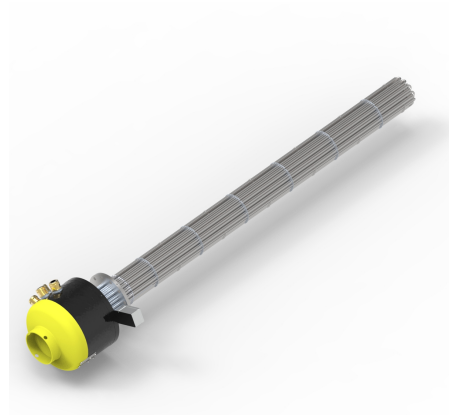


# CSN<sup>®</sup> Ex flange heater type 9I2Ex

## DESCRIPTION

Our CSN<sup>®</sup> Ex flange heaters are designed for outputs of up to 500 kW and are ideal for heating liquid and gaseous media. These electric flange heaters are specially designed for use in potentially explosive environments and provide a reliable and efficient heat source. Thanks to their integrated temperature monitoring, you can precisely control the operating temperature and thus ensure a safe working environment.



## PRODUCT BENEFITS

- Mining approval (device group I)
- Type of protection Ex d
- Version with replaceable heating elements possible
- Integrated temperature monitoring
- Extremely robust design

## TECHNISCHE DATEN

Authorisation	Zone I, additionally mining (equipment group I)
Certification	ATEX
Temperature class	T1 ... T6
Ambient temperature range	Standard -20°C to +40°C
Power (kW)	up to 500
Voltage (V)	up to 1000
Protection class	IP 54
Medium	Liquid and gaseous
Process data	Medium, pressure and temperature according to specification
Process connection	Flange EN 1092-1, PN 16, up to DN 450
Heating elements	Tubular radiators Cartridge radiators High-performance cartridge heaters
Materials Process connection	Steel; 1.4404 (AISI 316L);

Heating element materials	<p>1.4541 (AISI 321); 1.4571 (AISI 316 Ti)</p> <p>Steel; 1.4404 (AISI 316L);</p> <p>1.4541 (AISI 321); 1.4571 (AISI 316 Ti);</p> <p>1.4876 (Incoloy 800); 2.4858 (Incoloy 825)</p>
Material of connection cover	Steel (painted)
Installation length of heating elements (mm)	<p>300 - 3500 for tubular radiators</p> <p>up to 6000 for cartridge radiators</p> <p>up to 7000 for high-performance cartridge radiators</p>
Temperature monitoring (version via intrinsically safe circuits (Ex i))	<p>PT100 internal (standard)</p> <p>Internal thermocouple (optional)</p> <p>External temperature controller (optional)</p> <p>External temperature limiter (optional)</p>
Execution	<p>9I2F = for liquids</p> <p>9I2GB = for gases, Ex zone on heating element</p> <p>9I2GN = for gases, no Ex zone on the heating element</p>
Customised versions on request	

