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

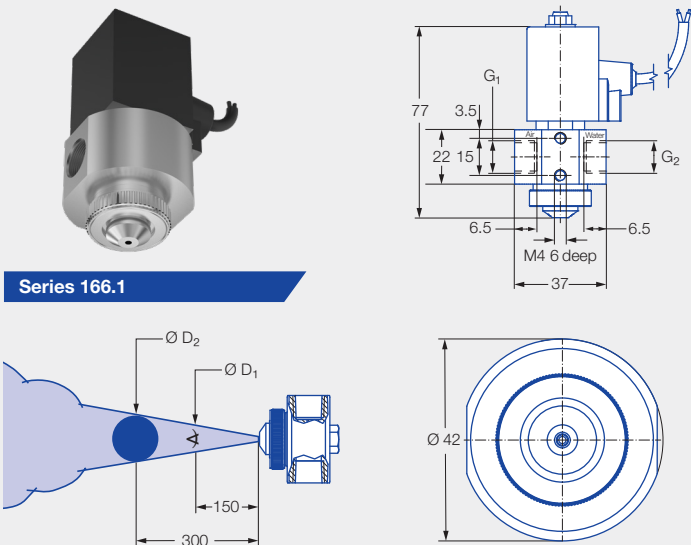
 Series 166.1



- 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



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

Spray angle	Ordering no.		Narrow- est 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	–	–	–	–	–	–	–	–	–	–



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		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]				
		Stainless steel 303														p air [bar]	p water [bar]	Ø D ₁ [mm]	Ø D ₂ [mm]
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

