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Electrically Heated Hoses assemblies

Advanced solutions for conveying semiprocessed materials, in liquid, semi-liquid or gaseous states, where the temperature of the fluid must be regulated and maintained. This is usually required to prevent solidification or an increase in the fluid viscosity.

In some applications, an additional 'heating up' or 'melting' facility may also be required.

Electrically heated hoses are used in every field of industry, from foodstuffs to chemicals, from automotive to pharmaceuticals, in general wherever there is a requirement for high quality and highly resistant hoses combined with precise temperature control.

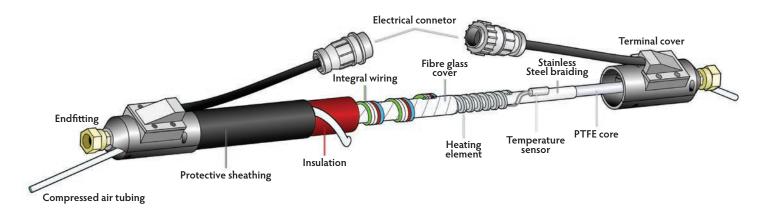


Features

The hose core is made of extruded sintered PTFE; an AISI 304 stainless steel braid outer sheath gives protection and high resistance to working pressures. Heating is done by variable power heating elements that are spirally wrapped around the hose core.

An inner sensor measures the temperature of the fluid and enables an external device to control the heating element in order to maintain constant temperature.

End terminations are applied by means of a special cold deformation (pressing) process which guarantees perfect tightness even at very high pressures. The end covers and polyamide sheath assure optimal mechanical strength, which is fundamental for manual applications or hose movement. The manufacturing process of electrically heated hose assemblies meets strict internal and external controls. Every complete assembly is rigorously tested before being shipped to the customer.



PTFE - polytetrafluoroethylene

Thanks to its unique combination of features PTFE is often considered the "noble" polymer par excellence. These include very low lubricity (lowest coefficient of friction of any polymer), excellent chemical inertia and anti-adhesion, good working temperature range, excellent dielectric properties, optimum relationship between rigidity and flexibility, excellent resistance to humidity and non-existent volumetric expansion.

The only elements which can damage PTFE are: alkaline metals in a molten state *(e.g. sodium and potassium)* and some gaseous fluorinated chemical compounds such as chlorine fluoride etc.



ELECTRICALLY HEATED HOSES

PTFE Electrically Heated Hoses



For the conveyance of liquids and gases under regulated temperatures - operating temperature range from 30°C to 260°C (86 to 500 °F), special versions up to 350°C (662 °F). Different diameters of internal hose combined with an extremely wide range of screw fittings and electrical connectors enable all technical and production process demands to be met.

Versions

T100_	operating temperature up to 100°C (212 °F), Dia. 3.2mm to 100mm, any length available
T200_	operating temperature up to 200°C (392 °F), Dia. 3.2mm to 100mm, any length available
T250_	operating temperature up to 250°C (482 °F), Dia. 3.2mm to 100mm, any length availabl
T350_	operating temperature up to 350°C (662 °F), Dia. 3.2mm to 100mm, any length available
Special_	available for higher operating pressures, for EEx classified areas, with a water resistant external sheath for v
	or with stainless steel braiding to improve mechanical resistance, with self-regulating heating elements (A

pecial_available for higher operating pressures, for EEx classified areas, with a water resistant external sheath for wet room applications or with stainless steel braiding to improve mechanical resistance, with self-regulating heating elements (ATEX standard) or with additional wiring or compressed air tubing etc.

Fittings and Connectors

A wide range of fittings greatly increases the application possibilities. Brass, iron or stainless steel fittings are readily available with BSP, metric, J.I.C. or ASA thread forms with others available on request. It is possible to coat the fittings and flange-holder assemblies in PTFE, no matter what material they are made from, in order to improve chemical resistance and achieve perfect inertia. The connection possibilities to various industrial plants are endless thanks to the huge range of available electrical connectors.

Application

The electrically heated hoses, equipped by their PTFE core, are used in every industrial field, from alimentary to chemical, from automotive to pharmaceutical, in general wherever it is necessary high quality and high resistance hoses and a precise temperature control. Some examples:

- \cdot Labelling or sealing machines, for melting adhesive
- Foaming of dual-compound machines with independent heating
- Machines for gas analysis in steel foundries, tests in automotive industry
- Heating systems, to lubricate dense diesel oil for feeding the boiler
- \cdot Co2 fillers, to avoid cooling by expansion
- Machines for food processing industry, e.G. Icing cakes or coating with chocolate
- Sound-proofing foam spraying, e.G. Seat covers or glasses
- \cdot Road work machines, for asphalting
- Toxicity or anti-pollution control systems, paint spraying cabins
- \cdot Survey and analysis of gas







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