

# CONDAIR OPTISORP

Rapid evaporation steam distribution manifold





Humidification and Evaporative Cooling

## Patented internal nozzles provide condensate-free steam.

Tiny inner nozzles draw the steam from the middle of the distribution pipe where it is at its hottest and free from condensate. This guarantees that only dry steam is introduced to the duct without drips.



The nozzles are made of stainless steel and are reliable and durable, with no fear of leaks.

#### Flexible and accurate

OptiSorp manifolds are individually designed and adapted to suit the duct's dimensions. They are prefabricated and come ready to be connected on site. This means the distribution system can be installed quickly and with minimum effort at installation stage.

### Condair OptiSorp Rapid evaporation steam distribution manifold

#### Uniform humidification profile across the air stream through optimal distribution.

The design of the distribution manifold with its many outlets allows precise steam introduction across the entire duct.



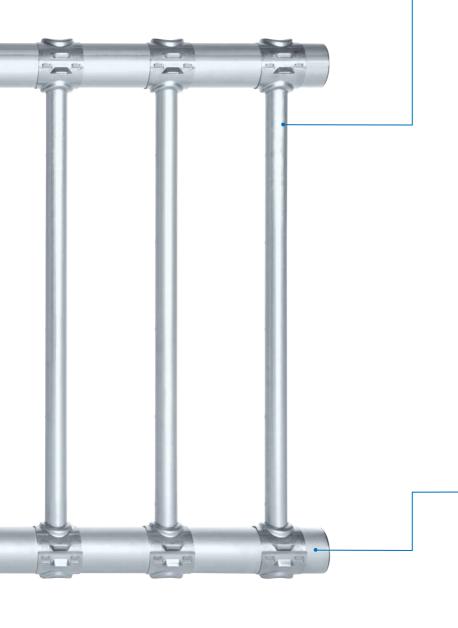
The hot dry steam is absorbed quickly and uniformly by the air stream.

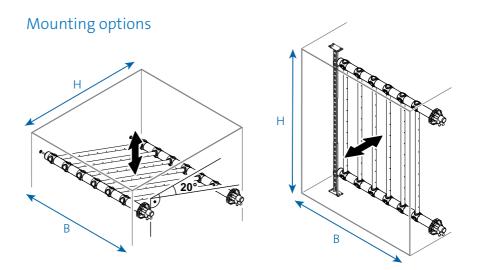
## The steam distribution system is made of robust stainless steel.

This provides long-lasting performance and ensures the integrity of all pipe connections for many years.



Steam should never come into contact with the components in the air handling unit. This would result in wetting, corrosion and hygiene risks. With the Condair OptiSorp steam distribution manifold the evaporation distance is greatly reduced compared with other conventional distribution systems. It enables the injection of steam even in difficult installation situations and guarantees optimal distribution and moisture absorption.





### Duty table

OptiSorp	No. of steam connections	Steam output	Duct dimensions		
		in kg/h	Width in mm	Height in mm	
System 1	1	max. 45	4502700	4501650	
System 2	2	max. 90	4502700	4502200	
System 3	3	max. 135	4502700	8003200	
System 4	4	max. 180	4502700	8003200	

### Evaporation distance (m)

Inlet humidity	Outlet humidity						
	40	50	60	70	80	90	
5	0.22	0.28	0.36	0.48	0.66	1.08	
10	0.20	0.26	0.34	0.45	0.64	1.04	
20	0.16	0.22	0.30	0.41	0.58	0.96	
30	0.10	0.17	0.25	0.36	0.52	0.88	
40		0.11	0.20	0.30	0.45	0.79	
50			0.13	0.24	0.38	0.69	
60				0.16	0.30	0.58	
70					0.20	0.45	

Estimated evaporation distances are for guidance only. For individual applications precise values can be calculated. Please contact us for more details.

