

**BALANCED PRESSURE  
THERMOSTATIC STEAM TRAP  
TSS7**

**DESCRIPTION**

The TSS7 all stainless steel thermostatic steam traps and air vents are specifically designed for use in reactors, sterilizers and distribution lines in clean and pure steam systems. Their small size makes them ideal for use with a wide variety of equipment.

**MAIN FEATURES**

Modulating discharge.  
Excellent air discharge.  
Simple and compact design.

**STANDARD SURFACE FINISH**

Internal wetted parts: ≤ 0,51micron Ra – SF1.  
External: ≤ 0,76 micron Ra – SF3.  
Other surface conditions see IS PV20.00 E – Technical information.  
Ultrasonic cleaning.

**OPTIONS:** Special designs on request.

**USE:** Saturated clean steam.

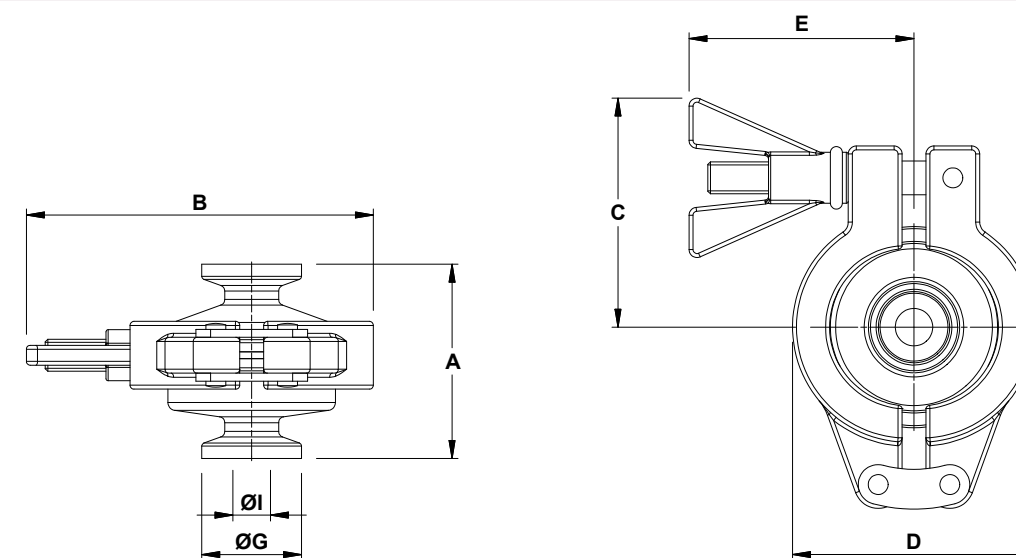
**AVAILABLE MODELS:** TSS7 – clean steam trap.

**SIZES:** 1/2" to 1".

**CONNECTIONS:** Clamp ferrules ASME BPE.  
Others on request.

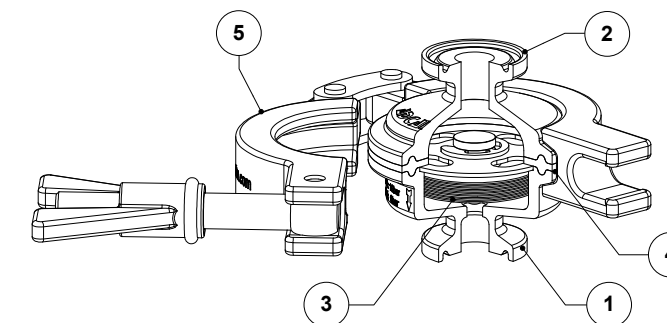
**PACKAGING:** Assembling and packaging in a clean room certified according to ISO 14644-1.  
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

**INSTALLATION:** Vertical installation.  
See IMI – Installation and maintenance instructions.



DIMENSIONS (mm) ASME BPE								
SIZE	A	B	C	D	E	ØG	ØI	WEIGHT (kg)
1/2"	49	87	57,5	61	56,5	25	9,4	0,6
3/4"	49	87	57,5	61	56,5	25	15,75	0,6
1"	53	87	57,5	61	56,5	50,5	22,1	0,7

MATERIALS		
POS. Nº	DESIGNATION	MATERIAL
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Thermostat	AISI 316L / 1.4404
4	* Gasket	PTFE / TFM® Envelope gasket
5	Safety clamp	AISI 316 / 1.4401



\* Available spare parts.  
Remark: FDA / USP Class VI seals certificate on request.

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

PN 10	Category
1/2" to 1"	SEP

**LIMITING CONDITIONS**

PMA – Maximum allowable pressure	10 bar
TMA – Maximum allowable temperature	177 °C
PMO – Maximum operating pressure	6 bar
TMO – Maximum operating temperature	165 °C

FLOW RATE CAPACITY (kg/h)										
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)								
		0,2	0,3	0,5	1	1,5	2	3	4	6
TSS7 (A)	1/2" to 1"	73	92	177	269	334	468	730	792	900
TSS7 (B)	1/2" to 1"	398	475	574	656	745	820	944	1190	1436

A – Condensate discharge at 5 °C below saturation temperature; B – Cold water capacity around 20 °C.

**BALANCED PRESSURE  
THERMOSTATIC STEAM TRAP  
TSS6**

**DESCRIPTION**

The TSS6 all stainless steel thermostatic steam traps and air vents are specifically designed for use in reactors, sterilizers and distribution lines in clean and pure steam systems. Their small size makes them ideal for use with a wide variety of equipment.

**MAIN FEATURES**

Modulating discharge.  
Excellent air discharge.  
Simple and compact design.

**STANDARD SURFACE FINISH**

Internal wetted parts: ≤ 0,51micron Ra – SF1.  
External: ≤ 0,76 micron Ra – SF3.  
Other surface conditions see IS PV20.00 E – Technical information.  
Ultrasonic cleaning.

**OPTIONS:** Special designs on request.

**USE:** Saturated clean steam.

**AVAILABLE MODELS:** TSS6 – clean steam trap.

**SIZES:** 1/2" to 1 1/2"; DN 08 to DN 25.

**CONNECTIONS:** ASME BPE, DIN and ISO clamp ferrules or tube weld (ETO) ends.  
Others on request.

**PACKAGING:** Assembling and packaging in a clean room certified according to ISO 14644-1.  
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

**INSTALLATION:** Vertical installation.  
See IMI – Installation and maintenance instructions.

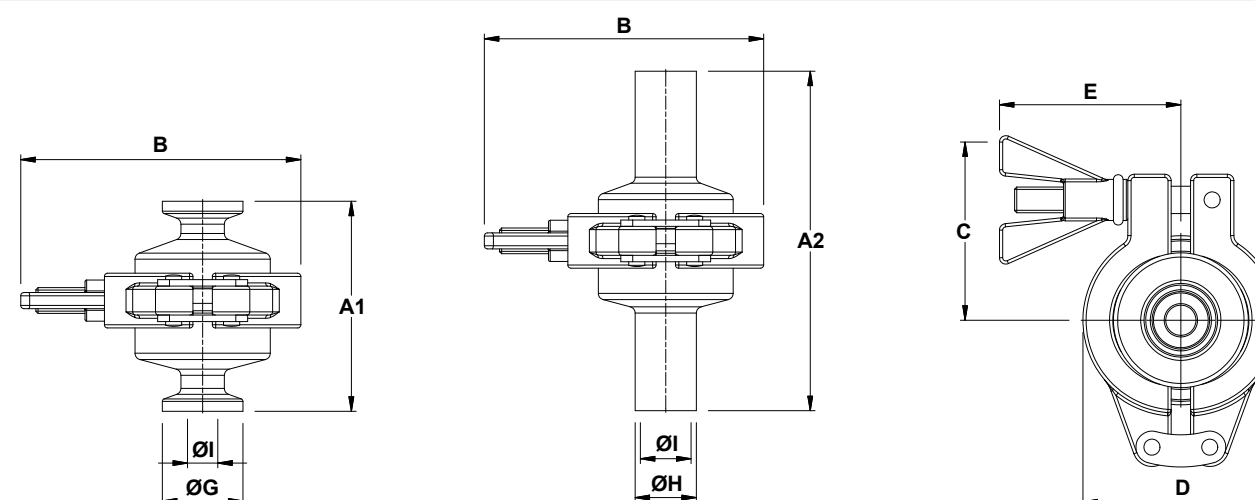


CE MARKING – GROUP 2 (PED – European Directive)	
PN 10	Category
1/2" to 1 1/2" – DN 08 to 25	SEP

LIMITING CONDITIONS	
PMA – Maximum allowable pressure	10 bar
TMA – Maximum allowable temperature	177 °C
PMO – Maximum operating pressure	6 bar
TMO – Maximum operating temperature	165 °C

FLOW RATE CAPACITY (kg/h)										
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)								
		0,2	0,3	0,5	1	1,5	2	3	4	6
TSS6 (A)	1/2" to 1 1/2" – DN 08 to 25	320	380	410	550	680	909	1081	1199	1403
TSS6 (B)	1/2" to 1 1/2" – DN 08 to 25	470	495	518	697	792	1026	1231	1436	1682

A – Condensate discharge at 5 °C below saturation temperature; B – Cold water capacity around 20 °C.



DIMENSIONS (mm) ASME BPE										
SIZE	A1	A2	B	C	D	E	ØG	ØH	ØI	WEIGHT (kg)
1/2"	65	95	87	57,5	61	56,5	25	12,7	9,4	0,7
3/4"	65	95	87	57,5	61	56,5	25	19,05	15,75	0,7
1"	65	95	87	57,5	61	56,5	50,5	25,4	22,1	0,8
1 1/2"	65	NA	87	57,5	61	56,5	50,5	NA	34,8	0,8

DIMENSIONS (mm) DIN										
SIZE	A1	A2	B	C	D	E	ØG	ØH	ØI	WEIGHT (kg)
DN 10	65	95	87	57,5	61	56,5	34	13	10	0,7
DN 15	65	95	87	57,5	61	56,5	34	19	16	0,7
DN 20	65	95	87	57,5	61	56,5	34	23	20	0,8
DN 25	65	95	87	57,5	61	56,5	50,5	29	26	0,8

Remarks: Clamp ferrules according to DIN 32676-A; Tube weld (ETO) according to DIN 11866-A (DIN 11850-2).

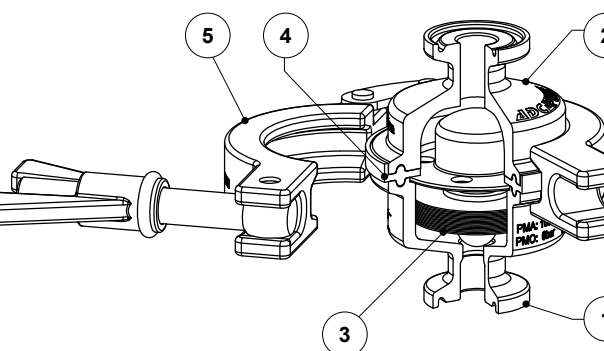
DIMENSIONS (mm) ISO										
SIZE	A1	A2	B	C	D	E	ØG	ØH	ØI	WEIGHT (kg)
DN 08	65	95	87	57,5	61	56,5	25	13,5	10,3	0,7
DN 10	65	95	87	57,5	61	56,5	25	17,2	14	0,7
DN 15	65	95	87	57,5	61	56,5	50,5	21,3	18,1	0,8
DN 20	65	95	87	57,5	61	56,5	50,5	26,9	23,7	0,8
DN 25	65	95	87	57,5	61	56,5	50,5	33,7	29,7	0,7

Remarks: Clamp ferrules according to DIN 32676-B; Tube weld (ETO) according to DIN 11866-B (ISO 1127).

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Thermostat	AISI 316L / 1.4404
4	* Gasket	PTFE / TFM® Envelope gasket
5	Safety clamp	AISI 316 / 1.4401

\* Available spare parts.

Remark: FDA / USP Class VI seals certificate on request.



**BALANCED PRESSURE  
THERMOSTATIC STEAM TRAP  
TSS6H**

**DESCRIPTION**

The TSS6H all stainless steel thermostatic steam traps and air vents are specifically designed for use in reactors, sterilizers and distribution lines in clean and pure steam systems.

Their small size makes them ideal for use with a wide variety of equipment.

The thermostatic element is very sensitive and designed to open with a minimum sub-cooling of around 2 °C related to the saturated steam temperature.

**MAIN FEATURES**

- Modulating discharge.
- Excellent air discharge.
- Simple and compact design.

**STANDARD SURFACE FINISH**

- Internal wetted parts: ≤ 0,51micron Ra – SF1.
- External: ≤ 0,76 micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

**OPTIONS:** Special designs on request.

**USE:** Saturated clean steam.

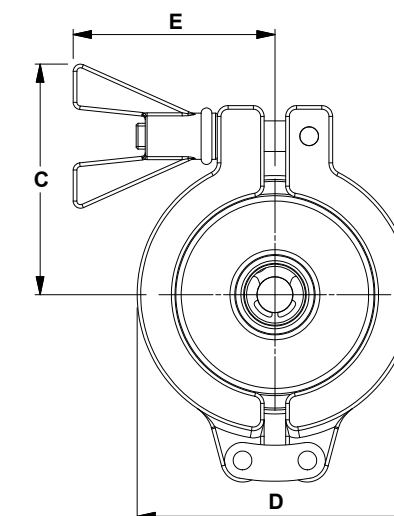
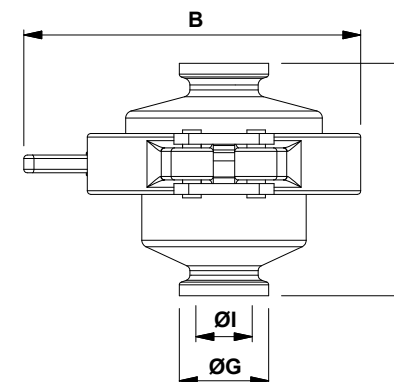
**AVAILABLE MODELS:** TSS6H – high capacity clean steam trap.

**SIZES:** 1/2" to 1 1/2".

**CONNECTIONS:** ASME BPE clamp ferrules. Others on request.

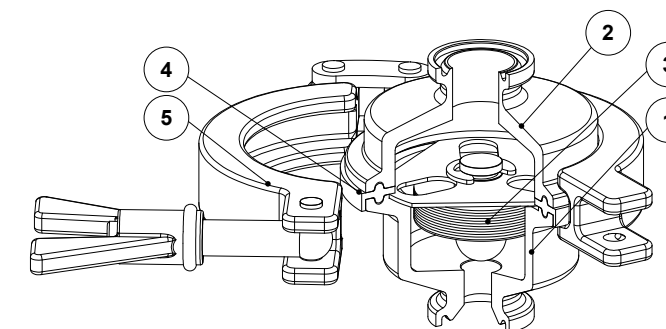
**PACKAGING:** Assembling and packaging in a clean room certified according to ISO 14644-1. The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

**INSTALLATION:** Vertical installation. See IMI – Installation and maintenance instructions.



DIMENSIONS (mm) ASME BPE								
SIZE	A	B	C	D	E	ØG	ØI	WEIGHT (kg)
1/2"	65	94	64	76,5	56	25	9,4	0,7
3/4"	65	94	64	76,5	56	25	15,75	0,7
1"	65	94	64	76,5	56	50,5	22,1	0,8
1 1/2"	65	94	64	76,5	56	50,5	34,8	0,8

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Thermostat	AISI 316L / 1.4404
4	* Gasket	PTFE / TFM® Envelope gasket
5	Safety clamp	AISI 316 / 1.4401



\* Available spare parts.  
Remark: FDA / USP Class VI seals certificate on request.

CE MARKING – GROUP 2 (PED – European Directive)	
PN 10	Category
1/2" to 1 1/2"	SEP

LIMITING CONDITIONS	
PMA – Maximum allowable pressure	10 bar
TMA – Maximum allowable temperature	177 °C
PMO – Maximum operating pressure	6 bar
TMO – Maximum operating temperature	165 °C

FLOW RATE CAPACITY (kg/h)											
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)									
		0,2	0,3	0,5	1	1,5	2	3	4	5	6
TSS6H (A)	1/2"	320	380	410	550	680	909	1081	1199	1372	1403
TSS6H (B)	1/2"	912	980	1079	1641	1964	2216	2831	3242	3611	3693
TSS6H (A)	3/4"	605	640	710	900	1096	1284	1801	2000	2330	2510
TSS6H (B)	3/4"	1186	1294	1354	1970	2372	2737	3312	3845	4227	4584
TSS6H (A)	1" and 1 1/2"	780	810	915	1188	1412	1840	2305	2970	3494	3962
TSS6H (B)	1" and 1 1/2"	1291	1378	1477	2052	2531	2873	3529	4104	4494	4966

A – Condensate discharge at 5 °C below saturation temperature; B – Cold water capacity around 20 °C.



**BALANCED PRESSURE  
THERMOSTATIC STEAM TRAP  
TSS6A**

**DESCRIPTION**

The TSS6A all stainless steel thermostatic steam traps and air vents are specifically designed for use in reactors, sterilizers and distribution lines in clean and pure steam systems. Their small size makes them ideal for use with a wide variety of equipment.

**MAIN FEATURES**

Modulating discharge.  
Excellent air discharge.  
Simple and compact design.

**STANDARD SURFACE FINISH**

Internal wetted parts: ≤ 0,51micron Ra – SF1.  
External: ≤ 0,76 micron Ra – SF3.  
Other surface conditions see IS PV20.00 E – Technical information.  
Ultrasonic cleaning.

**OPTIONS:** Special designs on request.

**USE:** Saturated clean steam.

**AVAILABLE MODELS:**  
TSS6A – angle inlet and outlet.  
TSS6AI – angle inlet, straight outlet.  
TSS6AO – straight inlet, angle outlet.

**SIZES:** 1/2" and 3/4".

**CONNECTIONS:** ASME BPE clamp ferrules.  
Others on request.

**PACKAGING:** Assembling and packaging in a clean room certified according to ISO 14644-1. The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

**INSTALLATION:** Vertical installation. See IMI.



**TSS6A**



**TSS6AI**



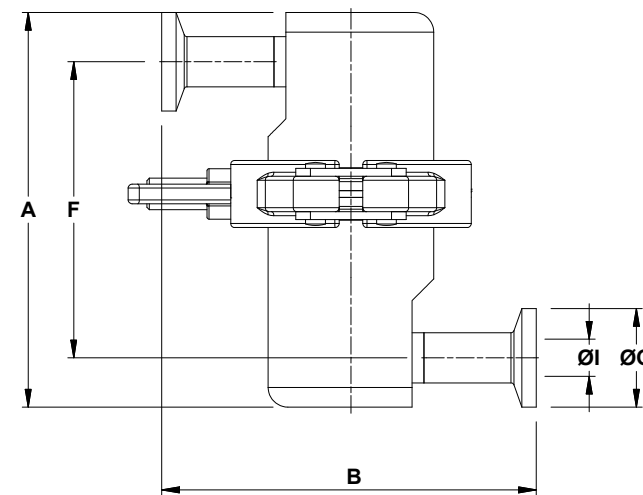
**TSS6AO**

CE MARKING – GROUP 2 (PED – European Directive)	
PN 10	Category
1/2" and 3/4"	SEP

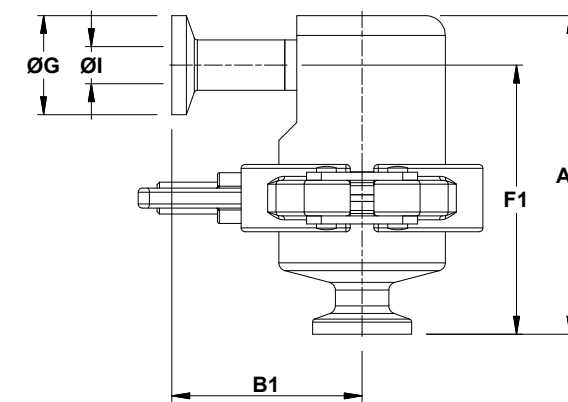
LIMITING CONDITIONS	
PMA – Maximum allowable pressure	10 bar
TMA – Maximum allowable temperature	177 °C
PMO – Maximum operating pressure	6 bar
TMO – Maximum operating temperature	165 °C

FLOW RATE CAPACITY (kg/h)		DIFFERENTIAL PRESSURE (bar)									
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)									
		0,2	0,3	0,5	1	1,5	2	3	4	6	
TSS6A (A) *	1/2" and 3/4"	320	380	410	550	680	909	1081	1199	1403	
TSS6A (B) *	1/2" and 3/4"	470	495	518	697	792	1026	1231	1436	1682	

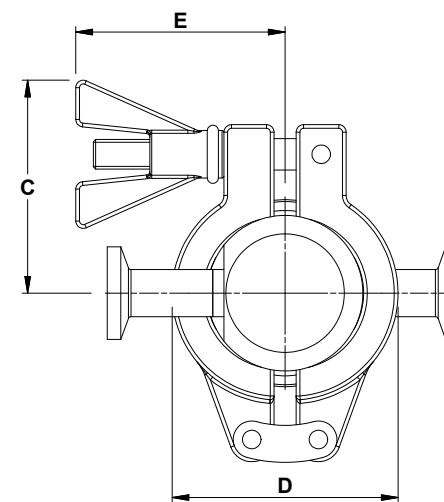
A – Condensate discharge at 5 °C below saturation temperature; B – Cold water capacity around 20 °C; \* Also valid for TSS6AI and TSS6AO.



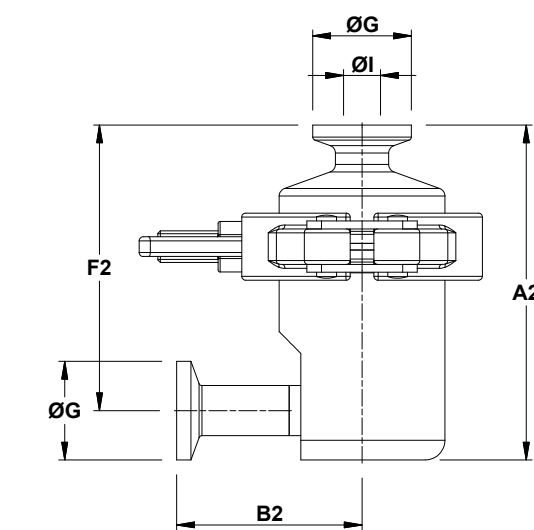
**TSS6A**



**TSS6AI**



**TSS6A**



**TSS6AO**

DIMENSIONS (mm) ASME BPE															
SIZE	A	A1	A2	B	B1	B2	C	D	E	F	F1	F2	ØG	ØI	WGT (kg)
1/2"	100	80,5	85	95	48	47	57,5	61	56,5	75	68	72,5	25	9,4	1,2
3/4"	100	80,5	85	95	48	47	57,5	61	56,5	75	68	72,5	25	15,75	1,2

MATERIALS		
POS. Nº	DESIGNATION	MATERIAL
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Thermostat	AISI 316L / 1.4404
4	* Gasket	PTFE / TFM® Envelope gasket
5	Safety clamp	AISI 316 / 1.4401

\* Available spare parts.

Remark: FDA / USP Class VI seals certificate on request.

