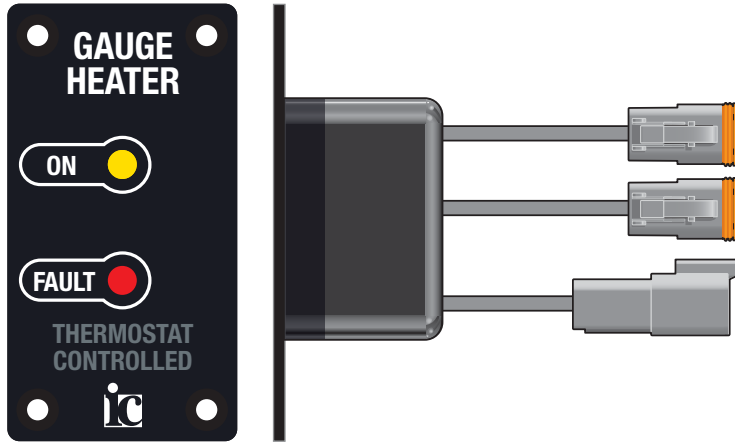




# 3050766/67 Gauge Heater & Heating Cables



## FREEZE-UP PROTECTION DELIVERED IN A SMART DESIGN

Innovative Controls Inc. 3050766 Gauge Heaters are used to automatically control power to the connected heating cable assemblies. An integrated temperature sensor monitors the ambient environmental temperature. Once this temperature drops below 38°F (3.3°C), power to the heating cable assemblies will be switched on.

### FEATURES

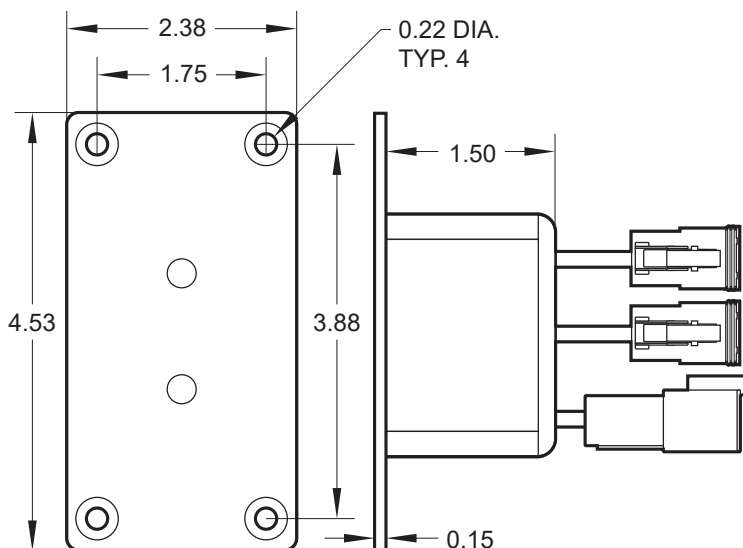
- **Self-Regulating Heating Cables provide safe, smart, and efficient freeze protection**
- **5W/ft. Heating Cable enables up to 31 ft. per Output**  
Heating cable runs longer than 31 ft. run the risk of damaging / overloading DT connectors (rated at 13A).
- **Two Outputs – Supports a Total Max Length of 62 ft.**
- **Sealed Deutsch Connectors**
- **-40C to +85C (-40F to +185F) AEC-Q100 Grade 3 Operating Temperature**
- **Potted Module for Dust and Water Ingress Protection**

These 5W/ft. heating cable assemblies can maintain a nominal temperature of 50°F (10°C). The self-regulating heating cables increase heat and energy applied to sections along the cable which are cold, and reduce heat and energy applied to sections along the cable which are warm. This essentially eliminates risk of overheating, melting, or fire during use.

Heating cable assemblies are available in 5 standard lengths:

- 8 Inches
- 20 Inches
- 56 Inches
- 32 Inches
- 44 Inches

### DIMENSIONS



Heating cable assemblies come assembled with male and female Deutsch connectors, allowing daisy-chaining to a max length of 31 ft. (372 inches) of heating cable per output, 62 ft. (744 inches) per controller.

### PART NUMBERS

Description	IC Part Number
Gauge Heater / Controller	3050766-01
8 inch Heating Cable Assembly	3050767-08
20 inch Heating Cable Assembly	3050767-20
32 inch Heating Cable Assembly	3050767-32
44 inch Heating Cable Assembly	3050767-44
56 inch Heating Cable Assembly	3050767-56
60 inch Heating Cable Assembly	3050767-60
72 inch Heating Cable Assembly	3050767-72
180 inch Heating Cable Assembly	3050767-180
Heating Cable End of Chain Sealing Plug	3050781

## TECHNICAL SPECIFICATIONS

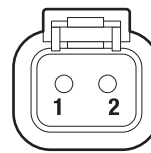
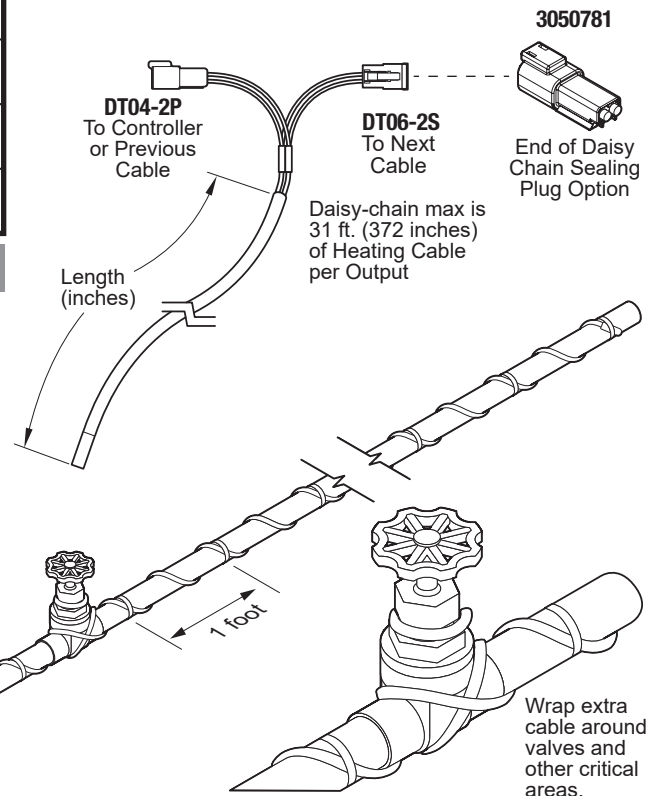
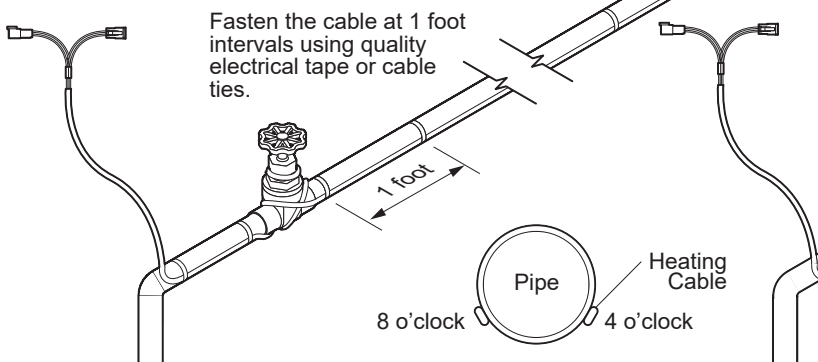
<b>Operating Voltage</b>	7.2 to 16VDC
<b>Current Consumption with relay deenergized at 13.8 VDC</b>	10mA
<b>Current Consumption with relay energized at 13.8 VDC</b>	20 mA plus 362 mA/ft. of Heating Cable
<b>Operating Temperature Range</b>	-40°C to +85°C (-40°F to +185°F)
<b>Storage Temperature Range</b>	-40°C to +85°C (-40°F to +185°F)
<b>Ingress Protection</b>	IP67
<b>Electrical Protection</b>	Reverse voltage polarity protection on all connections  indicator output is protected from reverse polarity, over-current, and voltage transients  Power input is protected from reverse polarity, over-current, over-voltage, and voltage transients
<b>Output Current Max</b>	30A max @ 20°C
<b>Dimensions</b>	2.38" wide x 4.53" high x 1.65" deep
<b>Weight</b>	6.7 oz

## FAULT CODE REFERENCE

No. of LED Flashes	Fault State	Fault Conditions
2	Open Circuit	Heater = ON Relay Feedback = ON No current detected to the heating cables.
3	Short Circuit Heater ON	Heater = ON Relay Feedback = ON Current to the heating cables exceeded expected values.
4	Short Circuit Heater OFF	Heater = OFF Relay Feedback = OFF Current was detected at sensor upstream from relay. (Indicative of a PCB fault)
5	Relay Open Circuit	Heater = ON Relay Feedback = OFF
6	Relay Short Circuit	Heater = OFF Relay Feedback = ON
7	Temperature Sensor Error	Temperature Sensor readings = outside of expected range

## HEATING CABLE INSTALLATION

If the heating cable is the same length as the pipe, run it straight along the pipe at the 4 or 8 o'clock position. For larger diameter pipes, pitch or spiral the heat cable evenly along the pipe length or run the cable longitudinally, at the 4 or 8 o'clock position.

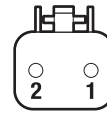


Controller Power In

### Deutsch DTP04-2P Connector

Terminal	Lead Color	Description
1	white	+12VDC (Battery) Power
2	black	Ground

Mating connector is Deutsch DTP06-2S with WP-2S wedgelock and 0462-203-12141 or 1062-12-0166 sockets

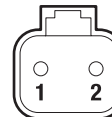


From Controller to first Heating Cable  
and from one Heating Cable to the Next  
Daisy-chain Cable

### Deutsch DT06-2S Connector

Terminal	Lead Color	Description
1	red	+12VDC (Battery) Power
2	black	Ground

Mating connector is Deutsch DT04-2P with W2P wedgelock and 0460-202-16141 or 1060-16-0122 pins



From Heating Cables to Controller  
or Previous Daisy-chain Cable

### Deutsch DT04-2P Connector

Terminal	Lead Color	Description
1	red	+12VDC (Battery) Power
2	black	Ground

Mating connector is Deutsch DT06-2S with W2S wedgelock and 0462-201-16141 or 1062-16-0122 sockets

