

# spirax sarco®

## Stainless Steel Separator 1808

Moisture Separators are used to improve the quality of steam or compressed air either within the distribution system or on the supply inlet to equipment. Removal of moisture is by a series of baffles on which the suspended water droplets impinge and fall out by gravity to the drain, which must be piped to a trap.

<b>Model</b> ⇄	<b>1808</b>
<b>Sizes</b>	1/2" to 6"
<b>Connections</b>	ANSI 300
<b>Construction</b>	Fabricated 316L stainless steel
<b>Options</b>	ANSI 150 connections, Larger sizes

### TYPICAL APPLICATIONS

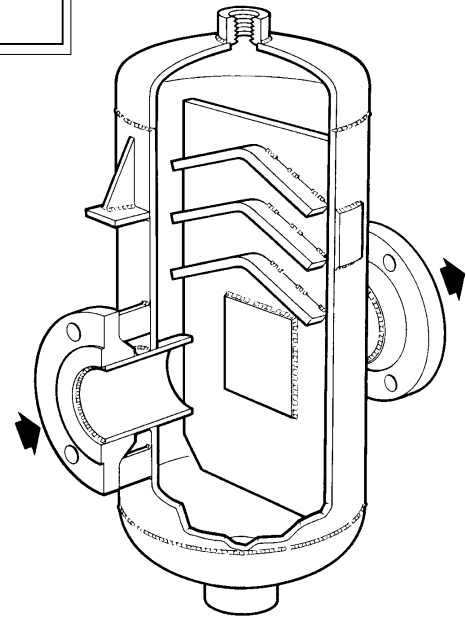
On steam mains, as a drip station ahead of steam pressure reducing or temperature control valves. On the steam inlet to process equipment which require dry saturated steam. On the compressed air supply to sensitive instruments and before filters.

### CONSTRUCTION MATERIALS

Part	Material
Body	Stainless Steel AISI 316L

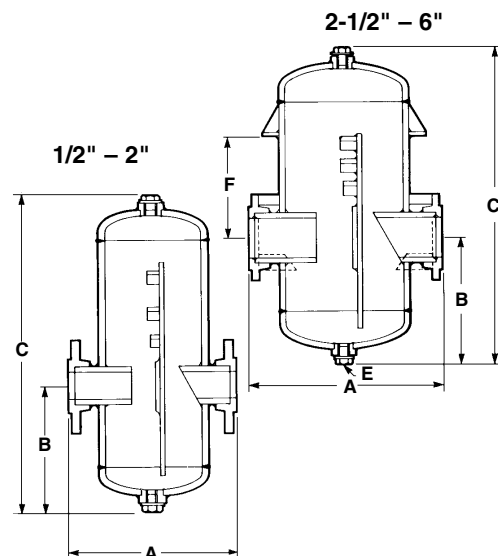
### PRESSURE SHELL DESIGN CONDITIONS

Temperature Size	Design Pressure		Design	
	psig	(barg)	°F	°C
1/2"	464	32	464	239
3/4" & 1"	435	30	455	235
1-1/4" – 2-1/2"	362	25	437	225
3" & 4"	290	20	417	213
6"	203	14	390	198



### DIMENSIONS (NOMINAL) IN INCHES AND MILLIMETERS

Size	A	B	C	E	F	Weight
1/2"	10.8 273	5.1 130	10.4 265	1/2"		9.9 lb 4.5 kg
3/4"	10.8 273	5.1 130	12.5 317	1/2"		11.0 lb 5 kg
1"	12.4 314	6.0 152	14.0 355	1/2"		15.4 lb 7 kg
1-1/4"	17.4 441	7.0 178	16.0 407	1/2"		24.2 lb 11 kg
1-1/2"	18.4 468	7.6 194	19.0 484	1"		33.0 lb 15 kg
2"	14.5 368	7.9 201	20.7 525	1"		55.1 lb 25 kg
2-1/2"	16.5 420	9.7 245	25.0 638	1"	7.1 181	90.3 lb 41 kg
3"	20.6 523	11.8 300	28.9 735	2"	8.0 204	114.6 lb 52 kg
4"	22.6 574	12.4 316	31.3 795	2"	7.1 180	160.9 lb 73 kg
6"	27.8 706	13.4 341	36.8 935	2"	10.8 273	297.6 lb 135 kg



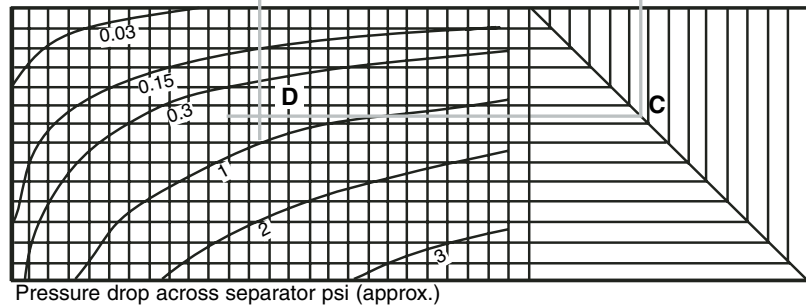
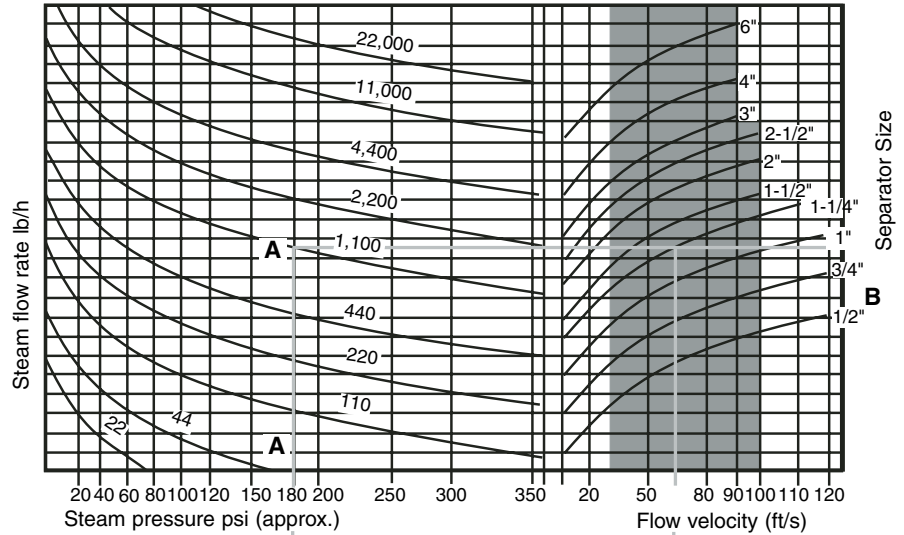
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.  
In the interests of development and improvement of the product, we reserve the right to change the specification.

# Stainless Steel Separator 1808

## 1808 STEAM SIZING CHART

### SIZING EXAMPLE FOR MODEL 1808

1. Taking a steam pressure of 180 psig and flow rate of 1100 lb/h draw line A-A.
  2. Draw horizontal line A-B.
  3. Any separator curve that is bisected by line A-B within the shaded area will operate at near 100% efficiency.
  4. Line velocity for any size can be determined by dropping a vertical line B-C (eg. 60 ft/s for 1-1/4" unit).
  5. Pressure drop is determined by plotting lines C-D and A-D. The point of intersection is the pressure drop across the separator, ie: 0.5 psi.
  6. Separators should be selected on the basis of the best compromise between line size, velocity and pressure drop for each application.
- The shaded area denotes recommended selection for better than 99% separation efficiency.

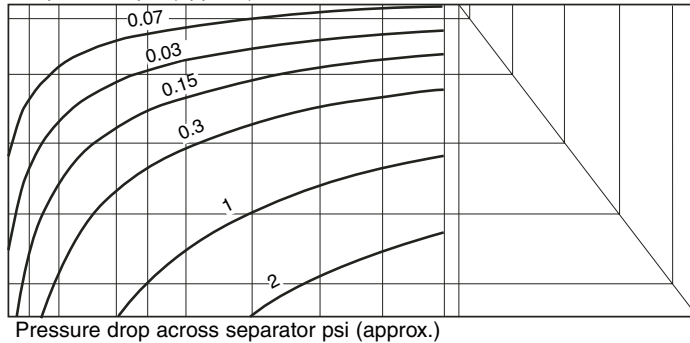
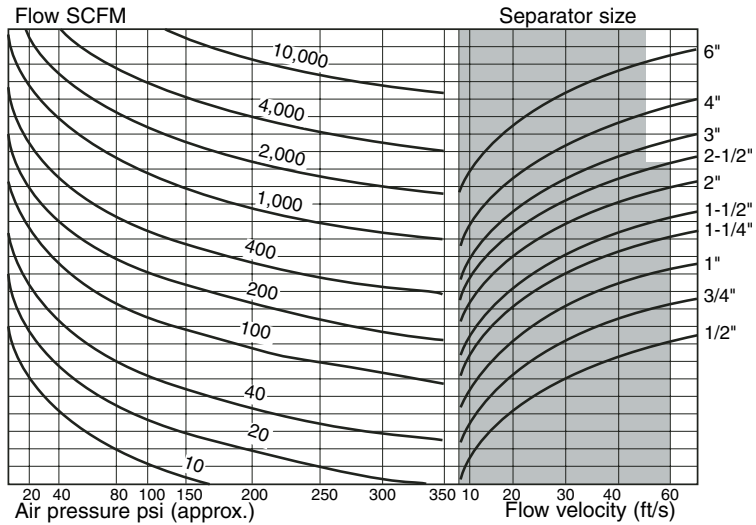


### 1808 SEPARATOR FLOW VELOCITY & PRESSURE DROP FOR COMPRESSED AIR

Note: Any Separator curve that is bisected within the shaded area will operate at near 100% efficiency.

### SAMPLE SPECIFICATION

Moisture Separator shall be of the high efficiency internal baffle type having a pressure drop that does not exceed an equivalent length of pipe. Body shall be stainless steel with ANSI 300 flanged connections. A screwed bottom drain shall be provided for the installation of a trap to discharge any accumulated liquid.



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