

AIR AND GAS VENTS FOR LIQUID SYSTEM

GO BACK

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AP

AK

GA 150A WCB

GA 150A CF8M

GO BACK

AIR AND GAS VENTS

Douglas float type air and gas vents are designed for automatic venting of any gas from any liquid under pressure.

MAIN FEATURES

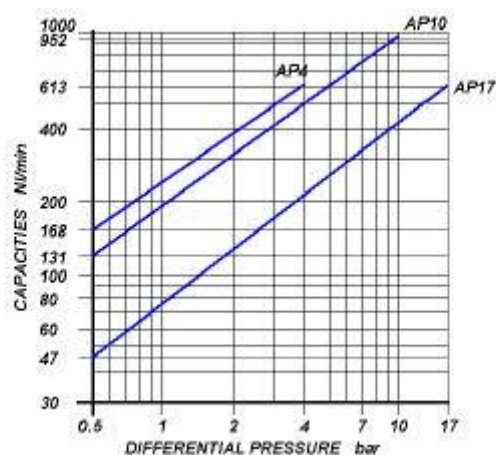
- ❑ Corrosion-resistance working parts
- ❑ Capacities to meet most requirements
- ❑ Replaceable internal parts



OPERATION

The float controls the discharge valve which is normally open allowing all air to escape through its large orifice. As liquid enters the chamber the float gradually rises, closing the valve.

DISCHARGE CAPACITY



CAPACITIES AT A STANDARD ATMOSPHERIC PRESSURE OF 1 bar AND 20°C
 $Q[°C] = Q[20°C] \times (288 / (273 + t))$ Q = Capacity t = Temperature

SIZES

1/2" – 3/4"

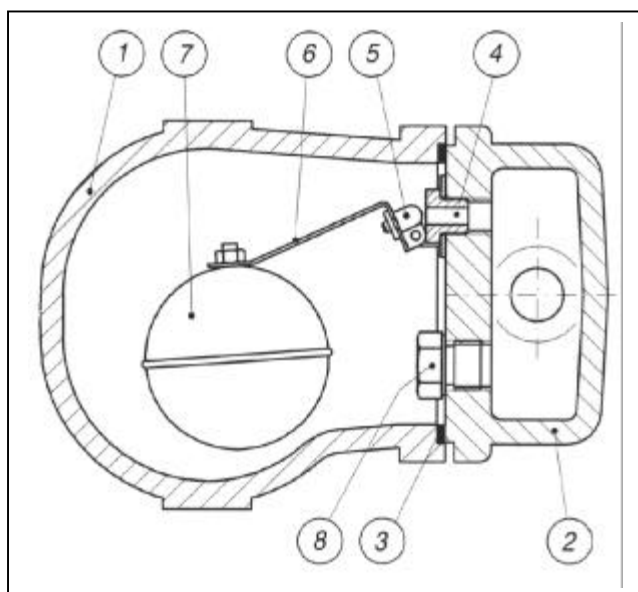
CONNECTIONS

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

LIMITING CONDITIONS (according to ISO 6552)

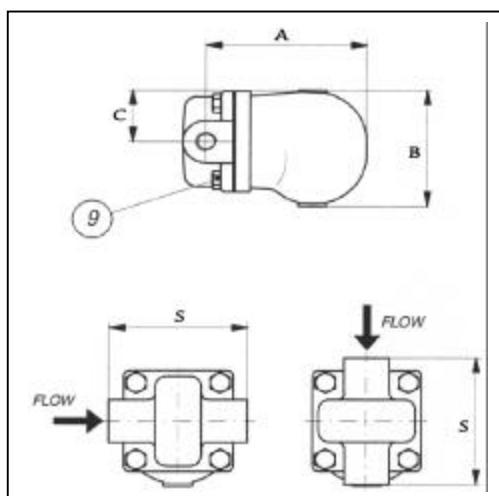
Steam Trap rating	DIN PN 25
PMA: Max allowable pressure	25 bar
TMA: max allowable temperature	300°C
PMO: max working pressure	17 bar
TMO: max working temperature	250°C
Minimum liquid specific weight	0.45 Kg/dm3
Max. Differential pressure (AP 4)	4 bar
Max. Differential pressure (AP 10)	10 bar
Max. Differential pressure (AP 17)	17 bar

AIR AND GAS VENTS AP



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	Ball float	AISI 304	X
8	Plug	STAINLESS STEEL	
9	Bolts	8.8 (UNI 3740-74)	

Size (inches)	S	A	B	C	Weight (Kg)
1/2"	120	141	110	49	4.8
3/4"	120	141	110	49	4.8



INSTALLATION

The air vent must be fitted above the point being vented and must always be fitted with the float arm in horizontal plane so that it rises and falls vertically with the flow direction indicated on the body.

HOW TO SERVICE

By installing a new mechanism assembly (4),(5),(6), if necessary also a ball float (7), you can bring the steam trap to the "as new from factory" condition. This operation is carried out without removing the trap from the pipeline. Always fit a new gasket (3) when reassembling.

How to order: i.e. AP 10 1/2" BSP

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

OFFICIAL WEB SITE: www.douglas-italia.com

AIR AND GAS VENTS

Douglas float type air and gas vents are designed for automatic venting of any gas from any liquid under pressure.

MAIN FEATURES

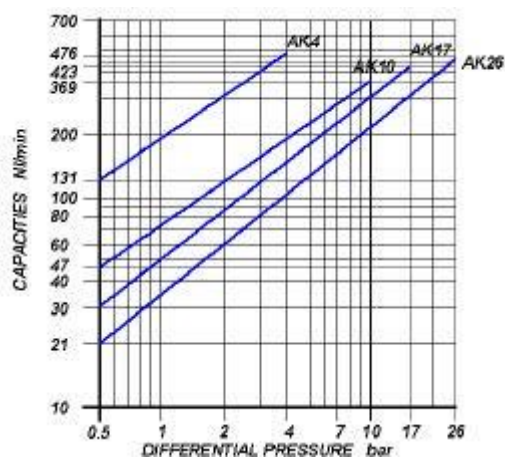
- ☐ Complete stainless steel construction
- ☐ High corrosion resistance
- ☐ Sealed construction



OPERATION

The float controls the discharge valve which is normally open allowing all air to escape through its large orifice. As liquid enters the chamber the float gradually rises, closing the valve.

DISCHARGE CAPACITY



CAPACITIES AT A STANDARD ATMOSPHERIC PRESSURE OF 1 bar AND 20°C
 $Q[t^{\circ}C] = Q[20^{\circ}C] \times (288 / (273 + t))$ Q = Capacity t = Temperature

SIZES

1/2" – 3/4"

CONNECTIONS

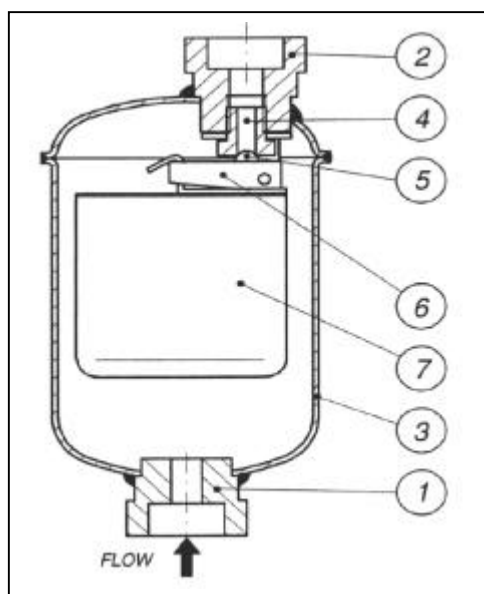
Screwed	BS 21 (BSP) / ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI B 16.5 / UNI/DIN

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
Minimum liquid specific weight	0.6 Kg/dm3
Max. Differential pressure (AK 4)	4 bar
Max. Differential pressure (AK 10)	10 bar
Max. Differential pressure (AK 17)	17 bar
Max. Differential pressure (AK 26)	26 bar

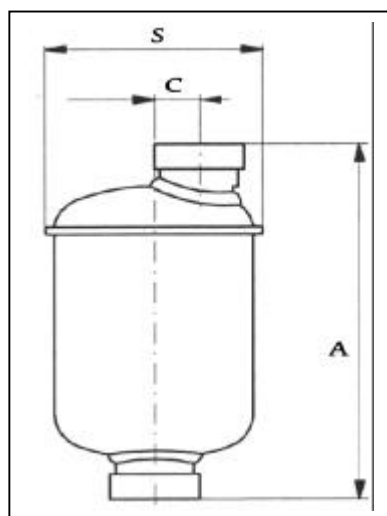
AIR AND GAS VENTS

AK



POS.	DESCRIPTION	MATERIALS	SPARES
1	Inlet coupling	AISI 304	
2	Outlet coupling	AISI 304	
3	Body	AISI 304	
4	Seat	AISI 410	
5	Valve	AISI 410	
6	Lever	AISI 304	
7	Float	AISI 304	

Size (inches)	S	A	C	Weight (Kg)
1/2"	76	144	16	0.9
3/4"	76	144	16	0.9



INSTALLATION

The trap must be installed with the body upright so that the float rises and falls vertically. The inlet should be at the bottom with the trap installed above the drain point.

How to order: i.e. AK 10 1/2" NPT

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MAIN FEATURES

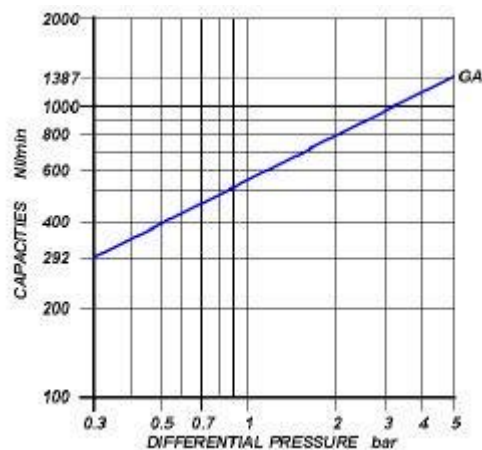
- ❑ Corrosion-resistance working parts
- ❑ Capacities to meet most requirements
- ❑ Replaceable internal parts



OPERATION

The float controls the discharge valve which is normally open allowing all air to escape through its large orifice. As liquid enters the chamber the float gradually rises, closing the valve.

DISCHARGE CAPACITY



CAPACITIES AT A STANDARD ATMOSPHERIC PRESSURE OF 1 bar AND 20°C
 $Q[t°C] = Q[20°C] \times (288 / (273 + t))$ Q = Capacity t = Temperature

SIZES

1/2" – 3/4" – 1"

CONNECTIONS

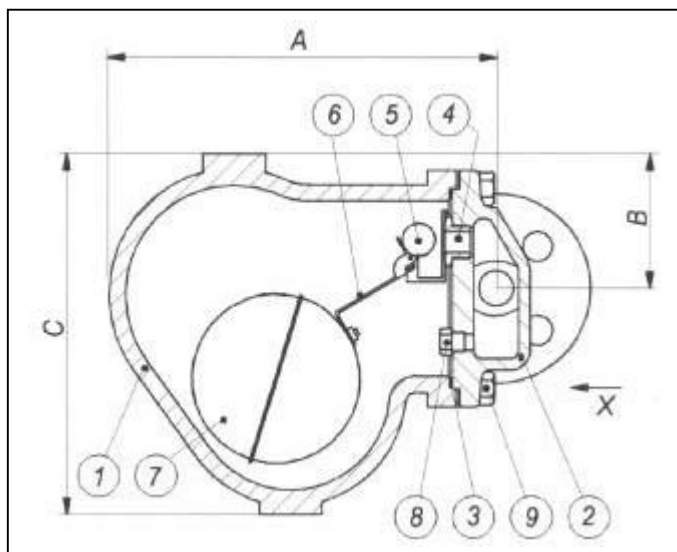
SCREWED	ANSI B1.20.1 (NPT) / BS21 (BSP)
SOCKET WELD	ANSI B16.11
FLANGED	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 150
PMA: Max allowable pressure	20 bar
TMA: max allowable temperature	350°C
PMO: max working pressure	14 bar
TMO: max working temperature	300°C
Minimum liquid specific weight	0.5 Kg/dm ³
Max. Differential pressure	5 bar

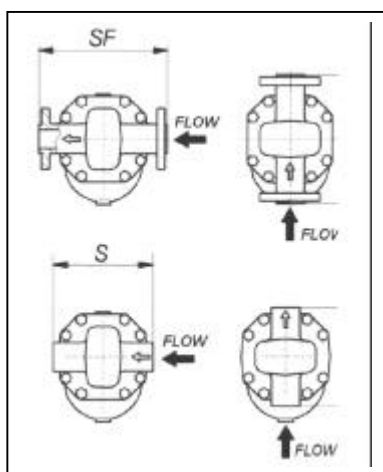
AIR AND GAS VENTS

GA 150A WCB



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A216 WCB	
2	Cover	ASTM A216 WCB	
3	Gasket	316 / GRAPHITE	X
4	Seat	AISI 316	X
5	Valve	AISI 316	X
6	Lever	AISI 316	X
7	Ball float	AISI 316	X
8	Plug	STAINLESS STEEL	
9	Bolts	ASTM A193 B7	

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"	165	213	71	180	11	211	13.3	205	13.3	211	13.5	222	14
3/4"	165	213	71	180	11	215	13.7	207	13.7	211	14.6	230	15
1"	165	213	71	180	11	215	14.5	210	14.5	214	15.2	230	15.5



INSTALLATION

The air vent must be fitted above the point being vented and must always be fitted with the float arm in horizontal plane so that it rises and falls vertically with the flow direction indicated on the body.

HOW TO SERVICE

By installing a new mechanism assembly (4),(5),(6), if necessary also a ball float (7), you can bring the steam trap to the "as new from factory" condition. This operation is carried out without removing the trap from the pipeline. Always fit a new gasket (3) when reassembling.

How to order: i.e. GA 150A WCB 1/2" BSP

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MAIN FEATURES

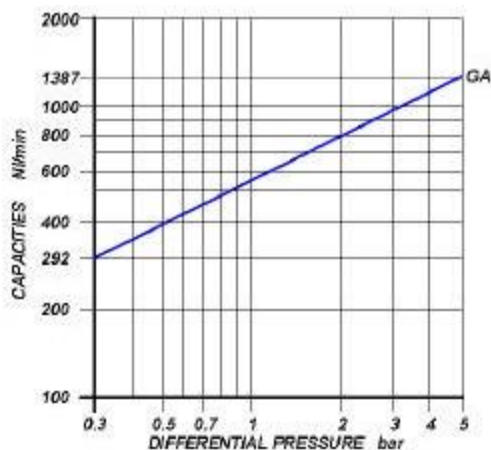
- ❑ Corrosion-resistance working parts
- ❑ Capacities to meet most requirements
- ❑ Replaceable internal parts



OPERATION

The float controls the discharge valve which is normally open allowing all air to escape through its large orifice. As liquid enters the chamber the float gradually rises, closing the valve.

DISCHARGE CAPACITY



CAPACITIES AT A STANDARD ATMOSPHERIC PRESSURE OF 1 bar AND 20°C
 $Q[t^{\circ}C] = Q[20^{\circ}C] \times (288 / (273 + t))$ Q = Capacity t = Temperature

SIZES

1/2" - 3/4" - 1"

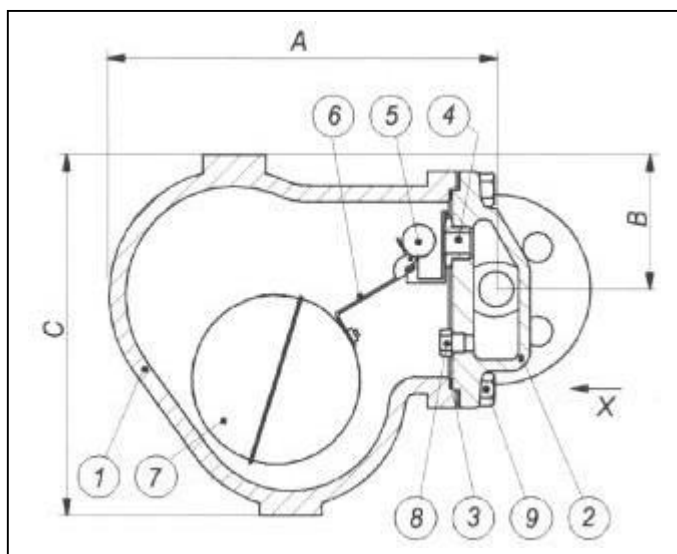
CONNECTIONS

SCREWED	ANSI B1.20.1 (NPT) / BS21 (BSP)
SOCKET WELD	ANSI B16.11
FLANGED	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)

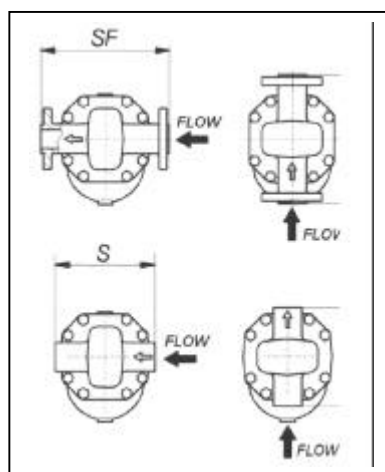
Steam Trap rating	ANSI 150
PMA: Max allowable pressure	20 bar
TMA: max allowable temperature	410°C
PMO: max working pressure	14 bar
TMO: max working temperature	370°C
Minimum liquid specific weight	0.5 Kg/dm³
Max. Differential pressure	5 bar

AIR AND GAS VENTS GA 150A CF8M



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A351 CF8M	
2	Cover	ASTM A351 CF8M	
3	Gasket	316 / GRAPHITE	X
4	Seat	AISI 316	X
5	Valve	AISI 316	X
6	Lever	AISI 316	X
7	Ball float	AISI 316	X
8	Plug	STAINLESS STEEL	
9	Bolts	ASTM A193 B8	

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"	165	213	71	180	11	211	13.3	205	13.3	211	13.5	222	14
3/4"	165	213	71	180	11	215	13.7	207	13.7	211	14.6	230	15
1"	165	213	71	180	11	215	14.5	210	14.5	214	15.2	230	15.5



INSTALLATION

The air vent must be fitted above the point being vented and must always be fitted with the float arm in horizontal plane so that it rises and falls vertically with the flow direction indicated on the body.

HOW TO SERVICE

By installing a new mechanism assembly (4),(5),(6), if necessary also a ball float (7), you can bring the steam trap to the "as new from factory" condition. This operation is carried out without removing the trap from the pipeline. Always fit a new gasket (3) when reassembling.

How to order: i.e. GA 150A CF8M 1/2" BSP

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