

**GCP**

**GROUP 1 - Immersion heaters, drum heaters and accessories**

1.17 - In line heaters



GCP pass superheaters consist of a GCB heating group assembled on a steel or stainless steel tubular body, of suitable flange, bed and entry, exit and purge tubulatures, threaded or flanged. The fluid to be heater circulates inside the same, guided by the deflectors at intervals in the heating group.

The GCP pass superheaters are manufactured to measure, adapting the design for each specific case. They can be manufactured as heat-resistant or non-heat-resistant depending on the working temperature of the same, in horizontal or vertical position, etc.

**General characteristics**

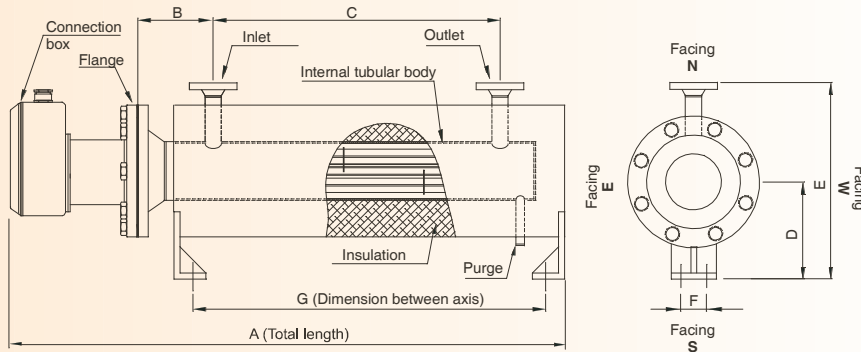
- Shape "U" tubular elements
- Tube material in stainless steel AISI 321, AISI 316L, Incoloy®-800, Incoloy®-825 or nicked copper
- Standardized tube diameters: Ø8, Ø10, 12'5, Ø16 mm
- Power according to your specifications

- Three-phase voltage up to 750 V
- Maximum length flat plate: 3300 mm
- Standard flanges: DIN - ANSI in stainless steel or steel
- Connection box IP-44. Tubular body in stainless steel or galvanized steel
- Optionally, tubular body with heat-resistant insulation
- Temperature control with thermostat, limiter, thermocouple or PT100 sensor

- Density load up to 16 W/cm<sup>2</sup>. Recommended density load according to applications

- 1 to 3 W/cm<sup>2</sup> → Air, ovens
- 1,2 W/cm<sup>2</sup> → Heavy fuel-oil
- 2 to 4 W/cm<sup>2</sup> → Thermic oil, ligh fuel-oil
- 6 to 8 W/cm<sup>2</sup> → Water

If you wish to receive an offer for the GCP heating groups appropriate to your needs, please complete the attached tables indicating the data requested and send it by fax. You will receive a quote from us as soon as possible.



Process requirements	
Medium to heat: (Indicate material)	Liquid <input type="checkbox"/>
	Gas <input type="checkbox"/>
Static material	Q dm <sup>3</sup> /h
In line material characteristics	Density Kg/dm <sup>3</sup>
	Viscosity cP
	Specific heat KJ/kg.K
Work temperature	°C
Inlet temperature	°C
Outlet temperature	°C
Design pressure	P kg/cm <sup>2</sup>

Tubular element characteristics			
Tube material	SS AISI 321 <input type="checkbox"/>	Incoloy®-825 <input type="checkbox"/>	
	SS AISI 316L <input type="checkbox"/>	Steel <input type="checkbox"/>	
	Incoloy®-800 <input type="checkbox"/>	Copper <input type="checkbox"/>	
Tube diameter	Ø8 mm <input type="checkbox"/>	Ø16 mm <input type="checkbox"/>	
	Ø10 mm <input type="checkbox"/>		

Electrical characteristics	
Total Watts	kW
Power supply	V (Mono-phase)
	V (Three-phase)
Connection	Mono-phase
	Three-phase Δ
N <sup>er</sup> steps	Three-phase
Density load	W/cm <sup>2</sup> $\lambda$

In line heater			
Material internal tubular body	Steel <input type="checkbox"/>	SS AISI 321 <input type="checkbox"/>	
		SS AISI 316 <input type="checkbox"/>	
Position	Horizontal <input type="checkbox"/>		
	Vertical <input type="checkbox"/>	Box position	Top <input type="checkbox"/> Lower <input type="checkbox"/>
Heat-resistant insulation	Yes <input type="checkbox"/>		
	No <input type="checkbox"/>		

Temperature control	
Safety	Fluid temperature °C
	Tube temperature °C
Control	Fluid temperature °C
	Thermostat (ON/OFF) <input type="checkbox"/> Range °C
Type	Thermocouple sensor. Type:
	J <input type="checkbox"/> PT100 <input type="checkbox"/>
	K <input type="checkbox"/>
Position (Flat plate)	mm

Inlet / Outlet - Flanges					
Flange	DIN		ANSI		Facing NSEW
	PN	DN	PN	DN	
Inlet					
Outlet					
Flange material	Steel <input type="checkbox"/>	SS AISI 321 <input type="checkbox"/>			
		SS AISI 316 <input type="checkbox"/>			
Purge	Yes <input type="checkbox"/>				
	No <input type="checkbox"/>				
Dimensions in mm	A	E			
	B	F			
	C	G			
	D				

