

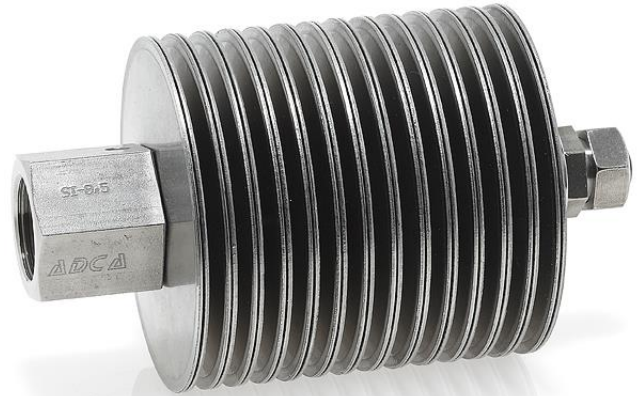
STEAM INJECTORS SI20

DESCRIPTION

The SI20 series steam injectors from ADCA are injection condensers. They ensure low noise and vibration and rapid heating of still or flowing fluids in basins and vessels due to direct steam injection.

Steam enters through the inlet housing, passes along the centre of the heater, through holes in the inner rings, through spaces between the element plates where it condensates under light load and partly condensates under heavy load to be discharged through the serrated periphery of the element plates. Under heavy load if any steam pass through the periphery of the element plates, will do so in very small jets and will condensate in the surrounding liquid with very little noise and vibration.

Connections are female screwed.



MAIN FEATURES

Quiet operation.
Corrosion-resistant.
No moving parts.

OPTIONS: Complete system including vacuum breaker and self operated controller.
Different capacities and design available under request.

USE: Direct steam injection heating systems.
See IMI installation and maintenance instructions.

AVAILABLE MODELS: SI20-4; SI20-5,5; SI20-7; SI20-8,5.

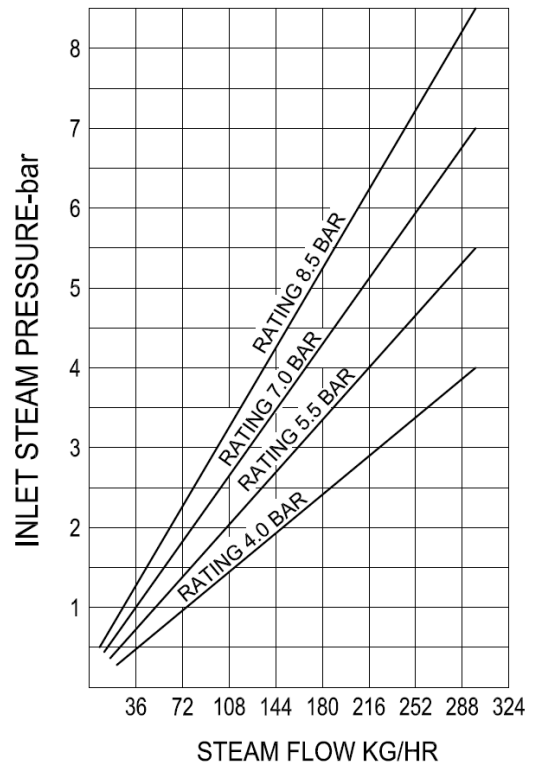
SIZES: 3/4".

CONNECTIONS: Female screwed ISO 7/1 Rp (BS21).

INSTALLATION: Horizontal or vertical installation.

LIMITING CONDITIONS:
PMO: Max. operating pressure 8,5 bar
TMO: Max. operating temperature 180 °C

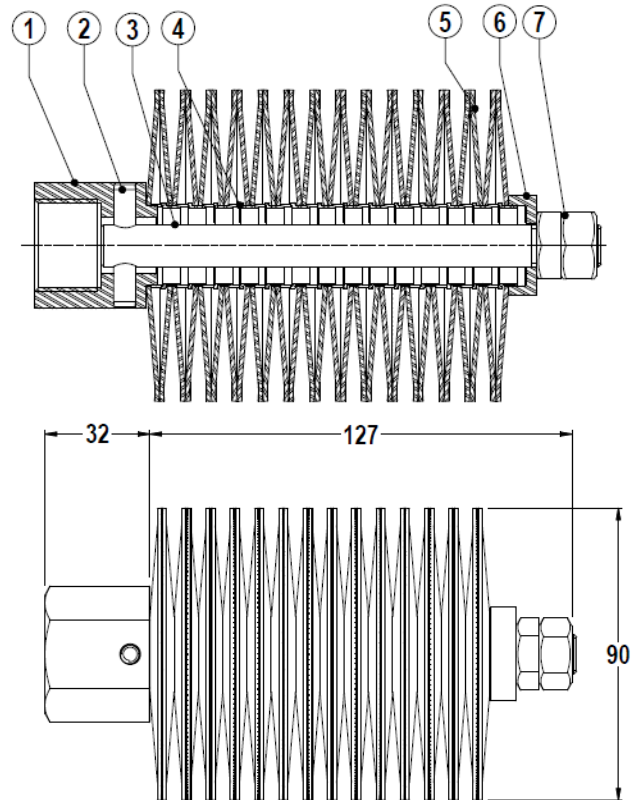
CAPACITY CHART



Example: We require the injection of 950 kg/h of steam with a pressure of 5 bar. Assuming 20% pressure drop across the control valve, therefore the steam supply to the injectors will be 4 bar. From the injector capacity chart, we see that the 4 bar injector will pass 293 kg/h and 950 divided by 293 = 3,24.

Three injectors of this size will barely cope, so we recommend installing four injectors, which will meet the demand. The pressure rating is stamped on the inlet housing (1). The SI20 injector is made in one size and if one device does not pass sufficient steam, two or more should be fitted to a common supply pipe.

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Inlet housing	AISI304 / 1.4301
2	Cross pin	AISI304 / 1.4301
3	Tie-rod	AISI304 / 1.4301
4	Inner rings	AISI304 / 1.4301
5	Element plates	AISI304 / 1.4301
6	Retaining plate	AISI304 / 1.4301
7	Retaining nut	AISI304 / 1.4301



POS. N°	DESIGNATION
1	ADCA SI20 Steam injector
2	Adcatrol V25 Control valve and positioner
3	GV32B Bronze globe valve
4	ADCA IS140Y Strainer
5	ADCA VB21 Vacuum breaker
6	PT100 Resistance thermometer
7	Temperature controller
8	Temperature indicator

Typical Installation

