

### **GENESIS SERIES**

### Hybrid Thermostat Cable Part No. 6716

Description: 8 Conductor 18/20 AWG Solid Unshielded Thermostat Cable Class 2 (CL2)

Compliance: UL Standard 13; NEC Article 725

**Construction:** 

Conductors 18 & 20 AWG Solid Bare Copper

No. of Conductors 1 x 18 AWG, 7 x 20 AWG

**Insulation** 

Type Polypropylene Thickness .006" nom

Color 18 AWG – Red; 20 AWG - Wht, Grn, Blu, Ylw, Brn, Org, Blk

Diameter 18 AWG - .052"; 20 AWG - 0.043" nom.

**Jacket** 

Type PVC
Color Brown
Thickness 0.016" nom.
Diameter 0.180" nom.

Legend (Ink Print)

HONEYWELL THERMOSTAT CABLE P/N 6716 1C18 + 7C20 3038058 (ETL) CL2

SUN RES (RoHS) w/o# XXXXX-XXXXXX XXXXXFT

Packaging 250 ft Speed Bag or 4 x 250 ft reels

**Properties** 

Temperature Rating -20 to 60 °C Operating Voltage 300 Volts max.

DC Resistance 20 AWG - 10.3 Ohms/M' at 20°C

18 AWG - 6.5 Ohms/M' at 20°C

Flame Rating UL 1685 Vertical Tray

Country of Origin USA

## Genesis® Series Cable



**Hybrid Thermostat Wire Innovation in Cable** 

Honeywell

# Innovation in Cable

### What is it?

Finally, a thermostat cable engineered for the intended use. Honeywell Genesis® Series Hybrid Thermostat wire is the first cable with each conductor specifically designed for the power requirements of the circuit. Ideal for both new and existing HVAC equipment.

### This is Why?

HVAC equipment has evolved, consuming less energy and controlling more. Hybrid Thermostat Wire is optimized for today's high efficiency equipment, as well as equipment from decades past. For the same reason you don't run 1" pipe to every faucet in a home, you don't need 18 AWG for each circuit the thermostat controls.





### **Benefits**

Honeywell Genesis® Series Hybrid Thermostat Wire replaces the traditional thermostat wire you've been installing for years. All devices will be properly powered and controls will function as designed by equipment manufacturers.

The only difference is you hauling around less weight and winning more project bids. Honeywell Hybrid Thermostat Wire is currently available in 5 and 8 conductor construction. The 5 conductor option is 1, 18 AWG conductor for power and 4, 20 AWG conductors for controls. The 8 conductor option is 1, 18 AWG conductor for power and 7, 20 AWG conductors for controls.

Honeywell Hybrid Thermostat Wire is available to you today in 250' Speed Bags® and 250' Reels.

Hybrid Thermostat Wire			
Description	Package	Color	Product Number
5C18/20 SOL Thermostat CL2	4 x 250' Reels	Brown	67130307
5C18/20 SOL Thermostat CL2	250' Speed Bag	Brown	67130907
8C18/20 SOL Thermostat CL2	4 x 250' Reels	Brown	67160307
8C18/20 SOL Thermostat CL2	250' Speed Bag	Brown	67160907



# Innovation in Cable



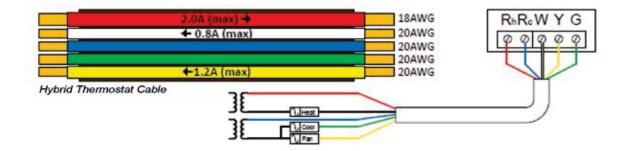
# Honeywell Genesis® Hybrid Thermostat Cable

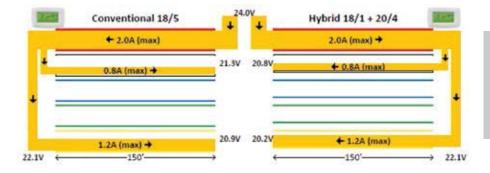
(Engineered for the Thermostat)

A common thermostat uses 4 or 5 wires to drive relays that control heating, cooling, and fans systems. A typical single transformer wiring diagram looks like this.

The red wire carries all of the current required by the thermostat to drive the relays. The thermostat splits the current across multiple wires to activate the heat, cool, and fan relays as needed. Traditionally, the HVAC industry uses 18AWG for all of the Conductors, but is all that copper necessary?

Carrying the most current, the red wire exhibits the biggest voltage drop. The current is much lower on the other conductors, so a smaller AWG can be used with a negligible effect on voltage drop. This is illustrated in the diagram below, which uses the maximum rated current for a common thermostat.





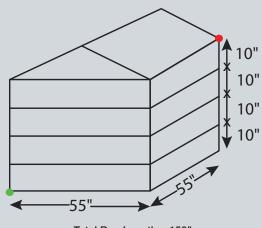
At a full 150ft. the voltage drop difference between conventional any hybrid cables is hardly noticeable. Using hybrid thermostat cable, the thermostat and the relays continue to function while using a fraction of the copper.

### What about Big Houses?

Most thermostat cable runs do not exceed 50 feet, but larger houses may require longer runs. Consider a 9075 sq. ft. three story home with a thermostat in one extreme corner and the transformer and relays in the extreme other corner in the basement.

The resulting run length is 150 feet, which as the voltage daigram above proves, is not too much for Hybrid Thermostat cable to handle.

Recall, the voltage drop daigram shows the absolute worst case scenarios. In reality, the current and the voltage drops are even lower, which allows for even longer runs. In fact, Hybrid Thermostat cable has been successfully field tested to 250 feet.



Total Run Length = 150"

### The Contractor's Point of View

"It's has a rugged outer jacket so the wire doesn't break or tear when being pulled like many other brands. However, it is still easy to install and strip with just the right amount of strength and insulation thickness. It performs well electrically-I like that it contains the 18 gauge to minimize voltage drop. Using this wire adds more quality to my jobs and peace of mind for me. A weak link in many systems is now stronger!"

- Bob Roy, Bob's Heating & Air Inc, Atlanta, GA

### Where to Use?

Use Honeywell Hybrid thermostat wire in any residential or commercial application where you currently use 18 gauge for all conductors.

### **Honeywell Contractor PRO™**

Wire from Honeywell Genesis Series Cable is the ONLY wire qualified for points in the Honeywell Contractor PRO program. We added Honeywell Hybrid Thermostat Wire to Contractor PRO! The wire contractor's use every day will qualify for points! If you are a contractor not yet enrolled in Contractor PRO you can be enrolled in just a few minutes. Go to <a href="https://www.contractorpro.com">www.contractorpro.com</a> and learn about the business building benefits to contractors.



### Easy and Clean Speed Bags®

Hybrid Thermostat Wire is available in Speed Bags! See how Speed Bags offer convenience and less waste. Watch the short video at <a href="https://www.honeywellcable.com/Resources/Videos">www.honeywellcable.com/Resources/Videos</a>





We are ready to fulfill your orders for Hybrid Thermostat Wire from Honeywell Cable!

#### For more information:

www.honevwellcable.com

### **Automation and Control Solutions**

Honeywell Genesis® Series Cable 7701 95<sup>th</sup> Street
Pleasant Prairie, WI 53158-2716
800.222.0060

**Honeywell**