



TI-C974-01

Issue 07

JC Series Condensate Cooler and Flash Steam Condenser

Description

The Spirax Sarco JC Series Condensate Cooler and Flash Condenser is designed to collect condensate from pressurized returns or humidifiers and blend it with cold water in order to safely discharge it to the drain, at a temperature that complies with local regulations. The cooler is sized to condense flash steam and cool the discharge to a maximum temperature of 140°F.

Condensate is piped into the tank through one of three connections. Separate pressurized and non-pressurized condensate returns into individual connections.

A self-actuated flow control system regulates the quantity of cooling water needed in the tank. It takes the input reading from a temperature sensor installed on the outlet port. Cold water is sprayed through the spiral discharge nozzle into the tank in order to eliminate flash steam and reduce the condensate temperature to the desired discharge set point.

Available types

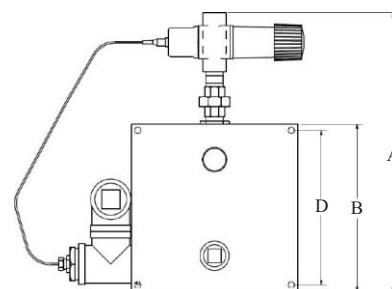
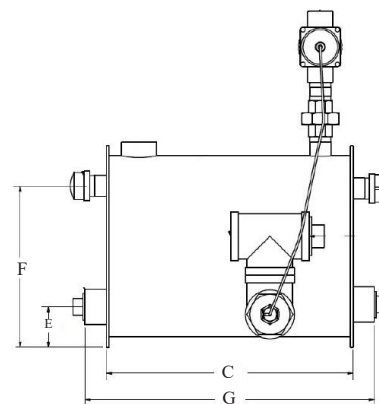
JC200C	- 5 USGPM of condensate @ 210 °F
Cold water flow of 20 USGPM @ 60 psig - Maximum 50 °F	
JC200FCC †	- 5 USGPM of condensate @ 250 °F
Cold water flow of 20 USGPM @ 60 psig - Maximum 50 °F	
JC210 - FCC316R - 10 †	- 10 USGPM of condensate @ 300 °F
Cold water flow of 26 USGPM @ 60 psig - Maximum 50 °F	
JC320 - FCC316R - 20 †	- 20 USGPM of condensate @ 300 °F
Cold water flow of 50 USGPM @ 60 psig - Maximum 50 °F	
JC440 - FCC316R - 40 †	- 40 USGPM of condensate @ 300 °F
Cold water flow of 100 USGPM @ 60 psig - Maximum 50 °F	

Dimensions (approximate) in inches

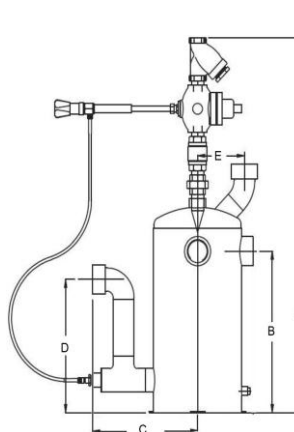
Size	A	B	C	D	E	F	G
JC200C	16.7	10.0	12.5	9.3	2.0	10.0	14.4
JC200FCC	39.4	11.5	12.5	9.0	4.5	23.4	6.5
JC210 -FCC316R-10	40.7	15.5	12.5	12.0	4.5	26.0	6.5
JC320 -FCC316R-20	51.6	18.5	15.7	12.0	6.5	32.7	7.5
JC440 -FCC316R-40	36.0	20.2	20.0	14.5	5.0	40.0	12.0

Weights

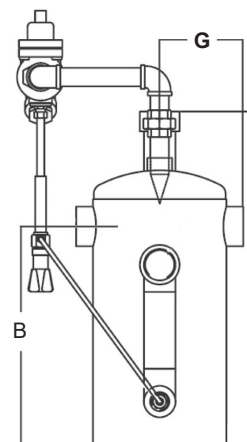
Type	Dry Weight	Wet Weight
JC200	18 lb	50 lb
JC200FCC	60 lb	110 lb
JC210	65 lb	120 lb
JC320	140 lb	280 lb
JC440	293 lb	550 lb



***Water inlet arrangement for models JC200C**



***Standard water inlet arrangement for models JC200FCC, JC210 and JC320**

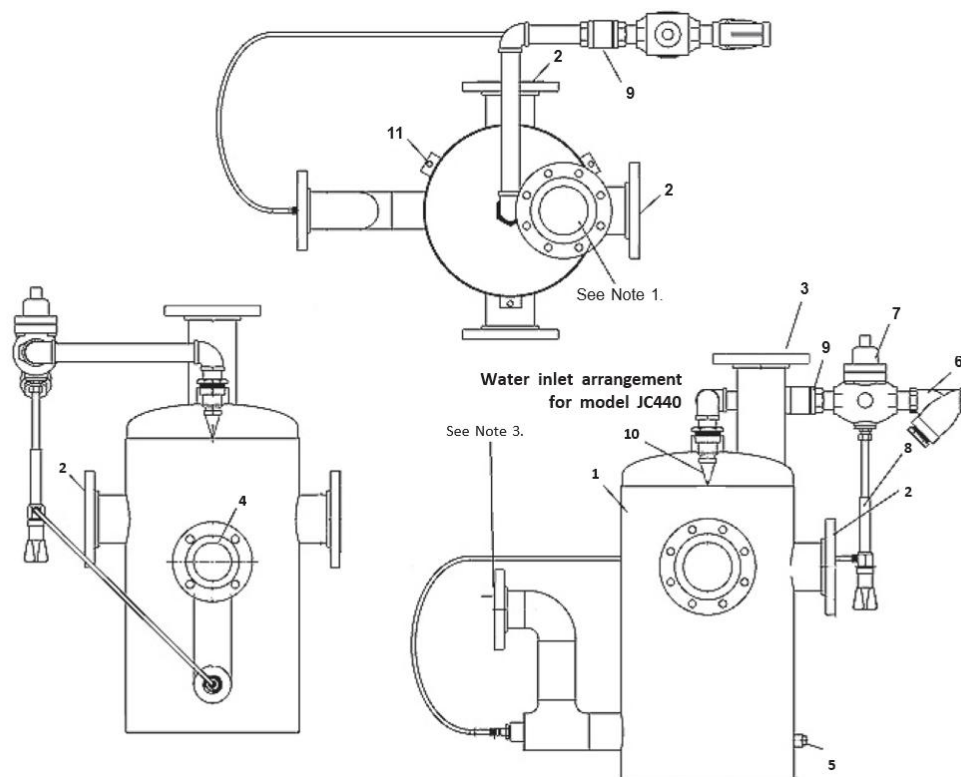


***Alternate water inlet arrangement for models JC200FCC, JC210 and JC320**

Components

No.	Component	JC200C	JC200F CC	JC210	JC320	JC440
1	Condensate cooler body	304 SS	304 SS	316L SS	316L SS	316L SS
2	Condensate inlet	1" NPT	2" NPT	2" NPT	2 1/2" NPT	4" ANSI 150-RF
3	Vent connection	1" NPT	2" NPT	2" NPT	2 1/2" NPT	4" ANSI 150-RF
4	Condensate outlet	1 1/2" NPT	2" NPT	2" NPT	2 1/2" NPT	3" ANSI 150-RF
5	Drain connection (plugged)	1" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
6	Strainer- Model BT-Bronze B62	3/4" NPT	3/4" NPT	3/4" NPT	1 1/4" NPT	1 1/4" NPT
7	Control valve - Bronze	3/4" SBRA	3/4" SBRA	3/4" SBRA	1 1/4" KY51	1 1/4" KY51
8	Sensors	SA-122-230F-2M	SA-122-230F-2M	SA-122-230F-2M	SA-122-230F-2M	SA-122-230F-2M
9	Check valve - SS CF3M	3/4" DCV41	3/4" DCV41	3/4" DCV41	1 1/4" DCV41	1 1/4" DCV41
10	Spray nozzle - SS316	Spiral nozzle	Spiral nozzle	Spiral nozzle	Spiral nozzle	Spiral nozzle
11	Lag holes	3/8" ø	3/8" ø	3/8" ø	3/8" ø	3/8" ø

- Notes**
1. Size vent to suit site requirements
 2. Size outlet piping to suit site requirements.
 3. All connecting pipe work **must** be independently supported.



Certification

† ASME U-Stamp certification or Canadian CRN registration are available upon request.

Design Conditions

Model	Design pressure
JC200C	0 psig
JC200FCC	14.9 psig
JC210 - FCC316R – 10	100 psig
JC320 - FCC316R – 20	100 psig
JC440 - FCC316R – 40	100 psig