

Ex Immersion Heaters

Electrical flange or thread connection heaters



ELMESS
THERMO SYSTEM TECHNIK



- Elektrische Industrieheizkörper • Erhitzer
- Regel- und Steuergeräte
- Electric heaters • Control devices





Immersion heaters serve for heating of fluids, air or gas. They are components of machinery and plants, or mounted into tanks or vessels.

According to the individual requirements of our customers, ELMESS-Thermosystemtechnik is offering customized immersion heaters. They are designed and manufactured in high quality industrial design or in explosion proof design according ATEX. This guarantees a maximum of reliability, safety and long lifetime for your plants.

Main fields of applications:

- Petrochemical, chemical and pharmaceutical industries
- Oil and gas extraction, production and distribution
- Mechanical engineering and plant construction
- Paint industries
- Energy and environmental technologies
- Laboratory and analytical technologies
- Plastics and textile industries
- Packaging technologies
- Industrial gases

Dates for enquiries:

You will assist us to answer your enquiry within short time, if you give us as much as possible operating data for the required heater with your enquiry:

- Medium (if the medium is not common, please advise density, specific heat, heat conductivity and dynamic viscosity)
- Tank volume or flow rate for flowing media
- Operating temperatures, operating pressure
- Required heating capacity, nominal voltage
- Flange dimensions and rating, mounting thread
- Immersion length, unheated length (e.g. for mounting nozzle)
- Mounting position (horizontal or vertical)
- Ambient temperatures (standard: -20 / +40 °C, special design for -60 / +60 °C)
- Materials for flange, heating bundle, connection box
- Design pressure, design temperature and design code for pressure vessel parts
- Protection (Ex hazardous area classification, IP)
- Special ambient conditions (e.g. outdoor mounting, offshore)

Typical applications for gas or air heaters:

- Motor anticondensation heaters
- Heaters for heating chambers or instrumentation cabinets
- Heating insets for gas heaters.

According to the application, a flow monitor can be necessary to prevent the heater from overheating.

Typical applications for liquid heaters:

- Lubrication oil systems for gas turbines, compressors, pumps, refrigeration compressors
- Heat transfer oil heaters
- Tanks for oil and fuels
- Tanks for liquids like water or process fluids
- Emergency showers
- Heat exchangers

In order to prevent overheating, liquid heaters always have to be covered with a sufficient liquid level. This must be guaranteed by means of a level switch which is judged by reliability and function or by comparable measures.



Design Versions:

Ex Cartridge Heater Type DH..M..

Ex d II C

High performance cartridge heater with compact flameproof enclosure and fix mounted connection cable.

Applications:

Heating of metal parts or components such as molds, valves, nozzles, extruders or other machine parts, especially in the plastics industries. Hot runner systems, packing machinery, analysis technology, medical devices. Lube oil heaters for small machines



Ex Cartridge Heater Type DH..A00..

Ex de II C

High performance cartridge heater with flameproof enclosure and Ex e connection box. Option with built-in RTD Pt100 for overtemperature monitoring, in combination with thermal cutout type eB*6***.

Applications:

Lube oil heaters for small compressors, pumps, cooling compressors and other machines.



Ex Heater Type DHF..A0..

Ex de II C

Cartridge type heater with withdrawable ceramic heating inset or with heating bundle of tubular heating elements. Flameproof Ex d enclosure with Ex e connection box.

Applications:

Heating of tempering systems, e.g. with heat transfer oil, with external temperature monitoring system. Temperature and level monitoring has to be installed by customer.



Immersion Heater Type DH..B..

Ex d or de IIC

Heaters with a bundle of tubular heating elements or cartridge type with withdrawable heating insets. Flameproof heater enclosure made of cast iron, carbon steel with heavy duty painting or made of stainless steel. For overtemperature protection of the heater and monitoring of the temperature class, a temperature limiter "TSHH" and temperature monitor "TSH" or temperature probes/thermocouples are built-in. Connection box Ex e for easy installation and maintenance on site.

Design variations with flange or thread connection.





Wärme.

Mit Sicherheit.

Heat. And safety.

Qualität im Detail. Die hochwertigen und langlebigen Industrie-Heizsysteme von ELMESS werden vielfältig eingesetzt. So sorgen sie z.B. auch auf einer Bohrinsel für einen reibungslosen und sicheren Ablauf.

There is quality in the detail. ELMESS' high-quality and durable industrial heating systems are put to a large variety of uses, for example on oil rigs to ensure that work can be carried out smoothly and safely.

Jedes einzelne Produkt von ELMESS: ein Unikat

- Ex-Tauchheizkörper, elektrische Flansch- und Einschraubheizkörper
- Strömungserhitzer für flüssige oder gasförmige Medien einschließlich Dokumentation nach Druckgeräterichtlinie oder ASME
- Gasvorwärmer und Verdampfer: Erhitzer mit Rohrschlange in einem Alu-Block eingegossen, für zuverlässigen und sicheren Betrieb auch bei hohen Drücken
- Luftherhitzer und Heizregister
- Ex-Heizlüfter zur Wandmontage oder in Kompaktbauweise
- Ex-Raum- und Rippenrohrheizgeräte
- Ex-Temperaturregler und Thermostate
- Ex-Niveaувächter

Each individual product of ELMESS is unique

- Ex immersion heaters with flange and thread connection
- Flow heaters for fluids or gas including documentation according to PED or ASME
- Gas preheaters or vaporizers: Block type heater with a tube coil cast in an aluminium block, for reliable and safe operation also with high pressures
- Air heaters
- Ex air blower heaters for wall mounting or compact type
- Ex space heaters and finned tube heaters
- Ex temperature regulators and thermostats
- Ex level switches

Fordern Sie uns heraus

Senden Sie uns Ihre spezifizierte Anfrage. Wir erstellen Ihnen ein auf Ihren Bedarfsfall zugeschnittenes Angebot. Auch im Internet unter www.elmess.de

Challenge us

Send us your specific enquiry. We will make you an offer tailored to your requirements. Also available on the Internet under www.elmess.de