

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:

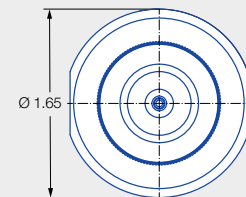
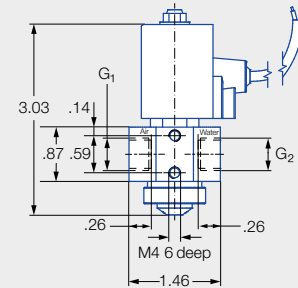
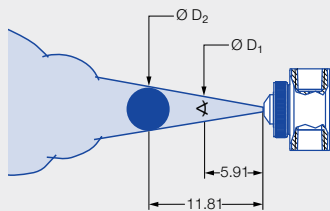
- Humidification
- Cooling

Technical data:

- Operating pressure: 0–87 psi
- Voltage: 24 V DC
- Power: 8 W
- Switching frequency: Approx. 500/min
- Protective system: IP 67
- Ambient temperature: +50 °C/+122 °F
- Cable length: 39.37 in
- Material of gasket: EPDM



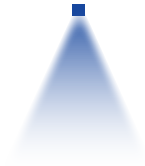
Series 166.1



Air connection G ₁	Water connection G ₂	Weight [lb]
1/4 NPT	1/4 NPT	0.91

Spray angle	Ordering number		Narrowest free cross section Ø [in]	Liquid pressure p [psi]										Spray dimensions						
	Type	Material number		10				20			40			60			p air [psi]	p water [psi]	Ø D ₁ [in]	Ø D ₂ [in]
		16		p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]					
		Stainless steel 303																		
20°	166.115.xx.B2	●	0.02	6	1.56	0.3	0.2	1.5	0.5	35	2.4	0.6	44	2.9	0.7	12	10	2	4	
				12	1.00	0.6	0.4	1.1	0.6	41	2.0	0.7	49	2.5	0.8	26	22	2	4	
				17	0.45	0.9	0.5	0.6	0.8	46	1.6	0.9	55	2.2	0.9	38	29	2	4	
				–	–	–	2.6	0.3	1.0	52	1.2	1.1	61	1.8	1.1	46	44	2	4	
				–	–	–	–	–	–	58	0.8	1.2	67	1.5	1.3	64	58	2	4	
				–	–	–	–	–	–	64	0.5	1.5	73	1.1	1.5	–	–	–	–	
				–	–	–	–	–	–	70	0.3	1.6	78	0.8	1.6	–	–	–	–	
				–	–	–	–	–	–	75	0.1	1.8	84	0.6	1.8	–	–	–	–	
	166.125.xx.B2	●	0.02	12	1.24	1.5	0.9	1.8	1.1	41	2.4	1.9	49	2.8	2.3	20	10	2	4	
				17	1.16	1.9	1.1	1.7	1.3	46	2.3	2.2	55	2.7	2.5	32	22	2	4	
				23	1.06	2.3	1.4	1.6	1.5	52	2.2	2.4	61	2.6	2.7	41	29	2	4	
				29	0.92	2.6	1.5	1.5	1.8	58	2.1	2.6	67	2.5	2.9	49	44	2	4	
				35	0.79	3.0	1.8	1.4	2.0	64	2.0	2.8	73	2.5	3.2	61	58	2	4	
				41	0.71	3.2	1.9	1.3	2.2	70	1.9	3.1	78	2.4	3.4	–	–	–	–	
				46	0.53	3.7	2.2	1.2	2.4	75	1.8	3.3	84	2.3	3.6	–	–	–	–	
				52	0.42	4.1	2.4	1.0	2.6	81	1.7	3.5	–	–	–	–	–	–	–	
				58	0.34	4.5	2.6	0.9	2.8	87	1.6	3.7	–	–	–	–	–	–	–	
				64	0.26	4.9	2.9	0.8	3.1	–	–	–	–	–	–	–	–	–	–	
				70	0.16	5.2	3.1	0.7	3.3	–	–	–	–	–	–	–	–	–	–	
				–	–	–	3.3	0.6	3.5	–	–	–	–	–	–	–	–	–	–	
				–	–	–	3.5	0.5	3.7	–	–	–	–	–	–	–	–	–	–	





Spray angle	Ordering number		Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number																	
		16																	
		Stainless steel 303																	
				10			20			40			60						
				p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	Ṽ water [gal/h]	Ṽ _n air [SCFM]	p air [psi]	p water [psi]	Ø D ₁ [in]	Ø D ₂ [in]
20°	166.134.xx.B2	●	0.03	17	3.5	1.6	29	5.1	2.3	44	7.5	3.1	55	8.6	1.6	26	10	2	4
				23	3.3	1.9	35	4.8	2.6	49	7.3	3.4	61	8.5	1.8	41	22	2	4
				29	3.1	2.3	41	4.6	2.9	55	7.1	3.7	67	8.3	1.9	55	29	2	4
				35	3.0	2.6	46	4.4	3.2	61	6.8	4.0	73	8.1	2.1	75	44	3	4
				41	2.9	2.9	52	4.3	3.5	67	6.6	4.3	78	7.9	2.2	87	58	3	4
				46	2.9	3.2	58	4.1	3.8	73	6.4	4.6	84	7.7	2.4	-	-	-	-
				52	2.8	3.5	64	4.0	4.1	78	6.2	4.9	-	-	-	-	-	-	-
				58	2.7	3.8	70	4.0	4.5	84	6.1	5.2	-	-	-	-	-	-	-
				64	2.7	4.1	75	3.9	4.8	-	-	-	-	-	-	-	-	-	-
				70	2.6	4.5	81	3.7	5.1	-	-	-	-	-	-	-	-	-	-
				75	2.5	4.8	87	3.6	5.4	-	-	-	-	-	-	-	-	-	-
				81	2.4	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-
				87	2.2	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-
	166.142.xx.B2	●	0.10	20	6.4	3.0	23	14.1	2.8	46	18.7	4.7	55	24.6	2.4	12	10	2	4
				26	5.4	3.7	29	11.3	3.5	52	16.5	5.4	61	22.0	2.7	23	22	3	4
				32	5.3	4.2	35	9.3	4.2	58	14.7	6.2	67	19.9	3.0	44	29	2	4
				38	5.1	4.8	41	8.0	4.9	64	13.0	6.9	73	18.2	3.3	58	44	3	4
				44	4.6	5.5	46	7.6	5.6	70	11.8	7.6	78	16.8	3.6	87	58	3	4
				49	4.4	6.1	52	7.5	6.2	75	11.1	8.3	84	15.2	3.9	-	-	-	-
				55	4.5	6.7	58	7.2	6.8	81	10.7	8.9	-	-	-	-	-	-	-
				61	4.3	7.3	64	6.8	7.4	87	10.5	9.5	-	-	-	-	-	-	-
				67	4.0	7.8	70	6.4	7.9	-	-	-	-	-	-	-	-	-	-
				73	3.7	8.4	75	5.9	8.6	-	-	-	-	-	-	-	-	-	-
				78	3.5	9.0	81	5.8	9.2	-	-	-	-	-	-	-	-	-	-
				84	3.3	9.5	87	5.7	9.8	-	-	-	-	-	-	-	-	-	-

Ordering Type + Material no. = Ordering no.
example: 166.134.xx.B2 + 16 = 166.134.16.B2