

Electrically Heated Hose Assemblies



Design Features

- * Base Hose has a smooth bore Teflon® core with Stainless Steel overbraid.
- * Self-vulcanizing Silicone TGL bedding tape at 50% overlap.
- * Kapton® insulation wrapped stranded nichrome alloy heater element.
- * 2 layers of 1/8" Nomex® felt insulation.
- * Layer of 2" wide black tape for final wrap.
- * Heavy duty abrasive resistant outer covering, polyester braid; optional water resistant jacket is available upon request.
- * Heat shrink tube end caps.
- * Male NPT or 37° JIC female swivel fittings are standard; options include Tri-Clamp or Tubing/Pipe for compression fittings. Choice of Stainless Steel or plated carbon steel.
- * Temperature range to 450°F/232°C.
- * Overall length up to 600 inches.
- * Temperature sensors such as thermocouples or RTDs can be built-in to the assembly.
- * Snap action thermostats can be built in to the assembly to limit the maximum temperature.
- * 6 ft. power leads standard; length can vary upon request.
- * Hose assemblies available in 120 and 240 Vac.
- * Ground connection to the Stainless Steel overbraid.



Tempco's Control Consoles
Ideal for controlling process temperatures on heated hose assemblies. Complete information can be found on page 13-52.

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"	10 feet to 20 feet: ±1.5"
18" to 36": ±0.75"	20 feet to 50 feet: ±2.5"
3 feet to 10 feet: ±1.0"	