-GENESIS-
Product Catalog
2023

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Enabling Your Success

Genesis. Wire that Works – the first time, every time. Engineered and tested to exceed the highest quality standards, Genesis low-voltage cable is trusted by contractors worldwide to produce consistent system performance. Our cable delivers a hassle-free experience - from sale to installation - that drives repeat business and gets pros in and out of jobs faster.

Hassle-Free Solutions for Every Application
Our complete portfolio of high-performance solutions span the Security, HVAC and Electrical markets and can be purchased from thousands of locations across the U.S., Canada and Latin America. Optimize system longevity and drive a greater return on investment with Genesis Cable – you can count on it.

SECURITY
- Burglar alarm systems
- Access control
- Closed circuit television (CCTV)

NETWORKING & COMMUNICATION
- Enterprise networks
- Hot spots
- Video conferencing systems
- Point of sale systems

FIRE & LIFE SAFETY
- Conventional, intelligent detection
- Audible and visual notification
- Emergency mass communication
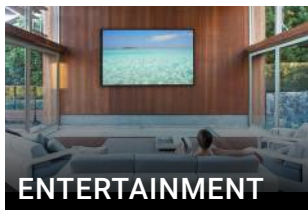
ENTERTAINMENT
- Conferencing and meeting systems
- Home theater audio
- Cable and satellite television

COMFORT (HVAC)
- Building climate and energy management
- Home climate control
- Centralized, localized, and zoned system

OTHER
- LED lighting
- Outdoor lighting
- Underground piping and sprinkler systems

Your Single Source Provider

3-FOR-1 WARRANTY
At Genesis, we ensure protection for you and your customers. If any cable fails to perform to spec, we'll replace it – three units to one.

READYSHIP
Readyship keeps your business running on schedule by providing same-or next-day shipping on more than 70 products.

TOLL-FREE CUSTOMER SUPPORT
We deliver confidence by ensuring prompt response and resolution when and where you need it. When you work with Genesis, you work with the best.

IN STOCK, READILY AVAILABLE
Genesis keeps your business running on schedule, with product availability from thousands of locations nationwide.

Part Numbers, Packaging & Color Codes

All Genesis Cable products are assigned an eight-digit part number that contains a product code, put up code and color code.

Put Up Code	
Code	**Description**
01	250' Reel
03	4 x 250' Reel
05	250' Pull Box
09	250' SPEED BAG®
10	1000' Reel
11	1000' Pull Box
21	1000' Reel-In-A-Box
25	2500' Reel
39	5 x 50' Coil
43	100' Reel
46	125' SPEED BAG®
48	4 x 500' Reel
50	500' Reel
55	500' Pull Box
58	500' SPEED BAG
61	500' Reel-In-A-Box
71	5000' Reel

Color Code	
Code	**Description**
00	Clear
01	White
02	Yellow
03	Orange
04	Red
05	Green
06	Blue
07	Brown
08	Black
09	Gray
10	Purple
11	Pink
12	Natural
13	Beige
18	Black/White
1A	White w/ Orange Stripe
1B	White w/ Blue Stripe
1R	White w/ Red Stripe
45	Neon Green
4A	Red w/ Orange Stripe
4B	Red w/ Blue Stripe
4G	Red w/ Green Stripe
4K	Red w/ Black Stripe
4N	Red w/ Brown Stripe
4P	Red w/ Purple Stripe
4W	Red w/ White Stripe
4Y	Red w/ Yellow Stripe
6Y	Blue w/ Yellow Stripe
99	Unjacketed
M4	Metal Clad w/ Red Stripe

For Example
This is a 1000' Reel of blue,
plenum rated Category 6A Cable.

| 5393	10	06
Product	Put-Up	Color

Packaging Technology

Genesis Packaging
Created with the installer in mind, our new and improved Genesis Packaging delivers a hassle-free installation experience. Designed to be crush-resistant with reinforced handles, installers benefit from guaranteed durability, smoother installations and the ability to get in and out of jobs faster – increasing total ROI.

Thermostat Cable Reels
Genesis Thermostat Cable Reels are durable, flexible and easy to install for a hassle-free experience you can count on. Its ergonomic features allow for easier transportation and protection from bends, breaks and rust. Additionally, the reel is made from recycled materials for a more environmentally friendly and cost-effective option.
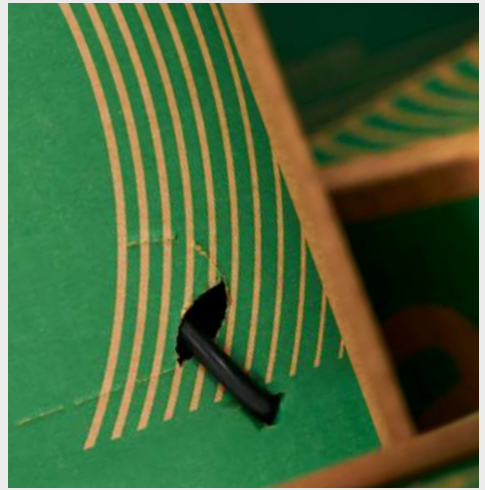
Pull Box Packaging

Simplify cable pulls with Pull Box packaging technology. Operating as a reel-less coil, these boxes prevent tangles and snags to reduce installation time. Stackable and lighter than traditional reels, recyclable Pull Box packaging allows for simple storage and minimized waste.

Speed Bag® Packaging

Save time, space and money with Speed Bag packaging. Easy-to-open, these innovative packages are stackable and facilitate multiple wire pulls from one source. Available for several thermostat and security cables, Speed Bags easily fit into five-gallon buckets, tool bags or carts for ease of transport. They are also environmentally efficient – eliminating empty reels and cutting down on jobsite waste.

SECURITY

Reliability and continuous connectivity are critical for every security network and system performance cannot be trusted to inferior wire. As the foundation for the highest-performing security networks in the world, Genesis Security Cable optimizes intrusion, access control and video systems for continuous high performance at all times.

Hassle-Free Security Solutions

Burglar alarm systems. Access control.
Closed circuit television (CCTV).
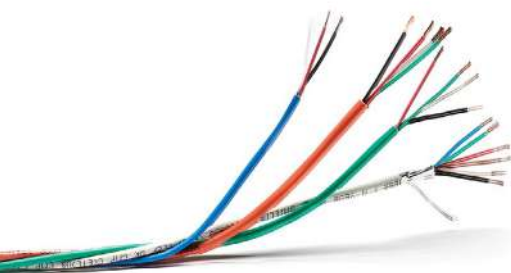
Profusion®
Decrease material costs by up to 16%
and reduce entry point wiring time by up
to 30% with jacketless Profusion Cable.
Unconstrained by binders, adhesives or thick
overall jackets, this cable is twisted together
like a rope, bundling individual lock power, door
contact, card reader and request-to-exit wiring.
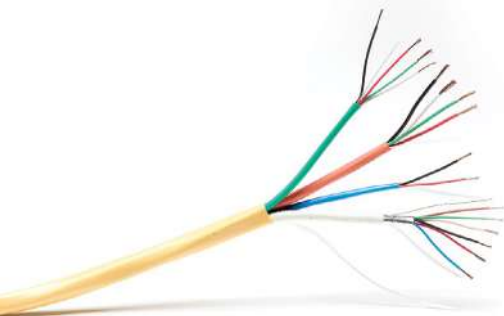
Access Control Composite Cable
Lessen the risk of snags and more easily
bend cable around corners and obstructions.
This convenient, jacketed bundle combines
individual lock power, door contact, card
reader and request-to-exit cables for smoother
pulls and more efficient installations.

Multi-Conductor

Unshielded

Plenum

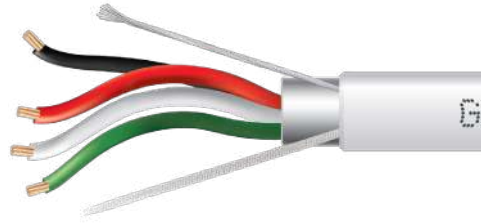| AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.116 in.	3102
22	4	Solid	0.120 in.	3103
22	4	Stranded	0.133 in.	3104
22	6	Stranded	0.158 in.	3106
22	8	Stranded	0.171 in.	3107
22	10	Stranded	0.202 in.	3108
22	12	Stranded	0.208 in.	3109
18	2	Solid	0.142 in.	3134
18	2	Stranded	0.148 in.	3114
18	3	Stranded	0.162 in.	3126
18	4	Stranded	0.172 in.	3115
18	6	Stranded	0.206 in.	3116
18	8	Stranded	0.224 in.	3117
18	10	Stranded	0.264 in.	3118
18	12	Stranded	0.275 in.	3119
16	2	Stranded	0.180 in.	3121
16	3	Stranded	0.190 in.	3129
16	4	Stranded	0.210 in.	3122
14	2	Stranded	0.208 in.	3123
14	4	Stranded	0.246 in.	3124
12	2	Stranded	0.252 in.	3125

Listings
ETL Listed NEC Type CL3P, FPLP, CMP (22-16 AWG) C(ETL)US FT6 (22-16 AWG)
ETL Listed NEC Type CL3P, FPLP (14-12 AWG) ETL Listed FT6 (14-12 AWG)

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Multi-Conductor Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

Multi-Conductor

Shielded
Plenum

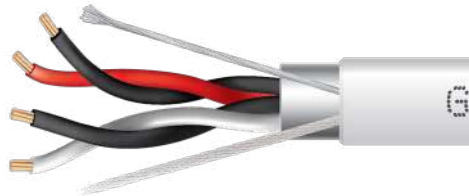| AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.120 in.	3202
22	3	Stranded	0.134 in.	3227
22	4	Stranded	0.137 in.	3204
22	6	Stranded	0.162 in.	3206
22	8	Stranded	0.192 in.	3207
22	10	Stranded	0.216 in.	3208
22	12	Stranded	0.219 in.	3209
18	2	Stranded	0.156 in.	3214
18	3	Stranded	0.166 in.	3226
18	4	Stranded	0.182 in.	3215
18	5	Stranded	0.197 in.	3276
18	6	Stranded	0.216 in.	3216
18	8	Stranded	0.236 in.	3217
18	10	Stranded	0.276 in.	3218
16	2	Stranded	0.180 in.	3221
16	4	Stranded	0.210 in.	3222
14	2	Stranded	0.212 in.	3223
14	4	Stranded	0.238 in.	3224

Listings

ETL Listed NEC Type CL3P, FPLP, CMP (22-16 AWG)
C(ETL)US FT6 (22-16 AWG)

ETL Listed NEC Type CL3P, FPLP (14-12 AWG)
ETL Listed FT6 (14-12 AWG)

Specifications

Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes
Multi-Conductor Cables

Conductor Number	Color	
1	Black	
2	Red	
3	White	
4	Green	
5	Brown	
6	Blue	
7	Orange	
8	Yellow	
9	Purple	
10	Gray	
11	Pink	
12	Tan	

Multi-Pair

Overall Shielded
Plenum

AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.182 in.	3281

Multi-Pair

1-Pair Shielded
Plenum
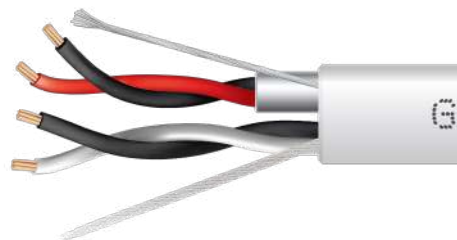
AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.190 in.	3270

Listings
ETL Listed NEC Type CL3P, FPLP, CMP
C(ETL)US Listed CMP FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Multi-Pair Cables	
Pair Number	Color
1	Black/Red
2	Black/White
3	Black/Green
4	Black/Blue
5	Black/Yellow
6	Black/Brown

Multi-Conductor

Unshielded
Riser
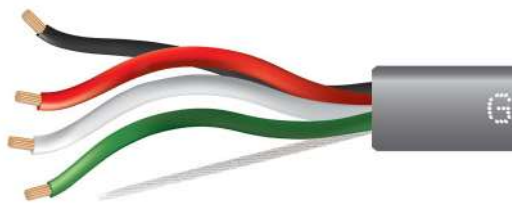
AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Solid	0.106 in.	2101
22	2	Stranded	0.116 in.	2102
22	4	Solid	0.120 in.	2103
22	4	Stranded	0.135 in.	2104
22	6	Solid	0.140 in.	2105
22	6	Stranded	0.158 in.	2106
22	8	Stranded	0.174 in.	2107
22	10	Stranded	0.202 in.	2108
22	12	Solid	0.182 in.	2111
22	12	Stranded	0.208 in.	2109
18	2	Stranded	0.150 in.	2114
18	3	Stranded	0.159 in.	2129
18	4	Stranded	0.174 in.	2115
18	6	Stranded	0.208 in.	2116
18	8	Stranded	0.228 in.	2117
18	10	Stranded	0.268 in.	2118
16	2	Stranded	0.176 in.	2121
16	4	Stranded	0.205 in.	2122
14	2	Stranded	0.210 in.	2123
14	4	Stranded	0.246 in.	2124
12	2	Stranded	0.264 in.	2125

Listings
ETL Listed NEC Type CL3R, FPLR, CMR (22-16 AWG) C(ETL)US Listed CMR FT4 (22-16 AWG)
ETL Listed NEC Type CL3R, FPLR (14-12 AWG) ETL Listed FT4 (14-12 AWG)

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Multi-Conductor Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan
Except 2103: Black, Red, Green, Yellow	

Multi-Conductor

Shielded

Riser
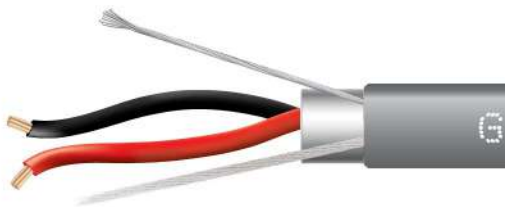
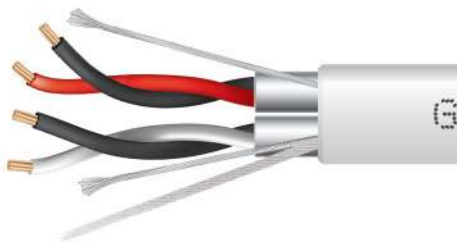| AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.120 in.	2202
22	4	Stranded	0.141 in.	2204
22	6	Stranded	0.162 in.	2206
22	8	Stranded	0.176 in.	2207
22	10	Stranded	0.204 in.	2208
22	12	Stranded	0.210 in.	2209
18	2	Stranded	0.154 in.	2214
18	3	Stranded	0.161 in.	2228
18	4	Stranded	0.180 in.	2215
18	6	Stranded	0.214 in.	2216
18	8	Stranded	0.232 in.	2217
18	10	Stranded	0.268 in.	2218
18	12	Stranded	0.281 in.	2219
16	2	Stranded	0.180 in.	2221
16	3	Stranded	0.186 in.	2229
16	4	Stranded	0.209 in.	2222
14	2	Stranded	0.216 in.	2223
14	4	Stranded	0.252 in.	2224

Listings
ETL Listed NEC Type CL3R, FPLR, CMR (22-16 AWG) C(ETL)US Listed CMR FT4 (22-16 AWG)
ETL Listed NEC Type CL3R, FPLR (14-12 AWG) ETL Listed FT4 (14-12 AWG)

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Multi-Conductor Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

Multi-Pair

Each-Pair Shielded

General Purpose

AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.165 in.	1264
18	2	Stranded	0.198 in.	1273

Listings
ETL Listed NEC Type CL2, CM

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Multi-Pair Cables	
Pair Number	Color
1	Black/Red
2	Black/White
3	Black/Green
4	Black/Blue
5	Black/Yellow
6	Black/Brown

Insulated Ground Wire

General Purpose

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
14	1	Solid	0.105 in.	1131

Listings
ETL Listed NEC Type CL2 (14-12 AWG)

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Insulated Ground Wire	
Conductor Number	Color
1	Green

Zip Cable   General Purpose
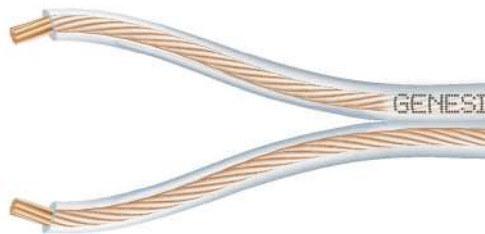
AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.074 x 0.164 in.	1002
18	2	Stranded	0.090 x 0.190 in.	1004

Listings
ETL Listed CL2, CM
C(ETL)US Listed FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)

Unjacketed Twisted   General Purpose

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	2	Stranded	0.150 in	1051
14	2	Solid	0.223 in	1057

Listings
ETL Listed CL2, CM
C(ETL)US Listed CMG FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)

CCTV Coaxial Video

General Purpose

Style	Coax Conductor	Coax Shield	Power Conductors	Nominal O.D.	Product Number
RG59 + 18/2	20 AWG BC	CCA Braid	18 AWG BC	0.425 x 0.240 in.	6508
RG59 + 18/2	20 AWG BC	BC Braid 18	18 AWG BC	0.420 x 0.245 in.	5013
RG59	20 AWG BC	BC Braid 18	18 AWG BC	0.242 in.	5001

Listings
ETL Listed CM, CL2

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C

CCTV Coaxial Video

Plenum
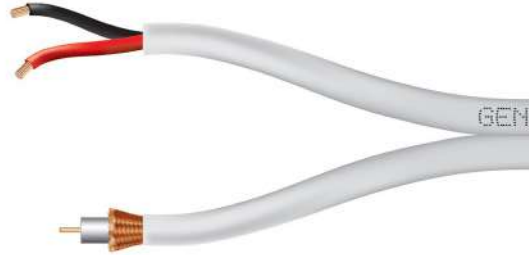
Style	Coax Conductor	Coax Shield	Power Conductors	Nominal O.D.	Product Number
RG59 + 18/2	20 AWG BC	CCA Braid	18 AWG BC	0.195 x 0.420 in.	5355

Listings
ETL Listed CMP, CL2P
C(ETL)US CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C

Access Control Bundles

Plenum

Type	Composite / Profusion	Nominal O.D.	Product Number
Standard	Composite	0.350 in.	3196
Standard	Profusion	0.395 in.	3195
Noisy Environment	Composite	0.400 in.	3296
Noisy Environment	Profusion	0.395 in.	3295

Listings
ETL Listed CMP, CL3P, FPLP
C(ETL)US Listed CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Access Control Bundles

Riser

Type	Composite / Profusion	Nominal O.D.	Product Number
Standard	Composite	0.350 in.	2196
Standard	Profusion	0.410 in.	2195
Noisy Environment	Profusion	0.410 in.	2295

Listings
ETL Listed CMR, CL3R, FPLR
C(ETL)US Listed CMR, FT4

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Composite constructions include a jacket over all components.
Profusion® constructions remain unified without binders, tapes, or overall jackets.

Profusion®

Composite
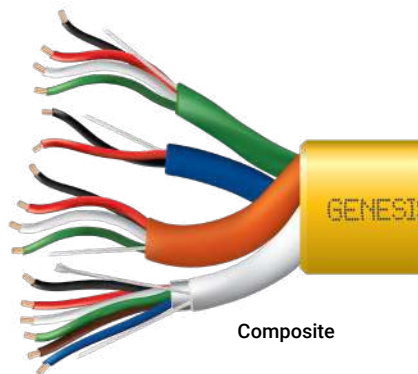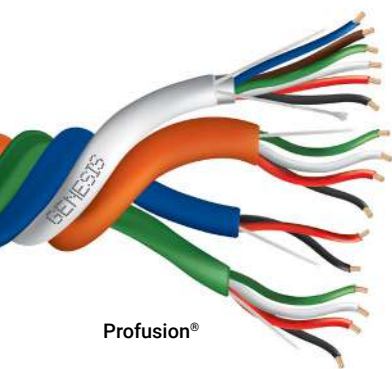
Standard Access Control Bundle
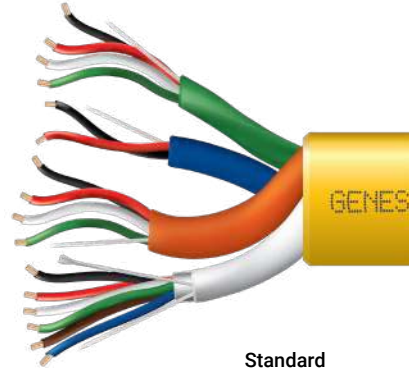
Standard

Component	AWG	Number of Conductors	Solid/ Stranded	Shield	Jacket Color
Card Reader	22 AWG	6	Stranded	Overall foil	White
Door Strike	18 AWG	4	Stranded	N/A	Orange
Door Contact	22 AWG	2	Stranded	N/A	Blue
Request for Exit	22 AWG	4	Stranded	N/A	Green

Noisy Environment Access Control Bundle
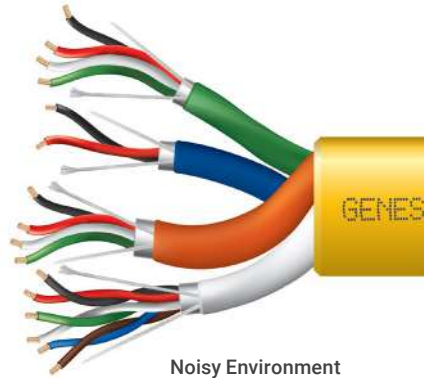
Noisy Environment

Component	AWG	Number of Conductors	Solid/ Stranded	Shield	Jacket Color
Card Reader	22 AWG	6 (3-pairs)	Stranded	Overall foil	White
Door Strike	18 AWG	4	Stranded	Overall foil	Orange
Door Contact	22 AWG	2	Stranded	Overall foil	Blue
Request for Exit	22 AWG	4	Stranded	Overall foil	Green

FIRE & LIFE SAFETY

There is no second chance when it comes to protecting people and their environment, so don't leave system connectivity and performance up to inferior cable. Genesis Fire & Life Safety Cable optimizes critical systems for continuous high performance, delivering peace of mind when it matters most.

Hassle-Free
Fire & Life
Safety Solutions

Conventional and intelligent detection.
Audible and visual notification.
Emergency mass communication.

Striped Fire Alarm Cable
Maximize jobsite productivity by assigning a
different stripe color to each type of circuit for
easy differentiation, minimized confusion and
expedited installations and service. Extruded
stripes offer continuous identification and
long-lasting durability.

Stranded Fire Alarm Cable
Experience optimal safety and superior
flexibility for easier pulls through conduit,
over long distances and around corners.
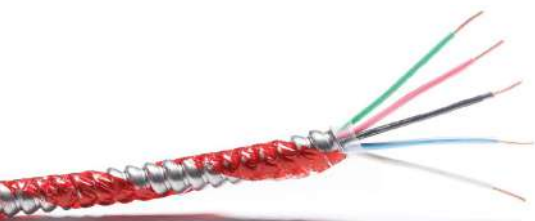
Metal Clad Fire Alarm Cable
Eliminate the need to bend, install and mark
rigid conduit during cable installations.
Permanent red helical tape runs continuously
along the cable for easy identification as a
fire alarm circuit.

Fire Alarm

Unshielded

Plenum

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2	Solid	0.136 in.	4506
18	4	Solid	0.157 in.	4507
18	6	Solid	0.188 in.	4508
16	2	Solid	0.177 in.	4511
16	2	Stranded	0.180 in.	4523
16	4	Solid	0.201 in.	4512
16	4	Stranded	0.210 in.	4526
14	2	Solid	0.206 in.	4513
14	2	Stranded	0.208 in.	4522
14	4	Solid	0.230 in.	4514
14	4	Stranded	0.246 in.	4527
12	2	Solid	0.228 in.	4515
12	2	Stranded	0.265 in.	4521

Listings
UL Listed FPLP, CL3P, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown
6	Blue
7	Purple
8	Pink

Fire Alarm

Shielded

Plenum
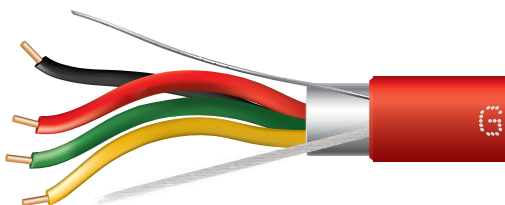
AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2	Solid	0.140 in.	4602
18	2	Stranded	0.156 in.	4614
18	4	Solid	0.168 in.	4603
16	2	Solid	0.177 in.	4606
16	4	Solid	0.206 in.	4607
14	2	Solid	0.211 in.	4608
14	2	Stranded	0.213 in.	4612
14	4	Solid	0.247 in.	4609
12	2	Solid	0.245 in.	4610

Listings
UL Listed FPLP, CL3P, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

| Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown
6	Blue
7	Purple
8	Pink

Fire Alarm

Unshielded

Riser

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
22	4	Solid	0.123 in.	4301
22	6	Solid	0.123 in.	4302
18	2	Solid	0.144 in.	4306
18	4	Solid	0.159 in.	4307
18	6	Solid	0.190 in.	4308
16	2	Solid	0.165 in.	4311
16	4	Solid	0.201 in.	4312
14	2	Solid	0.196 in.	4313
14	4	Solid	0.225 in.	4314
12	2	Solid	0.226 in.	4315
12	2	Stranded	0.264 in.	4320

Fire Alarm

Unshielded

Mid-Cap

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2	Solid	0.144 in.	4431
18	2	Solid	0.170 in.	4432

Listings
UL Listed FPLR, CL3R, FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown
6	Blue
7	Purple
8	Pink

Fire Alarm

Shielded
—
Riser

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2	Solid	0.148 in.	4402
18	4	Solid	0.163 in.	4403
16	2	Solid	0.176 in.	4406
16	4	Solid	0.197 in.	4407
14	2	Solid	0.205 in.	4408
14	4	Solid	0.230 in.	4409
12	2	Solid	0.231 in.	4410

Listings
UL Listed FPLR, CL3R, FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown
6	Blue
7	Purple
8	Pink

Fire Alarm

Unshielded

Direct Burial

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
16	2	Stranded	0.282 in.	4151
16	4	Stranded	0.323 in.	4152
14	2	Stranded	0.310 in.	4153
14	4	Stranded	0.355 in.	4154
18	2	Stranded	0.260 in.	4156
18	4	Stranded	0.295 in.	4157
18	6	Stranded	0.345 in.	4158
18	8	Stranded	0.375 in.	4159

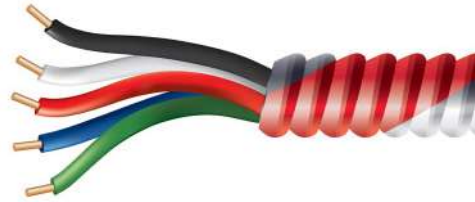| Listings |
|---|
| UL Listed FPL, CL2 |

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown
6	Blue
7	Purple
8	Pink

Fire Alarm

Unshielded

Metal Clad

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2 + Ground	Solid	0.393 in.	4290
18	4 + Ground	Solid	0.439 in.	4291
16	2 + Ground	Solid	0.416 in.	4292
16	4 + Ground	Solid	0.464 in.	4293
14	2 + Ground	Solid	0.444 in.	4294
14	4 + Ground	Solid	0.504 in.	4295
12	2 + Ground	Solid	0.483 in.	4296

Listings
UL Listed Type MC, FPL

Specifications	
Operating Temperature	-20 °C to 90 °C Dry/ 75 °C Wet
Operating Voltage	600 V (Type MC), 300 V (FPL)

Conductor Color Codes Fire Alarm Metal Clad Cables	
Conductor Number	Color
1	Black
2	White
3	Red
4	Blue
Ground	Green

Fire Alarm

Unshielded

FAS FT4

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	3	Solid	0.218 in.	4021
18	5	Solid	0.256 in.	4023
16	3	Solid	0.240 in.	4016

Listings
CSA Listed FAS 105, FT4

Specifications	
Operating Temperature	-30 °C to 105 °C
Operating Voltage	300 V (max)

Conductor Color Codes Fire Alarm Cables	
Conductor Number	Color
1	Black
2	Red
3	Green
4	Yellow
5	Brown

Fire Alarm

Unshielded
NYC Certified

AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
16	1	Solid	0.214 in.	5502
16	2	Solid	0.280 in.	5503
14	1	Solid	0.244 in.	5504
14	2	Solid	0.290 in.	5506
12	1	Solid	0.272 in.	5505

Fire Alarm

Shielded
NYC Certified
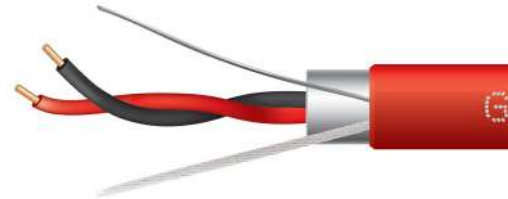
AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
16	1	Solid	0.218 in.	5552
16	2	Solid	0.250 in.	5553
14	1	Solid	0.248 in.	5554
14	2	Solid	0.290 in.	5555

Listings
UL Listed FPLP
NYC Certified Fire Alarm Cable

Specifications	
Operating Temperature	-20 °C to 105 °C
Operating Voltage	300 V (max)

| Conductor Color Codes NYC Certified Fire Alarm Cables	
Pair Number	Color
1	Black/Red
2	Yellow/Green

COMFORT (HVAC)

Whether implementing smart home technologies or connecting today's most-intelligent buildings, Genesis HVAC & Building Automation Cable optimizes system performance. From simple to complex systems, Genesis maintains its strong market reputation by offering the technology required for continuous high-speed data transfer and system connectivity.

Hassle-Free Comfort (HVAC) Solutions

Building climate and energy management.
Home climate control.
Centralized, localized and zoned system.
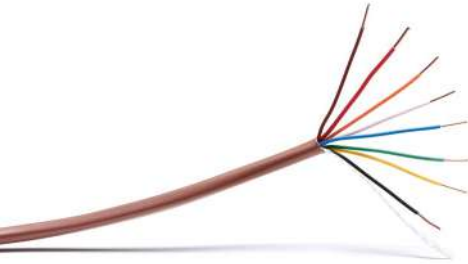
Thermostat Cable

Deliver optimal connectivity with Hybrid Thermostat and Standard Thermostat Cables designed for today's high efficiency equipment and equipment from decades past. Available in easy-to-open, environmentally-friendly Speed Bag® packaging and durable reels for hassle-free installations.

Mini Split Cable

Experience complete versatility with cable optimized for in-conduit installations and outdoor installations, with or without conduit. Direct burial and sunlight-resistant listings allow cable to handle harsh and wet environments in unprotected outdoor applications.
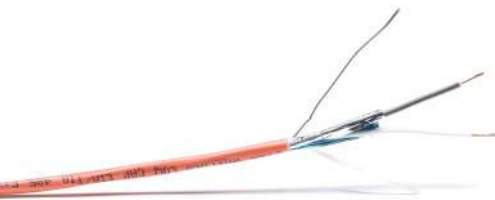
Building Automation Cable

Adhere to several communication standards and protocols that enable communication and data-sharing across devices. Built for integrated building automation systems, these cables protect performance without distortion or interruption, support system functionality, increase building efficiency and maximize energy cost savings.

Choosing a Mini Split Cable

Determine if Genesis Spinalcord® or Genesis Mini Split Tray Cable is best for your next indoor installation.
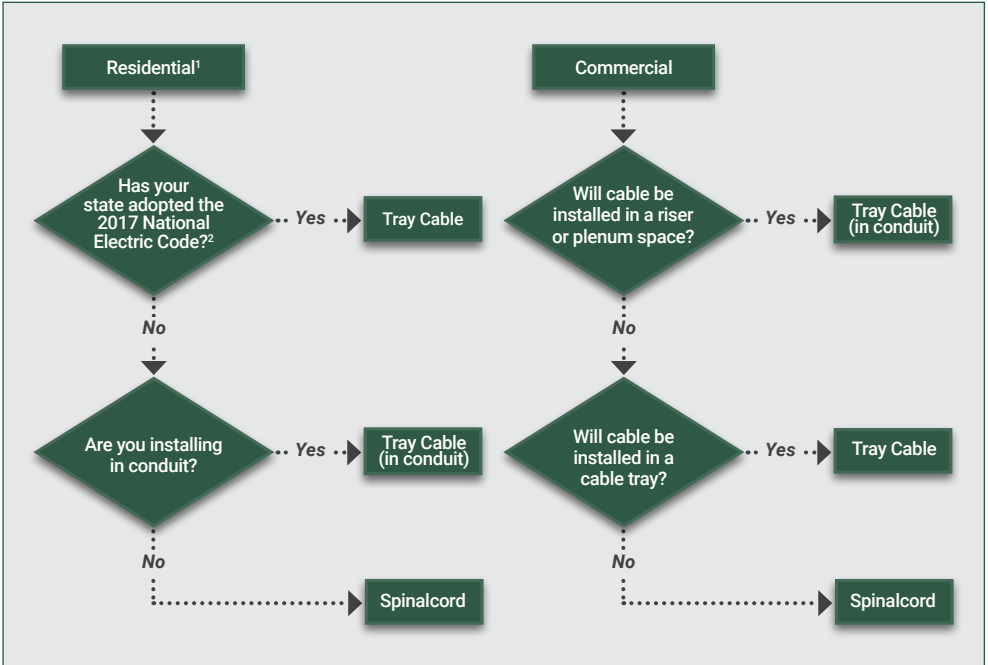
[1] Defined as a single- or dual-occupancy dwelling.

[2] NEC Adoption Status: https://www.nfpa.org/nec/nec-adoption-and-use/nec-adoption-maps

This chart is provided for informational and educational purposes only, and is not a substitute for professional advice.

Under no circumstance will Genesis have any liability for loss or damage incurred as a result of the use of this tool.

When in doubt, consult the appropriate authority having jurisdiction (AHJ).

Reel Applications & Features

Genesis' new Thermostat Cable Reels are made with flexible material that maintains its shape for easy, efficient pulls – from one job to the next. Its ergonomic features allow for easier transportation and protection from bends, breaks and rust. Additionally, the reel is made from recycled materials for a more environmentally friendly and cost-effective option.

Genesis Thermostat Reel

| AWG	Number of Conductors	Stranding	Cable Length	Jacket Color	Part Number
General Purpose Rated					
20	2	Solid	4 x 500 ft.	White, Brown	4701
20	3	Solid	4 x 500 ft.	White, Brown	4702
20	4	Solid	4 x 250 ft.	White, Brown	4703
20	5	Solid	4 x 250 ft.	White, Brown	4704
20	6	Solid	4 x 250 ft.	Brown	4705
20	7	Solid	4 x 250 ft.	Brown	4706
20	8	Solid	4 x 250 ft.	Brown	4707
18	2	Solid	4 x 500 ft.	White, Brown	4710
18	3	Solid	4 x 500 ft.	White, Brown	4711
18	4	Solid	4 x 250 ft.	White, Brown	4712
18	5	Solid	4 x 250 ft.	White, Brown	4713
18	6	Solid	4 x 250 ft.	White, Brown	4714
18	7	Solid	4 x 250 ft.	White, Brown	4715
18	8	Solid	4 x 250 ft.	White, Brown	4716
18	9	Solid	4 x 250 ft.	Brown	4717
18	10	Solid	4 x 250 ft.	White, Brown	4718
22	2	Solid	4 x 500 ft.	Brown	4720
18, 20	8	Solid	4 x 250 ft.	Brown	6716
Plenum Rated					
18	2	Solid	4 x 500 ft.	Natural	4760
18	3	Solid	4 x 500 ft.	Natural	4761
18	4	Solid	4 x 250 ft.	Natural	4762
18	5	Solid	4 x 250 ft.	Natural	4763
18	6	Solid	4 x 250 ft.	Natural	4764
18	8	Solid	4 x 250 ft.	Natural	4766
18	10	Solid	4 x 250 ft.	Natural	4768

Traditional vs. Hybrid Thermostat Cable

Traditional thermostat cable takes a one-size-fits-all approach to cable design. Hybrid Thermostat Cable customizes its design to better fit the needs of modern and legacy thermostat equipment. This upholds device performance at a more cost-effective price.

Powering a Thermostat
A typical thermostat cable contains five to eight conductors. One conductor carries all the current needed to power the thermostat. The remaining conductors split this current to control specific, individual functions, such as cooling, heating and fans.

Traditional Thermostat Cable
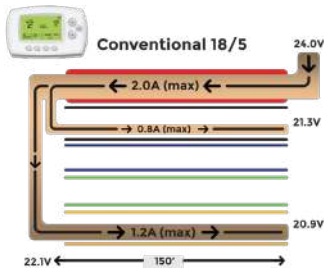
Traditional Thermostat Cable is designed with 18 AWG conductors. **Requiring more copper, it is less cost effective and weighs more, making transport more challenging.**

All conductors, except for the power supply, **are larger than they need to be to optimizedevice performance.**

Hybrid Thermostat Cable
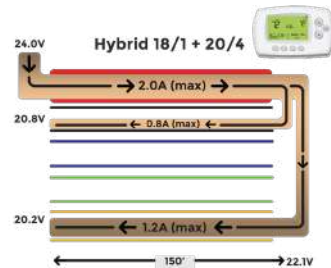
Hybrid Thermostat Cable is designed with an 18 AWG power supply conductor and all remaining conductors at 20 AWG. **The smaller gauge conductors use less copper, creating a more cost-effective solution that is lighter and easier to haul.**

Despite its smaller conductors, **voltage drop is negligible** and the cable **can perform up to 250 feet.**

Mini Split Control

Tray Cable
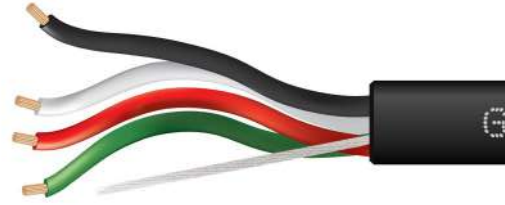
AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
16	4	Stranded	0.305 in.	1068
14	3	Stranded	0.365 in.	1069
14	4	Stranded	0.390 in.	1070
14	7	Stranded	0.460 in.	1073

In states where the 2017 NEC (or later) has been adopted, cable may be installed in-wall without conduit in one- and two-family dwellings.

Listings
UL Listed Type TC-ER-JP

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant
Operating Temperature	-20 °C to 90 °C Dry/ 75 °C Wet
Operating Voltage	600 V (max)

| Conductor Color Codes Mini Split Cables	
Conductor Number	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange

COMFORT (HVAC)

Mini Split Control

Spinalcord Jacketed Metal Clad

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
14	4	Stranded	0.574 in.	1075

Listings
UL Listed Type MC

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant, Oil Resistant I
Operating Temperature	-20 °C to 90 °C Dry/ 75 °C Wet
Operating Voltage	600 V (max)

Conductor Color Codes Mini Split Cables	
Conductor Number	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange

COMFORT (HVAC)

Thermostat   General Purpose

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
20	2	Solid	0.118 in.	4701
20	3	Solid	0.124 in.	4702
20	4	Solid	0.136 in.	4703
20	5	Solid	0.148 in.	4704
20	6	Solid	0.148 in.	4705
20	7	Solid	0.148 in.	4706
20	8	Solid	0.148 in.	4707
18	2	Solid	0.148 in.	4710
18	3	Solid	0.148 in.	4711
18	4	Solid	0.148 in.	4712
18	5	Solid	0.148 in.	4713
18	6	Solid	0.148 in.	4714
18	7	Solid	0.148 in.	4715
18	8	Solid	0.148 in.	4716
18	9	Solid	0.148 in.	4717
18	10	Solid	0.148 in.	4718
18	12	Solid	0.148 in.	4719

Listings
ETL Listed CL2

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	150 V (max)

Conductor Color Codes Thermostat Cables	
Conductor Number	Color
1	Red
2	White
3	Green
4	Blue
5	Yellow
6	Brown
7	Orange
8	Black
9	Pink
10	Gray
11	Tan
12	Purple

Hybrid Thermostat

General Purpose
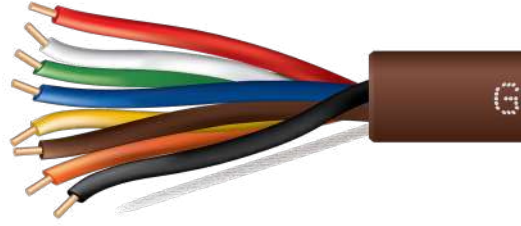
AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
20/18	5	Solid	0.140 in.	6713
20/18	8	Solid	0.180 in.	6716
20/18	10	Solid	0.216 in.	6718

Listings
ETL Listed CL2

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	150 V (max)

Conductor Color Codes Thermostat Cables	
Conductor Number	Color
1	Red
2	White
3	Green
4	Blue
5	Yellow
6	Brown
7	Orange
8	Black
9	Pink
10	Gray
11	Tan
12	Purple

COMFORT (HVAC)

Thermostat   Plenum

AWG	Number of Conductors	Solid / Stranded	Nominal O.D.	Product Number
18	2	Solid	0.136 in.	4760
18	3	Solid	0.144 in.	4761
18	4	Solid	0.157 in.	4762
18	5	Solid	0.172 in.	4763
18	6	Solid	0.188 in.	4764
18	8	Solid	0.204 in.	4766
18	10	Solid	0.240 in.	4768

Listings
ETL Listed CL2P

Specifications	
Operating Temperature	-20 °C to 60 °C
Operating Voltage	150 V (max)

Conductor Color Codes Thermostat Cables	
Conductor Number	Color
1	Red
2	White
3	Green
4	Blue
5	Yellow
6	Brown
7	Orange
8	Black
9	Pink
10	Gray
11	Tan
12	Purple

BACnet® Communication MS/TP, EIA-485

Shielded

Plenum
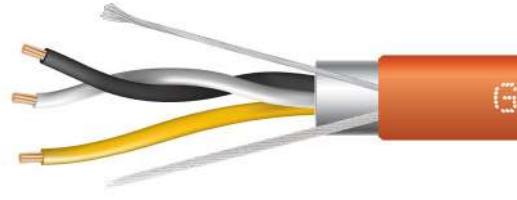
AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
22 (TC)*	1	Stranded	0.183 in.	3251
24	1	Stranded	0.164 in.	3319
22	1	Stranded	0.166 in.	3320
18	1	Stranded	0.256 in.	3322
24	1.5	Stranded	0.185 in.	3323
22	1.5	Stranded	0.173 in.	3324
22	2	Stranded	0.192 in.	3328

Low capacitance for superior data transmission over long distances.
* TC = Tinned Copper

Listings
UL or ETL Listed CMP, CL3P, FPLP
C(UL)US or C(ETL)US Listed CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes BACnet® Cables	
Pair Number	Color
1	Black/White
1.5	Yellow
Except 3328: Black/Red, Blue/White	

COMFORT (HVAC)

LonWorks®
Level 4
Communication

Plenum

AWG	Number of Pairs	Solid / Stranded	Shielded / Unshielded	Nominal O.D.	Product Number
22	1	Stranded	Unshielded	0.120 in.	3252
22	1	Stranded	Shielded	0.192 in.	3254

Low capacitance for superior data transmission over long distances.

Listings
ETL Listed CMP, CL3P, FPLP
C(ETL)US Listed CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes LonWorks® Cables	
Pair Number	Color
1	Blue/ Blue+White
2	Orange/ Orange+White

Trane®
Spec Comm 3/4
Communication

Shielded
———
Plenum

AWG	Number of Pairs	Solid / Stranded	Nominal O.D.	Product Number
18	1	Stranded	0.190 in.	4652

Characteristic Impedance and Capacitance designed to Trane Comm 3/4 spec.

Listings
UL Listed FPLP
C(UL)US Listed CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Trane® Spec Comm 3/4 Cables	
Pair Number	Color
1	Black/White
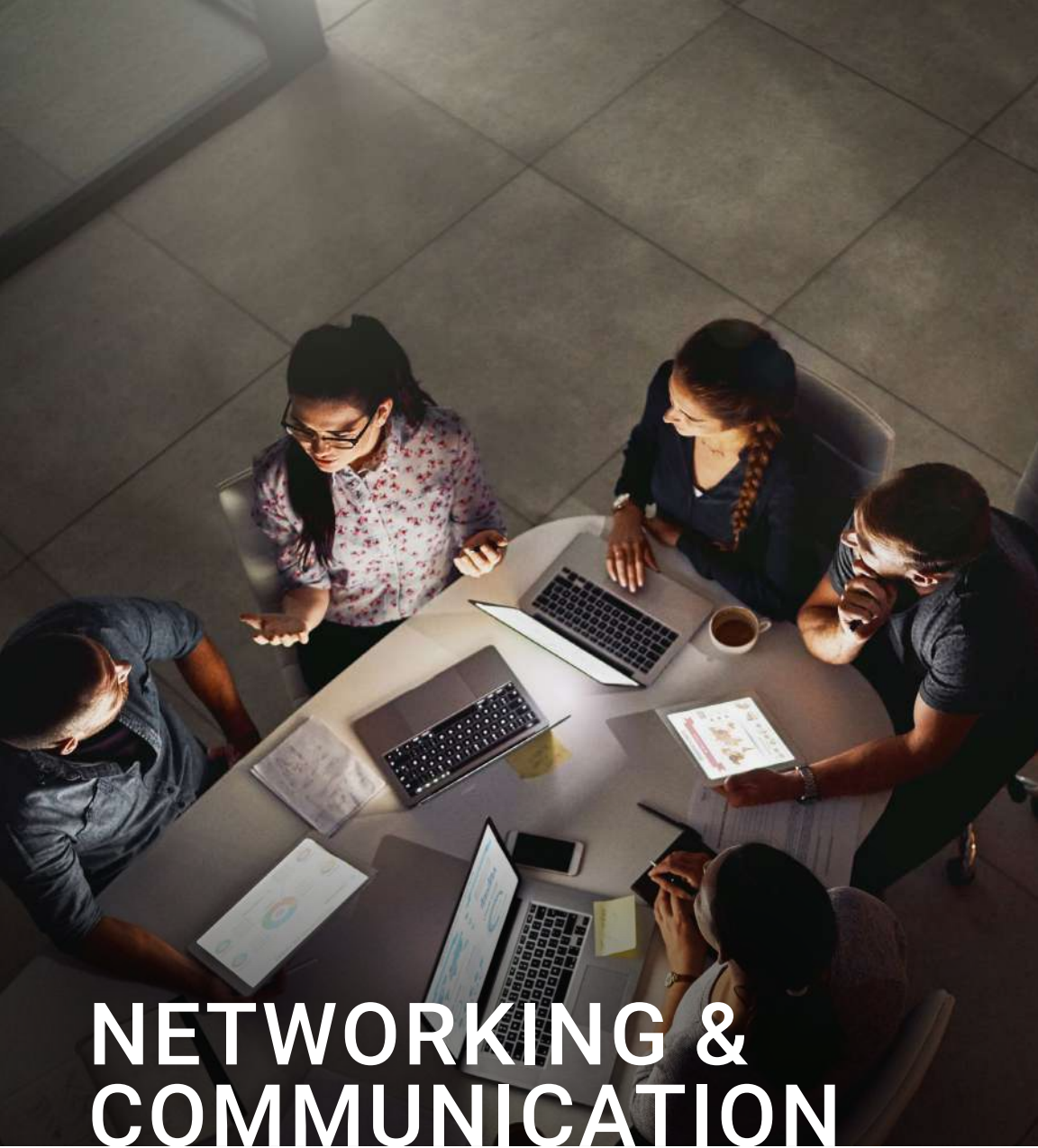
NETWORKING & COMMUNICATION

Continuous connectivity and system reliability are critical for every data network - from the home to complex systems. Designed to increase signal speed, Genesis Networking & Communication Cable protects network security and boosts system integrity for optimal performance, for every application.

Hassle-Free Networking & Communication Solutions

Enterprise networks. Hot spots.
Video conferencing systems.
Point of sale systems.

Cat 6A Cable
Provide maximum bandwidth, capacity and speed – and 10G performance – delivering optimal results for today's high-tech applications.

Shielded Network Cable
Protect highly confidential data transmission and minimize interference for a faster, stronger and safer connection.

Direct Burial Cable
Prepare for harsh outdoor conditions with cable expertly engineered to be rugged, durable and sunlight-resistant.

The Importance of Verifications

Setting Industry Standards

Industry standards for category cables are created by the Telecom Industry Association (TIA/EIA). Each category has specific performance requirements that need to be met to be verified for that category. As the category number increases, so do the performance requirements.

Performance requirements are tested up to standard frequencies for each category: **Cat 5e at 100 MHz, Cat 6 at 250 MHz and Cat 6A at 500 MHz**, and all are tested at a length of 100 meters.

Evaluating Performance Claims

Any manufacturer claims of performance beyond these lengths and frequencies should be examined and considered with extreme caution. These claims often require products to be used within specific circumstances and applications that don't offer the versatility of verified category cable.

Cables failing to meet set standards can experience incomplete signal transfer and signal interference, affecting the performance of the entire system. This reduces system flexibility for future business needs, leading to unnecessary rip-outs and reinstallations and additional time and money.
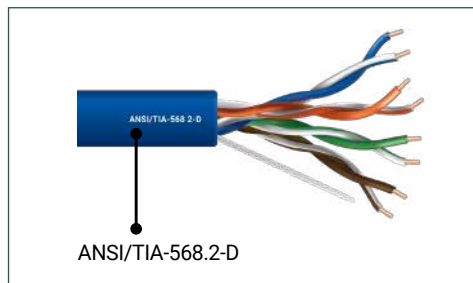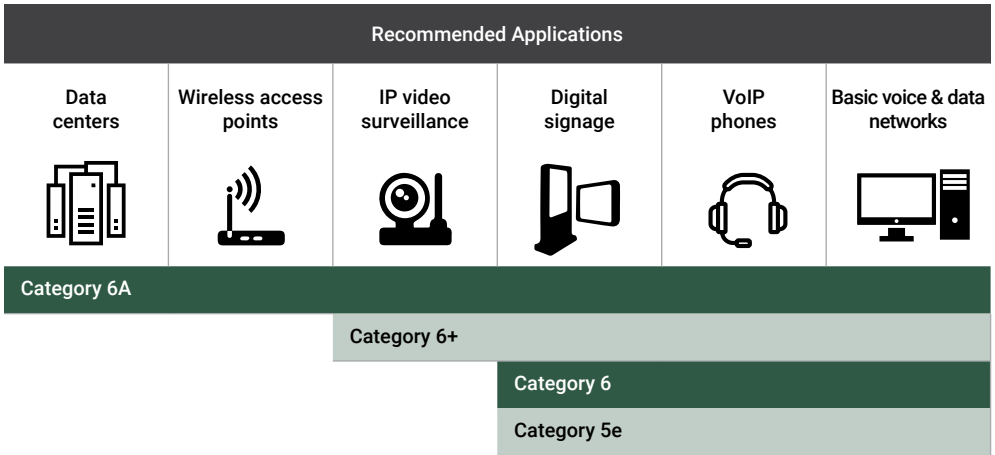

ANSI/TIA-568.2-D

Verified cables can be identified by locating the UL-Verified holographic sticker or ETL-Verified printed mark on the cable's packaging, in addition to reviewing the print legend on cable for UL or ETL text It must read: ANSI/TIA-568.2-D. Both must include the tested communication standard, i e , Cat 5e.

Bandwidth and PoE

Power Over Ethernet (PoE) Cable provides both data and electric power to a device, eliminating the need for additional wiring Most category cable offers PoE functionality, but bandwidth limits – the maximum amount of data that can be transferred along a cable – dictate the most appropriate application for each type of cable

Cable Type	Bandwidth @ 100 Meters	Bandwidth @ 30 Meters	Recommended PoE Limit
Category 6A	10 Gbps	40 Gbps	60W+
Category 6+	1 Gbps	10 Gbps	60W+
Category 6	1 Gbps	10 Gbps	60W+
Category 5e	1 Gbps	1 Gbps	Up to 25.5W

Recommended Applications					
Data centers	Wireless access points	IP video surveillance	Digital signage	VoIP phones	Basic voice & data networks

Category 6A

Category 6+

Category 6

Category 5e

Networking   Unshielded (U/UTP)
Plenum
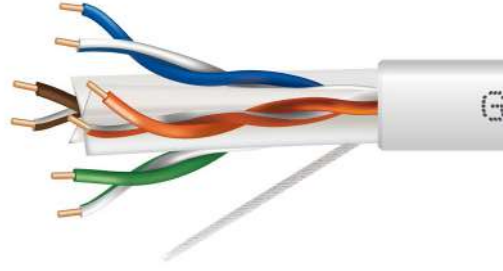
Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 6A	23	4	Yes	0.320 in.	5393
Category 6+	23	4	Yes	0.240 in.	5102
Category 6	23	4	No	0.205 in.	6361
Category 5e	24	4	No	0.200 in.	5088

Networking   Shielded (F/UTP)
Plenum
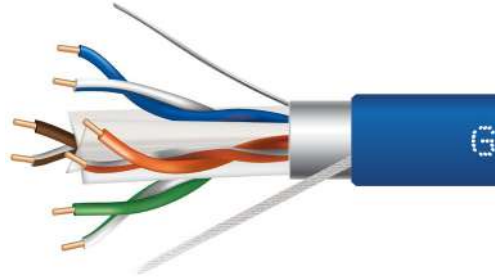
Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 6+	23	4	Yes	0.320 in.	5392
Category 5e	24	4	No	0.240 in.	5388

Listings
Listed CMP, FT6

Specifications	
Operating Temperature	-20 °C to 75 °C

Conductor Color Codes Networking Cables	
Pair Number	Color
1	Blue/ Blue+White
2	Orange/ Orange+White
3	Green/ Green+White
4	Brown/ Brown+White

Networking — Unshielded (U/UTP) Riser

Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 6A	23	4	Yes	0.320 in.	5193
Category 6+	23	4	Yes	0.240 in.	5092
Category 6	23	4	No	0.205 in.	6360
Category 5e	24	4	No	0.200 in.	5078
Category 3	24	2	No	0.150 in.	5031

Networking — Shielded (F/UTP) Riser
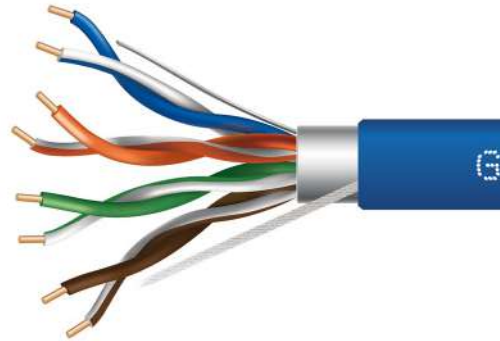
Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 6+	23	4	Yes	0.275 in.	5192
Category 5e	24	4	No	0.250 in.	5178

Listings
Listed CMR, FT4 (5078 and 5193 listed CMR only)

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C

Conductor Color Codes Networking Cables	
Pair Number	Color
1	Blue/ Blue+White
2	Orange/ Orange+White
3	Green/ Green+White
4	Brown/ Brown+White

Networking
Unshielded (U/UTP)
Direct Burial
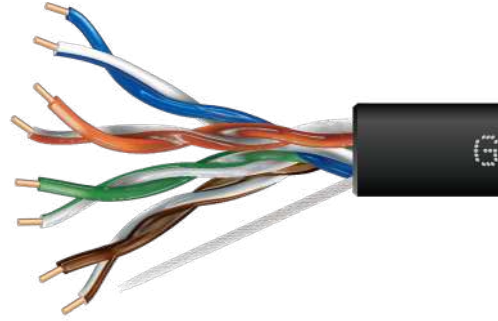
Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 6	24	4	Yes	0.236 in.	5110
Category 5e	24	4	No	0.281 in.	5090

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant
Water Blocking	Gel
Operating Temperature	-20 °C to 60 °C

Networking
Unshielded (F/UTP)
Water Resistant
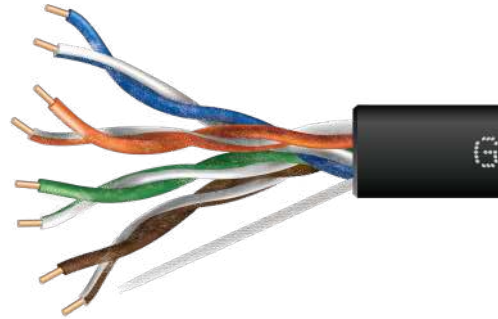
Product	AWG	Number of Pairs	Center Spline	Nominal O.D.	Product Number
Category 5e	24	4	No	0.225 in.	5097

Specifications	
Outdoor Rating	Sunlight Resistant
Water Blocking	Super Absorbant Powder
Operating Temperature	-40 °C to 80 °C

Conductor Color Codes Networking Cables	
Pair Number	Color
1	Blue/ Blue+White
2	Orange/ Orange+White
3	Green/ Green+White
4	Brown/ Brown+White

ENTERTAINMENT

Genesis Audio/Video Cable delivers optimal performance of HDTV, digital video, audio and stereo systems. Whether building a home entertainment or commercial-grade system, Genesis produces the ultimate in picture and sound quality for every system.

Hassle-Free Entertainment Solutions

Conferencing and meeting systems.
Home theater audio.
Cable and satellite television.

Audio/Speaker Cable
Deliver better quality and bolder sound with Audacious® Sound Cable. Designed with oxygen-free copper conductors and high strand counts, Genesis Audio/Speaker cables minimize distortion for the ultimate in sound quality and system performance.
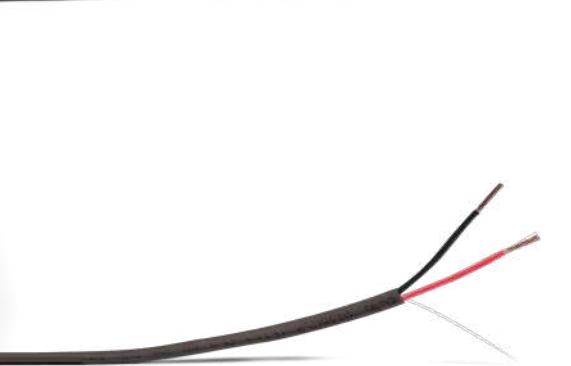
Home Theater Sound Cable
Twisted bare copper conductors moderate the effects of electromagnetic interference in this go-to audio cable solution. Designed for uncompromising performance and unparalleled value.

Audacious
Sound Cable®

Riser

AWG	Number of Conductors	Solid / Stranded	Strand Count	Nominal O.D.	Product Number
16	2	Stranded	65	0.250 in.	5473
16	4	Stranded	65	0.294 in.	5474
14	2	Stranded	105	0.306 in.	5475
14	4	Stranded	105	0.347 in.	5476
12	2	Stranded	105	0.340 in.	5477

Listings
UL Listed CL3R, CMR
C(UL)US Listed CMR FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Audio Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green

Audacious Sound Cable®

Direct Burial
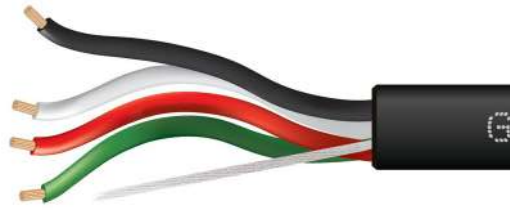
AWG	Number of Conductors	Solid / Stranded	Strand Count	Nominal O.D.	Product Number
16	2	Stranded	65	0.274 in.	5283
16	4	Stranded	65	0.350 in.	5284
14	2	Stranded	105	0.320 in.	5285
14	4	Stranded	105	0.365 in.	5286

Listings
UL Listed CL3, CM

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)

Conductor Color Codes Audio Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green

Home Theater Sound

Riser

AWG	Number of Conductors	Solid / Stranded	Strand Count	Nominal O.D.	Product Number
16	2	Stranded	26	0.180 in.	5250
16	4	Stranded	26	0.210 in.	5251
14	2	Stranded	41	0.224 in.	5252
14	4	Stranded	41	0.260 in.	5253
12	2	Stranded	65	0.264 in.	5254

Listings
UL Listed CL3R, CMR
C(ETL)US Listed CMR, FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	300 V (max)

Conductor Color Codes Audio Cables	
Conductor Number	Color
1	Black
2	Red
3	White
4	Green

CATV Coaxial Video

Riser

Style	Conductor	Shield	Nominal O.D.	Product Number
RG6	18 AWG CCS	Quad	0.293 in.	5307
RG6	18 AWG CCS	Dual	0.272 in.	5303

Listings
ETL Listed CATVR, CMR, CL2R
C(ETL)US Listed CMR, FT4

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C

CATV Coaxial Video

General Purpose

Style	Conductor	Shield	Nominal O.D.	Product Number
RG11	14 AWG CCS	Dual	0.400 in.	5018*
RG6	18 AWG CCS	Quad	0.298 in.	5007*
RG6	18 AWG BC	Quad	0.293 in.	5027*
RG6	18 AWG CCS	Dual	0.272 in.	5003*
RG6	18 AWG BC	Dual	0.272 in.	5304*

*Product not available in Canada

Listings
ETL Listed CATV, CM, CL2

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 75 °C

Multimedia
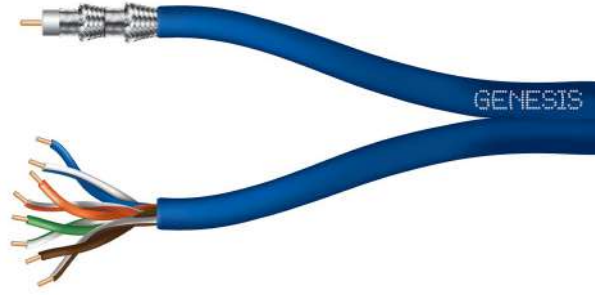
Description	Construction	Nominal O.D.	Product Number
Cat 5e RG6 CCS Quad-Shield	Zip	0.293 x 0.523 in.	5066
Cat 5e + RG6 CCS Dual-Shield	Zip	0.275 x 0.520 in.	5067

Listings
ETL Listed CM, CL2

Specifications	
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)
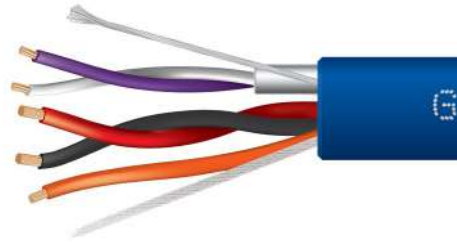
Lighting & Shade Control

Description	Solid/Stranded	Nominal O.D.	Product Number
22 AWG 1 Shielded Pair + 18 AWG 2C	Stranded	0.291 in.	1244
22 AWG 1 Shielded Pair + 12 AWG 2C + 18 AWG 1C	Stranded	0.350 in.	1260

Listings
ETL Listed CM, CL2

Specifications	
Outdoor Rating	Sunlight Resistant
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)

| Conductor Color Codes Lighting & Shade Control Cables	
Pair Number	Color
1	Purple/White
2	Red/Black
2.5	Orange

OTHER

Genesis Lighting and Tracer Cables are outdoor rated for continuous connectivity, no matter the environment. Offering a selection of sizes and capabilities, Genesis Cable is the wire to count on for outdoor comfort and safety.

Hassle-Free
Cable Solutions

LED lighting. Outdoor lighting.
Underground piping & sprinkler systems.
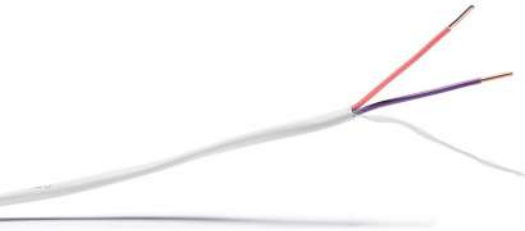
LED Lighting & Dimming

Increase efficiency and control over lighting systems with cables designed for indoor and outdoor applications. Offering more system customization, LED Lighting & Dimming systems have a longer lifespan and increased energy efficiency, for optimized, long-term performance.

Landscape Lighting

Protect system performance using cable approved with direct burial and sunlight resistant ratings. These cables are perfect for low-voltage direct burial lighting applications.

Tracer/Irrigation

Identify pipes and cables more easily in buried applications with specific color codes. With a direct burial rating, cable can withstand harsh weather conditions to perform when it is needed most.

Tracer wire is typically color coded as follows:
• Yellow - Gas Pipes
• Blue - Water Pipes
• Orange - Fiber Optic Cables
• Green - Sewage Lines

Products Available in: US | Latin America | Canada

LED Lighting & Dimming

AWG	Number of Conductors	Solid/Stranded	Nominal O.D.	Product Number
16	2	Solid	0.177 in.	3152

Listings
ETL Listed CMP, CL3P
C(ETL)US Listed CMP, FT6

Conductor Color Codes LED Lighting & Dimming Cables	
Conductor Number	**Color**
1	Purple
2	Pink

Specifications	
Operating Temperature	-20 °C to 60 °C
Operating Voltage	300 V (max)

Landscape Lighting

AWG	Number of Conductors	Solid/Stranded	Nominal O.D.	Product Number
16	2	Stranded	0.148 x 0.305 in.	1022
14	2	Stranded	0.165 x 0.365 in.	1021
12	2	Stranded	0.190 x 0.390 in.	1019
10	2	Stranded	0.214 x 0.422 in.	1018

Listings
UL Listed ULECC

Specifications	
Outdoor Rating	Direct Burial, Sunlight Resistant
Operating Temperature	-20 °C to 75 °C
Operating Voltage	150 V (max)

Tracer/Irrigation

AWG	Number of Conductors	Solid/Stranded	Nominal O.D.	Product Number
18	1	Solid	0.133 in.	1301
14	1	Solid	0.157 in.	1303
12	1	Solid	0.174 in.	1304

Listings
UL Listed UL TRACER

Specifications	
Outdoor Rating	Direct Burial
Operating Voltage	600 V (max)

TECHNICAL TOOLS & RESOURCES

The following resources are designed to support the cable selection and installation process. Use them as an ongoing reference to ensure you choose the right cable for your next installation.

Cable Listings

All Genesis Cables are UL- or ETL-listed. Cable listing marks show that products have been tested to industry-specific fire and safety standards by unbiased third-party organizations. Choosing listed cable will protect your cable investment - preventing rip outs, reinstallations and fire hazards.

Reputable Testing Partners
The two most recognized testing entities are UL and ETL. Both are certified as Nationally Recognized Testing Laboratories (NRTL), giving them the authority to test and certify products to widely accepted safety requirements.

Though different organizations, UL and ETL test to the same standards for any given listing and a listing from either organization has identical meaning.

Underwriters Laboratories (UL) is a global entity that tests and certifies products and helps develop industry standards through ongoing scientific research.

Intertek (ETL) is a globally recognized testing entity that tests and certifies products to published industry standards.

Manufacturers have the freedom to choose their NRTL, including a testing entity besides UL or ETL.
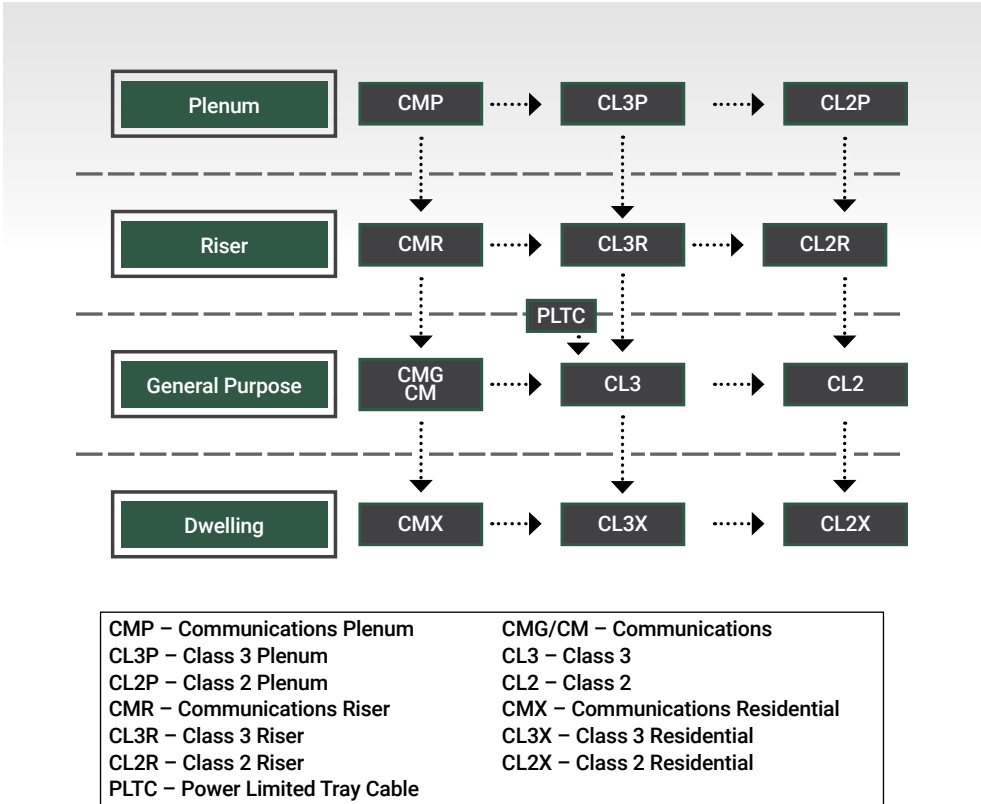
The Mark of Quality
Listed cables can be identified by the listing mark and unique file number placed on the product and its packaging. This mark is most often found on the front of boxes, circular flange or label of reels, and the file number is printed on the cable's jacket.

Unmarked products shouldn't be trusted and are a threat to device and personal safety.
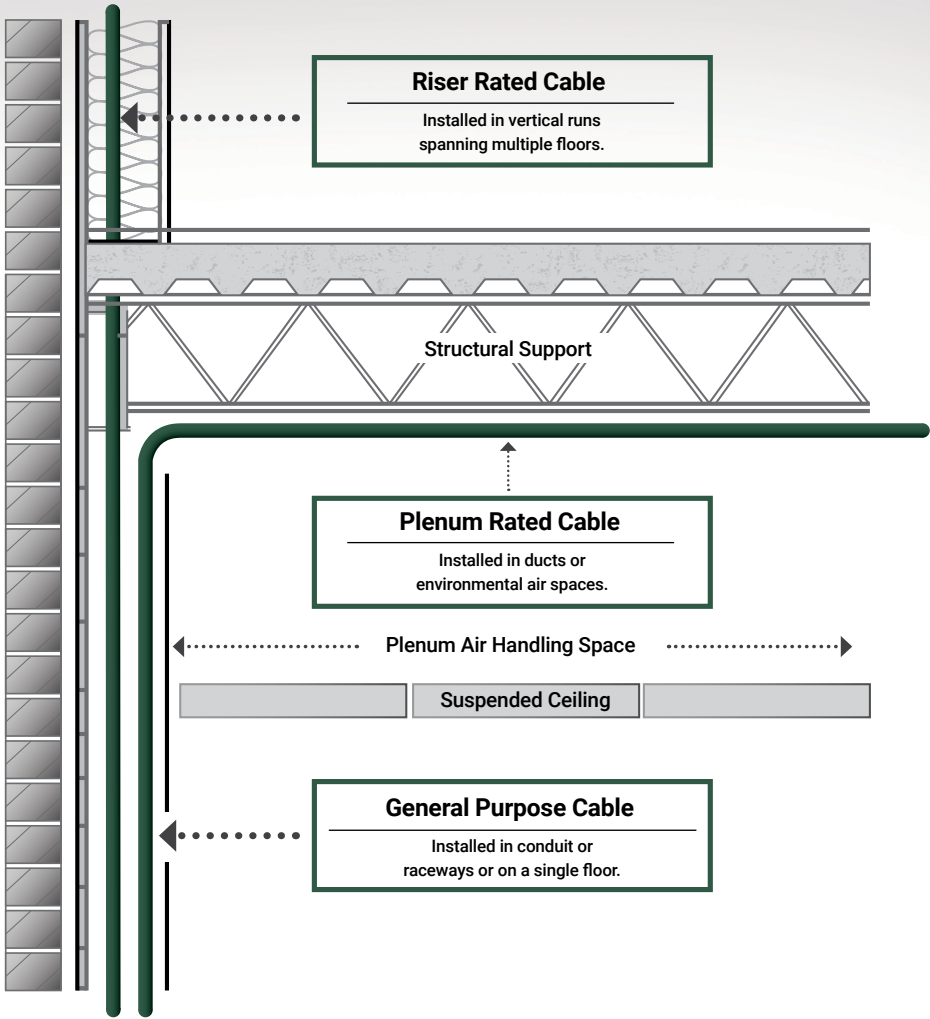

ETL printed mark

UL holographic sticker

National Electric Code

Substitution Hierarchy for Class 2 and Class 3 Cables

Plenum	CMP ·····▶	CL3P ·····▶	CL2P
Riser	CMR ·····▶	CL3R ·····▶	CL2R
		PLTC	
General Purpose	CMG CM ·····▶	CL3 ·····▶	CL2
Dwelling	CMX ·····▶	CL3X ·····▶	CL2X

CMP – Communications Plenum	**CMG/CM – Communications**
CL3P – Class 3 Plenum	**CL3 – Class 3**
CL2P – Class 2 Plenum	**CL2 – Class 2**
CMR – Communications Riser	**CMX – Communications Residential**
CL3R – Class 3 Riser	**CL3X – Class 3 Residential**
CL2R – Class 2 Riser	**CL2X – Class 2 Residential**
PLTC – Power Limited Tray Cable	

The wiring requirements of Article 725, Parts I and III, apply where substitute cable is installed.

Cable Ratings & Installation Requirements

Riser Rated Cable

Installed in vertical runs spanning multiple floors.

Structural Support

Plenum Rated Cable

Installed in ducts or environmental air spaces.

Plenum Air Handling Space

Suspended Ceiling

General Purpose Cable

Installed in conduit or raceways or on a single floor.

Conduit Capacity Guidelines

EMT Conduit Trade Size		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"
Diameter (in.)	Area (sq. in.)	Maximum Number of Cables Permitted @ 40% Fill									
0.100	0.00785	15	27	44	76	103	170	298	450	587	751
0.125	0.01227	9	17	28	48	66	109	190	288	376	480
0.150	0.01767	6	12	19	33	46	75	132	200	261	333
0.175	0.02405	5	8	14	24	33	55	97	147	191	245
0.200	0.03142	3	6	11	19	25	42	74	112	146	187
0.225	0.03976	3	5	8	15	20	33	58	88	116	148
0.250	0.04909	1	4	7	12	16	27	47	72	94	120
0.275	0.05940	1	3	5	10	13	22	39	59	77	99
0.300	0.07069	1	3	4	8	11	18	33	50	65	83
0.325	0.08296	1	3	4	7	9	16	28	42	55	71
0.350	0.09621	1	2	3	6	8	13	24	36	47	61
0.375	0.11045	1	2	3	5	7	12	21	32	41	53
0.400	0.12566	1	2	3	4	6	10	18	28	36	46
0.425	0.14186	1	1	3	4	5	9	16	24	32	41
0.450	0.15904	1	1	2	3	5	8	14	22	29	37
0.475	0.17721	0	1	2	3	4	7	13	19	26	33
0.500	0.19635	0	1	2	3	4	6	11	18	23	30
0.525	0.216	1	1	2	3	4	6	11	16	21	27
0.550	0.237	1	1	1	3	3	6	10	15	19	25
0.575	0.260	0	1	1	2	3	5	9	14	18	23
0.600	0.283	0	1	1	2	3	5	8	13	16	21
0.625	0.307	0	1	1	2	3	4	8	12	15	19
0.650	0.332	0	1	1	2	2	4	7	11	14	18
0.675	0.358	0	1	1	2	2	4	7	10	13	16
0.700	0.385	0	1	1	2	2	3	6	9	12	15
0.725	0.413	0	1	1	1	2	3	6	9	11	14
0.750	0.442	0	0	1	1	2	3	5	8	10	13
0.775	0.471	0	0	1	1	2	3	5	7	10	13

Conductor Sizing

The American Wire Gauge System (AWG) standardizes conductor sizing and all Genesis Cables follow this system. As the gauge number decreases, conductor size increases. This lowers resistance, increases the amount of power that can be safely transferred by the conductor and extends the length of runs. Choosing cable with the correct gauge is essential for system performance.

AWG	Conductor Comparison	DC Resistance (at 20 °C)			
		Solid Conductor		Stranded Conductor	
		Ohms per 1000 feet	Ohms per kilometer	Ohms per 1000 feet	Ohms per kilometer
24		28.6	93.8	26.47	87.6
23		22.3	73.2	21.1	69.2
22		18	59.1	16.9	55.4
20		11.1	36.4	10.5	34.4
18		6.52	21.4	6.66	21.9
16		4.1	13.5	4.19	13.7
14		2.57	8.45	2.62	8.60
12		1.62	5.31	1.65	5.41
10		1.02	3.34	1.04	3.41
8		0.6407	2.102	0.6535	2.144

Outdoor Ratings

When installing cable outdoors, both performance and safety depend on the selection of the right cable for the job. This reference guide differentiates the types of outdoor cable ratings Genesis offers, empowering you to make the best choice for your next installation.

Rating/Feature	Cable Marking	Applications	Testing & Additional Information
Sunlight Resistant	Sunlight Resistant, Sun Res or SR	May be installed in locations exposed to sunlight.	Informally known as UV Rated cable. Evaluated for long-term (720 hours) exposure to UV light and light moisture.
CMX-Outdoor	CMX-Outdoor	Suitable for installations outdoors on a 1- or 2-family dwelling. Not suitable for burial applications.	Evaluated for long-term (300 hours) exposure to UV light and light moisture.
Wet Location	Wet or Wet Location	Often combined with other features like sunlight resistance and water blocking for expanded installation versatility.	Insulated conductors evaluated for long-term exposure to water.
Direct Burial	Direct Burial, Dir Burial or Dir Bur	Suitable for burial with or without conduit. Often combined with other features like sunlight resistance and water blocking for expanded installation versatility.	Evaluated for water absorption and crush resistance.
Water Blocked	Noted in Cable Specification	Install for added protection of sensitive connected equipment and devices.	Prevents the flow of water along length of cable in unlikely event of compromised cable jacket. Achieved through various methods including gels, tapes, and powders.

Product Index

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Fire & Life Safety

Product Index

Comfort (HVAC)

Product Index

Networking

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Entertainment

-GENESIS-