

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:

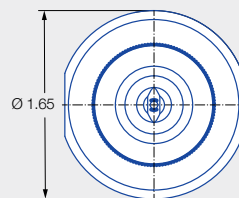
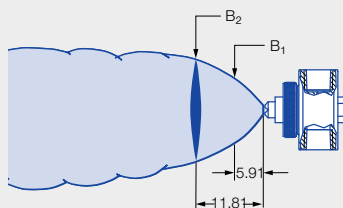
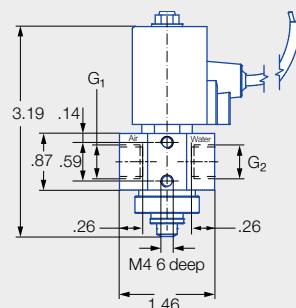
- Belt humidification
- Cooling
- Humidification of goods

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 ₁	Water connection G ₂	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			
		16		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]	
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	
				17	1.6	0.9		23	3.4	0.9		38	5.3	1.4		49	6.1	1.6	
				20	1.1	1.0		26	3.1	1.1		44	4.7	1.5		55	5.5	1.8	
				23	0.7	1.1		29	2.7	1.2		49	4.1	1.8		61	5.0	2.1	
				26	0.3	1.2		32	2.4	1.3		55	3.5	2.0		67	4.5	2.2	
				–	–	–		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	
				23	3.2	2.0		35	4.8	1.4		49	13.7	2.8		58	18.6	3.0	
				29	2.5	2.4		41	3.8	1.6		55	11.8	3.4		61	17.3	3.2	
				35	1.9	2.8		46	3.0	1.9		61	10.3	3.9		64	16.2	3.5	
				41	1.5	3.2		52	2.3	2.1		67	8.8	4.4		67	15.1	3.8	
				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														p air [psi]	p water [psi]	B ₁ [in]	B ₂ [in]				
		16																					
		Stainless steel 303		10			20			40			60										
				p air [psi]	v̇ water [gal/h]	v̇ air [SCFM]	p air [psi]	v̇ water [gal/h]	v̇ air [SCFM]	p air [psi]	v̇ water [gal/h]	v̇ air [SCFM]	p air [psi]	v̇ water [gal/h]	v̇ 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	–	–	–	–	–	–	–	–	–	–				
	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