Separator SPR 40

CHARACTERISTICS

The SPR 40 separator is used to remove water, oil and dust particles from the steam and compressed air distribution pipes. It provides a clean fluid and protects sensitive downstream equipment: regulators, control valves, instrumentation. In the case of steam, it makes it possible to obtain dry steam and thus improves the heat exchange yields.
It is made of carbon steel with PN40 flange connection.
The low point must be equipped with a condensate trap for steam and a liquid trap for compressed air. The high point can be equipped with various accessories. It is necessary to provide adequate support for the separators according to their weight.
The SPR 40 separator is sized according to the AD Merkblatt 2000 code and the CE pressure directive 2014/68.
AVAILABLE MODELS
Materials: carbon steel.
Diameters: DN15 to DN100.
Connection: PN40 flanges.
LIMITS OF USE

PS fluid :	32 bar / Steam	40 bar / Air
TS fluid :	250°C / Steam	20°C / Air

CONSTRUCTION GUIDELINES AND STANDARDS

Object	Norm	Object	Norm
Directive CE pressure 2014/68	Catégorie I, II, III	Material certificate	EN 10204
Sizing	AD Merkblatt 2000	Grade of carbon steels	EN 10216-2
Steel flange connections	EN 1092-1		

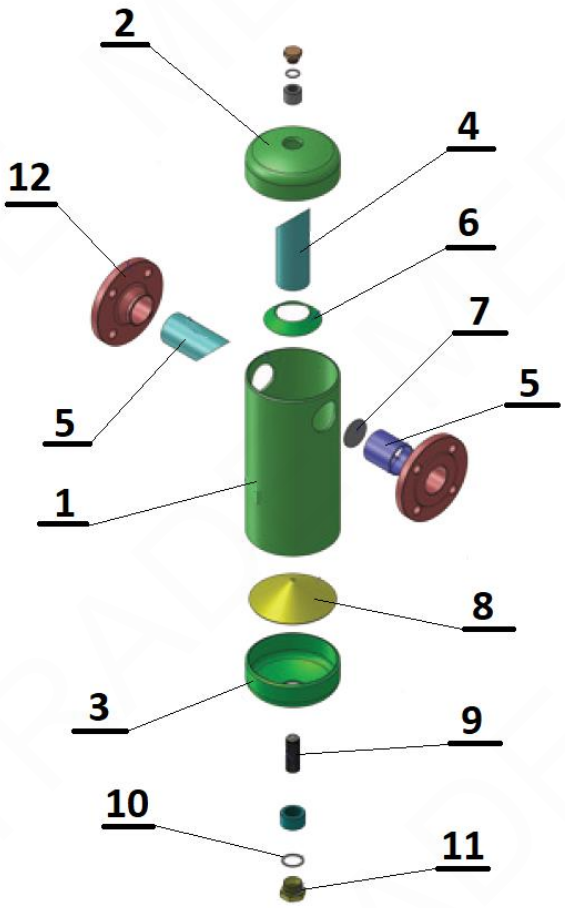
CE CLASSIFICATION ACCORDING TO DIRECTIVE 2014/68

DN	15	20	25	32	40	50	65	80	100
Category	I	I	I	II	II	II	II	III	III

Separator SPR 40

CONSTRUCTION

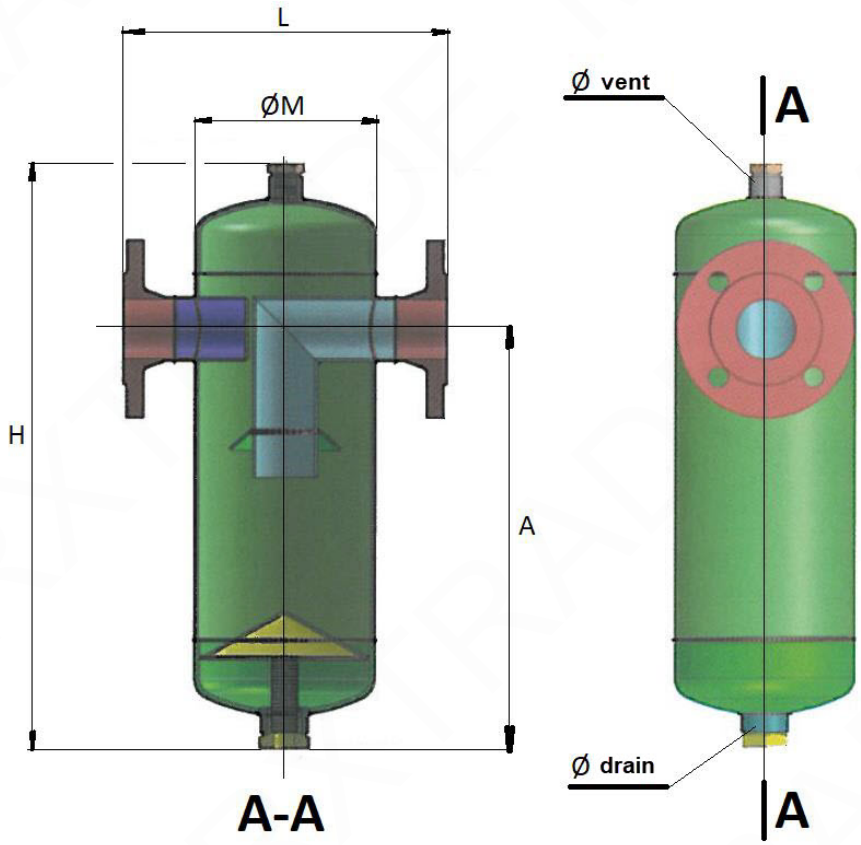
n°	Designation	SPR steel material
1	Body	Carbon steel
2	Cover	Carbon steel
3	Bottom	Carbon steel
4	Pipe	Carbon steel
5	Pipes input / output	Carbon steel
6	Particle trap	Carbon steel
7	Metal cover	Carbon steel
8	Seperation plate	Carbon steel
9	Filtre à crépine	AISI 304 stainless steel
10	Joint	Brass
11	Bouchon	Carbon steel C22.8
12	Brides PN40	Carbon steel



Separator SPR 40

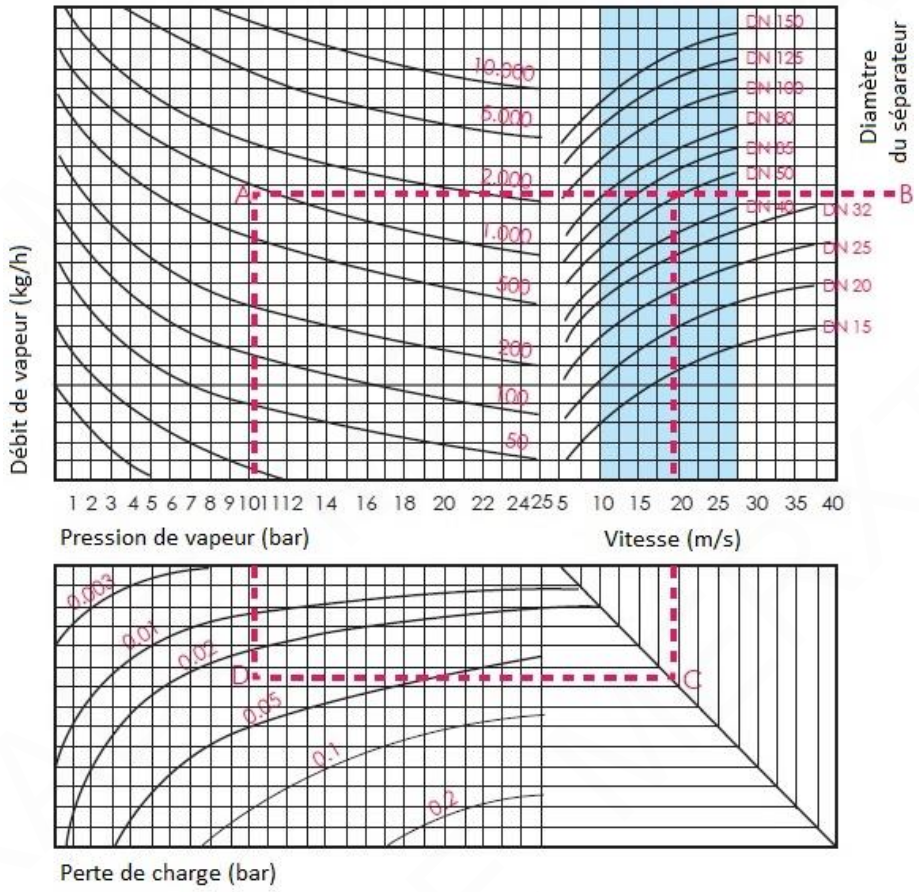
DIMENSIONS (mm) CONNECTIONS AND WEIGHT (kg)

DN	Volume (l)	A	H	L	Ø M	Ø drain	Ø vent	Weight (kg)
15	1,5	242	356	180	88.9	G 1/2''	G 1/2''	4.4
20	2,9	298	411	230	114.3	G 1''	G 1/2''	7.8
25	3,1	306	427	230	114.3	G 1''	G 1/2''	7.8
32	5,2	315	440	250	139.7	G 1''	G 1/2''	11.6
40	8.9	346	486	300	168.3	G 1''	G 1/2''	16.9
50	9.7	384	540	300	168.3	G 1''	G 1/2''	22
65	19.4	481	645	400	219.1	G 1"1/2	G 3/4''	31
80	34,3	520	724	450	273	G 1"1/2	G 3/4''	56
100	57.8	589	795	500	323.9	G 2"	G 1''	76



Separator SPR 40

VAPOR PRESSURE LOSS DEBIT AND DIAGRAM



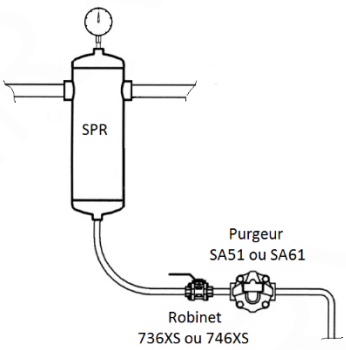
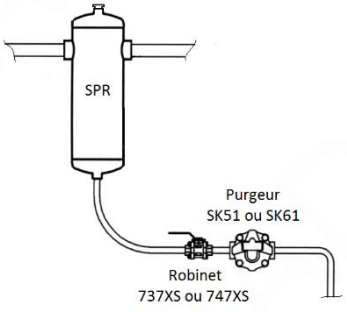
Start from the diagram at the top left, locating point A from the steam flow to the operating pressure. Deduce point B on the diagram at the top right of the diameter of the separator relative to the speed selected. Continue on the diagram below point C and find point D which indicates the pressure drop across the separator.

INSTALLATION

The low point must be equipped with a trap (steam or compressed air).

The high point can be equipped with various accessories (air eliminator, vacuum breaker, pressure gauge, ...)

It is necessary to provide a support adapted to the weight of the separator.

Pressurized air	Steam
	

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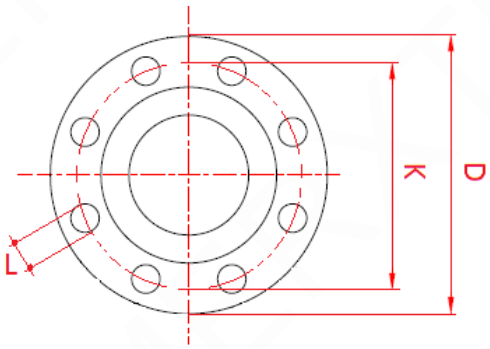
Use the following types of bolts:

ISO PN40 flange dimensions					
DN	**D**	**K**	**L**	**Qty**	**ø**
15	95	65	14	4	M12
20	105	75	14	4	M12
25	115	85	14	4	M12
32	140	100	19	4	M16
40	150	110	19	4	M16
50	165	125	19	4	M16
65	185	145	19	8	M16
80	200	160	19	8	M16
100	235	190	23	8	M20



Note:

The SPR 40 requires no maintenance.
Pressure tank subjected to periodic control according to the decree of November 20, 2017