gital Audio Single-Pair: Ed	asy 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 -22°F to	+75°C 167°F	53.4 N	10 lbs/Mft (15 kg/km)
	LSZH	Thin Profi	le 110 Ω Digital	Audio Single-Pair										
Electric	al Sp	ecificati	ons											
										Atten	vation -	dB per	100 ft (30	.5 m)
Part #	Impe	dance (	Capacitance				Cond.	DCR D	rain DCR	1 MHz	3 MHz	6 MHz	12 MHz	25 MHz
DS401LS	110 Ω			n) Between Conductors, n) Between One Conduct	or and Other	Tied to	23.8 ! Shield (78 £	*. *	5.3 Ω/Mft 50 Ω/km)	0.90	1.30	1.60	2.15	4.10
DS601LS	110 Ω			n) Between Conductors, n) Between One Conduct	or and Other	Tied to	38.5 ! Shield (126 C		3.8 Ω/Mft 78 Ω/km)	1.25	1.85	2.40	3.16	4.20





## **LSZH High-Definition SDI Coax**





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 & 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  $\Omega$  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)

- 60332-3-24 CATC Flame Propagation
- 61034-1, -2 Smoke Density
- 60754-2 Degree of Acidity

Mechanic	al Spec	ifications																			
Part #	# of Cond.	Nom. OD	Conduc	ctor	Insulation (Type, OI		Shield		Jack (Typ	cet e, Co	lors)	Flame Resiste	ance	Bend Radiu		Operati Temp. F			x. Pull sion	Appr Weig	
VHD1100LS	1	0.405" (10.3 mm)		G Solid BC, (1.6 mm)	Gas-Injecto Foam PE, 0.285" (7.5		95% TC 100% Fc			C/LSZI k & Gr		FRNC-	С	4.05" (102 m		30°C to		441	.3 N	76 lbs (113 l	s/Mft kg/km)
	LSZH I	Extended-Dist	ance RG	11 HD Coax																	
VSD2001LS	1	0.272" (6.9 mm)		G Solid BC, (1.0 mm)	Foam PE,	Gas-Injected			, ERVIC.C.		2.75" -30°C to +75°C (69.9 mm) -22°F to 167°F		306	306.9 N		s/Mft g/km)					
	LSZH I	Low-Loss RG	6 HD Coc	xc																	
VPM2000LS	1	0.242" (6.2 mm)	20 AWC 0.031 (0	G Solid BC, 0.8 mm)	Gas-Injecto Foam PE, 0.146" (3.		95% TC 100% Fc			C/LSZI k & Gr		FRNC-	С	2.50" (63.5 r		30°C to 22°F to		275	.3 N	35 lbs (52 kg	-,
	LSZH S	Standard RG	59 HD C	оах																	
VDM230ELS	1	0.164" (4.5 mm)		G Solid BC, (0.6 mm)	Gas-Injecto Foam PE, 0.11" (2.8		95% TC 100% Fc			C/LSZI k & Gr		FRNC-	С	1.50" (38 mm		30°C to		181	.7 N	23 lbs (34 kg	-,
	LSZH /	Miniature HD	/SDI Coa	x: 23 AWG S	olid																
Electrico	al Spec	ifications																			
		Return Los					Ve	al.				Nomin	al Att	enuati	on - d	dB per	100 ft	(30.5 n	1)		
Part #	Imped.	(100 kHz-1 (1 GHz-4.5	GHz),	Capac.	Cond. DCR	Shield DCR	d of		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, >2		16.2 pF/ft (53 pF/m)	2.5 Ω/Mft (8 Ω/km)	1.5 Ω (5 Ω/k		1% 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, >2		16.3 pF/ft [54 pF/m]	6.4 Ω/Mft (21 Ω/km)	2.8 Ω (9 Ω/l		3% O	).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, >2		16.3 pF/ft [54 pF/m]	10.2 Ω/Mft (34 Ω/km)		X -	3% 0	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, >2		16.3 pF/ft [54 pF/m]	20.4 Ω/Mft (67 Ω/km)			2% 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.

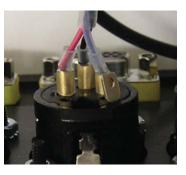
## **Premium Connectors and Specialty Components**

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 Speaker Guitar/Instrument Patchcords 110 Ohm Digital Audio Single-Pair 110 Ohm Digital Audio Snakes GEP-FLEX Multi-Pair Audio Snakes X-Band Multi-Pair Audio Snakes DT12 Snakes DT12 Fanouts DT12 Breakout Boxes Stage Box Snakes

LEMO is a registered trademark of Interlemo Holding, S.A. Neutrik is a registered trademark of Neutrik AG.

ADC is a registered trademark of ADC Telecommunication, Inc. Kings is a registered trademark of Kings Electronics





## 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:

SMPTE 304/311 Hybrid Fiber Optic Hybrid Fiber Breakout Boxes & Racks Hybrid Fiber Breakout Hybrid Fiber Fusion Splice Boxes & Racks SMPTE Field and Studio Boxes Neutrik® opticalCON® 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 Multiple Cable Types Under a Single Installation on Location Expandable Sleeving Jacket Pre-Wired Custom Panels Cable Repairs

Neutrik and opticalCON are registered trademarks of Neutrik AG.







## **PRODUCT REFERENCE & DESIGN APPLICATIONS**

# MobileX-ref

PRODUCT DIRECTORY

Quickly and easily find Gepco® Brand equivalent products and their specs from anywhere with our Mobile X-ref.

For complete information at your fingertips, the product directory provides full specifications as well as product photos, descriptions, features and benefits, applications and ordering information. Browse by category or search via keyword.

Accessible from any device with web browsing capabilities, the



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Mobile X-ref is touch-optimized for smartphones and tablets with an intuitive user interface.





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Click the start button.



Enter competing part number and submit to find Gepco® Brand equivalent products along with their specs.





# Paneldesigner<sup>™</sup>

CUSTOMIZE TO YOUR NEEDS

Gepco® has long been able to produce almost any type of custom panel for Broadcast or Professional A/V applications. Now Gepco® provides a new time-saving, visual interface for designing them.



Drag and Drop Interface Makes Designing a Panel Simple



Quickly and Easily Submit Your Panel for Quote or Order



Expandable Menus Provide Easy Reference for Connectors Available



Choose from Panel Type, Size, Material, Finish, Connectors and Lettering Options

Go to gepco.com to start building your panels now!











## **COMMERCIAL A/V GUIDE**



Since 1981, Gepco® 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® 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® 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	
0.1.4	Daniel Control

Micropho	ne Cable	Page
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
Guitar/M	usical Instruments Cables - Low Capacitance	Page
GLC20*	20 (41x36) AWG BC 1 Cond 95% BC Braid, PVC Black (*Not UL Rated)	17

Plenum	Non-Plenum	
Cable	Cable	
Solution	Solution	Description

Cable Solution	Cable Solution	Description	
High-Gra	de Line Level	Audio	Page
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
Premium	Line Level A	udio	Page
	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
Line Leve	l Audio Snak	e	Page
	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
AES EBU	Digital Audio	)	Page
	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

24 (7x32) AWG TC 12 Pr, Foil Shield, Outer Jacket TPE Violet CMR

Plenum	Riser	
Cable	Cable	
Solution	Solution	Description

Solution	Solution	Description	
Speaker a	nd Control	Cable - Unshielded	Page
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 (7x26) 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
Speaker a	and Control	Cable - Shielded	Page
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

#### Cable Solution Description

SSS226R

SSS226P

Speaker (	Cable - Unshielded Indoor/Outdoor Direct Burial - OFC	Page
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
Speaker (	Cable - Unshielded Indoor/Outdoor Direct Burial	Page
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

22 (7x30) AWG BC 6 Cond, Foil Shield, PVC Natural or Gray CMP/Gray CMR

#### Cable

Solution Description

Speaker Cable · High Definition · OFC	Page
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



DS412





## **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	Non-Plenum		
Cable Solution	Cable Solution	Description	
	x - CATV - MATV - DBS	•	Page
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	_
High Definition	Coax - HDTV - Serial [	Digital Interface - SDI	Page
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
Component Vide	eo RGB Coax Cable		Page
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
Composite Cabl	e - Video + Audio or D	Data Company Compa	Page
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
Low Skew Vide	o Cable		Page
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	_
CCTV - Coax			Page
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	_
50 Ω Coax			Page
	C5779	50 $\Omega$ 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, Gepco® Brand automation and lighting control cables deliver solutions for a multitude of cross-platform and manufacturer-specific standards and systems. As with all other Gepco 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	
Digital Media Cal	bles		Page
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
Automation Cont	rol Cables		Page
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
Lighting Control	Cables		Page
	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
DMX Lighting Co	ntrol Cables		Page
	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	

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## **Powered Cable**

Through research and technology, Gepco provides a portable, all-in-one solution for applications requiring audio or data along with power while protecting the signal from noise. Gepco $^*$  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  $\Omega$  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.

Cable		
Solution	Description	
Powered Cab	le - Bulk	Page
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 C	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 Co	olor 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						

Pair		Pair		Pair	
Number	Color	Number	Color	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 Ch	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

		Approx	. O.D.		Wei	ght	
AWG	Strand	Inches	mm	Circular ML Area	Lbs/Mft	kg/km	DCR Ω/Mft
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

		Approx	. O.D.	Circular	Wei	ight	DCR
AWG	Strand	Inches	mm	ML Area	Lbs/Mft	kg/km	Ω/ <b>Mft</b>
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 /0	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		471.37	0.10
2/0	133/20	.414	10.51	136,192.0		613.35	0.08
2/0	259/23	.414	10.51	132,297.2		595.85	0.08
3/0	259/22	.464	11.78	163,195.0		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		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 Cha	art										
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:	Nui	mbers listed	below are	based on th	e 2008 NEC	(40% fill ) f	or 3 or mor	e non-lead	covered cab	les.
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	81	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 Bu	ındles
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.

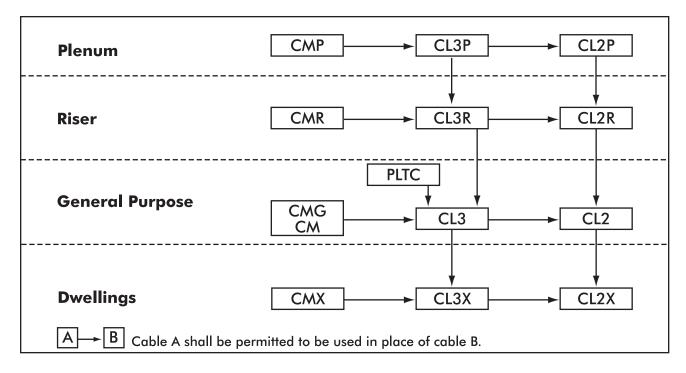
The finished O.D. of the bundle is based upon the most efficient and compact grouping of the individual cables. This diameter can be larger if done incorrectly.

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	<del></del>
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

<sup>\*</sup> 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.





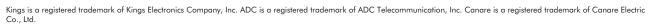


# **Appendix F: BNC & RCA Connector Cross Reference**

		BNC Connec	tors		RCA Connec	tors
Gepco® Brand Cable Part Number	Kings®	ADC®	Gepco <sup>®</sup>	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
/A2/2TP, 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
/B1860/VB1890	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
/B1890TS	2065-10-9	BNC-10	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
/B2095	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
/5020	755-114-9	N/A	N/A	N/A	N/A	N/A
/C1460/VB1490TK	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
/C1895	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
/C1895TS	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
/C2095TS	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
/DM250	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25I
/DM250D	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25I
/DM260	2065-29-9	BNC-16	N/A	3345-4-9	CRCA-16	N/A
/E61859M	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
/HD1100, VHD1100PEF	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
/HD1100F	N/A	N/A	BNC-XL-6	N/A	N/A	N/A
/HD1100TK	2065-8-9	BNC-25	N/A	N/A	N/A	N/A
/HD1300	N/A	N/A	BNC-XL-6	N/A	N/A	N/A
/HD2001M	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
/HD7000	2065-12-9	BNC-27	N/A	N/A	N/A	N/A
/J59U	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
/RC13	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
/RC618	2065-2-9	BNC-1	N/A	3345-1-9	CRCA-1	RCAP-C4F
/\$102000, V\$52000	2065-2-9	BNC-1	BNC-XL-2	3345-1-9	CRCA-1	RCAP-C4F
/\$102001	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VS102301 VS10230, VS12230, VS16230	2065-11-9	BNC-13	BNC-XL-1	3345-3-9	CRCA-13	RCAP-C25I
VS32001, VS42001, VS52001	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-13	RCAP-C53
VS57000	2065-10-9	BNC-27	N/A	N/A	N/A	N/A
/SD2001, VSD2001PEF	2065-10-9	BNC-8	BNC-XL-3	3345-2-9	CRCA-8	RCAP-C53
VSD20017 VSD20011EI	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 <sup>®</sup>	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







# **Appendix F: F-Type Connector Cross Reference**

Gepco® Brand Cable Part Number	AIM®	Canare®	ADC®
VA2/3, VA2/4, VA2/5	25-7030	FP-C4F	CF-1
		FP-C4F	
VE61859M	N/A		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 Conn	ector Refe	rence Char	t								
			l l	Cings® Part I	Numbers				ADC® Po	art Numbers	
Gepco Part Number	Male Tri-Loc® Cable Mount	Female Tri-Loc® Cable Mount	Male Tri-Loc® Panel Mount	Female Tri-Loc® Panel Mount	Female Tri-Loc <sup>®</sup> 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

 $Note: All\ ADC\ cable\ mount\ ProAx^{\tiny{TM}}\ connectors\ can\ be\ converted\ to\ panel\ mount\ types\ with\ optional\ hardware.$ 

Lemo H	lybrid Fiber Connect	tor Reference Chart					
			Lem	o® Part Numbers			
Gepco Part	Cable	Mount		Panel Mount		Fiber (	Contacts
Number	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 Con	nector Reference Chart			
		Canare® Part	Numbers	
	Cable I	Mount	Panel	Mount
Gepco Part Number	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 Interlemo Holding, S.A.

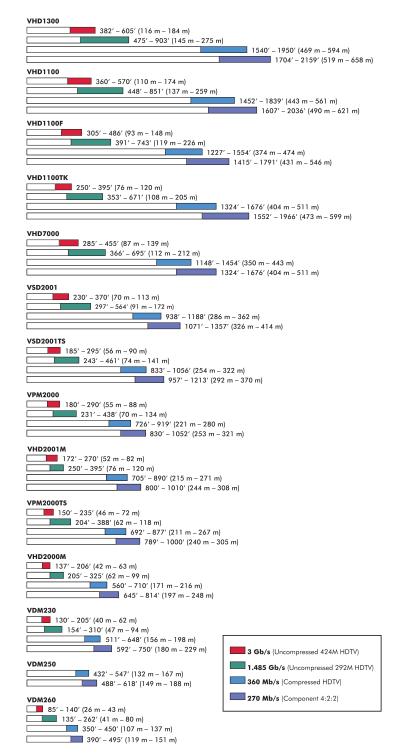




#### **Appendix G: Serial Digital Coax Distances**

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 drawdown, 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 logarithm10 of (P1/P2) 2 logarithm10 (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 strop

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 bendina.

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 auide 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 low 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, abrasionresistant 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

**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
1153A	C3529
1164B	SV253STR
1167B	SV254STR
1172A	MM1024
1189A	C5785
1189AP	C3525
1192A	MP1201
1212	CT504/350
1213	CT504/350P
1263B	VA2/3TP
1277P	SV253SP
1277R	SV253SR
1278P	SV254SP
1278R	SV254SR
1279P	SV255SP
1279R	SV255SR
1280R	SV256SR
1300SB	CT504S/STDSB
1305A	CT504HD
1306SB	V18/2PZSB
1307A	SSPUB162
1308A	SSPUB164
1309A	SSPUB142
1310A	SSPUB144
1314SB	SSU142SB
1315SB	SSU144SB
1316SB	SSU122SB
1317SB	SSU124SB
1319SB	CT604/STDSB
1322R	C5889
1347A	VA2/4
1410R	GA72408GFC
1411R	GA72412GFC
1415R	GA72426GFC
1418B	SV255STR
1426A	C1142
1502P	18/22AXLP
1502P	18/22CRTP
1502R	18/22AXL
1502R	18/22CRT
1502SB	18/22CRTSB
1504A	D61801EZGF
1505A	VPM2000
1505F	VHD2000M
1506A	VPM2000TS
1509C	GA72402GFC
1510C	GA72404GFC
1512C	GA72408GFC
1513C	GA72412GFC
1514C	GA72416GFC
1517C	GA72426GFC
1518C	GA72432GFC

rand	
Belden®	Gepco® Brand
1694A	VSD2001
1694F	VHD2001M
1694SB	VSD2001SB
1694WB	VSD20019EF
1695A	VSD2001TS
1800B	DS401
1800F	DS401M
1801B	DS401TS
1802B	DS401D
1803F	DS404
1805F	DS408
1806F	DS412
1814R	GA61802GFC
1815R	GA61804GFC
1816R	GA61806GFC
1817R	GA61808GFC
1818R	GA61812GFC
1819R	GA61816GFC
1820R	GA61820GFC
1822R	GA61826GFC
1823R	GA61832GFC
1829P	C3524
1829R	GA61820GFC
1829R	C5886
1855A	VDM230
1855P	VDM230TS
1856A	LVT61859
1857A	LVT61859S
1858A	LVT61811
1859A	VT61811TK
1865A	VDM250
1883A	72401EZ
1901A	XB401
1904A	XB404
1908A	XB408
1912A	XB412
1916A	XB416
2412	CT604/250
2413	CT604/250P
4812	CT604/500
4813	CT604/500P
5000FE	SSS122R
5000UE	SSU122R
5002FE	SSS124R
5002UE	SSU124R
5100FE	SSS142R
5100UE	SSU142R
51000E	SSS144R
510201	SSUB144
5102UE	SSU144R
5140U1	SSUB142
5200FE	SSS162R
5200UE	SSU162R
	500.0ER

Belden®	Gepco® Brand	ľ
5202FE	SSS164R	7
5202U1	SSUB164	7
5202UE	SSU164R	7
5240U1	SSUB162	7
5300FE	SSS182R	7
5300UE	SSU182R	7
5302FE	SSS184R	7
5302UE	SSU184R	7
533945	395011	7
5400FE	SSS202R	7
5402FE	SSS204R	7
5402UE	SSU204R	7
543945	C1142	7
549945	C8028	7
5500FE	SSS222R	7
5502FE	SSS224R	7
5502UE	SSU224R	7
6000FE	SSS122P	8
6000UE	SSU122P SSS124P	8
6002FE		8
6002UE	SSU124P	8
6100FE	SSS142P	8
6100UE	SSU142P	8
6102FE	SSS144P	8
6102UE	SSU144P	8
6200FE	SSS162P	8
6200UE	SSU162P	8
6202FE	SSS164P	8
6202UE 6300FE	SSU164P SSS182P	8
6300FE	SSU182P	8
6302FE	SSS184P	8
63021E	SSU184P	8
633948	495035	8
6400FE	SSS202P	8
6402FE	SSS204P	8
6402UE	SSU204P	8
643948	495028	8
649948	C8030	8
6500FE	SSS222P	8
6502FE	SSS224P	9
6502UE	SSU224P	9
6543PA	6604HS	9
6545PA	6606HS	9
6546PA	6608HS	9
6548PA	6612HS	9
7710A	VS32001	9
7711A	VS42001	9
7712A	VS52001	9
7713A	VS102001	9
7731A	VHD1100	9
7701CD	VUDITORED	Г

Belden®	Gepco® Brand
7789A	VS5230
7791A	VS10230
7792A	VS12230
7796A	VS52000
7798A	VS102000
7804R	HDC920R
7810SB	V5010SB
7855A	VHD7000
7880A	DS608
7890A	DS604
7891A	DS601D
7892A	DS612
7893A	DS616
7987P	E3842S
7987R	E1842S
7989P	E3843S
7989R	E1843S
8232A	VT61859 VT61811
8233A 8233WB	VT61811PEF
	61801HS
82761	0.00
8281	VP618M
8281F 8412	VP618PE
8413	M1042 MP1022
8451	SSS222R
8461	1800
8471	1600
8473	1400
8477	1200
8641	72401EZ
8719	1600S
8723	6600
8723SB	6600SB
8760	1800S
87723	6600HS
87740	1800HS
87761	61801HS
8777SB	6603SB
88723	6600HS
9116	C5886
9116P	C3524
9116SB	VB1860SB
9154	SSS202R
9170	VA2/5
9180	DS601
9451	61801EZ
9451P	61801HS
9451P	SSS222P
9451SB	61801EZSB
9907	C5779
B9A005	FMB2R/50
B9A006	FMB4R/50

Belden	Gepco® Brand
B9A007	FMB6R/50
B9A010	FMB12R/50
B9A013	FMB2P/50
B9A014	FMB4P/50
B9A015	FMB6P/50
B9A018	FMB12P/50
B9A037T	FMD2R/50
B9A038T	FMD4R/50
B9A039T	FMD6R/50
B9A042T	FMD12R/50
B9A043T	FMD2P/50
B9A044T	FMD4P/50
B9A045T	FMD6P/50
B9A048T	FMD12P/50
B9A602T	FMD24R/50
B9A611T B9B005	FMD24P/50 FMB2R
B9B005	FMB4R
B9B007	FMB6R
B9B010	FMB12R
B9B013	FMB2P
B9B014	FMB4P
B9B015	FMB4P
B9B018	FMB12P
B9B037T	FMD2R
B9B038T	FMD4R
B9B039T	FMD6R
B9B042T	FMD12R
B9B043T	FMD2P
B9B044T	FMD4P
B9B045T	FMD6P
B9B048T	FMD12P
B9B602T	FMD24R
B9B611T	FMD24P
B9W005	FSB2R
B9W006	FSB4R
B9W007	FSB6R
B9W010	FSB12R
B9W013	FSB2P
B9W014	FSB4P
B9W015	FSB6P
B9W018	FSB12P
B9W037T	FSD2R
B9W038T B9W039T	FSD4R FSD6R
B9W042T	FSD12R
B9W043T	FSD2P
B9W044T	FSD4P
B9W045T	FSD6P
B9W048T B9W602T	FSD12P
B9W6U2T	FSD24R FSD24P
DYWOIDI	F3UZ4F

Quickly and easily find Gepco Brand equivalent products and their specs with the

Gepco Brand Mobile Cross Reference & Product Directory (http:xref.gepco.com).

7731SB

7732A

VHD1100SB

VHD1100TK

Belden is a registered trademark of Belden, Inc.



C5044

1617A



# **Appendix I: Competitor Cross Reference**

#### Canare® to Gepco® Brand

Canare®	Gepco® Brand
<b>4</b> S11	GSC134
A2C3	6600
DA202	DS601M
DA202-2P	DS601D
DA202-4P	DS604
DA202-8P	DS608
DA202AT	DS601
DA206	DS401M
GS-6	GLC20
L-2.5CHD	VDM230
L-2.5FCB	VDM250

Canare®	Gepco® Brand
L-2B2AT	72401EZ
L-2E5	MP1022
L-2T2S	XB201M
L-3C2VS	VP618PE
L-3CFB	VDM230
L-4.5CHD	VSD2001
L-4CFB	VPM2000
L-4CFTX	LVT61859
L-4E3-16P	XB416
L-4E3-4P	XB404
L-4E3-8P	XB408

Canare®	Gepco® Brand
L-4E4-12AT	GA61812GFC
L-4E4-16AT	GA61816GFC
L-4E4-2AT	GA61802GFC
L-4E4-4AT	GA61804GFC
L-4E4-8AT	GA61808GFC
L-4E5C	MM1024
L-4E6S	MP1201
L-5CFB	VSD2001
L-5CFB	VSD2001PEF
L-5CHD	VHD7000
L-6CHD	VHD1100

Canare®	Gepco® Brand
L-7CFB	VHD1100
L-7CHD	VHD1300
LF-2SM9	HDC920
LV-77S	VP618M
MR202-12AT	GA72412GFC
MR202-16AT	GA72416GFC
MR202-2AT	GA72402GFC
MR202-32AT	GA72432GFC
MR202-4AT	GA72404GFC
MR202-8AT	GA72408GFC
V3-4CFB	VPM2000TS

Canare®	Gepco® Brand
V3-5C	VSD2001TS
V3-5CFB	VS32001
V4-4CFB	VPM2000TS
V4-5C	VSD2001TS
V4-5CFB	VS42001
V5-3C	VP618PE
V5-3CFB	VS52000
V5-4CFB	VPM2000TS
V5-5C	VSD2001TS
V5-5FCB	VS52001

#### West Penn to Gepco® Brand

West Penn	Gepco® Brand
224	SSU182R
225	SSU162R
226	SSU142R
227	SSU122R
241	SSU224R
242	SSU204R
244	SSU184R
245	SSU164R
246	SSU144R
248	SSU124R
25806	495035
25815	495028
25819	VPM2000TS
25224B	SSU182P
25225B	SSU162P
25226B	SSU142P
25227B	SSU122P
25241B	SSU224P
25242B	SSU204P
25244B	SSU184P
25245B	SSU164P
25246B	SSU144P
25270B	SSU226P
252815	C8030

West Penn	Gepco® Brand
252825	VDM250D
25291B	SSS222P
25292B	SSS202P
25293B	SSS182P
25294B	SSS162P
25295B	SSS142P
25296B	SSS122P
253241B	SSS224P
253270B	SSS226P
253544B	SSS184P
25488B	SSU124P
256100	C3524
256300	C3525
256350	VSD2001TS
270	SSU226R
2815B	C8028
291	SSS222R
292	SSS202R
293	SSS182R
294	SSS162R
295	SSS142R
296	SSS122R
3011	SSS204R
3241	SSS224R

West Penn	Gepco® Brand
3244	SSS184R
3245	SSS164R
3270	SSS226R
3CRGB	SV253SR
454	61801EZ
5CRGB	SV255SR
6100	C5886
6300	C5889
6350	VSD2001
77350	18/22CRT
806	395011
815	C1142
819	VPM2000
AQ224	HBU182T
AQ225	HBU162T
AQ226	HBU142T
AQ227	HBU122T
AQ244	HBU184T
AQ245	HBU164T
AQ246	HBU144T
AQ293	HBS182T
AQ294	HBS162T
AQ295	HBS142T

West Penn	Gepco® Brand
AQ296	HBS122T
AQ3244	HBS184T
AQ3245	HBS164T
AQC189	HBHD201
AQC224	HBU182
AQC225	HBU162
AQC240	HBU2240
AQC290	HBS2220
AQC291	HBS222
AQC292	HBS202
AQC293	HBS182
AQC3186	HBS186
AQC351	HBS2230
AQC352	HBS223
AQC355	HBS2240
AQC357	HBS224
AQC358	HBS203
AQC359	HBS204
AQC430	HBSP222
AQC432	HBSP226
AQC439	HBSP224
AQC806	HBS181
AQC815	HBS201

West Penn	Gepco® Brand
C2415	18/22CCT
C2425	18/22CCD
D2401	72401EZ
D25350	18/22CRTP
D25454	61801HS
DA2401	DS401
DA2402	DS401D
DA252401	DS401TS
HA1624	164NCAT
HA225	SSPUB162
HA226	SSPUB142
HA245	SSPUB164
HA246	SSPUB144
HA825	VDM230
HD25825	VDM230TS
M58813	E1842S
M58814	E3842S
WP4546	GA61806GFC
WP4548	GA61808GFC
WP45412	GA61812GFC
WP6355	VS52001
WP8253	SV253STR
WP8255	SV255STR

#### Crestron® to Gepco® Brand

Crestron®	Gepco® Brand
CRESCAT-DC-NP	18/22CDC
CRESCAT-D-NP	18/22CCD
CRESCAT-NP	18/22CCT
CRESCAT-Q-NP	18/22CCQ
CRESNET-DM-NP	SSS222R

Crestron®	Gepco® Brand
CRESNET-DM-P	SSS222P
CRESNET-NP	18/22CRT
CRESNET-P	18/22CRTP
DM-CBL-8G-NP	CT504/SDM
DM-CBL-8G-P	CT504/SDMP

#### Mohawk to Gepco® Brand

Mohawk	Gepco® Brand
	HDC920R
M96924	FSD2P, HDP221

Quickly and easily find Gepco Brand equivalent products and their specs with the Gepco Brand Mobile Cross Reference & Product Directory (http:xref.gepco.com).

Canare is a registered trademark of Canare Electric Co., Ltd. Crestron is a registered trademark of Crestron Electronics, Inc.





# **Part Number Index**

138	: Р	Page	Part #	Page	Part #	Page	Part #	Page	Part #	Page	Part #	Page
01103 111 6600HS 132 FSF** 7.4 HSUIRET 121 SSS14PR 29 WBILD 1100 HS 111 6600HS 132 FSF** 7.4 HSUIRET 121 SSS14PR 29 WBILD 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WSILD 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WSILD 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 6600HS 121 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 FSF** 7.4 HSUIRET 121 SSS14PR 29 WCCNEW 1100 HS 111 FSF** 7.4 HSUIRET 121 FSF** 7.4 H	1	111		87	FP1-xx-SCD-IS	87	HBU162T	121	SSS124R	28	VBB5	51
10104												51
10100												51
1910   11												51
1010												51 50
10100												50
1200HS												50
1200-55   22				12	FSD**T	70				28		50
01311 113 61801253 124 OA-61804FC 6 HDC/920 64 SS184R 29 WCONING O1342 113 61801253 124 OA-61804FF 8 HDC/9201-D 65 SS184R 29 WCONING O1344 113 8001153 14 GAA18040FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80011 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80011 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80011 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80011 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 6 HDC/9201-D 65 SS184R 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 113 80031 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING O1340 111 GAA1810FC 7 HDRI SERTING 00 SS182AR 29 WCONING 01 HDRI SERTING 01 HDRI SER					GA61802GFC	6		67	SSS182P			50
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01346 113 80611 111 GA-1812FC 6 HDC-200FE 44 SS2028 12 VCCN16K												50 50
01360 113 80621 111 GAS1812PE 8 HDC920R 64 SS204P 29 VCONING 101800 1131 80621 111 GAS1812PE 6 HDC921 69 SS204P 29 VCONING 101800 1131 80631 111 GAS1812PE 6 HDC921 69 SS204P 29 VCONING 101800 1131 80651 111 GAS1812PE 6 HDC921 69 SS204P 13 VCONING 101838 113 80651 111 GAS1812PE 6 HDC921 69 SS204P 13 VCONING 101838 113 80651 111 GAS1812PE 6 HDC921 69 SS204P 13 VCONING 101838 113 80651 111 GAS1812PE 6 HDC921 69 SS204P 13 VCONING 101838 113 80651 111 GAS1812PE 6 HDC921 69 SS204P 13 VCONING 101838 113 80651 111 GAS1812PE 6 HDC921 6 H												50
01384 113 80631 111 GAS1816CFC 6 HDP21 69 SSS204R 28 VCON16M 01381 113 80631 111 GAS1816CFC 6 HDR1-EIT-MA 80 SSS222R 13 VGM2301 01381 113 80641 111 GAS1826CFC 6 HDR1-EIT-MA 80 SSS222R 13 VGM2301 01381 113 80641 111 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 13 VGM2301 01381 113 80641 111 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 13 VGM2301 114 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 13 VGM2301 114 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 13 VGM2301 114 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 28 VGM2301 114 GAS1826CFC 7 HDR1-EIT-MA 80 SSS222R 29 VGM230 114 GAS182CFC 7 HDR1-EIT-MA 78 SSS226R 29 VGM230 114 GAS182CFC 7 HDR2-EIT-MA 78 SSS226R 29 VG												50
01383 113 80651 111 GA6182GFC 6 HDR1-ERITAM 80 SS5222R 13 V0M230EL 01384 113 80651 111 GA7240GFC 7 HDR1-ERITAM 80 SS5224R 28 V0M230EL 01384 113 80651 111 GA7240GFC 7 HDR1-ERITAM 80 SS5224R 28 V0M230EL 01384 113 80651 111 GA7240GFC 7 HDR1-ERITAM 80 SS522R 28 V0M230EL 01384 113 80651 111 GA7240GFC 7 HDR1-ERITAM 80 SS522R 28 V0M230EL 01384 113 GA7240GFC 7 HDR1-ERITAM 78 SS522R 28 V0M230EL 01384 113 GA7240GFC 7 HDR1-ERITAM 78 SS522R 28 V0M230EL 01384 113 GA7240GFC 7 HDR1-ERITAM 78 PS SSS102R 28 V0M230EL 01384 113 GA7240GFC 7 HDR1-ERITAM 78 V0M230EL 01384 113 GA7240GFC 7 HDR1-ERITAM 78 V0M230EL 01384 113											VCON16MP	50
01383 113 80661 111 GA61832GFC 6 HDR1-ERITHS 80 SSS224R 29 W0X830T 12001 23 80661 111 GA7240GFC 7 HDR1-ERITH 80 SSS224R 28 W0X830T 12001 23 80661 111 GA7240GFC 7 HDR1-ERITH 80 SSS224R 28 W0X830T 12001 23 80661 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 23 80661 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 23 80661 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 23 80671 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 23 80671 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 23 80671 111 GA7240GFC 13 HDR1-ERITH 80 SSS224R 29 W0X830T 12001 25 988-5311-A 87 GA7241GFC 7 HDR1-ERITH 80 HDR1-ERITH 80 F 80 SSS224R 29 W0X830T 12001 25 988-5311-A 87 GA7241GFC 7 HDR1-ERITH 80 F 80 SSS224R 29 W0X830T 12001 25 988-5311-A 87 GA7241GFC 7 HDR1-ERITH 80 F 80 SSS224R 29 W0X830T 12001 1200	1	113	80631	111	GA61820GFC	6	HDR1	80	SSS222P	13	VDM230	40
138   89641   111   GA7240/CFC   7   HORLENTP   80   SSS224R   28   VDM230D   VDM250D   VDM250											VDM230ELS	133
1400												41
140015   25   80681	]											40
16000   25   80091	c											40
1400HS   25   898-311-A   87   6A72419CFC   7   HMD-ERT   78, 79   SSU102R   26   VOR3*5   1800HS   25   588-351-A   87   6A72419CFC   7   HMD-ERT   78, 79   SSU102R   27   VOR3*5   1800HS   25   CTIO4/SDM   98   6A72419CFC   7   HMD-ERT   78, 79   SSU122R   27   VOR3*5   1800HS   28   SSU122R   22   VOR3*5   1800HS   28   SSU122R   23   VOR3*5   1800HS   28   SSU122R   24   VOR3*5   1800HS   28   SSU122R	3											40 50
1800	S											50
1800HS   25   CT104/SDM   98   GA72412FCLS   130   HMP-ENTS   7,79   SSU122R   26   VDR5*5   CDR5*0	3											50
D2601   112   CT104/SDWP   98   GA72412TP   8   HMPB   82   SSU122SB   125   VDR10*   VDR10	S											50
02603   112   CT504/350P   96   GA72416GFCLS   130   HMP8-R   83   SSU124R   26   VHD1100   VHD100   VHD1100   VHD100   VHD1100   VHD100   VHD1100   VHD1100   VHD1100   VHD1100   VHD11												50
07606 112 CT504HDD 97 GA72426GFC 7 HMP8-B 83 SU1242 27 VHD1100F 07606 112 CT504/SDM 99 GA72437GFC 7 HMP8-EKIT- 82 SU1422 27 VHD1100F 07606 112 CT504/SDM 99 GA72437GFC 7 HMP8-EKIT- 82 SU1428 25 VHD1100F 07606 112 CT504/SDM 99 GA72437GFC 7 HMP8-EKIT- 82 SU1428 27 VHD1100F 07606 112 CT504/SDM 99 GA72437GFC 7 HMP8-EKIT- 82 SU1428 25 VHD1100F 07608 112 CT504/SDM 99 GA72439GFC 130 HMP8-B 83 SU1428 25 VHD1100F 07609 112 CT504/STD 95 GA7243GFC 130 HMP8-B 83 SU1448 26 VHD1300F 07629 112 CT504/STD 95 GA7243GFC 130 HMP8-B 83 SU1448 26 VHD1300F 07629 112 CT504/SDM 99 GHF16A 67 HMP8-R 83 SU1448 26 VHD1300F 07624 112 CT504/SDM 99 GHF16A 67 HMP8-B 83 SU1448 26 VHD1300F 07624 112 CT604/SDM 99 GHF16A 67 HMP8-B 83 SU1448 26 VHD1300F 07624 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1428 125 VHD1200F 07624 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1428 125 VHD1200F 07624 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07633 112 CT604/SDM 99 GHF16A 67 HMP8-B 84 SU1448 27 WMCS-leng 07634 112 DG104 MMP8-B 84 SU1448 27 W	1	112	CT504/350	96	GA72416GFC	7	HMP8-AJ	83	SSU124P	27	VE61859M	43
02605 112 CT504/HDX 97 GA72436FCLS 130 HMP8-EKIT-S 82 SSU142R 24 VHD1100C 02607 112 CT504/SDM 99 GA724372FCLT 7 HMP8-EKIT-S 83 SSU142R 26 VHD1100C 02609 112 CT504/SDM 99 GA724372FCLS 130 HMP8-H 83 SSU142R 26 VHD1100C 02609 112 CT504/STDM 95 GA72445FCLS 130 HMP8-H 83 SSU144R 26 VHD1100C 02609 112 CT504/STDM 95 GA72445FCLS 130 HMP8-H 83 SSU144R 26 VHD130C 02602 112 CT504/STDM 95 GHF12B 66 HMP8-N 83 SSU144R 26 VHD130C 02602 112 CT504/STDM 95 GHF12B 66 HMP8-N 83 SSU144R 26 VHD130C 02602 112 CT504/SDM 93 GHF92A 64 HMP8-R 83 SSU142R 26 VHD120C 02623 112 CT604/SDM 93 GHF92B 64,8 6 HMP8-B 83 SSU142R 26 VHD120C 02624 112 CT604/SDM 94 GHF92B 64,8 6 HMP8-B 84 SSU162R 20 VHD120C 02624 112 CT604/SDM 94 GHF92B 64,8 6 HMP8-B 84 SSU162R 20 VHD120C 02624 112 CT604/SDM 94 GHF92B 65 HMPF 84 SSU162R 20 VHCS-Inspection 92 GHF92B 64,8 6 HMP8-B 84 SSU162R 20 VHCS-Insp					GA72416GFCLS					26		38
02606 112 CT504/SDM 99 GA72432GFC 7 HMP8-EKITS 82 SU1428 26 VHD1100P 02608 112 CT504/SDM 99 GA7243GFCLS 130 HMP8-LB 83, 84 SU1428 125 VHD1100P 02609 112 CT504/STD 95 GA7243GFCLS 130 HMP8-LB 83, 84 SU1428 27 VHD1100P 02609 112 CT504/STD 95 GAF243GFCLS 130 HMP8-LB 83, 84 SU144R 27 VHD1100P 02609 112 CT504/STD 95 GAF243GFCLS 130 HMP8-LB 83, 85 SU144R 27 VHD1100P 02609 112 CT504/STD 95 GAF243GFCLS 130 HMP8-LB 83, 85 SU144R 26 VHD1300 02622 112 CT604/250 93 GHF92A 64 HMP8-S 83 SU144R 26 VHD1300 02623 112 CT604/250 93 GHF92A 64 HMP8-S 83 SU1428 125 VHD2000 02623 112 CT604/500 94 GHF92B 64, 86 HMP-B 84 SU162R 27 WKCS-leng 02631 112 CT604/500 94 GHF92B 64, 86 HMP-B 84 SU162R 27 WKCS-leng 02631 112 CT604/STD 92 GHF8K 86 HMP-N 88 SU164R 27 WKCS-leng 02632 112 CT604/STD 92 GHF8K 3-SB/STA 76, 82 HMPR 84 SU164R 27 WKCS-leng 02633 112 CT604/STD 92 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 92 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 97 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 97 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 97 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 97 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76, 82 HMPR 84 SU162R 27 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76 WKCS-leng 02634 112 CT604/STD 87 GHF8K 3-SB/STA 76 WKCS-leng 02634 112 CT604/STD 87 GHF												38
Decoration   112												133
02608 112 CT504/STD 95 GA72448GFCLS 130 HMP8-LB 83,84 SU144P 27 VHD11000 C02609 112 CT504/STDP 95 GHF128 66 HMP8-LB 83 SU144P 27 VHD11000 C0262 112 CT504/STDS 129 GHF16A 67 HMP8-LP 83 SSU144SP 125 VHD2020M C0262 112 CT504/Z5D 93 GHF16A 67 HMP8-LB 83 SSU145B 125 VHD2020M C0262 112 CT604/Z5D 93 GHF16A 67 HMP8-LB 84 SSU162P 27 VHD2020M C0262 112 CT604/SDD 94 GHF92A 64,86 HMP8-LB 84 SSU162P 27 VHD2020M C0263 112 CT604/SDD 94 GHF92HD 65 HMPF 84 SSU164P 27 VMCS-leng C0263 112 CT604/SDD 94 GHF92HD 65 HMP8-LB 84 SSU164P 27 VMCS-leng C0263 112 CT604/SDD 94 GHF8K-3-B/STA 76,82 HMP8-LB 84 SSU164P 27 VMCS-leng C0263 112 CT604/SDD 92 GHF8K-3-SB/STA 76,82 HMPR 84 SSU164P 27 VMCS-leng C0263 112 CT604/SDD 92 GHF8K-3-SB/STA 76,82 HMPS 84 SSU182P 27 VMCS-leng C0263 112 CT604/SDD 92 GHF8K-3-SB/STA 76,82 HMPS 84 SSU182P 27 VMCS-leng C0263 112 CT604/SDD 92 GHF8K-3-SB/STA 76,82 HMPS 84 SSU182P 27 VMCS-leng C0263 112 CT604/SDD 97 GNC 77 HMS 79 SSU184P 26 VMCS-leng C0263 112 CT50504HDX 97 GNC 77 HMS 79 SSU184P 26 VMCS-leng C0263 112 CT504/DDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 CT504/DDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 CDS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 CDS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 CDS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 CDS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU202P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0263 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0264 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0264 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0264 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0264 112 DS04HDX 97 GNC 72 HSB SSU20P 27 VMCS-leng C0264 113 DS04HX 94 GNC 84 G												39
02699   112   CT504/STDP   95												126 38
02621   112   CT504/TD58   129   GHF16A   67   HMP8-R   83   SU1438   125   VHD2000M   02623   112   CT604/Z50P   93   GHFP2B   64, 86   HMP8   84   SU162R   26   VHD2000M   02624   112   CT604/500P   94   GHFP2B   65   HMPF   84   SU164R   26   VHC5-long   02631   112   CT604/S00P   94   GHFP2B   65   HMPF   84   SU164R   26   VMC5-long   02632   112   CT604/S00P   94   GHFBK   86   HMPR   84   SU164R   26   VMC5-long   02633   112   CT604/SD0P   92   GHFBK-3-BYSTA   76, 82   HMPR   84   SU1164R   26   VMC5-long   02633   112   CT604/SD0P   92   GHFBK-3-BYSTA   76, 82   HMPR   84   SU1182P   27   VMC10-long   02634   112   CT604/SD0P   92   GHFBK-3-BYSTA   76, 82   HMPS   84   SU1182R   26   VMC10-long   02635   112   CT5204HDX   97   GIC20   17   HMS   79   SU1184R   26   VMC10-long   02636   112   CT5204HDX   97   GIC20   17   HMS   79   SU1184R   26   VMC10-long   02636   112   CT5204HDX   97   GIC20   17   HMS   79   SU194R   26   VMC10-long   02637   112   D61801EZGF   14   GSC102OFC   22   HS8-BASE   76   SU202PR   26   VP618PE   02638   112   D72401EZGF   15   GSC122OFC   22   HS8-BASE   76   SU202PR   26   VP618PE   02639   112   D1C122   105, 110   GSC132   23   HS8-RP1   76   SU202R   26   VPM20001   02641   112   D1C122   105, 110   GSC134   23   HS8-RP1   76   SU202PR   27   VPR20001   02642   112   D1C222   105, 110   GSC134   23   HS8-RP2   76   SU222PR   26   VS2320   02645   112   D5401   34   GSKHT-BKFBR-S   76, 78, 79   LV7618PS   60   SU222R   26   VS2320   02646   112   D5401   34   GSKHT-BKFBR-S   76, 78, 79   LV7618PS   60   SU222R   27   VS5230   02726   113   D5401S   34   HBP1-U   85   MM1024   20   SU212R   24   VS52000   02726   113   D5401S   34   HBP1-U   85   MM1024   20   SU212R   24   VS52001   02727   113   D5401S   34   HBP1-U   85   MM1024   20   SU212R   24   VS52001   02726   113   D5401S   35   HBS182T   120   NA04SW-A   72   SU3184   42   VS52001   02727   113   D5401S   35   HBS182T   120   NA04SW-A   72   SU35SR   47   VS10200   02728   113   D5401S   35   HBS182T												38
02622												42
02623   112   C1604/500 P											VHD2001M	42
02631   112				93	GHF92B	64, 86					VHD7000	38
Deck   Product	1	112	CT604/500	94	GHF92HD	65	HMPF	84	SSU164P	27	VMC3-length	51
Decay											VMC5-length	51
O2634   112   CT604/STDSB   128   GHP   69   HMPT   83,84   SSU184P   27   VMC12-lene   O2635   112   CT52504HDX   97   GNO   72   HSB   76   SSU1020P   27   VP618M   O2636   112   DT52504HDX   97   GNO   72   HSB   76   SSU202P   27   VP618M   O2637   112   D161801EZGF   14   GSC1020FC   22   HSB-BASE   76   SSU202P   27   VPM20001   O2639   112   D1C122   105,110   GSC132   23   HSB-RFI   76   SSU202P   27   VPM20001   O2641   112   D1C124   105,110   GSC134   23   HSB-RFI   76   SSU202P   27   VPM20001   O2641   112   D1C124   105,110   GSC134   23   HSB-RP2   76   SSU202P   27   VPM20001   O2642   112   D1C124   105,110   GSC134   23   HSB-RP2   76   SSU222P   27   VPM20001   O2643   112   D1C224   105,110   GSC134   23   HSB-RP2   76   SSU222P   27   VPM20001   O2644   112   D5401   34   GSKT-BKFBR-L   76,78,79   LT61859   60   SSU224P   27   VS5230   O2645   112   D5401   34   GSKT-BKFBR-S   76,78,79   LT61859   60   SSU224P   27   VS5230   O2725   113   D5401LS   132   GSKT-HDC3R   76,78,79   MI024   20   SSU224P   27   VS5230   O2725   113   D5401LS   132   GSKT-HDC3R   76,78,79   MI024   20   SSU224P   27   VS10230   O2726   113   D5401LS   132   GSKT-HDC3R   68   MP1021   20   SSU124P   24   VS32001   O2726   113   D5404LS   131   HBPL-U   85   MA02M-HU-A   72   SSUB142   4   VS32001   O2726   113   D5404LS   131   HBPA-U   85   MA02M-HU-A   72   SSUB142   4   VS32001   O2726   113   D5408   32   HBS127   120   MA04SW-A   72   SSUB164   24   VS52000   O2726   113   D5408   32   HBS127   120   MA04SW-A   72   SSUB164   24   VS52000   O2726   113   D5408   33   HBS147   120   MA04SW-A   72   SSUB164   24   VS52000   O2726   113   D5408   33   HBS186   118   MOPL-M   72   SSUB164   4   VS52000   O2726   113   D5408   33   HBS186   118   MOPL-M   72   SSUB164   54   VS52000   O2726   113   D5408   33   HBS186   118   MOPL-M   72   SSUB164   54   VS52000   O2726   113   D5408   33   HBS186   118   MOPL-M   72   SSUB164   54   VS52000   O2726   013   D5601   33   HBS186   118   MOPL-M   72   SSUB164   54												51
Decision   112												51 51
Decision   Company   Com												51
D2637												44
Decoration   Dec												44
Deciding				15								38
December								76			VPM2000LS	133
Decoration   Dec											VPM2000TS	38
D2646												52
DS401D												52 52
D2725												52
Description												52
DS404   32												52
02762   113			DS401TS	34	HBP1-*U	85	MP1201	20		24		54
D2765   113												54
02766 113 DS408LS 131 HBS142T 120 NAO4MW-A 72 SSUB164 24 VS57000 02768 113 DS412 32 HBS162T 120 NAO4SAW-A 72 SV253SP 45 VS102000 02769 113 DS412LS 131 HBS164T 120 NAO4SAW-A 72 SV253SR 47 VS102001 02770 113 DS601 35 HBS181 122 NAO4SW-A 72 SV253SR 47 VS102001 02770 130 DS601D 35 HBS181 122 NAO4SW-A 72 SV253SR 46 VSD2001LS 132 HBS182T 120 NO2-4FDW-A 72 SV254SP 45 VSD2001LS 132 HBS182T 120 NO2-4FDW-A 72 SV254SP 45 VSD2001LS 132 HBS184T 120 NO2-4FDW-A 72 SV254SR 47 VSD2001LS 18/22AXL 101 DS601LS 132 HBS184T 120 NO2-4FDW-A 72 SV254SR 47 VSD2001TS 18/22AXL 101 DS604 33 HBS184T 120 NO2-4FDW-A 72 SV254SR 46 VSD2001TS 18/22AXL 101 DS608 33 HBS201 122 PA2 108 SV255SR 46 VSD2001TS 18/22CCD 100 DS612 33 HBS201D 122 PA2 108 SV255SR 46 VT61811PC 18/22CCD 100 DS616 33 HBS201D 122 PA2 108 SV255ST 46 VT61811PC 18/22CCD 100 DS616 33 HBS202 118 PA2T 109 SV256SR 47 VT61811TC 18/22CCT 100 DS624 33 HBS203 117 PA8 108 SV255ST 46 VT61811PC 18/22CCT 100 DT61812 10 HBS204 117 PA12 108 SV255ST 46 VT6185PC 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 RG862 48 TFAEB 73 XB201M 18/22CRT 100 DT61812 10 HBS204 117 RG862TS 48 TFAEB 73 XB201M 18/22CRTB 103 FC1-xx-LCD-IS 87 HBS2240 117 RG864TS 49 VI8/2PZSB 127 XB401 FB XB202FT 11 HBS224 117 RG864TS 49 VI8/2PZSB 127 XB404 16/2NAT65 104 FMB**T 75 HBS2240 117 SMPTE-304TS 62 V5010SB 127 XB408 127												53
02768 113 DS412 32 HBS162T 120 NAO4SAW-A 72 SV253SP 45 VS102000 02769 113 DS412LS 131 HBS164T 120 NAO4SAW-AX 72 SV253SR 47 VS102001 127 DS601 135 HBS181 122 NAO4SAW-AX 72 SV253SR 47 VS102001 127 DS601 135 HBS181 122 NAO4SAW-AX 72 SV253SR 46 VSD2001LS 127 DS601D 35 HBS182 118 NDR1 81 SV254SP 45 VSD2001LS 16/18SVA 103 DS601LS 132 HBS182T 120 NO2-4FDW-1-A 72 SV254SR 47 VSD2001FB 16/18SVAP 103 DS601M 35 HBS184T 120 NO2-4FDW-A 72 SV254SR 47 VSD2001FB 18/22AXL 101 DS604 33 HBS186 118 NO4FDW-A 72 SV254SR 47 VSD2001FB 18/22AXL 101 DS608 33 HBS201 122 PA2 108 SV255SP 45 VSD2001TB 18/22CCD 100 DS612 33 HBS201HD 122 PA2 108 SV255SR 47 VT61811FB 18/22CCD 100 DS616 33 HBS202 118 PA2T 109 SV256SR 47 VT61811FB 18/22CCT 100 DS616 33 HBS203 117 PA8 108 SV255STR 46 VT61811FB 18/22CCT 100 DS616 33 HBS203 117 PA8 108 SV256STR 46 VT61811FB 18/22CCT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 PA12 108 TCF 61 XB20UB 18/22CRT 100 DT61812 10 HBS204 117 RGB62TS 48 TFAEB 73 XB201M 18/22CRTS 123 DTBXS1624FYMFG 11 HBS222 118 RGB644 49 TFATT 73 XB401 TRATT 73 XB401 TFATT 74 HBS2230 117 RGB62TS 48 TFATT 73 XB401 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2240 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2240 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2240 117 RGB644TS 49 V18/2PZSB 127 XB404 TFATT 75 HBS2230 117 RGB644TS 49 V18/2PZSB 127 XB408 TFATT 75 HBS2240 117 RGB644TS 49 V18/2PZSB 127 XB408 TFATT 71 HBS224 116 SSPUBI64 24 VA2/3T 56 TFATT 75 HBS2240 116 SSPUBI64 24 VA2/3T 56 TFATT 75 HBS2247 116 SSPUBI64 24 VA2/3T 56 TFATT 75 HBS2												54
D2769   113   D5412LS   131   HBS164T   120   NAO4SAW-AX   72   SV253SR   47   VS102001												55
D2770												53 54
12/22LGRX												38
16/185VA   103												133
18/22AXL   101											VSD2001PEF	39
18/22AXLP         101         DS608         33         HBS201         122         PA2         108         SV255SR         47         VT61811           18/22CCD         100         DS612         33         HBS201HD         122         PA2C         108         SV255STR         46         VT61811PE           18/22CCT         100         DS616         33         HBS202         118         PA2T         109         SV256SR         47         VT61811PE           18/22CCT         100         DS624         33         HBS203         117         PA8         108         SV256STR         46         VT6181PE           18/22CCT         100         DT61812         10         HBS204         117         PA12         108         TCF         61         XB20UB           18/22CRT         100         DTBXS912FNMFG         11         HBS222         118         PA12C         108         TCM         60, 61         XB20UB           18/22CRTP         100         DTBXS912FNMRG         11         HBS222         118         PA12C         108         TCM         60, 61         XB20UB           18/22CRTS         123         DTBXS1624FYMFG         11         HBS223         117	SVAP 1	103	DS601M	35	HBS184T	120	NO2-4FDW-A	72	SV254STR	46	VSD2001SB	126
18/22CCD         100         DS612         33         HBS201HD         122         PA2C         108         SV255STR         46         VT61811PE           18/22CCQ         100         DS616         33         HBS202         118         PA2T         109         SV256SR         47         VT61811RE           18/22CDC         100         DS624         33         HBS203         117         PA8         108         SV256STR         46         VT6181TR           18/22CDC         100         DT61812         10         HBS204         117         PA12         108         TCF         61         XB20UB           18/22CRT         100         DTBXS912FNMRG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTS         100         DTBXS912FNMRG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTS         123         DTBXS1624FYMFG         11         HBS222         118         RG62TS         48         TFAEB         73         XB201M           18/22KYP         102         FC1-xx-LCD-IS         87         HBS2220         <		101					NO4FDW-A			45	VSD2001TS	38
18/22CCQ         100         DS616         33         HBS202         118         PA2T         109         SV256SR         47         VT61811TK           18/22CCT         100         DS624         33         HBS203         117         PA8         108         SV256STR         46         VT61859           18/22CRT         100         DT61812         10         HBS204         117         PA12         108         TCF         61         XB201BM           18/22CRT         100         DTBXS912FNMFG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTP         100         DTBXS912FNMNG         11         HBS223         117         RGB62         48         TFAEB         73         XB201DM           18/22GFE         103         DTBXS1624FYMFG         11         HBS223         117         RGB62TS         48         TFAEP         73         XB401           18/22GFE         103         FC1-xx-LCD-IS         87         HBS2220         118         RGB64TS         49         TFAIT         73         XB401FB           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>61</td></t<>												61
18/22CCT         100         DS624         33         HBS203         117         PA8         108         SV256STR         46         VT61859           18/22CDC         100         DT61812         10         HBS204         117         PA12         108         TCF         61         XB20UB           18/22CRT         100         DTBXS912FNMFG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTP         100         DTBXS912FNMNG         11         HBS223         117         RGB62         48         TFAEB         73         XB201M           18/22CRTS         123         DTBXS1624FYMFG         11         HBS224         117         RGB62TS         48         TFATT         73         XB401           18/22GFE         103         FC1-xx-LCD-IS         87         HBS2220         118         RGB644         49         TFATT         73         XB401FB           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230         117         RGB644TS         49         V18/2PZSB         127         XB408           144NCAT         101         FC1-xx-ST         87         HBS2230												61
18/22CDC         100         DT61812         10         HBS204         117         PA12         108         TCF         61         XB20UB           18/22CRT         100         DTBXS912FNMFG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTS         100         DTBXS912FNMNG         11         HBS223         117         RGB62         48         TFAEB         73         XB201M           18/22CRTS         123         DTBXS1624FYMFG         11         HBS223         117         RGB62TS         48         TFAET         73         XB201M           18/22CFF         103         FC1-xx-LCD-IS         87         HBS2220         118         RGB644         49         TFAIT         73         XB401FB           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230         117         RGB644TS         49         V18/2PZSB         127         XB404           144NCAT         101         FC1-xx-SCD-IS         87         HBS2230         117         SMFE-304TS         62         V5010SB         127         XB408           162VANT65         104         FMB**P         75         HBSP222												61
18/22CRT         100         DTBXS912FNMFG         11         HBS222         118         PA12C         108         TCM         60, 61         XB201DBM           18/22CRTS         100         DTBXS912FNMNG         11         HBS223         117         RG662         48         TFAEB         73         XB201M           18/22CRTS         123         DTBXS1624FYMFG         11         HBS224         117         RGB62TS         48         TFATP         73         XB401B           18/22GFE         103         FC1-xx-LCD-IS         87         HBS2220         118         RG6644         49         TFATT         73         XB401B           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2220         118         RG6644TS         49         V18/2PZSB         127         XB401B           144NCAT         101         FC1-xx-SCD-IS         87         HBS2240         117         SMPTE-304TS         62         V5010SB         127         XB408           162VANT65         104         FMB**P         75         HBSP222         116         SSPUB142         24         VA2/2TP         56         XB412           164NCAT         104         FMB**R         75         H												61 17
18/22CRTP         100         DTBXS912FNMNG         11         HBS223         117         RGB62         48         TFAEB         73         XB201M           18/22CRTSB         123         DTBXS1624FYMFG         11         HBS224         117         RGB62TS         48         TFATP         73         XB401           18/22KYP         102         FC1-xx-LCD-IS         87         HBS2220         118         RGB644         49         TFATT         73         XB401FB           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230         117         RGB644TS         49         V18/2PZSB         127         XB404           144NCAT         101         FC1-xx-SCD-IS         87         HBS2240         117         SMPTE-304TS         62         V5010SB         127         XB408           162VANT65         104         FMB**P         75         HBSP222         116         SSPUB142         24         VA2/2TP         56         XB412           164NCAT         104         FMB**R         75         HBSP224         116         SSPUB144         24         VA2/3TP         56           182LUTDS         102         FMD**P         75         HBU122T         121 <td></td> <td>19</td>												19
18/22CRTSB         123         DTBXS1624FYMFG         11         HBS224         117         RGB62TS         48         TFATP         73         XB401           18/22GFE         103         FC1-xx-LCD-IS         87         HBS2220         118         RGB644         49         TFATT         73         XB401FB           18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230         117         RGB644TS         49         V18/2PZSB         127         XB404           144NCAT         101         FC1-xx-ST         87         HBS2240         117         SMPTE-304TS         62         V5010SB         127         XB408           162VANT65         104         FMB**P         75         HBSP222         116         SSPUB142         24         VA2/2TP         56         XB412           164NCAT         104         FMB**R         75         HBSP224         116         SSPUB144         24         VA2/3T         57         XB416           164NCAT         101         FMB**T         71         HBSP226         116         SSPUB162         24         VA2/3TP         56           182LUTDS         102         FMD**P         75         HBU122T         121												19
18/22GFE     103     FC1-xx-LCD-IS     87     HBS2220     118     RGB644     49     TFATT     73     XB401FB       18/22KYP     102     FC1-xx-SCD-IS     87     HBS2230     117     RGB644TS     49     V18/2PZSB     127     XB404       144NCAT     101     FC1-xxST     87     HBS2240     117     SMPTE-304TS     62     V5010SB     127     XB408       162VANT65     104     FMB**P     75     HBSP222     116     SSPUB142     24     VA2/2TP     56     XB412       164LTCH     104     FMB**R     75     HBSP224     116     SSPUB144     24     VA2/3     57     XB416       164NCAT     101     FMB**T     71     HBSP226     116     SSPUB162     24     VA2/3TP     56       182LUTDS     102     FMD**P     75     HBU122T     121     SSPUB164     24     VA2/3     57       184LUTDS     102     FMD**R     75     HBU142T     121     SSS122P     29     VA2/5     57												16
18/22KYP         102         FC1-xx-SCD-IS         87         HBS2230         117         RGB644TS         49         V18/2PZSB         127         XB404           144NCAT         101         FC1-xxST         87         HBS2240         117         SMPTE-304TS         62         V5010SB         127         XB408           162VANT65         104         FMB**P         75         HBSP222         116         SSPUB142         24         VA2/2TP         56         XB412           164NCAT         104         FMB**R         75         HBSP224         116         SSPUB144         24         VA2/3         57         XB416           164NCAT         101         FMB**T         71         HBSP226         116         SSPUB162         24         VA2/3TP         56           182LUTDS         102         FMD**P         75         HBU122T         121         SSPUB164         24         VA2/4         57           184LUTDS         102         FMD**R         75         HBU142T         121         SSS122P         29         VA2/5         57												16
162VANT65     104     FMB**P     75     HBSP222     116     SSPUB142     24     VA2/2TP     56     XB412       164LTCH     104     FMB**R     75     HBSP224     116     SSPUB144     24     VA2/3     57     XB416       164NCAT     101     FMB**T     71     HBSP226     116     SSPUB162     24     VA2/3TP     56       182LUTDS     102     FMD**P     75     HBU122T     121     SSPUB164     24     VA2/4     57       184LUTDS     102     FMD**R     75     HBU142T     121     SSS122P     29     VA2/5     57	CYP 1	102	FC1-xx-SCD-IS	87	HBS2230		RGB644TS		V18/2PZSB		XB404	9
164LTCH     104     FMB**R     75     HBSP224     116     SSPUB144     24     VA2/3     57     XB416       164NCAT     101     FMB**T     71     HBSP226     116     SSPUB162     24     VA2/3TP     56       182LUTDS     102     FMD**P     75     HBU122T     121     SSPUB164     24     VA2/4     57       184LUTDS     102     FMD**R     75     HBU142T     121     SSS122P     29     VA2/5     57												9
164NCAT     101     FMB**T     71     HBSP226     116     SSPUB162     24     VA2/3TP     56       182LUTDS     102     FMD**P     75     HBU122T     121     SSPUB164     24     VA2/4     57       184LUTDS     102     FMD**R     75     HBU142T     121     SSS122P     29     VA2/5     57												9
182LUTDS         102         FMD**P         75         HBU122T         121         SSPUB164         24         VA2/4         57           184LUTDS         102         FMD**R         75         HBU142T         121         SSS122P         29         VA2/5         57											XB416	9
184LUTDS 102 FMD**R 75 HBU142T 121 SSS122P 29 VA2/5 57												
224SLTCH 104 FP1-x-LCD-IS 87 HBU162 119 SSS124P 29 VBB3 51												







# 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.





Visit www.GeneralCableCSR.com to learn more.





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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