

Pneumatic atomizing nozzles, full cone, pressure principle, internal mixing Series 166.1



Features:

- Version with magnetic valve
- Fine full cone atomization
- Liquid pressure principle
- Internal mixing

Applications:

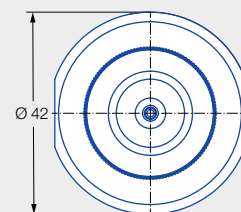
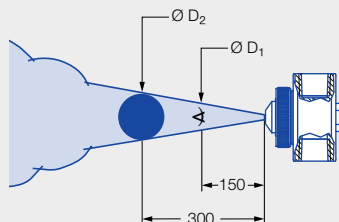
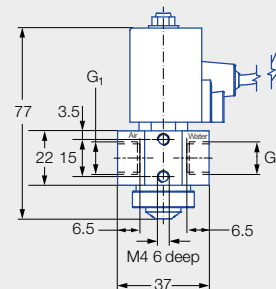
- Humidification of air
- Cooling

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 166.1



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]	Ø D ₁ [mm]	Ø D ₂ [mm]
		16		p air [bar]	ṽ water [l/h]	ṽ _n air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ _n air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ _n air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ _n air [m³/h]				
20°	166.115.xx.A2	●	0.5	0.4	5.9	0.3	1.4	5.8	0.8	2.4	9.1	1.1	3.0	11.0	1.2	0.8	0.7	60	100
				0.8	3.8	0.6	1.8	4.1	1.0	2.8	7.5	1.2	3.4	9.6	1.4	1.8	1.5	60	95
				1.2	1.7	0.9	2.2	2.2	1.4	3.2	5.9	1.5	3.8	8.2	1.6	2.6	2.0	60	100
				-	-	-	2.6	1.2	1.7	3.6	4.4	1.8	4.2	6.8	1.9	3.2	3.0	55	95
				-	-	-	-	-	-	4.0	2.9	2.1	4.6	5.5	2.2	4.4	4.0	55	100
				-	-	-	-	-	-	4.4	2.0	2.5	5.0	4.1	2.5	-	-	-	-
				-	-	-	-	-	-	4.8	1.1	2.8	5.4	2.9	2.8	-	-	-	-
				-	-	-	-	-	-	5.2	0.4	3.0	5.8	2.1	3.1	-	-	-	-
	166.125.xx.A2	●	0.5	0.8	4.7	1.5	1.2	7.0	1.8	2.8	9.1	3.3	3.4	10.6	3.9	1.4	0.7	55	90
				1.2	4.4	1.9	1.6	6.6	2.2	3.2	8.7	3.7	3.8	10.3	4.3	2.2	1.5	55	95
				1.6	4.0	2.3	2.0	6.2	2.6	3.6	8.4	4.1	4.2	9.9	4.6	2.8	2.0	55	100
				2.0	3.5	2.6	2.4	5.8	3.0	4.0	8.0	4.5	4.6	9.6	5.0	3.4	3.0	60	100
				2.4	3.0	3.0	2.8	5.4	3.4	4.4	7.7	4.8	5.0	9.3	5.4	4.2	4.0	60	100
				2.8	2.7	3.2	3.2	4.9	3.7	4.8	7.3	5.2	5.4	8.9	5.8	-	-	-	-
				3.2	2.0	3.7	3.6	4.4	4.1	5.2	7.0	5.6	5.8	8.6	6.1	-	-	-	-
				3.6	1.6	4.1	4.0	3.9	4.5	5.6	6.6	5.9	-	-	-	-	-	-	-
				4.0	1.3	4.5	4.4	3.5	4.8	6.0	6.2	6.3	-	-	-	-	-	-	-
				4.4	1.0	4.9	4.8	3.1	5.2	-	-	-	-	-	-	-	-	-	-
				4.8	0.6	5.2	5.2	2.7	5.6	-	-	-	-	-	-	-	-	-	-
				-	-	-	5.6	2.3	5.9	-	-	-	-	-	-	-	-	-	-
				-	-	-	6.0	1.9	6.3	-	-	-	-	-	-	-	-	-	-

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			p air [bar]	p water [bar]	Ø D ₁ [mm]	Ø D ₂ [mm]
		16		p air [bar]	ṽ water [l/h]	ṽ air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ air [m³/h]	p air [bar]	ṽ water [l/h]	ṽ air [m³/h]				
20°	166.134.xx.A2	●	0.7	1.2	13.2	2.7	2.0	19.4	3.9	3.0	28.3	5.2	3.8	32.6	6.2	1.8	0.7	55	95
				1.6	12.4	3.3	2.4	18.1	4.4	3.4	27.5	5.7	4.2	32.0	6.8	2.8	1.5	60	105
				2.0	11.8	3.9	2.8	17.3	4.9	3.8	26.7	6.3	4.6	31.3	7.3	3.8	2.0	60	105
				2.4	11.4	4.4	3.2	16.7	5.5	4.2	25.9	6.8	5.0	30.6	7.8	5.2	3.0	65	110
				2.8	11.1	4.9	3.6	16.1	6.0	4.6	25.0	7.3	5.4	29.9	8.4	6.0	4.0	65	110
				3.2	10.8	5.5	4.0	15.6	6.5	5.0	24.2	7.8	5.8	29.3	8.9	—	—	—	—
				3.6	10.6	6.0	4.4	15.2	7.0	5.4	23.6	8.4	—	—	—	—	—	—	—
				4.0	10.4	6.5	4.8	15.0	7.6	5.8	23.1	8.9	—	—	—	—	—	—	—
				4.4	10.1	7.0	5.2	14.6	8.1	—	—	—	—	—	—	—	—	—	—
				4.8	9.9	7.6	5.6	14.1	8.6	—	—	—	—	—	—	—	—	—	—
				5.2	9.5	8.1	6.0	13.8	9.1	—	—	—	—	—	—	—	—	—	—
				5.6	9.0	8.6	—	—	—	—	—	—	—	—	—	—	—	—	—
				6.0	8.5	9.2	—	—	—	—	—	—	—	—	—	—	—	—	—
	166.142.xx.A2	●	2.5	1.4	24.2	5.1	1.6	53.4	4.7	3.2	70.8	8.0	3.8	93.2	9.2	0.8	0.7	60	100
				1.8	20.4	6.3	2.0	42.6	5.9	3.6	62.5	9.2	4.2	83.1	10.1	1.6	1.5	65	105
				2.2	20.0	7.2	2.4	35.3	7.2	4.0	55.7	10.6	4.6	75.3	11.3	3.0	2.0	60	105
				2.6	19.3	8.2	2.8	30.4	8.4	4.4	49.3	11.7	5.0	69.0	12.5	4.0	3.0	65	110
				3.0	17.6	9.3	3.2	28.6	9.5	4.8	44.6	12.9	5.4	63.4	13.7	6.0	4.0	65	110
				3.4	16.5	10.4	3.6	28.2	10.5	5.2	41.9	14.1	5.8	57.5	14.9	—	—	—	—
				3.8	17.0	11.4	4.0	27.3	11.5	5.6	40.4	15.1	—	—	—	—	—	—	—
				4.2	16.3	12.4	4.4	25.9	12.5	6.0	39.7	16.1	—	—	—	—	—	—	—
				4.6	15.1	13.3	4.8	24.3	13.5	—	—	—	—	—	—	—	—	—	—
				5.0	14.0	14.3	5.2	22.3	14.6	—	—	—	—	—	—	—	—	—	—
				5.4	13.1	15.3	5.6	21.8	15.7	—	—	—	—	—	—	—	—	—	—
				5.8	12.4	16.2	6.0	21.4	16.7	—	—	—	—	—	—	—	—	—	—

Ordering Type + Material no. = Ordering no.
example: 166.134.xx.A2 + 16 = 166.134.16.A2