

## THERMOSTATIC STEAM TRAPS AND AIR VENTS TH21SS

### DESCRIPTION

The TH21SS series thermostatic steam traps and air vents are specifically designed for use on process equipment such as kettle cookers, sterilizers, food, chemical and laundry equipment.

### MAIN FEATURES

- Modulating discharge.
- Discharges condensate close to steam temperature.
- Thermostats for different sub cooling (5 °C to 30 °C).
- Excellent air discharge.
- Operates on moderate superheated steam.
- Built-in strainer.

USE: Saturated steam.

### AVAILABLE

MODELS: TH21SS – stainless steel.  
TH21SSLC – stainless steel, low capacity.  
TH21/2SS – stainless steel, high capacity.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.  
Flanged EN 1092-1 PN 40.  
Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation recommended, can be installed in any position.  
See IMI - Installation and maintenance instructions.



BODY LIMITING CONDITIONS			
FLANGED CLASS 150 **	FLANGED CLASS 300 **	FLANGED PN 40 *	RELATED TEMP.
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
13,3 bar	34,4 bar	37,9 bar	100 °C
11,1 bar	28,8 bar	31,8 bar	200 °C
10,2 bar	26,6 bar	29,9 bar	250 °C
9,7 bar	25,2 bar	27,6 bar	300 °C

PMO – Max. operating pressure: 21 bar;  
TMO – Max. operating temperature: 250 °C.  
\* Acc. to EN 1092-1:2018. \*\* Acc. to EN 1759-1:2004.  
Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded versions.

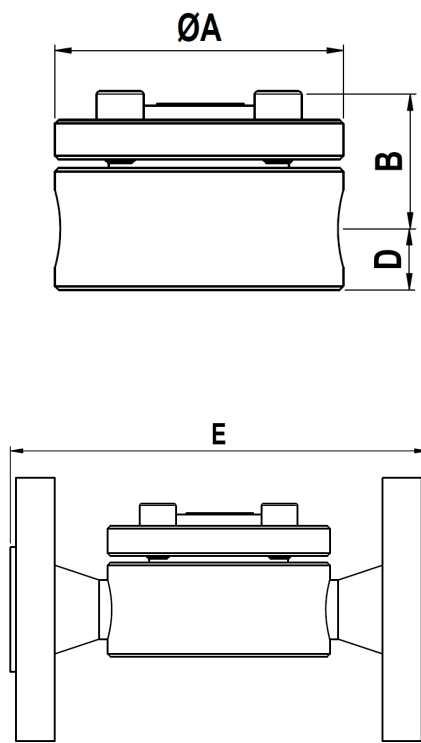
### CE MARKING – GROUP 2 (PED – European Directive)

PN 40	Category
1/2" to 1" – DN 15 to 25	SEP

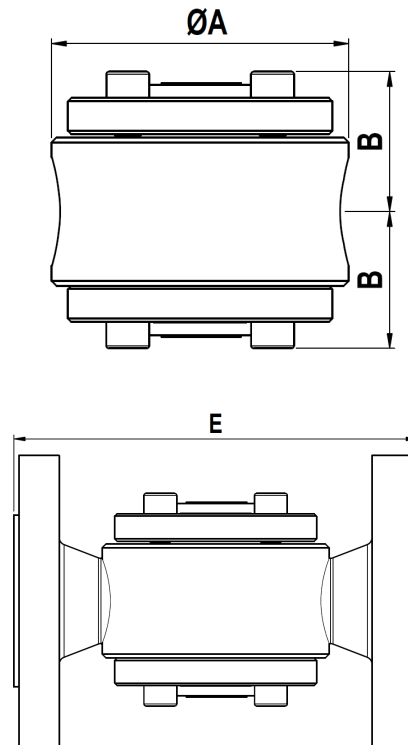
### FLOW RATE CAPACITY (kg/h)

MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)														
		0,2	0,3	0,5	1	1,5	2	3	4	6	8	10	13	15	20	21
TH21SS	1/2" to 1" DN 15 to 25	70	120	140	255	330	385	455	510	600	670	700	720	750	775	795
TH21SSLC	1/2" to 1" DN 15 to 25	45	55	70	95	125	135	180	200	270	315	330	360	370	405	415
TH21/2SS	1" – DN 25	140	240	280	510	660	770	910	1020	1200	1340	1400	1440	1500	1550	1590

Capacities shown refer to condensate at 10 °C below saturated steam temperature (standard type S thermostat).  
Thermostats for 5 °C (type H) and 30 °C (type L) also available. Capacities for cold condensate discharge at 20 °C are two to three times greater.



**TH21SS**



**TH21/2SS (Only DN 25 – 1")**

DIMENSIONS (mm)											
SIZE	THREADED				PN 40		CLASS 150		CLASS 300		
	A	B	D	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)	
1/2" – DN 15	80	35	17	1,8	150	3,3	150	2,8	150	3,6	
3/4" – DN 20	80	37	20	1,9	150	4,1	150	3,2	150	4,8	
1" – DN 25	80	40	23	2,1 *	160	5,1 *	160	4,3 *	160	5,9 *	

\* TH21/2 weighs an additional 0,15 kg.

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316 / 1.4401
2	Cover	AISI 316 / 1.4401
3	* Gasket	Stainless steel / Graphite
4	* Valve seat	AISI 304 / 1.4301
5	* Thermostatic element	Stainless steel
6	* Strainer screen	AISI 304 / 1.4301
7	* Spring	AISI 302 / 1.4300
8	Bolts	Stainless steel A2-70

\* Available spare parts.

