

Honeywell | Cable



A solution guide to HVAC and Control cables
We've got a cable for that!

Insist on innovation you can trust. Insist on Honeywell Genesis[®] Series Cable.

At Honeywell Cable, we work closely with our customers to develop innovative solutions that are designed to save time, money, and hassles. Our focus on our customers' on-the-job and long-term business needs drives us to enable their success each day. We are committed to producing long-lasting products that are designed for unsurpassed reliability, ease of installation, and outstanding performance. With Honeywell Genesis Series Cable, our customers can trust that they're in the best position to meet the ongoing demands of the industry.

We offer a full range of products to meet every application. When it comes to installing and connecting HVAC and control systems, our cables are specifically engineered to handle evolving technologies and deliver to the need every time. Our Hybrid Thermostat and Metal Clad Mini-Split cables are two of these recent innovations. They demonstrate our dedication to designing and manufacturing with a laser-sharp focus on ongoing improvements.

We've Got a Cable for That!

This solution guide will give you in-depth information about how to clearly identify the exact cable you need for specific HVAC and control applications by providing you with features and benefits, diagrams, and part numbers for each cable option.



Table of Contents

4-5 Thermostat Cables

- Hybrid
- General Purpose
- Plenum
- Product Listing

6-9 Mini-Split Cables

- Installation Guide
 - Metal Clad
 - Tray
 - Low-Voltage
- Product Listing
- Cross-Reference Guide

10-13 Intelligent Building System Cables

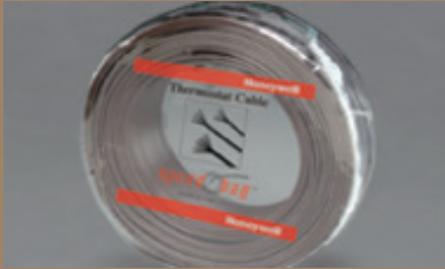
- Capacitance
- Characteristic Impedance
- DC Resistance
- Product Listing
- Cross-Reference Guide

14-15 Reliable World-Class Service

- Honeywell Cable Selection Guide
- Packaging Code
- Colors

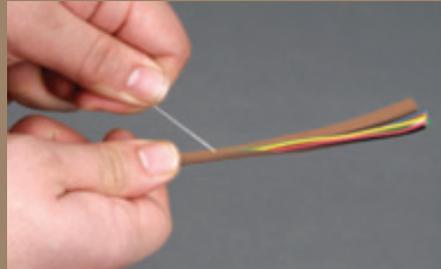
Thermostat Cables

Honeywell Thermostat Cables Work with You



Speed Bag® Packaging

Save time and hassle by choosing ready-to-dispense, compact, and fully recyclable packaging.



Durable Rip Cords

Strip jackets more easily without damaging conductors.



Room and Zone Markings

Easily label and identify rooms and zones using the convenient markings on the cable jacket.

Hybrid Thermostat Cable: A Perfect Fit

When it comes to installing a cable specifically engineered to handle the evolving demands and functionality of thermostats, Hybrid Thermostat Wire delivers exactly what you need:

- First cable designed specifically for the power requirements of the circuit – all devices will be properly powered and controls will function as intended
- Ideal for both new (energy-efficient) and existing HVAC equipment
- Available in 5-, 6-, 8- and 10- conductor constructions
- Haul around less weight and win more project bids with Hybrid Cable
- Comes in a variety of reel and Speed Bag® packaging configurations

Hybrid Cables

Come in a wide range of conductor constructions and packaging options.



Hybrid Thermostat Cable									
Product Code	Description	Color	Standard Packaging (Consult Factory for Additional Options)						
			250' Reel	4 pcs, 250' Reel	4 pcs, 500' Reel	125' Speedbag	250' Speedbag	500' Speedbag	
6713	5 Solid Conductors CL2 (1x18AWG + 4x20AWG)	Brown		67130307				67130907	
6714	6 Solid Conductors CL2 (1x18AWG + 5x20AWG)	Brown		67140307				67130907	
6716	8 Solid Conductors CL2 (1x18AWG + 7x20AWG)	Brown		67160307			67164607	67160907	
6718	10 Solid Conductors CL2 (2x18AWG + 8x20AWG)	Brown		67180307				67180907	

General Purpose Thermostat Cable									
Product Code	Description	Color	Standard Packaging (Consult Factory for Additional Options)						
			250' Reel	4 pcs, 250' Reel	4 pcs, 500' Reel	125' Speedbag	250' Speedbag	500' Speedbag	
4701	20/2 Solid CL2	Brown			47014807				47015807
		White			47014801				
4702	20/3 Solid CL2	Brown			47024807				47025807
		White			47024801				
4703	20/4 Solid CL2	Brown		47030307				47030907	
		White		47030301					
4704	20/5 Solid CL2	Brown		47040307				47040907	
		White		47040301					
4705	20/6 Solid CL2	Brown		47050307				47050907	
		White							
4706	20/7 Solid CL2	Brown		47060307				47060907	
		White							
4707	20/8 Solid CL2	Brown		47070307				47070907	
		White						47070901	
4710	18/2 Solid CL2	Brown			47104807				47105807
		White			47104801				
4711	18/3 Solid CL2	Brown			47114807				47115807
		White			47114801				
4712	18/4 Solid CL2	Brown		47120307				47120907	
		White		47120301					
4713	18/5 Solid CL2	Brown		47130307				47130907	
		White		47130301					
4714	18/6 Solid CL2	Brown		47140307				47140907	
		White		47140301					
4715	18/7 Solid CL2	Brown		47150307				47150907	
		White		47150301					
4716	18/8 Solid CL2	Brown		47160307			47164607	47160907	
		White		47160301					
4717	18/9 Solid CL2	Brown		47170307					
4718	18/10 Solid CL2	Brown		47180307					
		White		47180301					
4719	18/12 Solid CL2	Brown	47190107						
		White	47190101					47070901	

Plenum Thermostat Cable									
Product Code	Description	Color	Standard Packaging (Consult Factory for Additional Options)						
			250' Reel	4 pcs, 250' Reel	4 pcs, 500' Reel	125' Speedbag	250' Speedbag	500' Speedbag	
4760	18/2 Solid CMP/CL2P	Natural			47604812				
4761	18/3 Solid CMP/CL2P	Natural			47614812				
4762	18/4 Solid CMP/CL2P	Natural		47620312					
4763	18/5 Solid CMP/CL2P	Natural		47630312					
4764	18/6 Solid CMP/CL2P	Natural		47640312					
4766	18/8 Solid CMP/CL2P	Natural		47660312					
4768	18/10 Solid CMP/CL2P	Natural		47680312					

Highlighted cells are readySHIP items (see page II for information on readySHIP).

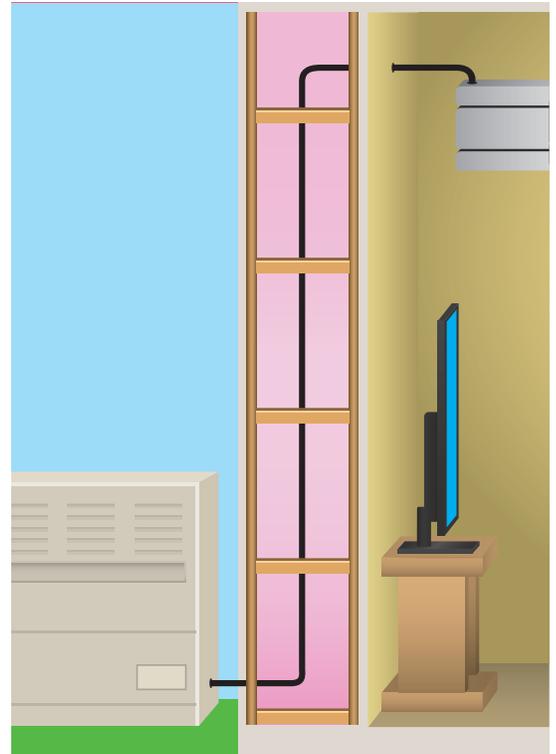
Mini Split System Cable Installations and Products

Metal Clad Mini Split Cables

For systems where indoor unit is powered from the condenser.



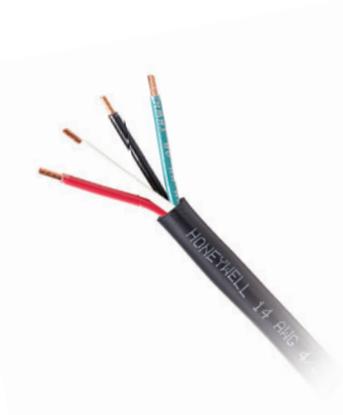
- Sunlight resistant and suitable for direct burial
- Use a water-tight connector such as Bridgeport Fittings P/N: 595-DC2
- Install in wall without the need for additional conduit



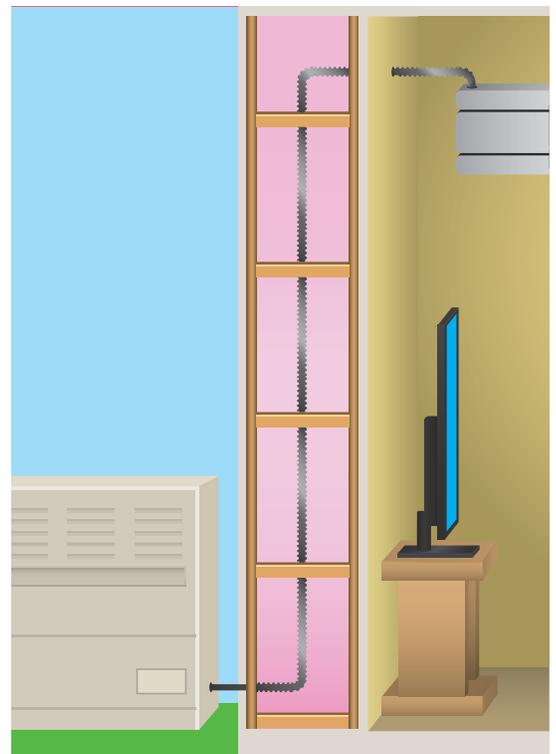
Metal Clad Mini Split Cables				
Product Code	Description	Color	Packaging	Part Number
1075	14/4 Stranded THHN, Jacket Metal Clad (Type MC)	Black	250' Reel	10750108
		Black	5 pcs, 50' Coil	10753908

Mini Split Tray Cables

For systems where indoor unit is powered from the condenser.



- Sunlight resistant and suitable for direct burial
- Once the cable enters the structure, it must be contained in conduit
- Cable must be installed in conduit indoors or in-wall



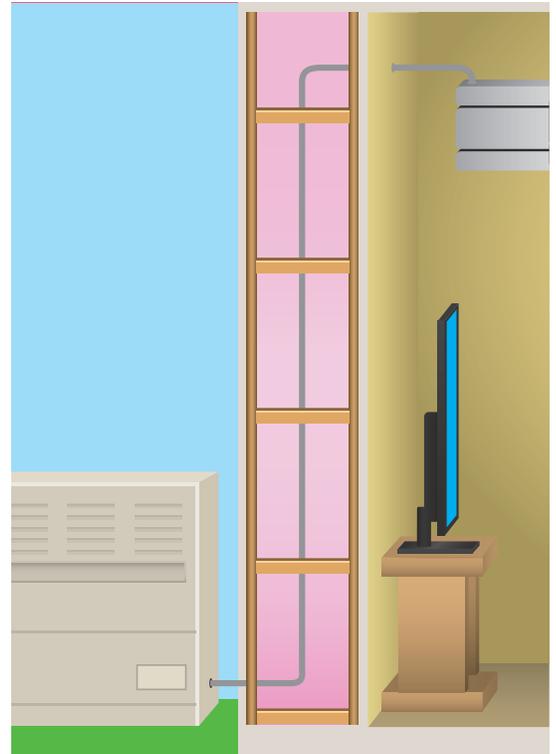
Mini Split Tray Cables				
Product Code	Description	Color	Packaging	Part Number
1070	14/4 Stranded THHN Tray Cable (Type TC)	Black	250' Reel	10700108
		Black	5 pcs, 50' Coil	10703908
1073	14/7 Stranded THHN Tray Cable (Type TC)	Black	250' Reel	10730108
		Black	5 pcs, 50' Coil	10733908
1068	16/4 Stranded THHN Tray Cable (Type TC)	Black	250' Reel	10680108
		Black	5 pcs, 50' Coil	10683908

Low-Voltage Mini Split Cables

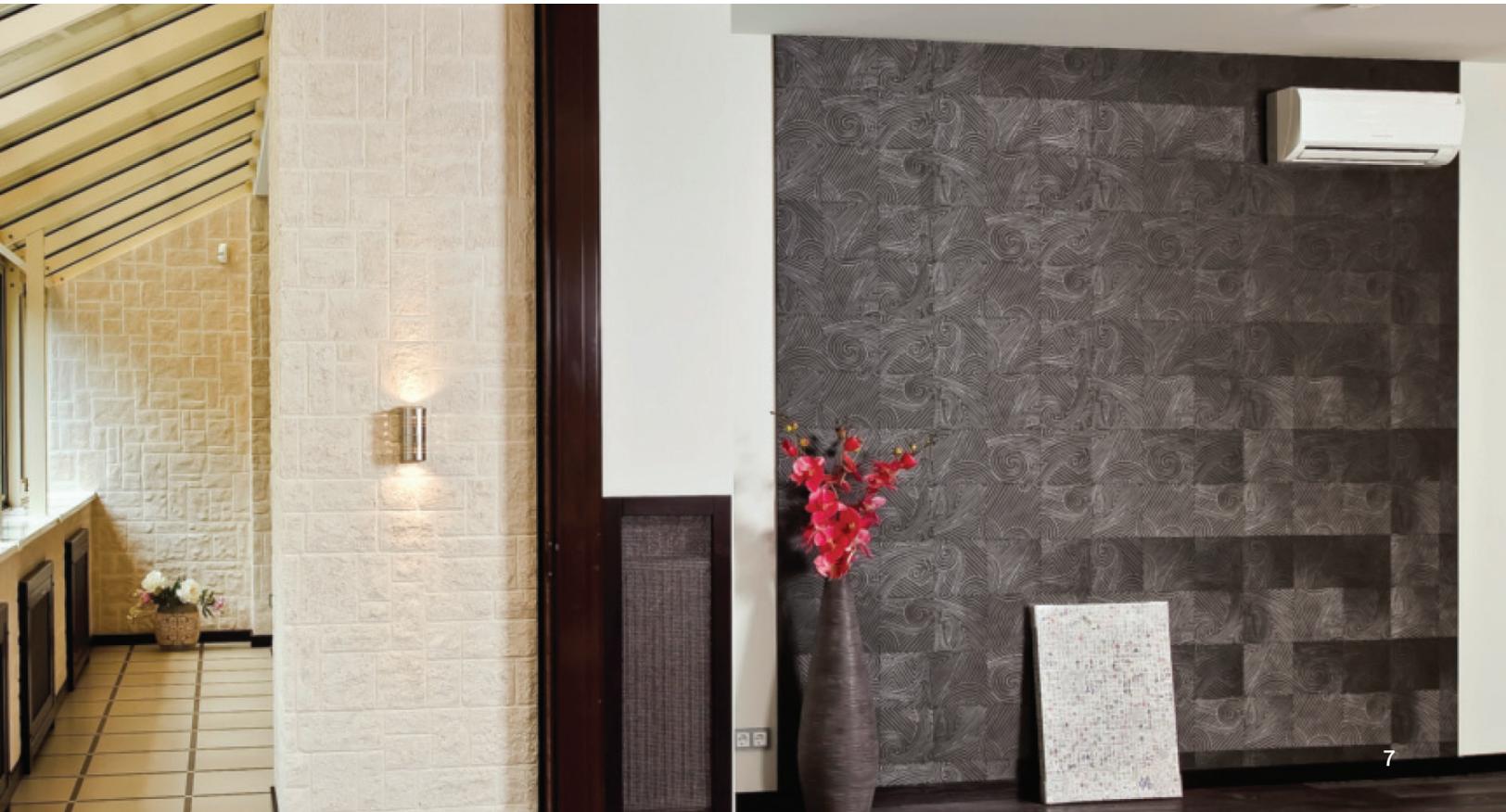
For systems where the interconnection cable is only for communication.



- Not suitable for burial
- Conduit recommended
- Can be installed in-wall without conduit
- If installed in plenums, use plenum rated cable
- If installed between floors in a multi-unit residential or commercial structure, use riser rated cable

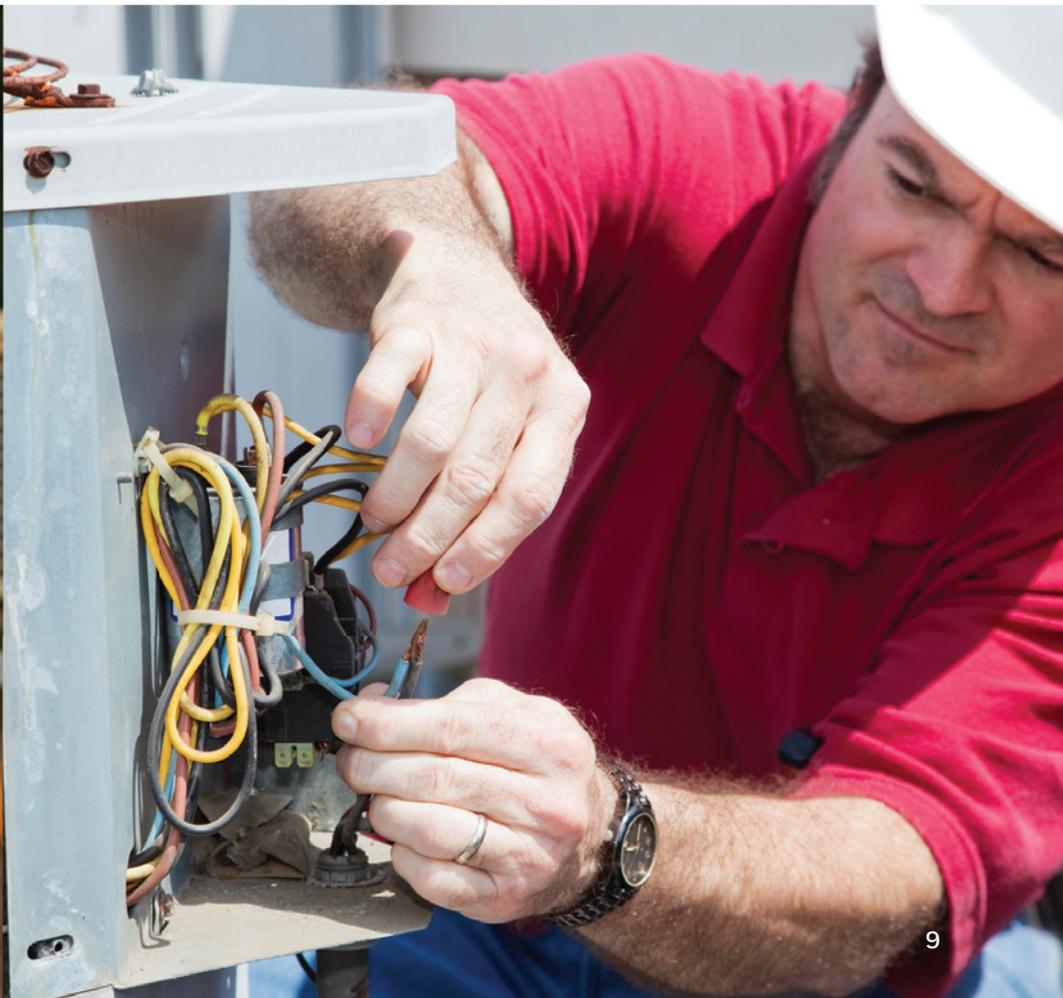


Low-Voltage Cable Mini Split Cables				
Product Code	Description	Color	Packaging	Part Number
1215	18/4 Stranded Shielded CM/CL2	Gray	5 pcs, 50' Coil	12153909
1221	16/2 Stranded Shielded CM/CL2	Gray	5 pcs, 50' Coil	12213909
1118	18/2 Stranded CM/CL2	Gray	5 pcs, 50' Coil	11183909
1228	18/3 Stranded Shielded CM/CL2	Gray	4 pcs, 250' Coil	12280309



Mini Split System Cable Cross-Reference Guide

Mini Split Model	Cable	Communication Cable (Type CM/CL2) Product Code	Tray Cable (Type TC) Product Code	Metal Clad (Type MC) Product Code
Carrier				
QA & QN Series - Cooling Only Models	18/2 Solid 300V	4710		
QA & QN Series - Heat Pump Models	18/7 Solid 300V	4715		
All Other Models	14/4 Stranded THHN 600V		1070	1075
Daikin				
	14/4 Stranded THHN 600V		1070	1075
Environare				
	14/4 Stranded THHN 600V		1070	1075
Friedrich				
	14/4 Stranded THHN 600V		1070	1075
Frigidaire				
	14/4 Stranded THHN 600V		1070	1075
Fujitsu				
	14/4 Stranded THHN 600V		1070	1075
Gree				
	14/4 Stranded THHN 600V		1070	1075
Grunaire				
	14/4 Stranded THHN 600V		1070	1075
Heat Controller				
	14/4 Stranded THHN 600V		1070	1075
LG				
	14/4 Stranded THHN 600V		1070	1075
Mitsubishi				
M-Series	14/4 Stranded THHN 600V		1070	1075
P-Series	16/4 Stranded THHN 600V		1068	
City-Multi, M-Net	16/2 Stranded Shielded 300V	1221		
Nordyne				
IQ Drive				
Thermostat	18/4 Stranded Shielded 300V	1215		
Indoor-Outdoor Communication	18/3 Stranded Shielded 300V	1228		
Indoor-Outdoor Power	18/2 Stranded 300V	1118		
Panasonic				
	14/4 Stranded THHN 600V		1070	1075
Quietside				
Single & Multizone Inverter	14/4 Stranded THHN 600V		1070	1075
Single-Zone Rotary	14/7 Stranded THHN 600V		1073	
Samsung				
	16/2 Stranded Shielded 300V	1221		
Trane				
	14/4 Stranded THHN 600V		1070	1075
Westinghouse				
	14/4 Stranded THHN 600V		1070	1075
York				
	14/4 Stranded THHN 600V		1070	1075



Intelligent Building System Cables

Intelligent Building Systems (IBS) employ two types of cables: communication and signal. Communication cables are used to network controllers. Signal cables connect inputs and outputs to their controllers.

Communication circuits must be able to support high speed data transfer for long distances. Because of this it's important to select the right cables that have low capacitance and correctly matched characteristic impedances.

For signal circuits, the capacitance and impedance levels of the cables are less critical. For these circuits, the limiting factor is DC resistance. The gauge of the cables should be selected to minimize voltage drop based on the length of the run and the load of the circuit.

Capacitance

Capacitance resists changes in voltage levels. For high-speed data transfer, excessive capacitance can distort digital signals and lead to system malfunction. The higher the data transmission rate and the longer the cable run, the more critical is it to use low-capacitance cables to ensure proper system function.



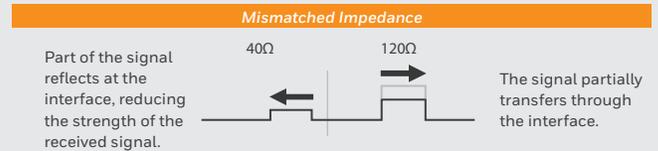
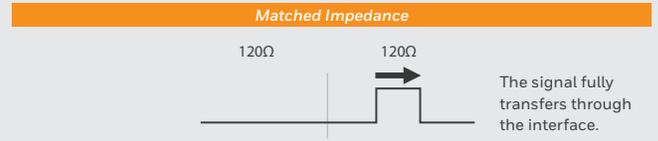
Low capacitance cables minimize signal degradation at high data speeds and long run lengths. Signal receiver can clearly interpret the incoming bits of data.



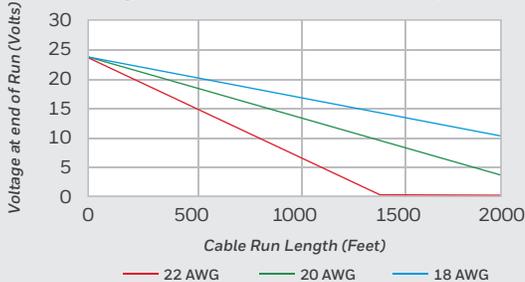
Excessive capacitance distorts the data signal to the point that the received signal no longer resembles the transmitted signal.

Characteristic Impedance

At electrical interfaces, such as between the end of a cable run and a receiver device, the impedances must be closely matched to ensure efficient signal transfer. If the mismatch in impedances is too large, portions of the signal will reflect at the interface, which leads to a reduction in the signal amplitude, or return loss.



Voltage vs. Distance (Current = 1 Amp)



DC Resistance

As the distance of a cable run increases, circuit resistance increases too. Higher resistance leads to increased voltage drop, which means a decrease in signal strength. For longer runs, larger conductors should be used to minimize voltage drop.

Communication Cables							
Product Code	Description	Communication Standard	Characteristic Impedance (Ω)	Capacitance (pF/ft.)	Color	Packaging	Part Number
3319	24/1pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Orange	1000' Reel-in-a-Box	33192103
3323	24/1.5pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Natural	1000' Reel-in-a-Box	33232112
					Orange	1000' Reel-in-a-Box	33232103
3320	22/1pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Orange	1000' Reel-in-a-Box	33202103
					Green	1000' Reel-in-a-Box	33202105
					Blue	1000' Reel-in-a-Box	33202106
3324	22/1.5pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Blue	1000' Reel-in-a-Box	33242106
3328	22/2pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Brown	1000' Reel-in-a-Box	33282107
3322	18/2pr Stranded Shielded CMP	EIA-485, MS/TP, BACnet®	115	12.5	Orange	1000' Reel	33221003
3252	22/1pr Stranded CMP	Echelon LonWorks®	100	14.5	White	1000' Reel-in-a-Box	32522101
					Yellow	1000' Reel-in-a-Box	32522102
					Blue	1000' Reel-in-a-Box	32522106
					Purple	1000' Reel-in-a-Box	32522110
					White with Orange Stripe	1000' Reel-in-a-Box	3252213A
3253	22/2pr Stranded CMP	Echelon LonWorks®	100	14.5	White	1000' Reel-in-a-Box	32532101
					Blue	1000' Reel-in-a-Box	32522106
3254	22/1pr Stranded Shielded CMP	Echelon LonWorks®	100	14.5	White	1000' Pull Box	32541101
					Blue	1000' Reel-in-a-Box	32542106
3255	22/2pr Stranded Shielded CMP	Echelon LonWorks®	100	14.5	White	1000' Pull Box	32551101
4652	18/1pr Stranded Shielded CMP		60	25.0	Purple	1000' Reel-in-a-Box	46522110

Signal, I/O Cables							
Product Code	Description	DC Resistance (Ω /1000 ft.)	Capacitance (pF/ft.)	Color	Packaging	Part Number	
3114	18/2 Stranded CMP/CL2P	6.66	32.2	Natural	1000' Reel-in-a-Box	31142112	
				Yellow	1000' Reel-in-a-Box	31142102	
				Orange	1000' Reel-in-a-Box	31142103	
				Green	1000' Reel-in-a-Box	31142105	
				Blue	1000' Reel-in-a-Box	31142106	
				Purple	1000' Reel-in-a-Box	31142110	
3126	18/3 Stranded CMP/CL2P	6.66	32.2	Natural	1000' Reel-in-a-Box	31262112	
				Yellow	1000' Reel-in-a-Box	31262102	
				Green	1000' Reel-in-a-Box	31262105	
				Blue	1000' Reel-in-a-Box	31262106	
3115	18/4 Stranded CMP/CL2P	6.66	32.2	Natural	1000' Reel-in-a-Box	31152112	
				Orange	1000' Reel-in-a-Box	31152103	
				Green	1000' Reel-in-a-Box	31152105	
3214	18/2 Stranded Shielded CMP/CL2P	6.66	59.3	Natural	1000' Reel-in-a-Box	32142112	
				Yellow	1000' Reel-in-a-Box	32142102	
				Orange	1000' Reel-in-a-Box	32142103	
				Green	1000' Reel-in-a-Box	32142105	
				Blue	1000' Reel-in-a-Box	32152106	
3226	18/3 Stranded Shielded CMP/CL2P	6.66	50.8	Natural	1000' Reel-in-a-Box	32262112	
				Yellow	1000' Reel-in-a-Box	32262102	
				Orange	1000' Reel-in-a-Box	32262103	
				Green	1000' Reel-in-a-Box	32262105	
				Blue	1000' Reel-in-a-Box	32262106	
				Purple	1000' Reel-in-a-Box	32262110	
3215	18/4 Stranded Shielded CMP/CL2P	6.66	50.8	Natural	1000' Reel-in-a-Box	32152112	
				Yellow	1000' Reel-in-a-Box	32152102	
				Orange	1000' Reel-in-a-Box	32152103	
				Green	1000' Reel-in-a-Box	32152105	
				Blue	1000' Reel-in-a-Box	32152106	

IBS Cable Cross-Reference Guide

Application	Cable Description	Product Code
Honeywell Building Automation Systems		
C-BUS	22/1pr Stranded Shielded CMP (EIA-485 / BACnet®)	3320
LonWorks® E-BUS	22/1pr Stranded CMP (Echelon®)	3252
Alerton®		
BACtalk® MS/TP, BACtalk® Sensors, VLX-EXP Comm Bus, IBEX LAN	24/1pr Stranded Shielded CMP	3319
TUX Trunk, Sensors	18/2 Stranded Shielded CMP	3214
IBEX Microset	18/3 Stranded CMP	3126
BACtalk Microset	18/3 Stranded Shielded CMP	3226
Automated Logic®		
ARC156	22/1pr Stranded Shielded CMP (EIA-485)	3320
Logistat	22/4 Stranded CMP	3104
Carrier®		
MS/TP Network	22/1pr Stranded Shielded CMP (EIA-485)	3320
Rnet	18/4 Stranded CMP	3115
Power	18/2 Stranded CMP	3114
Sensors	18/2 Stranded CMP	3114
	18/2 Stranded Shielded CMP	3214
Fujitsu®		
LON® Communication	22/1pr Stranded Shielded CMP (Echelon®)	3254
	22/2pr Stranded Shielded CMP (Echelon®)	3255
Johnson Controls®		
N2 BUS	22/1.5pr Stranded Shielded (EIA-485)	3324
FC BUS	22/1.5pr Stranded Shielded (EIA-485)	3324
SA BUS	22/2pr Stranded Shielded (EIA-485)	3328
Input & Outputs	18/2 Stranded CMP	3114
	18/3 Stranded CMP	3126
Schneider Electric® - TAC Controls		
Lon Communication	21/1pr Stranded CMP (Echelon®)	3252
Type H (DO), Type D (AI/DI)	18/2 Stranded CMP	3114
Type I (AO/DO)	18/3 Stranded CMP	3126
Siemens®		
Automation Level Network (ALN) BACnet® Building Level Network (BLN) BACnet® Field Level Network (FLN) BACnet®	24/1.5pr Stranded Shielded CMP (EIA-485)	3323
Lon Communication	22/1pr Stranded CMP (Echelon®)	3252
Inputs & Outputs	18/2 Stranded CMP	3114
	18/3 Stranded CMP	3126
Trane®		
Comm 5 (Echelon®)	22/1pr Stranded CMP (Echelon®)	3252
	22/1pr Stranded Shielded CMP (Echelon®)	3254
	22/2pr Stranded CMP (Echelon®)	3253
Comm 3/4	18/1pr Stranded Shielded CMP	4652
Sensors	18/2 Stranded Shielded CMP	3214
	18/3 Stranded Shielded CMP	3226
	18/4 Stranded Shielded CMP	3215



*Fire Detection
& Alarm*



HVAC Control

Remote Controls
Control lighting,
heating, cooling and
security systems
remotely – with
absolute reliability.



*Intrusion
Detection*



Digital Video



*Security &
Access Control*



*Building
Automation
Control*

Reliable World-Class Service

Backed by a Fortune 100 company that sets the standard across numerous industries, our robust support system is second to none. It has enabled us at Honeywell Cable to build our entire organization around creating the best, hassle-free experience for our customers.

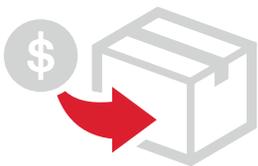
It drives everything we do, including our:



Thousands of locations across the HVAC, security, low-voltage, and electrical distribution channels, where our Honeywell Genesis® Series Cable is readily available for quick delivery or pick up.



Toll-free, LIVE customer service and sales support at: 800-222-0060.



Free freight with orders of \$1,500 or more (some restrictions apply).



ReadySHIP – over 100 current products that ship same day (for orders placed prior to 3pm, after 3pm ships next day) – eligible products list available on our website or by calling customer service.



Contractor Pro™ – Enroll at www.contractorpro.com to get reward points for Honeywell wire you sell every day.



Cable for That! app – Provides an easy-to-use and accessible guide that helps you choose the right cable for your application – go to our website and use your mobile device to download the app that’s right for you.



3 for 1 GUARANTEE

3-for-1 Guarantee – Our confidence in our products translates into the most comprehensive warranty in the industry – replacing three units to one – should any fail to perform to specification.

Please visit www.honeywellcable.com for more information, including a detailed cable catalog or to download our Cable for That! App, and get access to information on-the-go!

Honeywell Cable Selection Guide

Honeywell Cable Part Numbers

All Genesis® Series Cable products have an eight digit product number composed of:

AAAA	BB	CC
⎵	⎵	⎵
Product Code	Pkg Code	Color Code

BB: Packaging Code	Put Up
01	1 x 250' Reel
03	4 x 250' Reel
10	1000' Reel
11	1000' Reel Box
18	1000' Speed Bag®
21	1000' Reel in-a-Box
39	5 x 50' Coil
48	4 x 500' Reel
50	500' Reel
55	500' Box
58	500' Speed Bag®
61	500' Real in-a-Box

CC: Color Code	Color
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
37	Raspberry
1A	White with Orange

Cable engineered by the equipment manufacturer.



Unlike other cable, ours is made by the same company that makes the devices, ensuring optimal connectivity. We produce the vast majority of our full line of low-voltage cables in Pleasant Prairie, WI, where we have been manufacturing and distributing wire and cables since 1996.

Our 230 employees produce 70 percent of Honeywell Cable's total finished goods sold in our 250,000-square-foot facility. We operate 24 hours a day, five days a week, converting raw materials into cables engineered to meet electrical and mechanical requirements for signal communications and low-power systems.

For more information

www.honeywellcable.com

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