

## HUMIDITY SEPARATORS SF251/S PN 16 and PN 40

### DESCRIPTION

The SF251/S series centrifugal separators remove moisture from steam and compressed air pipelines. Steam and compressed air pass through the separator and, as a result of centrifugal forces, impact and swirling effects, the particles with a heavier specific gravity, such as water and oil droplets, moisture in suspension, dirt and scale are separated from the fluid.

The condensate collected at the bottom of the separator must be automatically drained by a suitable steam or compressed air trap.

### MAIN FEATURES

Several possibilities of installation.  
No moving parts.  
Stainless steel strainer screen included.

**OPTIONS:** Threaded condensate connection.  
Special tailor-made designs.

**USE:** Steam, compressed air and other gases (Group 2).

**AVAILABLE MODELS:** SF251/S – carbon steel.

**SIZES:** 1/2" to 4"; DN 15 to DN 100.

**CONNECTIONS:** Flanged EN 1092-1 PN 16 or PN 40.  
Flanged ASME B16.5 Class 150 or 300 on request.  
Female threaded ISO 7 Rp or NPT on request.

**INSTALLATION:** Always with the condensate discharge pointing downwards.  
See IMI – Installation and maintenance instructions.



CE MARKING – GROUP 2 (PED – European Directive)			
PN 16	Category	PN 40	Category
DN 15 to 25	SEP	DN 15 to 32	1 (CE marked)
DN 32 to 50	1 (CE marked)	DN 40 to 80	2 (CE marked)
DN 65 to 100	2 (CE marked)	DN 100	3 (CE marked)

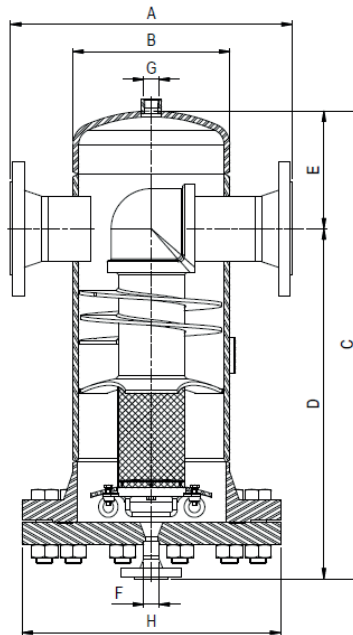
BODY LIMITING CONDITIONS *					
FLANGED PN 16		FLANGED CLASS 150		FLANGED PN 40 / CLASS 300	
ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.
16 bar	50 °C	16 bar	50 °C	40 bar	50 °C
14 bar	100 °C	14 bar	100 °C	37 bar	100 °C
13 bar **	195 °C	13 bar **	195 °C	31 bar **	239 °C
12 bar	250 °C	–	–	27 bar	300 °C

\* Rating according to EN 1092-1:2018; \*\* PMO – Maximum operating pressure for saturated steam.  
Minimum operating temperature: -10 °C; Design code: AD-Merkblatt.

MATERIALS	
DESIGNATION	MATERIAL
Body	P235GH / 1.0325
Heads	P265GH / 1.0425
Inlet /outlet pipes	P235GH / 1.0325
EN flanges	P250GH / 1.0460
ASME flanges	ASTM A105 / 1.0432
Sockets	ASTM A105 / 1.0432
Internals	S235JR / 1.0038
Strainer	AISI 304 / 1.4301

FLANGE CONNECTIONS			
Rating	Size	EN Standard	ASME Standard
PN 16	* DN 15 to 50	EN 1092-1 PN 40	ASME B16.5 Cl. 150
PN 16	DN 65 to 300	EN 1092-1 PN 16	ASME B16.5 Cl. 150
PN 40	DN 15 to 300	EN 1092-1 PN 40	ASME B16.5 Cl. 300

\* Flanges EN 1092-1 PN 16 and PN 40, from DN 15 to DN 50, have the same number and size of holes.



APPROXIMATE DIMENSIONS (mm) *													
SIZE	A PN 16	A PN 40	A CL. 150	A CL. 300	B	C	D	E	F **	G **	H	VOL. (L)	WGT. (kg)
1/2" – DN 15	230	230	250	259	114	385	285	100	DN 15	1/2"	235	2	21
3/4" – DN 20	230	230	255	264	114	385	285	100	DN 15	1/2"	235	2,6	22,4
1" – DN 25	230	230	262	274	114	385	285	100	DN 15	1/2"	235	3	24
1 1/4" – DN 32	260	260	290	303	140	520	410	110	DN 15	1/2"	270	5,3	36
1 1/2" – DN 40	260	260	294	307	140	520	410	110	DN 15	1/2"	270	6	38
2" – DN 50	310	310	341	354	168	590	460	130	DN 15	1/2"	300	11	52,5
2 1/2" – DN 65	380	400	430	448	219	710	550	160	DN 20	3/4"	375	19,3	94
3" – DN 80	400	410	440	453	219	710	550	160	DN 20	3/4"	375	26	102,5
4" – DN 100	470	490	518	532	273	815	610	205	DN 20	3/4"	450	37	169

\* For certified values, consult manufacturer. Volume and weight refer to PN 16 version. Other versions may have slightly different values.

\*\* As standard, in separators manufactured with EN 1092-1 flanges, these connections are female threaded ISO 7 Rp. In models with ASME B16.5 flanges, they are female threaded NPT. Alternatively, EN 1092-1 or ASME B16.5 flanged drain connections can be supplied (ASME on the same class as main connections).

Remarks: The top of the separator is supplied with a threaded connection, which size does not exceed the size of the drain connection. This connection is always supplied with a threaded socket. It can be used for air venting or balance pipe connection.