

# DS-1 & DS-2 Cyclone Separator

## For Steam and Compressed Air

Condensate in steam and air lines reduces thermal efficiency, causes water hammers, corrodes equipment such as valves and pipes and creates other problems.

Drain Separators DS-1 (1/2" to 2" screwed or with screwed on flanges) and DS-2 (DN65 to DN100 flanged) separate water efficiently by using the centrifugal force of steam or air created by shaped path. The simple design of the separator, using a specific nozzle, minimizes the pressure loss, allowing clean, dry steam or air to be fed to equipment.

## Features

- A cyclone structure maximizes liquid separation efficiency.
- Pressure loss is extremely low.
- No moving parts means no breakdowns.

## Operating Principle

When steam or air flow enters the drain separator as shown in the figure at the left, centrifugal force is generated in the fluid because of the device's internal structural design. The fluid drains along the wall because of the difference in specific gravity with steam or air, eventually striking the baffle. The baffle guides the fluid to the drain outlet and to the trap, which drains it.

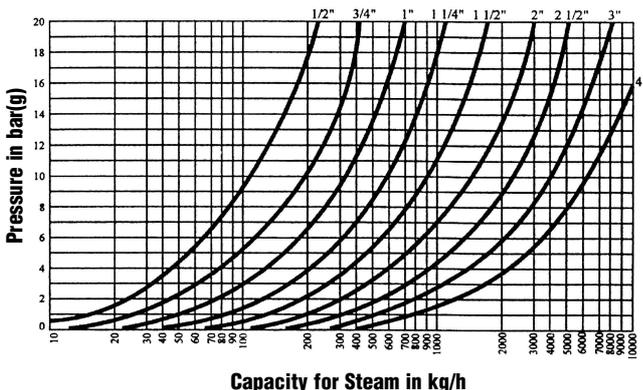
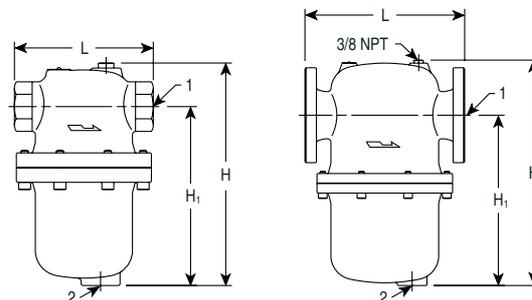
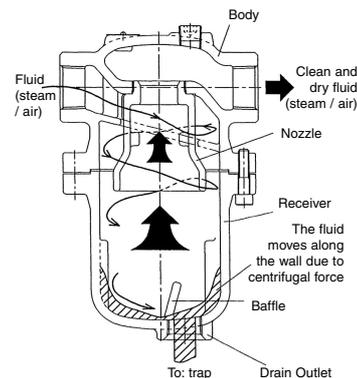


Table PTC-273-1. Dimensions and Weight

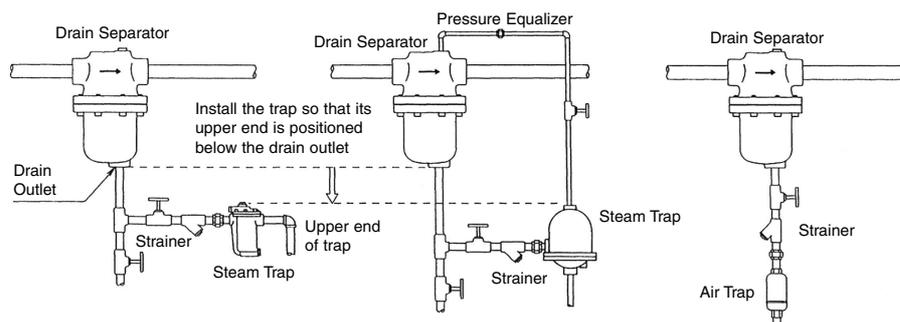
Type	Size (d)	L	H	H <sub>1</sub>	d <sub>o</sub>	Weight (kg)
DS-1	1/2"	150	243	193	3/4"	7,1
	3/4"	150	243	193	3/4"	7,1
	1"	150	243	193	3/4"	7,3
	1 1/4"	190	282	213	1"	12,5
	1 1/2"	190	282	213	1"	12,5
	2"	219	342	260	1"	20,5
DS-2	DN65	298	418	314	1"	35,0
	DN80	349	484	361	1 1/4"	45,0
	DN100	408	594	445	1 1/4"	65,0

Note: Shade indicates products that are CE Marked according to PED (97/23/EC). All other models comply with the Article 3.3 of the same directive.

## Piping Example

Table PTC-273-1. Specifications

Model	Nominal Size	Application Fluid	Maximum Pressure	Maximum Temperature	Materials			Connection	Body Hydraulic Test (Water)
					Body	Nozzle	Receiver		
DS-1	1/2" - 2"	Steam or Air	20 bar for Steam or Air	220°C	FCD 450 Nodular Iron	FC 200 Cast Iron	FCD 450 Nodular Iron	BSPT	40 bar
DS-2	DN65 - DN100							PN 25	



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.