

## HUMIDITY SEPARATORS SH25/S PN16 – PN40

### DESCRIPTION

The SH25/S series horizontal 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

In-line design.  
No moving parts.

OPTIONS: Flanged condensate connection.

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

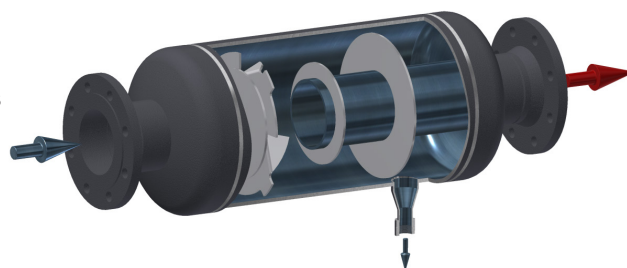
AVAILABLE MODELS: SH25/S – carbon steel body.

SIZES: DN 15 to DN 100.

CONNECTIONS: Flanged EN1092-1 PN16/40 or ANSI Class 150 lb or 300 lb.  
Female threaded ISO 7 Rp 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
PN16	DN 15 to DN 25	SEP	PN40	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 100	2 (CE marked)		DN 100	3 (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 1092-1:2018;

Minimum operating temperature: -10 °C;

Design code: AD-Merkblatt.

**MATERIALS**

DESIGNATION	MATERIAL
Body	EN10216-2 / P235GH / 1.0325
Heads	EN10028-2 / P265GH / 1.0425
Inlet / Outlet pipes	EN10216-2 / P235GH / 1.0325
EN flanges	EN10222-2 / P250GH / 1.0460
ANSI flanges	ASTMA105 / 1.0432
Sockets	ASTMA105 / 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 100	EN 1092-1 PN16	ANSI B16.5 Cl. 150 lb
PN40	DN 15 to DN 100	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	FLANGED										THREADED				
	A PN16	A PN40	A 150 lb	A 300 lb	B	D			E	F **	G	VOL. (L) ***	WGT. (kg) ***	C	WGT. (kg)
						PN16/40	150 lb	300 lb							
15	431	431	450	460	114	148	158	163	154	1/2"	131	2,1	7,1	357	5
20	435	435	460	470	114	148	158	163	156	1/2"	131	2,2	7,2	362	2,8
25	435	435	465	479	114	148	158	163	156	1/2"	131	2,4	7,6	396	2,9
32	475	475	505	521	140	162	172	177	170	1/2"	145	4,6	11,3	487	4,6
40	515	515	549	562	140	174	183	188	152	1/2"	170	5,1	11,6	521	4,7
50	590	590	621	634	168	180	190	195	166	1/2"	160	8	18,3	606	6,5
65	656	670	706	718	219	210	220	225	196	3/4"	186	16,3	20,4	–	–
80	724	740	764	785	219	201	213	218	216	3/4"	186	18	23	–	–
100	824	850	872	891	273	227	239	244	240	3/4"	213	28,5	25	–	–

\* For certified values, consult factory.

\*\* As standard, in separators manufactured with EN 1092-1 flanges, the drain connection is female threaded ISO 7 Rp. In models with ANSI B 16.5 flanges, this connection is female threaded NPT. Alternatively, EN 1092-1 or ANSI B 16.5 flanged drain connections can be supplied (ANSI on the same class as main connections).

\*\*\* Weight and volume refer to PN16 design. Other ratings may have slightly different values.

