



**DOUGLAS ITALIA**



# **THERMODYNAMIC STEAM TRAPS**

**DA**

**DAA F6**

**DF**

**DC 50 A105**

**DC 50 A105 1½"**

**DC 50 A105 2"**

**DC 50 L A105**

**DC 50 A A105**

**DC 50 F304**

**DC 50 F304 1½"**

**DC 50 F304 2"**

**DC 50 L F304**

**DC 50 A F304**

**DK 100 A105**

**DK 100 F22**

**DK 150 F22**

**DK 150 F304**

**GO BACK**



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DA**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



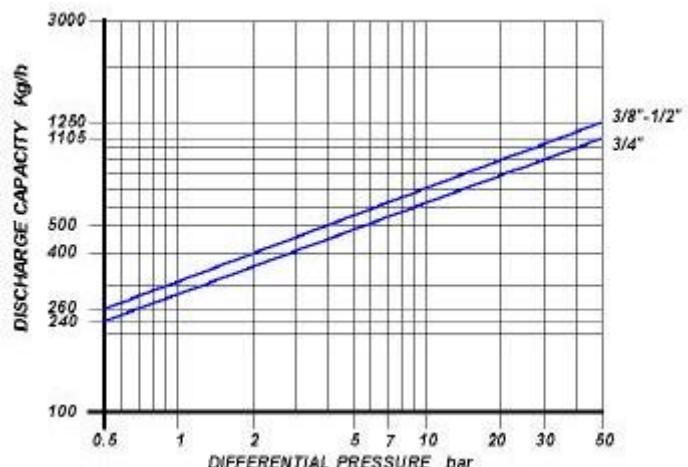
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

3/8" – 1/2" – 3/4"

### CONNECTIONS

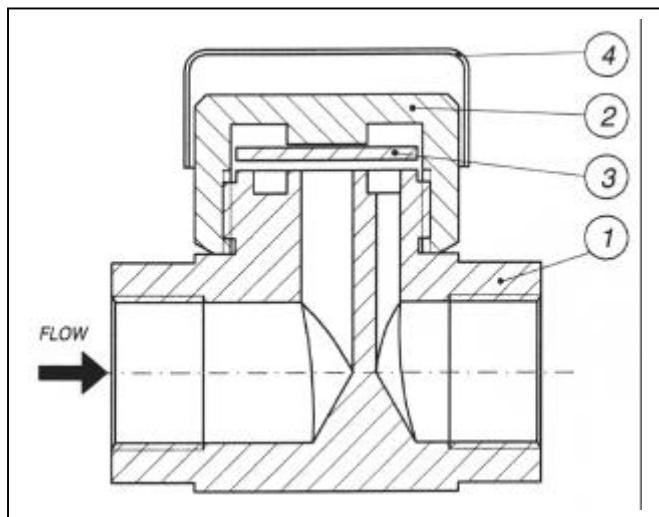
SCREWED      ANSI B1.20.1 (NPT) / BS21 (BSP)

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	425°C
PW: max working pressure	50 bar
TW: max working temperature	400°C
Minimum Working Pressure	0.25 bar
PMWB: max working back pressure	80%

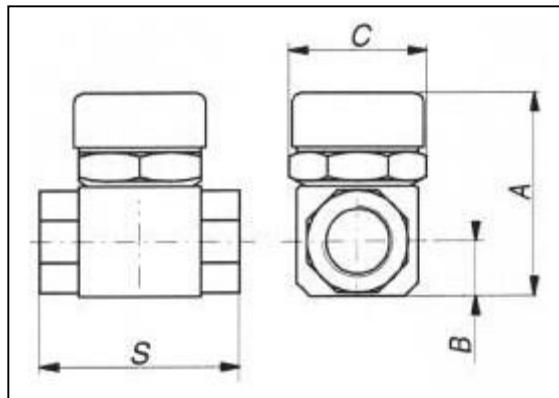
## THERMODYNAMIC STEAM TRAPS

### DA



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 182 F6a	
2	Cover	ASTM A 182 F6a	
3	Disc	AISI 431	X
4	Insulating cap*	AISI 304	
* optional			

Size (inches)	S	A	B	C	Weight (Kg)
3/8"	70	65	16	47	0.6
1/2"	70	65	16	47	0.6
3/4"	75	77	20	52	1.1



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

**How to order: i.e. DA 1/2" NPT**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS  
DAA F6**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



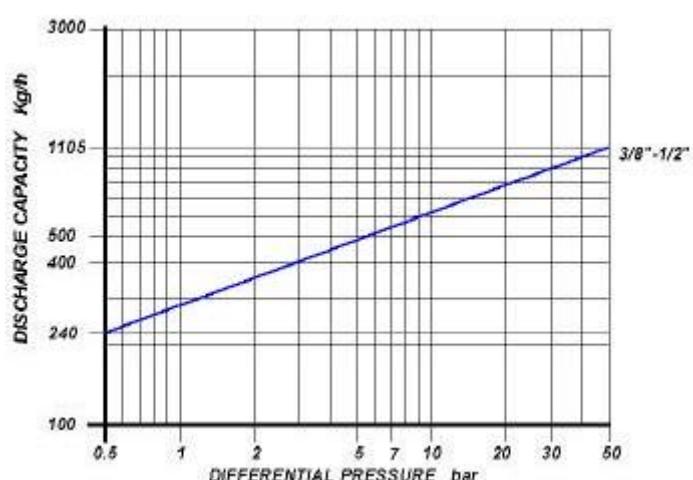
### MAIN FEATURES

Reduced dimension and weight simple and reliable. **Special air venting disc.** It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

3/8" – 1/2"

### CONNECTIONS

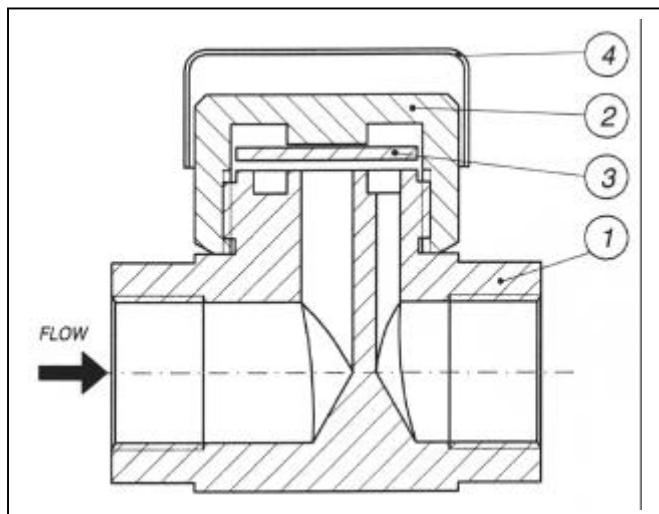
SCREWED      ANSI B1.20.1 (NPT) / BS21 (BSP)

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	390°C
PW: max working pressure	50 bar
TW: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PWOB: max working back pressure	80%

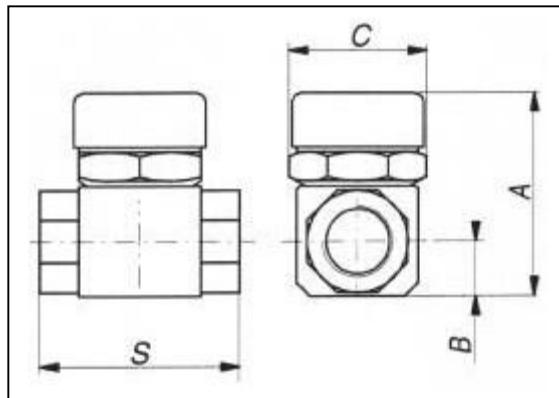
## THERMODYNAMIC STEAM TRAPS

### DAA F6



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 182 F6a	
2	Cover	AISI 303	X
3	Disc	AISI 431	X
4	Insulating cap*	AISI 304	
* optional			

Size (inches)	S	A	B	C	Weight (Kg)
3/8"	70	65	16	47	0.6
1/2"	70	65	16	47	0.6



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

**How to order: i.e. DAA F6 1/2" NPT**

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

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DF**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



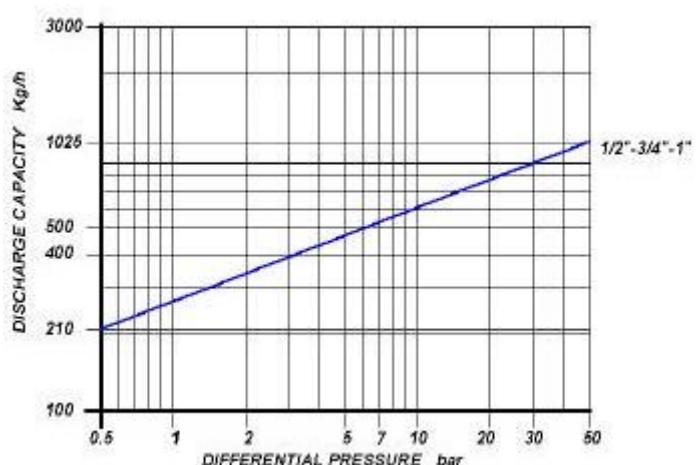
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

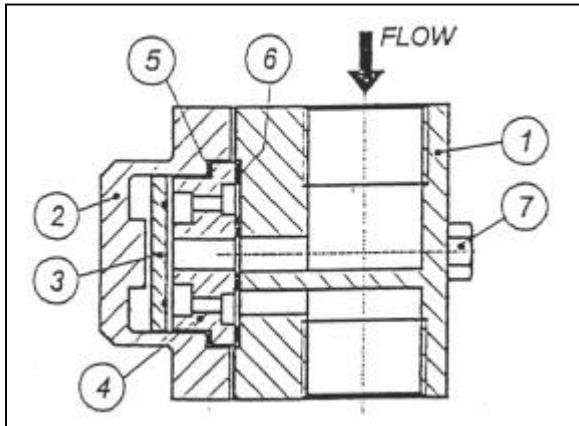
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B 16.11

### 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	50 bar
TMO: max working temperature	380°C

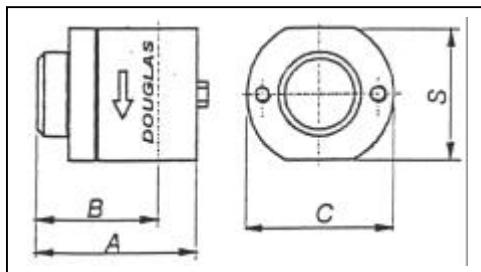
## THERMODYNAMIC STEAM TRAPS

### DF



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 182 F304	
2	Cover	ASTM A 182 F304	X
3	Disc	AISI 431	X
4	Seat	AISI 431	
5	Gasket	Non asbestos material	
6	Gasket	Non asbestos material	
7	Bolts	ASTM A 193 B 8	

Size (inches)	S	A	B	C	Weight (Kg)
1/2"	60	78	60	70	1.5
3/4"	60	78	60	70	1.5
1"	68	83	62	80	1.8



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(3), seat(4) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease.

#### NOTE

The thermodynamic steam trap DF can be installed on the same connector of our inverted bucket steam trap mod. IF. Please contact our technical department.

**How to order: i.e.**

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

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC 50 A 105**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.

### MAIN FEATURES

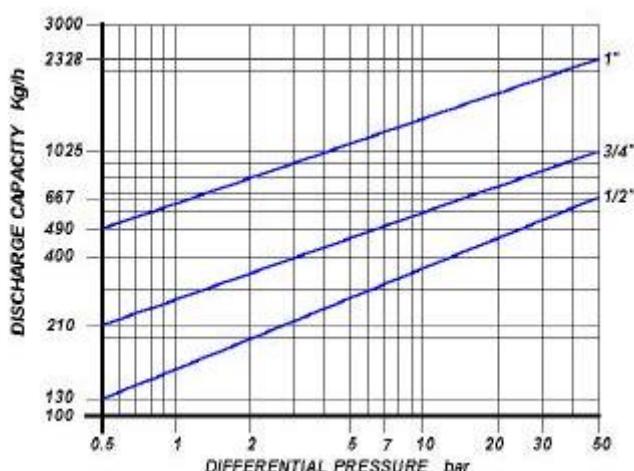
Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.



### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

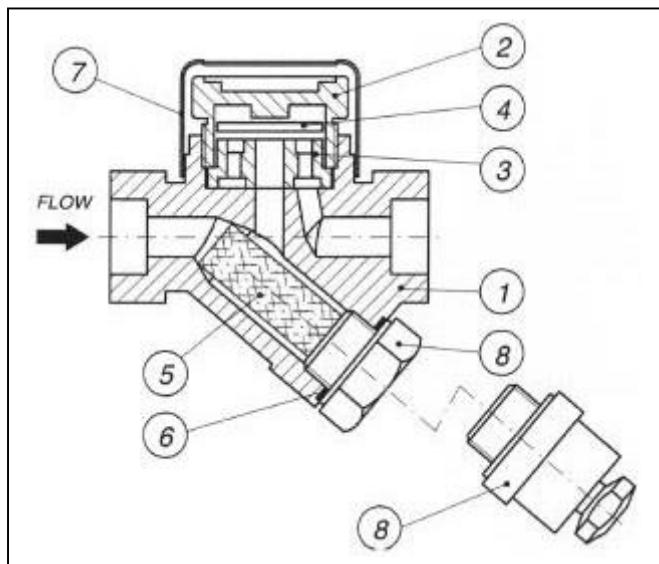
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150# / 300# / 600# / UNI / DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	390°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

### DC 50 A 105

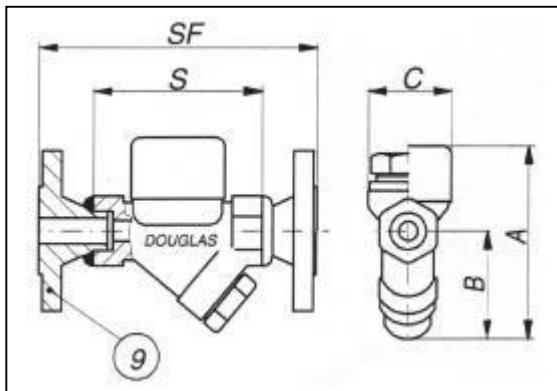


POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A 105	
8	Blow off valve*	AISI 416	
9	Flange	ASTM A 105	

\* optional

#### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(4), seat(3) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease. To service the strainer unscrew cap(8), withdraw screen(5) and clean or replace it. Screwing cover back in place always fit a new gasket(6).

**How to order: i.e. DC 50 A105 1/2" 150#RF**

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DOUGLAS ITALIA S.p.A.

THERMODYNAMIC  
STEAM TRAPS

**DC50 A105 ø 1.1/2"**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



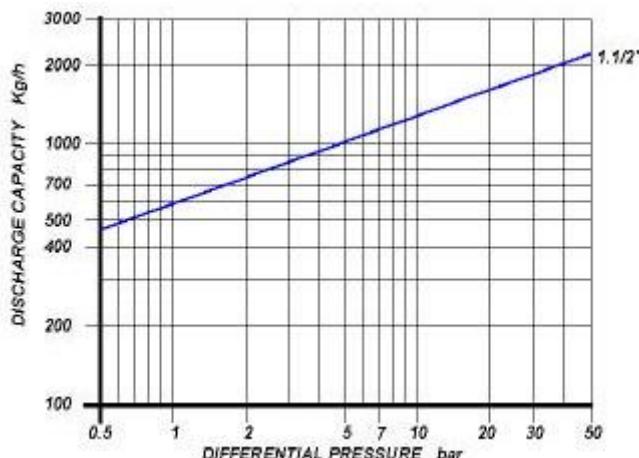
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1½"

### CONNECTIONS

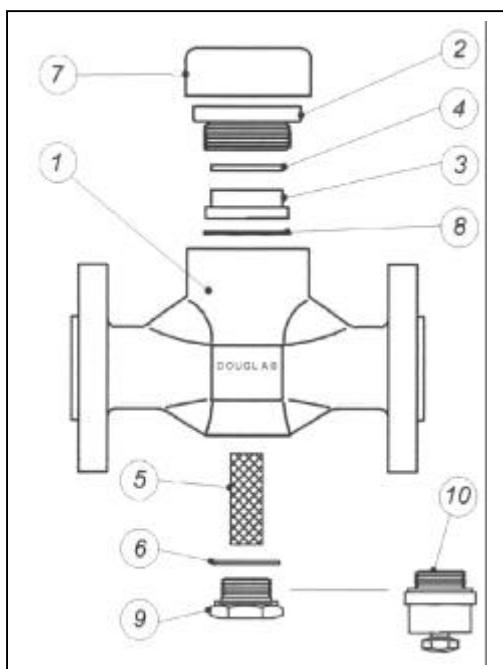
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	68 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

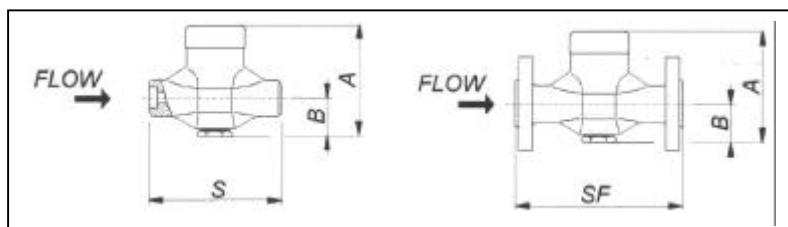
### DC 50 A 105 ø 1.1/2"



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	A 105	
2	Cover	AISI 303	
3	Seat	AISI 431 HT	X
4	Disc	AISI 431 HT	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Insulating cap *	AISI 304	X
8	Gasket	Reinforced graphite	X
9	Strainer cap	AISI 105	X
10	Blow-off valve *	AISI 416	X

\* optional

Size (inches)	Flanged						150#		300#		600#		
	S	A	B	Weight (Kg)	UNI-DIN PN16-25-40	SF	Kg	SF	Kg	SF	Kg		
1½"	125	130	50	3.5	205	6		215	6.5	225	9.5	245	10.5



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc (4), seat (3) and gasket (4) and clean the inside of the trap. Put in new part aligning the gasket hole with the hole in the trap body. Screw on cover (2) using a high temperature grease. To service the strainer unscrew plug (9), withdraw screen (5) and clean or replace it. Screwing cover back in place always fit a new gasket (6).

**How to order: i.e. DC 50 A105 1½" NPT**

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC50 A105 ø 2"**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



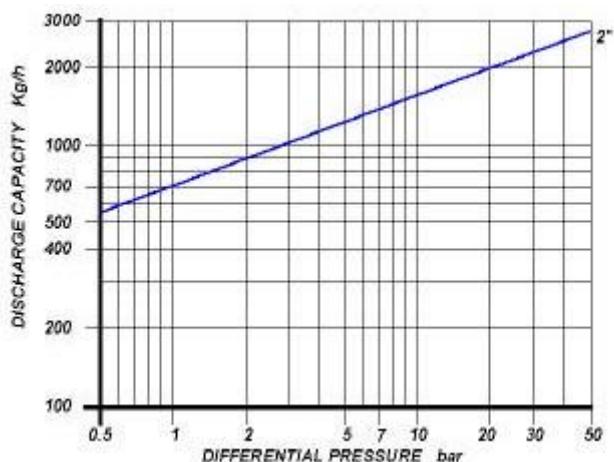
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

2"

### CONNECTIONS

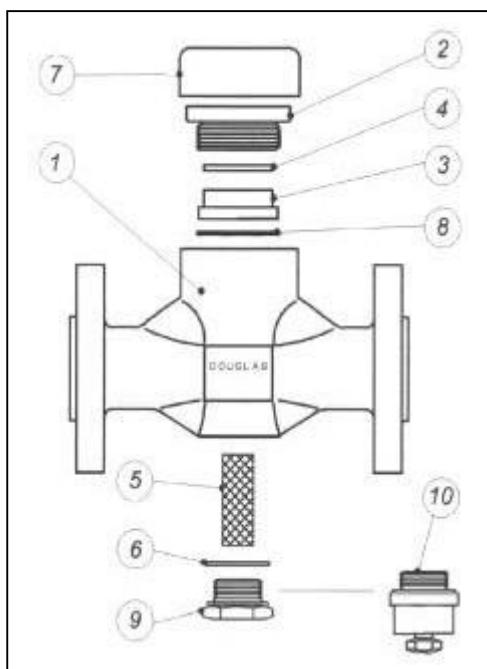
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	68 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

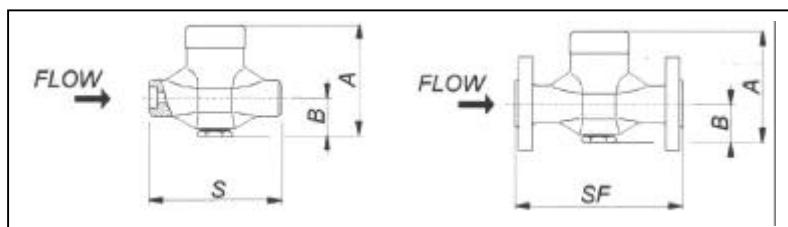
### DC 50 A 105 ø 2"



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	A 105	
2	Cover	AISI 303	
3	Seat	AISI 431 HT	X
4	Disc	AISI 431 HT	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Insulating cap *	AISI 304	X
8	Gasket	Reinforced graphite	X
9	Strainer cap	AISI 105	X
10	Blow-off valve *	AISI 416	X

\* optional

Size (inches)	Flanged											
	UNI-DIN PN16-25-40		150#		300#		600#					
	S	A	B	Weight (Kg)	SF	Kg	SF	Kg	SF	Kg		
2"	130	130	50	4.3	225	6.4	256	8	269	10	288	11.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc (4), seat (3) and gasket (4) and clean the inside of the trap. Put in new part aligning the gasket hole with the hole in the trap body. Screw on cover (2) using a high temperature grease. To service the strainer unscrew plug (9), withdraw screen (5) and clean or replace it. Screwing cover back in place always fit a new gasket (6).

**How to order: i.e. DC 50 A105 2" NPT**

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC50 A105 ø 2"**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



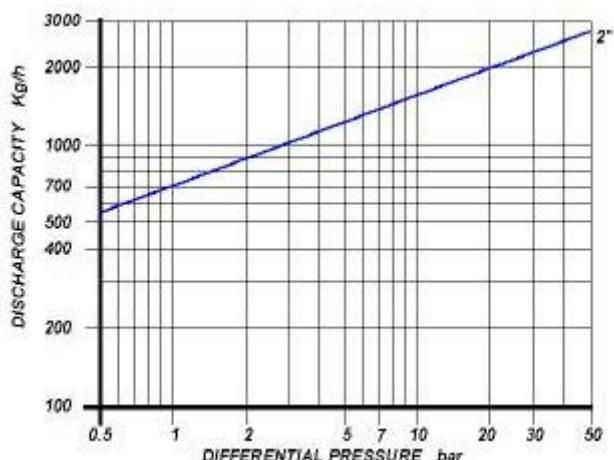
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

2"

### CONNECTIONS

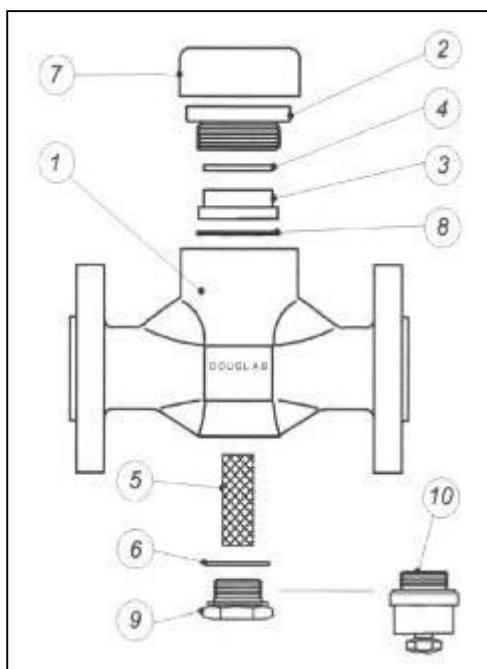
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	68 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

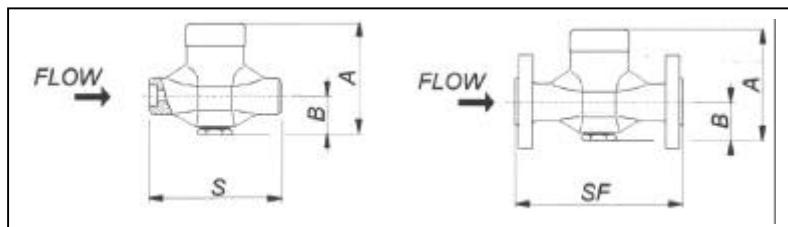
# DC 50 A 105 ø 2"



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	A 105	
2	Cover	AISI 303	
3	Seat	AISI 431 HT	X
4	Disc	AISI 431 HT	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Insulating cap *	AISI 304	X
8	Gasket	Reinforced graphite	X
9	Strainer cap	AISI 105	X
10	Blow-off valve *	AISI 416	X

\* optional

Size (inches)	Flanged											
	UNI-DIN PN16-25-40		150#		300#		600#					
	S	A	B	Weight (Kg)	SF	Kg	SF	Kg	SF	Kg		
2"	130	130	50	4.3	225	6.4	256	8	269	10	288	11.2



### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc (4), seat (3) and gasket (4) and clean the inside of the trap. Put in new part aligning the gasket hole with the hole in the trap body. Screw on cover (2) using a high temperature grease. To service the strainer unscrew plug (9), withdraw screen (5) and clean or replace it. Screwing cover back in place always fit a new gasket (6).

**How to order: i.e. DC 50 A105 2" NPT**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC STEAM TRAPS**

**LOW CAPACITIES**

**DC 50L A 105**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



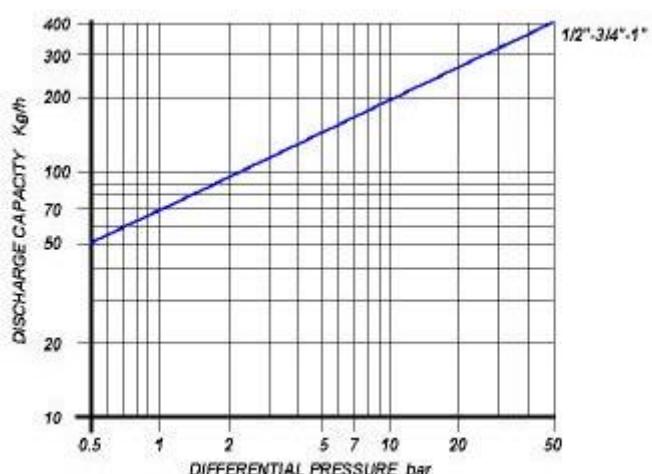
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

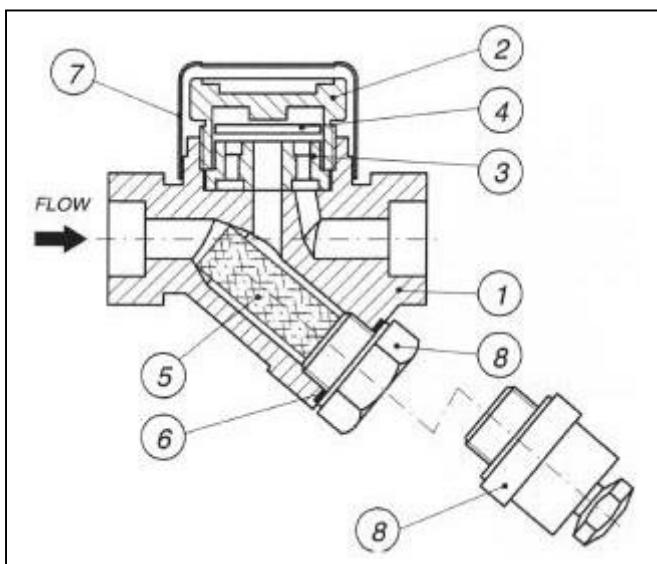
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150# / 300# / 600# / UNI / DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	390°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS LOW CAPACITIES

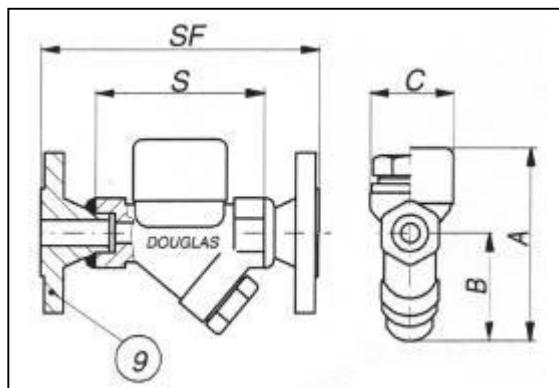
### DC 50L A 105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A 105	
9	Blow off valve*	AISI 416	
	* optional		

#### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(4), seat(3) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease. To service the strainer unscrew cap(8), withdraw screen(5) and clean or replace it. Screwing cover back in place always fit a new gasket(6).

**How to order: i.e. DC 50L A105 1/2" 150 RF**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC 50/A A105**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



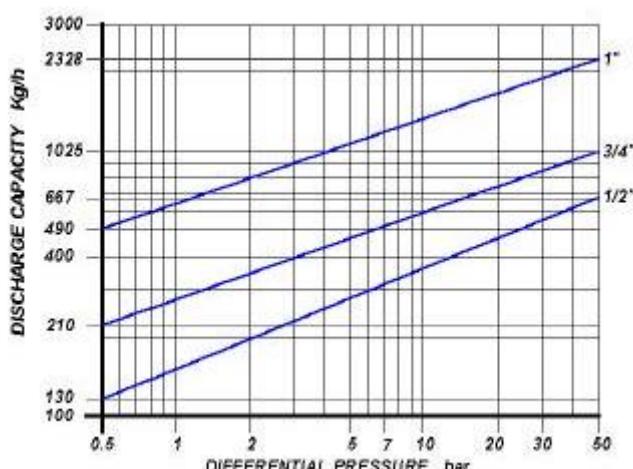
### MAIN FEATURES

Reduced dimension and weight simple and reliable. **Special air venting disc.** It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

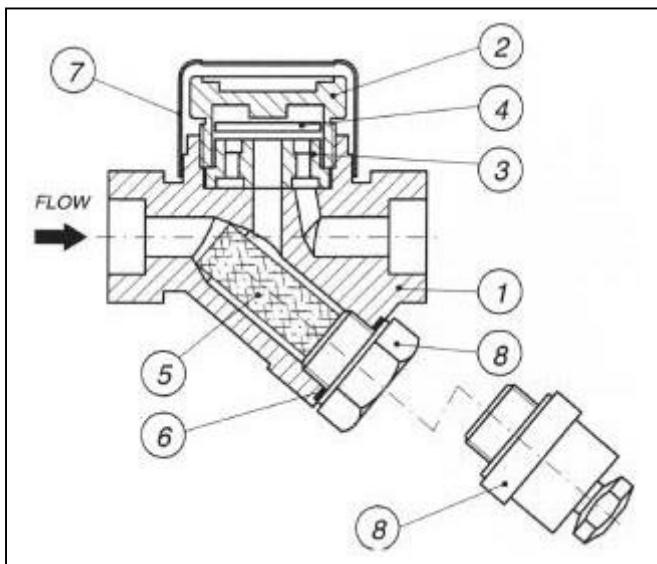
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	390°C
PMO: max working pressure	50 bar
TMO: max working temperature	350°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

# DC 50/A A 105

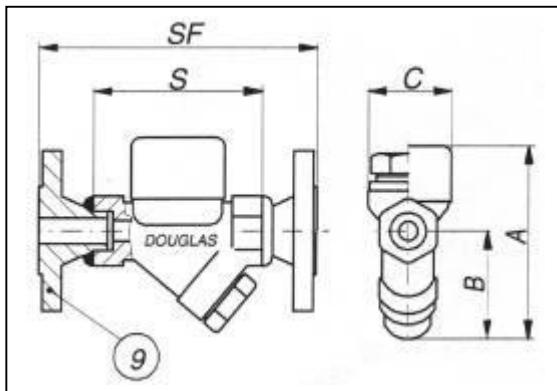


POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A 105	
8	Blow off valve*	AISI 416	
9	Flange	ASTM A 105	

\* optional

### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove insulating cap if fitted and unscrew cover(2) and remove disc(4), seat(3) and clean the inside of the trap. When re-assembling the disc is normally placed in position with the grooved side in contact with the seat. Screw on cover(2) using a high temperature grease. To service the strainer cap(8), withdraw screen(5) and clean or replace it. When servicing the trap always fit the new gasket.

**How to order: i.e. DC 50 /A A 105 1/2" 150 RF**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC 50 F 304**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.

### MAIN FEATURES

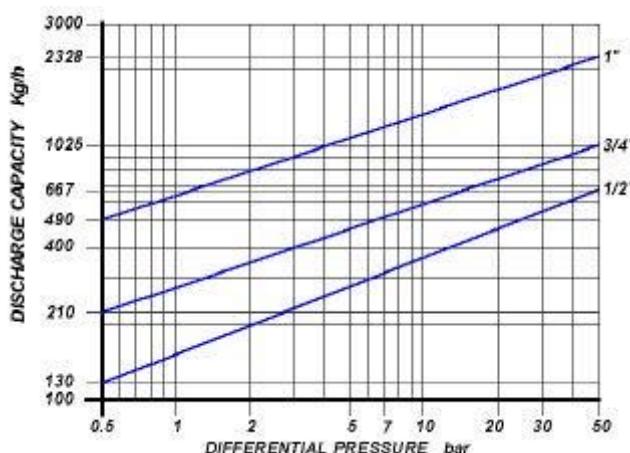


Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

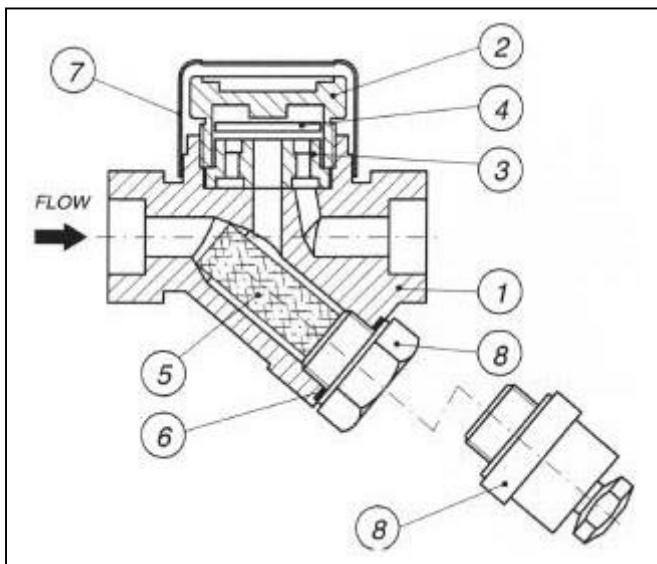
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150# / 300# / 600# / UNI / DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	500°C
PMO: max working pressure	50 bar
TMO: max working temperature	425°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

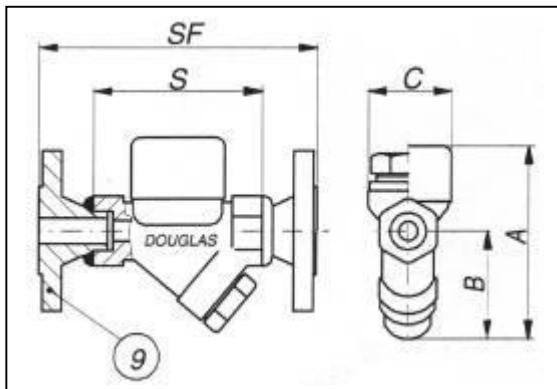
### DC 50 F 304



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F304	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A182 F304	
9	Blow off valve*	AISI 416	
	* optional		

#### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(4), seat(3) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease. To service the strainer unscrew cap(8), withdraw screen(5) and clean or replace it. Screwing cover back in place always fit a new gasket(6).

**How to order: i.e. DC 50 F 304 3/4" NPT**

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

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC50 F304 ø 1.1/2"**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



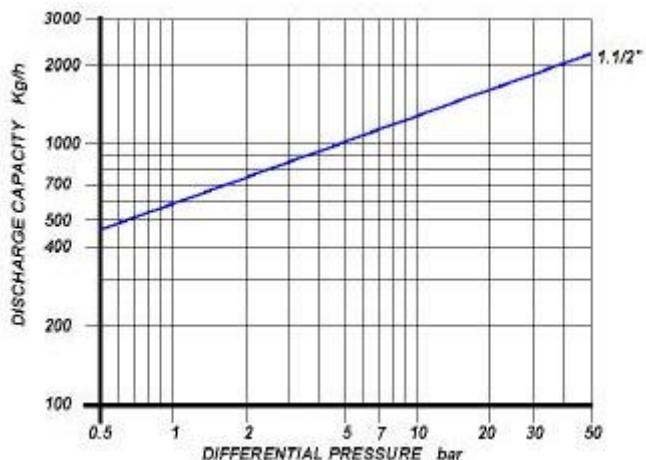
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1½"

### CONNECTIONS

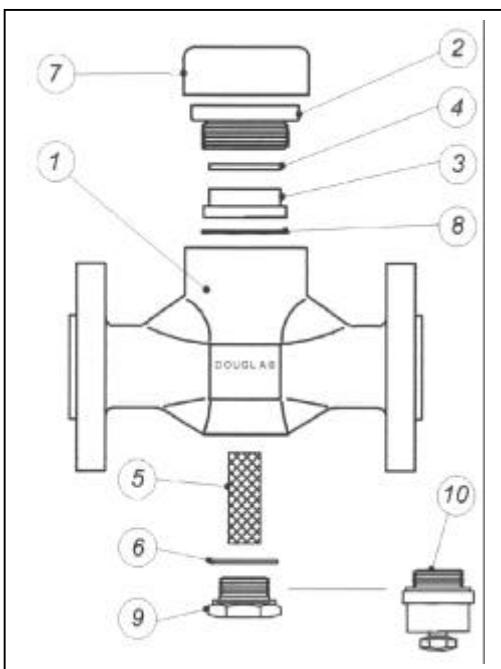
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	500°C
PMO: max working pressure	50 bar
TMO: max working temperature	425°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

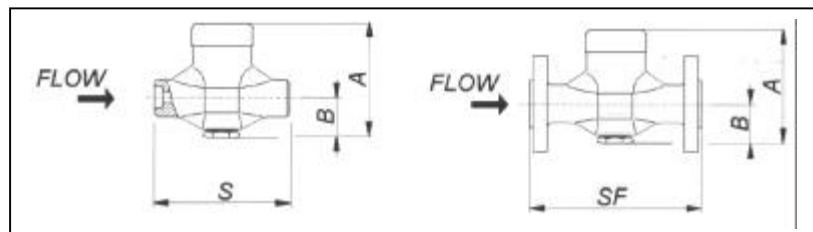
### DC 50 F 304 ø 1.1/2"



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	A 105	
2	Cover	AISI 303	
3	Seat	AISI 431 HT	X
4	Disc	AISI 431 HT	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Insulating cap *	AISI 304	X
8	Gasket	Reinforced graphite	X
9	Strainer cap	AISI 105	X
10	Blow-off valve *	AISI 416	X

\* optional

Size (inches)	S	A	B	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
					SF	Kg	SF	Kg	SF	Kg	SF	Kg
1½"	125	130	50	3.5	205	6	215	6.5	225	9.5	245	10.5



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc (4), seat (3) and gasket (4) and clean the inside of the trap. Put in new part aligning the gasket hole with the hole in the trap body. Screw on cover (2) using a high temperature grease. To service the strainer unscrew plug (9), withdraw screen (5) and clean or replace it. Screwing cover back in place always fit a new gasket (6).

**How to order: i.e. DC 50 F 304 1½" NPT**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS  
DC50 F304 ø 2"**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



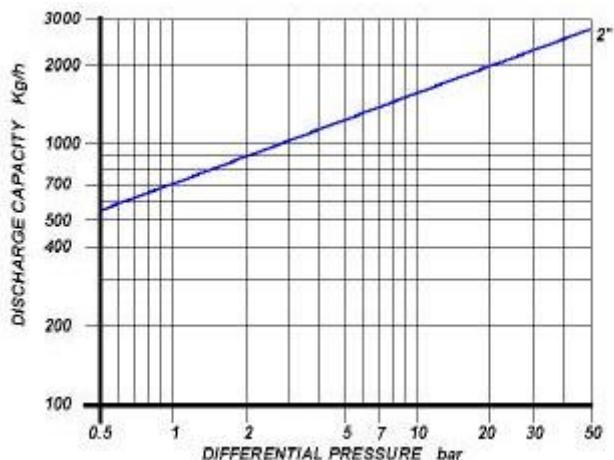
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

2"

### CONNECTIONS

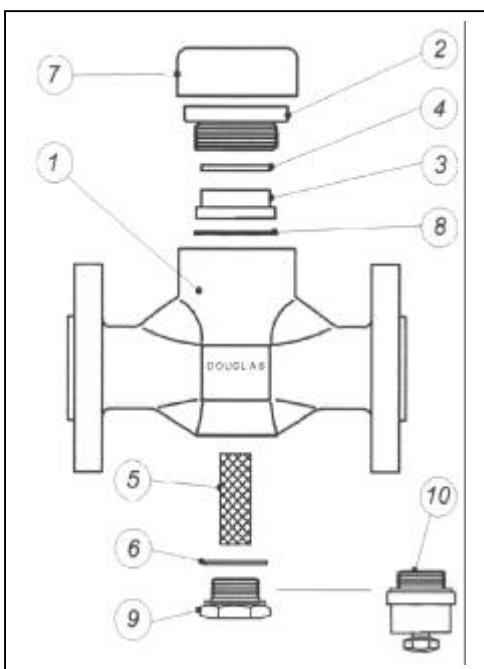
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	500°C
PMO: max working pressure	50 bar
TMO: max working temperature	425°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

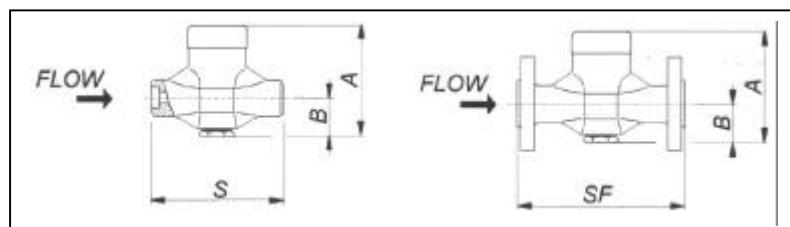
### DC 50 F 304 ø 2"



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	A 105	
2	Cover	AISI 303	
3	Seat	AISI 431 HT	X
4	Disc	AISI 431 HT	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Insulating cap *	AISI 304	X
8	Gasket	Reinforced graphite	X
9	Strainer cap	AISI 105	X
10	Blow-off valve *	AISI 416	X

\* optional

Size (inches)	S	A	B	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
					SF	Kg	SF	Kg	SF	Kg	SF	Kg
2"	130	130	50	4.3	225	6.4	256	8	269	10	288	11.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc (4), seat (3) and gasket (4) and clean the inside of the trap. Put in new part aligning the gasket hole with the hole in the trap body. Screw on cover (2) using a high temperature grease. To service the strainer unscrew plug (9), withdraw screen (5) and clean or replace it. Screwing cover back in place always fit a new gasket (6).

**How to order: i.e. DC 50 F 304 2" NPT**

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

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC STEAM TRAPS**

**LOW CAPACITIES**

**DC 50L F 304**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge , but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



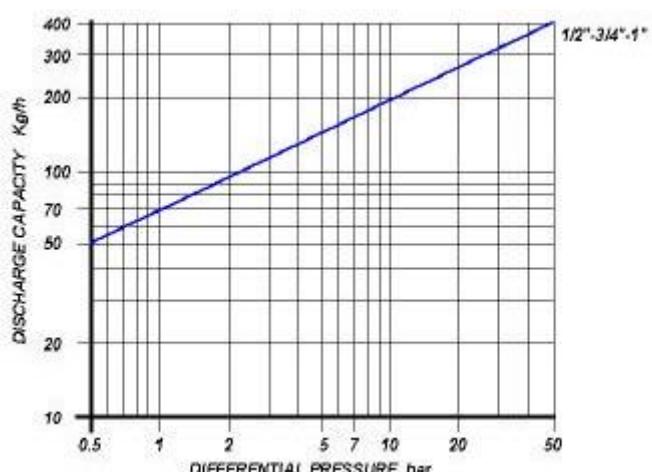
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

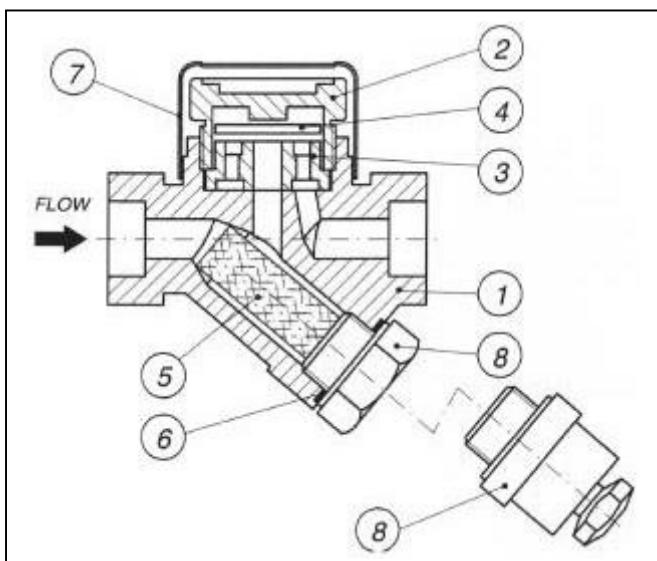
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	500°C
PMO: max working pressure	50 bar
TMO: max working temperature	425°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS LOW CAPACITIES

### DC 50L F 304

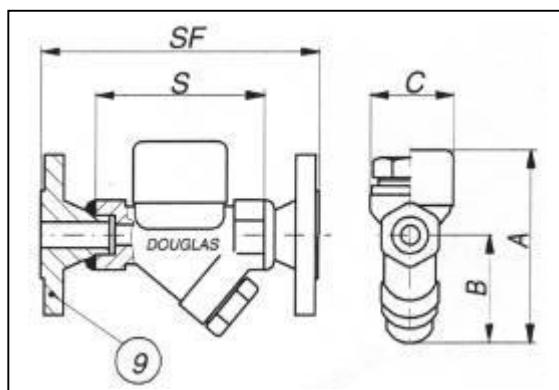


POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F304	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A182 F304	
8	Blow off valve*	AISI 416	
9	Flange	ASTM A182 F304	

\* optional

#### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(4), seat(3) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease. To service the strainer unscrew cap(8), withdraw screen(5) and clean or replace it. Screwing cover back in place always fit a new gasket(6).

**How to order: i.e. DC 50L F304 3/4" NPT**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DC 50/A F 304**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.

### MAIN FEATURES

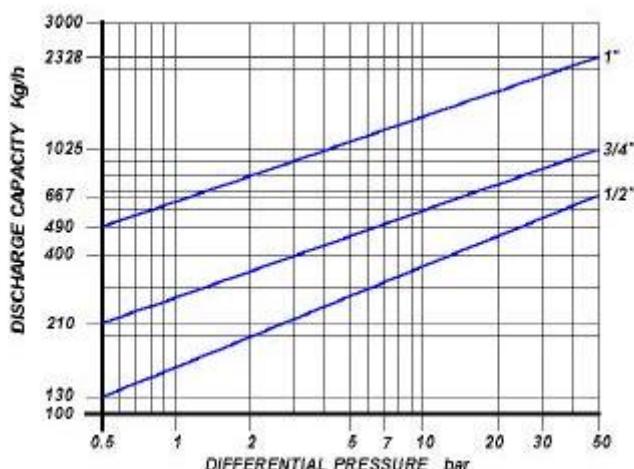


Reduced dimension and weight simple and reliable. **Special air venting disc.** It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

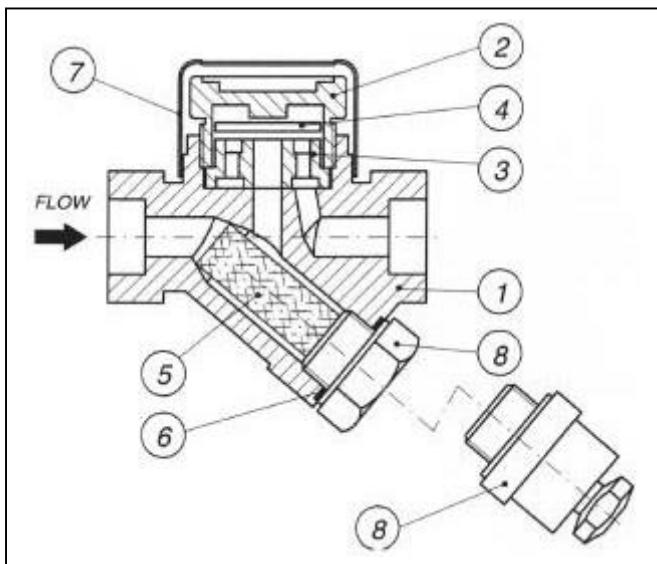
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature	500°C
PMO: max working pressure	50 bar
TMO: max working temperature	425°C
Minimum Working Pressure	0.25 bar
PMOB: max working back pressure	80%

## THERMODYNAMIC STEAM TRAPS

### DC 50/A F 304

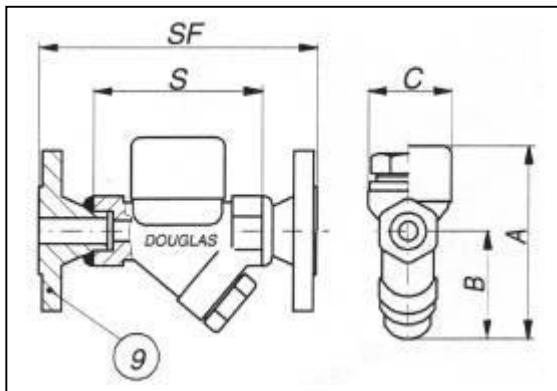


POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F304	
2	Cover	AISI 303	
3	Seat	AISI 431	X
4	Disc	AISI 431	X
5	Screen	AISI 304	X
6	Gasket	316/GRAPHITE	X
7	Insulating cap*	AISI 304	
8	Strainer cap	ASTM A182 F304	
8	Blow off valve*	AISI 416	
9	Flange	ASTM A182 F304	

\* optional

#### 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
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove insulating cap if fitted and unscrew cover(2) and remove disc(4), seat(3) and clean the inside of the trap. When re-assembling the disc is normally placed in position with the grooved side in contact with the seat. Screw on cover(2) using a high temperature grease. To service the strainer cap(8), withdraw screen(5) and clean or replace it. When servicing the trap always fit the new gasket.

**How to order: i.e. DC 50/A F304 3/4" NPT**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DK 100 A105**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



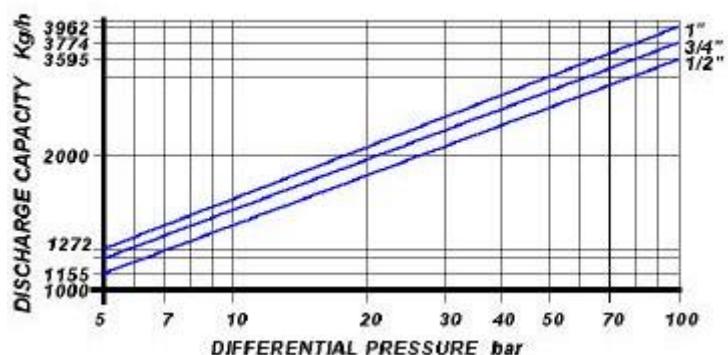
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" - 1"

### CONNECTIONS

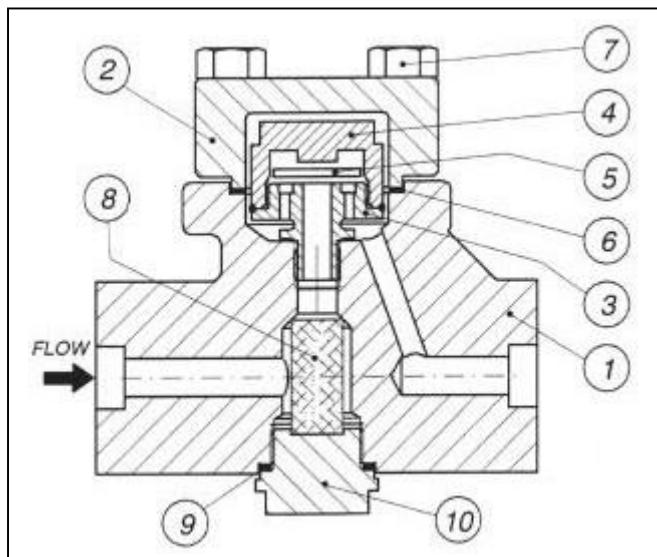
SCREWED	ANSI B 1.20.1 ( NPT )
BUTTWELD	ANSI B 16.25
SOCKET WELD	ANSI B 16.11
FLANGED	ANSI 600#/1500#/UNI/DIN

### LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	1500
PMA: Max allowable pressure	230 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	100 bar
TMO: max working temperature	400°C
Minimum Working Pressure	5 bar
PMOB: max working back pressure	80%

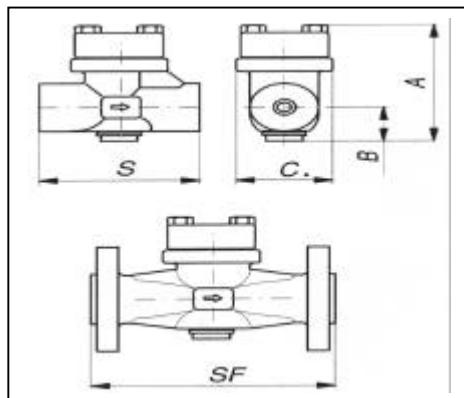
## THERMODYNAMIC STEAM TRAPS

### DK 100 A105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	ASTM A105	
3	Seat	AISI 421	X
4	Cover seat	AISI 431	X
5	Disc	AISI 431	X
6	Gasket	316 / GRAPHITE	X
7	Bolts	ASTM A194 B7	
8	Screen	AISI 304	X
9	Gasket	316 / GRAPHITE	X
10	Strainer cap	ASTM A105	

Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN 40 - 100		600#		1500#	
						SF	Kg	SF	Kg	SF	Kg
1/2"	155	150	48	94	7	242	9	242	8.5	242	11.3
3/4"	155	150	48	94	7	242	11	242	9.2	242	12.5
1"	155	150	48	94	7	242	12.2	242	11.2	242	15



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove cover(2),unscrew seat-disc assembly and clean the inside of the body. Screw in the new assembly (3-4-5),replace body,cover,gasket (6) and reassemble cover. To service the strainer unscrew the relevant cap (10) and clean or replace the screen. Screwing the cap back always fit a new gasket (9).

**How to order: i.e. DK 100 1" SW A105**

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

**OFFICIAL WEB SITE:** [www.douglas-italia.com](http://www.douglas-italia.com)



DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS  
DK 100 F22**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharged, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



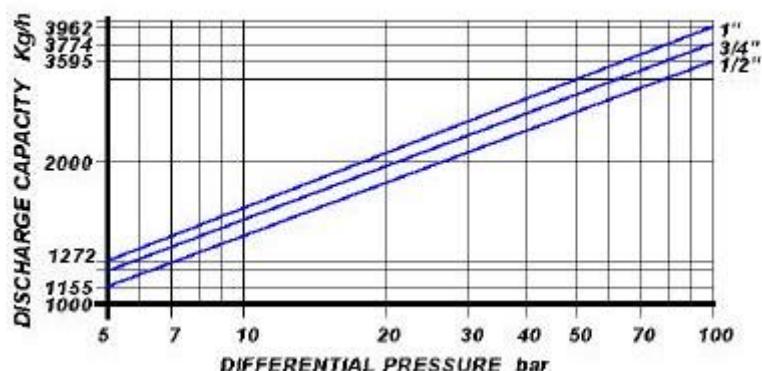
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Ironing machines
- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" - 1"

### CONNECTIONS

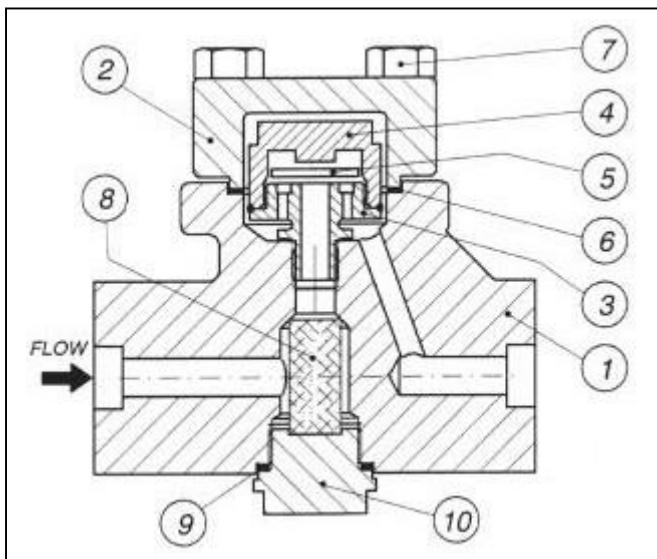
SCREWED	ANSI B 1.20.1 ( NPT )
BUTTWELD	ANSI B 16.25
SOCKET WELD	ANSI B 16.11
FLANGED	ANSI 600#/1500#/UNI/DIN

### LIMITING CONDITIONS ( according to ISO 6552 )

Steam Trap rating	1500
PMA: Max allowable pressure	260 bar
TMA: max allowable temperature	510°C
PMO: max working pressure	100 bar
TMO: max working temperature	495°C
Minimum Working Pressure	5 bar
PMOB: max working back pressure	80%

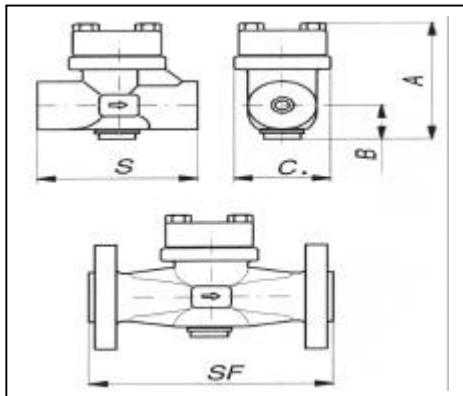
## THERMODYNAMIC STEAM TRAPS

### DK 100 F22



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F22	
2	Cover	ASTM A182 F22	
3	Seat	AISI 421	X
4	Cover seat	AISI 431	X
5	Disc	AISI 431	X
6	Gasket	316 / GRAPHITE	X
7	Bolts	ASTM A193 B8	
8	Screen	AISI 304	X
9	Gasket	316 / GRAPHITE	X
10	Strainer cap	ASTM A182 F22	

Size (inches)	Flanged								
	UNI-DIN PN 40 - 100		600#		1500#				
	S	A	B	C	Weight (Kg)	SF Kg	Kg	SF Kg	Kg
1/2"	155	150	48	94	7	242	9	242	8.5
3/4"	155	150	48	94	7	242	11	242	9.2
1"	155	150	48	94	7	242	12.2	242	11.2
								242	15



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove cover(2),unscrew seat-disc assembly and clean the inside of the body. Screw in the new assembly (3-4-5),replace body,cover,gasket (6) and reassemble cover. To service the strainer unscrew the relevant cap (10) and clean or replace the screen. Screwing the cap back always fit a new gasket (9).

**How to order: i.e. DK 100 1" SW F22**

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DK 150 F 22**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



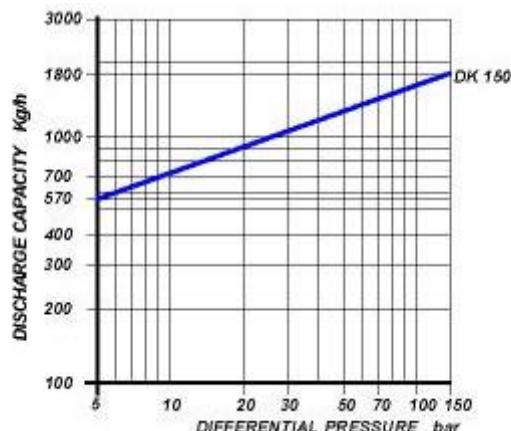
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1" – 1 1/2"

### CONNECTIONS

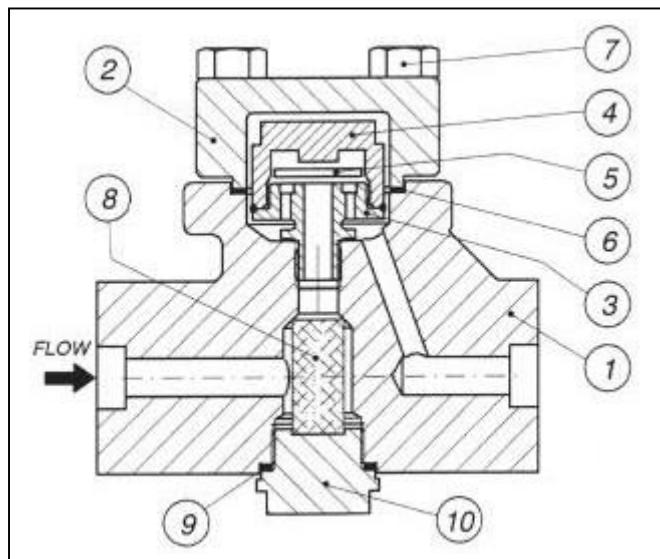
BUTTWELD	ANSI B 16.25
SOCKET WELD	ANSI B 16.11
FLANGED ( on request )	ANSI B 16.5 ( 1500 )

### LIMITING CONDITIONS ( according to ISO 6552 )

Steam Trap rating	2500
PMA: Max allowable pressure	430 bar
TMA: max allowable temperature	580°C
PMO: max working pressure	150 bar
TMO: max working temperature	550°C
Minimum Working Pressure	5 bar
PMOB: max working back pressure	80%

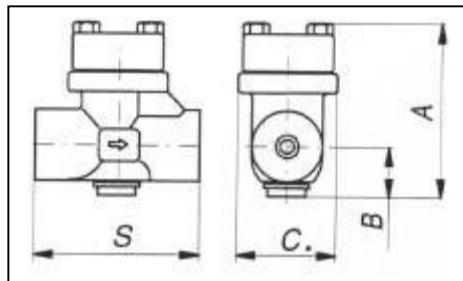
## THERMODYNAMIC STEAM TRAPS

# DK 150 F 22



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F22	
2	Cover	ASTM A182 F22	
3	Seat	AISI 431	X
4	Cover seat	AISI 431	X
5	Disc	AISI 431	X
6	Gasket	316 / GRAPHITE	X
7	Bolts	ASTM A193 B8	
8	Screen	AISI 304	X
9	Gasket	316 / GRAPHITE	X
10	Strainer cap	ASTM A182 F22	

Size (inches)	S	A	B	C	Weight (Kg)
1/2"	170	215	72	106	9.5
3/4"	170	215	72	106	9.5
1	170	215	72	106	9.5
1 1/2"	170	215	72	106	9.5



### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove cover(2),unscrew seat-disc assembly and clean the inside of the body. Screw in the new assembly (3-4-5),replace body,cover,gasket (6) and reassemble cover. To service the strainer unscrew the relevant cap (10) and clean or replace the screen. Screwing the cap back always fit a new gasket (9).

**How to order: i.e. DK 150 F 22 1" SW**

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DOUGLAS ITALIA S.p.A.

**THERMODYNAMIC  
STEAM TRAPS**  
**DK 150 F304**

### THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area ( Bernulli Law ) under the disc which draws it towards the seat.



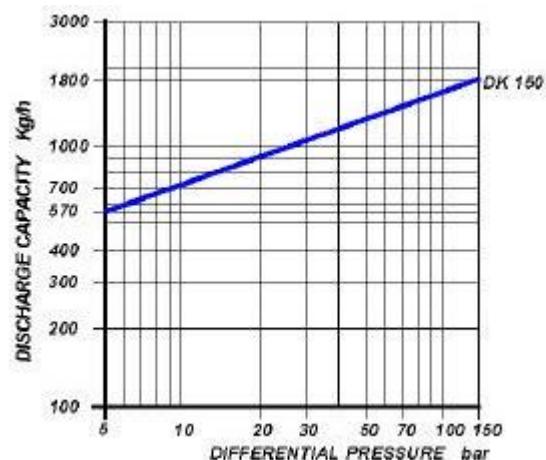
### MAIN FEATURES

Reduced dimension and weight simple and reliable. It discharges air. It withstands waterhammer. Condensate discharge is intermittent. Some loss of live steam.

### APPLICATIONS

- Steam mains
- Tracing lines
- Turbines
- Marine applications
- Presses

### DISCHARGE CAPACITY



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

### SIZES

1/2" – 3/4" – 1"

### CONNECTIONS

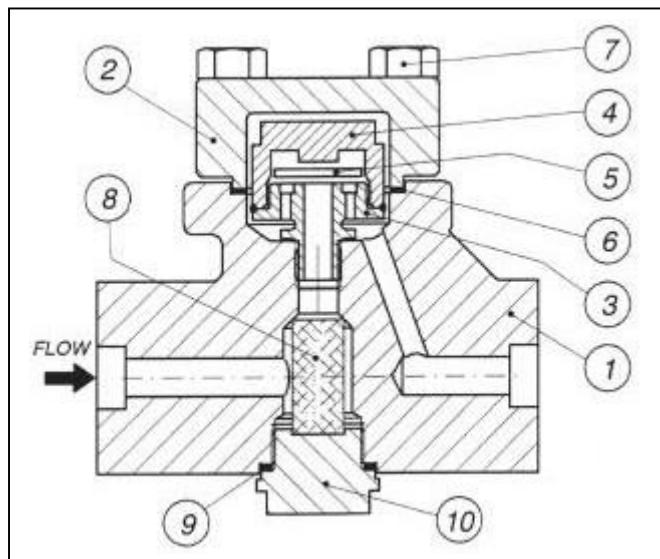
BUTTWELD	ANSI B 16.25
SOCKET WELD	ANSI B 16.11
FLANGED ( on request )	ANSI B 16.5 ( 1500 )

### LIMITING CONDITIONS ( according to ISO 6552 )

Steam Trap rating	2500
PMA: Max allowable pressure	410 bar
TMA: max allowable temperature	580°C
PMO: max working pressure	150 bar
TMO: max working temperature	550°C
Minimum Working Pressure	5 bar
PMOB: max working back pressure	80%

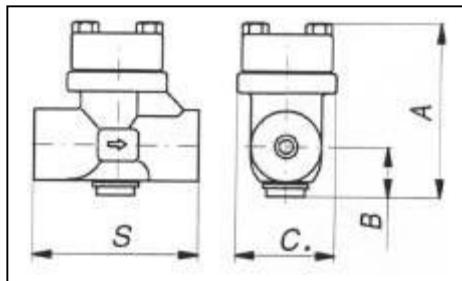
## THERMODYNAMIC STEAM TRAPS

### DK 150 F304



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F304	
2	Cover	ASTM A182 F304	
3	Seat	AISI 431	X
4	Cover seat	AISI 431	X
5	Disc	AISI 431	X
6	Gasket	S.S 304	X
7	Bolts	ASTM A193 B8	
8	Screen	AISI 304	X
9	Gasket	S.S 304	X
10	Strainer cap	ASTM A182 F304	

Size (inches)	S	A	B	C	Weight (Kg)	Flanged	
						1500#	SF Kg
1/2"	170	215	72	106	9.5	290	10
3/4"	170	215	72	106	9.5	290	10
1"	170	215	72	106	9.5	297	11



#### INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

#### HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Remove cover(2),unscrew seat-disc assembly and clean the inside of the body. Screw in the new assembly (3-4-5),replace body,cover,gasket (6) and reassemble cover. To service the strainer unscrew the relevant cap (10) and clean or replace the screen. Screwing the cap back always fit a new gasket (9).

**How to order: i.e. DK 150 F 304 1" SW**

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