**Tempco's Electrically Heated Hose Assemblies**

Tempco’s Electrically Heated Hose Assemblies are designed for optimum transfer of non-explosive liquids or gases. Tempco’s HEH Transfer Hoses are Teflon® lined stainless steel braid heated flexible assemblies. Style R (regular pressure) or Style H (high pressure) transfer hoses are used in a wide range of applications such as water (freeze protection), steam, wax, plastics and many others. Heated transfer hoses improve fluid transfer for many applications.

**Typical Applications**

- Hot Melt Systems
- Petroleum Products
- Food Products
- Hot Oil Lines
- Chemical Transfer
- Gas Analyzer Systems
- Steam Transfer
- Water & Waste Disposal
- Bulk Transfer
- Paint Systems
- Tar & Asphalt
- Waxes – Candle Making
- Adhesives

**Construction Characteristics**

Tempco’s Heated Transfer Hoses are built to the most stringent standards. Each hose is hand assembled to exact physical and electrical specifications. The heated hose assembly starts with the highest quality Teflon® smooth bore core with Stainless Steel overbraid style hose. Over this is wrapped a layer of self-vulcanizing silicone TGL bedding tape at 50% overlap as a base for the resistance wire. The stranded resistance wire is pre-wrapped with Kapton® insulation before winding around the growing assembly in the precise pattern required for uniform heating. Next is wound two layers of Nomex® felt insulation, to maintain consistent heat and a safe cool-to-the-touch design, followed by a layer of 2" wide black tape. The standard hose outer cover is an abrasion resistant polyester braid for normally dry environments. An optional outer cover can be provided for water resistant protection.

The hose assembly is then finished with heat shrink end caps, specified hydraulic fittings and electrical connectors. Hoses are also manufactured with optional built-in sensors including RTDs or thermocouples.

**HEH Heated Hose Assembly Length Definition**

1. For Heated Hose Assemblies with 37° JIC Female Swivel fittings, the specified Length is defined as fitting seat to seat.
2. For Heated Hose Assemblies with other permanently attached fittings, such as Tri-Clamps, Rigid NPT or Tubing, regardless of fitting type or gender, the specified Length is measured from the outside edge to the outside edge of the fittings.
3. Fitting adapters such as male JIC to male NPT, are not included in the Length specification.
4. Length Tolerances are stated as follows:
   - 17.99" or less: ±0.5"
   - 18" to 36": ±0.75"
   - 3 feet to 10 feet: ±1.0"

**Tempco’s Control Consoles**

Ideal for controlling process temperatures on heated hose assemblies. Complete information can be found on page 13-52.

View Product Inventory @ www.tempco.com
Specifications for Heated Hose Assemblies

<table>
<thead>
<tr>
<th>Hose Style</th>
<th>Core ID</th>
<th>OD Assembly</th>
<th>Hose Assembly</th>
<th>Max. Rec. Watt</th>
<th>Max. Working Pressure</th>
<th>Minimum Bend Radius</th>
<th>Male NPT Fitting Size</th>
<th>JIC Fitting Size</th>
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</thead>
<tbody>
<tr>
<td>R</td>
<td>in. / mm</td>
<td>in. / mm</td>
<td>mm</td>
<td>R Style</td>
<td>H Style</td>
<td>R Style</td>
<td>H Style</td>
<td>in. / mm</td>
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<tr>
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<td>1.40 / 35.6</td>
<td>1.22 / 58.6</td>
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<td>4000</td>
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<tr>
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<td>1.50 / 38.1</td>
<td>.308 / 7.82</td>
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<td>40</td>
<td>1875</td>
<td>4000</td>
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<tr>
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<td>.406 / 10.31</td>
<td>1.59 / 40.4</td>
<td>.301 / 7.91</td>
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<td>50</td>
<td>1500</td>
<td>4000</td>
<td>10 / 244</td>
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<td>1.69 / 42.9</td>
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<td>55</td>
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<td>4000</td>
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<td>85</td>
<td>750</td>
<td>4000</td>
<td>18 / 457</td>
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<td>2.60 / 66.0</td>
<td>1.118 / 28.40</td>
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<td>95</td>
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<td>4000</td>
<td>17 / 600</td>
</tr>
</tbody>
</table>

Notes:
- Operating pressures are for non-impulsive applications only.
- #20 and High Pressure can only be done for special applications, consult Tempco.

Ordering Code:

- **HEH** –
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9
  - 10
  - 11

Hose Style **BOX 1**
- **R** = Regular Pressure, Teflon®
- **H** = High Pressure, Teflon®
- **X** = Other

Length **BOX 2**
- In 6” increments
- From 006 to 600 inches

Trade Size **BOX 3**
- 04, 06, 08, 10, 12, 16, 20
- XX = Other

Wattage **BOX 4**
- Insert Required Wattage
- Example: **0120** = 120 Watts

Temperature Sensor **BOX 7**
- **N** = None
- **A** = RTD, 100 ohms, platinum, 2-wire, leads only
- **B** = Thermocouple, Type J, leads only
- **C** = Thermocouple, Type K, leads only
- **D** = RTD, 100 ohms, platinum, 3-wire, leads only
- **E** = RTD, 100 ohms, platinum, 2-wire, Std. Plug
- **F** = Thermocouple, Type J, Std. Plug
- **G** = Thermocouple, Type K, Std. Plug
- **H** = RTD, 100 ohms, platinum, 3-wire, Std. Plug
- **L** = RTD, 100 ohms, platinum, 2-wire, Mini-Plug
- **M** = Thermocouple, Type J, Mini-Plug
- **P** = Thermocouple, Type K, Mini-Plug
- **Q** = RTD, 100 ohms, platinum, 3-wire, Mini-Plug
- **X** = Other

Notes:
- Larger wattages are limited to 240V due to overall amperage requirements.

Ordering Information

Heated Hose Assemblies are offered with the features listed above. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements and a part number will be assigned.

Consult Tempco with your requirements.

Standard lead time is 2 to 3 weeks.