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

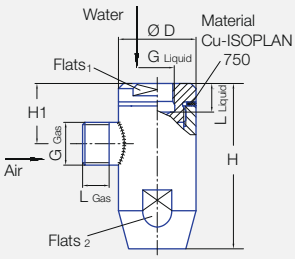
Liquid pressure:
1.0 - 5.0 bar

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.		E Ø [mm]	E Ø [mm]	Air pressure **p** [bar]											
				1.0			**2.0**			**3.0**			**4.0**		
Type	Mat. no. **1Y** 316L SS	Air	Water	**p** Water [bar]	**V** Water [l/min]	$\dot{V}_n$ Air [m³/h]	**p** Water [bar]	**V** Water [l/min]	$\dot{V}_n$ Air [m³/h]	**p** Water [bar]	**V** Water [l/min]	$\dot{V}_n$ Air [m³/h]	**p** Water [bar]	**V** Water [l/min]	$\dot{V}_n$ Air [m³/h]
180.641	○	3.0	4.2	0.8 0.9 1.3	0.4 1.0 2.5	20.0 18.0 14.0	1.7 1.9 2.7	0.6 1.5 3.5	32.0 28.0 23.0	2.5 3.2 4.0	0.8 3.0 5.0	43.0 36.0 32.0	3.1 4.6 5.8	0.9 4.0 7.0	55.0 43.0 37.0
180.721	○	3.7	5.0	0.6 0.8 0.9	0.5 2.0 3.5	43.0 37.0 32.0	1.3 1.7 1.9	0.7 3.0 5.5	66.0 55.0 49.0	2.2 2.7 3.1	0.9 4.0 7.5	86.0 74.0 64.0	3.0 3.7 4.2	1.1 6.0 9.0	109.0 86.0 79.0
170.801	○	2.0	5.5	0.7 0.9 1.0	1.0 3.0 5.0	40.0 35.0 32.0	1.5 1.8 2.0	1.0 5.0 10.0	58.0 52.0 48.0	2.2 2.6 3.0	1.2 7.0 14.0	80.0 72.0 63.0	3.2 3.6 4.0	1.2 10.0 20.0	105.0 91.0 83.0
170.881	○	2.8	7.6	0.6 0.8 0.9	1.0 5.0 8.0	60.0 55.0 50.0	1.5 1.7 1.9	1.2 7.0 13.0	95,.0 90.0 80.0	2.2 2.5 3.0	1.5 10.0 19.0	130.0 118.0 105.0	3.1 3.5 4.1	1.8 15,0 28.0	171.0 154.0 143.0
170.961	○	3.2	9.5	0.6 0.8 1.0	1.0 5.0 12.0	94.0 85.0 72.0	1.4 1.7 1.9	1.2 10.0 19.0	155.0 130.0 115.0	2.2 2.6 3.0	1.5 15.0 26.0	210.0 179.0 152.0	3.0 3.5 4.1	1.8 20.0 38.0	275.0 220.0 198.0

E = narrowest free cross section

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