



Twin-fluid nozzles with internal mixing

Series 170 / 180



Efficient atomization by mixing liquid and gas.

- Internal mixing principle (Mixing chamber inside the nozzle combines a gas and a liquid to form an intensive dual-phase mixture)
- Extremely fine atomization with good regulating performance
- Large free cross sections
- Lower air consumption than with nozzles that mix externally
- Maintenance-free operation

Applications:

Gas cooling, air humidification, flue gas desulphurisation, spray drying, absorption

Liquid pressure:

14.5 - 72.5 psi

Air pressure:

14.5 - 72.5 psi

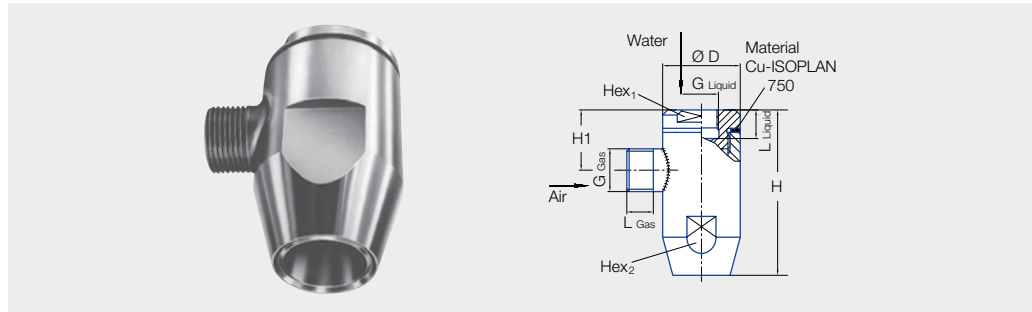
Regulating range up to max.:

1 : 30

Spray angle:

approx. 20°

The nozzle's large free cross sections allow maintenance-free operation even when atomizing viscous and abrasive media with a high solid content.



Type	Dimensions (in.)										Weight (lbs.)
	H	H ₁	D	Hex ₁	Hex ₂	G _{Liquid} NPT	G _{Gas} NPT	L _{Liquid}	L _{Gas}		
180.641	1.9	1.1	.98	22	22	1/8	1/8	.38	.40	0.31	
180.721	3.19	1.16	1.50	1-1/4	1-1/4	3/8	1/2	.55	.51	1.19	
170.801	3.19	1.16	1.50	1-1/4	1-1/4	3/8	1/2	.55	.51	1.19	
170.881	3.19	1.16	1.50	1-1/4	1-1/4	3/8	1/2	.55	.51	1.19	
170.961	4.41	1.65	2.05	1-13/16	1-13/16	1/2	3/4	.71	.59	2.81	

Ordering no.			Orifice diameter (in.)		Air pressure (psi)											
Type	Mat. no.	Connection			14.5			29			43.5					
					Water psi	Water GPM	Air ft ³ /hr	Water psi	Water GPM	Air ft ³ /hr	Water psi	Water GPM	Air ft ³ /hr			
180.641	○	BB - -	.12	.17	11.6	.11	706	24.7	.16	1130	36.3	.21	1519	45.0	.24	1942
					13.1	.26	636	27.6	.40	989	46.4	.79	1271	66.7	1.06	1519
					18.9	.66	494	39.2	.92	812	58.0	1.32	1130	84.1	1.85	1307
180.721	○	- BF -	.15	.20	8.7	.13	1519	18.9	.18	2331	31.9	.24	3037	43.5	.29	3849
					11.6	.53	1307	24.7	.79	1942	39.2	1.06	2613	53.7	1.59	3037
					13.1	.92	1130	27.6	1.45	1730	45.0	1.98	2260	60.9	2.38	2790
170.801	○	- BF -	.08	.22	10.2	.26	1413	21.8	.26	2048	31.9	.32	2825	46.4	.32	3708
					13.1	.79	1236	26.1	1.32	1836	37.7	1.85	2543	52.2	2.64	3214
					14.5	1.32	1130	29.0	2.64	1695	43.5	3.70	2225	58.0	5.28	2931
170.881	○	- BF -	.11	.30	8.7	.26	2119	21.8	.32	3355	31.9	.40	4591	45.0	.48	6039
					11.6	1.32	1942	24.7	1.85	3178	36.3	2.64	4167	50.8	3.96	5438
					13.1	2.11	1766	27.6	3.43	2825	43.5	5.02	3708	59.5	7.40	5050
170.961	○	- - BH	.13	.37	8.7	.26	3320	20.3	.32	5474	31.9	.40	7416	43.5	.48	9712
					11.6	1.32	3002	24.7	2.64	4591	37.7	3.96	6321	50.8	5.28	7769
					14.5	3.17	2543	27.6	5.02	4061	43.5	6.87	5368	59.5	10.04	6992

Example Type + Material no. + Conn. = Ordering no.
for ordering: 170.801 + 1Y + BF = 170.801.1Y.BF