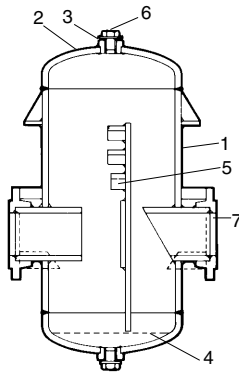


# spirax sarco®

## Steel Separator 8" to 18" S4A

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.

Model ↕	S4A		
<b>PMO</b>	150 psig	300 psig	600 psig
<b>Sizes</b>	8" to 18"		
<b>Connections</b>	ANSI 150	ANSI 300	ANSI 600
<b>Construction</b>	Fabricated steel body		
<b>ASME code stamped</b>	150 psig	300 psig	600 psig
<b>Options</b>	Gauge Glass Assembly		



### Construction Materials

No.	Part	Material
1	Body	Steel
2	End Caps	Steel
3	Coupling	Steel
4	Screen	Steel
5	Baffle	Steel
6	Plug	Steel
7	End Connections	Steel

Designed to Section VIII Division I of the ASME Boiler & Pressure Vessel Code.

### Pressure Shell Design Conditions

(8" to 18")

**MAWP**

Max. allowable working pressure

#### ANSI 150 flanged

150 psig/10.4 barg

-20°F to 650°F/-29°C to 344°C

#### ANSI 300 flanged

300 psig/20.7 barg

-20°F to 650°F/-29°C to 344°C

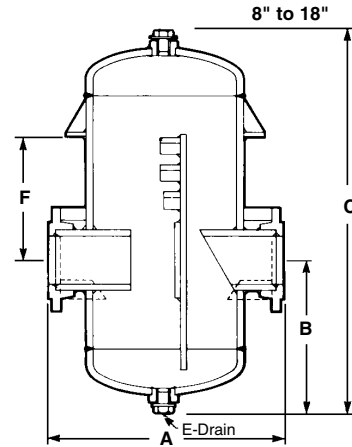
#### ANSI 600 Flanged

600 psig/41.4 barg

-20°F to 650°F/-29°C to 344°C

### Typical Applications

On steam mains, compressed air lines, steam turbines, heat transfer processes, meter protection, steam distribution systems, protection of equipment requiring dry saturated steam, removal of moisture from steam, air, or gas systems.



### Dimensions (nominal) in inches and millimeters

Size	Conn.	A	B	C	E	F	Weight
8" 200	ANSI 150	41.9 1064	15.3 389	48.1 1222	2"	15.0 381	445 lb 202 kg
	ANSI 300	41.9 1064	15.5 394	48.3 1227	2"	15.0 381	601 lb 273 kg
	ANSI 600	41.9 1064	15.7 399	48.8 1240	2"	15.0 381	972 lb 441 kg
10" 250	ANSI 150	48.7 1237	27.0 686	63.2 1605	2"	16.4 417	805 lb 365 kg
	ANSI 300	48.7 1237	27.1 688	63.5 1613	2"	16.4 417	969 lb 440 kg
	ANSI 600	48.7 1237	27.4 696	64.1 1628	2"	16.4 417	1740 lb 789 kg
12" 300	ANSI 150	49.5 1257	29.8 757	68.0 1727	2"	19.0 483	828 lb 376 kg
	ANSI 300	49.5 1257	29.9 759	68.3 1735	2"	19.0 483	1145 lb 519 kg
	ANSI 600	49.5 1257	30.3 770	68.9 1750	2"	19.0 483	2008 lb 911 kg
14" 350	ANSI 150	54.8 1392	30.8 782	72.1 1831	2"	20.1 511	1282 lb 582 kg
	ANSI 300	54.8 1392	30.8 782	72.2 1834	2"	20.1 511	1634 lb 741 kg
	ANSI 600	54.8 1392	31.1 790	72.8 1849	2"	20.1 511	2851 lb 1293 kg
16" 400	ANSI 150	59.0 1499	32.8 833	77.6 1971	2"	20.1 511	1509 lb 684 kg
	ANSI 300	59.0 1499	32.9 836	77.9 2007	2"	20.1 511	1953 lb 886 kg
	ANSI 600	59.0 1499	33.5 851	79.0 2007	2"	20.1 511	3578 lb 1623 kg
18" 450	ANSI 150	67.2 1707	35.2 894	83.9 2131	2"	20.1 511	2186 lb 992 kg
	ANSI 300	67.2 1707	35.2 894	84.0 2134	2"	20.1 511	2858 lb 1296 kg
	ANSI 600	67.2 1707	36.3 922	86.2 2189	2"	20.1 511	5155 lb 2338 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.

TI-7-0001-US 05.01

# Steel Separator 8" to 18" S4A

## Recommended Saturated Steam Capacities

(lb/h based on 90 ft/sec velocity)

Based on flows and velocity indicated, the pressure drop will be no more than equivalent length of pipe.

Operating Pressure psig	Separator Size					
	8"	10"	12"	14"	16"	18"
5	5,754	8,871	12,576	15,153	19,812	25,190
10	7,020	10,822	15,342	18,487	24,171	30,733
25	10,933	16,855	23,894	28,791	37,643	47,862
50	17,262	26,613	37,728	45,460	59,437	75,573
100	29,576	45,597	64,640	77,888	101,836	129,481
150	42,005	64,759	91,805	110,620	144,631	183,894
200	53,744	82,856	117,460	141,533	185,049	235,283
250	65,713	101,308	143,618	173,052	226,259	287,681
300	78,257	120,647	171,034	206,087	269,451	342,597
325	84,587	130,405	184,868	222,756	291,245	370,307
350	89,881	138,566	196,438	236,697	309,472	393,483
375	96,671	149,034	211,277	254,578	332,851	423,208
400	102,770	158,438	224,608	270,641	353,853	449,911
450	115,084	177,422	251,521	303,069	396,252	503,819
500	129,355	199,422	282,709	340,650	445,387	566,293
550	140,403	216,455	306,855	369,744	483,427	614,640
600	153,062	239,971	334,523	403,082	527,015	670,080

Capacities for air and other gases available upon request.

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## 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. Separator shall be of steel construction in accordance with Section VIII, Division I of the ASME Boiler and Pressure Vessel Code. ASME Code Stamped for maximum working pressures of 150, 300, or 600 psig. A screwed bottom drain connection shall be provided for the installation of a trap to discharge accumulated liquid. A Spirax Sarco Float Operated Drain Trap and "Y" Type Strainer shall be installed on the drain connection.