

# ➤ Pneumatic atomizing nozzles, flat fan, pressure principle, external mixing Series 166.6

### Features:

- Version with magnetic valve
- Fine flat fan atomization
- Liquid pressure principle
- External mixing

### Applications:

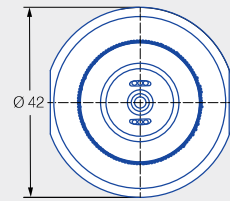
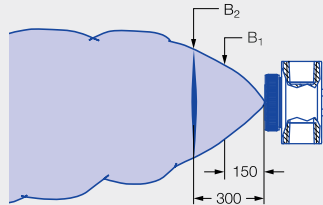
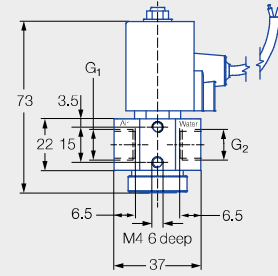
- Belt humidification
- Cooling
- Humidification of goods
- Atomization of viscous liquids

### Technical data:

- Operating pressure: 0–6 bar
- Voltage: 24 V DC
- Power: 8 W
- Switching frequency: Approx. 500/min
- Protective system: IP 67
- Ambient temperature: +10 °C /+50 °C
- Cable length: 1,000 mm
- Material of gasket: EPDM



Series 166.6



Air connection G <sub>1</sub>	Water connection G <sub>2</sub>	Weight [g]
1/4 BSPP	1/4 BSPP	410

Spray angle	Ordering no.		Narrowest free cross section Ø [mm]	Liquid pressure p [bar]												Spray dimensions							
	Type	Mat. no.		0.07				0.15				0.30				0.35				p air [bar]	p water [bar]	B <sub>1</sub> [mm]	B <sub>2</sub> [mm]
		16		p air [bar]	v̇ water [l/h]	v̇ air [m³/h]	p air [bar]	v̇ water [l/h]	v̇ air [m³/h]	p air [bar]	v̇ water [l/h]	v̇ air [m³/h]	p air [bar]	v̇ water [l/h]	v̇ air [m³/h]								
45°	166.616.xx.A2	●	0.40	0.80	1.68	2.50	0.80	2.43	2.40	0.80	3.42	2.50	1.00	3.69	2.80	1.40	0.07	80	115				
				1.20	1.80	3.10	1.00	2.46	2.90	1.20	3.48	3.10	1.40	3.81	3.40	2.20	0.15	90	130				
				1.60	1.92	3.70	1.40	2.58	3.60	1.60	3.51	3.70	1.80	3.87	4.00	3.20	0.20	90	135				
				2.00	2.10	4.30	1.80	2.61	4.20	2.00	3.63	4.30	2.20	3.84	4.60	4.00	0.30	95	145				
				2.40	2.07	4.90	2.20	2.76	4.80	2.40	3.63	4.90	2.60	3.90	5.20	5.00	0.35	100	145				
				2.80	2.19	5.50	2.60	2.73	5.40	2.80	3.63	5.50	3.00	3.93	5.80	-	-	-	-	-			
				3.20	2.19	6.10	3.00	2.73	6.00	3.20	3.63	6.10	3.40	3.90	6.40	-	-	-	-	-			
				3.60	2.22	6.70	3.60	2.76	6.70	3.60	3.66	6.70	3.80	3.93	7.00	-	-	-	-	-			
				4.00	2.22	7.30	4.00	2.76	7.30	4.00	3.69	7.30	4.20	3.96	7.60	-	-	-	-	-			
				4.40	2.22	7.90	4.40	2.76	7.90	4.40	3.69	7.90	4.60	3.93	8.20	-	-	-	-	-			
				4.80	2.22	8.50	4.80	2.76	8.50	4.80	3.69	8.40	5.00	3.93	8.80	-	-	-	-	-			
				5.20	2.22	9.10	5.20	2.76	9.10	5.20	3.66	9.10	5.40	3.93	9.40	-	-	-	-	-			
				5.60	2.22	9.60	5.60	2.76	9.70	5.60	3.66	9.60	5.80	3.87	10.00	-	-	-	-	-			
				6.00	2.22	10.20	6.00	2.73	10.20	6.00	3.66	10.20	6.00	3.87	10.20	-	-	-	-	-			
	166.654.xx.A2	●	0.70	0.80	5.25	2.40	0.80	7.29	2.40	1.20	10.11	3.10	1.60	11.07	3.70	1.40	0.07	95	135				
				1.20	5.64	3.10	1.20	7.44	3.10	1.60	10.23	3.70	2.00	11.22	4.30	2.20	0.15	100	150				
				1.60	5.79	3.70	1.60	7.62	3.70	2.00	10.38	4.30	2.40	11.28	4.90	3.20	0.20	105	160				
				2.00	6.18	4.30	2.00	7.86	4.30	2.40	10.47	4.90	2.80	11.31	5.50	4.00	0.30	105	160				
				2.40	6.24	4.90	2.40	7.92	4.90	2.80	10.59	5.50	3.20	11.43	6.10	5.00	0.35	105	160				
				2.80	6.27	5.50	2.80	8.04	5.50	3.20	10.59	6.10	3.60	11.46	6.60	-	-	-	-				
				3.20	6.39	6.10	3.20	8.13	6.10	3.60	10.62	6.70	4.00	11.43	7.20	-	-	-	-				
				3.60	6.42	6.60	3.60	8.13	6.70	4.00	10.62	7.20	4.40	11.37	7.80	-	-	-	-				
				4.00	6.45	7.20	4.00	8.13	7.20	4.40	10.62	7.80	4.80	11.37	8.40	-	-	-	-				
				4.40	6.42	7.80	4.40	8.07	7.80	4.80	10.59	8.40	5.20	11.34	9.00	-	-	-	-				
				4.80	6.30	8.40	4.80	8.04	8.40	5.20	10.56	9.00	5.60	11.22	9.60	-	-	-	-				
				5.20	6.24	9.00	5.20	7.86	9.00	5.60	10.50	9.60	6.00	11.16	10.10	-	-	-	-				
				5.60	6.09	9.60	5.60	7.83	9.60	6.00	10.35	10.20	-	-	-	-	-	-	-	-			
				6.00	5.85	10.20	6.00	7.59	10.20	-	-	-	-	-	-	-	-	-	-	-			





Spray angle	Ordering no.		Narrowest free cross section Ø [mm]	Liquid pressure p [bar]												Spray dimensions			
	Type	Mat. no.		0.07				0.15				0.30				0.35			
		16		p air [bar]	V̇ water [l/h]	V̇ air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ air [m³/h]	p air [bar]	p water [bar]	B₁ [mm]	B₂ [mm]
		Stainless steel 303																	
60°	166.626.xx.A2	●	0.40	0.80	1.83	2.80	0.80	2.49	2.80	0.80	3.48	2.80	0.80	3.78	2.80	1.60	0.07	85	135
				1.20	1.98	3.60	1.20	2.58	3.50	1.20	3.60	3.50	1.20	3.87	3.60	2.40	0.15	90	140
				1.60	2.10	4.30	1.60	2.70	4.20	1.60	3.66	4.30	1.60	3.90	4.20	3.20	0.20	90	140
				2.00	2.16	4.90	2.00	2.82	4.90	2.00	3.69	4.90	2.00	3.96	4.90	4.00	0.30	100	145
				2.40	2.25	5.60	2.40	2.85	5.60	2.40	3.69	5.60	2.40	3.96	5.60	5.20	0.35	105	150
				2.80	2.34	6.30	2.80	2.88	6.30	2.80	3.72	6.30	2.80	4.02	6.30	-	-	-	-
				3.20	2.31	7.00	3.20	2.88	7.00	3.20	3.78	7.00	3.20	3.99	7.00	-	-	-	-
				3.60	2.34	7.60	3.60	2.88	7.70	3.60	3.78	7.60	3.60	4.02	7.70	-	-	-	-
				4.00	2.40	8.40	4.00	2.94	8.40	4.00	3.81	8.30	4.00	4.05	8.30	-	-	-	-
				4.40	2.40	9.00	4.40	2.91	9.00	4.40	3.81	9.00	4.40	4.02	9.00	-	-	-	-
				4.80	2.40	9.70	4.80	2.97	9.70	4.80	3.81	9.70	4.80	4.08	9.70	-	-	-	-
				5.20	2.43	10.40	5.20	2.97	10.40	5.20	3.81	10.40	5.20	4.05	10.40	-	-	-	-
	5.60	2.43	11.20	5.60	2.97	11.10	5.60	3.81	11.10	5.60	4.05	11.00	-	-	-	-			
	6.00	2.43	11.80	6.00	2.97	11.80	6.00	3.81	11.80	6.00	4.05	11.80	-	-	-	-			
	166.682xx.A2	●	1.50	1.00	22.41	7.50	1.40	28.95	9.30	1.80	41.22	11.10	2.00	44.04	11.80	1.60	0.07	110	155
				1.40	20.19	9.30	1.80	26.07	10.90	2.20	34.92	12.60	2.40	39.09	13.40	2.40	0.15	120	155
				1.80	18.75	11.00	2.20	23.94	12.50	2.60	33.18	14.20	2.80	35.16	15.10	3.20	0.20	120	160
				2.20	17.88	12.50	2.60	22.23	14.30	3.00	30.45	15.90	3.20	32.22	16.70	4.00	0.30	120	165
				2.60	17.10	14.20	3.00	21.12	15.90	3.40	28.29	17.50	3.60	30.18	18.30	5.20	0.35	120	175
				3.00	16.47	15.90	3.40	20.10	17.50	3.80	26.64	19.10	4.00	28.32	19.90	-	-	-	-
				3.40	16.08	17.50	3.80	19.44	19.10	4.20	25.35	20.70	4.40	26.94	21.50	-	-	-	-
				3.80	15.90	19.10	4.20	18.99	20.70	4.60	24.24	22.30	4.80	25.59	23.10	-	-	-	-
				4.20	15.90	20.70	4.60	18.45	22.30	5.00	23.13	24.00	5.20	24.36	24.80	-	-	-	-
				4.60	15.81	22.30	5.00	18.18	24.00	5.40	22.14	25.50	5.60	23.28	26.40	-	-	-	-
				5.00	15.21	23.90	5.40	17.25	25.40	5.80	21.12	27.20	6.00	22.17	28.00	-	-	-	-
				5.40	13.92	25.50	5.80	15.72	27.20	6.00	20.67	28.00	-	-	-	-	-	-	-
	5.80	12.09	27.20	6.00	14.91	28.00	-	-	-	-	-	-	-	-	-	-			
	6.00	11.07	28.00	-	-	-	-	-	-	-	-	-	-	-	-	-			
	166.691.xx.A2	●	2.50	1.40	52.00	13.80	2.00	67.30	17.50	2.60	92.30	21.20	2.60	102.10	21.20	1.60	0.07	150	200
				1.80	50.00	16.30	2.40	64.60	20.10	3.00	87.70	23.60	3.00	97.20	23.70	2.40	0.15	160	205
				2.20	48.60	18.80	2.80	62.00	22.50	3.40	84.30	26.00	3.40	92.50	26.10	3.20	0.20	160	205
				2.60	47.50	21.30	3.20	60.40	24.90	3.80	80.70	28.50	3.80	88.40	28.50	4.00	0.30	160	210
				3.00	46.50	23.70	3.60	58.00	27.30	4.20	77.00	30.90	4.20	85.20	31.00	5.20	0.35	150	210
				3.40	45.40	26.10	4.00	56.20	29.80	4.60	74.40	33.40	4.60	81.30	33.40	-	-	-	-
				3.80	44.40	28.60	4.40	54.20	32.10	5.00	71.10	35.90	5.00	78.20	35.80	-	-	-	-
				4.20	42.90	31.00	4.80	52.40	34.70	5.40	68.10	38.30	5.40	74.30	38.20	-	-	-	-
4.60				41.50	33.40	5.20	49.90	37.10	5.80	64.30	40.80	5.80	71.10	40.70	-	-	-	-	
5.00				39.90	35.80	5.60	48.10	39.50	6.00	63.20	42.00	6.00	68.90	41.90	-	-	-	-	
5.40				38.90	38.30	6.00	46.40	42.00	-	-	-	-	-	-	-	-	-	-	
5.60				38.50	39.40	-	-	-	-	-	-	-	-	-	-	-	-	-	

Ordering Type + Material no. = Ordering no.  
 example: 166.626.xx.A2 + 16 = 166.626.16.A2