



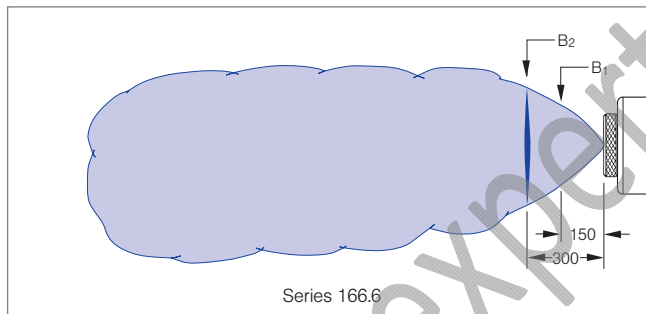
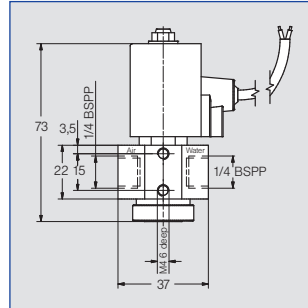
Pneumatic atomizing nozzles, Flat fan, pressure principle, external mixing Series 166.6

Version with magnetic valve.
Fine flat fan atomization
with the aid of air or gas.
Liquid pressure principle.
External mixing of fluids.

Applications:
 Web dampening, cooling,
 humidification of goods,
 atomization of viscous liquids.

Technical Data:

- Service pressure: 0-6 bar
- Voltage: 24 V DC
- Power: 8 W
- Switching frequency:
ca. 500/min
- Protective system: IP 67
- Ambient temperature:
10°C / +50°C
- Cable length: 1.000 mm
- Material of gasket: EPDM



Accessories for series 166
 please refer to page 1.29

Spray angle	Ordering no.		E Ø [mm]	Liquid pressure p [bar]												Spray dimensions							
	Type	Mat.-no.		0.07			0.15			0.30			0.35			p Air [bar]	p Water [bar]	B ₁ [mm]	B ₂ [mm]				
				p Air [bar]	V̇ Water [l/h]	V̇ _n Air [m ³ /h]	p Air [bar]	V̇ Water [l/h]	V̇ _n Air [m ³ /h]	p Air [bar]	V̇ Water [l/h]	V̇ _n Air [m ³ /h]	p Air [bar]	V̇ Water [l/h]	V̇ _n Air [m ³ /h]								
45°	166. 616. xx. A2	○	16	AISI 303	0.4	0.80	1.68	2.50	0.80	2.43	2.40	0.80	3.42	2.50	1.00	3.69	2.80	1.40	0.07	80	115		
						1.20	1.80	3.10	1.00	2.46	2.90	1.20	3.48	3.10	1.40	3.81	3.40	2.20	0.15	90	130		
						1.60	1.92	3.70	1.40	2.58	3.60	1.60	3.51	3.70	1.80	3.87	4.00	3.20	0.20	90	135		
						2.00	2.10	4.30	1.80	2.61	4.20	2.00	3.63	4.30	2.20	3.84	4.60	4.00	0.30	95	145		
						2.40	2.07	4.90	2.20	2.76	4.80	2.40	3.63	4.90	2.60	3.90	5.20	5.00	0.35	100	145		
						2.80	2.19	5.50	2.60	2.73	5.40	2.80	3.63	5.50	3.00	3.93	5.80						
						3.20	2.19	6.10	3.00	2.73	6.00	3.20	3.63	6.10	3.40	3.90	6.40						
						3.60	2.22	6.70	3.60	2.76	6.70	3.60	3.66	6.70	3.80	3.93	7.00						
						4.00	2.22	7.30	4.00	2.76	7.30	4.00	3.69	7.30	4.20	3.96	7.60						
						4.40	2.22	7.90	4.40	2.76	7.90	4.40	3.69	7.90	4.60	3.93	8.20						
	4.80	2.22	8.50	4.80	2.76	8.50	4.80	3.69	8.40	5.00	3.93	8.80											
	5.20	2.22	9.10	5.20	2.76	9.10	5.20	3.66	9.10	5.40	3.93	9.40											
	5.60	2.22	9.60	5.60	2.76	9.70	5.60	3.66	9.60	5.80	3.87	10.00											
	6.00	2.22	10.20	6.00	2.73	10.20	6.00	3.66	10.20	6.00	3.87	10.20											
		166. 654. xx. A2	○	16	AISI 303	0.7	0.80	5.25	2.40	0.80	7.29	2.40	1.20	10.11	3.10	1.60	11.07	3.70	1.40	0.07	95	135	
	1.20						5.64	3.10	1.20	7.44	3.10	1.60	10.23	3.70	2.00	11.22	4.30	2.20	0.15	100	150		
	1.60						5.79	3.70	1.60	7.62	3.70	2.00	10.38	4.30	2.40	11.28	4.90	3.20	0.20	105	160		
	2.00						6.18	4.30	2.00	7.86	4.30	2.40	10.47	4.90	2.80	11.31	5.50	4.00	0.30	105	160		
	2.40						6.24	4.90	2.40	7.92	4.90	2.80	10.59	5.50	3.20	11.43	6.10	5.00	0.35	105	160		
	2.80						6.27	5.50	2.80	8.04	5.50	3.20	10.59	6.10	3.60	11.46	6.60						
3.20	6.39						6.10	3.20	8.13	6.10	3.60	10.62	6.70	4.00	11.43	7.20							
3.60	6.42						6.60	3.60	8.13	6.70	4.00	10.62	7.20	4.40	11.37	7.80							
4.00	6.45						7.20	4.00	8.13	7.20	4.40	10.62	7.80	4.80	11.37	8.40							
4.40	6.42						7.80	4.40	8.07	7.80	4.80	10.59	8.40	5.20	11.34	9.00							
4.80	6.30	8.40	4.80	8.04	8.40	5.20	10.56	9.00	5.60	11.22	9.60												
5.20	6.24	9.00	5.20	7.86	9.00	5.60	10.50	9.60	6.00	11.16	10.10												
5.60	6.09	9.60	5.60	7.83	9.60	6.00	10.35	10.20	-	-	-												
6.00	5.85	10.20	6.00	7.59	10.20	-	-	-	-	-	-												



Pneumatic atomizing nozzles, Flat fan, pressure principle, external mixing Series 166.6

Spray angle	Ordering no.		E ∅ [mm]	Liquid pressure p [bar]												Spray dimensions				
	Type	Mat.-no.		0.07			0.15			0.30			0.35			p Air [bar]	p Water [bar]	B ₁ [mm]	B ₂ [mm]	
				p Air [bar]	V Water [l/h]	ṽ _n Air [m ³ /h]	p Air [bar]	V Water [l/h]	ṽ _n Air [m ³ /h]	p Air [bar]	V Water [l/h]	ṽ _n Air [m ³ /h]	p Air [bar]	V Water [l/h]	ṽ _n Air [m ³ /h]					
				16	AISI 303															
60°	166. 626. xx. A2	○	0.4	0.80	1.83	2.80	0.80	2.49	2.80	0.80	3.48	2.80	0.80	3.78	2.80	1.60	0.07	85	135	
				1.20	1.98	3.60	1.20	2.58	3.50	1.20	3.60	3.50	1.20	3.87	3.60	2.40	0.15	90	140	
				1.60	2.10	4.30	1.60	2.70	4.20	1.60	3.66	4.30	1.60	3.90	4.20	3.20	0.20	90	140	
				2.00	2.16	4.90	2.00	2.82	4.90	2.00	3.69	4.90	2.00	3.96	4.90	4.00	0.30	100	145	
				2.40	2.25	5.60	2.40	2.85	5.60	2.40	3.69	5.60	2.40	3.96	5.60	5.20	0.35	105	150	
				2.80	2.34	6.30	2.80	2.88	6.30	2.80	3.72	6.30	2.80	4.02	6.30					
				3.20	2.31	7.00	3.20	2.88	7.00	3.20	3.78	7.00	3.20	3.99	7.00					
				3.60	2.34	7.60	3.60	2.88	7.70	3.60	3.78	7.60	3.60	4.02	7.70					
				4.00	2.40	8.40	4.00	2.94	8.40	4.00	3.81	8.30	4.00	4.05	8.30					
				4.40	2.40	9.00	4.40	2.91	9.00	4.40	3.81	9.00	4.40	4.02	9.00					
				4.80	2.40	9.70	4.80	2.97	9.70	4.80	3.81	9.70	4.80	4.08	9.70					
				5.20	2.43	10.40	5.20	2.97	10.40	5.20	3.81	10.40	5.20	4.05	10.40					
	5.60	2.43	11.20	5.60	2.97	11.10	5.60	3.81	11.10	5.60	4.05	11.00								
	6.00	2.43	11.80	6.00	2.97	11.80	6.00	3.81	11.80	6.00	4.05	11.80								
	166. 682. xx. A2	○	1.5	1.00	22.41	7.50	1.40	28.95	9.30	1.80	41.22	11.10	2.00	44.04	11.80	1.60	0.07	110	155	
				1.40	20.19	9.30	1.80	26.07	10.90	2.20	34.92	12.60	2.40	39.09	13.40	2.40	0.15	120	155	
				1.80	18.75	11.00	2.20	23.94	12.50	2.60	33.18	14.20	2.80	35.16	15.10	3.20	0.20	120	160	
				2.20	17.88	12.50	2.60	22.23	14.30	3.00	30.45	15.90	3.20	32.22	16.70	4.00	0.30	120	165	
				2.60	17.10	14.20	3.00	21.12	15.90	3.40	28.29	17.50	3.60	30.18	18.30	5.20	0.35	120	175	
				3.00	16.47	15.90	3.40	20.10	17.50	3.80	26.64	19.10	4.00	28.32	19.90					
				3.40	16.08	17.50	3.80	19.44	19.10	4.20	25.35	20.70	4.40	26.94	21.50					
				3.80	15.90	19.10	4.20	18.99	20.70	4.60	24.24	22.30	4.80	25.59	23.10					
				4.20	15.90	20.70	4.60	18.45	22.30	5.00	23.13	24.00	5.20	24.36	24.80					
				4.60	15.81	22.30	5.00	18.18	24.00	5.40	22.14	25.50	5.60	23.28	26.40					
				5.00	15.21	23.90	5.40	17.25	25.40	5.80	21.12	27.20	6.00	22.17	28.00					
				5.40	13.92	25.50	5.80	15.72	27.20	6.00	20.67	28.00	-	-	-					
	5.80	12.09	27.20	6.00	14.91	28.00	-	-	-	-	-	-								
	6.00	11.07	28.00	-	-	-	-	-	-	-	-	-								
	166. 691. xx. A2	○	2.5	1.40	52.00	13.80	2.00	67.30	17.50	2.60	92.30	21.20	2.60	102.10	21.20	1.60	0.07	150	200	
				1.80	50.00	16.30	2.40	64.60	20.10	3.00	87.70	23.60	3.00	97.20	23.70	2.40	0.15	160	205	
2.20				48.60	18.80	2.80	62.00	22.50	3.40	84.30	26.00	3.40	92.50	26.10	3.20	0.20	160	205		
2.60				47.50	21.30	3.20	60.40	24.90	3.80	80.70	28.50	3.80	88.40	28.50	4.00	0.30	160	210		
3.00				46.50	23.70	3.60	58.00	27.30	4.20	77.00	30.90	4.20	85.20	31.00	5.20	0.35	150	210		
3.40				45.40	26.10	4.00	56.20	29.80	4.60	74.40	33.40	4.60	81.30	33.40						
3.80				44.40	28.60	4.40	54.20	32.10	5.00	71.10	35.90	5.00	78.20	35.80						
4.20				42.90	31.00	4.80	52.40	34.70	5.40	68.10	38.30	5.40	74.30	38.20						
4.60				41.50	33.40	5.20	49.90	37.10	5.80	64.30	40.80	5.80	71.10	40.70						
5.00				39.90	35.80	5.60	48.10	39.50	6.00	63.20	42.00	6.00	68.90	41.90						
5.40				38.90	38.30	6.00	46.40	42.00	-	-	-	-	-	-						
5.60				38.50	39.40	-	-	-	-	-	-	-	-	-						

E = narrowest free cross section (water)

Example **Type** + **Material no. (xx)** = **Ordering no.**
for ordering: 166. 654. xx. A2 + 16 = 166. 654. 16. A2