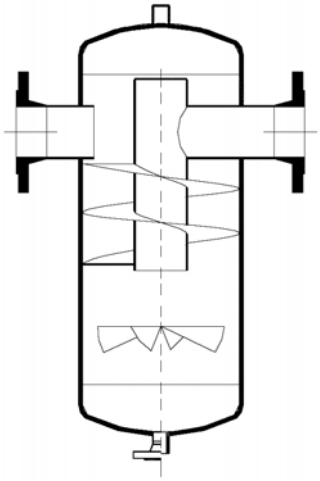
Separators S 25

Description

S-25 series centrifugal separators remove moisture from steam and compressed air pipelines. Steam and compressed air passing throught the separator and as a result of centrifugal forces, impact and swirling effects, separate the particles with a heavier specific gravity, such as water and oil droplets, moisture in suspension, dirt and scale.
The condensate collected at the bottom of the separator, must be automatically drained by a suitable steam or compressed air trap. Connections are female screwed or flanged.



Main Features

Several possibilities of installation.
No moving parts.

Options : Zinc plated fabricated carbon steel construction (compressed air).
Stainless steel construction.
Condensate flanged connection.
Air vent or equalizing socket on top.

Use: Steam, compressed air and other gases (group 2)

Available Models : S25/S - Carbon steel body.
S25/SZ - Zinc plated body.

Sizes : Screwed : DN 1/2" to DN 2".
Flanged : DN 15 to DN 200.
Different sizes and design on request.

Connections : Female screwed ISO 7/1 Rp (BS21)
Flanged DIN PN 16 and PN 40 or
ANSI Class 150 and Class 300 lbs.

Installation : Always with the condensate discharge pointing downwards. See IMI, installation and maintenance instructions.

HOW TO : Generally, in an existing plant it is advisable

SELECT : to fit a separator of the same size of the pipe line. Pressure drop is normaly negligible. For approximate pressure drop calculation please consult.

How to order i.e. S25/S DN 40 PN 16

Application Limits / CE Marking

Size	DN15	DN20	DN25	DN32	DN40	DN50
Rating	PN16	PN16	PN16	PN16	PN16	PN16
Approval	SEP	SEP	SEP	CE	CE	CE
Rating	PN40	PN40	PN40	PN40	PN40	PN40
Approval	CE	CE	CE	CE	CE	CE
Size	**DN65**	**DN80**	**DN100**	**DN125**	**DN150**	**DN200**
Rating	PN16	PN16	PN16	PN16	PN16	PN16
Approv.	CE	CE	CE	CE	CE	CE
Rating	PN40	PN40	PN40	PN40	PN40	PN40
Approv.	CE	CE	CE	CE	CE	CE

CE : CE Marked.

Limiting Conditions

		Press. bar	Temp. °C
DIN PN 16	a)	16	120
		14	198
		13	250
ANSI CL. 150	a)	16	120
		14	198
DIN PN 25	a)	25	120
ANSI CL.300		21	220
		17	300
DIN PN 40	a)	40	120
ANSI CL.300		32	239
		28	300

a) PMO - Maximum operating pressure for saturated steam.
Minimum operating temperature : -10 °C
Design code : AD-Merkblatt (2000).

Group 2 Gases Categories

Rating	Sizes	Category
DIN PN 16	15 - 25	SEP
	32 - 50	1
	65 - 125	2
	150 - 200	3
DIN PN 25	200	3
DIN PN 40	15 - 32	1
	40 - 80	2
	100 - 150	3

CE Marking : This product have been designed for use on water, steam, air and other gases which are in Group 2 of the PED-European Pressure Equipment Directive 97/23/EC and it comply with those requirement. The product carry the CE mark when falling in category 1 and above.

Approximate Dimensions (mm)

PN 16 DIN Flanges									Screwed Ends		DIN FL.	ANSI Flanges	
Size DN	A	B	C	D	E	F	VOL* dm^3	WGT** Kg	G	WGH	A PN40	A 150lbs	A 300lbs
15	230	114	260	195	60	1/2"	2	5	160	4.3	230	Consult factory	
20	230	114	260	195	65	1/2"	2.5	6	160	4.4	230		
25	230	114	300	200	90	1/2"	3	7	160	5.3	230		
32	260	140	395	294	100	1/2"	5	12	190	8.2	260		
40	260	140	435	335	105	1/2"	5.7	13.8	190	9.2	260		
50	310	168	505	395	120	1/2"	10.5	19.5	220	15.1	310		
65	380	219	550	410	140	3/4"	18.5	32	-	-	394		
80	400	219	610	462	148	3/4"	25	37.7	-	-	416		
100	485	273	715	528	187	3/4"	35.4	57	-	-	510		
125	535	324	845	630	215	1"	50	81.5	-	-	555		
150	585	356	962	780	270	1"	75	153	-	-	585		
200	605	406	1170	880	290	1"	95	175	-	-	650		

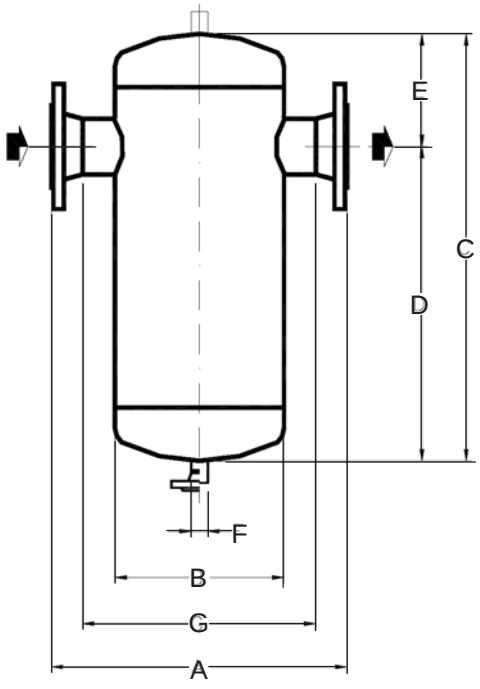
* Volume correspond to the class PN16 design. Classes PN 25 and PN 40 may have slightly lower volumes.
** Weight correspond to the class PN 16 design flanged with DIN flanges.
F - Screwed drain connection as standard. Alternativly can be supplied flanged DIN or ANSI on the same class of main connections. Air vent or balancing pipe connection on top can be supplied on request, not exceding the size of drain one.

Note : Dimensions subject to change without notice. Consult factory for certified dimensions.
Other sizes and designs can be supplied under request.

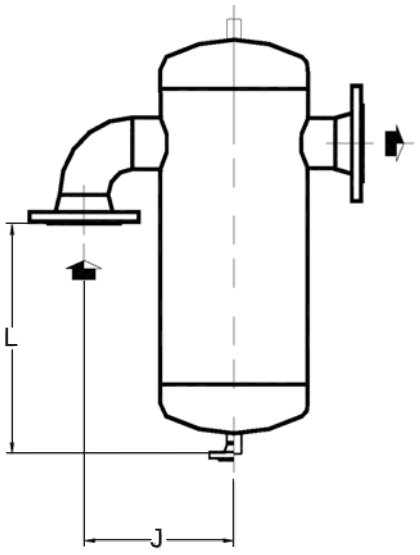
Rating	Separator size	Flange DIN STD.	Flange ANSI STD.
PN 16	* From DN 15 to DN 50	DIN 2635 - PN 40	ANSI B16.5 - CL. 150 lbs
PN 16	DN 65 and above	DIN 2633 - PN 16	ANSI B16.5 - CL. 150 lbs
PN 25	ALL	DIN 2635 - PN 40	ANSI B16.5 - CL. 300 lbs
PN 40	ALL	DIN 2635 - PN 40	ANSI B16.5 - CL. 300 lbs

* Flanges DIN 2633 and DIN 2635 on the sizes DN 15 up to DN 50 has the same number and size holes.

INLINE CONNECTIONS



ALTERNATIVE CONNECTION



EVH - Elbow vertical inlet / Horizontal outlet

Description	Material	
Body	Carbon steel	DIN 17175 / St 35.8
Heads	Carbon steel	EN 10028/2 / P265GH
Inlet/Outlet pipes	Carbon steel	DIN 17175 / St 35.8
DIN flanges	Carbon steel	DIN 17243 / C 22.8
ANSI flanges	Carbon steel	ASTM A 105
Sockets	Carbon steel	ASTM A 105
Internals	Steel	St 37-2 / St 35.8

EN 10204 3.1B certificate available if requested with the order.

INSTALLATION AND MAINTENANCE INSTRUCTIONS
S25 SEPARATORS

GENERAL

1.Water is present in all steam and compressed air distribution pipelines systems. For maximum efficiency , steam must be saturated and dry. Careful draining and trapping will remove much of condensate but not all.The use of separators and appropriate condensate traps can solve the problem .

Warning !

-If malfunction of any other equipment or system opperation failure may result in a dangerous overpressure ,overtemperature or even vacuum condition, a safety device must be included in the system to prevent such situations .

-Do not touch the equipment without appropriate protection during working operation because it may conduct heat if the used fluid is at high temperature.

-Before starting maintenance be sure that the equipment is not pressurized or hot .

-If the optional top connection is not being used, it must be closed with an appropriate carbon steel plug.

-Do not remove the nameplate attacched to the equipment.Serial number and other useful information is stamped on it.

INSTALLATION

1.Prior to install check that the product is suitable for the intended application : materials and pressure/temperature ratings.

2.Before to install remove plastic covers placed on flanges or connection ends. The equipment has an arrow or Inlet/Outlet designations.Be sure that it will be installed on the appropriate flow direction.

3.External stresses that may be induced by the system doing to pipe expansion,etc, can affect this product. The necessary precautions are recommend during the system design and equipment assembly.

4.The separator must be installed on horizontal position always with the condensate discharge pointing downwards. A steam or compressed air trap is recommended to automaticaly discharge the condensate .A balancing pipe is recomended to be fitted with the compressed air trap.

MAINTENANCE

1.The separator don't need any specific type of maintenance. Regular inspection may be recommended by local autorities according to specific or general pipe and/or vessels assembly procedures.

Estimated lifetime under satisfactory working conditions : 5 years ; after this period we recommend the wall thickness examination using appropriated inspection equipment.Pour quality water or corrosive fluids will reduce this period.

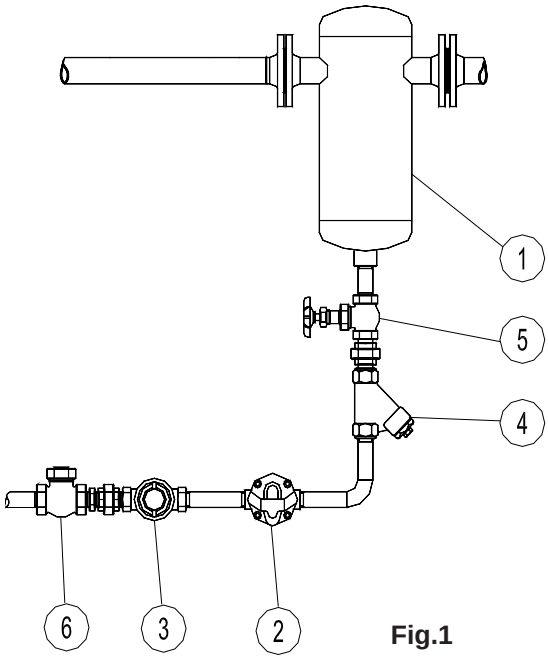


Fig.1

Legend:

1-ADCA S25 centrifugal separator
2-FLT 17 / FLT16 series float steam traps or FA series compressed air traps.
3-SW12 or DW40S sigh glasses
4-IS16 or IS116 strainer
5-Stop valve
6-Check valve

LIMITING CONDITIONS

	PRESS. bar	TEMP. ºC
DIN PN16	16 a) 14 13	120 198 250
ANSI CL.150	16 a) 14	120 198
DIN PN 25 ANSI CL. 300	25 a) 21 17	120 220 300
DIN PN 40 ANSI CL.300	40 a) 32 28	120 239 300

a) PMO - Maximum operating pressure for saturated steam .

Minimum operating temperature : - 10ºC

GROUP 2 GASES CATEGORIES

RATING	SIZES DN	Category
DIN PN 16	15 - 25 32 - 50 65 -125 150 -200	SEP 1 2 3
DIN PN 25	200	3
DIN PN 40	15 - 32 40 - 80 100 - 150	1 2 3

CE Marking :

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