

# ➤ 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:

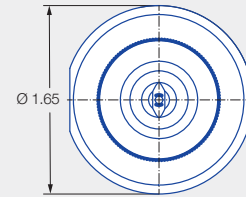
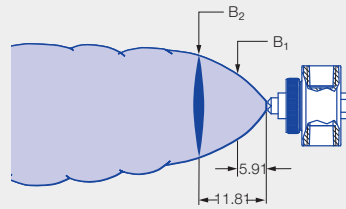
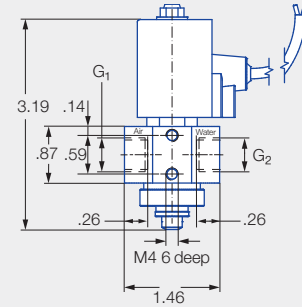
- Belt humidification
- Cooling
- Humidification of goods

### Technical data:

- Operating pressure: 0–87 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 166.4



Air connection G <sub>1</sub>	Water connection G <sub>2</sub>	Weight [lb]
1/4 NPT	1/4 NPT	0.90

Spray angle	Ordering number		Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions							
	Type	Material number		10				20				40				60				p <sub>air</sub> [psi]	p <sub>water</sub> [psi]	B <sub>1</sub> [in]	B <sub>2</sub> [in]
		16		p <sub>air</sub> [psi]	V <sub>water</sub> [gal/h]	V̇ <sub>air</sub> [SCFM]	p <sub>air</sub> [psi]	V <sub>water</sub> [gal/h]	V̇ <sub>air</sub> [SCFM]	p <sub>air</sub> [psi]	V <sub>water</sub> [gal/h]	V̇ <sub>air</sub> [SCFM]	p <sub>air</sub> [psi]	V <sub>water</sub> [gal/h]	V̇ <sub>air</sub> [SCFM]								
45°	166.414.xx.B2	●	0.03	15	2.0	0.8	20	3.8	0.9	32	5.9	1.2	44	6.6	1.5	20	10	3	5				
				17	1.6	0.9	23	3.4	0.9	38	5.3	1.4	49	6.1	1.6	35	22	4	6				
				20	1.1	1.0	26	3.1	1.1	44	4.7	1.5	55	5.5	1.8	46	29	4	6				
				23	0.7	1.1	29	2.7	1.2	49	4.1	1.8	61	5.0	2.1	55	44	5	7				
				26	0.3	1.2	32	2.4	1.3	55	3.5	2.0	67	4.5	2.2	67	58	5	8				
				–	–	–	35	2.0	1.4	61	2.9	2.2	73	3.9	2.5	–	–	–	–				
				–	–	–	38	1.6	1.5	67	2.3	2.4	78	3.4	2.7	–	–	–	–				
				–	–	–	41	1.2	1.6	73	1.7	2.6	84	2.9	2.9	–	–	–	–				
				–	–	–	44	0.8	1.8	78	1.1	2.9	87	2.6	3.1	–	–	–	–				
				–	–	–	46	0.6	1.9	84	0.7	3.1	–	–	–	–	–	–	–				
				–	–	–	49	0.3	2.0	87	0.4	3.2	–	–	–	–	–	–	–				
					166.462.xx.B2	●	0.06	17	5.0	1.5	29	5.8	1.2	44	16.3	2.4	55	20.1	2.7	17	10	5	6
								23	3.2	2.0	35	4.8	1.4	49	13.7	2.8	58	18.6	3.0	35	22	5	7
								29	2.5	2.4	41	3.8	1.6	55	11.8	3.4	61	17.3	3.2	46	29	5	7
35	1.9	2.8	46					3.0	1.9	61	10.3	3.9	64	16.2	3.5	55	44	6	8				
41	1.5	3.2	52					2.3	2.1	67	8.8	4.4	67	15.1	3.8	87	58	6	8				
46	1.3	3.5	58					2.1	2.3	73	7.8	4.8	70	14.3	3.9	–	–	–	–				
52	1.0	3.9	64					1.6	2.5	78	6.7	5.2	73	13.6	4.2	–	–	–	–				
58	0.8	4.2	70					1.2	2.7	84	5.8	5.7	75	13.0	4.5	–	–	–	–				
64	0.6	4.6	75					0.8	2.9	87	5.4	5.8	78	12.3	4.8	–	–	–	–				
–	–	–	81					0.4	3.1	–	–	–	81	11.5	5.1	–	–	–	–				
–	–	–	84					0.2	3.2	–	–	–	84	10.9	5.2	–	–	–	–				
–	–	–	–					–	–	–	–	–	87	10.3	5.5	–	–	–	–				





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]	B <sub>1</sub> [in]	B <sub>2</sub> [in]	
		16		Stainless steel 303	p air [psi]	V water [gal/h]	V air [SCFM]	p air [psi]	V water [gal/h]	V air [SCFM]	p air [psi]	V water [gal/h]	V air [SCFM]	p air [psi]	V water [gal/h]					V air [SCFM]
60°	166.425.xx.B2	●	0.02	12	1.7	0.7	20	2.5	1.0	35	3.5	1.5	35	16.1	4.3	17	10	6	8	
				17	1.5	0.9	26	2.3	1.2	38	3.4	1.6	41	15.5	4.1	32	22	6	10	
				23	1.2	1.1	32	2.1	1.4	44	3.2	1.8	46	15.0	4.0	44	29	7	10	
				29	1.1	1.4	38	1.9	1.6	49	3.1	2.0	52	14.5	3.8	49	44	8	13	
				35	0.8	1.5	44	1.7	1.8	55	2.9	2.2	58	13.9	3.7	81	58	8	13	
				41	0.7	1.7	49	1.5	2.0	61	2.7	2.4	64	13.4	3.5	-	-	-	-	
				44	0.6	1.8	55	1.3	2.2	67	2.6	2.5	70	12.8	3.4	-	-	-	-	
				-	-	-	58	1.3	2.3	73	2.4	2.7	75	12.2	3.2	-	-	-	-	
				-	-	-	64	1.1	2.5	78	2.3	2.9	81	11.7	3.1	-	-	-	-	
				-	-	-	70	1.0	2.6	84	2.1	3.1	87	11.2	3.0	-	-	-	-	
	-	-	-	75	0.7	2.8	87	2.1	3.2	-	-	-	-	-	-	-				
	-	-	-	81	0.6	3.0	-	-	-	-	-	-	-	-	-	-				
	-	-	-	87	0.4	3.2	-	-	-	-	-	-	-	-	-	-				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	60°	166.452.xx.B2	●	0.06	15	5.0	2.3	26	8.2	3.1	46	13.2	4.5	55	18.7	4.8	15	10	5	7
					20	2.3	3.4	29	6.7	3.7	52	10.4	5.5	61	15.5	5.7	26	22	6	9
26					2.0	4.1	32	5.3	4.2	58	8.3	6.6	67	12.8	6.6	38	29	6	10	
32					1.1	4.9	35	4.1	4.7	64	6.3	7.6	73	10.9	7.7	52	44	7	11	
38					0.3	5.8	38	3.3	5.2	70	4.7	8.5	78	8.9	8.7	73	58	7	11	
41					0.03	6.1	41	2.7	5.7	75	3.5	9.4	84	7.3	9.7	-	-	-	-	
-					-	-	-	-	-	81	2.8	10.3	87	6.4	10.1	-	-	-	-	
-					-	-	-	-	-	87	2.3	11.1	-	-	-	-	-	-	-	
-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
80°	166.433.xx.B2	●	0.02	15	3.1	1.2	26	4.8	1.6	44	8.2	2.2	55	9.9	2.6	20	10	6	8	
				17	2.1	1.4	29	4.0	1.9	49	6.7	2.6	61	8.6	2.9	32	22	7	10	
				20	1.4	1.6	32	3.2	2.1	55	5.4	3.0	67	7.3	3.4	44	29	8	12	
				23	1.0	1.9	35	2.6	2.4	61	4.3	3.5	73	6.2	3.8	55	58	12	19	
				-	-	-	38	2.0	2.5	67	3.3	3.9	78	5.1	4.2	75	58	10	16	
				-	-	-	41	1.6	2.8	73	2.5	4.3	84	4.2	4.6	-	-	-	-	
				-	-	-	44	1.2	2.9	78	1.7	4.7	87	3.8	4.9	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Ordering Type + Material no. = Ordering no.  
 example: 166.425.xx.B2 + 16 = 166.425.16.B2

