

Cast Iron

Model	WCIS1	WCIS3
Sizes	3/4" – 2"	2 1/2" – 4"
Connections	NPT	ANSI 150#/300#
Body Material	Cast Iron	Cast Iron
PMO Max. Operating Pressure	360 PSIG	360 PSIG
TMO Max. Operating Temperature	662°F	662°F
PMA Max. Allowable Pressure	232 PSIG @ 248°F 160 PSIG @ 572°F	232 PSIG @ 248°F 188 PSIG @ 428°F
TMA Max. Allowable Temperature	572°F @ 160 PSIG	428°F @ 188 PSIG



WCIS1
Cast Iron



WCIS3
Cast Iron

Typical Applications

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

How It Works

When a vapor entrained with moisture enters the steam separator, a series of baffles change its flow direction several times. During the process, the baffles in the housing collect impinged water droplets that are carried in the vapor. Gravity causes the accumulated water droplets and other foreign particles to fall to the drain and exit through an external trap. This allows clean, dry vapor to exit at the outlet of the separator.

Features

- Removes 99% of all particles ≥ 10 microns in size
- Optimal gravity discharge
- Long-lasting cast iron construction

Sample Specification

Moisture Separator shall be of the high efficiency impingement type having a pressure drop that does not exceed an equivalent length of pipe. Body shall be iron with threaded or flanged connections. A threaded bottom drain shall be provided for the installation of a trap to discharge any accumulated liquid.

Installation

Install in a horizontal pipeline with the drain directly below the line. Recommended trap is a continuous draining float operated type.

Maintenance

The trap at the separator drain should be serviced periodically according to the manufacturer's instructions. The separator itself requires no maintenance.

MATERIALS

WCIS1 Body & Cover	Cast Iron ASTM A 126 GR CLB
WCIS3 Body	
WCIS1 Gasket	Semi-rigid Graphite Laminate
WCIS3 Gasket	Reinforced Exfoliated Graphite
Bolts	Steel UNF, BS 1766 Gr 5
Bushing	Malleable Iron
Plug	Malleable Iron

Air Capacities in SCFM (standard cubic feet per minute)

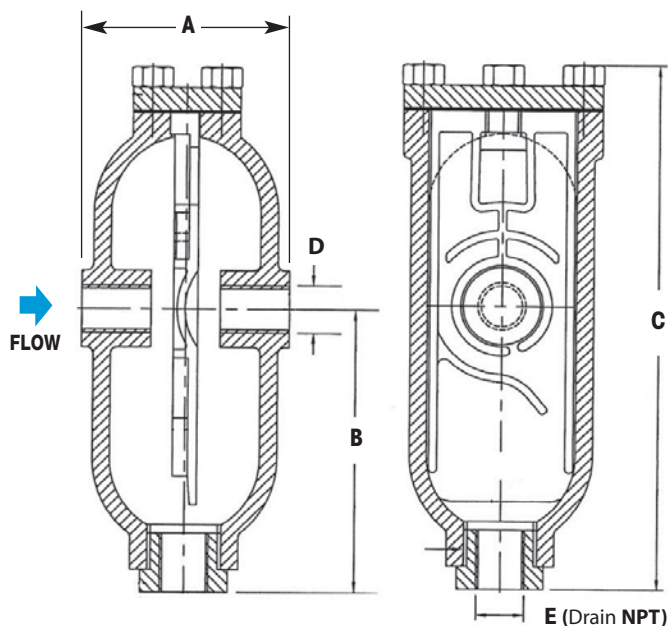
Size	Operating Pressure (PSIG)						
	20	40	60	80	100	145	200
3/4"	31	51	67	87	102	148	194
1"	51	82	108	138	169	245	322
1 1/2"	123	190	262	334	406	587	
2"	206	437	437	556	674	968	
2 1/2"	288	623	623	793	957	1380	
3"	370	803	803	1019	1236	1776	
4"	643	1385	1385	1756	2132	3059	

Saturated Steam Capacities in lbs/hr

Size	Operating Pressure (PSIG)						
	5	10	25	50	100	145	200
3/4"	68	82	128	203	349	496	635
1"	110	133	208	330	567	804	1030
1 1/2"	260	317	494	783	1347	1845	
2"	429	523	814	1292	3220	3041	
2 1/2"	612	746	1162	1844	3168	4340	
3"	946	1153	1795	2848	4893	6702	
4"	1630	1985	3092	4906	8427	11542	

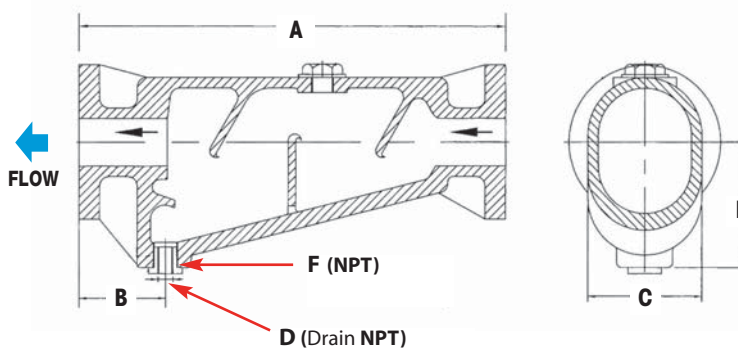
Cast Iron

WCIS1 (Cast Iron)



WCIS1 DIMENSIONS (nominal) - inches/mm						
Size	A	B	C	D	E	Weight
3/4"	4.75	6.69	14	3/4"	3/4"	24 lb
1"	4.75	6.69	14	1"	3/4"	24 lb
1 1/2"	9.0	9.06	18.35	1 1/2"	1"	80 lb
2"	9.96	9.65	20.55	2"	1"	80 lb

WCIS3 (Cast Iron)



WCIS3 DIMENSIONS – Flanged connections (in./mm)							
Size	A	B	C	D	E	F	Weight
2 1/2"	15.94	4.13	5.71	3/4"	6.89	1 1/2"	67 lb
3"	18.90	4.53	5.91	1"	6.50	1 1/2"	87 lbs
4"	27.17	4.92	7.87	1"	8.27	1 1/2"	148 lbs