

## HUMIDITY SEPARATORS S30S (Baffle design) PN16 – PN40

### DESCRIPTION

The S30 series baffle separators remove moisture from steam and compressed air pipelines. Steam and compressed air pass through the separator and, as a result of expansion, 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

No moving parts.



**OPTIONS:** Zinc plated (compressed air).  
Flanged condensate connection.

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

### AVAILABLE

**MODELS:** S30S – carbon steel body.  
S30SZ – zinc plated body.

**SIZES:** DN 15 to DN 300.

### PIPE

**CONNECTIONS:** Flanged EN1092-1 PN16 / PN40.  
Flanged ANSI Class 150 lb / 300 lb.  
Female screwed BSP or NPT on request.

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

### HOW TO SELECT:

Generally, in an existing plant, it is advisable to fit a separator with the same size as the pipeline. Pressure drop is normally negligible. For approximate pressure drop calculation, please consult factory.

#### CE MARKING – GROUP 2 (PED – European Directive)

Rating	Size	Category	Rating	Size	Category
<b>PN16</b>	DN 15 to DN 25	SEP	<b>PN40</b>	DN 15 to DN 32	1 (CE marked)
	DN 32 to DN 50	1 (CE marked)		DN 40 to DN 80	2 (CE marked)
	DN 65 to DN 125	2 (CE marked)		DN 100 to DN 150	3 (CE marked)
	DN 150 to DN 200	3 (CE marked)		DN 200 to DN 300	4 (CE marked)
	DN 250 to DN 300	4 (CE marked)		–	–

**LIMITING CONDITIONS \*\***

Rating	Pressure (bar)	Temperature (°C)	Rating	Pressure (bar)	Temperature (°C)	Rating	Pressure (bar)	Temperature (°C)
PN16	16	50	ANSI 150 lb	16	50	PN40 / ANSI 300 lb	40	50
	14	100		14	100		37	100
	13 *	195		13 *	195		31 *	239
	12	250		–	–		27	300

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

**MATERIALS**

DESIGNATION	MATERIAL
Body	EN10216-5 / P235GH / 1.0325
Heads	EN10028-2 / P265GH / 1.0425
Inlet / Outlet pipes	EN10216-5 / P235GH / 1.0325
EN flanges	EN10222-5 / P250GH / 1.0460
ANSI flanges	ASTM A105 / 1.0432
Sockets	ASTM A105 / 1.0432
Internals	EN 10025-2 / S235JR / 1.0038

**FLANGE CONNECTIONS**

Rating	Size	EN Standard	ANSI Standard
PN16	* DN 15 to DN 50	EN 1092-1 PN40	ANSI B16.5 Cl. 150 lb
PN16	DN 65 to DN 300	EN 1092-1 PN16	ANSI B16.5 Cl. 150 lb
PN40	DN 15 to DN 300	EN 1092-1 PN40	ANSI B16.5 Cl. 300 lb

\* Flanges EN 1092-1 PN16 and PN40, from DN 15 to DN 50, have the same number and size of holes.

EN 10204 3.1 certificate available if requested with the order.

**APPROXIMATE DIMENSIONS (mm) \***

SIZE DN	A PN16	A PN40	A 150 lb	A 300 lb	B	C	D	E	F **	VOL. (L)	WGT. (kg)
15	230	230	250	259	114	320	130	190	1/2"	2,7	6,3
20	230	230	255	264	114	320	130	190	1/2"	2,7	6,9
25	230	230	262	274	114	320	130	190	1/2"	2,8	7,3
32	260	260	290	303	140	395	170	225	1/2"	5,1	12
40	260	260	294	307	140	435	190	245	1/2"	5,7	13,3
50	310	310	341	354	168	505	210	295	1/2"	9,8	19
65	380	394	430	442	219	550	240	310	3/4"	17,9	30,8
80	400	416	440	459	219	610	290	320	3/4"	20	35
100	470	490	520	530	273	715	300	415	3/4"	37,6	49,6
125	535	561	605	622	324	845	350	495	1"	62,8	75,4
150	565	605	633	652	356	960	400	560	1"	86,2	101,2
200	605	650	685	700	406	1170	450	720	1"	139	158,7
250	720	790	784	815	508	1540	610	930	1 1/2"	283	301
300	860	914	933	964	610	1700	740	960	1 1/2"	452	433,9

\* For certified values, consult factory. Weight and volume refer to PN16 design. Other ratings may have slightly different values.

\*\* Screwed drain connection as standard. Alternatively, EN1092-1 or ANSI flanged versions can be supplied. (ANSI on the same class as main dimensions.)

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.

