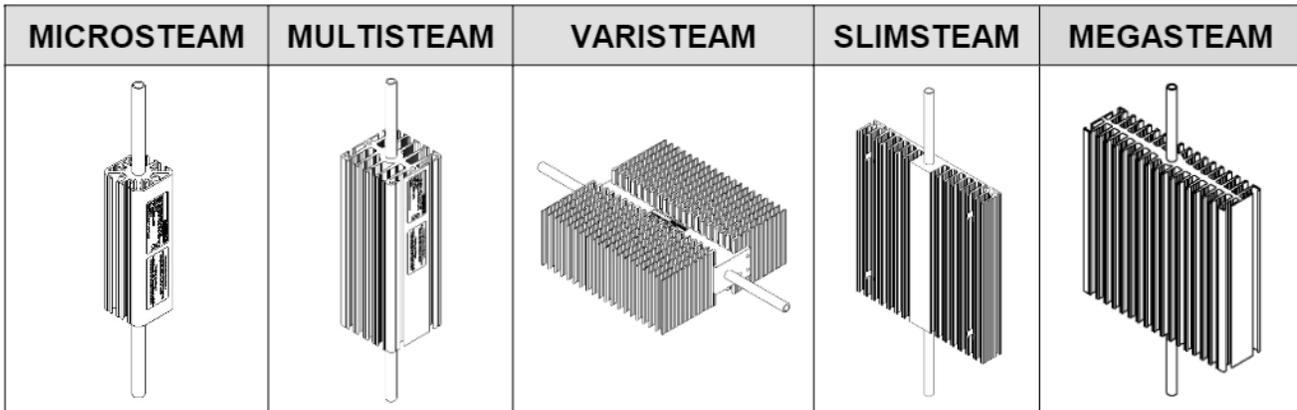


...STEAM Steam heater



1 Application

Heating of instrument enclosures by means of steam or hot water

- for freeze protection
- for condensation protection
- for temperature maintenance

2 Features and Advantages

- Intertec standard heater profiles
- high heat output resulting from a special, black anodized aluminium profile construction
- The heat transfer medium is steam or hot glycol/water
- Intertec standard accessories such as mounting brackets etc same as for the electrical Ex heater CP MICROTHERM.
- Tube cut and bent to fit the application.

3 Description

The INTERTEC ...STEAM series are steam or glycol/water heaters designed to heat the air in the enclosure by convection. The different profiles always enable a good application specific solution relying on regular standard INTERTEC stock items.

First the heating power required for the application is calculated, then a suitable profile is selected and finally it is decided if this heater is to be powered by electricity or by hot water/ steam. Assembly/ installation of the heater will be the same and the same accessories such as mounting brackets etc. are used.

A convection roll should develop in the enclosure. Take care not to cover the fins.

To control the temperature inside the enclosure to an accurate set point, any ...STEAM may be combined

with a TV/Sxx steam controller and TV/ HAT steam trap (please see [HDS10205](#)).

MICROSTEAM is ideal for smaller enclosures. Its compact design allows it to be used for applications requiring low power output.

For detailed information regarding the profile, please refer to our data sheet [HDS10233](#).

MULTISTEAM is the right choice, of heater should MICROTHERM not be powerful enough, but compact design is still required.

For detailed information regarding the profile, please refer to our data sheet [HDS10227](#).

VARISTEAM is ideal if it should be mounted below the instruments.

For detailed information regarding the profile, please refer to our data sheet [HDS10236](#).

SLIMSTEAM is appropriate for contact heating, e.g. on the rear side of a mounting plate. It provides conduction heat, while also keeping the air in the enclosure warm by convection.

4 Technical Data

Tube	Stainless steel 0.5"/ 12 mm dia. outside
Length of tube	Standard 35.5"/ 900 mm Special lengths and pipe bends on request
Profile	Length x Width x Height
MICROSTEAM	2" x 2" x 6"/ 50 x 50 x 155 mm
MULTISTEAM	3" x 3" x 9"/ 80 x 80 x 225 mm
VARISTEAM	9" x 8" x 5"/ 225 x 213 x 120 mm
SLIMSTEAM	1" x 8" x 9"/ 30 x 206 x 225 mm
MEGASTEAM	2" x 9" x 9"/ 60 x 229 x 225 mm
Material	seawater-proof aluminium, black anodized
Connection	Any regular fittings.

For more details about the profiles, please see the relevant data sheets for the electric heaters.

...STEAM Steam heater

5 Options

Pipe	Stainless steel Ø0.5/ 14 mm outside
Connection	several standard glands, e.g. Parker or Swagelok

6 Power Output

The power output of the different ...STEAM heaters depends on the set point temperature and the temperature of the heating medium (Freeze protection for example +50°F/ +10°C or set point temperature). The table below indicates performance. For further information, please consult the factory.

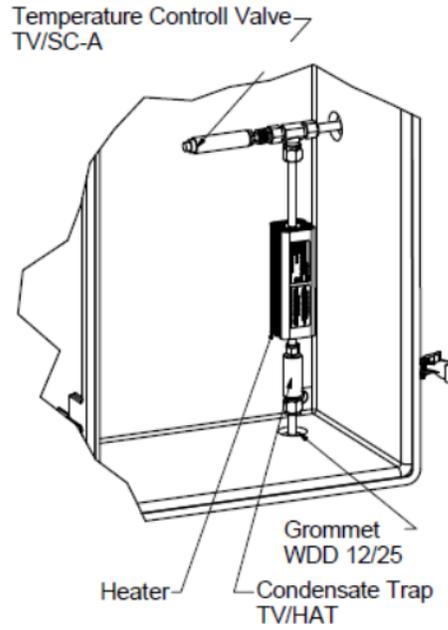
Type	Steam +266°F/+130°C / 2.5 bar		Water +194°F/+90°C	
	+50°F/ 10°C	+104°F/ +40°C	+50°F/ +10°C	104°F/ +40°C
MICROSTEAM	79 W	53 W	45 W	23 W
MULTISTEAM	240 W	159 W	135 W	69 W
VARISTEAM (installed horizontally)	614 W	418 W	358 W	190 W
SLIMSTEAM	223 W	151 W	128 W	68 W
MEGASTEAM	395 W	264 W	224 W	116 W

The above values apply if the fins are positioned vertically and if a minimum distance of approx. 1"/ 30 mm to the enclosure wall is maintained.

7 Installation

- Alternatively, to the glycol/water installation, the steam design requires a slope in the tubing installation.
- Several heaters, especially VARISTEAM heaters, may be arrayed on one pipe.
- The condensate trap can be mounted inside or outside the enclosure with low distance. The distance from the enclosure should not be too wide, so that the heat conductance keeps it frost free.
- Our silicone grommets Type WDD are suitable for use as wall bushings => see data sheet [KDS10383](#)

7.1 Mounting sample for MICROSTEAM



7.2 Mounting sample for VARISTEAM

