STEAM EQUIPMENT

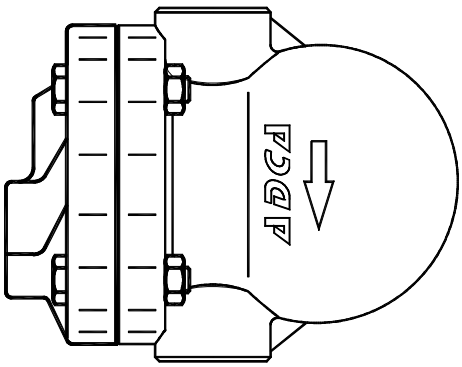
COMPRESSED AIR BALL FLOAT TRAPS
FA17/G

DESCRIPTION

FA 17/G is a fully automatic ball float trap extremely compact in dimension and light in weight, specially designed for draining water from compressed air lines.
Applications on aftercoolers, separators and compressed air mains.
Connections are female screwed or flanged.

MAIN FEATURES

Modulating discharge.
Unaffected by sudden or wide load and pressure changes.



OPTIONS:	Horizontal reversible inlet connections.
USE:	Compressed air and non corrosive gas, compatible with the construction.
AVAILABLE MODELS:	FA 17/G
SIZES:	DN ½" - 3/4"; DN 15 – DN 20.
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21) Flanged EN 1092-2 PN16 or ANSI
INSTALLATION:	Vertical installation. See IMI installation and maintenance instructions.

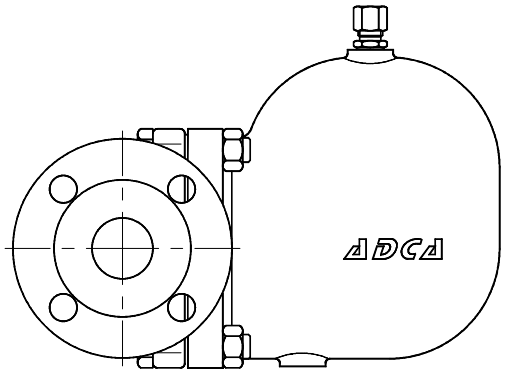
APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure	14 bar

BODY LIMITING CONDITIONS		
FLANGED PN16*	FLANGED ANSI 150 **	RELATED TEMP.
ALLOW. PRES.	ALLOW. PRES.	
16 bar	15,4 bar	100 ºC
15,5 bar	14,6 bar	150 ºC
14,7 bar	13,8 bar	200 ºC
13,9 bar	12,1 bar	250 ºC

PMO - Max. operating pressure 14 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-2:2000 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN16 or below, depending on the type of connection adopted. Rating PN16 for thread.

FLOW RATE CAPACITY IN Kg /h														
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*												
		0,5	*1*	*1,5*	*2*	*3*	*4*	*6*	*7*	*8*	*9*	*10*	*12*	*14*
FA17G	**1/2"-3/4"**	120	145	180	190	230	250	300	330	340	360	380	430	430

COMPRESSED AIR BALL FLOAT TRAPS
FA17/G
(DN40 – DN50)

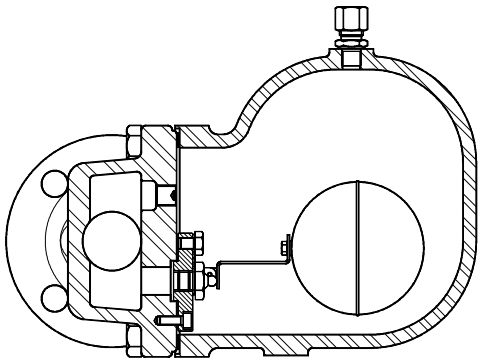


DESCRIPTION

FA17/G is a fully automatic ball float trap extremely compact in dimension and light in weight, specially designed for draining water from compressed air lines.
Applications on aftercoolers, separators and compressed air mains.
Connections are screwed or flanged.

MAIN FEATURES

Modulating discharge.
Unaffected by sudden or wide load and pressure changes.



OPTIONS:	Horizontal reversible inlet connections.
USE:	Compressed air and non corrosive gas, compatible with the construction.
AVAILABLE MODELS:	FA 17 G
SIZES:	DN 11/2" -2"; DN 40 – DN 50.
CONNECTIONS:	Female screwed ISO 7/1 Rp (BS21) Flanged EN 1092-2 PN16 or ANSI
INSTALLATION:	Standard horizontal installation-flow from right to left (R-L). Vertical installation with the flow from top to bottom (V). See IMI installation and maintenance instructions.

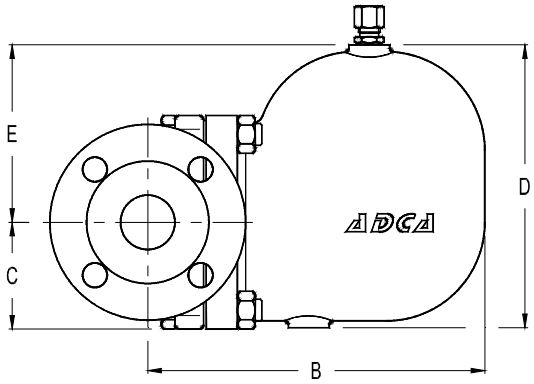
APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure	14 bar

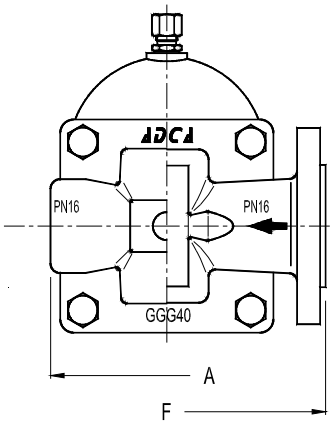
BODY LIMITING CONDITIONS		
FLANGED PN16*	FLANGED ANSI 150 **	RELATED TEMP.
ALLOW. PRES.	ALLOW. PRES.	
16 bar	15,4 bar	100 ºC
15,5 bar	14,6 bar	150 ºC
14,7 bar	13,8 bar	200 ºC
13,9 bar	12,1 bar	250 ºC

PMO - Max. operating pressure 14 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-2:2000 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN16 or below, depending on the type of connection adopted. Rating PN16 for thread.

FLOW RATE CAPACITY IN Kg /h														
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*												
		0,5	*1*	*1,5*	*2*	*3*	*4*	*6*	*7*	*8*	*9*	*10*	*12*	*14*
FA17G	**40 - 50**	370	515	605	720	900	1005	1250	1340	1500	1560	1620	1750	1890

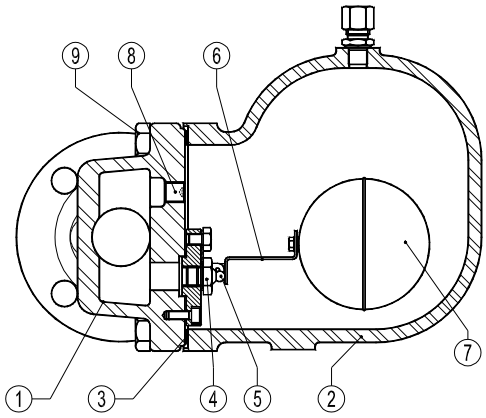
DIMENSIONS (mm)												
Screwed							EN PN16			ANSI 150		
SIZE DN	A	B	C	D	E	WGT. Kgs	F	B	WGT. Kgs	F	B	WGT. Kgs
40-11/2"	210	248	79	208	131	16,9	230	248	20,3	230	248	19,1
50-2"	210	248	79	208	131	17,5	230	248	20,7	230	248	20,5

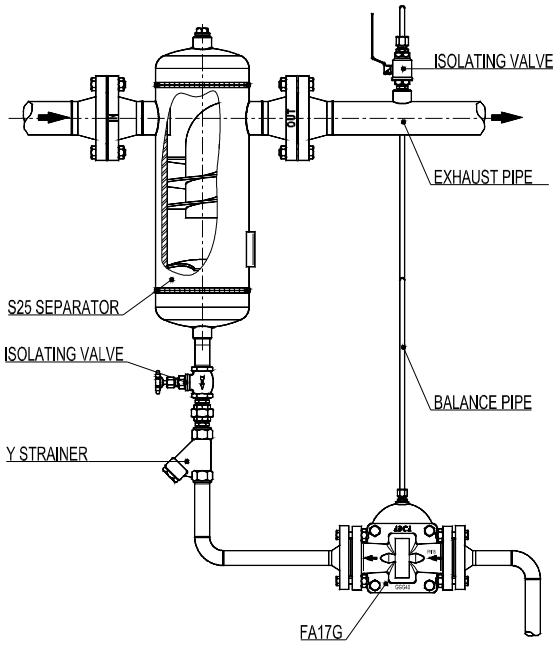


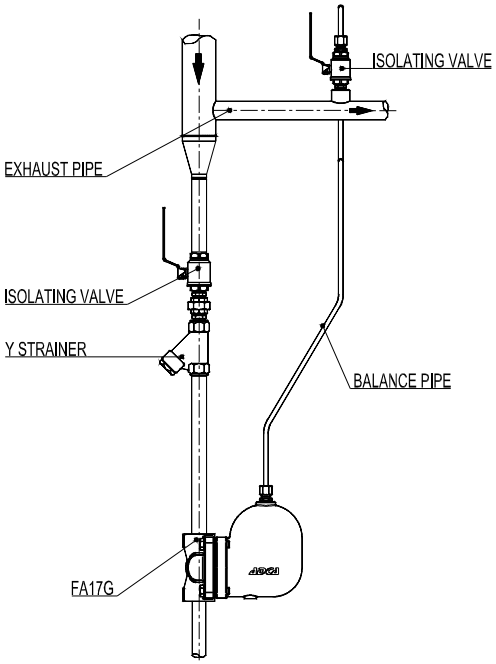


MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GJS-400-15 / 0.7040
2	Cover	GJS-400-15 / 0.7040
3	* Gasket	St.Steel / Graphite
4	* Seat	AISI 304 / 1.4301
5	* Valve	AISI 304 / 1.4301
6	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301
8	Plug	St. Steel
9	Bolts	Steel 8.8

*Available spare parts.







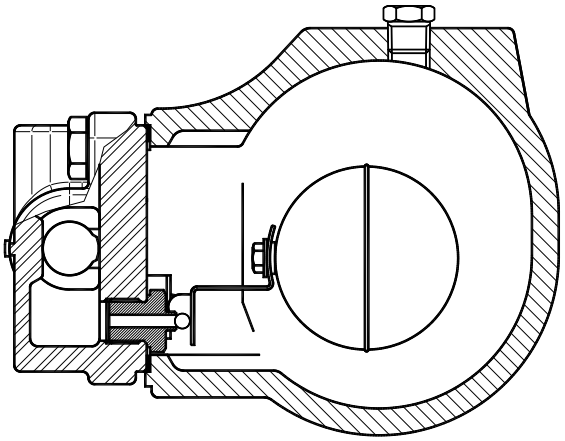
COMPRESSED AIR BALL FLOAT TRAPS
FA20
(Carbon Steel)

DESCRIPTION

FA20 series compressed air float traps are specially designed for draining water from high pressure compressed air and gas lines.
Applications on aftercoolers, separators and compressed air and gas mains.
An air balance pipe must be fitted allowing the air trapped in the trap body to escape, avoiding obstructing of condensate flow.
Connections are flanged or female screwed.

MAIN FEATURES

Modulating discharge.
Unaffected by sudden or wide load and pressure changes.



OPTIONS:	Internal strainer (only on horizontal models). Equalizing and drain plug on body. Lifting lever.
USE:	Compressed air and non corrosive gas compatible with the construction.
AVAILABLE MODELS:	FA 20-21.
SIZES:	DN 1/2" - 1", DN 15 - DN 25.
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21) Flanged EN 1092-1 PN40 or ANSI. Special flanges upon request.
INSTALLATION	Horizontal or vertical installation.

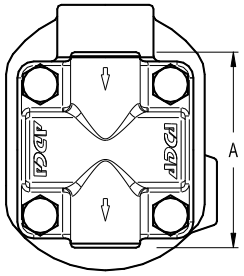
APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-FA20-21	21 bar

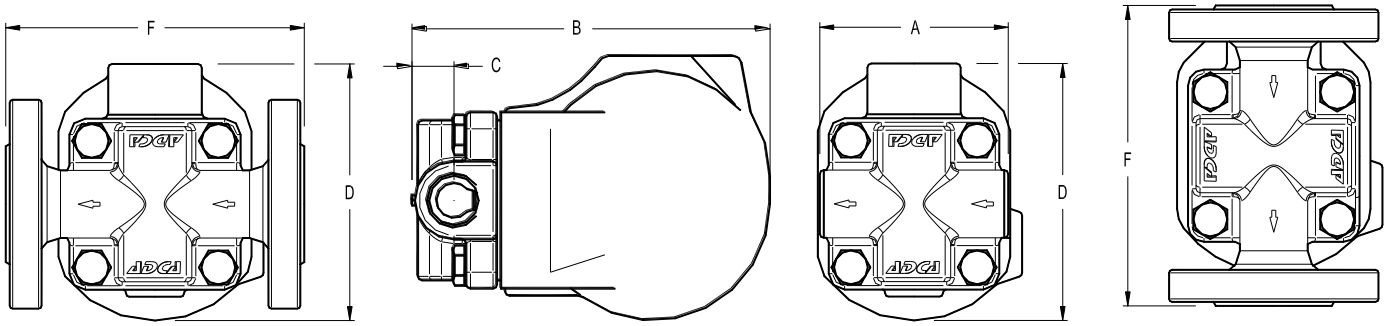
BODY LIMITING CONDITIONS		
FLANGED PN25 / ANSI 300*	**FLANGED ANSI 150 ****	**RELATED TEMP.**
ALLOW. PRES.	**ALLOW. PRES.**	
23,2 bar	15,4 bar	100 ºC
22 bar	15,8 bar	150 ºC
20,8 bar	13,8 bar	200 ºC
19 bar	12,1 bar	250 ºC

PMO - Max. operating pressure 21 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-1:2007 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN25 or below, depending on the type of connection adopted. Rating PN25 for thread,SW and BW.

FLOW RATE CAPACITY IN Kgs/h															
MODEL	***SIZE***	***DIFFERENTIAL PRESSURE (bar)***													
		0,5	***1***	***1,5***	***2***	***3***	***4,5***	***6***	***7***	***8***	***9***	***10***	***12***	***14***	***16***	***21***
FA20	**15 - 25**	75	100	125	155	180	220	255	275	290	305	320	345	375	420	480

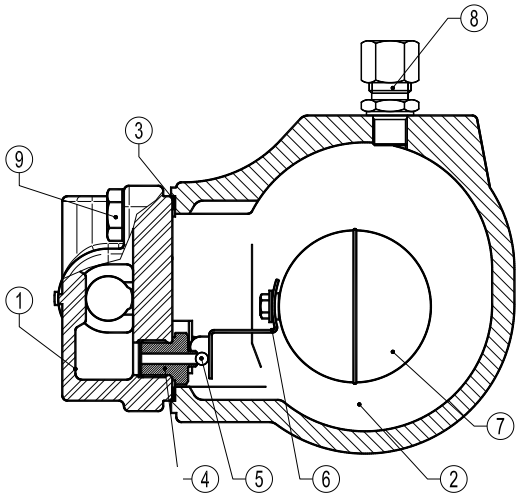
DIMENSIONS (mm)											
Screwed						EN PN16/40		ANSI 150		ANSI 300	
SIZE DN	A	B	C	D	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs
15-1/2"	95	178	23	128	5,2	150	6,7	150	6,2	150	7
20-3/4"	95	178	23	128	5,2	150	7,4	150	6,6	150	8,2
25-1"	95	178	23	128	5,2	160	7,8	160	7,4	160	9



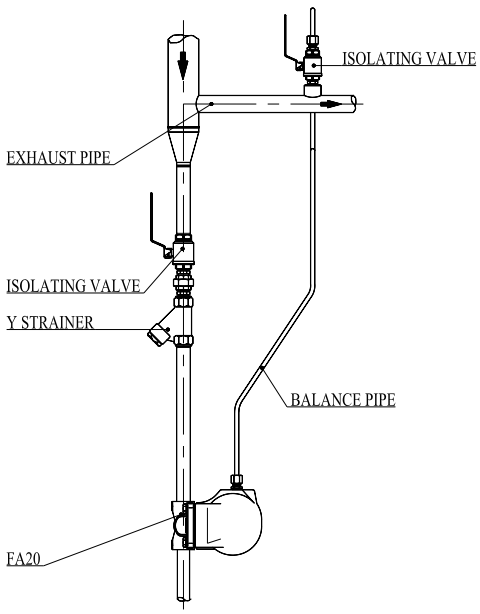


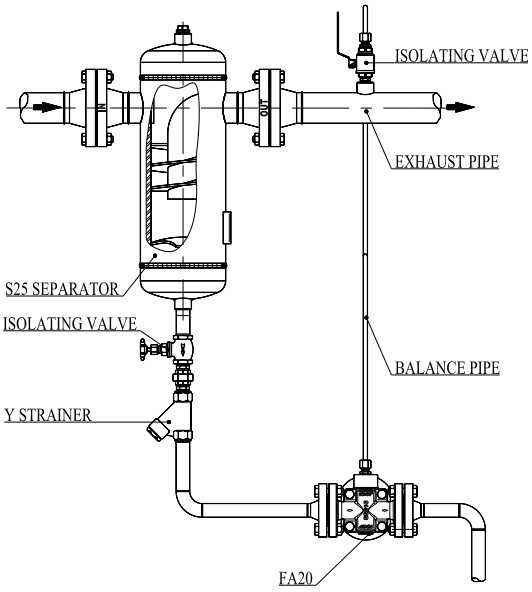
MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GP240GH / 1.0619
2	Cover	GP240GH / 1.0619
3	*Gasket	Stainless st. / Graphite
4	*Seat	AISI 410 / 1.4006
5	*Valve	VITON
		** AISI 410 / 1.4006
6	*Lever	AISI 304 / 1.4301
7	*Float	AISI 304 / 1.4301
8	** Compression fitting	St.Steel or Steel Fe / Zn
9	Bolts	Steel 8.8

* Available spare parts. ** Optional



Typical Installation





COMPRESSED AIR BALL FLOAT TRAPS
FA32
(Carbon Steel)

DESCRIPTION

FA32 series compressed air float traps are specially designed for draining water from high pressure compressed air and gas lines.
Applications on aftercoolers, separators and compressed air and gas mains.
An air balance pipe must be fitted allowing the air trapped in the trap body to escape, avoiding obstructing of condensate flow.
Connections are flanged or female screwed.

MAIN FEATURES

Modulating discharge.
Unaffected by sudden or wide load and pressure changes.

OPTIONS: Internal strainer (only on horizontal models).
Equalizing and drain plug on body.
Lifting lever.

USE: Compressed air and non corrosive gas compatible with the construction.

AVAILABLE MODELS: FA 32-21, FA32-32.

SIZES: DN 1” - DN 25.

CONNECTIONS: Female screwed ISO 7/1Rp(BS21)
Flanged EN 1092-1 PN40 or ANSI.
Special flanges upon request.

INSTALLATION Horizontal or vertical installation.

BODY LIMITING CONDITIONS		
FLANGED PN40 / ANSI 300*	FLANGED ANSI 150 **	RELATED TEMP.
ALLOW. PRES.	ALLOW. PRES.	
37,1 bar	15,4 bar	100 ºC
33,3 bar	13,8 bar	200 ºC
30,4 bar	12,1 bar	250 ºC
27,6 bar	10,2 bar	300 ºC

PMO - Max. operating pressure 32 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-1:2007 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN40 or below, depending on the type of connection adopted. Rating PN40 for thread,SW and BW.

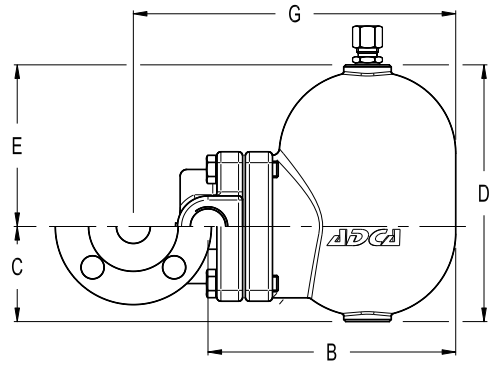
APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-FA32-21	21 bar
Maximum working dif.pressure-FA32-32	32 bar

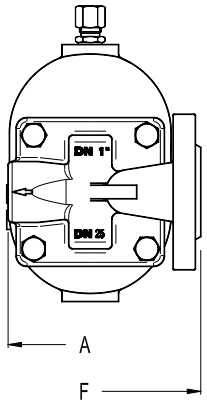
CE MARKING (PED - European Directive 97/23/EC)	
PN 40	Category
DN25 - DN1"	1 (CE Marked)

FLOW RATE CAPACITY IN Kgs/h																
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*														
		1	*1,5*	*2*	*3*	*4,5*	*6*	*7*	*8*	*9*	*10*	*12*	*14*	*16*	*21*	*32*
FA32-21	**1" - 25**	410	500	600	710	900	1005	1100	1150	1200	1350	1550	1640	1700	1850	
FA32-32	**1" - 25**	240	280	335	400	500	590	610	690	700	745	850	900	920	1100	1380

DIMENSIONS (mm)																							
Screwed							EN PN 16 / 40			EN PN 16 / 40 *			ANSI 150			ANSI 150 *			ANSI 300			ANSI 300 *		
SIZE DN	A	B	C	D	E	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs
25-1"	120	195	80	190	110	9	160	248	11,3	230	195	12	160	248	11	230	195	11,2	160	248	11,3	230	195	12,8

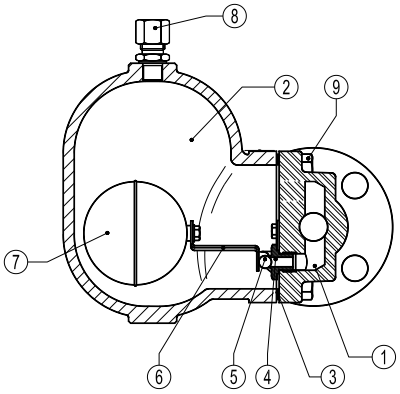
* Alternative



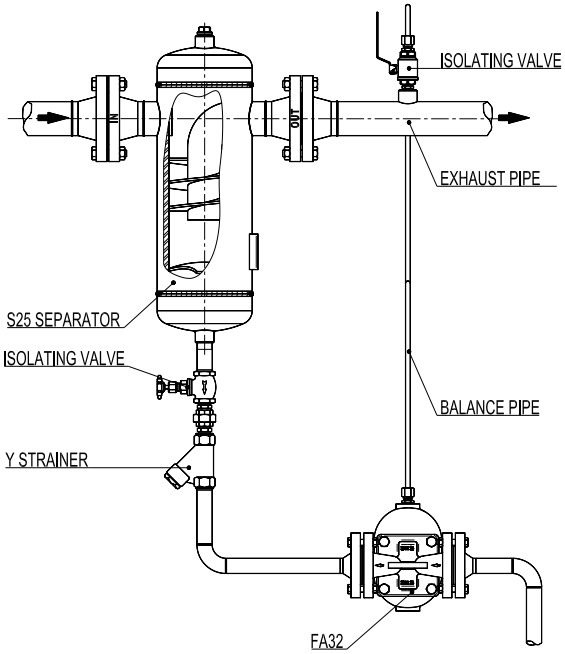


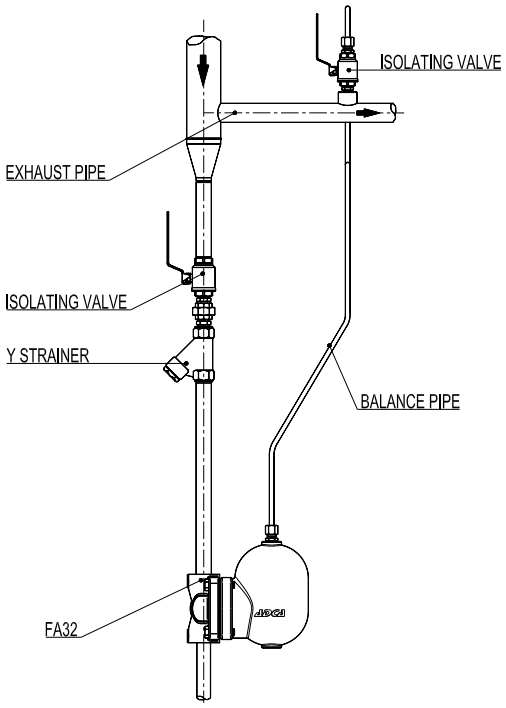
MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GP240GH / 1.0619
2	Cover	GP240GH / 1.0619
3	*Gasket	Stainless st. / Graphite
4	*Seat	AISI 410 / 1.4006
5	*Valve	AISI 410 / 1.4006
6	*Lever	AISI 304 / 1.4301
7	*Float	AISI 304 / 1.4301
8	**Compression fitting	St.Steel or Steel Fe / Zn
9	Bolts	Steel 8.8

*Available spare parts. ** Optional



Typical Installation





COMPRESSED AIR BALL FLOAT TRAPS
FA16SS (Stainless steel)

DESCRIPTION

FA16SS is a fully automatic ball float trap extremely compact in dimension and light in weight, specially designed for draining water from compressed air lines.
Applications on after coolers, separators and compressed air mains.
Connections are female screwed.

MAIN FEATURES

Corrosion-resistant.
Replaceable internal parts.
Modulating discharge
Unaffected by sudden or wide load and pressure changes.

OPTIONS: Compression fitting
Hand purging valve.

USE: Compressed air and non corrosive gas compatible with the construction.

AVAILABLE MODELS: FA16SS

SIZES: DN 1/2" and ¾".

CONNECTIONS: Inlet ½" or ¾" vertical (top to bottom)
Outlet ½" vertical.
Female screwed ISO 7/1Rp(BS21)

INSTALLATION: Vertical installation. It must be installed absolutely vertically at the points in the plant where the condensate tends to collect .
The drain should be piped to a safe position.
See IMI installation and maintenance instructions.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif. pressure	14 bar

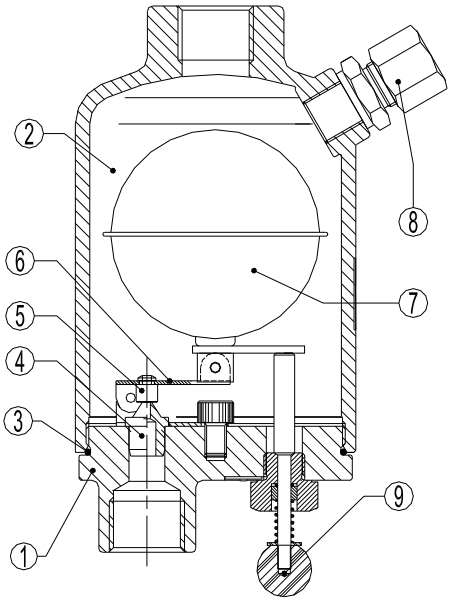
BODY LIMITING CONDITIONS	
Threaded PN16 ALLOW. PRES.	RELATED TEMP.
16 bar	100 ºC
14,5 bar	150 ºC
13,4 bar	200 ºC
12,7 bar	250 ºC

PMO - Max. operating pressure 14 bar
TMO - Max. operating temperature 180 ºC

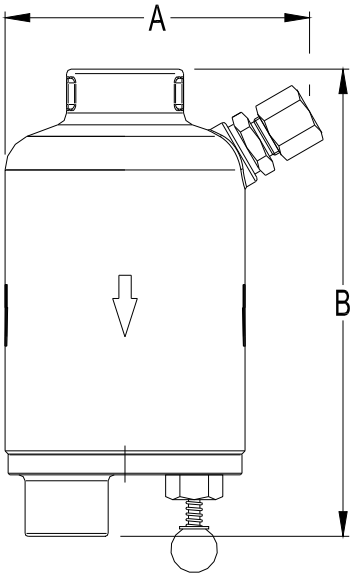
FLOW RATE CAPACITY IN Kg / h														
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*												
		0,5	*1*	*1,5*	*2*	*3*	*4*	*6*	*7*	*8*	*9*	*10*	*12*	*14*
FA 16SS	**1/2"-3/4"**	120	145	180	190	230	250	300	330	340	360	380	400	430

MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	CF8M / 1.4408 ; AISI316 / 1.4401
2	Cover	CF8M / 1.4408 ; AISI316 / 1.4401
3	* O-ring	NBR
4	* Seat	AISI 316 / 1.4401
5	* Valve	VITON
6	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301
8 a)	Compression fitting	Fe / Zn 12 - ISO 2081
9 b)	Hand purging valve	AISI 304 / 1.4301

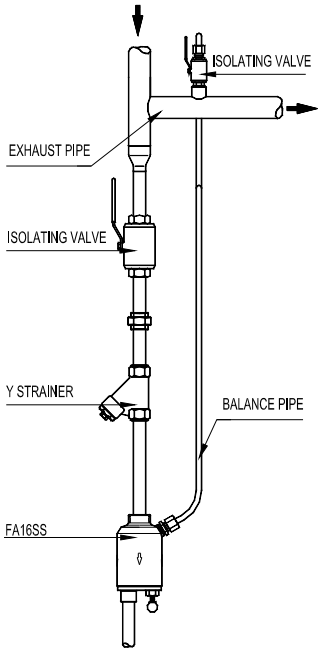
*Available spare parts.
a) 1/4" x 8 mm compression fitting
b) Hand purging valve

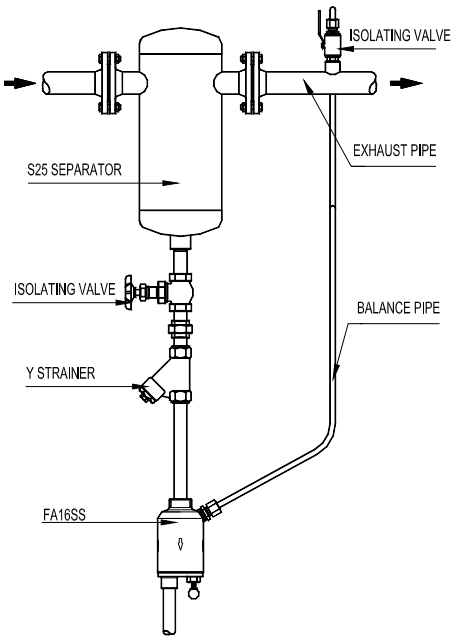


DIMENSIONS (mm)			
SIZE DN	***A***	***B***	***WGT. Kgs***
1/2"	110	152	1,6
3/4"	110	152	1,6



Typical Installation





STEAM EQUIPMENT

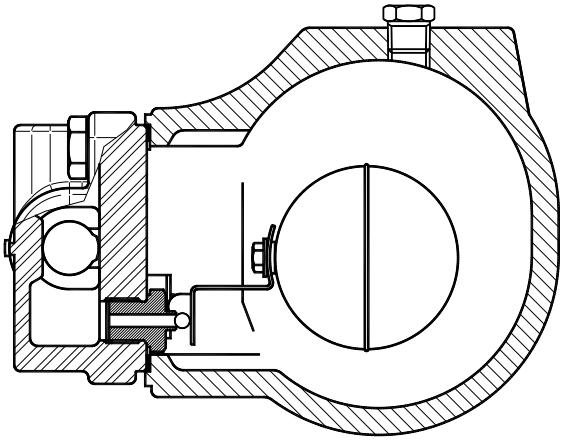
COMPRESSED AIR BALL FLOAT TRAPS
FA21SS
(Stainless Steel)

DESCRIPTION

FA21SS series compressed air float traps are specially designed for draining water from high pressure compressed air and gas lines.
Applications on aftercoolers, separators and compressed air and gas mains.
An air balance pipe must be fitted allowing the air trapped in the trap body to escape, avoiding obstructing of condensate flow.
Connections are flanged or female screwed.

MAIN FEATURES
Modulating discharge.
Unaffected by sudden or wide load and pressure changes.

OPTIONS:	Internal strainer (only on horizontal models). Equalizing and drain plug on body. Lifting lever.
USE:	Compressed air and non corrosive gas compatible with the construction.
AVAILABLE MODELS:	FA 21SS-21.
SIZES:	DN 1/2" - 1", DN 15 - DN 25.
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21) Flanged EN 1092-1 PN40 or ANSI.
INSTALLATION	Horizontal or vertical installation.



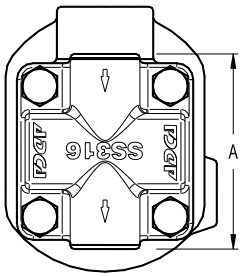
BODY LIMITING CONDITIONS		
FLANGED PN25 / ANSI 300*	FLANGED ANSI 150 **	RELATED TEMP.
ALLOW. PRES.	ALLOW. PRES.	
25 bar	16 bar	100 ºC
22,7 bar	14,8 bar	150 ºC
21 bar	13,6 bar	200 ºC
19,8 bar	12 bar	250 ºC

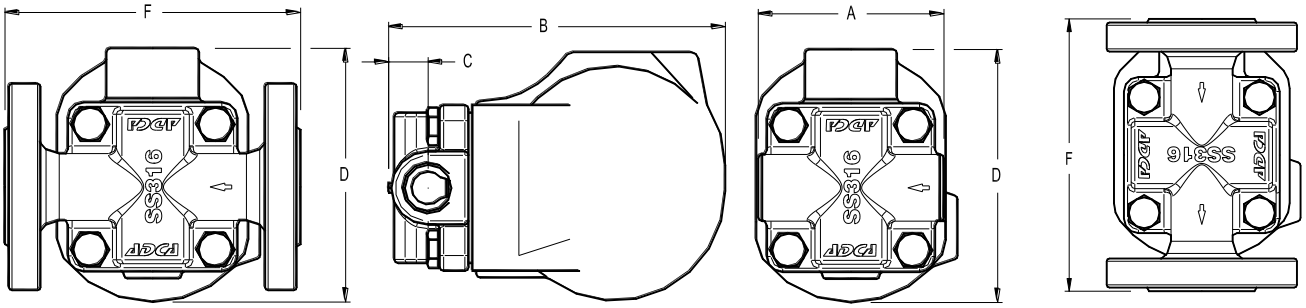
PMO - Max. operating pressure 21 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-1:2007 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN25 or below, depending on the type of connection adopted. Rating PN25 for thread,SW and BW.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-FA21-21	21 bar

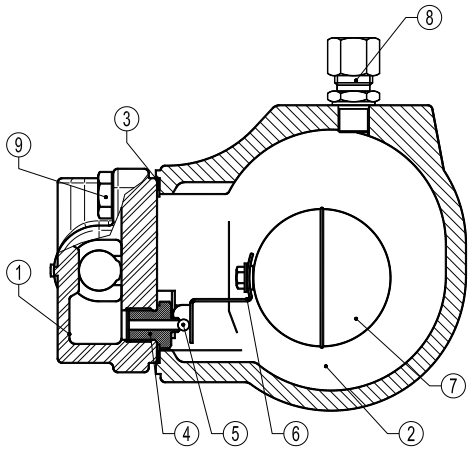
FLOW RATE CAPACITY IN Kgs/h																
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*														
		0,5	*1*	*1,5*	*2*	*3*	*4,5*	*6*	*7*	*8*	*9*	*10*	*12*	*14*	*16*	*21*
FA21SS	**15 - 25**	75	100	125	155	180	220	255	275	290	305	320	345	375	420	480

DIMENSIONS (mm)											
Screwed						EN PN16/40		ANSI 150		ANSI 300	
SIZE DN	A	B	C	D	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs
15-1/2"	95	178	23	128	5,2	150	6,7	150	6,2	150	7
20-3/4"	95	178	23	128	5,2	150	7,4	150	6,6	150	8,2
25-1"	95	178	23	128	5,2	160	7,8	160	7,4	160	9



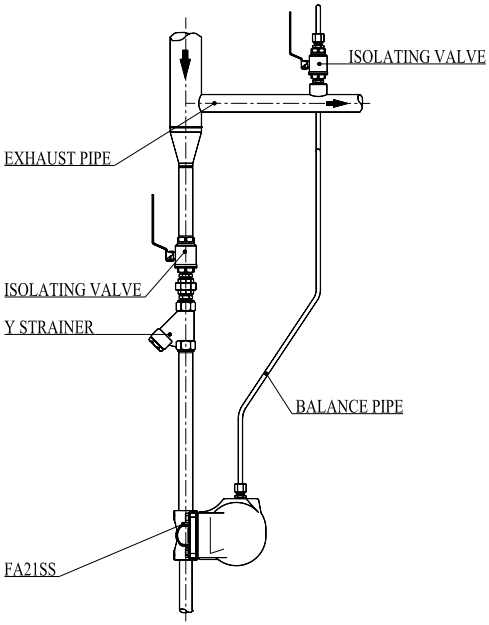


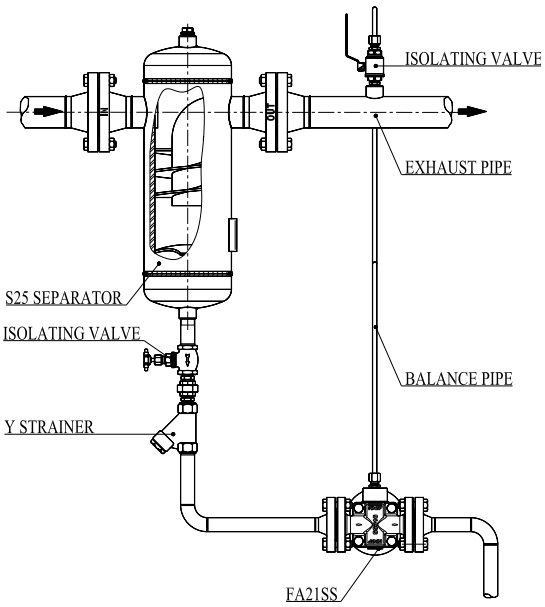
MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	CF8M / 1.4408
2	Cover	CF8M / 1.4408
3	*Gasket	Stainless st./Graphite
4	*Seat	AISI 410 / 1.4006
5	*Valve	VITON
		** AISI 410 / 1.4006
6	*Lever	AISI 304 / 1.4301
7	*Float	AISI 304 / 1.4301
8	**Compression fitting	St.Steel or Steel Fe / Zn
9	Bolts	St.Steel A2-70



*Available spare parts. **Optional

Typical Installation





COMPRESSED AIR AUTOMATIC DRAIN VALVES
CAD

DESCRIPTION

CAD - Compressed Air Automatic Drain Valve consists of a solid-state timer coupled to a solenoid valve.
The CAD is specially designed for automatic draining of filters, separators, aftercoolers, dryers, receivers, drip legs and other compressed air system components where condensate and contaminants collect.
The draining interval and discharge time can be adjusted according to the requirements.
Valve connections are female screwed.

MAIN FEATURES

Easy to read and set time for on/off periods.
Adjustable interval and discharge times.
Manual test switch.
Simple to install.

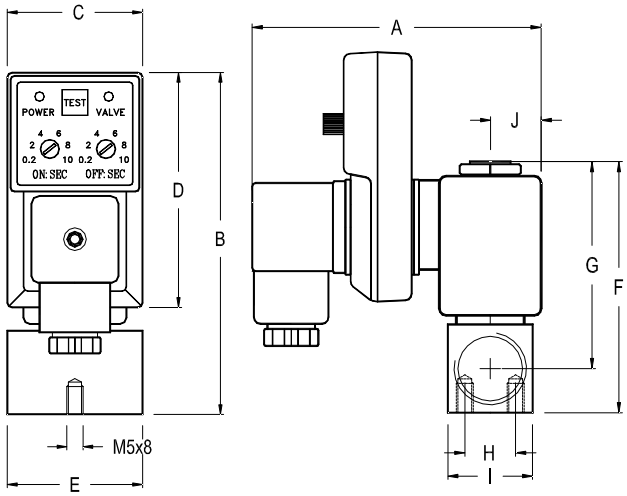
OPTIONS: Stainless steel valve body
USE: Compressed air, oil, gases and liquids compatible with the materials of construction.

AVAILABLE MODELS: CAD

SIZES: DN 3/8" and 1/ 2"

CONNECTIONS: Female screwed ISO 7/1 Rp (BS21)

INSTALLATION: In any position.



DIMENSIONS (mm)

SIZE DN	A	B	C	D	E	F	G	H	I	WGT. Kgs
3/8"	90	112	42	75	46	75	63	15	20	0,4
1/2"	90	112	42	75	40	75	63	15	20	0,4

SPECIFICATIONS

TIMER		VALVE	
Interval time	0,5 - 45 minutes	Type	2/2 Way direct acting valve
Discharge time	0,5 - 10 seconds	In/Out ports	3/8" or 1/2" BSP female
Supply voltage	240 V (24V on request)	Max. Working pressure	16bar (40 or 80 bar on request)
Current consumption	4 mA Max.	Min./ Max. Temperature	2ºC / 55ºC ambient
Operating temperature	-40ºC to +60ºC	Media temperature	Max. 90ºC
Environmental protection	IP 65	Valve Body	Forged brass (orifice 4,5mm)
Housing material	ABS Plastic FR grade	Insulation	Thermal group H (200ºC)
Connection	DIN 43650A ISO 4400/6952	Environmental protection	IP 65
Indicators	1LED (yellow) to indicate on phase	Supply voltage	240 V (24V on request)
	1LED (yellow) to indicate off phase	Voltage tolerance	+-10%

AIR ELIMINATORS FOR WATER SYSTEMS
AE16 (Cast Iron)

DESCRIPTION

The AE16 air eliminator removes air from HVAC systems and is also suitable for non corrosive and/or dangerous liquids providing that their specific weight is not less than 0,75Kg/dm3.

This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.

Connections are female screwed.

MAIN FEATURES

Corrosion-resistant working parts.

Replaceable internal parts.

USE:	Cold and hot water systems.
AVAILABLE MODELS:	AE16-6E; AE16-14E (EPDM Valve) AE16-6V; AE16-14V (VITON Valve)
SIZES:	DN ½", 3/4" and 1"
CONNECTIONS:	Inlet ½" to 1" vertical. Outlet ½" vertical. Female screwed ISO 7/1Rp(BS21)
INSTALLATION:	Vertical installation. It must be installed absolutely vertically at the points in the plant where the air tends to collect .The drain should be piped to a safe position. See IMI installation and maintenance instructions.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-AE16/6	6 bar
Maximum working dif.pressure-AE16/14	14 bar

BODY LIMITING CONDITIONS	
Threaded PN16 **ALLOW. PRES.**	**RELATED TEMP.**
16 bar	100 ºC
15,5 bar	150 ºC
14,7 bar	200 ºC
13,9 bar	250 ºC

PMO - Max. operating pressure 14 bar

TMO - Max. operating temperature (EPDM valve) 130 ºC

TMO - Max. operating temperature (VITON valve)180 ºC

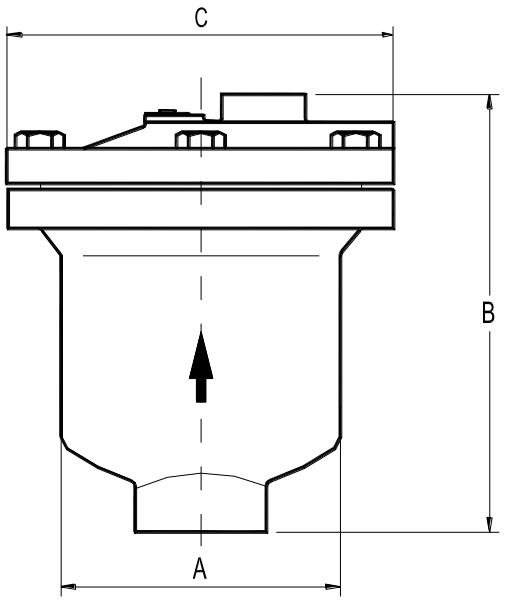
FLOW RATE CAPACITY IN N l/min														
MODEL	***SIZE***	***DIFFERENTIAL PRESSURE (bar)***												
		0,5	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***10***	***12***	***13***	***14***
AE16-6	**1/2"-1"**	75	95	140	185	245	265	330						
AE16-14	**1/2"-1"**	45	65	95	125	165	185	225	263	290	365	425	445	475

Capacities at a standard atmospheric pressure of 1bar and 20ºC.

If the temperature differs from 15ºC,the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$

where T is the actual temperature in ºC.

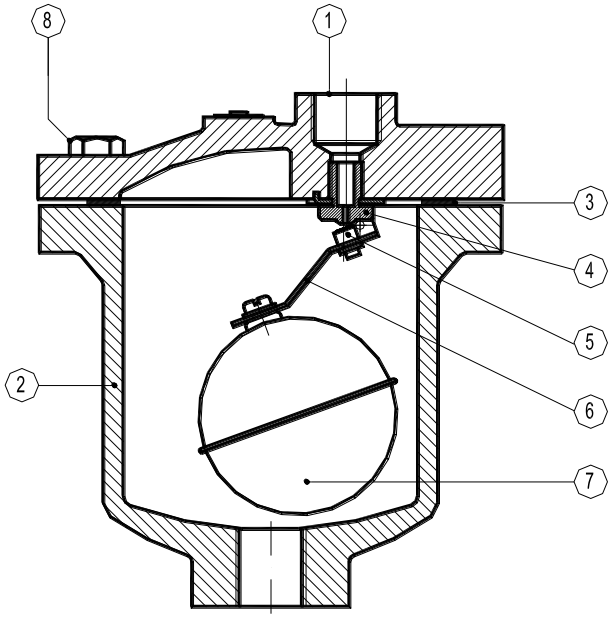
Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC. **IS 2.221 E 11.07**



DIMENSIONS (mm)				
SIZE DN	***A***	***B***	***C***	***WGT. Kgs***
1/2"	100	150	140	4
3/4"	100	150	140	4
1"	100	150	140	4

MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	GJS-400-15 / 0.7040
2	Cover	GJS-400-15 / 0.7040
3	* Gasket	St.Steel / Graphite
4	* Seat	AISI 304 / 1.4301
5	* Valve	VITON or EPDM
6	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301
8	Bolts	Steel 8.8

*Available spare parts.



AIR ELIMINATORS FOR WATER SYSTEMS
AE16SS (Stainless steel)

DESCRIPTION
The AE16SS stainless steel air eliminator removes air from HVAC systems and is also suitable for non corrosive and/or dangerous liquids providing that their specific weight is not less than 0,75Kg/dm3.
This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.
Connections are female screwed.

MAIN FEATURES
Corrosion-resistant.
Replaceable internal parts.

USE:	Cold and hot water systems.
AVAILABLE MODELS:	AE16SSE (EPDM valve) AE16SSV (VITON valve)
SIZES:	DN 1/2" and ¾".
CONNECTIONS:	Inlet ½" or ¾" vertical. Outlet ½" vertical. Female screwed ISO 7/1Rp(BS21)
INSTALLATION:	Vertical installation. It must be installed absolutely vertically at the points in the plant where the air tends to collect .The drain should be piped to a safe position. See IMI installation and maintenance instructions.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif. pressure	12 bar

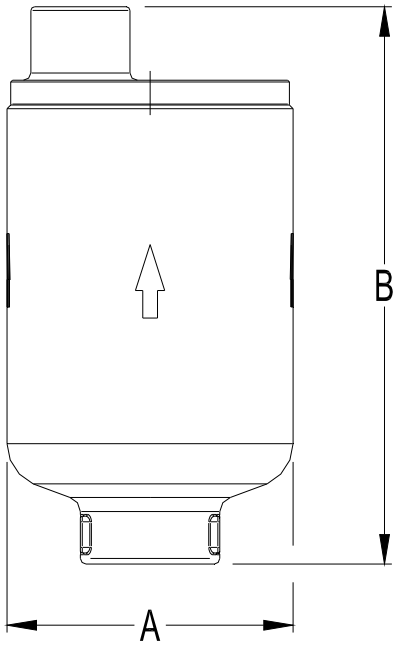
BODY LIMITING CONDITIONS	
Threaded PN16 **ALLOW. PRES.**	**RELATED TEMP.**
16 bar	100 ºC
14,5 bar	150 ºC
13,4 bar	200 ºC
12,7 bar	250 ºC

PMO - Max. operating pressure 14 bar
TMO - Max. operating temperature (EPDM valve) 130 ºC
TMO - Max. operating temperature (VITON valve)180 ºC

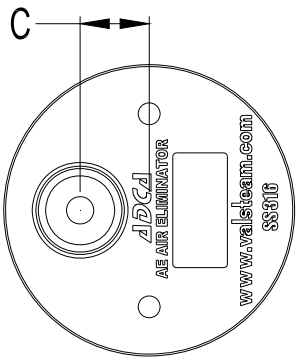
FLOW RATE CAPACITY IN N l/min											
MODEL	***SIZE***	***DIFFERENTIAL PRESSURE (bar)***									
		0,5	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***10***	***12***
AE16SS	**1/2"-3/4"**	45	65	95	125	165	185	225	263	290	365	425

Capacities at a standard atmospheric pressure of 1bar and 20ºC.
If the temperature differs from 15ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$,
where T is the actual temperature in ºC.

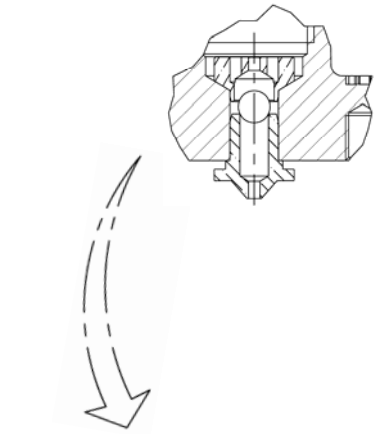
Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC. **IS 2.222 E 11.08**

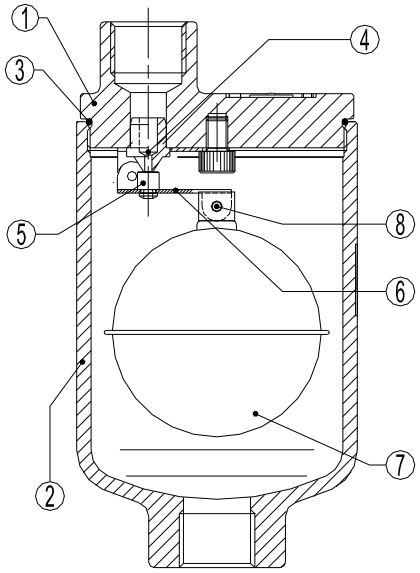


DIMENSIONS (mm)				
SIZE DN	*A*	*B*	*C*	*WGT. Kgs*
1/2"	78	152	19	1,5
3/4"	78	152	19	1,5



AE16SS-CK
with check valve





MATERIALS		
POS.Nr.	*DESIGNATION*	*MATERIAL*
1	Body	CF8M / 1.4408
2	Cover	CF8M / 1.4408
3	* O-ring	NBR
4	* Seat	AISI 316 / 1.4401
5	* Valve	VITON or EPDM
6,8	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301

*Available spare parts.

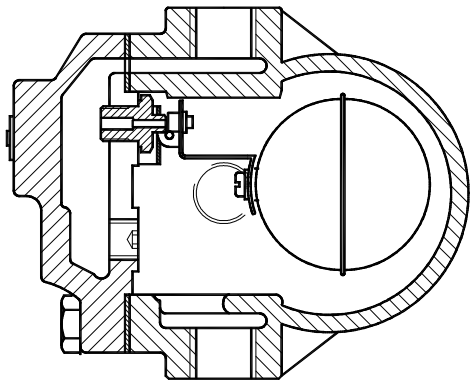
AIR ELIMINATORS FOR WATER SYSTEMS
AE17/G

DESCRIPTION

The AE17 air eliminator removes air from HVAC systems and is also suitable for non corrosive and/or dangerous liquids providing that their specific weight is not less than 0,75Kg/dm3.

This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.

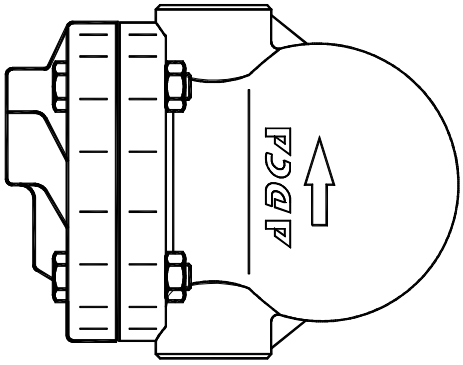
Connections are female screwed.



MAIN FEATURES

Corrosion-resistant working parts.

Replaceable internal parts.



USE: Cold and hot water systems.

AVAILABLE MODELS: AE 17 G

SIZES: DN ½" and 3/4".

CONNECTIONS: Female screwed ISO 7/1Rp(BS21)

INSTALLATION: Vertical installation. It must be installed absolutely vertically at the points in the plant where the air tends to collect.
The drain should be piped to a safe position.
See IMI installation and maintenance instructions.

BODY LIMITING CONDITIONS	
Threaded PN16 ALLOW. PRES.	RELATED TEMP.
16 bar	100 ºC
15,5 bar	150 ºC
14,7 bar	200 ºC
13,9 bar	250 ºC

PMO - Max. operating pressure 14 bar

TMO - Max. operating temperature (EPDM valve) 130 ºC

TMO - Max. operating temperature (VITON valve)180 ºC

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure	14 bar

FLOW RATE CAPACITY IN N l/min

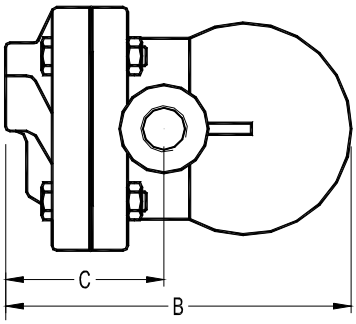
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*												
		0,5	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*10*	*12*	*13*	*14*
AE17/G	**1/2"-3/4"**	45	65	95	125	165	185	225	263	290	365	425	445	475

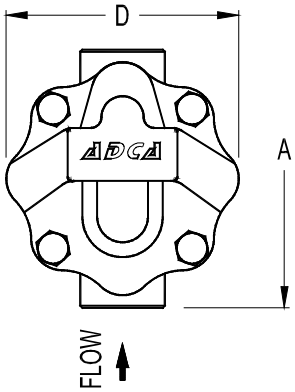
Capacities at a standard atmospheric pressure of 1bar and 20ºC.

If the temperature differs from 15ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$ where T is the actual temperature in ºC.

Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC. **IS 2.202 E 01.08**

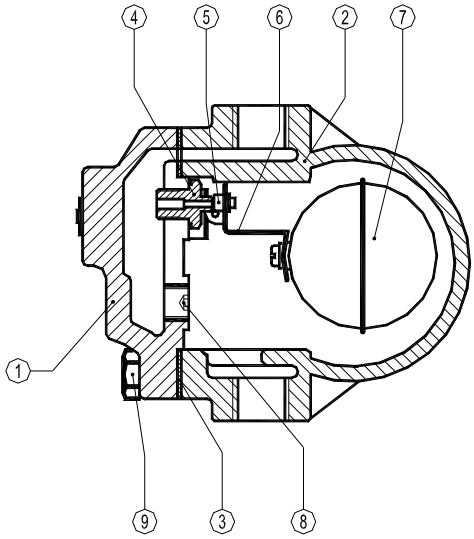
DIMENSIONS (mm)					
SIZE DN	***A***	***B***	***C***	***D***	***WGT. Kgs***
1/2"	122	150	68	108	3,5
3/4"	122	150	68	108	3,5

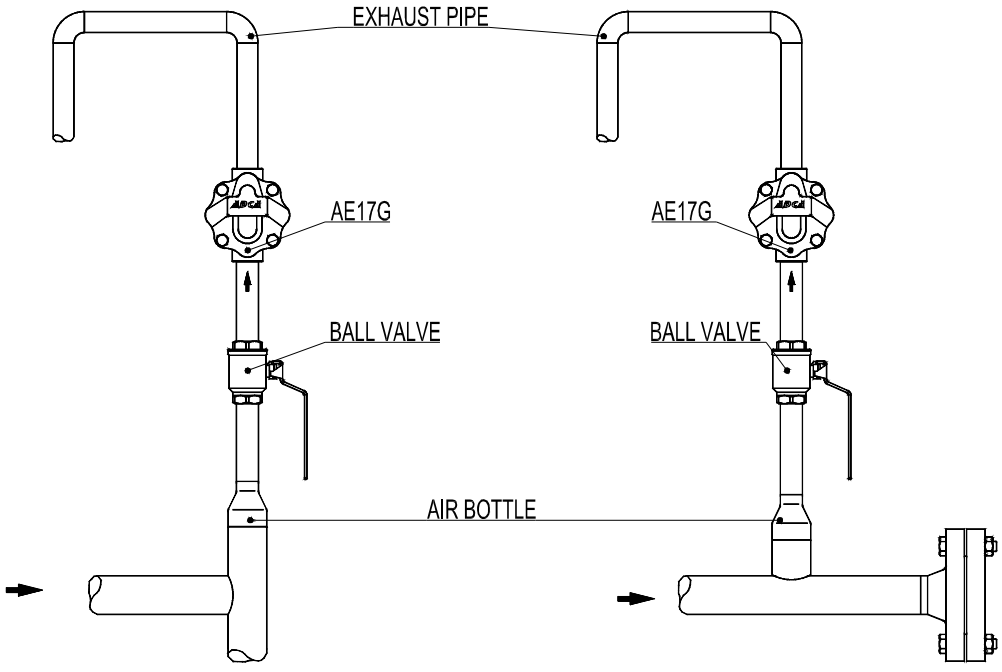




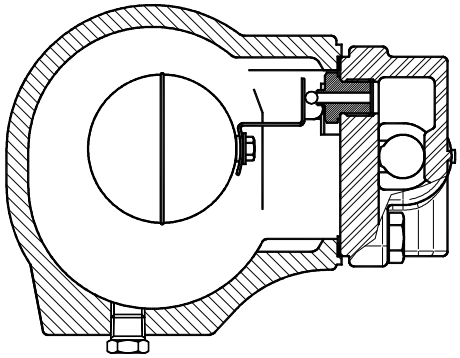
MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	GJS-400-15 / 0.7040
2	Cover	GJS-400-15 / 0.7040
3	* Gasket	St.Steel / Graphite
4	* Seat	AISI 304 / 1.4301
5	* Valve	VITON or EPDM
6	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301
8	Plug	A105 / 1.0432
9	Bolts	Steel 8.8

*Available spare parts.



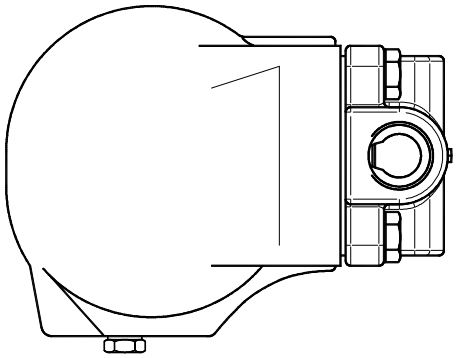


AIR ELIMINATORS FOR WATER SYSTEMS
AE20
(Carbon Steel)



DESCRIPTION
The AE20 carbon steel air eliminator removes air from hot and superheated water systems and is also suitable for all liquids compatible with the construction, providing that their specific gravity is not less than 0,75Kg/dm3.
This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.
Connections are female screwed or flanged for horizontal or vertical installation

MAIN FEATURES
Corrosion resistant working parts.
Replaceable internal parts.



OPTIONS: Internal strainer (only on horizontal models).

USE: Cold, hot and superheated water systems.

AVAILABLE MODELS: AE 20-21

SIZES: DN ½" – 1", DN 15 to DN25.

CONNECTIONS: Female screwed ISO 7/1Rp(BS21).
Flanged EN 1092-1 PN40 or ANSI.
Special flanges upon request.

INSTALLATION Horizontal or vertical installation (on request).It must be installed with the float lever in horizontal plane, so that it rises and falls vertically. It should be installed at the points in the plant where the air tends to collect.
The drain should be piped to a safe position.
See IMI installation and maintenance instructions.

BODY LIMITING CONDITIONS		
FLANGED PN40 / ANSI 300* ALLOW. PRES.	FLANGED ANSI 150 ** ALLOW. PRES.	RELATED TEMP.
37,1 bar	15,4 bar	100 ºC
33,3 bar	13,8 bar	200 ºC
30,4 bar	12,1 bar	250 ºC
27,6 bar	10,2 bar	300 ºC

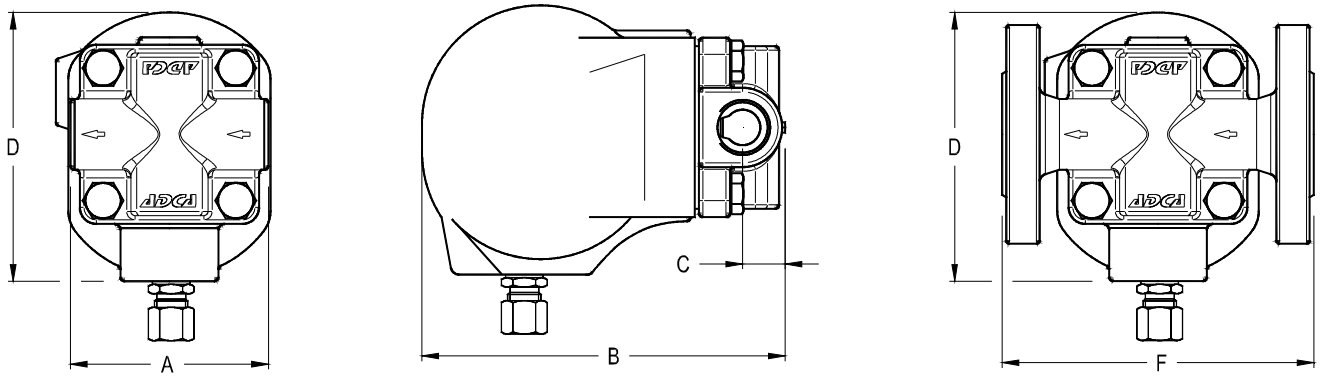
PMO - Max. operating pressure 32 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-1:2007 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN40 or below, depending on the type of connection adopted. Rating PN40 for thread,SW and BW.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-AE20-21	21 bar

FLOW RATE CAPACITY IN N l/min.												
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*										
		0,5	*1*	*1,5*	*2*	*3*	*4*	*6*	*8*	*10*	*15*	*21*
AE20-21	**15 - 25**	18	32	45	55	75	90	130	180	210	300	430

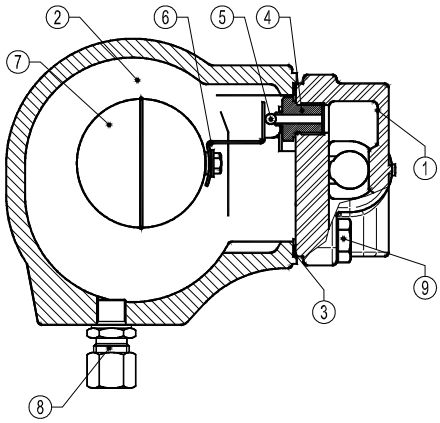
Capacities at a standard atmospheric pressure of 1bar and 20ºC.
If the temperature differs from 15ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$, where T is the actual temperature in ºC.

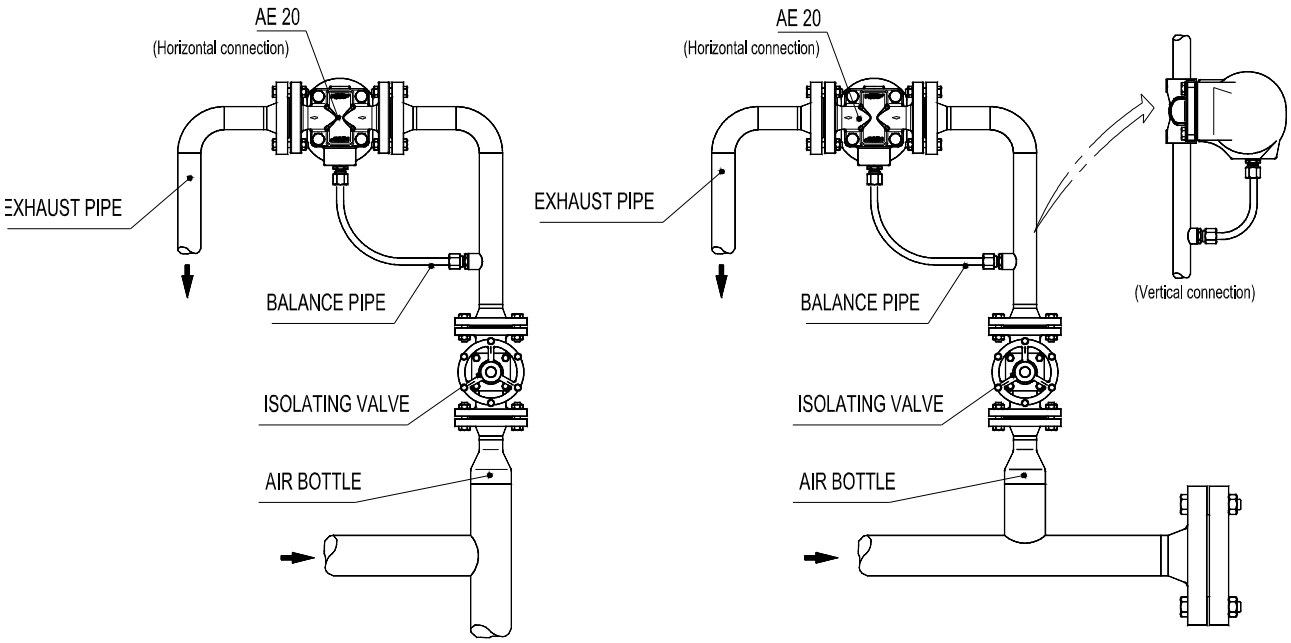
DIMENSIONS (mm)											
Screwed						EN PN16/40		ANSI 150		ANSI 300	
SIZE DN	A	B	C	D	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs
15-1/2"	95	178	23	128	5,2	150	6,7	150	6,2	150	7
20-3/4"	95	178	23	128	5,2	150	7,4	150	6,6	150	8,2
25-1"	95	178	23	128	5,2	160	7,8	160	7,4	160	9



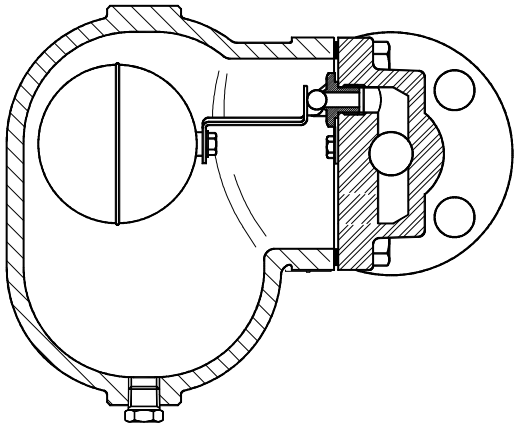
MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GP240GH / 1.0619
2	Cover	GP240GH / 1.0619
3	*Gasket	Stainless st. / Graphite
4	*Seat	AISI 410 / 1.4006
5	*Valve	AISI 410 / 1.4006
6	*Lever	AISI 304 / 1.4301
7	*Float	AISI 304 / 1.4301
8	Compression fitting	Fe / Zn 12 - ISO 2081
9	Bolts	Steel 8.8

* Available spare parts.



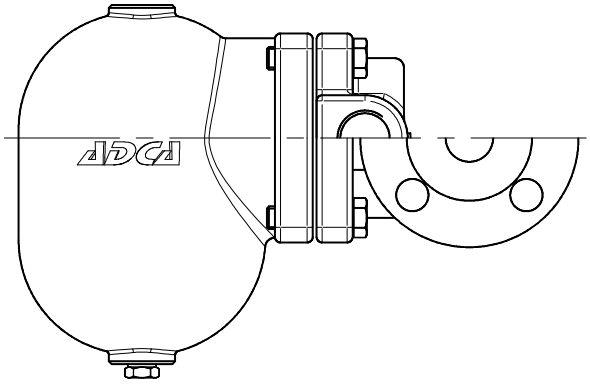


AIR ELIMINATORS FOR WATER SYSTEMS
AE32
(Carbon Steel)



DESCRIPTION
The AE32 carbon steel air eliminator removes air from hot and superheated water systems and is also suitable for all liquids compatible with the construction, providing that their specific gravity is not less than 0,75Kg/dm3.
This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.
Connections are female screwed or flanged for horizontal or vertical installation.

MAIN FEATURES
Corrosion-resistant working parts.
Replaceable internal parts.



OPTIONS:	Internal strainer (only on horizontal models).
USE:	Cold, hot and superheated water systems.
AVAILABLE MODELS:	AE 32-17
SIZES:	DN 1", DN 25.
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21). Flanged EN 1092 -1or ANSI. Special flanges upon request.
INSTALLATION	Horizontal or vertical installation (on request).It must be installed with the float lever in horizontal plane, so that it rises and falls vertically. It should be installed at the points in the plant where the air tends to collect. The drain should be piped to a safe position.

BODY LIMITING CONDITIONS		
FLANGED PN40 / ANSI 300*	FLANGED ANSI 150 **	RELATED TEMP.
ALLOW. PRES.	ALLOW. PRES.	
37,1 bar	15,4 bar	100 ºC
33,3 bar	13,8 bar	200 ºC
30,4 bar	12,1 bar	250 ºC
27,6 bar	10,2 bar	300 ºC

PMO - Max. operating pressure 32 bar
TMO - Max. operating temperature 200 ºC
* According to EN1092-1:2007 ; ** Acc. to EN1759-1:2004
Body limiting conditions PN40 or below, depending on the type of connection adopted. Rating PN40 for thread,SW and BW.

APPLICATION LIMITS	
Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif.pressure-AE32-17	17 bar

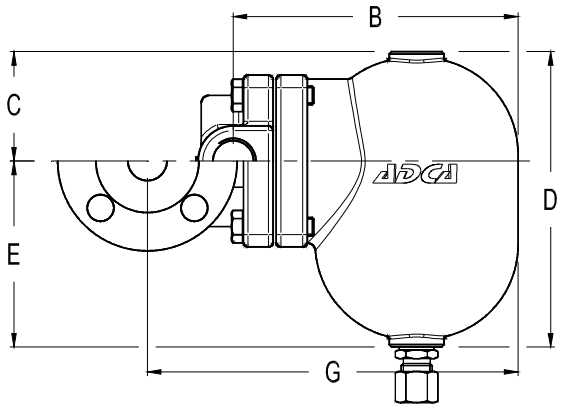
CE MARKING (PED - European Directive 97/23/EC)	
PN 40	Category
DN25 - DN1"	1 (CE Marked)

FLOW RATE CAPACITY IN N l/min.										
MODEL	*SIZE*	*DIFFERENTIAL PRESSURE (bar)*								
		0,5	*1*	*2*	*4*	*6*	*8*	*10*	*13*	*17*
AE32-17	**1" - 25**	75	120	240	420	535	720	870	1200	1380

Capacities at a standard atmospheric pressure of 1bar and 20ºC.
If the temperature differs from 15ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$, where T is the actual temperature in ºC.

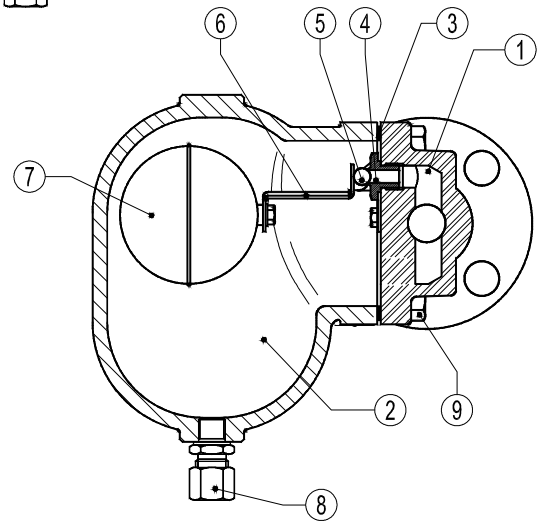
DIMENSIONS (mm)																						
Screwed							EN PN 16 / 40			EN PN 16 / 40 *			ANSI 150			ANSI 150 *			ANSI 300			ANSI 300 *		
SIZE DN	A	B	C	D	E	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs	F	G	WT. Kgs	F	B	WT. Kgs
25-1"	120	195	80	190	110	9	160	248	11,3	230	195	12	160	248	11	230	195	11,2	160	248	11,3	230	195	12,8

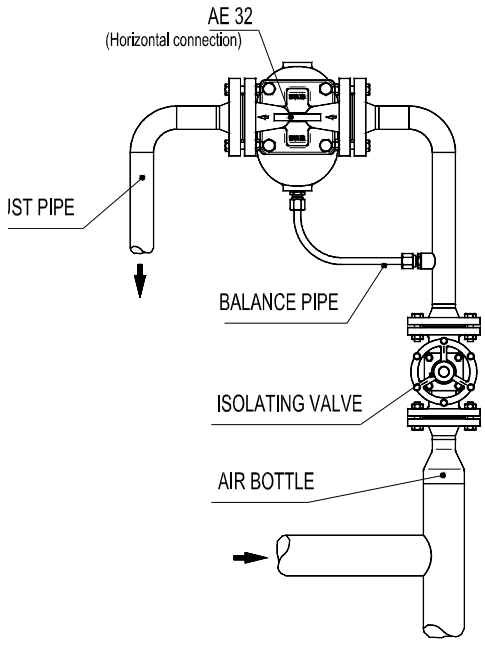
* Alternative

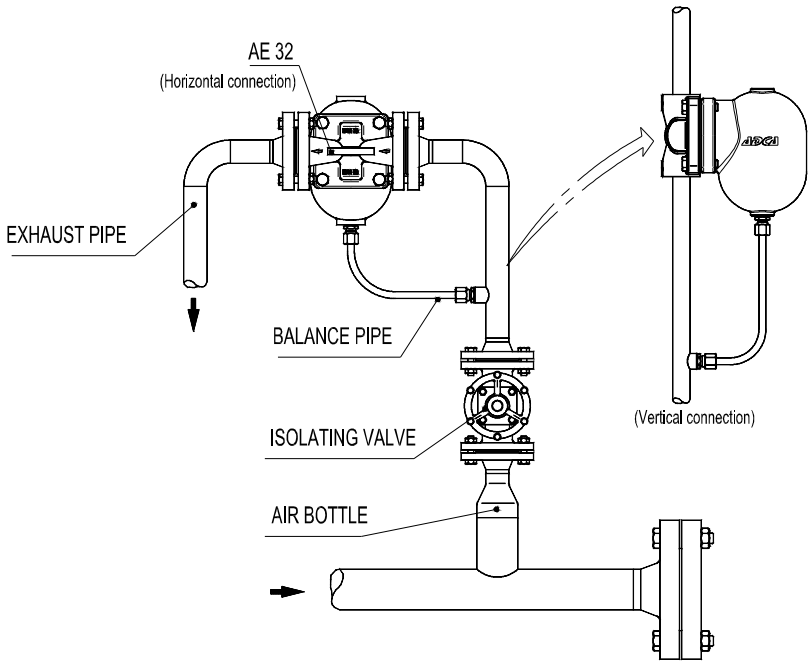


MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GP240GH / 1.0619
2	Cover	GP240GH / 1.0619
3	*Gasket	Stainless st. / Graphite
4	*Seat	AISI 410 / 1.4006
5	*Valve	AISI 410 / 1.4006
6	*Lever	AISI 304 / 1.4301
7	*Float	AISI 304 / 1.4301
8	Compression fitting	Fe / Zn 12 - ISO 2081
9	Bolts	Steel 8.8

* Available spare parts.







AIR ELIMINATORS FOR WATER SYSTEMS
AE30SS (Stainless steel)

DESCRIPTION

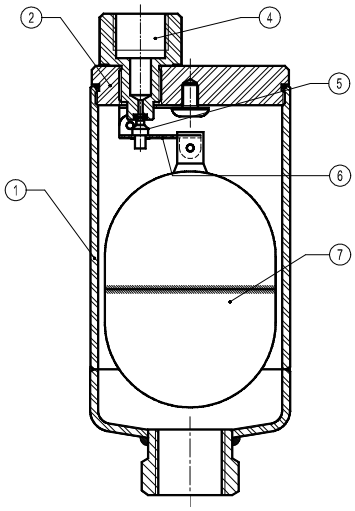
The AE30SS all stainless steel sealed body air eliminator removes air from hot and superheated water systems and is also suitable for all liquids compatible with the construction, providing that their specific gravity is not less than 0,75Kg/dm3.

This ball float type automatic air eliminator can be used in combination with other air elimination and separation systems or directly applied at high points in the piping.

Connections are female screwed.

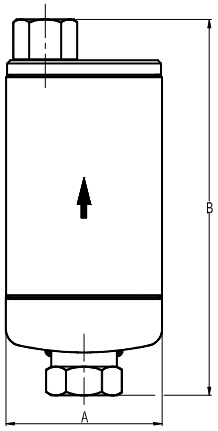
MAIN FEATURES: Corrosion-resistant.

USE:	Cold, hot and superheated water systems.
AVAILABLE MODELS:	AE30SS
SIZES:	DN ½" and ¾".
CONNECTIONS:	Inlet ½" or ¾" vertical. Outlet ½" vertical. Female screwed ISO 7/1Rp(BS21) ANSI B2.1 on request
INSTALLATION:	Vertical installation. It must be installed absolutely vertically at the points in the plant where the air tends to collect. The drain should be piped to a safe position. See IMI installation and maintenance instructions.



DIMENSIONS (mm)

SIZE DN	A	B	WGT. Kgs
1/2"	75	187	1,3
3/4"	75	187	1,3



BODY LIMITING CONDITIONS

THREADED PN40 ALLOW. PRES.	RELATED TEMP.
40 bar	100 ºC
33,7 bar	200 ºC
31,8 bar	250 ºC
29,7 bar	300 ºC

PMO - Max. Op.pressure 30 bar

TMO - Max. Op.Temperature 300ºC

MATERIALS

POS.Nr.	DESIGNATION	MATERIAL
1	Body	AISI316 / 1.4401
2	Cover	AISI316 / 1.4401
4	Seat	AISI316 / 1.4401
5	Valve	AISI316 / 1.4401
6	Lever	AISI304 / 1.4301
7	Float	AISI316 / 1.4401

APPLICATION LIMITS

Min.Liquid specific weight	0,75 Kg/dm3
Maximum working dif. pressure	30 bar

FLOW RATE CAPACITY IN N l/min

MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)																	
		0,5	1	2	3	4	5	6	7	8	9	10	12	15	18	20	22	25	30
AE30SS	1/2"-3/4"	50	70	90	100	135	150	175	180	185	200	220	240	255	285	300	330	370	400

Capacities at a standard atmospheric pressure of 1bar and 20ºC.

If the temperature differs from 15ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$, where T is the actual temperature in ºC.

VALSTEAM ADCA

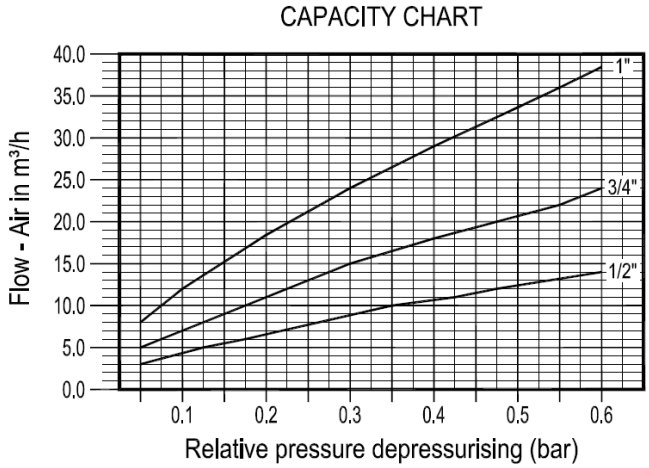
VACUUM BREAKER
VB 16

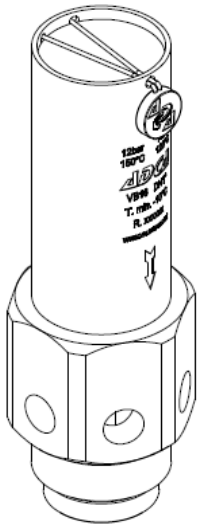
DESCRIPTION

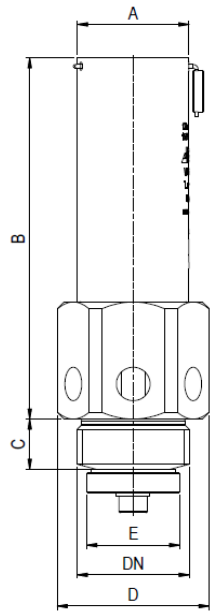
The VB16 vacuum breakers are simple and reliable devices that automatically relieve or “break” an unwanted vacuum condition, restoring the atmospheric pressure.
This device is particularly suitable for steam heated units of small and medium volume as heat exchangers, heating coils, calorifiers, jacketed kettles, steam boilers, etc.
Connections are male screwed.

OPTIONS:	Stainless steel inlet deflector
USE:	Saturated steam and other gases compatible with the construction
AVAILABLE MODELS:	VB16
SIZES:	½” to 1”
CONNECTIONS:	Screwed ISO 7/1 RP (BS21)
INSTALLATION:	Vertical installation See IMI, installation and maintenance instructions.
LIMITING CONDITIONS:	12 bar at 150 ºC 16 bar at 120 ºC

How to order: i.e. VB16 DN ½” BSP (0,05-0,10bar)

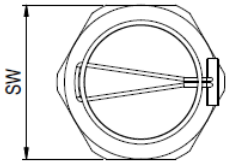


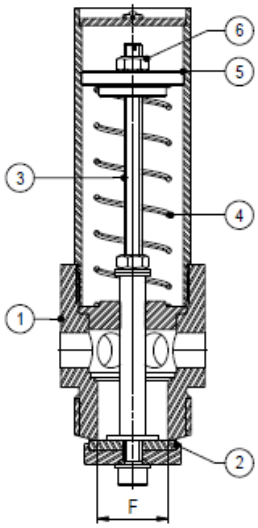




DIMENSIONS (mm)									
SIZE DN	A	B	C	D	E	F	G	SW	WGT. Kgs
1/2"	26	82	11	35	18	12,5	23	32	0,25
3/4"	33	85	13	39	21	16,5	28	36	0,34
1"	33	108	15	45	27,5	20	35	41	0,51

Set depressurising bar: (0,05-0,10), (0,09-0,20), (0,19-0,30), (0,29-0,40), (0,39-0,50).

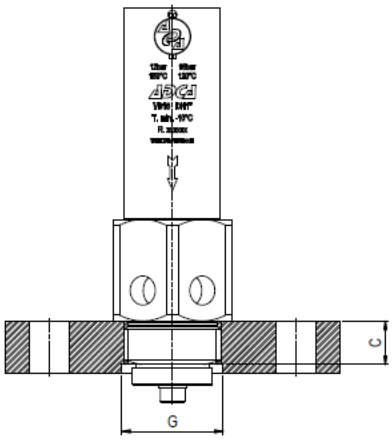




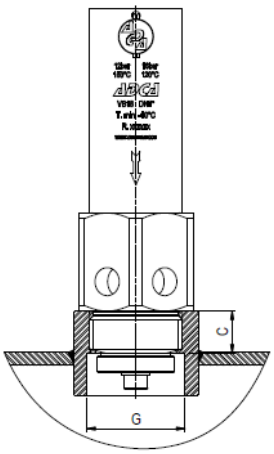
MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	AISI316 / 1.4401
2	*Valve	AISI316 / 1.4401 and VITON
3	Stem	AISI304 / 1.4301
4	*Spring	AISI302 / 1.4300
5	Spring guide	AISI304 / 1.4301
6	Nut	A2-70

*Available spare parts.

Typical Installation



With flange



With socket

VACUUM BREAKER
VB 21

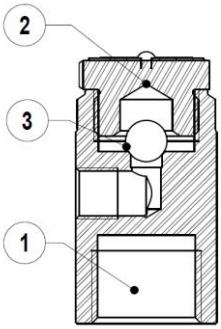
DESCRIPTION

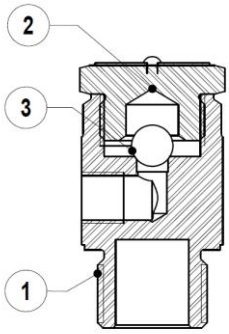
The VB21 vacuum breakers are simple and reliable devices that automatically relieve or “break” an unwanted vacuum condition, restoring the atmospheric pressure.
This device is particularly suitable for steam heated units of small and medium volume as heat exchangers, heating coils, calorifiers, jacketed kettles, steam boilers, etc.
Connections are female screwed.

VB21

VB21M

USE:	Saturated and superheated steam
AVAILABLE MODELS:	VB21; VB21M
SIZES:	½” x 1/8”
CONNECTIONS:	Inlet ½” vertical Outlet 1/8” horizontal VB21-Female screwed ISO 7-1 Rp (BS21) VB21M-Male screwed ISO 7-1 R (BS21)
INSTALLATION:	Vertical installation angled connection. See IMI, installation and maintenance instructions.
LIMITING CONDITIONS:	13 bar at 400 ºC 21 bar at 220 ºC

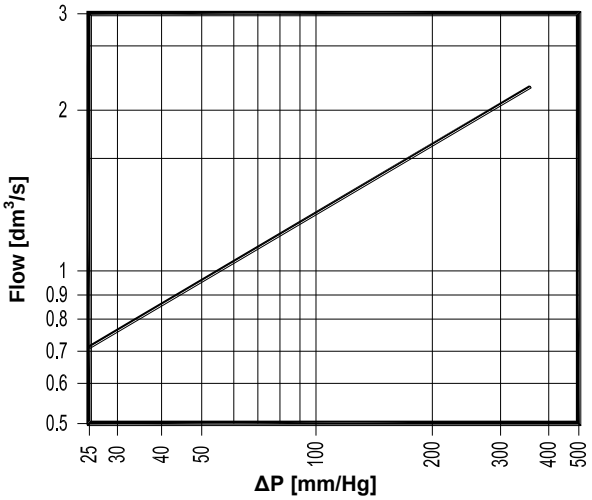




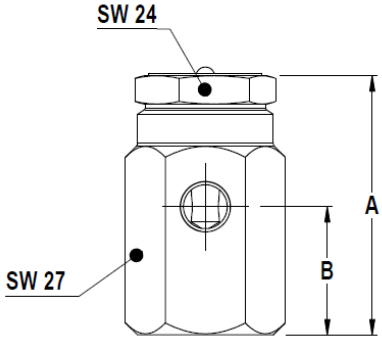
MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	AISI304 / 1.4301
2	Cover	AISI304 / 1.4301
3	* Ball valve	Stainless steel

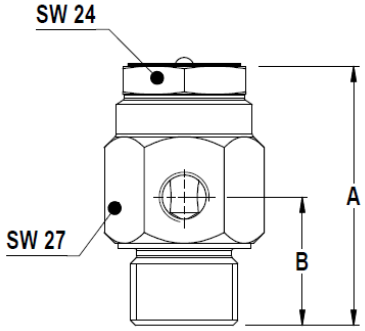
*Available spare parts.

CAPACITY CHART



ΔP required to open vacuum breaker: 4,6mm/Hg.





DIMENSIONS (mm)			
MODEL	***A***	***B***	***WGT. Kgs***
VB21	50	25	0,17
VB21M	50	25	0,13

PIPELINE Y STRAINERS
IS 140

DESCRIPTION
IS140 strainers are applicable to all types of steam, water, oil and air systems.
Their purpose is to protect traps, regulating valves, piping, etc. from dirt which are often times the cause of damage and consequently energy loss of fluid systems.
Connections are female screwed.

OPTIONS: Different screen aperture sizes
Drain plug or drain valve in strainer cap

USE: Saturated steam, water, oil, air and other compatible fluids.

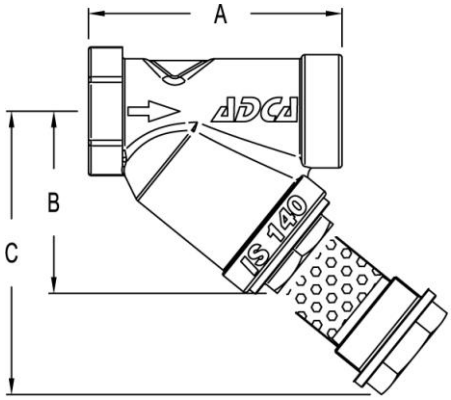
AVAILABLE MODELS: IS 140S – Cast steel
IS 140I – Stainless steel

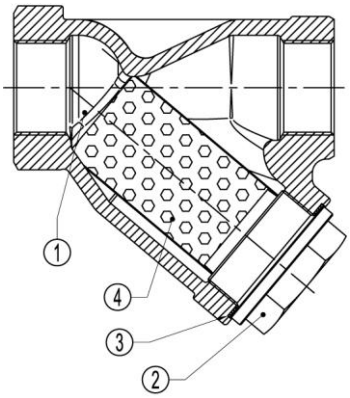
SIZES: IS 140S – DN ½" to DN 2"
IS 140I – DN ½" to DN 1"

SCREENS: 0,8 mm aperture

CONNECTIONS: Female screwed ISO 7/1 Rp (BS21)

INSTALLATION: Horizontal or vertical downstream installation.





LIMITING CONDITIONS			
IS140S *		IS140I *	
ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.
40 bar	-10 /50º C	40 bar	-10 /50º C
33,3 bar	200 ºC	33,7 bar	200 ºC
27,6 bar	300 ºC	29,7 bar	300 ºC
25,7 bar	350 ºC	28,5 bar	350 ºC
23,8 bar	400 ºC	27,4 bar	400 ºC

* Rating according to EN1092-1:2007

DIMENSIONS (mm)				
SIZE DN	A	B	C	WGT. Kgs
1/2"	85	63	107	0,6
3/4"	100	80	139	1
1"	115	87	155	1,5
11/4"	143	107	192	2,5
11/2"	160	125	215	3,6
2"	198	142	242	5,7

MATERIALS			
POS. Nr.	DESIGNATION	IS140S	IS140I
1	Body	ASTM A216WCB 1.0619	CF8M / 1.4408
2	Cap	A105 / 1.0432	AISI316 / 1.4401
3	* Gasket	St.Steel / Graphite	St.Steel / Graphite
4	* Strainer screen	AISI304 / 1.4301	AISI304 / 1.4301

* Available spare parts

CE MARKING (PED - European Directive 97/23/EC)	
PN 40	Category
DN 15 to DN 32	SEP - art. 3, paragraph3
DN 40 and DN 50	1 (CE Marked)

CAST IRON PIPELINE Y STRAINERS
IS16F

DESCRIPTION

IS16F Y cast iron strainers are applicable to all types of steam, water, oil and air systems.
Their purpose is to protect traps, regulating valves, piping, etc. from dirt which are often times the cause of damage and consequently energy loss of fluid systems.
Connections are flanged.

OPTIONS: Different screen aperture sizes
Drain plug or drain valve in strainer cap

USE: Saturated steam, water, oil, air and other compatible fluids.

AVAILABLE MODELS: IS16F

SIZES: DN 15 to DN 300

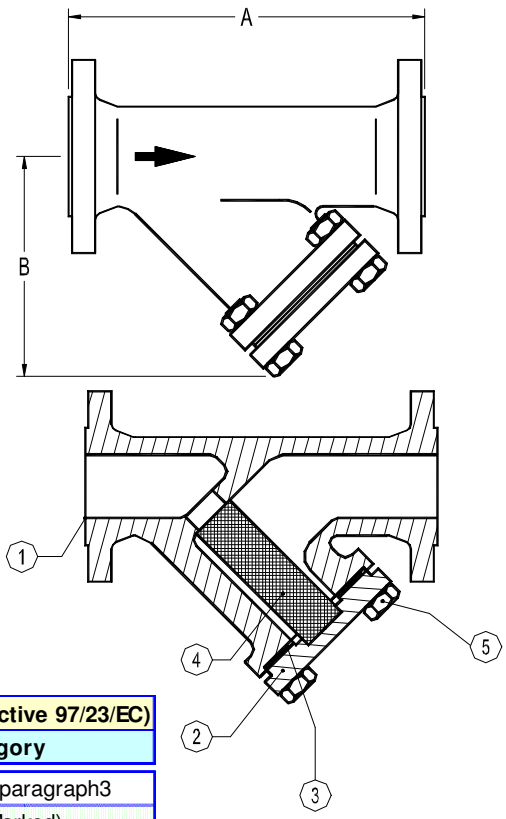
SCREENS: 0,5 mm aperture up to DN50
1,2 mm aperture from DN 65 to DN 300

CONNECTIONS: Flanged EN 1092-2 PN16

INSTALLATION: Horizontal or vertical downstream installation.
See IMI, installation and maintenance instructions.

DIMENSIONS (mm)

SIZE DN	A	B	WGT. Kgs
15	130	75	2,4
20	150	75	3
25	160	90	3,8
32	180	90	5,2
40	200	110	6,8
50	230	120	9
65	290	140	11,8
80	310	165	16,8
100	350	220	25,2
125	400	260	37
150	480	300	58
200	600	360	112
250	730	470	162
300	850	560	195



LIMITING CONDITIONS IS16F

ALLOWABLE PRESSURES	RELATED TEMPERATURE
16 bar	-10 /120º C
12,8 bar	200 ºC
11,2 bar	250 ºC
9,6 bar	300 ºC

MATERIALS

POS. Nr.	DESIGNATION	MATERIAL
1	Body	GJL-250 / 0.6025
2	Cap	GJL-250 / 0.6025
3	* Gasket	St.Steel / Graphite
4	* Strainer screen	AISI304 / 1.4301
5	Bolts	Steel 8.8

* Available spare parts

CE MARKING (PED - European Directive 97/23/EC)

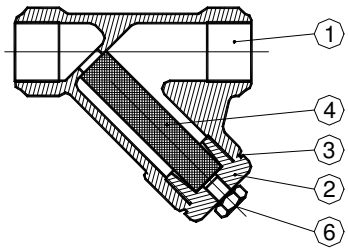
PN 16	Category
DN15 to DN50	SEP - art. 3, paragraph3
DN65 to DN200	1 (CE Marked)
DN250 to DN300	2 (CE Marked)

STEAM EQUIPMENT

FORGED STEEL PIPELINE Y STRAINERS
IS116

DESCRIPTION

IS116 Y forged steel strainers are applicable to all types of steam, water, oil and air systems.
Their purpose is to protect traps, regulating valves, piping, etc. from dirt which are often times the cause of damage and consequently energy loss of fluid systems.
Connections are female screwed or flanged.



OPTIONS: Different screen aperture sizes
Drain plug or drain valve in strainer cap

USE: Saturated steam, water, oil, air and other compatible fluids.

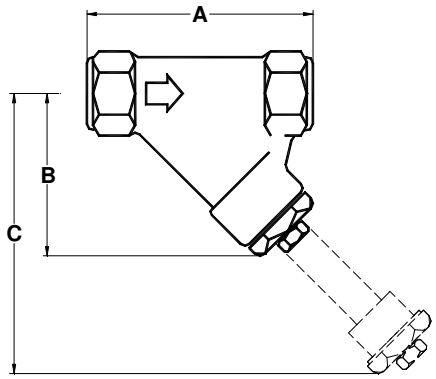
AVAILABLE MODELS: IS 116

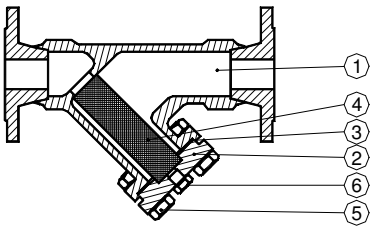
SIZES: DN ½" to DN 2" ; DN 15 to DN50

SCREENS: 0,8 mm aperture

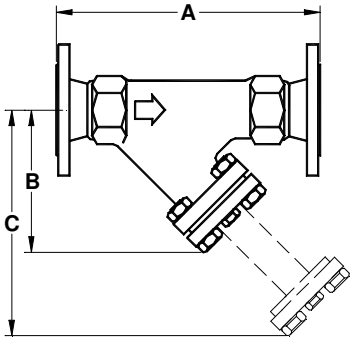
CONNECTIONS: Female screwed ISO 7/1 Rp (BS21)
NPT (ANSI B1.20.1)
Flanged EN 1092-1 or ANSI

INSTALLATION: Horizontal or vertical downstream installation.
See IMI, installation and maintenance instructions.





PMA – Max. allowable pressure 63 bar
TMA – Max. allowable temperature 400 ºC
How to order: i.e. IS116 DN 1½" NPT



CE MARKING (PED - European Directive 97/23/EC)	
PN 63	**Category**
DN 15 to DN 32	SEP - art. 3, paragraph3
DN 40-50	1 (CE Marked)

DIMENSIONS (mm)-Screwed					EN 1092-1 Flanges	
SIZE DN	***A***	***B***	***C***	***WGT. Kgs***	***A***	***WGT. Kgs***
15	90	60	105	1	150	2,6
20	110	75	140	1,2	170	3,5
25	130	93	155	2	200	4,6
32	160	120	195	4,5	240	8,3
40	160	120	195	4,5	240	9,5
50	160	145	280	6	245	12

MATERIALS		
POS. Nr.	***DESIGNATION***	***MATERIAL***
1	Body	ASTM A105 / 1.0432
2	Cap	ASTM A105 / 1.0432
3	* Gasket	St.Steel / Graphite
4	* Strainer screen	AISI304 / 1.4301
5	Bolts	ASTM A193 B7 / A194 2H
6	Drain plug	ASTM A105 / 1.0432

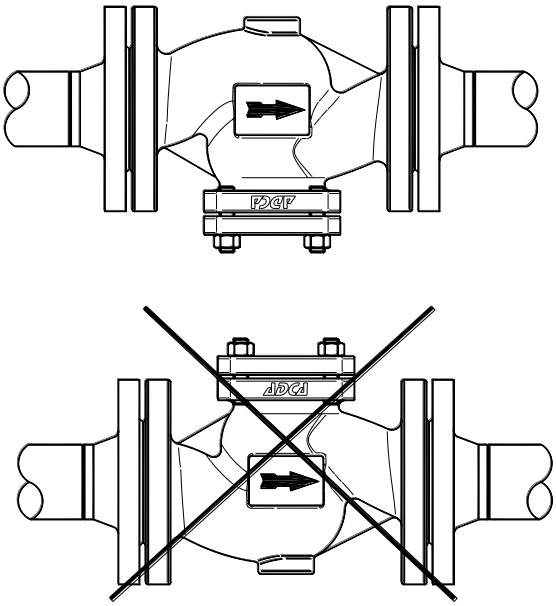
* Available spare parts (Bolted cover, DN2" only)

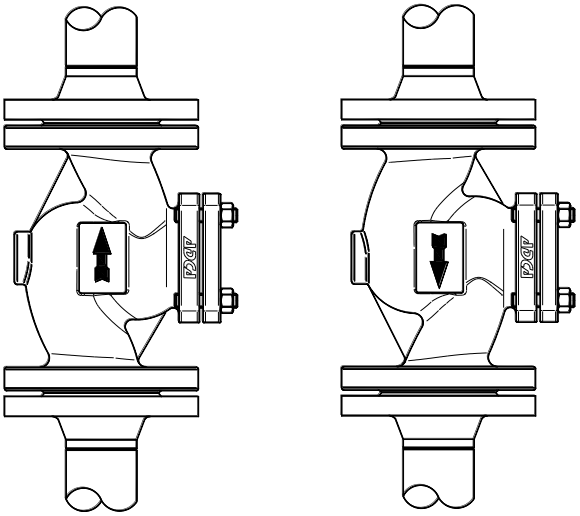
CAST STEEL PIPELINE T STRAINERS
IS40T
DN15 to DN100 (EN)

DESCRIPTION

IS40T cast steel T strainers are applicable to all types of steam, water, oil and air systems.
Their purpose is to protect steam traps, regulating valves, pressure reducing valves, piping, etc. from dirt which are often times the cause of damage and consequently energy loss of fluid systems.
Connections are flanged.

OPTIONS:	Different screen aperture sizes Drain plug or drain valve in strainer cap
USE:	Saturated steam, water, oil, air and other compatible fluids.
AVAILABLE MODELS:	IS40TS – Carbon steel IS40TI – Stainless steel
SIZES:	DN 15 to DN 100
SCREENS:	0,5 mm aperture up to DN50 1,2 mm aperture from DN 65 to DN 100
CONNECTIONS:	Flanged EN 1092-1 PN40
INSTALLATION:	Horizontal or vertical installation.





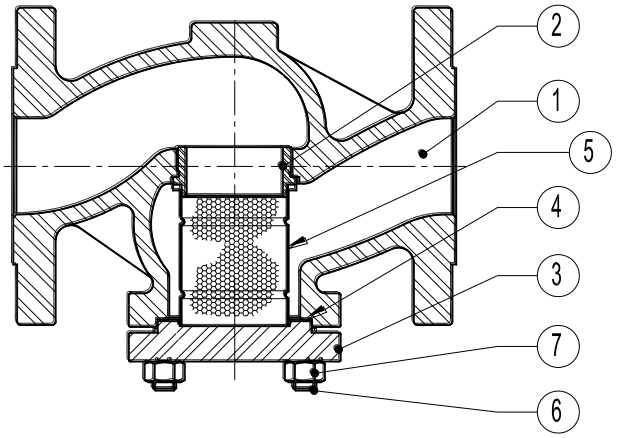
CE MARKING (PED - European Directive 97/23/EC)			
PN 16	**PN 25**	**PN 40**	**Category**
DN15 to DN50	DN15 to DN40	DN15 to DN32	SEP - art. 3, paragraph3
DN65 to DN100	DN50 to DN100	DN40 to DN100	1 (CE Marked)

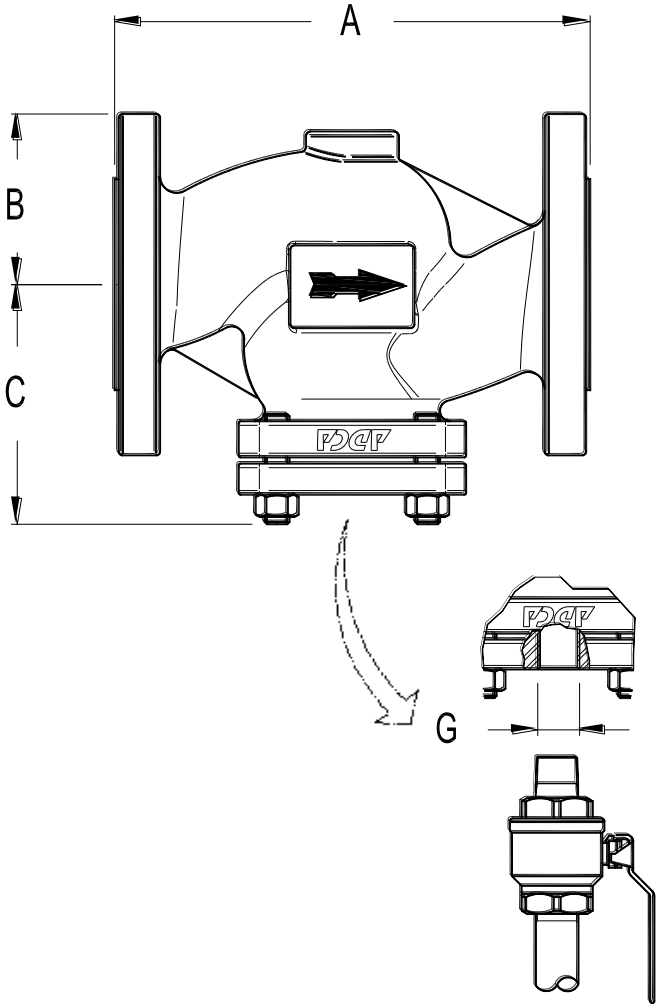
VALVE BODY LIMITING CONDITIONS							
IS40TS - PN16 *		IS40TS - PN25 *		IS40TS - PN40 *		IS40TI - PN40 *	
ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.
16 bar	-10 /120º C	25 bar	-10 /50º C	40 bar	-10 /50º C	40 bar	-10 /50º C
13,3 bar	200 ºC	20,8 bar	200 ºC	33,3 bar	200 ºC	33,7 bar	200 ºC
12,1 bar	250 ºC	19 bar	250 ºC	27,6 bar	300 ºC	29,7 bar	300 ºC
11 bar	300 ºC	17,2 bar	300 ºC	25,7 bar	350 ºC	28,5 bar	350 ºC
10,2 bar	350 ºC	16 bar	350 ºC	23,8 bar	400 ºC	27,4 bar	400 ºC

- Rating according to EN1092-1:2007

MATERIALS			
POS.	DESIGNATION	MATERIAL IS40TS	MATERIAL IS40TI
1	Body	ASTM A216WCB/1.0619; GP240GH / 1.0619	CF8M / 1.4408
2	Centering ring	AISI304 / 1.4301	AISI304 / 1.4301
3	Cover	AISI304 / 1.4301	AISI304 / 1.4301
4	*Gasket	St.Steel / Graphite	St.Steel / Graphite
5	*Screen	AISI304 / 1.4301	AISI304 / 1.4301
6	Studs	Steel	A2 - 70
7	Nuts	Steel	A2 - 70

* Available spare parts





DIMENSIONS (mm)					
SIZE DN	A	B	C	G *	WGT. Kgs
15	130	48	80	1/2"	3,7
20	150	53	80	1/2"	4,2
25	160	58	80	1/2"	5,3
32	180	70	100	1/2"	7,8
40	200	75	105	1/2"	9,6
50	230	83	115	1/2"	14
65	290	93	155	1/2"	23,5
80	310	100	155	1/2"	27,9
100	350	118	165	1/2"	34,6

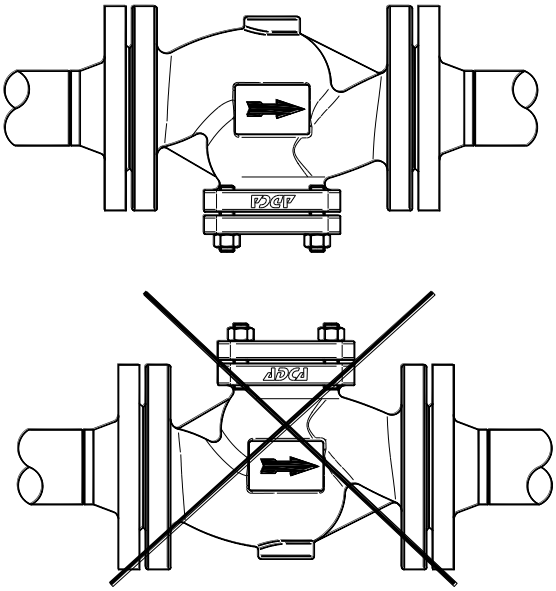
* Other on request

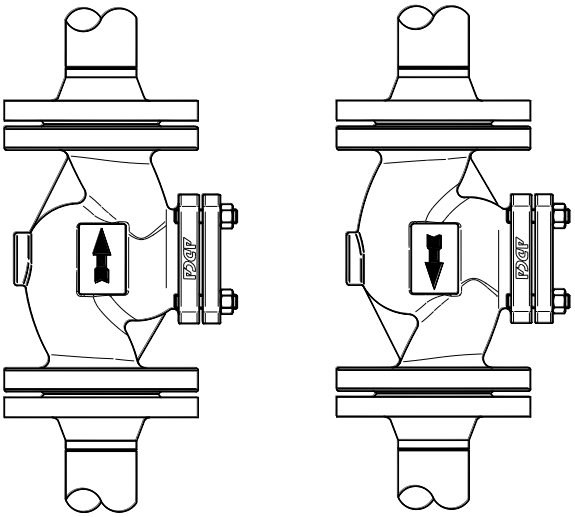
CAST STEEL PIPELINE T STRAINERS
IS40T
DN 1” to DN 4” (ANSI)

DESCRIPTION

IS40T cast steel T strainers are applicable to all types of steam, water, oil and air systems.
Their purpose is to protect steam traps, regulating valves, pressure reducing valves, piping, etc. from dirt which are often times the cause of damage and consequently energy loss of fluid systems.
Connections are flanged.

OPTIONS:	Different screen aperture sizes Drain plug or drain valve in strainer cap
USE:	Saturated steam, water, oil, air and other compatible fluids.
AVAILABLE MODELS:	IS40TS – Carbon steel IS40TI – Stainless steel
SIZES:	1” to DN 4”
SCREENS:	0,5 mm aperture up to 2” 1,2 mm aperture from 3” to 4"
CONNECTIONS:	Flanged ANSI B16.5 150# and 300#
INSTALLATION:	Horizontal or vertical installation.





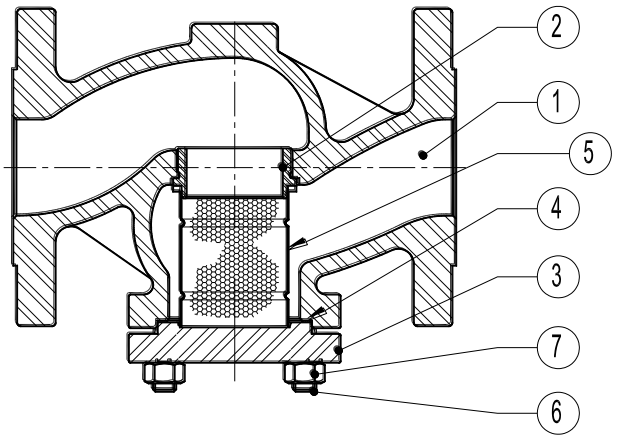
CE MARKING (PED - European Directive 97/23/EC)		
ANSI 150	**ANSI 300**	**Category**
1" - 2" (DN25-50)	1" (DN25)	SEP - art. 3, paragraph3
3"-4" (DN80-100)	11/2"-4" (DN40-100)	1 (CE Marked)

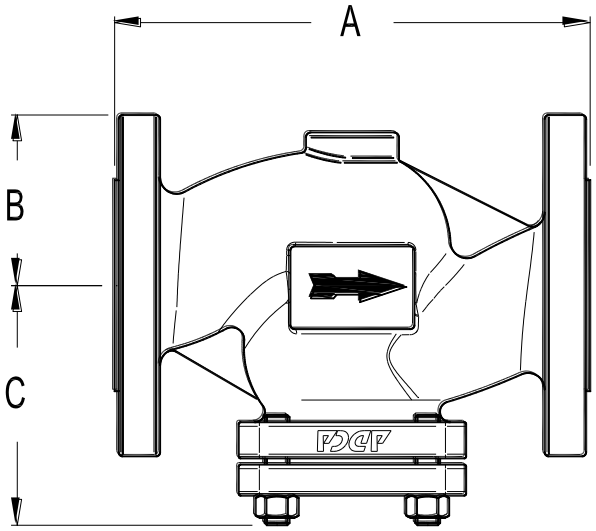
Note: classification for gases - Group 2, for others see IMI

VALVE BODY LIMITING CONDITIONS							
IS40TS - ANSI 150		IS40TS - ANSI 300		IS40TI - ANSI 150		IS40TI - ANSI 300	
ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.
19,3 bar	-10 /50º C	50 bar	-10 /50º C	18,4 bar	-10 /50º C	48,1 bar	-10 /50º C
15,8 bar	150 ºC	43,9 bar	200 ºC	14,8 bar	150 ºC	35,8 bar	200 ºC
12,1 bar	250 ºC	36,9 bar	350 ºC	12 bar	250 ºC	30,4 bar	350 ºC
8,4 bar	350 ºC	34,6 bar	400 ºC	8,4 bar	350 ºC	29,3 bar	400 ºC

MATERIALS			
POS.	*DESIGNATION*	*MATERIAL IS40TS*	*MATERIAL IS40TI*
1	Body	ASTM A216WCB/1.0619; GP240GH / 1.0619	CF8M / 1.4408
2	Centering ring	AISI304 / 1.4301	AISI304 / 1.4301
3	Cover	AISI304 / 1.4301	AISI304 / 1.4301
4	*Gasket	St.Steel / Graphite	St.Steel / Graphite
5	*Screen	AISI304 / 1.4301	AISI304 / 1.4301
6	Studs	Steel	A2 - 70
7	Nuts	Steel	A2 - 70

* Available spare parts

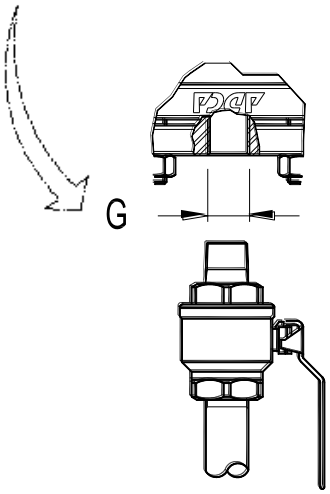




DIMENSIONS (mm)						
SIZE	*A ** ANSI 300*	*B ANSI 150*	*B ANSI 300*	*C*	*G **	*WGT. Kgs*
1"	197	54	62	80	1/2"	5,3
11/2"	235	63,5	78	105	1/2"	9,6
2"	267	76	82,5	115	1/2"	14
3"	317	95	105	155	1/2"	27,9
4"	368	114,5	127	165	1/2"	34,6

* Other on request

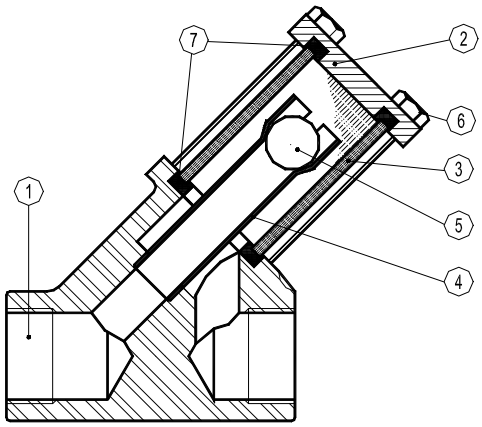
** ANSI 150 is drilled with the same lenght



SIGHT CHECKER
SCK

DESCRIPTION
Being installed after the steam trap, the sight checker is a device to be used for visually checking the conditions and leakage of steam traps.
SCK sight checker functions as both sight glass and check valve.
Connections are female screwed.

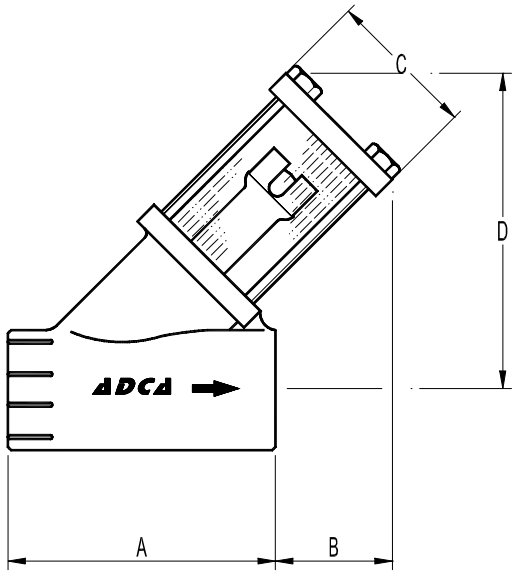
USE:	Condensate pipes downstream steam traps.
AVAILABLE MODELS:	SCK
SIZES:	½", 3/4" and DN 1"
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21).
INSTALLATION:	Horizontal or vertical (bottom to top) installation. See IMI, installation and maintenance instructions.
CAUTION:	SCK should be fitted at least 1m from the trap in order to protect the glass from thermal pressure or shock.



PMO – Max. operating pressure	10	bar
TMO – Max. operating temperature	150	ºC

How to order: i.e. SCK DN ½" BSP.

DIMENSIONS (mm)					
SIZE DN	***A***	***B***	***C***	***D***	***WGT. Kgs***
1/2"	80	36	45	95	0,9
3/4"	80	36	45	95	0,9
1"	90	40	56	110	1,3



MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	Bronze B62 / ASTM B148-97
2	Cover	Brass EN12165 / CuZn39Pb2
3	* Sight tube	Borosilicate glass
4	Discharge tube	Copper
5	Ball check	Stainless steel
6	Bolts	Seel 8.8
7	* Gasket	Graphite

*Available spare parts.

SINGLE WINDOW SIGHT GLASS
SW12

DESCRIPTION

For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream of the steam trap.

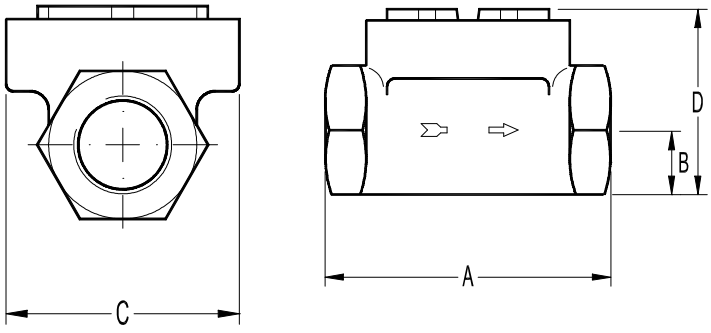
Single window SW sight glass, has been designed for this particular application.

Connections are female screwed.

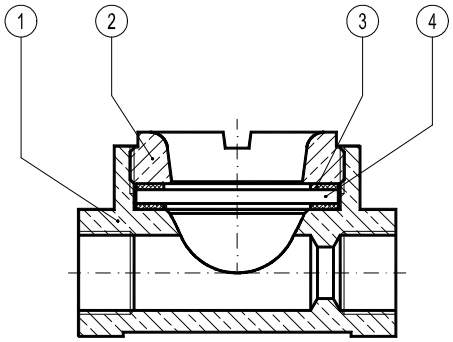
USE:	Condensate pipes downstream steam traps.
AVAILABLE MODELS:	SW 12 - 5 mm thick glass
SIZES:	DN ½", 3/4" and DN 1"
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21).
INSTALLATION:	Horizontal or vertical installation. See IMI, installation and maintenance instructions.

PMO – Max. operating pressure	12 bar
TMO – Max. operating temperature	150 ºC

How to order: i.e. SW12 DN ½" BSP.



DIMENSIONS (mm)					
SIZE DN	***A***	***B***	***C***	***D***	***WGT. Kgs***
1/2"	80	16	62	52	0,6
3/4"	88	19	62	57	0,9
1"	88	23	62	60	0,85



MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	Brass EN12165 / CuZn39Pb2
2	Glass nut	Brass EN12165 / CuZn39Pb2
3	* Gasket	St.Steel / Graphite
4	* Window glass	Borosilicate

*Available spare parts.

DOUBLE WINDOW SIGHT GLASS
DW40S
(DN15 – DN25)

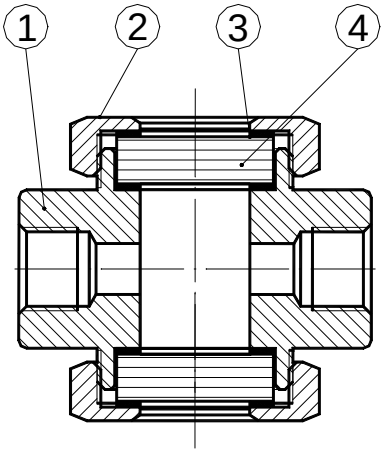
DESCRIPTION

For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream of the steam trap.

Double window DW sight glass, has been designed for this particular application.

Connections are female screwed or flanged.

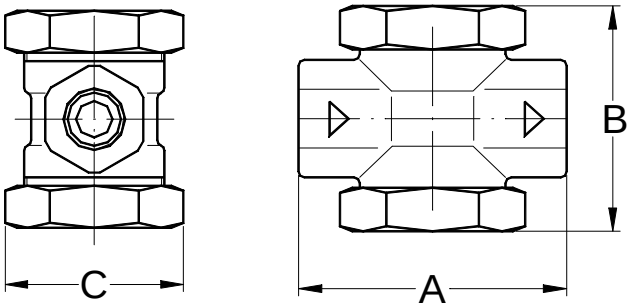
USE:	Condensate pipes downstream steam traps.
AVAILABLE MODELS:	DW 40 S
SIZES:	DN ½" to DN 1"; DN 15 to DN 25
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21). NPT (ANSI B1.20.1) Flanged EN 1092-1 or ANSI
INSTALLATION:	Horizontal or vertical installation. See IMI, installation and maintenance instructions.



PMO – Max. operating pressure	40 bar
TMO – Max. operating temperature	280 ºC

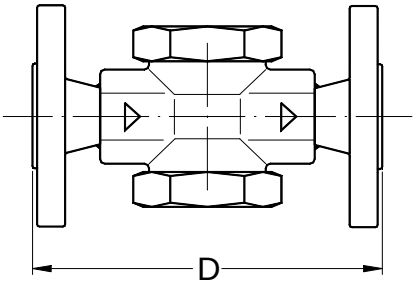
How to order: i.e. DW40 DN ½" BSP.

DIMENSIONS (mm)-Screwed					EN 1092-1 Flanges	
SIZE DN	A	B	C	WGT. Kgs	D	WGT. Kgs
15	90	80	60	1,25	150	2,8
20	90	80	60	1,25	150	3,4
25	100	87	65	2,1	160	4,7



MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	P250GH / 1.0460
2	Glass nut	P250GH / 1.0460
3	* Gasket	St.Steel / Graphite
4	* Window glass	Borosilicate

*Available spare parts.



DOUBLE WINDOW SIGHT GLASS
DW40S
(DN 32 – DN 50)

DESCRIPTION

For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream of the steam trap.

Double window DW sight glass, has been designed for this particular application.

Connections are female screwed or flanged.

OPTIONS: Stainless steel construction

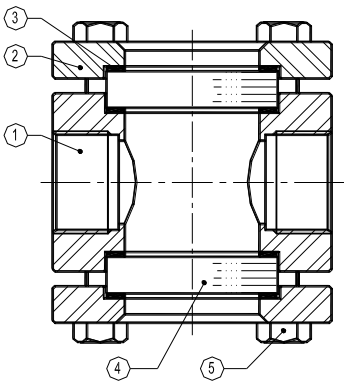
USE: Condensate pipes downstream steam traps.

AVAILABLE MODELS: DW 40 S

SIZES: DN 11/4" to DN 2 " ; DN 32 to DN 50

CONNECTIONS: Female screwed ISO 7/1Rp(BS21).
NPT (ANSI B1.20.1)
Flanged EN 1092-1 or ANSI

INSTALLATION: Horizontal or vertical installation.
See IMI, installation and maintenance instructions.

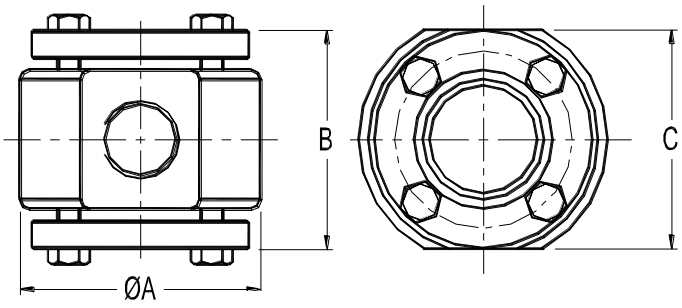


PMO – Max. operating pressure 25 bar

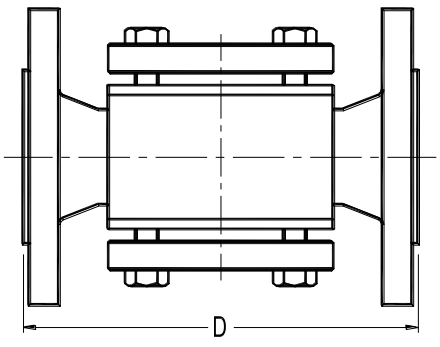
TMO – Max. operating temperature 280 ºC

How to order: i.e. DW40 DN 2" BSP.

CE MARKING (PED - European Directive 97/23/EC)	
PN 40	**Category**
DN 32	SEP - art. 3, paragraph3
DN 40-50	1 (CE Marked)



DIMENSIONS (mm)-Screwed					EN 1092-1 Flanges	
SIZE DN	***A***	***B***	***C***	***WGT. Kgs***	***D***	***WGT. Kgs***
32	130	115	114	6,2	180	9,5
40	130	115	114	6,5	200	10,5
50	130	125	114	7,5	230	12,5



MATERIALS		
POS.Nr.	***DESIGNATION***	***MATERIAL***
1	Body	S355J2G3 / 1.0570 ; P250GH / 1.0460
2	Glass nut	S355J2G3 / 1.0570
3	* Gasket	St.Steel / Graphite
4	* Window glass	Borosilicate
5	Bolts	Steel 8.8

*Available spare parts.

DOUBLE WINDOW SIGHT GLASS
DW12 (Bronze)

DESCRIPTION
For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream of the steam trap.
Double window DW sight glass, has been designed for this particular application.
Connections are female screwed.

OPTIONS: Borosilicate glass against extra price

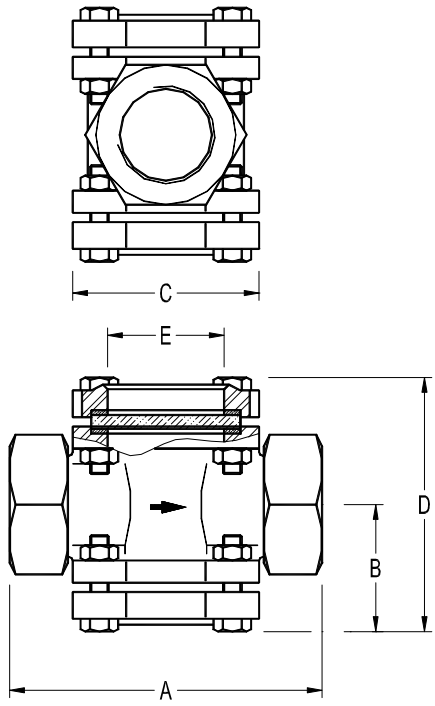
USE: Condensate pipes downstream steam traps.

AVAILABLE MODELS: DW 12

SIZES: DN 11/4" to DN 2"

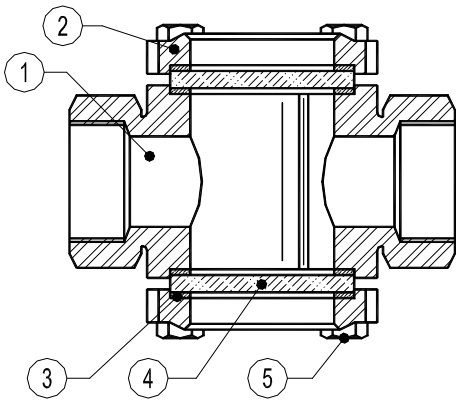
CONNECTIONS: Female screwed ISO 7/1Rp(BS21).

INSTALLATION: Horizontal or vertical installation.
See IMI, installation and maintenance instructions.



LIMITING CONDITIONS (Tempered glass)		LIMITING CONDITIONS (Borosilicate glass)	
ALLOWABLE PRESSURES	RELATED TEMPERATURE	ALLOWABLE PRESSURES	RELATED TEMPERATURE
16 bar	-10 /120º C	16 bar	-10 /120º C
/	/	14,4 bar	150 ºC
/	/	13,4 bar	180 ºC
/	/	12,8 bar	200 ºC

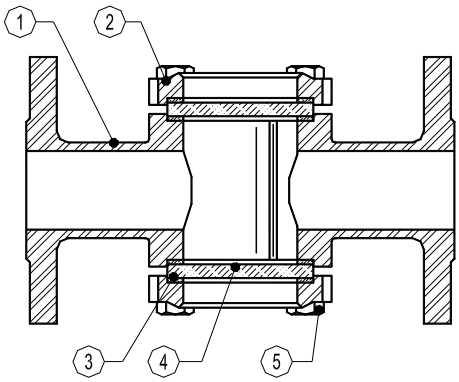
DIMENSIONS (mm)						
SIZE DN	A	B	C	D	E	WGT. Kgs
11/4"	125	55	83	109	50	2,5
11/2"	135	57	83	113	50	2,8
2"	170	70	104	139	60	5



MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	Bronze B62 / ASTM B148-97
2	Glass nut	Bronze B62 / ASTM B148-97
3	* Gasket	St.Steel / Graphite
4	* Window glass	Tempered glass
4	* Window glass	Borosilicate
5	Bolts	Steel 8.8

*Available spare parts.

WINDOW SIGHT GLASS
DW12G – DW12SS



DESCRIPTION

For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream the steam trap. Double window DW sight glass, has been designed for this particular application.
Connections are flanged.

OPTIONS: Tempered glass.

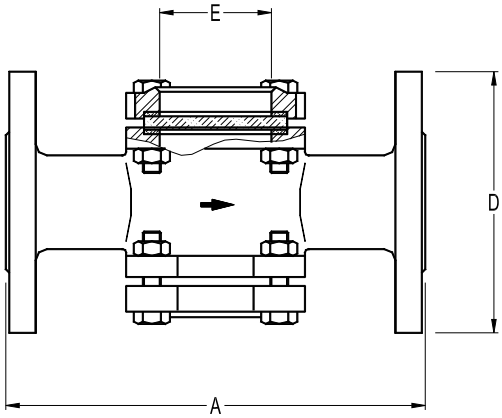
USE: Condensate pipes downstream steam traps.

AVAILABLE MODELS: DW12G – PN16 Cast iron
DW12SS – PN25 Stainless steel

SIZES: DN15 to DN150

CONNECTIONS: Flanged EN 1092-1/-2 PN16-PN25

INSTALLATION: Horizontal or vertical installation.
See IMI installation and maintenance instructions.



LIMITING CONDITIONS DW12G (Tempered glass)		LIMITING CONDITIONS DW12SS (Temp. glass)		LIMITING CONDITIONS DW12G (Borosilicate)		LIMITING CONDITIONS DW12SS (Borosilicate)	
ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.
16 bar	-10 /120° C	25 bar	-10 /37° C	16 bar	-10 /120° C	25 bar	-10 /37° C
/	/	18 bar	93 °C	14,4 bar	150 °C	18 bar	93 °C
/	/	17 bar	120 °C	12,8	200 °C	16 bar	148 °C
/	/	/	/	11,8	230 °C	14 bar	204 °C
/	/	/	/	10,5	280 °C	11 bar	280 °C

DIMENSIONS (mm)					
SIZE DN	A	B	C	Weight (kgs)	
				DW12G	DW12SS
15	130	95	44	3	3
20	150	105	44	3,5	4
25	160	115	44	4	5
32	180	140	50	6	6,5
40	200	150	50	6,5	7,3
50	230	165	60	9	10,5
65	290	185	90	17	17
80	310	200	90	18	20
100	350	220	110	23	26,5
125	400	250	142	50	52
150	480	285	160	63	68

CE MARKING (PED-European Directive 97/23/EC)			
PN 16	Category	PN 25	Category
DN15 to DN50	SEP - art. 3, paragraph3	DN15 to DN40	SEP - art. 3, paragraph3
DN65 to DN150	1 (CE Marked)	DN50 to DN125	1 (CE Marked)
-	-	DN150	2 (CE Marked)

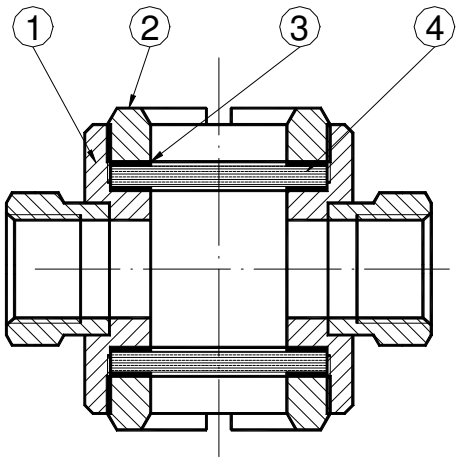
MATERIALS			
POS.	DESIGNATION	MATERIAL DW12G	MATERIAL DW12SS
1	Body	GJL-250 / 0.6025	CF8M / 1.4408
2	Cover	GJL-250 / 0.6025	CF8M / 1.4408
3	* Gasket	Graphite	Graphite
4	* Window	Borosilicate glass	Borosilicate glass
		Tempered glass **	Tempered glass **
5	Bolts	Steel 8.8	A2-70

* Available spare parts.** Option

DOUBLE WINDOW SIGHT GLASS
DW16SS (Stainless Steel)

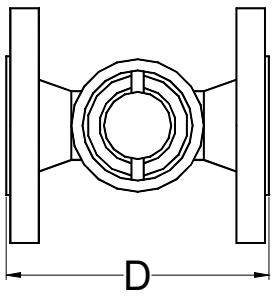
DESCRIPTION
For monitoring the right operation of a steam trap to avoid leakage of live steam and consequently big energy losses, a sight glass is recommended to be installed downstream the steam trap.
Double window DW sight glass, has been designed for this particular application.
Connections are female screwed or flanged.

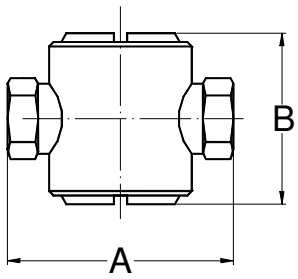
OPTIONS:	Different glasses and design on request.
USE:	Condensate pipes downstream steam traps.
AVAILABLE MODELS:	DW16SS - double window borosilicate glass.
SIZES:	½" to DN 1" - DN15 to DN25. 11/2" and 2" on request.
CONNECTIONS:	Female screwed ISO 7/1Rp(BS21). NPT (ANSI B1.20.1). Flanged EN 1092-1 or ANSI (welded flanges). Special flanges upon request.
INSTALLATION:	Horizontal or vertical installation. See IMI installation and maintenance instructions.



PMO – Max. operating pressure	12	bar
TMO –Max. operating temperature	280	ºC

How to order: i.e. DW16SS DN ½" BSP



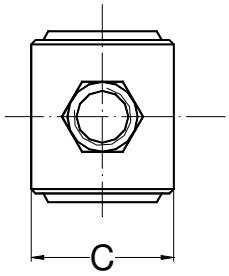


MATERIALS		
POS. Nr.	DESIGNATION	MATERIAL
1	Body	AISI316 / 1.4401
2	Cover	Brass (NickelPl.)
3	* Gasket	St.St./Graphite
4	* Glass	Borosilicate

* Available spare parts

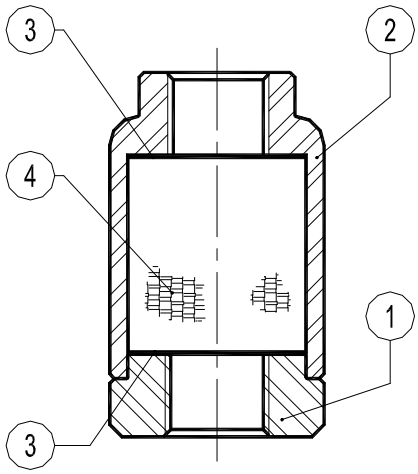
DIMENSIONS (mm)-Screwed					EN 1092-1 Flg.	
SIZE DN	A	B	C	WGT. Kgs	D	WGT. Kgs
1/2"	103	80	65	1,3	130	2,4
3/4"	103	80	65	1,3	130	3,4
1"	100	90	65	1,9	130	4,5

Different face-to-face dimensions on the flanged version,under request.



Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC. IS 4.140 E 01.08

NOISE DIFFUSER
DF15

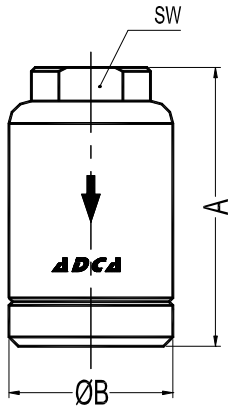


DESCRIPTION

The DF15 all stainless steel noise diffuser spreads out the high velocity discharge from steam or air traps while dampening the level of noise associated with steam or compressed air trap cycles.
Connections are female screwed.

MAIN FEATURES

A reduction of about 80% of noise can be expected measured at 1 meter from the application.
Simple and compact design.



OPTIONS:	Outlet without thread, suitable for direct discharge to atmosphere (DF16).
USE:	Saturated steam and compressed air. On the discharge of steam or air traps, blowdown valves, air cylinders etc.
AVAILABLE MODELS:	DF15 and DF16.
SIZES:	1/2", 3/4" and 1”
CONNECTIONS:	Female screwed ISO 7/1 Rp (BS21)
INSTALLATION:	Horizontal or vertical installation. Before installing the diffuser, blow all dirt and scale from the system. Diffuser discharge must be oriented towards the floor or other suitable enclosure.
CAUTION:	Do not install the diffuser in such a manner that it may cause an accidental exposure to the discharge.

DIMENSIONS (mm)

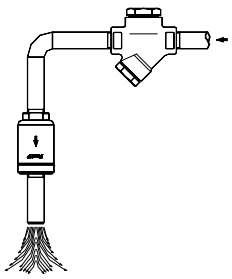
SIZE DN	A	B	SW	WGT. Kgs
1/2"	80	45	36	0,9
3/4"	80	45	36	0,9
1"	90	45	40	1,3

MATERIALS

POS.	DESIGNATION	MATERIAL
1	Body	AISI304 / 1.4301
2	Cover	AISI304 / 1.4301
3	Strainer screen	AISI304 / 1.4301
4	Element	AISI304 / 1.4301

PMA – Max. allowable pressure	40	bar
TMA – Max. allowable temperature	400	ºC
PMO – Max. operating pressure	32	bar
TMO – Max. operating temperature	250	ºC

How to order: i.e. DF15 DN ½” BSP



Application example (outlet of DT42S)

Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC. IS 9.450 E 03.07

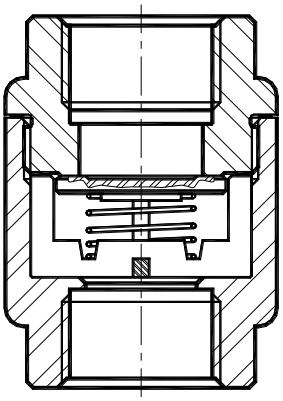
NON-RETURN VALVE
RT25

DESCRIPTION

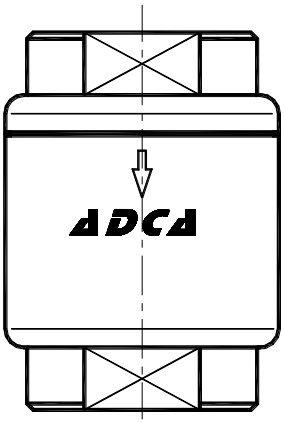
The RT25 all stainless steel disc check valve has a compact design and was specially designed for use with steam and hot condensate.
Connections are female screwed

MAIN FEATURES
Low pressure drop.
Simple and compact design.

OPTIONS:	Soft sealing : EPDM(E),NBR(N),VITON(V),PTFE (T). Inconel springs
USE :	Saturated steam, water and other gases (Group 2) compatible with the construction.
AVAILABLE MODELS :	RT 25
SIZES :	DN ¼" to DN 2"
CONNECTIONS :	Female screwed ISO 7/1 Rp (BS21)
INSTALLATION :	Horizontal or vertical installation See IMI, installation and maintenance instructions.
RATING :	PN 25



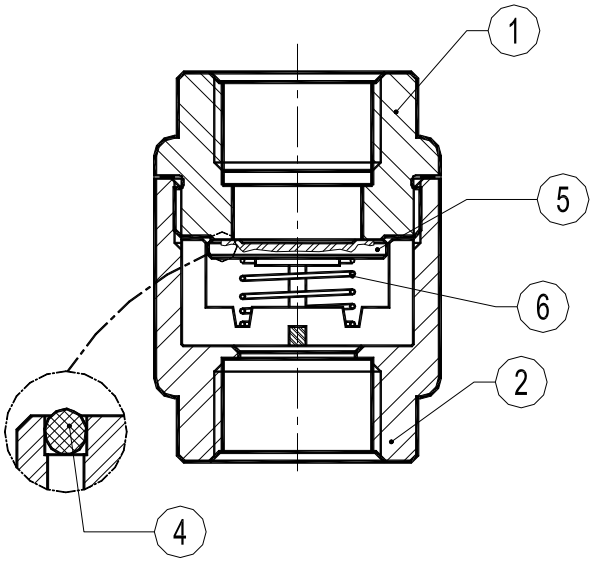
PMA – Max. allowable pressure	32 bar
TMA – Max. allowable temperature	250 ºC
PMO – Max. operating pressure	21 bar
TMO – Max. operating temperature	220 ºC



Recommended limit of operation with soft seats (ºC)			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130º	95º	180º	180º

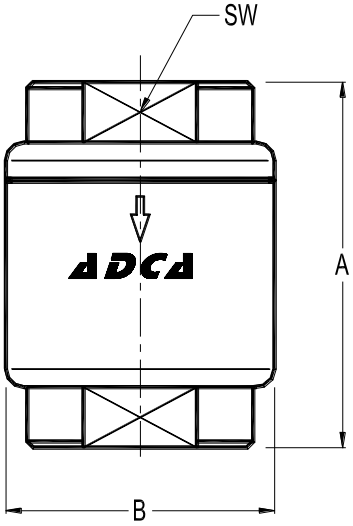
CE MARKING	
PN 25	Category
DN 1/4" to DN 11/2"	SEP - art. 3, paragraph3
DN 2"	Category1 (CE marked)

DIMENSIONS (mm)								
DN	***1/4"***	***3/8"***	***1/2"***	***3/4"***	***1"***	***11/4"***	***11/2"***	***2"***
A	55	55	55	60	70	61	72	72
B	40	40	40	45	50	65	80	80
SW	27	27	27	32	41	50	55	70
Kgs	0,3	0,3	0,3	0,38	0,54	0,68	0,96	1,13

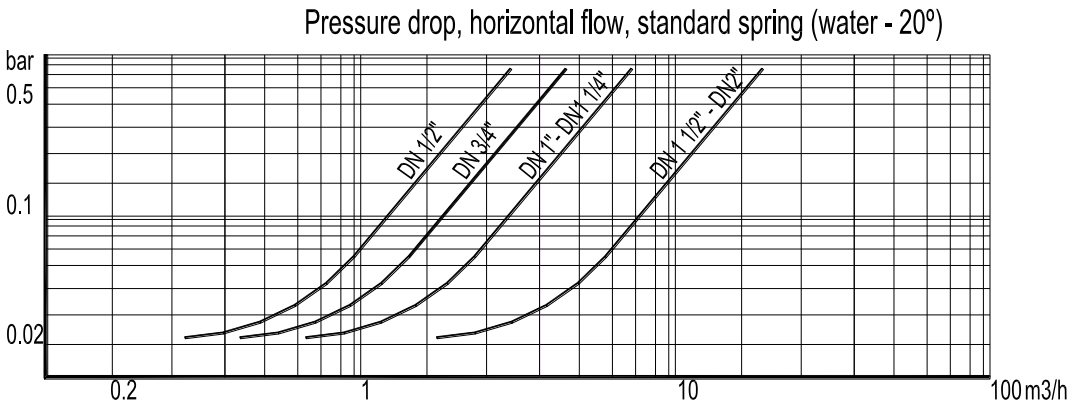


MATERIALS		
POS.	***DESIGNATION***	***MATERIAL***
1	Valve body	AISI316 / 1.4401
2	Cover	AISI316 / 1.4401
4	*Soft seal	See options
5	*Valve disc	AISI316 / 1.4401
6	*Spring	AISI302 / 1.4300

*Available spare parts



Minimum opening pressures with standard spring in mbar									
DN		***1/4"***	***3/8"***	***1/2"***	***3/4"***	***1"***	***11/4"***	***11/2"***	***2"***
D.P.	↑	25	25	25	25	25	25	28	29
D.P.	→	23	23	23	23	23	24	25	25
D.P.	↓	21	21	21	21	21	21	21	21
*D.P.	↑	2	2	2	2	2	3	4	4
* Vertical installation without springs (bottom to top).						→ Flow direction.			



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_w = \sqrt{\frac{Q}{1000}} \times V$

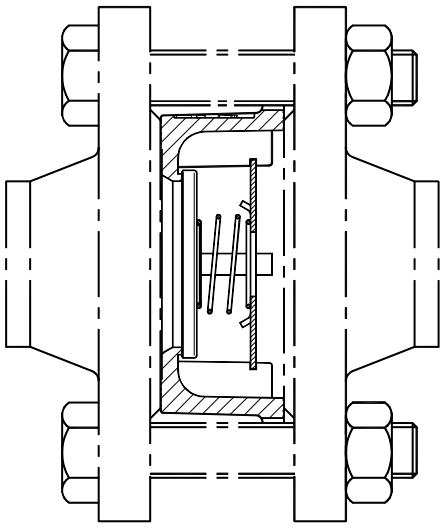
Vw = Equivalent water flow volume in m3/h ; Q = Density in Kg/m3 ; V = Flow volume in m3/h

WAFER-TYPE NON-RETURN VALVE
RD40 DN15 – DN100

DESCRIPTION
The RD40 all stainless steel disc check valve has a compact design and was specially designed for use with steam and hot condensate.
Connections are flanged (wafer type)

MAIN FEATURES
Low pressure drop.
Simple and compact design.
Overall lengths according to DIN 3202 part 3-K4

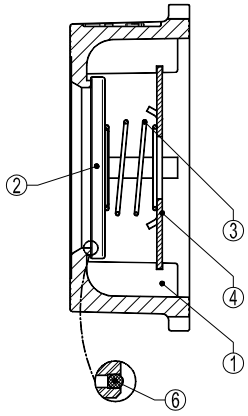
OPTIONS:	Soft sealing : EPDM (E), NBR (N), VITON (V), PTFE (T). Inconel springs
USE :	Saturated steam, water and other gases (Group 2) compatible with the construction
AVAILABLE MODELS :	RD 40
SIZES :	DN 15 to DN 100
CONNECTIONS :	Sandwiched between flanges as per EN 1092 or ANSI.
INSTALLATION :	Horizontal or vertical installation See IMI, installation and maintenance instructions.
RATING :	PN 25 / PN 40
LIMIT OF OPERATION:	As per EN 1092



Recommended limit of operation with soft seats (ºC)			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130º	95º	180º	180º

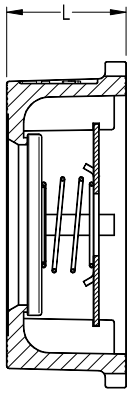
CE MARKING (PED - European Directive 97/23/EC)		
PN 25	PN 40	Category
DN15 to DN40	DN15 to DN32	SEP - art. 3, paragraph3
DN50 to DN100	DN40 to DN80	Category 1 (CE Marked)
-	DN100	Category 2 (CE Marked)

DIMENSIONS (mm)									
DN	***15***	***20***	***25***	***32***	***40***	***50***	***65***	***80***	***100***
D1	43	53	64	75	86	96	115	132	152
D2	50	60	70	81	91	105	126	141	167
L	17	20	23	28	32	40	46	50	60
Kgs	0,18	0,2	0,25	0,5	0,7	1,3	1,7	2,8	4,5

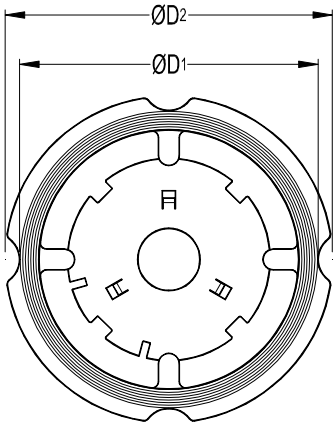


MATERIALS		
POS.	***DESIGNATION***	***MATERIAL***
1	Valve body	CF8M / 1.4408
2	*Disc	AISI316 / 1.4401
3	*Spring	AISI302 / 1.4300
4	Star	AISI316 / 1.4401
6	* Soft seal	See options

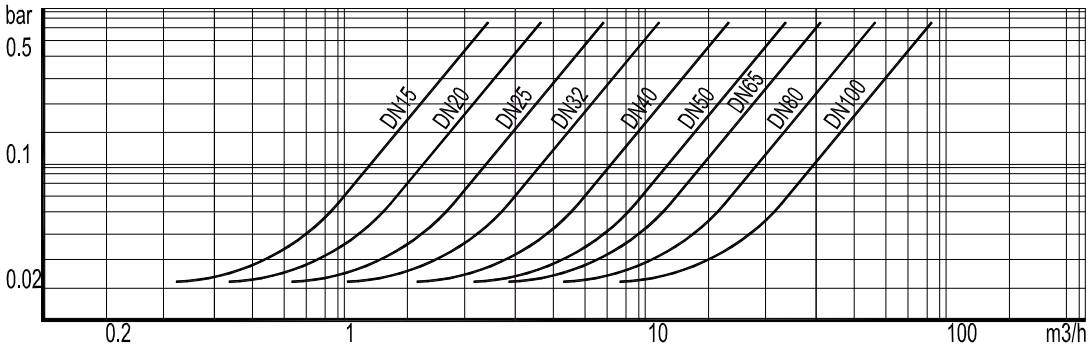
*Available spare parts



Minimum opening pressures with standard spring in mbar									
DN		***15***	***20***	***25***	***32***	***40***	***50***	***65***	***80***	***100***
D.P.	↑	25	25	25	27	28	29	30	31	33
D.P.	→	23	23	23	24	25	25	26	26	27
D.P.	↓	21	21	21	21	21	21	21	21	21
*D.P.	↑	2	2	2	3	4	4	5	5	6
* Vertical installation without springs (bottom to top). → Flow direction.										



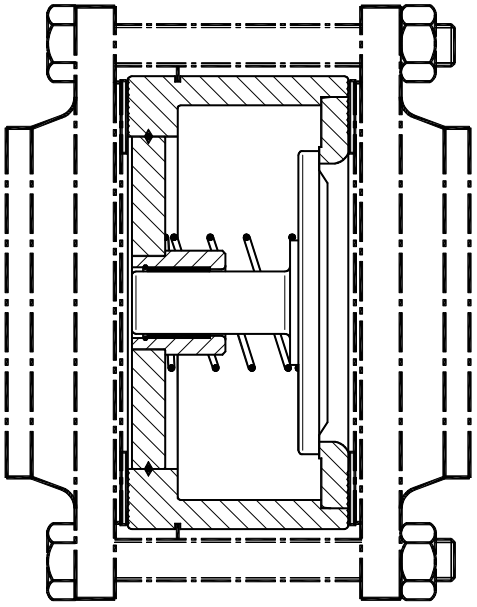
Pressure drop, horizontal flow, standard spring (water - 20°)



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_W = \sqrt{\frac{Q}{1000}} \times V$

Vw = Equivalent water flow volume in m3/h ; Q = Density in Kg/m3 ; V = Flow volume in m3/h

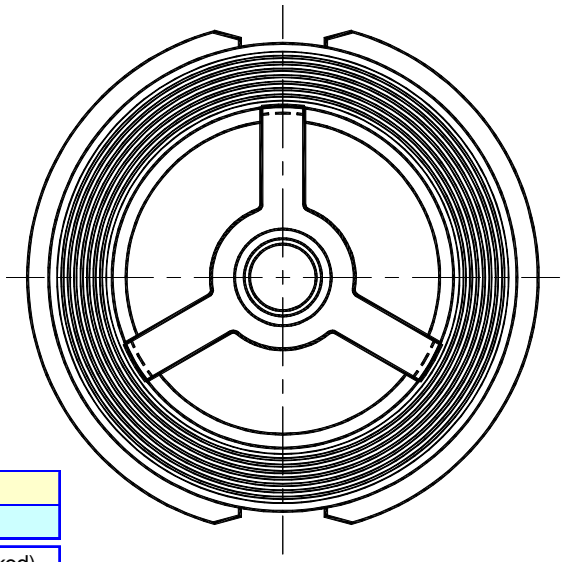
WAFER-TYPE NON-RETURN VALVE
RD40 DN 125 – DN 200



DESCRIPTION
The RD40 disc check valve has a compact design and was specially designed for use with steam and hot condensate.
Connections are flanged (wafer type)

MAIN FEATURES
Low pressure drop.
Simple and compact design.
Overall lengths according to DIN 3202 part 3-K4

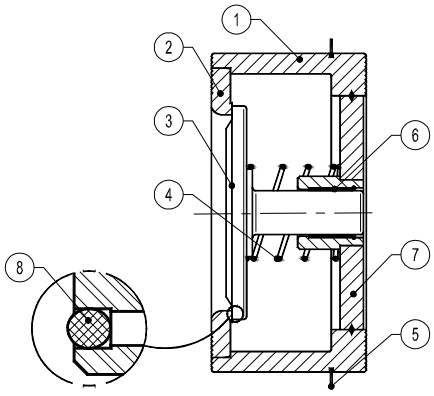
OPTIONS:	Soft sealing : EPDM (E), NBR (N), VITON (V), PTFE (T). Inconel springs
USE :	Saturated steam, water and other gases (Group 2) compatible with the construction
AVAILABLE MODELS :	RD 40
SIZES :	DN 125 to DN 200
CONNECTIONS :	Sandwiched between flanges as per EN 1092 or ANSI.
INSTALLATION :	Horizontal or vertical installation .See IMI, installation and maintenance instructions.
RATING :	PN 10 / PN 40
LIMIT OF OPERATION:	As per EN 1092



Recommended limit of operation with soft seats (ºC)			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130º	95º	180º	180º

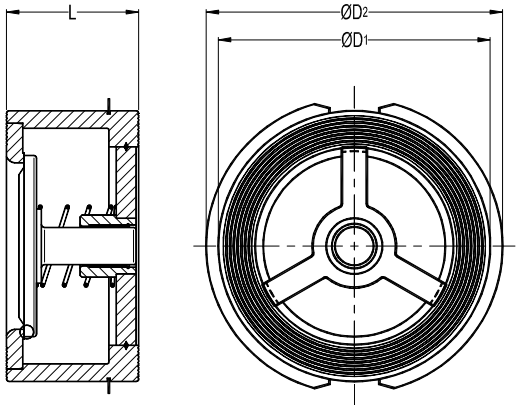
CE MARKING (PED - European Directive 97/23/EC)			
PN 10/16	PN 25	PN 40	Category
DN125 to DN200	DN125	/	Category 1 (CE marked)
/	DN150-DN200	DN125	Category 2 (CE marked)
/	/	DN150-DN200	Category 3 (CE marked)

DIMENSIONS (mm)							
DN	***D1 PN10/16***	***D2 PN25***	***D2 PN40***	***D2 ANSI150***	***D2 ANSI300***	***L***	***Weight Kgs***
125	192	192	192	192	216	90	11
150	218	226	226	218	251	106	13,5
200	273	286	293	273	308	140	24

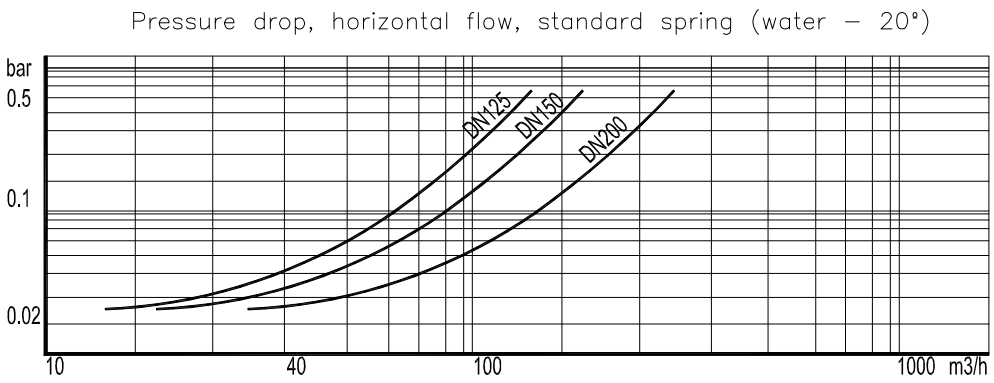


MATERIALS		
POS.	***DESIGNATION***	***MATERIAL***
1	Valve body	S355J2G3 / 1.0570
2	Seat	AISI316 / 1.4401
3	*Disc	AISI316 / 1.4401
4	*Spring	AISI302 / 1.4300
5	Centering ring	AISI304 / 1.4301
6	Bearing	Steel Fe Zn
7	Star	S355J2G3 / 1.0570
8	*Soft seal	See options

*Available spare parts



Minimum opening pressures with standard spring in mbar				
DN		***125***	***150***	***200***
D.P.	↑	37	40	46
D.P.	→	22	25	28
D.P.	↓	7	10	10
Flow direction.		→		



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_W = \sqrt{\frac{Q}{1000}} \times V$

Vw = Equivalent water flow volume in m3/h ; Q = Density in Kg/m3 ; V = Flow volume in m3/h

BRONZE GLOBE VALVE
GV32B

DESCRIPTION

GV32B bronze in line stop valves, screwed type for use on steam, water, oil or air applications.

MAIN FEATURES : Rising stem
PTFE renewable disk
High quality PTFE packing

USE: Saturated steam, condensate, water, oil, compressed air and other fluids compatible with the construction.

AVAILABLE MODELS: GV32B

SIZES : DN1/2" - 2"

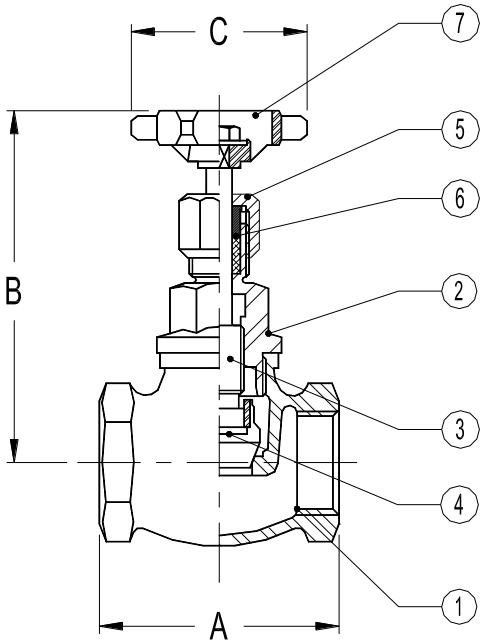
CONNECTIONS: Female screwed ISO7/1Rp(BS21)

LIMITING CONDITIONS : Body design conditions: PN32
198ºC at 14 bar
100ºC at 32 bar

FLOW RATE COEFFICIENTS						
	SIZES					
	1/2"	3/4"	1"	11/4"	11/2"	2"
Kvs	2	5	10	16	23	42

Kvs in m3/h , see data sheet IS PV10.00 E ;
For conversion Kvs = Cv(US) x 0,855

DIMENSIONS				
DN	A (mm)	B (mm)	C (mm)	Weight (Kgs)
1/2"	57	95	75	0,39
3/4"	65	98	75	0,55
1"	78	114	85	0,85
11/4"	89	138	95	1,36
11/2"	100	159	105	1,76
2"	121	170	120	2,62



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Valve Body	Bronze
2	Bonnet	Forged brass
3	Stem	Brass
4	Disk	Glass filled PTFE
5	Disk nut	Brass
6	Packing	PTFE
7	Handwheel	Aluminium

CE MARKING (PED-European Directive 97/23/EC)	
PN 32	Category
DN 1/2" to 11/4"	SEP-art.3, paragraph 3
DN 11/2" and DN 2"	Cat. 1 (CE Marked)

BELLOWS SEALED STOP VALVES
VF16 – VF17 – VF18

DESCRIPTION

VF series are streamlined flow valves with bellows, inside screw and maintenance free.
They are specially recommended for steam, gas, liquid, condensate, thermal oil and water systems.
Connections are flanged.

MAIN FEATURES

Double wall bellows specially designed for high durability.
Maintenance free
Secondary safety sealing

OPTIONS: Parabolic plug
PTFE disc sealing (max.180ºC)

USE: Steam, gases and liquids compatible with the construction.

AVAILABLE MODELS:
VF16 – PN16 – Cast iron
VF17 – PN16 – Nodular cast iron
VF18 – PN25 – Nodular cast iron

SIZES:
DN15 to DN 250

CONNECTIONS:
Flanged EN1092-2 PN16-PN25

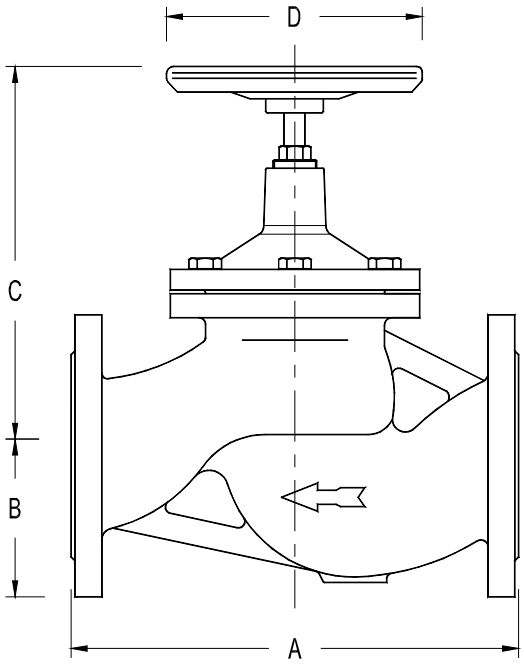
INSTALLATION:
See IMI, installation and maintenance instructions.

CE MARKING (PED - European Directive 97/23/EC)			
PN 16	**Category**	**PN 25**	**Category**
DN15 to DN50	SEP - art. 3, paragraph3	DN15 to DN40	SEP - art. 3, paragraph3
DN65 to DN200	1 (CE Marked)	DN50 to DN125	1 (CE Marked)
DN250	2 (CE Marked)	DN150 to DN200	2 (CE Marked)

LIMITING CONDITIONS VF 16		LIMITING CONDITIONS VF 17		LIMITING CONDITIONS VF 18	
ALLOWABLE PRESSURES	**RELATED TEMPERATURE**	**ALLOWABLE PRESSURES**	**RELATED TEMPERATURE**	**ALLOWABLE PRESSURES**	**RELATED TEMPERATURE**
16 bar	-10 /120º C	16 bar	-10 /120º C	25 bar	-10 /120º C
12,8 bar	200 ºC	14,7 bar	200 ºC	23 bar	200 ºC
11,2 bar	250 ºC	13,9 bar	250 ºC	21,8 bar	250 ºC
9,6 bar	300 ºC	12,8 bar	300 ºC	20 bar	300 ºC
/	/	11,2	350 ºC	17,5 bar	350 ºC

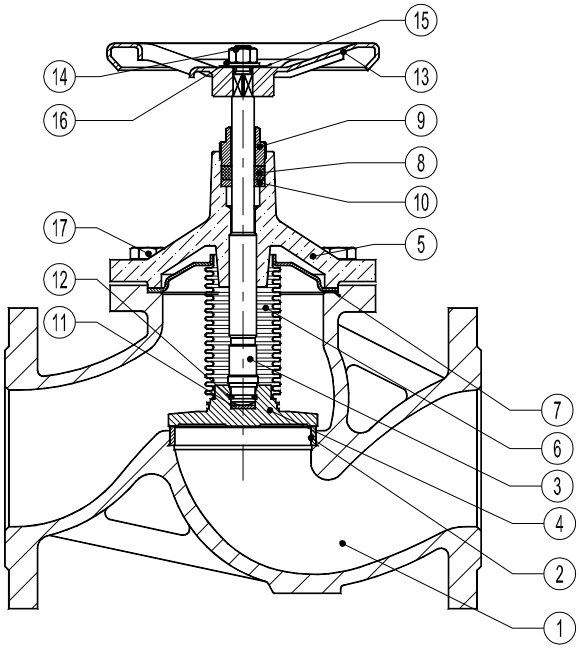
DIMENSIONS (mm)						
SIZE DN	***A***	***B***	***C ****	***D***	***WGT. Kgs***	***Kv m3/h***
15	130	47,5	175	100	2,2	4,6
20	150	52,5	175	100	3	7,3
25	160	57,5	191	100	4	11,7
32	180	70	193	125	5,5	16,8
40	200	75	229	150	8,2	26,7
50	230	82,5	231	150	10,2	42,6
65	290	92,5	314	200	18	77,9
80	310	100	316	200	20,5	111
100	350	110	353	225	30,6	177
125	400	125	385	250	42,5	262
150	480	142,5	443	350	64	368
200	600	170	517	400	110	664

* Valve fully open.



MATERIALS			
POS.	***DESIGNATION***	***MATERIAL VF16***	***MATERIAL VF17-18***
1	Body	EN-GJL-250	EN-GJS-400-18-LT
2	Seat	St.Steel	St.Steel
3	* Spindle	St.Steel	St.Steel
4	* Disc	St.Steel	St.Steel
5	Bonnet	EN-GJL-250	EN-GJS-400-18-LT
6	* Bellows	St.Steel	St.Steel
7	* Gasket	St.Steel/Graphite	St.Steel/Graphite
8	* Packing	Carbo-Graphite	Carbo-Graphite
9	Gland	ZincPl.Steel	ZincPl.Steel
10	Bottom ring	ZincPl.Steel	ZincPl.Steel
11	Anti-friction disc	St.Steel	St.Steel
12	Elastic ring	St.Steel	St.Steel
13	Handwheel	Steel	Steel
14	Nut	ZincPl.Steel	ZincPl.Steel
15	Nameplate	Aluminium	Aluminium
16	Washer	Steel	Steel
17	Bolts	Steel 8.8	Steel 8.8

* Available spare parts.



BELLOWS SEALED STOP VALVES
VF20

DESCRIPTION

VF20 series are streamlined flow valves with bellows, outside screw no rising stem, maintenance free.
They are specially recommended for steam, gas, liquid, condensate, thermal oil and water systems.
Connections are flanged.

MAIN FEATURES

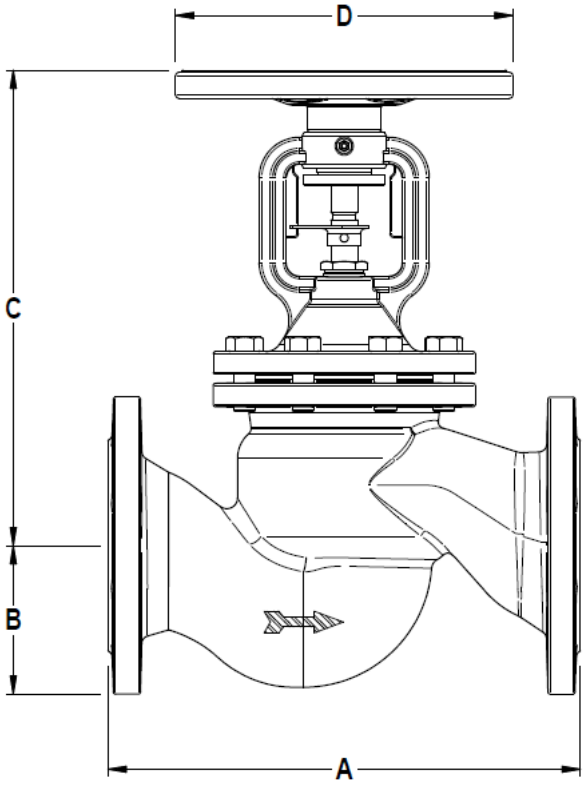
Double wall bellows specially designed for high durability.
Position indicator
Lubricator
Maintenance free
Secondary safety sealing

OPTIONS:	Parabolic plug PTFE disc sealing (max.180ºC)
USE:	Steam, gases and liquids compatible with the construction.
AVAILABLE MODELS:	VF20 – Cast iron
RATING:	PN16
SIZES:	DN15 to DN 200
CONNECTIONS:	Flanged EN1092-2 PN16
INSTALLATION:	See IMI, installation and maintenance instructions.

LIMITING CONDITIONS VF 20	
ALLOWABLE PRESSURES	**RELATED TEMPERATURE**
16 bar	-10 /120º C
12,8 bar	200 ºC
11,2 bar	250 ºC
9,6 bar	300 ºC

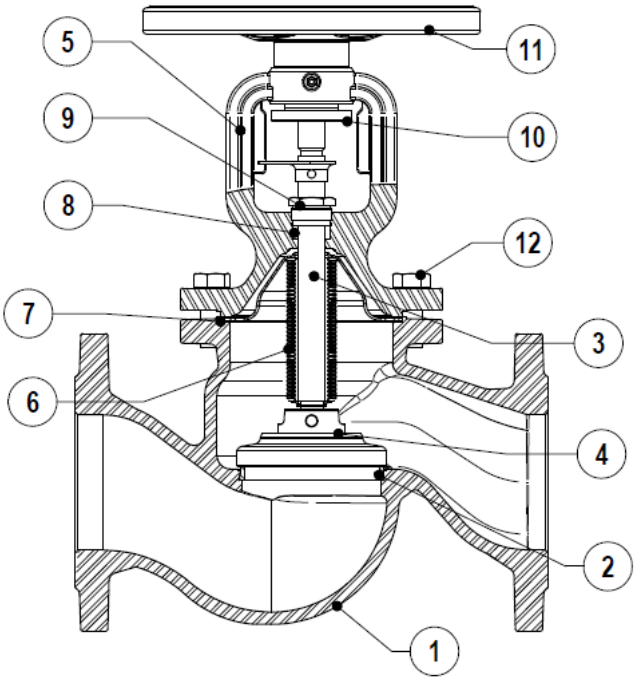
CE MARKING (PED - European Directive 97/23/EC)	
PN 16	**Category**
DN15 to DN50	SEP - art. 3, paragraph3
DN65 to DN200	1 (CE Marked)

DIMENSIONS (mm)						
SIZE DN	A	B	C	D	WGT. Kgs	Kv m3/h
15	130	47,5	178	125	3,2	5,9
20	150	52,5	178	125	3,9	7,4
25	**160**	**57,5**	**193**	**125**	**4,6**	**13**
32	180	70	201	125	6,5	18
40	**200**	**75**	**224**	**150**	**9**	**30**
50	230	82,5	228	150	11	41
65	**290**	**92,5**	**270**	**175**	**15,8**	**79**
80	310	100	295	200	20,5	115
100	**350**	**110**	**321**	**250**	**35**	**181**
125	400	125	388	300	49	225
150	**480**	**142,5**	**448**	**400**	**76**	**364**
200	600	170	575	500	130,5	725



MATERIALS		
POS.	DESIGNATION	MATERIAL VF20
1	Body	EN-GJL-250
2	Seat	St.Steel
3	* Spindle	St.Steel
4	* Disc	St.Steel
5	Bonnet	EN-GJL-250
6	* Bellows	St.Steel
7	* Gasket	St.Steel/Graphite
8	* Packing	Carbo-Graphite
9	Gland	ZincPl.Steel
10	Anti-friction disc	ZincPl.Steel
11	Handwheel	Steel
12	Bolts	Steel 8.8

* Available spare parts.



STAINLESS STEEL NEEDLE VALVES
NV400 – NV400H

DESCRIPTION

The NV-400 is a high pressure needle stop valve, designed for steam and other industrial fluids isolation.

MAIN FEATURES

Rising stem
Complete stainless steel construction
High quality graphite packing

OPTIONS: Other sizes and materials available under request.

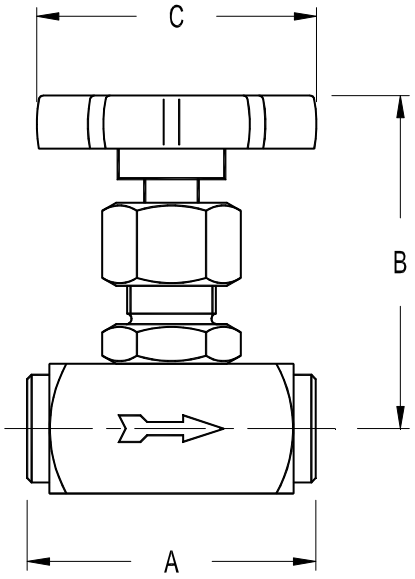
USE: Saturated steam, water, compressed air and other fluids compatible with the construction.

AVAILABLE MODELS: NV-400 ; NV-400H

SIZES : DN ¼" ,3/8" and ½"

CONNECTIONS: Female screwed ISO7/1Rp(BS21)

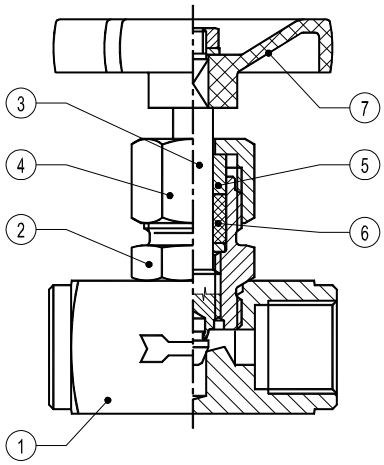
INSTALLATION: In any position with the flow in the direction of the arrow on the valve body.



DIMENSIONS (mm)				
DN	***A***	***B***	***C***	***Weight Kgs***
1/4"	55	75	70	0,46
3/8"	60	75	70	0,45
1/2"	65	75	70	0,45

BODY LIMITING CONDITIONS		
NV-400 ALLOW. PRES.	**NV-400H ALLOW. PRES.**	**RELATED TEMP.**
400 bar	400 bar	20 ºC
320 bar	320 bar	200 ºC
284 bar	284 bar	300 ºC
/	268 bar	400 ºC
/	240 bar	550 ºC

Minimum operating temperature : -20ºC

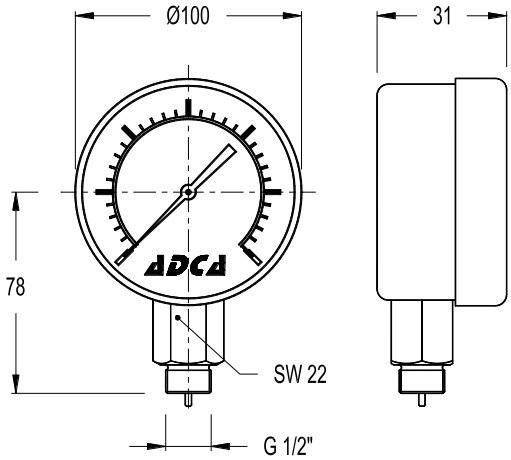


MATERIALS			
POS.	**DESIGNATION**	**MATERIAL**	
		NV400	**NV400H**
1	Valve Body	AISI316Ti / 1.4571	AISI316Ti / 1.4571
2	Bonnet	AISI316Ti / 1.4571	AISI316Ti / 1.4571
3	Stem	AISI316Ti / 1.4571	AISI316Ti / 1.4571
4	Disk nut	AISI316Ti / 1.4571	AISI316Ti / 1.4571
5	Packing gland	AISI316Ti / 1.4571	AISI316Ti / 1.4571
6	Packing	Graphite	Grafiflex
7	Handwheel	Plastic	Metalic

PRESSURE GAUGE
MAN-100

DESCRIPTION

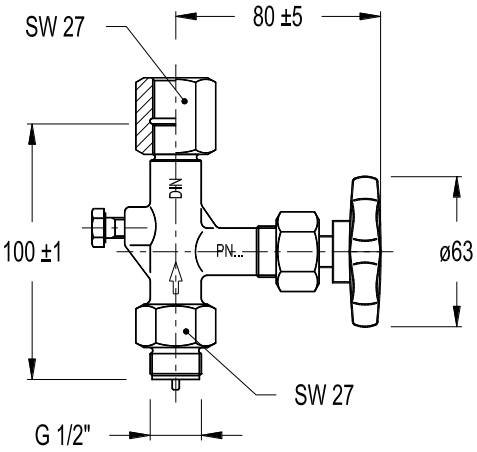
MAN-100 pressure gauges have 100 mm diameter and are marked in bar.
MAIN FEATURES
Accuracy – Class 1
Case - Stainless steel
Lens-Glass
Dial-Aluminium white
Pointer-Aluminium black
Measuring system: copper alloy
AVAILABLE
MODELS: MAN-100
CONNECTIONS : DN ½" Bottom, back eccentric
MEASURING RANGE: -1…40 bar
WEIGHT: 0,34Kgs
LIMITING CONDITIONS :
PMA Max. allowable pressure: Full scale reading
PMO Max. operating temperature: 80ºC



GAUGE COCK
GC-400

DESCRIPTION

GC-400 pressure gauges cocks without test connection DIN 16270 Form A
MAIN FEATURES
Body-Steel C22.8 or stainless steel
Spindle-Stainless steel
Packing-PTFE
Handwheel-Plastic
AVAILABLE
MODELS: GC-400
CONNECTIONS : DN ½" (male x female)
WEIGHT: 0,51 Kgs
LIMITING CONDITIONS :
Working pressure:250 bar at 250ºC
400 bar at 120ºC



GAUGE SIPHONS
GSC - GSU

DESCRIPTION

The GS series pressure gauge siphons have been designed to protect pressure gauges from the effect of rapid pressure surges and hot pressure fluids.
They operate as cooling elements for liquids and gases in pressure measuring devices.
An isolation pressure gauge cock is recommended to be installed in combination with gauge siphons.

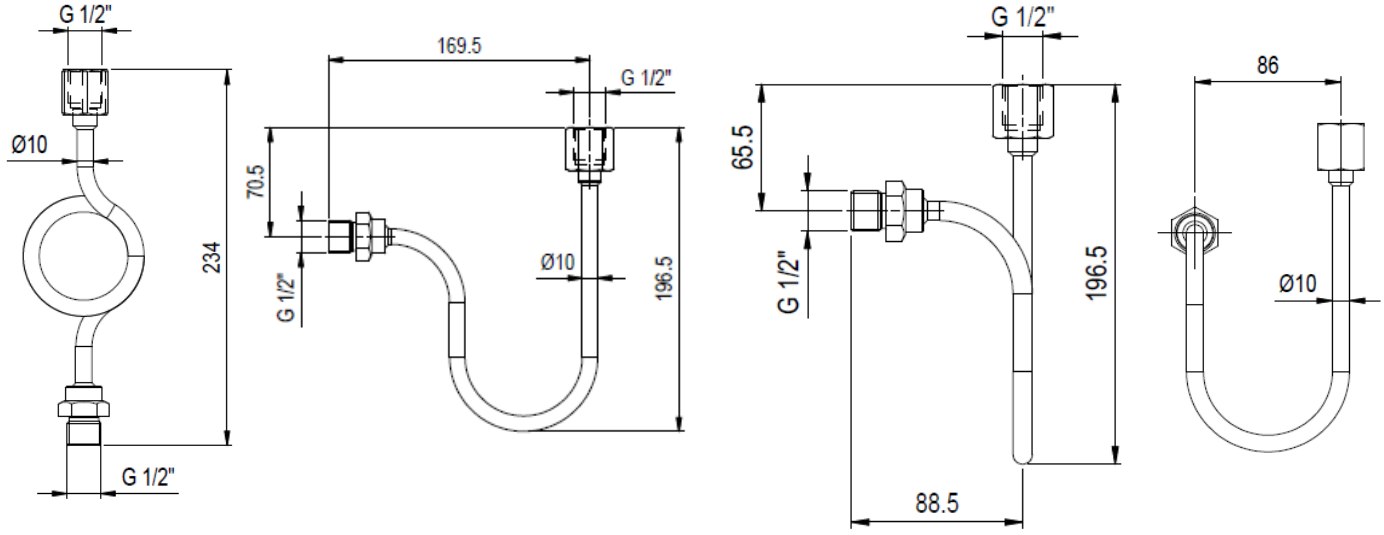
MAIN FEATURES
Complete stainless steel construction

OPTIONS:	Different kind of connections.
USE:	Pressure gauge protection on steam, water, compressed air and other fluids systems compatible with the construction.
AVAILABLE MODELS:	GSC-40; GSU-40 ; GSUL-40
SIZES :	½" (male x female)
CONNECTIONS:	Female screwed ISO7/1Rp(BS21)
INSTALLATION:	GSC - vertical: GSU - horizontal.
LIMITINNG CONDITIONS:	40 bar at 300 ºC; 110 bar at 110 ºC
WEIGHT:	0,34 Kgs
MATERIALS:	Coil – AISI 316L / 1.4404 Connections – AISI 304 / 1.4301

GSC

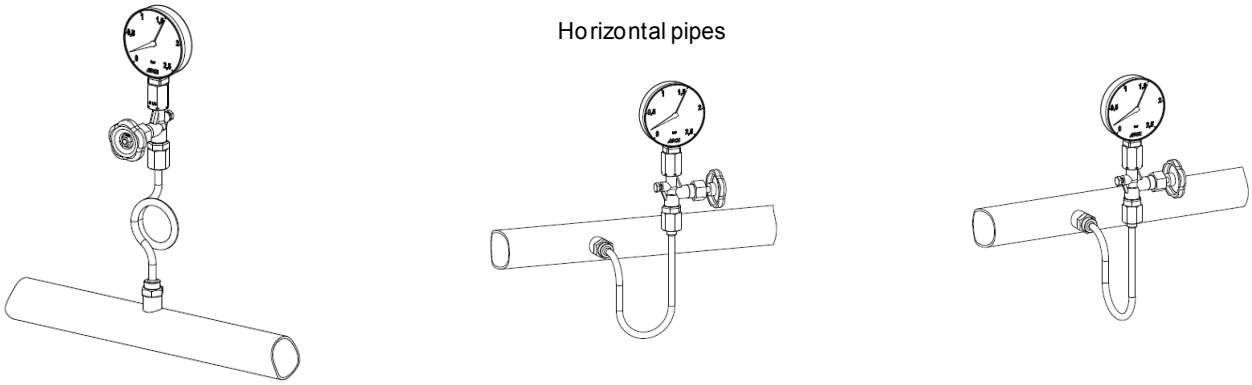
GSU

GSUL

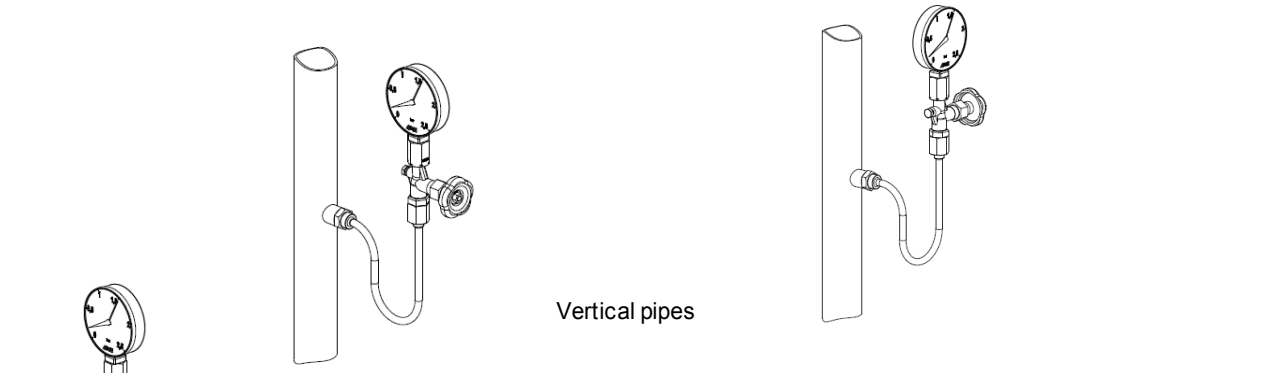


Typical Installation

Horizontal pipes



Vertical pipes



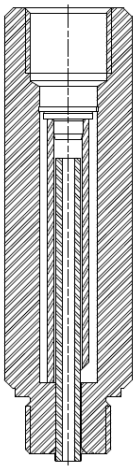
Top of vessel

Side of vessel

GAUGE SIPHONS
GSV

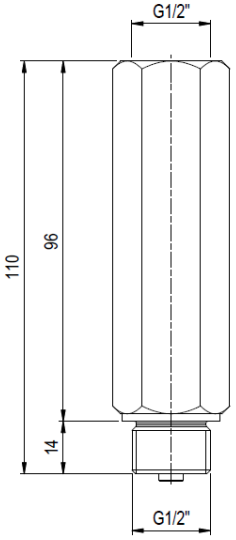
DESCRIPTION

The GSV series pressure gauge siphons have been designed to protect pressure gauges from the effect of rapid pressure surges and hot pressure fluids.
Specifically designed to replace the traditional “pigtail” and other coil design siphons where it is necessary to eliminate gauge whip and vibration. They operate as cooling elements for liquids and gases in pressure measuring devices.
An isolation pressure gauge cock is recommended to be installed in combination with gauge siphons.

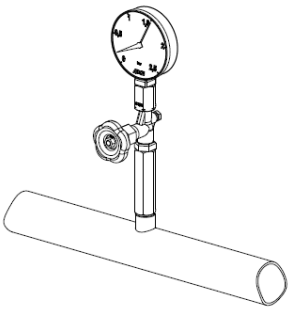


MAIN FEATURES
Complete stainless steel construction
Compact sturdy design, requires minimum space for installation.

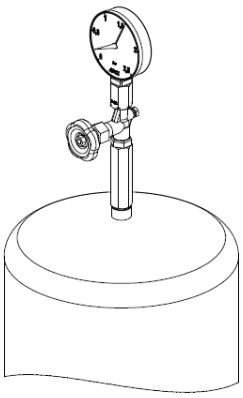
OPTIONS:	Different kind of connections.
USE:	Pressure gauge protection on steam, water, compressed air and other fluids systems compatible with the construction.
AVAILABLE MODELS:	GSV
SIZES :	½” (male x female)
CONNECTIONS:	Female screwed ISO7/1Rp(BS21)
INSTALLATION:	GSC - vertical: GSU - horizontal.
LIMITINNG CONDITIONS:	63 bar at 400 ºC; 100 bar at 120 ºC
WEIGHT:	0,42 Kg
MATERIALS:	AISI 316 / 1.4401



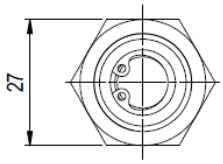
Typical Installation



Horizontal pipe



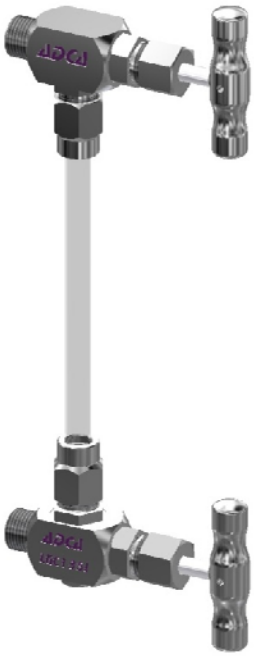
Top of vessel



LEVEL GAUGE
LGC135I

DESCRIPTION

The LGC level gauge valve was specially conceived to supervise the functioning and visualization of liquid level in pressure operated condensate pumps, reservoirs and other equipment whenever compatible with operation boundaries.
May be supplied either with glass or without.



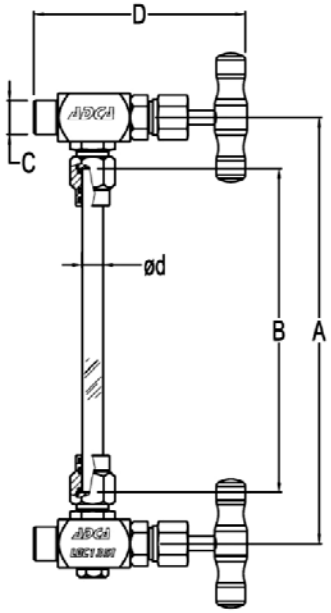
MAIN FEATURES

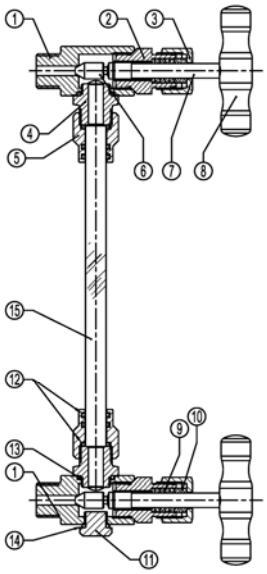
Stainless steel construction

AVAILABLE
MODELS: LGC 135I

CONNECTIONS : DN ½”

LIMITING CONDITIONS :
Working pressure: 12 bar at 200ºC





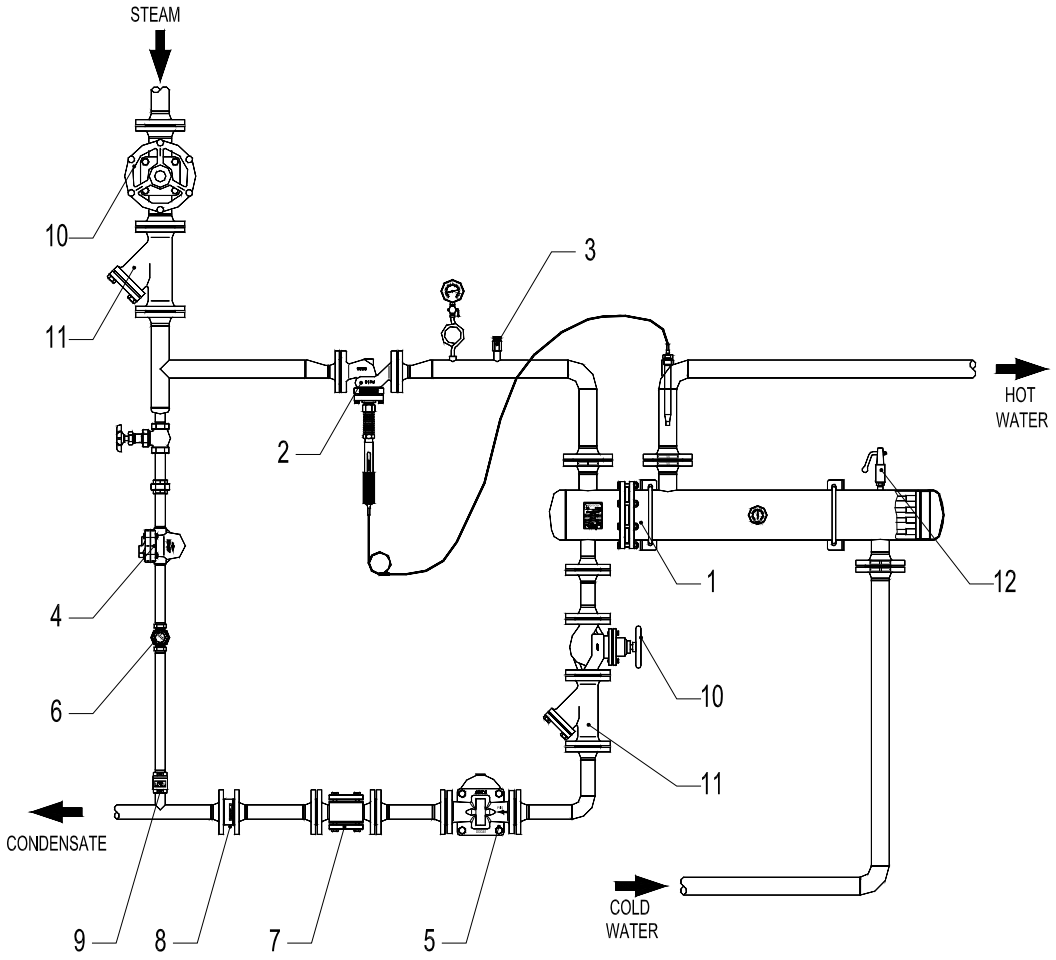
DIMENSIONS (mm)						
SIZE DN	A	B	C	D	d	WGT. Kgs
1/2"x13	*	*	1/2"	135	13	1,4

* Dimension B is obtained by deducting 66 to A

MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI316 / 1.4401
2	Bonnet	AISI316 / 1.4401
3	Packing nut	AISI316 / 1.4401
4	Socket	AISI316 / 1.4401
5	Glass union	AISI316 / 1.4401
6	*O-ring	Viton
7	Valve stem	AISI316 / 1.4401
8	Handw heel	AISI316 / 1.4401
9	*Packing	PTFE/Graphite
10	Gland	AISI316 / 1.4401
11	Low er plug	AISI316 / 1.4401
12	*O-rings	Viton
13	*O-ring	Viton
14	*O-ring	Viton
15	*Tube glass	Borosilicate

* Available spare parts.

ADCATHERM STH SHELL & TUBE HEAT EXCHANGER
Typical Installation

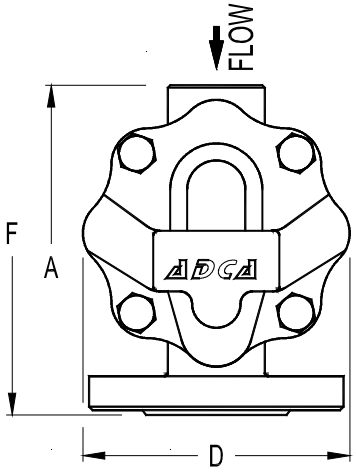


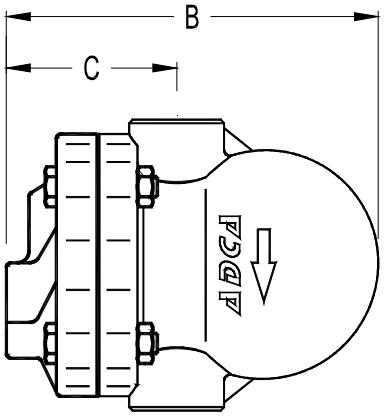
MATERIALS

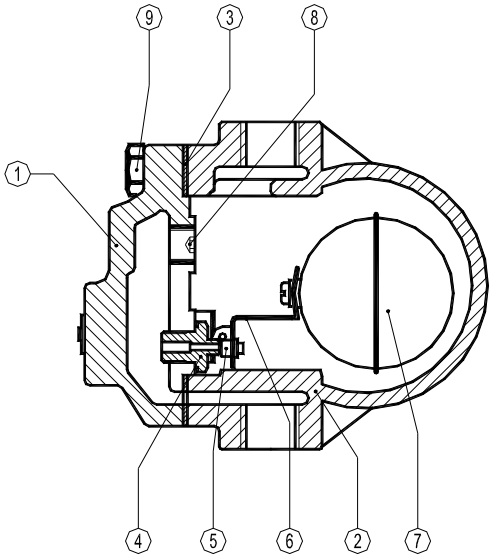
POS.	DESIGNATION	MODEL
1	HEAT EXCHANGER	STH
2	SELF OPERATED CONTROLLER	TR
3	VACUUM BREAKER	VB 21
4	DRIP LEG STEAM TRAP	TSS 22
5	FLOAT&THERMOST.STEAM TRAP	FLT
6	SIGH GLASS	SW
7	SIGH GLASS	DW
8	CHECK VALVE	RD 40
9	CHECK VALVE	RT 25
10	GLOBE VALVE	----
11	Y STRAINER	IS16F
12	SAFETY VALVE	----

Remarks :
Materials according to the operating pressures.
Different assembling designs may be produced on request .

DIMENSIONS (mm)									
Screwed						EN PN16		ANSI 150	
SIZE DN	A	B	C	D	WGT. Kgs	F	WGT. Kgs	F	WGT. Kgs
15-1/2"	122	150	68	108	3,5	150	4,4	150	3,9
20-3/4"	122	150	68	108	3,5	150	4,9	150	4,1







MATERIALS		
POS.Nr.	DESIGNATION	MATERIAL
1	Body	GJS-400-15 / 0.7040
2	Cover	GJS-400-15 / 0.7040
3	* Gasket	St.Steel / Graphite
4	* Seat	AISI 304 / 1.4301
5	* Valve	VITON
6	* Lever	AISI 304 / 1.4301
7	* Float	AISI 304 / 1.4301
8	Plug	A105 / 1.0432
9	Bolts	Steel 8.8

*Available spare parts.