



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:

1.0 - 5.0 bar

Air pressure:

1.0 - 5.0 bar

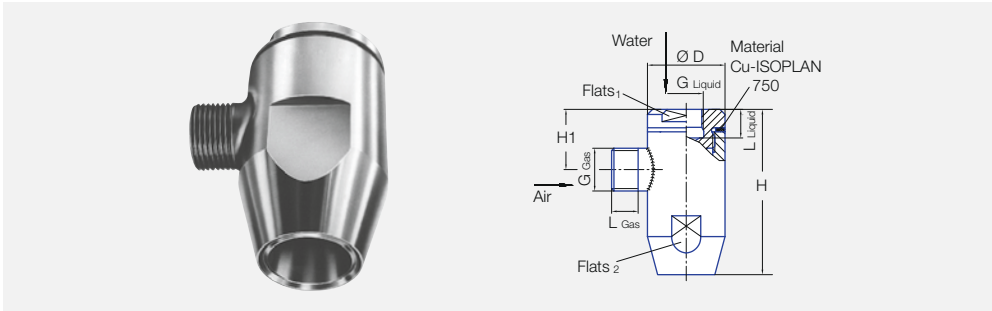
Regulating range up to max.:

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 [mm]									Weight 316 SS
	H	H ₁	D	Flats ₁	Flats ₂	G _{Liquid} BSPP	G _{Gas} BSPP	L _{Liquid}	L _{Gas}	
180.641	48	28	25	22	22	G 1/8	G 3/8	7,5	10	140 g
180.721	81	29.5	38	32	32	G 3/8	G 1/2	14	13	540 g
170.801	81	29.5	38	32	32	G 3/8	G 1/2	14	13	540 g
170.881	81	29.5	38	32	32	G 3/8	G 1/2	14	13	540 g
170.961	112	42	52	46	46	G 1/2	G 3/4	18	15	1275 g

Ordering no.	Mat. no.	E Ø [mm]	E Ø [mm]	Air pressure p [bar]											
				1.0			2.0			3.0			4.0		
				p Water [bar]	V Water [l/min]	V _n Air [m³/h]	p Water [bar]	V Water [l/min]	V _n Air [m³/h]	p Water [bar]	V Water [l/min]	V _n Air [m³/h]	p Water [bar]	V Water [l/min]	V _n Air [m³/h]
180.641	316L SS	Air	Water	0.8	0.4	20.0	1.7	0.6	32.0	2.5	0.8	43.0	3.1	0.9	55.0
				0.9	1.0	18.0	1.9	1.5	28.0	3.2	3.0	36.0	4.6	4.0	43.0
				1.3	2.5	14.0	2.7	3.5	23.0	4.0	5.0	32.0	5.8	7.0	37.0
180.721	316L SS	Air	Water	0.6	0.5	43.0	1.3	0.7	66.0	2.2	0.9	86.0	3.0	1.1	109.0
				0.8	2.0	37.0	1.7	3.0	55.0	2.7	4.0	74.0	3.7	6.0	86.0
				0.9	3.5	32.0	1.9	5.5	49.0	3.1	7.5	64.0	4.2	9.0	79.0
170.801	316L SS	Air	Water	0.7	1.0	40.0	1.5	1.0	58.0	2.2	1.2	80.0	3.2	1.2	105.0
				0.9	3.0	35.0	1.8	5.0	52.0	2.6	7.0	72.0	3.6	10.0	91.0
				1.0	5.0	32.0	2.0	10.0	48.0	3.0	14.0	63.0	4.0	20.0	83.0
170.881	316L SS	Air	Water	0.6	1.0	60.0	1.5	1.2	95.0	2.2	1.5	130.0	3.1	1.8	171.0
				0.8	5.0	55.0	1.7	7.0	90.0	2.5	10.0	118.0	3.5	15.0	154.0
				0.9	8.0	50.0	1.9	13.0	80.0	3.0	19.0	105.0	4.1	28.0	143.0
170.961	316L SS	Air	Water	0.6	1.0	94.0	1.4	1.2	155.0	2.2	1.5	210.0	3.0	1.8	275.0
				0.8	5.0	85.0	1.7	10.0	130.0	2.6	15.0	179.0	3.5	20.0	220.0
				1.0	12.0	72.0	1.9	19.0	115.0	3.0	26.0	152.0	4.1	38.0	198.0

E = narrowest free cross section

Example	Type	+ Material no.	= Ordering no.
for ordering:	180.641	+ 1Y	= 180.641.1Y

