

INLINE STEAM HEATER

Threaded connections

MIR type

It is a simple but effective device for mixing process liquids by direct steam injection. Thanks to its simplicity of construction and low cost, it is widely used in many industrial applications where it is necessary to mix a cold liquid by using steam.

The MIR heater consists of a body and a diffuser made in a single piece inside which the removable nozzle is threaded. It also allows the handle of sludge with solids or semi-solids in suspension.

If used correctly, the mixer guarantees silent and vibration-free operation.

As there are no moving parts, it is maintenance free. For the installation, it is necessary to provide check valves upstream of the steam and water connections.



Operating principle

MIR type

Due to pressurisation the liquid and the steam enter the mixer; the steam passes through the calibrated orifices of the mixing nozzle; the mixing causes the complete condensation of the steam and as a consequence the heating of the liquid.

Maximum operating values:

- Maximum operating values: steam pressure of 10 bar
- Steam pressure must be at least 0.3 bar higher than that of the water
- Maximum outlet temperature of water, at atmospheric pressure, is 90°C

In any case, water must have the necessary head to exit the heater with at least a pressure of 0.1 bar..

Our technical office will help you to size up the correct Mir heater according to the available pressure, flow rate and temperature of the steam and water.

Materials

Condensation nozzle and body in SS 316 or bronze

Other materials available on customer request.

Installation

Mir inline steam heaters can be installed in both horizontal or vertical pipe since their assembly does not affect their operation.

Sizes and connections

MIR type

- MIR steam heater, connections: 1/2" BSP (steam) – 3/4" BSP (water) - Cod.: MIR 34
 - MIR steam heater, connections: 3/4" BSP (steam) – 1" BSP (water) - Cod.: MIR 100
- Different size can be manufactured on request.



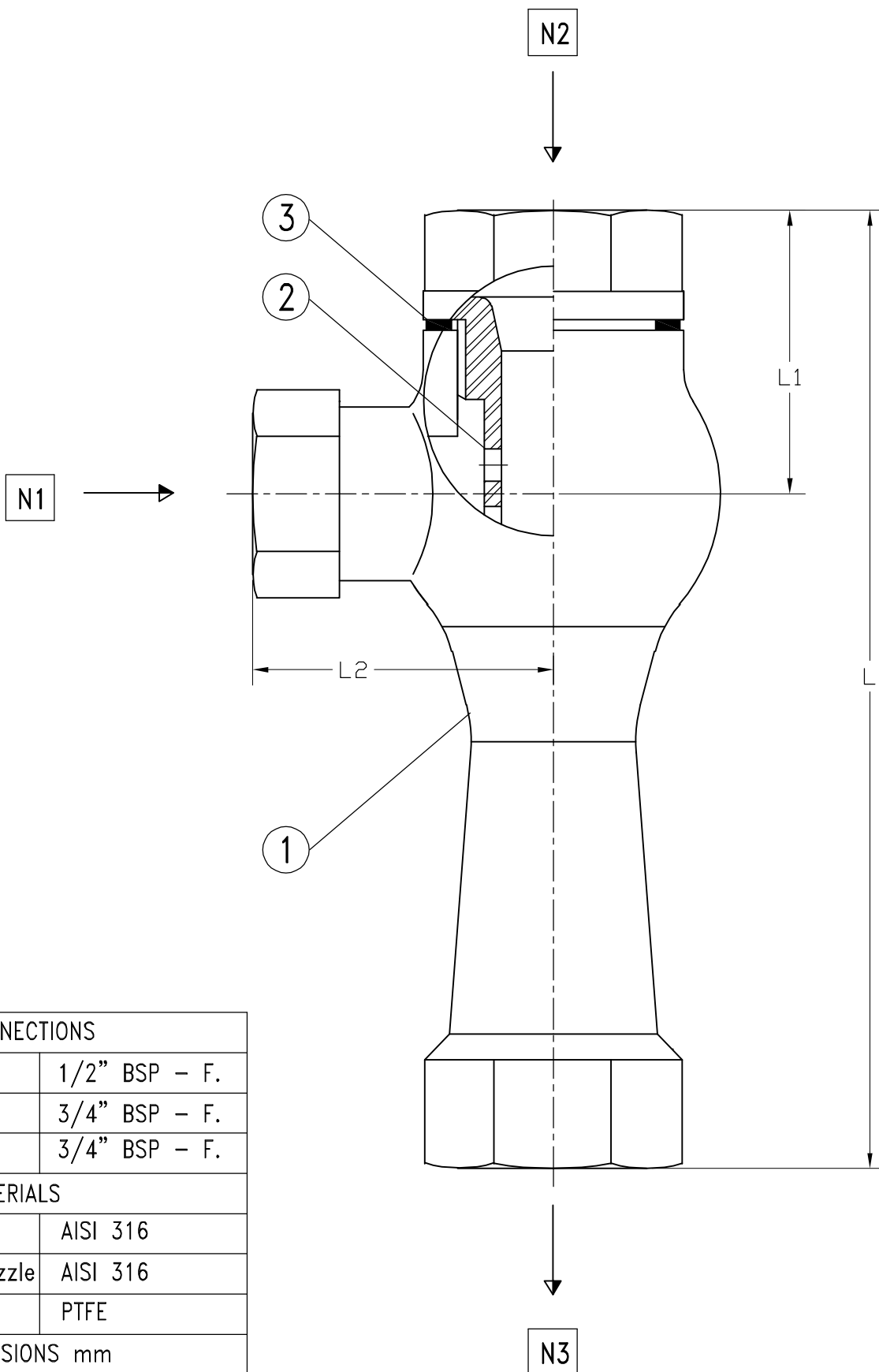
MIR STEAM HEATER

DISEGNO (Drawing) N°

MIR 34

DIMENSIONS AND CONNECTIONS

FOGLIO Sheet	1	DI of	1
REV.		0	
DATE	13/11/2015		



CONNECTIONS

N1	Steam	1/2" BSP - F.
N2	cold water	3/4" BSP - F.
N3	hot water	3/4" BSP - F.

MATERIALS

①	Head	AISI 316
②	Condens. nozzle	AISI 316
③	Gasket	PTFE

DIMENSIONS mm

L1	40
L2	41
L	128



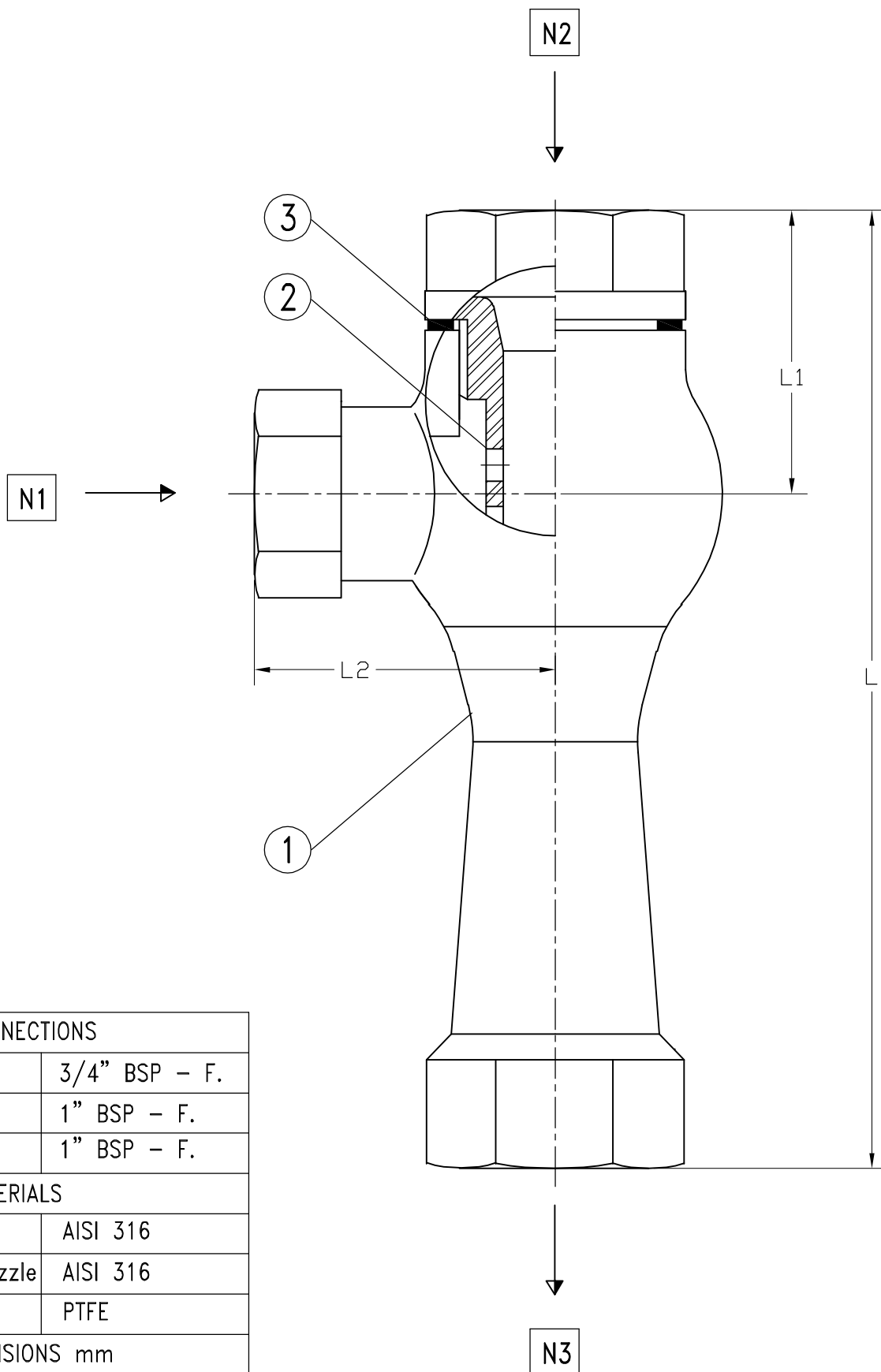
MIR STEAM HEATER

DISEGNO (Drawing) N°

MIR 100

DIMENSIONS AND CONNECTIONS

FOGLIO Sheet	1	DI of	1
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CONNECTIONS

N1	Steam	3/4" BSP - F.
N2	cold water	1" BSP - F.
N3	hot water	1" BSP - F.

MATERIALS

①	Head	AISI 316
②	Condens. nozzle	AISI 316
③	Gasket	PTFE

DIMENSIONS mm

L1	49
L2	52
L	145