

Pneumatic atomizing nozzles, flat fan, pressure principle, internal mixing Series 166.4

Features:

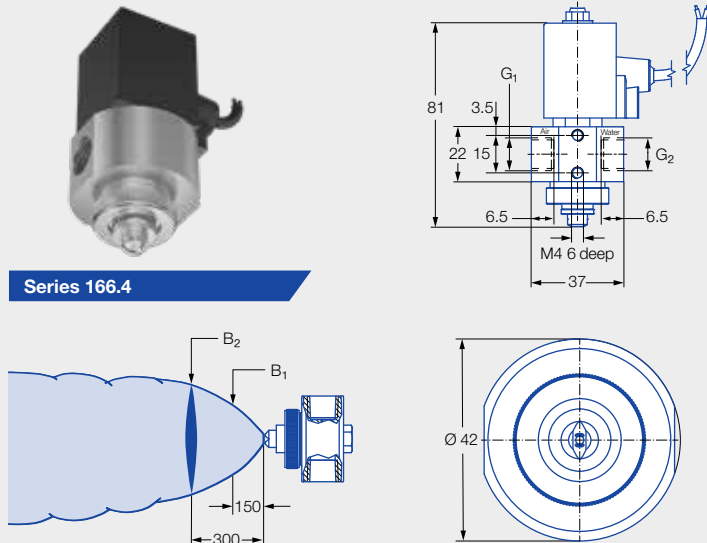
- Version with magnetic valve
- Fine flat fan atomization
- Liquid pressure principle
- Internal mixing

Applications:

- Belt humidification
- Cooling
- Humidification of goods

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



Air connection G ₁	Water connection G ₂	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.		0.7			1.5			3.0			4.0			p air [bar]	p water [bar]	B ₁ [mm]	B ₂ [mm]
		16 Stainless steel 303		p air [bar]	V̇ water [l/h]	V̇ _n air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ _n air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ _n air [m³/h]	p air [bar]	V̇ water [l/h]	V̇ _n air [m³/h]				
45°	166.414.xx.A2	●	0.7	1.0	7.7	1.3	1.4	14.3	1.5	2.2	22.4	2.0	3.0	25.1	2.5	1.4	0.7	85	125
				1.2	6.0	1.5	1.6	13.0	1.6	2.6	20.0	2.3	3.4	23.0	2.8	2.4	1.5	100	145
				1.4	4.2	1.7	1.8	11.6	1.8	3.0	17.7	2.6	3.8	20.9	3.1	3.2	2.0	105	155
				1.6	2.7	1.9	2.0	10.2	2.0	3.4	15.5	3.0	4.2	18.9	3.5	3.8	3.0	120	170
				1.8	1.3	2.1	2.2	8.9	2.2	3.8	13.3	3.4	4.6	16.9	3.8	4.6	4.0	130	210
				–	–	–	2.4	7.4	2.4	4.2	11.0	3.7	5.0	14.9	4.2	–	–	–	–
				–	–	–	2.6	5.9	2.6	4.6	8.8	4.1	5.4	12.8	4.6	–	–	–	–
				–	–	–	2.8	4.6	2.8	5.0	6.6	4.5	5.8	10.8	5.0	–	–	–	–
				–	–	–	3.0	3.2	3.0	5.4	4.3	4.9	6.0	9.8	5.2	–	–	–	–
				–	–	–	3.2	2.1	3.2	5.8	2.5	5.3	–	–	–	–	–	–	–
				–	–	–	3.4	1.1	3.4	6.0	1.6	5.5	–	–	–	–	–	–	–
	166.462.xx.A2	●	1.5	1.2	19.0	2.6	2.0	22.0	2.0	3.0	61.8	4.0	3.8	76.1	4.6	1.2	0.7	120	140
				1.6	12.2	3.4	2.4	18.0	2.4	3.4	51.9	4.8	4.0	70.4	5.1	2.4	1.5	120	170
				2.0	9.4	4.1	2.8	14.4	2.8	3.8	44.6	5.8	4.2	65.6	5.5	3.2	2.0	120	175
				2.4	7.1	4.8	3.2	11.3	3.2	4.2	39.0	6.6	4.4	61.3	5.9	3.8	3.0	140	205
				2.8	5.7	5.4	3.6	8.8	3.6	4.6	33.4	7.4	4.6	57.3	6.4	6.0	4.0	145	205
				3.2	5.0	6.0	4.0	8.1	3.9	5.0	29.4	8.1	4.8	54.1	6.7	–	–	–	–
				3.6	3.6	6.6	4.4	6.2	4.3	5.4	25.5	8.9	5.0	51.3	7.2	–	–	–	–
				4.0	3.2	7.2	4.8	4.6	4.6	5.8	22.0	9.6	5.2	49.3	7.7	–	–	–	–
				4.4	2.2	7.8	5.2	3.2	4.9	6.0	20.6	9.9	5.4	46.5	8.2	–	–	–	–
				–	–	–	5.6	1.6	5.3	–	–	–	5.6	43.7	8.6	–	–	–	–
				–	–	–	5.8	0.8	5.4	–	–	–	5.8	41.3	8.9	–	–	–	–
				–	–	–	–	–	–	–	–	–	6.0	39.0	9.3	–	–	–	–



Spray angle	Ordering no.		Narrowest free cross section Ø [mm]	Liquid pressure p [bar]												Spray dimensions			
	Type	Mat. no.		0.7			1.5			3.0			4.0						
		16 Stainless steel 303		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]	V̇ water [bar]	B ₁ [mm]	B ₂ [mm]
60°	166.425.xx.A2	●	0.5	0.8	6.5	1.2	1.4	9.4	1.7	2.4	13.2	2.5	2.4	16.1	2.5	1.2	0.7	155	195
				1.2	5.5	1.6	1.8	8.7	2.1	2.6	12.9	2.7	2.8	15.5	2.9	2.2	1.5	165	255
				1.6	4.7	1.9	2.2	7.9	2.4	3.0	12.3	3.0	3.2	15.0	3.2	3.0	2.0	170	265
				2.0	4.0	2.3	2.6	7.2	2.7	3.4	11.8	3.4	3.6	14.5	3.5	3.4	3.0	200	330
				2.4	3.2	2.6	3.0	6.4	3.1	3.8	11.1	3.7	4.0	13.9	3.8	5.6	4.0	200	330
				2.8	2.6	2.9	3.4	5.7	3.4	4.2	10.4	4.0	4.4	13.4	4.1	–	–	–	–
				3.0	2.2	3.1	3.8	5.1	3.7	4.6	9.8	4.3	4.8	12.8	4.5	–	–	–	–
				–	–	–	4.0	4.8	3.9	5.0	9.2	4.6	5.2	12.2	4.8	–	–	–	–
				–	–	–	4.4	4.2	4.2	5.4	8.6	5.0	5.6	11.7	5.1	–	–	–	–
				–	–	–	4.8	3.6	4.5	5.8	8.1	5.3	6.0	11.2	5.4	–	–	–	–
				–	–	–	5.2	2.8	4.8	6.0	7.8	5.4	–	–	–	–	–	–	–
				–	–	–	5.6	2.2	5.1	–	–	–	–	–	–	–	–	–	–
				–	–	–	6.0	1.6	5.5	–	–	–	–	–	–	–	–	–	–
	166.452.xx.A2	●	1.5	1.0	18.8	3.9	1.8	31.0	5.3	3.2	50.1	7.7	3.8	70.7	8.2	1.0	0.7	130	185
				1.4	8.6	5.7	2.0	25.4	6.3	3.6	39.5	9.4	4.2	58.6	9.6	1.8	1.5	150	240
				1.8	7.4	7.0	2.2	20.1	7.2	4.0	31.3	11.2	4.6	48.6	11.2	2.6	2.0	155	245
				2.2	4.1	8.4	2.4	15.5	8.0	4.4	24.0	12.9	5.0	41.2	13.1	3.6	3.0	175	280
				2.6	1.0	9.8	2.6	12.4	8.9	4.8	17.7	14.5	5.4	33.6	14.8	5.0	4.0	180	285
				2.8	0.1	10.3	2.8	10.4	9.6	5.2	13.4	16.0	5.8	27.5	16.4	–	–	–	–
				–	–	–	–	–	–	5.6	10.6	17.5	6.0	24.4	17.2	–	–	–	–
				–	–	–	–	–	–	6.0	8.6	18.8	–	–	–	–	–	–	–
80°	166.433.xx.A2	●	0.4	1.0	11.6	2.0	1.8	18.3	2.8	3.0	31.0	3.7	3.8	37.5	4.4	1.4	0.7	150	210
				1.2	8.1	2.4	2.0	15.3	3.2	3.4	25.4	4.4	4.2	32.4	5.0	2.2	1.5	185	255
				1.4	5.3	2.8	2.2	12.2	3.6	3.8	20.6	5.1	4.6	27.7	5.7	3.0	2.0	205	300
				1.6	3.7	3.2	2.4	9.8	4.0	4.2	16.3	5.9	5.0	23.4	6.5	3.8	4.0	300	485
				–	–	–	2.6	7.6	4.3	4.6	12.5	6.6	5.4	19.4	7.2	5.2	4.0	260	395
				–	–	–	2.8	5.9	4.7	5.0	9.3	7.3	5.8	15.9	7.9	–	–	–	–
				–	–	–	3.0	4.4	5.0	5.4	6.5	8.0	6.0	14.2	8.3	–	–	–	–
				–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Ordering Type + Material no. = Ordering no.
 example: 166.425.xx.A2 + 16 = 166.425.16.A2