DOUGLAS ITALIA

INVERTED BUCKET STEAM TRAPS

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- IR
- IT
- IA A105
- IA F304
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- IK
- IF 304
- IFS
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GO BACK

DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IQ

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

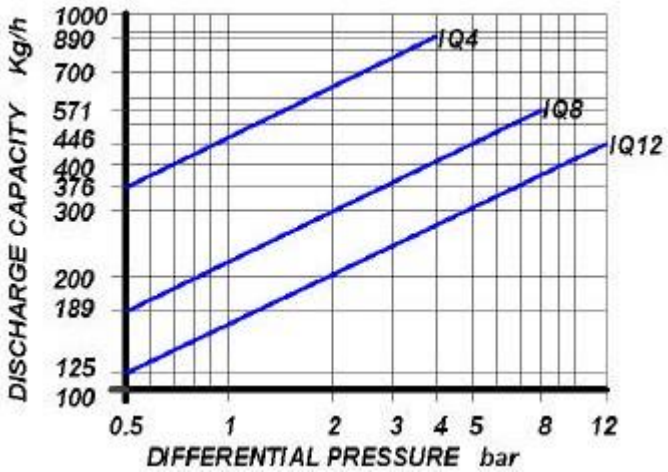
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



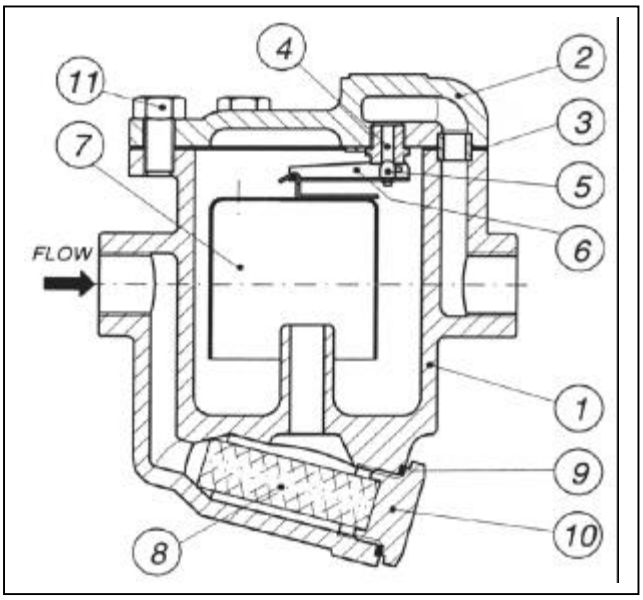
Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

SIZES
½" – ¾"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Flanged (ON REQUEST)	ANSI B 16.5 / UNI / DIN

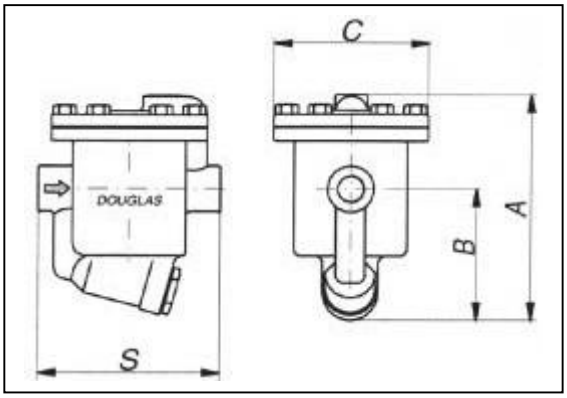
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		DIN PN 16
PMA: Max allowable pressure		16 bar
TMA: max allowable temperature		300°C
PMO: max working pressure		12 bar
TMO: max working temperature		230°C
Max. Differential pressure	(IQ 4)	4 bar
Max. Differential pressure	(IQ 8)	8 bar
Max. Differential pressure	(IQ 12)	12 bar

INVERTED BUCKET STEAM TRAPS
IQ



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	GG 25	
2	Cover	GG 25	
3	Gasket	CAF	X
4	Seat	AISI 410	X
5	Valve	AISI 410	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X
8	Screen	AISI 304	X
9	Gasket	316 / GRAPHITE	X
10	Plug	ASTM A 105	
11	Bolts	B 7	

Size (inches)	S	A	B	C	Weight (Kg)
½"	130	193	109	96	3.9
¾"	130	193	109	96	3.9



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to form and preservate the internal water seal.

HOW TO SERVICE

Remove cover (2) by undoing bolts (11) un hook the bucket (7) from the valve lever (6) unscrew the seat (4) from the cover (2) screw in the new one, hooking the bucket back (7). To service the strainer, unscrew cap (10), withdraw screen (8) and clean or replace it. Screwing the cap back in place, always fit a new gasket (9).

How to order: i.e. *IQ 4 ¾" BSP*

DOUGLAS ITALIA S.p.A **Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)**

OFFICIAL WEB SITE: www.douglas-italia.com

DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IR

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

MAIN FEATURES

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APPLICATIONS

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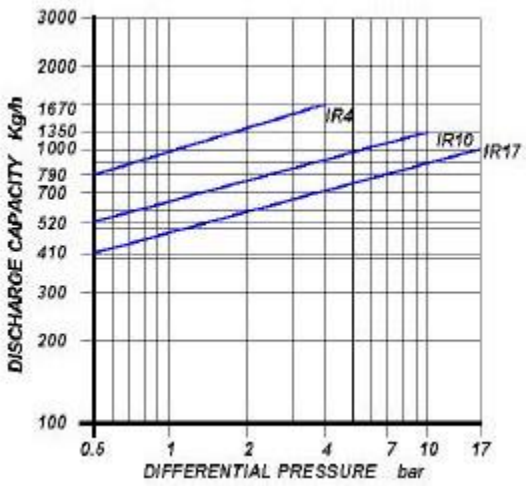
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



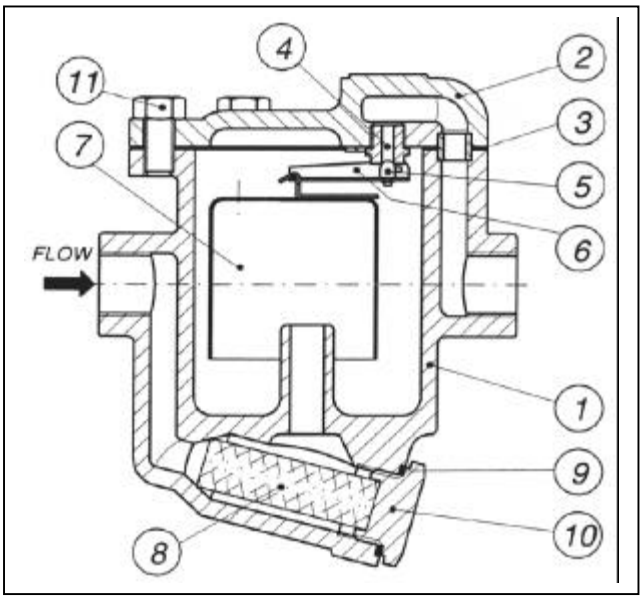
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

SIZES
¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP)
Flanged (ON REQUEST)	ANSI B 16.5 / UNI / DIN

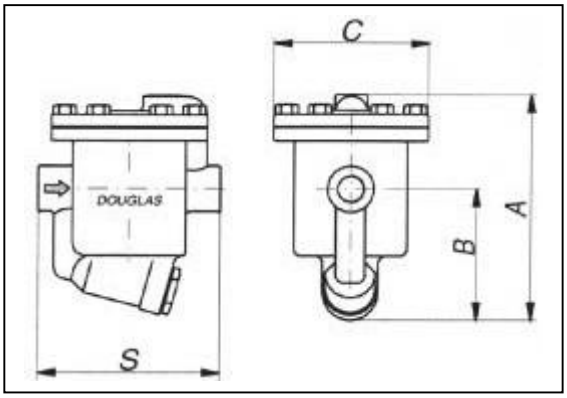
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		DIN PN 25
PMA: Max allowable pressure		25 bar
TMA: max allowable temperature		300°C
PMO: max working pressure		17 bar
TMO: max working temperature		250°C
Max. Differential pressure	(IR 4)	4 bar
Max. Differential pressure	(IR 10)	10 bar
Max. Differential pressure	(IR 17)	17 bar

INVERTED BUCKET STEAM TRAPS
IR



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	GGG40 (DIN 1693)	
2	Cover	GGG40 (DIN 1693	
3	Gasket	CAF	X
4	Seat	AISI 410	X
5	Valve	AISI 410	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X
8	Screen	AISI 304	X
9	Gasket	316 / GRAPHITE	X
10	Plug	ASTM A 105	
11	Bolts	8.8 (UNI 3704-74)	

Size (inches)	S	A	B	C	Weight (Kg)
¾"	175	219	127	150	9
1"	175	219	127	150	9



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to form and preservate the internal water seal.

HOW TO SERVICE

Remove cover (2) by undoing bolts (11) un hook the bucket (7) from the valve lever (6) unscrew the seat (4) from the cover (2) screw in the new one, hooking the bucket back (7). To service the strainer, unscrew cap (10), withdraw screen (8) and clean or replace it. Screwing the cap back in place, always fit a new gasket (9).

How to order: i.e. *IR 10 1" BSP*

DOUGLAS ITALIA S.p.A ***Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)***

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IT

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

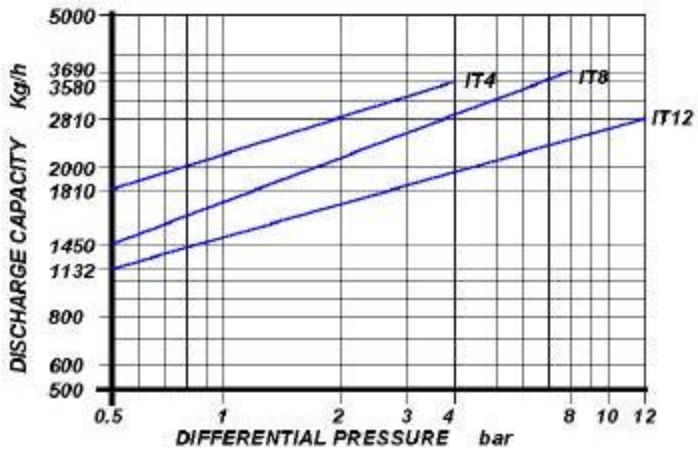
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

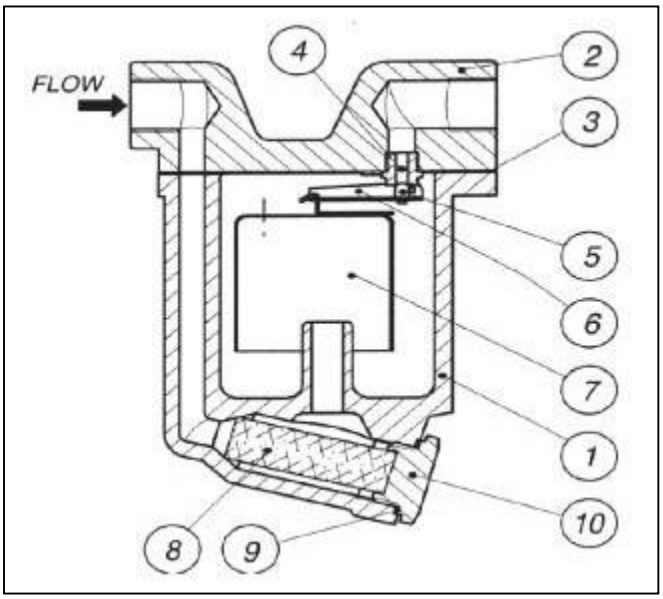
SIZES
1 ½"

CONNECTIONS	
Screwed	BS 21 (BSP)
Flanged (ON REQUEST)	ANSI B 16.5 / UNI / DIN

LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		DIN PN 16
PMA: Max allowable pressure		16 bar
TMA: max allowable temperature		250°C
PMO: max working pressure		12 bar
TMO: max working temperature		230°C
Max. Differential pressure	(IT 4)	4 bar
Max. Differential pressure	(IT 8)	8 bar
Max. Differential pressure	(IT 12)	12 bar

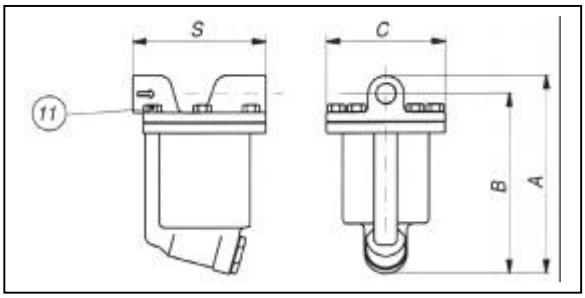
INVERTED BUCKET STEAM TRAPS

IT



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	G 25 (UNI 5007)	
2	Cover	G 25 (UNI 5007)	
3	Gasket	GRAPHITE	X
4	Seat	AISI 304	X
5	Valve	AISI 420	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X
8	Screen	AISI 304	X
9	Gasket	GRAPHITE	X
10	Plug	FE50 (UNI 5332)	
11	Bolts	8 G	

Size (inches)	S	A	B	C	Weight (Kg)
1 ½"	224	379	344	185	23



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to form and preservate the internal water seal.

HOW TO SERVICE

Remove cover (2) by undoing bolts (11) un hook the bucket (7) from the valve lever (6) unscrew the seat (4) from the cover (2) screw in the new one, hooking the bucket back (7). To service the strainer, unscrew cap (10), withdraw screen (8) and clean or replace it. Screwing the cap back in place, always fit a new gasket (9).

How to order: i.e. *IT 8 1 ½" BSP*

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IA A105

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

MAIN FEATURES

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APPLICATIONS

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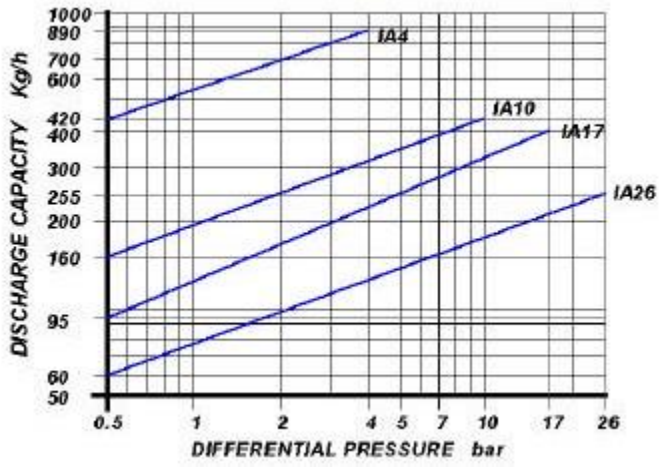
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

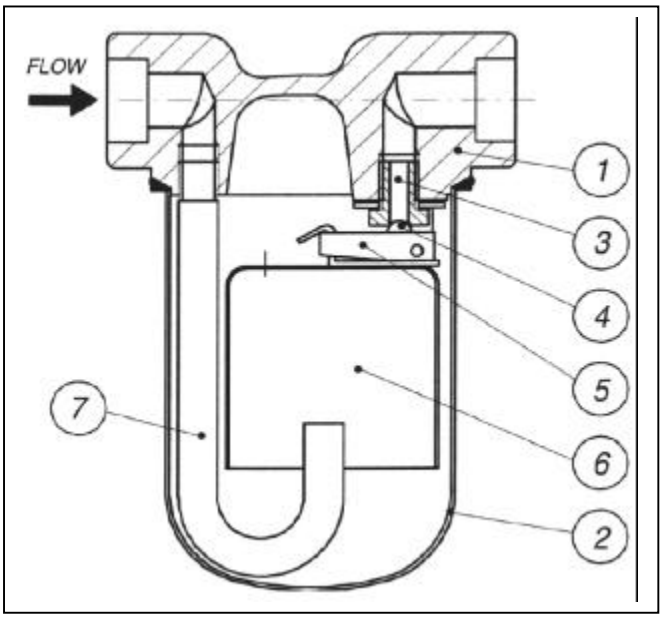
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)	
Steam Trap rating	ANSI 300
PMA: Max allowable pressure	50 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	26 bar
TMO: max working temperature	380°C
Max. Differential pressure (IA 4)	4 bar
Max. Differential pressure (IA 10)	10 bar
Max. Differential pressure (IA 17)	17 bar
Max. Differential pressure (IA 26)	26 bar

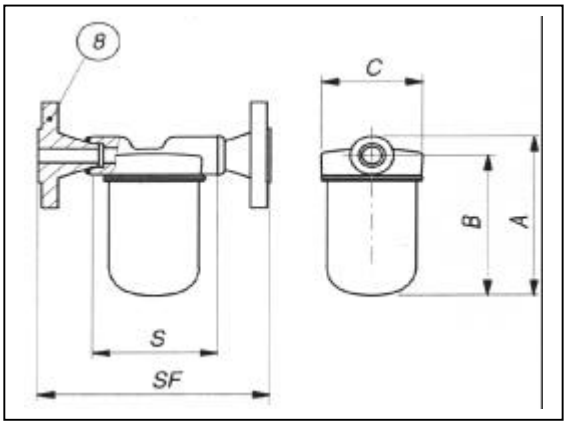
INVERTED BUCKET STEAM TRAPS

IA A105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A105	
2	Body	AISI 304	
3	Seat	AISI 410	
4	Valve	AISI 410	
5	Lever	AISI 304	
6	Bucket	AISI 304	
7	Tube	AISI 304	
8	Flange	ASTM A105	

Flanged													
Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	102	145	127	80	1.5	168	3.1	162	2.9	182	3.1	192	3.3
¾"	102	145	127	80	1.5	172	3.8	172	3.1	192	4.3	202	4.7
1"	164	145	127	80	1.8	182	4	214	3.5	226	4.6	239	5.1



INSTALLATION

The stream trap must always be fitted with connections in horizontal position and with the body below them. Thist type of trap cannot operate in any other position. The steam trap cannot operate without the initial and preservation of the internal water seal. For this reason the trap should be always fitted below the drain point. When this is not possible a check valve should be fitted at the trap inlet. This procedure is also advisable when operating with superheated steam. In some cases it may be necessary to fill the steam trap with water before steam is turned on.

How to order: i.e. *IA A105 10 ½" NPT*

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IA F304

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

MAIN FEATURES

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APPLICATIONS

- *Heater batteries*
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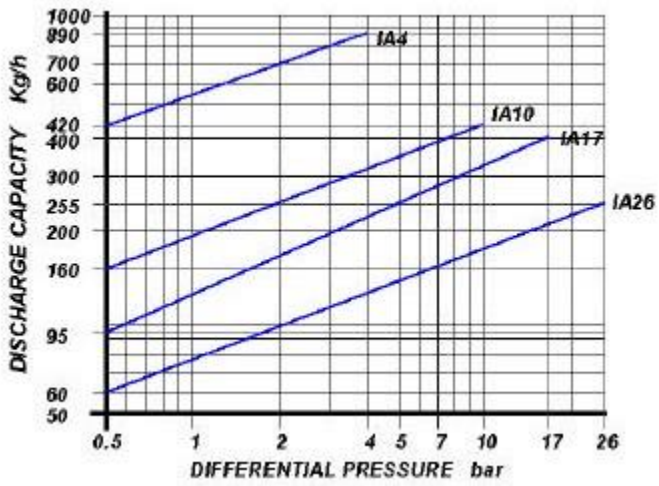
DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

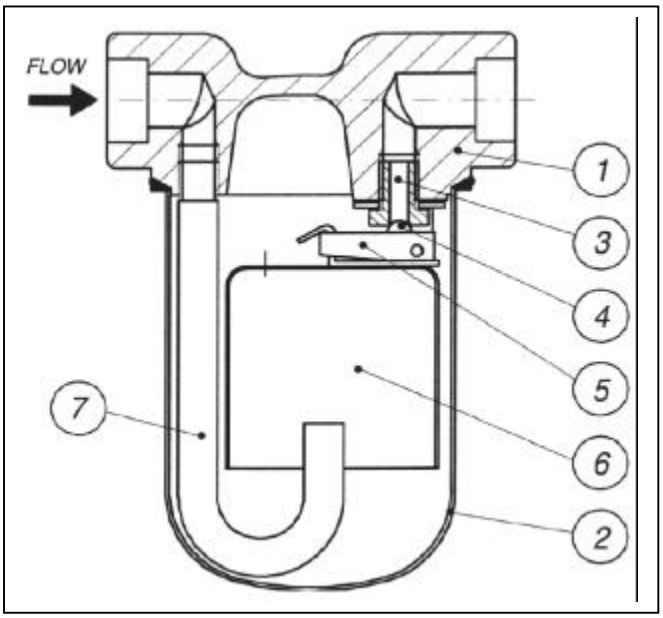
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		500°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IA 4)	4 bar
Max. Differential pressure	(IA 10)	10 bar
Max. Differential pressure	(IA 17)	17 bar
Max. Differential pressure	(IA 26)	26 bar

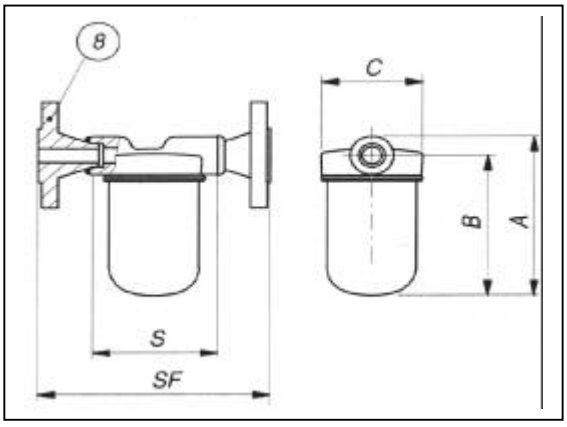
INVERTED BUCKET STEAM TRAPS

IA F304



POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A182 F304	
2	Body	AISI 304	
3	Seat	AISI 410	
4	Valve	AISI 410	
5	Lever	AISI 304	
6	Bucket	AISI 304	
7	Tube	AISI 304	
8	Flange	ASTM A182 F304	

Flanged													
Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	102	145	127	80	1.5	168	3.1	162	2.9	182	3.1	192	3.3
¾"	102	145	127	80	1.5	172	3.8	172	3.1	192	4.3	202	4.7
1"	164	145	127	80	2.5	182	4	213	3.5	226	4.6	238	5.1



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How to order: i.e. *IA F304 10 ½" NPT*

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INVERTED BUCKET STEAM TRAPS
IB A105

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APPLICATIONS

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- *Turbines*
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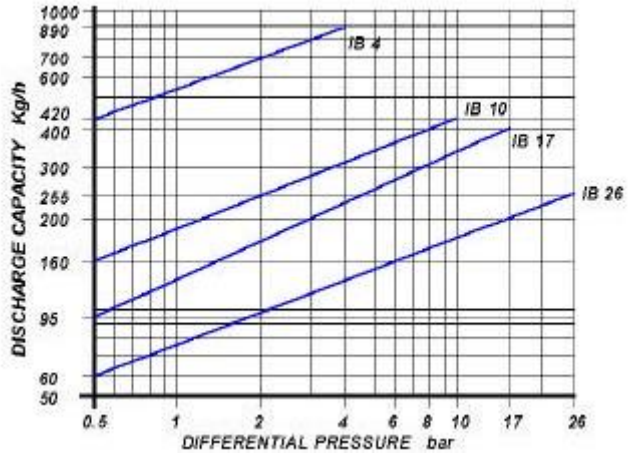
DISCHARGE CAPACITY



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Safety factor = 1.2 – 1.5

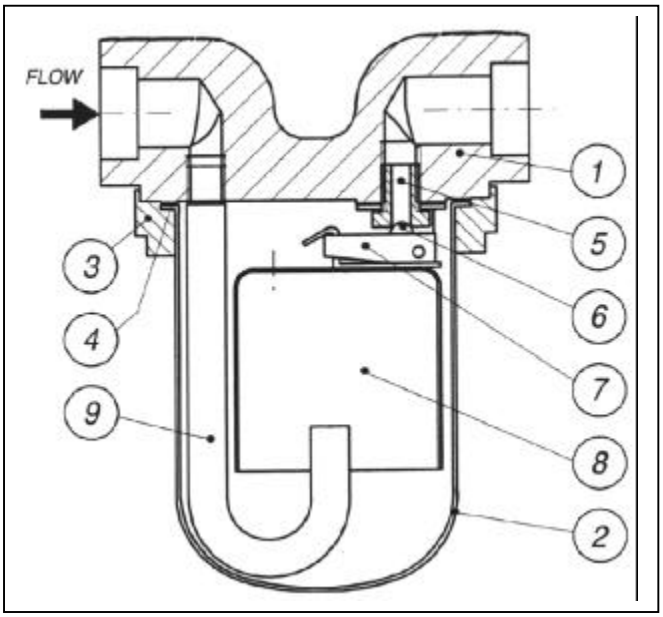
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		420°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IB 4)	4 bar
Max. Differential pressure	(IB 10)	10 bar
Max. Differential pressure	(IB 17)	17 bar
Max. Differential pressure	(IB 26)	26 bar

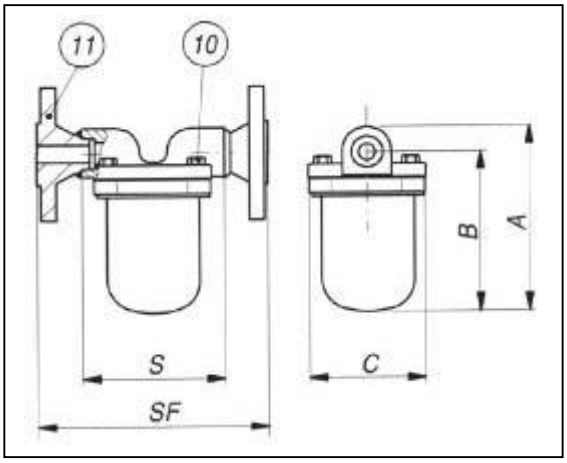
INVERTED BUCKET STEAM TRAPS

IB A105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A 105	
2	Body	AISI 304	
3	Flange	ASTM A 105	
4	Gasket	CAF	X
5	Seat	AISI 410	X
6	Valve	AISI 410	X
7	Lever	AISI 304	X
8	Bucket	AISI 304	X
9	Tube	AISI 304	
10	Bolts	ASTM A 193 B 7	
11	Flange	ASTM A 105	

Flanged													
Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	110	148	128	102	2.5	176	4.1	170	3.9	190	4.1	200	4.3
¾"	110	148	128	102	2.5	180	4.8	180	4.1	200	5.3	210	5.7
1"	172	148	128	102	3	190	5.7	221	5.7	234	7	247	8.2



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in horizontal position, with the trap installed below the drain point in order to form and preservate the internal water seal.

HOW TO SERVICE

Remove cover (1) by undoing bolts (10) un hook the bucket (8) from the valve lever (7) unscrew the seat (5) from the cover (1) screw in rhe new one, hooking the bucket back (8).

How to order: i.e. *IB A105 26 ½" 300 RF*

DOUGLAS ITALIA S.p.A Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)

OFFICIAL WEB SITE: www.douglas-italia.com

DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IB F304

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

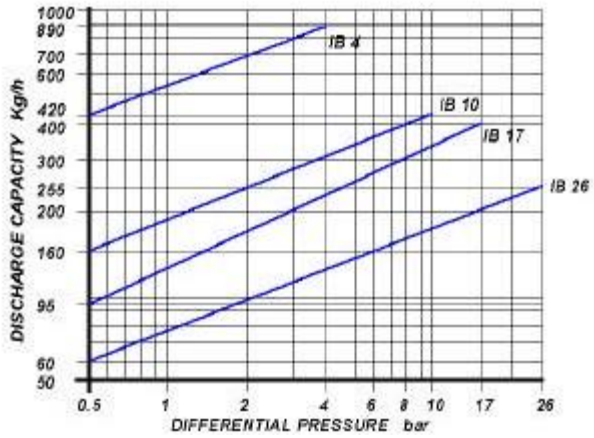
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

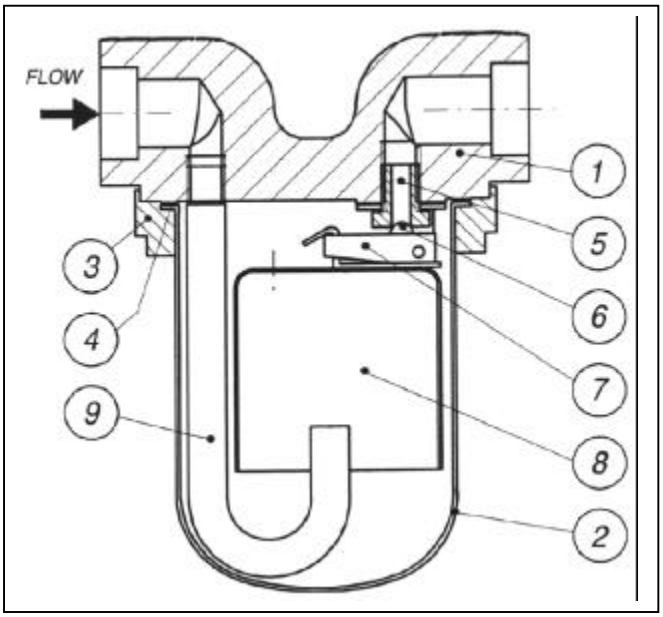
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		500°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IB 4)	4 bar
Max. Differential pressure	(IB 10)	10 bar
Max. Differential pressure	(IB 17)	17 bar
Max. Differential pressure	(IB 26)	26 bar

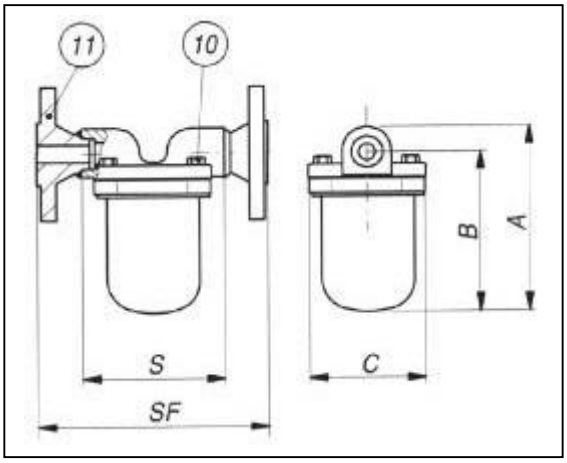
INVERTED BUCKET STEAM TRAPS

IB F304



POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A182 F304	
2	Body	AISI 304	
3	Flange	ASTM A182 F304	
4	Gasket	CAF	X
5	Seat	AISI 410	X
6	Valve	AISI 410	X
7	Lever	AISI 304	X
8	Bucket	AISI 304	X
9	Tube	AISI 304	
10	Bolts	ASTM A 193 B 7	
11	Flange	ASTM A182 F304	

Flanged													
Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	110	148	128	102	2.5	176	4.1	170	3.9	190	4.1	200	4.3
¾"	110	148	128	102	2.5	180	4.8	180	4.1	200	5.3	210	5.7
1"	172	148	128	102	3	190	5.7	221	5.7	234	7	247	8.2



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in horizontal position, with the trap installed below the drain point in order to form and preservate the internal water seal.

HOW TO SERVICE

Remove cover (1) by undoing bolts (10) un hook the bucket (8) from the valve lever (7) unscrew the seat (5) from the cover (1) screw in rhe new one, hooking the bucket back (8).

How to order: i.e. *IB F304 26 ½" 300 RF*

DOUGLAS ITALIA S.p.A Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IK

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

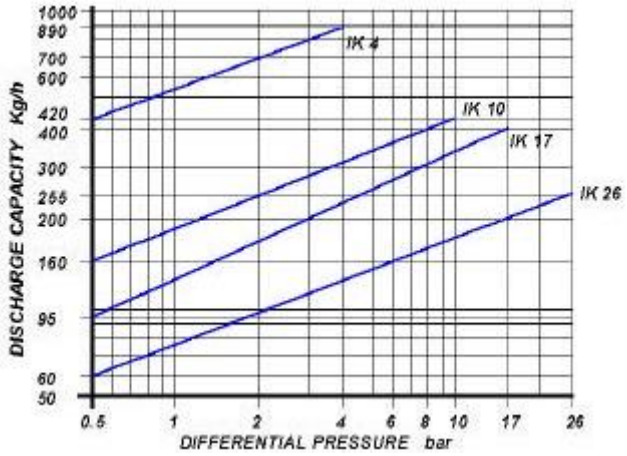
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



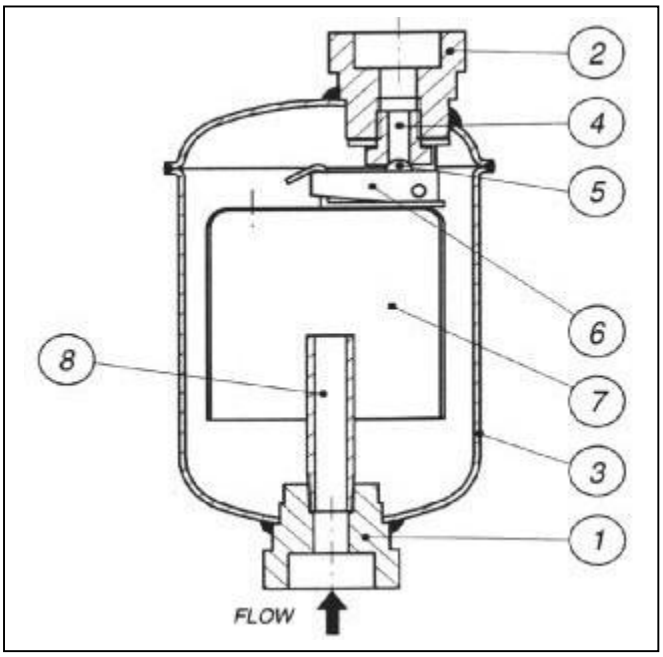
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

SIZES
½" – ¾"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI B 16.5 / UNI/DIN

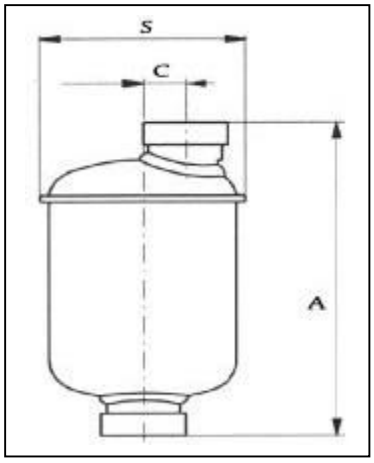
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		500°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IK 4)	4 bar
Max. Differential pressure	(IK 10)	10 bar
Max. Differential pressure	(IK 17)	17 bar
Max. Differential pressure	(IK 26)	26 bar

INVERTED BUCKET STEAM TRAPS
IK



POS.	DESCRIPTION	MATERIALS	SPARES
1	Inlet coupoling	AISI 304	
2	Outlet coupoling	AISI 304	
3	Body	AISI 304	
4	Seat	AISI 410	
5	Valve	AISI 410	
6	Lever	AISI 304	
7	Bucket	AISI 304	
8	Tube	AISI 304	

Size (inches)	S	A	C	Weight (Kg)
½"	76	144	16	0.9
¾"	76	144	16	0.9



INSTALLATION

The trap must be installed with the body upright so that the bucket is rises and falls vertically. The inlet should be at the bottom with the trap installed below the drain point so that a water seal can be maintained around the open end of the bucket. When is not possible a check valve should be fitted at the trap inlet. This procedure is also advisable when operating with superheated steam.

How to order: i.e. IK 10 ½" NPT

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IF 304 360° CONNECTIONS

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

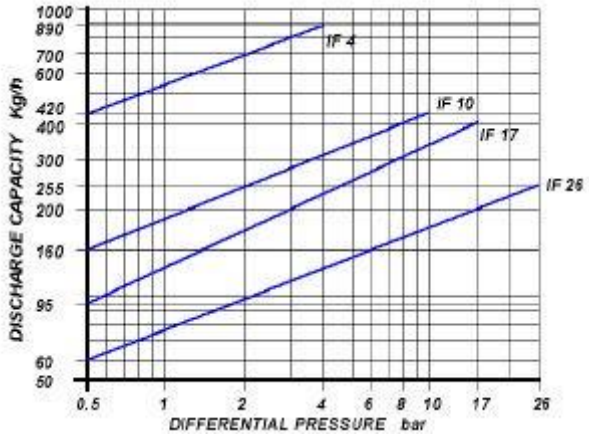
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



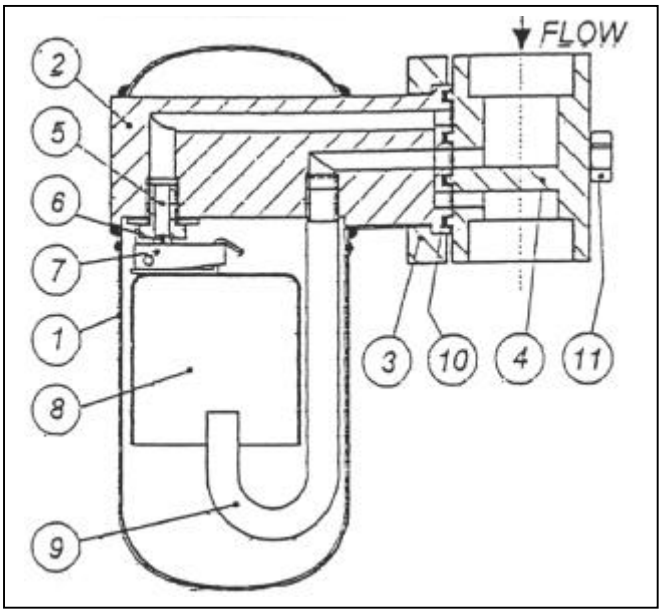
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

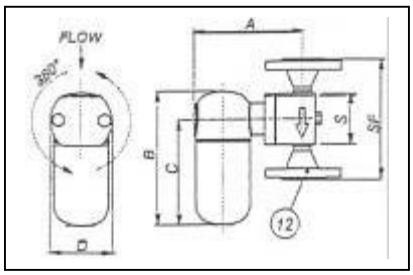
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		500°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IF 4)	4 bar
Max. Differential pressure	(IF 10)	10 bar
Max. Differential pressure	(IF 17)	17 bar
Max. Differential pressure	(IF 26)	26 bar

INVERTED BUCKET STEAM TRAPS
IF 304 360° CONNECTIONS



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	AISI 304	
2	Cover	ASTM A182 F304	
3	Flange	ASTM A182 F304	
4	Connector	ASTM A182 F304	
5	Seat	AISI 410	X
6	Valve	AISI 410	X
7	Lever	AISI 304	X
8	Bucket	AISI 304	X
9	Tube	AISI 304	
10	Gasket	316 / GRAPHITE	X
11	Bolts	ASTM A193 B8	
12	Flange	ASTM A182 F304	

Flanged														
Size (inches)	S	A	B	C	D	Weight (Kg)	UNI-DIN PN25-40		150#		300#		600#	
							SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	60	140	174	129	70	3	130	4.4	120	4.4	140	4.6	150	4.8
¾"	60	140	174	129	70	3	132	4.6	130	4.6	150	5.8	160	6.2
1"	68	142	174	129	80	3.8	138	6	148	6	158	7.2	178	7.6



INSTALLATION

The pipeline can be installed in either horizontal or vertical pipework. The maiting flange on the IF 304 trap is free rotate 360°. The steam trap should be fitted with the cover above the centre line of the trap. Ensure inner and outher gaskets are in place and secure trap to pipeline connector using two connectors screws.

How to order: i.e. *IF 304 10 ½" NPT*

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS

IFS 360° CONNECTIONS

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

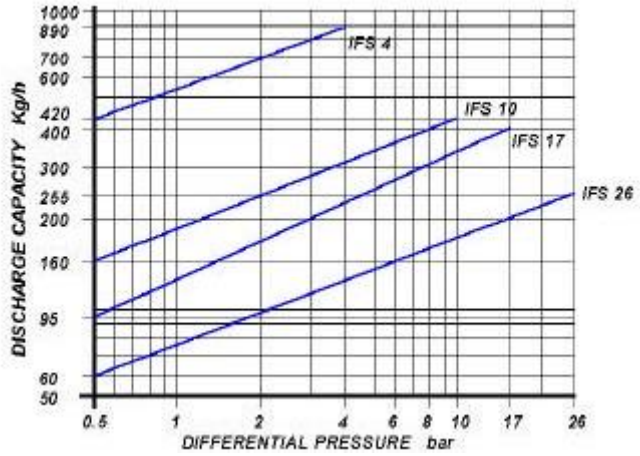
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



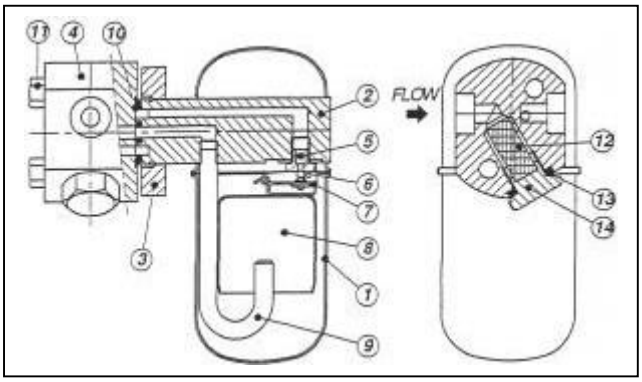
Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

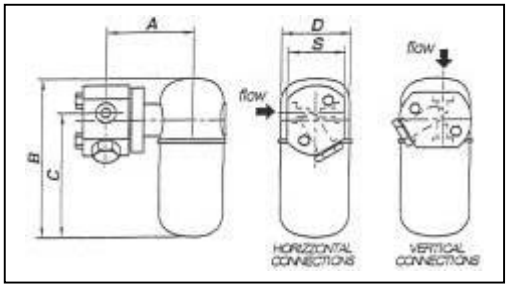
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 300
PMA: Max allowable pressure		50 bar
TMA: max allowable temperature		500°C
PMO: max working pressure		26 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IFS 4)	4 bar
Max. Differential pressure	(IFS 10)	10 bar
Max. Differential pressure	(IFS 17)	17 bar
Max. Differential pressure	(IFS 26)	26 bar

INVERTED BUCKET STEAM TRAPS
IFS 360° CONNECTIONS



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	AISI 304	
2	Cover	ASTM A182 F304	
3	Flange	ASTM A182 F304	
4	Connector	ASTM A105	
5	Seat	AISI 410	X
6	Valve	AISI 410	X
7	Lever	AISI 304	X
8	Bucket	AISI 304	X
9	Tube	AISI 304	
10	Gasket	316 / GRAPHITE	X
11	Bolts	ASTM A193 B7	
12	Screen	AISI 304	X
13	Screen gasket	316 / GRAPHITE	X
14	Strainer cap	ASTM A105	

Flanged														
Size (inches)	S	A	B	C	D	Weight (Kg)	UNI-DIN PN25-40		150#		300#		600#	
							SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	60	101	174	129	73	3.5	130	4.4	120	4.4	140	4.6	150	4.8
¾"	68	101	174	129	73	4.0	138	4.6	138	4.6	158	5.8	168	6.2
1"	68	103	174	129	73	4.5	138	6	148	6	158	7.2	178	7.6



INSTALLATION

The pipeline can be installed in either horizontal or vertical pipework. The maiting flange on the IFS trap is free rotate 360°. The steam trap should be fitted with the cover above the centre line of the trap. Ensure inner and outher gaskets are in place and secure trap to pipeline connector using two connectors screws.

HOW TO SERVICE

To service the strainer , unscrew cap (14), withdraw screen (12) and clean or replace it. Screwing the cap back in place, always a fit new gasket (13)

How to order: i.e. *IFS 10 ½" NPT*

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IDD A105

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

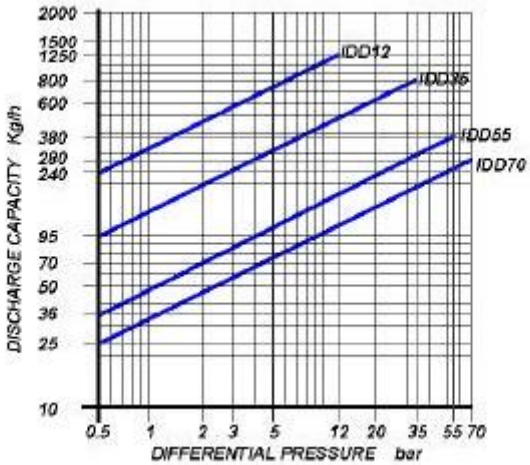
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

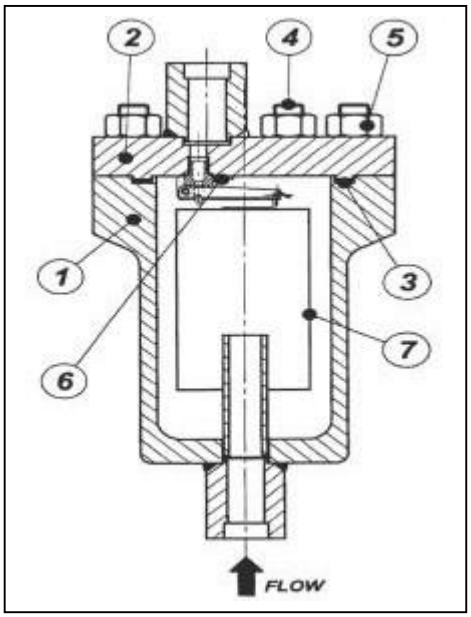
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI B 16.5 / UNI / DIN

LIMITING CONDITIONS (according to ISO 6552)	
Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	75 bar
TMO: max working temperature	350°C
Max. Differential pressure (IDD 12)	12 bar
Max. Differential pressure (IDD 35)	35 bar
Max. Differential pressure (IDD 55)	55 bar
Max. Differential pressure (IDD 70)	70 bar

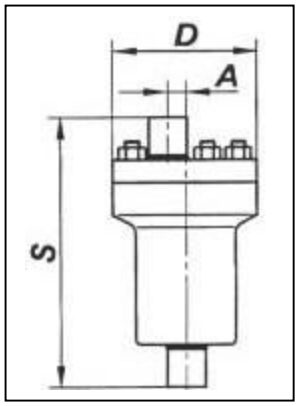
INVERTED BUCKET STEAM TRAPS

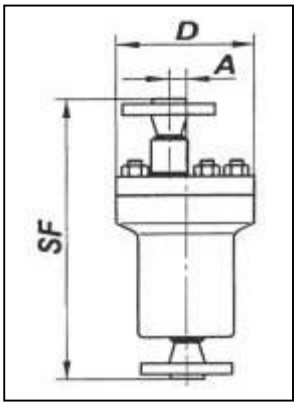
IDD A105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	ASTM A 105	
3	Cover gasket	316 / GRAPHITE	X
4	Studs	ASTM A193 B7	
5	Nuts	ASTM A194 2H	
6	Seat	AISI 410	X
6	Valve	AISI 416	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X

						Flanged							
Size (inches)	S NPT	S SW	A	B	Weight (Kg)	UNI-DIN PN 25 – 40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	305	305	18	155	26	323	27	342.5	28	352	29	365	30
¾"	305	305	18	155	26	327	28	352	29	362	31	374.5	32
1"	305	305	18	155	26	328	29	359	30	372	33	385	34





INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to from and preservate the internal water seal.

HOW TO SERVICE

Before doing any maintenance work always ensure that the trap is isolated and pressure is dissipated. Undo cover nuts (5), remove cover (2) with all mechanism and cover gasket (3). Unlock the bucket (7) from valve lever (6). Remove the valve guide undoing to the screw. Remove valve seat from cover (2). Screw in a new valve seat. Reinstall valve guide with lever and bucket (7). Refit cover (2), using new gasket (3).

How to order: i.e. IDD 12 ½" SW

DOUGLAS ITALIA S.p.A Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IED

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

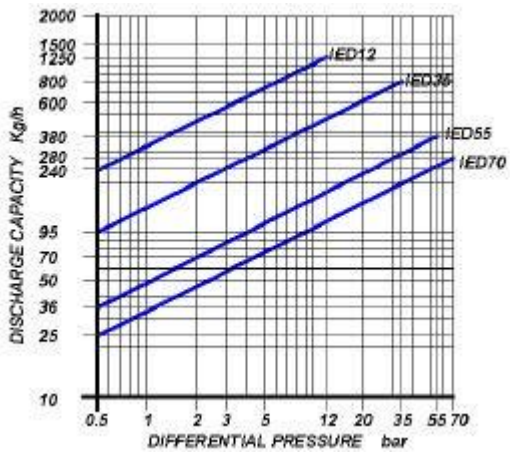
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



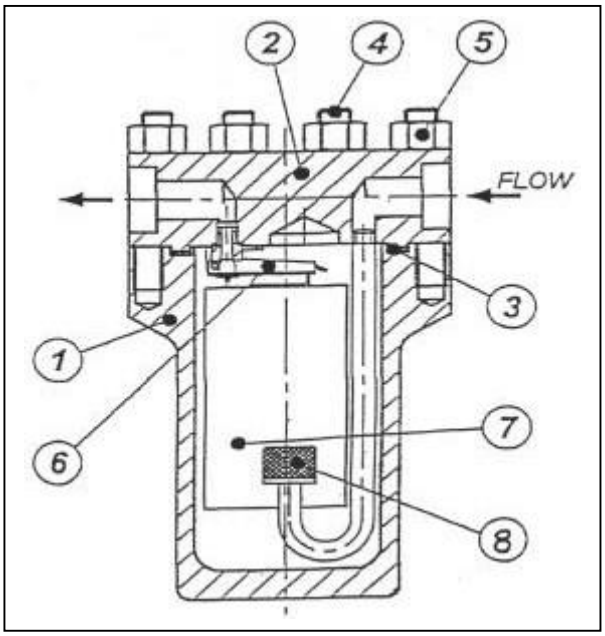
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI B 16.5 / UNI / DIN

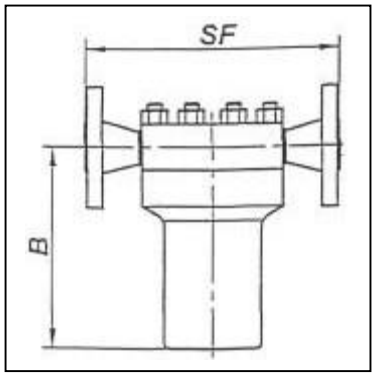
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		ANSI 600
PMA: Max allowable pressure		100 bar
TMA: max allowable temperature		410°C
PMO: max working pressure		75 bar
TMO: max working temperature		380°C
Max. Differential pressure	(IED 12)	12 bar
Max. Differential pressure	(IED 35)	35 bar
Max. Differential pressure	(IED 55)	55 bar
Max. Differential pressure	(IED 70)	70 bar

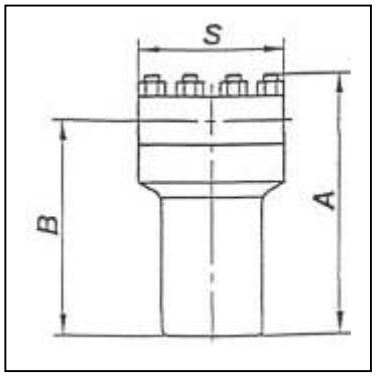
INVERTED BUCKET STEAM TRAPS
IED



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	ASTM A 105	
3	Cover gasket	316 / GRAPHITE	X
4	Studs	ASTM A193 B7	
5	Nuts	ASTM A194 2H	
6	Seat	AISI 410	X
6	Valve	AISI 416	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X
8	Screen *	AISI 304	X
* optional			

						Flanged									
Size (inches)	S NPT	S SW	A	B	Weight (Kg)	UNI-DIN PN 25 – 40		150#		300#		600#		1500#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	145	145	255	207	23	207	24.5	224	25	234	26	250	27	262	30
¾"	145	145	255	207	23	211	25	234	26	244	27	256	28	282	31
1"	145	145	255	207	23	211	26	240	27	255	28	266	29	288	33





INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to from and preservate the internal water seal.

HOW TO SERVICE

Before doing any maintenance work always ensure that the trap is isolated and pressure is dissipated. Undo cover nuts (5), remove cover (2) with all mechanism and cover gasket (3). Unlock the bucket (7) from valve lever (6). Remove the valve guide undoing to the screw. Remove valve seat from cover (2). Screw in a new valve seat. Reinstall valve guide with lever and bucket (7). Refit cover (2), using new gasket (3).

How to order: i.e. *IED 12 ½" 300 RF*

DOUGLAS ITALIA S.p.A ***Località Pradaglie – 29013 CARPANETO PIACENTINO (PC)***

OFFICIAL WEB SITE: www.douglas-italia.com

DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IDD F11

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

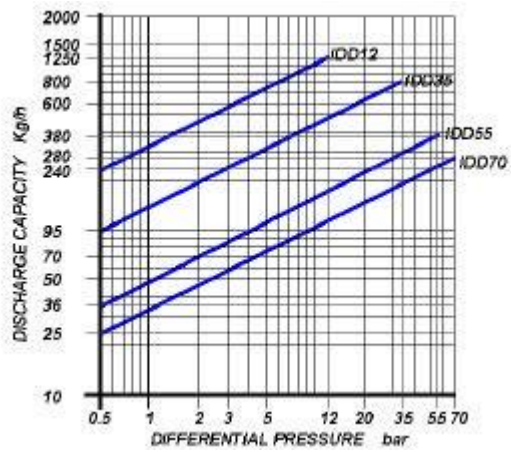
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above .
Safety factor = 1.2 – 1.5

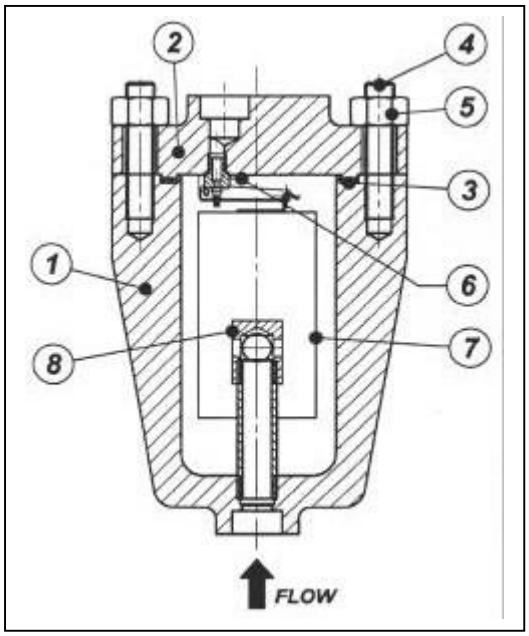
SIZES
½" – ¾" – 1"

CONNECTIONS	
Screwed	BS 21 (BSP) /ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11

LIMITING CONDITIONS (according to ISO 6552)	
Steam Trap rating	ANSI 900
PMA: Max allowable pressure	155 bar
TMA: max allowable temperature	580°C
PMO: max working pressure	95 bar
TMO: max working temperature	480°C
Max. Differential pressure (IDD 12)	12 bar
Max. Differential pressure (IDD 35)	35 bar
Max. Differential pressure (IDD 55)	55 bar
Max. Differential pressure (IDD 70)	70 bar

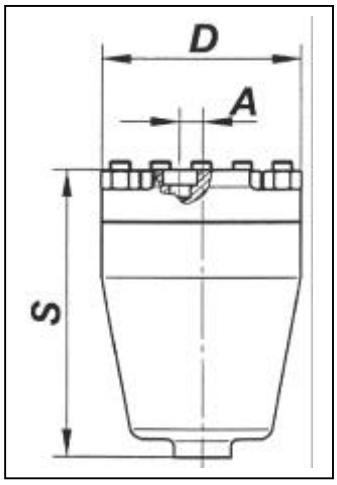
INVERTED BUCKET STEAM TRAPS

IDD F11



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F11	
2	Cover	ASTM A182 F11	
3	Cover gasket	316 / GRAPHITE	X
4	Studs	ASTM A193 L7	
5	Nuts	ASTM A194 Gr.4	
6	Seat	AISI 410	X
6	Valve	AISI 416	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X
8	Check valve *	AISI 304	X
*** optional**			

Size (inches)	S NPT	S SW	A	B	Weight (Kg)
¼"	305	305	18	155	23
¾"	305	305	18	155	23
1"	305	305	18	155	23



INSTALLATION

The trap must be installed with the body upright so that the bucket rises and falls vertically. The inlet and outlet connections must be in a horizontal position, with the trap installed below the drain point in order to from and preservate the internal water seal.

HOW TO SERVICE

Before doing any maintenance work always ensure that the trap is isolated and pressure is dissipated. Undo cover nuts (5), remove cover (2) with all mechanism and cover gasket (3). Unlock the bucket (7) from valve lever (6). Remove the valve guide undoing to the screw. Remove valve seat from cover (2). Screw in a new valve seat. Reinstall valve guide with lever and bucket (7). Refit cover (2), using new gasket (3).

How to order: i.e. *IDD 12 ½" SW*

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DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IDH

INVERTED BUCKET

This trap uses an inverted bucket that floats whean steam is present and sinks when condensate exceeds a predetermined liquid level.When the bucket floats the valve – at the top of the trap – is closed . When it sinks the valve will open. On start up the bucket is down end the valve is wide open , when condensate and air enters the trap it flows directly into the bucket…The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed , it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predeterminated level and the cycle starts over.

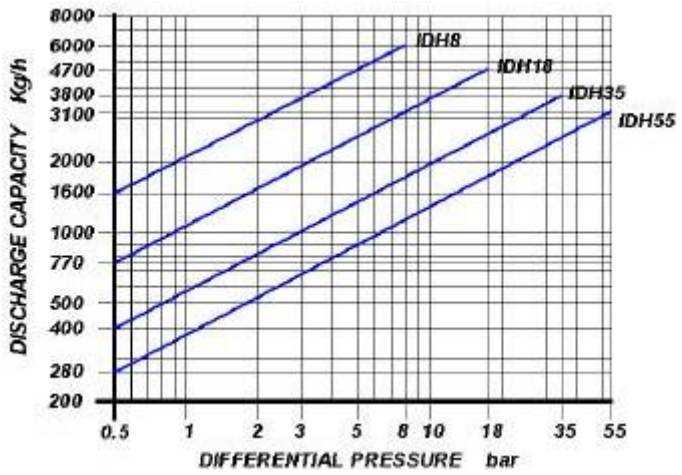
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It whith stands waterhammer.

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *Ironing machines*

DISCHARGE CAPACITY



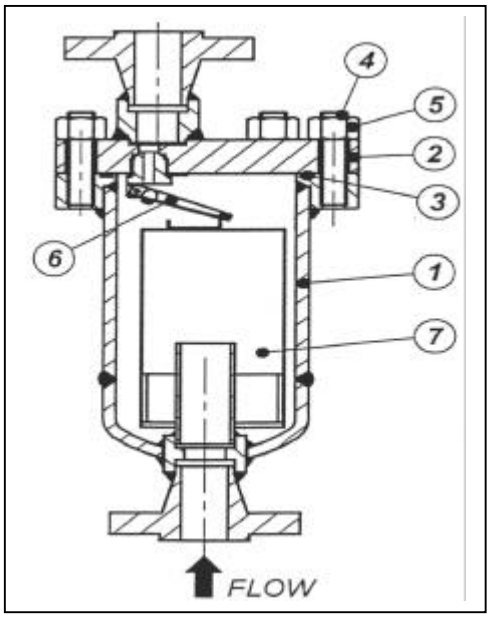
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2 – 1.5

SIZES
1" – 1½" – 2"

CONNECTIONS	
Screwed	*BS 21 (BSP) /ANSI B1.20.1 (NPT)*
Socket weld	*ANSI B 16.11*
Flanged	*ANSI B 16.5 / UNI / DIN*

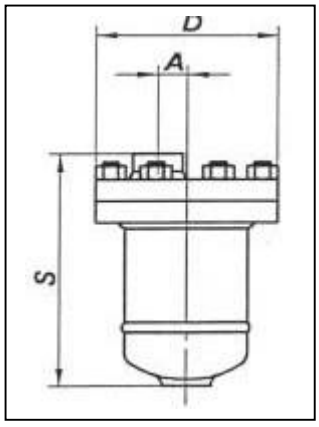
LIMITING CONDITIONS (according to ISO 6552)		
Steam Trap rating		*ANSI 600*
PMA: Max allowable pressure		*100 bar*
TMA: max allowable temperature		*400°C*
PMO: max working pressure		*75 bar*
TMO: max working temperature		*350°C*
Max. Differential pressure	*(IDH 8)*	*8 bar*
Max. Differential pressure	*(IDH 18)*	*18 bar*
Max. Differential pressure	*(IDH 35)*	*35 bar*
Max. Differential pressure	*(IDH 55)*	*55 bar*

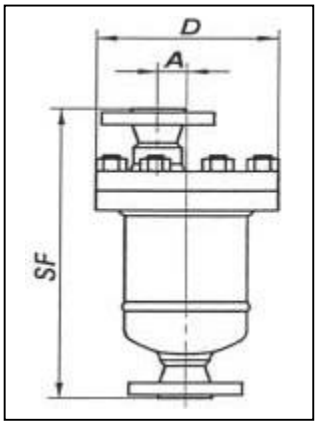
INVERTED BUCKET STEAM TRAPS
IDH



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	ASTM A 105	
3	Cover gasket	316 / GRAPHITE	X
4	Studs	ASTM A193 B7	
5	Nuts	ASTM A194 2H	
6	Seat	AISI 410	X
6	Valve	AISI 416	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X

						Flanged									
Size (inches)	S NPT	S SW	A	B	Weight (Kg)	UNI-DIN PN 25 – 40		150#		300#		600#		1500#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg	SF	Kg
1"	396	379	250	45	40	446	42	477	42	490	43	503	44	525	48
1½!	406	386	250	40	40	463	44	497	44	510	46	526	47	551	52
2"	415	411	250	35	40	494	46	525	46	538	48	557	50	614	62





INSTALLATION

The trap must be installed vertically. The inlet must be at the bottom with the trap installed below the drain point in order to maintain the water seal around the bucket. A protective strainer is always raccomended upstream of the trap. Always ensure that the trap is properly sized. With very low condensate loads and/or with superheated steam, the installation of a check valve upstream the trap is raccomended

HOW TO SERVICE

Before doing any maintenance work always ensure that the trap is isolated and pressure is dissipated. Undo cover nuts (5), remove cover (2) with all mechanism and cover gasket (3). Unlock the bucket (7) from valve lever (6). Remove the valve guide undoing to the screw. Remove valve seat from cover (2). Screw in a new valve seat. Reinstall valve guide with lever and bucket (7). Refit cover (2), using new gasket (3).

How to order: i.e. *IDH 8 1½" 300 RF*

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