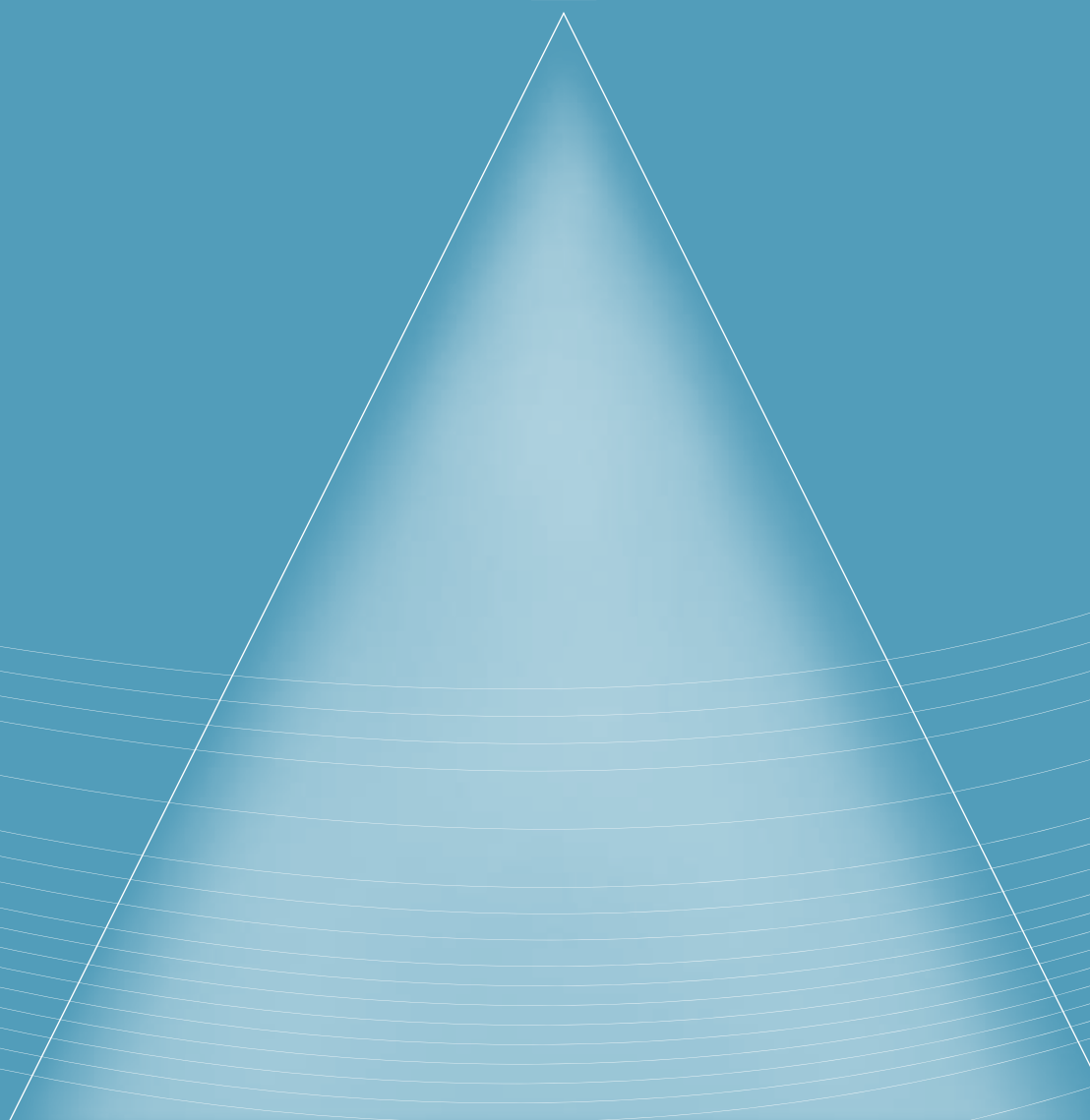
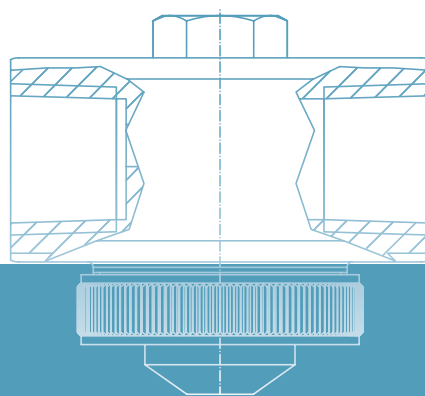
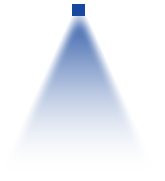


PNEUMATIC ATOMIZING NOZZLES





PNEUMATIC ATOMIZING NOZZLES GENERAL INFORMATION

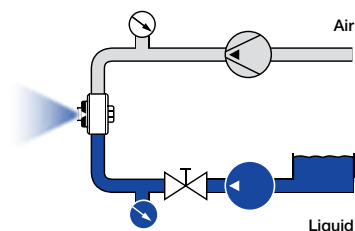
Pneumatic atomizing nozzles produce extremely fine droplets with a small droplet size. There are two options available: Internal Mixing (for lower viscosity fluids) where the mixing of gas and liquid happens inside the nozzle and External Mixing (for higher viscosity fluids) where the mixing of gas and liquid happens outside the nozzle. Depending on the option chosen, the liquid can be gravity/siphon fed or pressurized. Flat fan, full cone and solid stream spray patterns are available.

Pneumatic atomizing nozzles

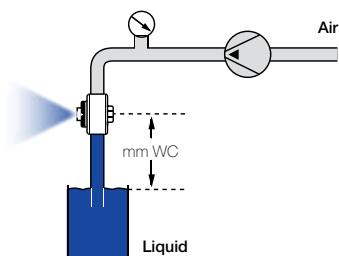


- Produces extremely fine droplets.
- Wide range of liquid-supply.
- Internal or external mixing.
- Suitable for humidification, cooling and the atomization of viscous fluids.

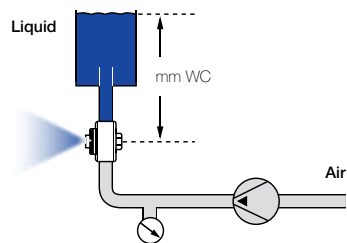
Liquid pressure principle



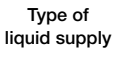
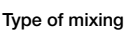
Siphon principle



Supply principle



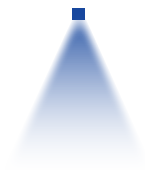


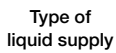
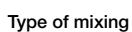
		Pneumatic atomizing nozzles			
					
Series		136.1	136.2	136.3	136.4
Information on page		119	121	122	125
 Spray pattern	Full cone	•	•	•	
	Flat fan				•
	Solid stream				
 Type of liquid supply	Pressure principle	•	•		•
	Siphon and/or supply principle			•	
 Type of mixing	Internal mixing	•	•		•
	External mixing			•	
 Flow rate	gal/h	0.11–24.62	0.11–35.11	0.08–17.63	0.03–20.10
 Spray angle	Small (15°–30°)	•		•	
	Medium (45°)				•
	Large (60°–80°)		•		•

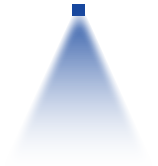
					
136.5	136.6	166.1	166.2	166.4	166.6
127	129	135	137	138	140
		•	•		
•	•			•	•
	•	•	•	•	•
•					
•		•	•	•	
	•				•
0.21–0.85	0.44–26.97	0.11–24.62	0.11–35.11	0.03–20.10	0.44–26.97
		•			
	•			•	•
•	•		•	•	•



PNEUMATIC ATOMIZING NOZZLES OVERVIEW OF SERIES



Pneumatic atomizing nozzles					
					
Series		176 ViscoMist	140	170	150
Information on page		143	142	on request	on request
 Spray pattern	Full cone	•	•	•	•
	Flat fan	•			
	Solid stream	•			
 Type of liquid supply	Pressure principle	•		•	•
	Siphon and/or supply principle		•		
 Type of mixing	Internal mixing		•	•	
	External mixing	•			•
 Flow rate	gal/h	2.06–81.10	1.19–3.17	2.25–76.61 [gal/min]	0.04–16.64 [gal/min]
 Spray angle	Small (15°–30°)	•	•	•	•
	Medium (45°)				
	Large (60°–80°)				



Pneumatic atomizing nozzles, full cone, pressure principle, internal mixing Series 136.1

Features:

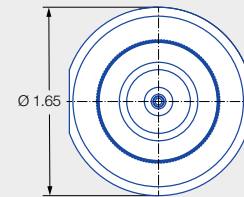
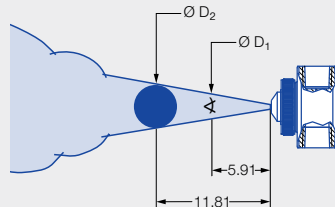
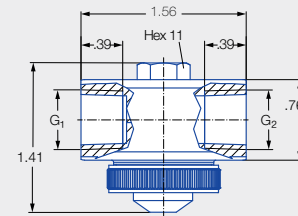
- Fine full cone atomization
- Liquid pressure principle
- Internal mixing

Applications:

- Humidification of air
- Cooling



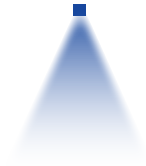
Series 136.1



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number																		
		1Y	16		10				20				40				60			
					p air [psi]	V water [gal/h]	V _n air [SCFM]	p air [psi]	V water [gal/h]	V _n air [SCFM]	p air [psi]	V water [gal/h]	V _n air [SCFM]	p air [psi]	V water [gal/h]	V _n air [SCFM]	p air [psi]	V water [gal/h]	V _n air [SCFM]	
20°	136.115.xx.B2	●	●	0.2	6	1.6	0.18	20	1.5	.47	35	2.4	0.6	44	2.9	0.7	12	10	2	4
					12	1.0	0.35	26	1.1	.59	41	2.0	0.7	49	2.5	0.8	26	22	2	4
					17	.45	0.53	32	.58	.82	46	1.6	0.9	55	2.2	0.9	38	29	2	4
					–	–	–	38	.32	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	–	–	–	–
					–	–	–	–	–	–	76	0.1	1.8	84	0.6	1.8	–	–	–	–
	136.125.xx.B2	●	●	0.5	12	1.3	0.9	17	1.8	1.1	41	2.4	1.9	49	2.8	2.3	20	10	2	4
					17	1.2	1.1	23	1.7	1.3	46	2.3	2.2	55	2.7	2.5	32	22	2	4
					23	1.1	1.4	29	1.6	1.5	52	2.2	2.4	61	2.6	2.7	41	29	2	4
					29	0.9	1.5	35	1.5	1.8	58	2.1	2.6	67	2.5	2.9	49	44	2	4
					35	0.8	1.8	41	1.4	2.0	64	2.0	2.8	73	2.4	3.2	61	58	2	4
					41	0.7	1.9	46	1.3	2.2	70	1.9	3.1	78	2.3	3.4	–	–	–	–
					46	0.5	2.2	52	1.2	2.4	75	1.8	3.3	84	2.2	3.6	–	–	–	–
					52	0.4	2.4	58	1.0	2.6	81	1.7	3.5	–	–	–	–	–	–	–
					58.0	0.3	3	63.8	0.9	3	87	1.6	4	–	–	–	–	–	–	–
					63.8	0.3	3	69.6	0.8	3	–	–	–	–	–	–	–	–	–	–
					69.6	0.2	3	75.4	0.7	3	–	–	–	–	–	–	–	–	–	–
					–	–	–	81.2	0.6	3	–	–	–	–	–	–	–	–	–	–
					–	–	–	87.0	0.5	4	–	–	–	–	–	–	–	–	–	–





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]	Ø D ₁ [in]	Ø D ₂ [in]
		1Y	16		10			20			40			60						
		Stainless steel 316L	Stainless steel 303		p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]				
20°	136.134.xx.B2	●	●	0.03	17	3.5	1.6	29	5.1	2.3	44	7.5	3.1	55	9.6	3.6	26	10	2	4
23					3.3	1.9	35	4.8	2.6	49	7.2	3.4	61	8.4	4.0	41	22	2	4	
29					3.1	2.3	41	4.6	2.9	55	7.0	3.7	67	8.2	4.3	55	29	2	4	
35					3.0	2.6	46	4.4	3.2	61	6.8	4.0	73	8.1	4.6	75	44	3	4	
41					2.9	2.9	52	4.2	3.5	67	6.6	4.3	78	7.9	4.9	87	58	3	4	
46					2.8	3.2	58	4.1	3.8	73	6.4	4.6	84	7.7	5.2	-	-	-	-	
52					2.8	3.5	64	4.0	4.1	78	6.2	4.9	-	-	-	-	-	-	-	
58					2.7	3.8	70	3.9	4.5	84	6.1	5.2	-	-	-	-	-	-	-	
64					2.6	4.1	75	3.8	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
136.142.xx.B2	●	●	0.10	20	6.4	3.0	23	14.1	2.8	46	18.7	4.7	55	24.6	5.4	12	10	2	4	
				26	5.4	3.7	29	11.2	3.5	52	16.5	5.4	61	22.0	5.9	23	22	3	4	
				32	5.3	4.2	35	9.3	4.2	58	14.7	6.2	67	19.9	6.7	44	29	2	4	
				38	5.1	4.8	41	8.0	4.9	64	13.0	6.9	73	18.2	7.4	58	44	3	4	
				44	4.6	5.5	46	7.5	5.6	70	11.8	7.6	78	16.8	8.1	87	58	3	4	
				49	4.3	6.1	52	7.4	6.2	75	11.1	8.3	84	15.2	8.8	-	-	-	-	
				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	3.9	7.8	70	6.4	7.9	-	-	-	-	-	-	-	-	-	-	
				73	3.7	8.4	75	5.9	8.6	-	-	-	-	-	-	-	-	-	-	
				78	3.4	9.0	81	5.7	9.2	-	-	-	-	-	-	-	-	-	-	
				84	3.3	9.5	87	5.6	9.8	-	-	-	-	-	-	-	-	-	-	

Ordering Type + Material no. = Ordering no.
example: 136.134.xx.B2 + 1Y = 136.134.1Y.B2

Pneumatic atomizing nozzles, wide full cone, pressure principle, internal mixing Series 136.2

Features:

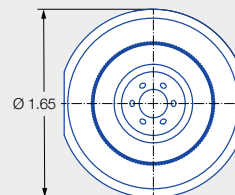
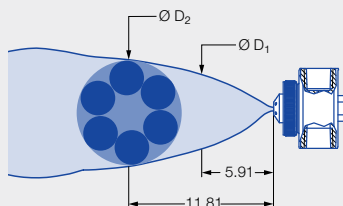
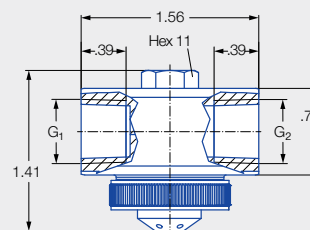
- Fine full cone atomization
- Liquid pressure principle
- Internal mixing
- Extra wide spray angle of 60°

Applications:

- Humidification
- Cooling



Series 136.2



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number																		
		1Y	16		10				20				40				60			
		Stainless steel 316L	Stainless steel 303		p _{air} [psi]	ṽ _{water} [gal/h]	ṽ _{air} [SCFM]	p _{air} [psi]	ṽ _{water} [gal/h]	ṽ _{air} [SCFM]	p _{air} [psi]	ṽ _{water} [gal/h]	ṽ _{air} [SCFM]	p _{air} [psi]	ṽ _{water} [gal/h]	ṽ _{air} [SCFM]	p _{air} [psi]	p _{water} [psi]	Ø D ₁ [in]	Ø D ₂ [in]
60°	136.215.xx.B2	●	●	0.02	15	0.8	0.8	23	1.5	1.0	41	2.2	1.4	55	2.5	1.8	15	10	8	13
					17	0.5	0.9	26	1.3	1.1	46	1.9	1.6	61	2.2	2.1	23	22	9	15
					20	0.2	1.1	29	1.0	1.2	52	1.5	1.9	67	1.8	2.3	35	29	9	15
					–	–	–	32	0.7	1.4	58	1.1	2.1	73	1.4	2.5	46	44	10	15
					–	–	–	35	0.4	1.5	64	0.6	2.4	78	1.0	2.8	61	58	10	16
					–	–	–	38	0.2	1.6	70	0.2	2.6	84	0.6	3.1	–	–	–	–
					–	–	–	–	–	–	73	0.1	2.7	87	0.4	3.3	–	–	–	–
					–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	136.222.xx.B2	●	●	0.04	12	4.6	1.6	23	6.8	2.4	44	10.7	3.4	55	14.5	3.8	12	10	10	18
					15	1.6	2.5	26	3.9	3.1	46	8.3	4.1	58	12.0	4.3	23	22	10	18
					–	–	–	29	1.8	3.9	49	5.9	4.8	61	9.9	5.0	33	29	10	18
					–	–	–	32	0.5	4.8	52	3.9	5.6	64	7.8	5.7	46	44	10	18
					–	–	–	–	–	–	55	2.2	6.5	67	5.7	6.6	61	58	10	18
					–	–	–	–	–	–	58	1.2	7.2	70	4.0	7.3	–	–	–	–
					–	–	–	–	–	–	–	–	73	2.6	8.1	–	–	–	–	
					–	–	–	–	–	–	–	–	75	1.6	8.9	–	–	–	–	
	136.231.xx.B2	●	●	0.06	–	–	–	–	–	–	–	–	–	–	78	0.8	9.7	–	–	–
					23	6.8	3.0	38	11.7	4.1	52	24.8	4.6	61	35.1	4.3	29	10	9	15
					29	4.7	3.6	44	8.7	4.8	58	20.7	5.5	67	31.0	5.3	38	22	10	16
					35	3.0	4.2	49	6.5	5.4	64	17.4	6.2	73	26.7	6.1	35	29	10	17
					41	1.8	4.8	55	4.8	6.0	70	14.5	7.0	78	23.2	6.9	52	44	10	17
					–	–	–	61	3.5	6.6	75	12.0	7.7	84	20.2	7.8	61	58	10	17
					–	–	–	67	2.5	7.1	81	10.0	8.3	87	18.8	8.1	–	–	–	–
					–	–	–	–	–	–	87	9.5	8.5	–	–	–	–	–	–	–

Ordering Type + Material no. = Ordering no.
 example: 136.215.xx.B2 + 1Y = 136.215.1Y.B2

Pneumatic atomizing nozzles, full cone, siphon principle, external mixing Series 136.3

Features:

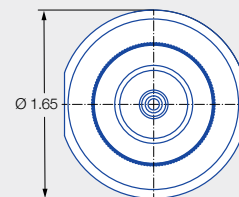
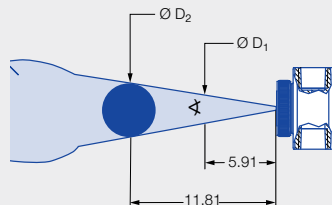
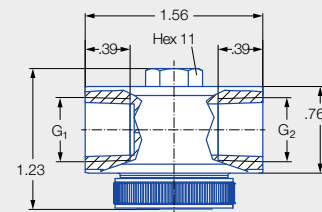
- Particularly fine full cone atomization
- Gravity/Siphon principle
- External mixing

Applications:

- Cooling
- Atomization of viscous liquids
- Chemical industry



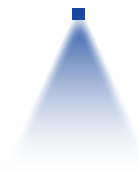
Series 136.3



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

Spray angle	Ordering number			Narrowest free cross section Ø [in]	Air		V̇ water [gal/h]									Spray dimensions			
	Type	Material number					Water column [in WC]			Aspiration height [in WC]									
		1Y	16				p [psij]	V̇ _n [SCFM]	6	12	18	4	8	12	24	35	p air [psij]	Aspiration height [in WS]	Ø D ₁ [in]
		Stainless steel 316L	Stainless steel 303																
20°	136.316.xx.B2	●	●	0.02	9	0.4	–	0.4	0.3	–	–	–	–	–	20	12	2	4	
12					0.5	0.3	0.4	0.4	–	–	–	–	–	–	46	12	2	5	
17					0.6	0.4	0.4	0.4	0.3	0.2	–	–	–	70	12	3	5		
20					0.7	0.4	0.4	0.4	0.3	0.3	0.2	–	–	87	12	3	5		
26					0.8	0.4	0.5	0.5	0.3	0.3	0.2	–	–	–	–	–	–		
29					0.9	0.4	0.5	0.5	0.3	0.3	0.3	–	–	–	–	–	–		
35					1.1	0.5	0.5	0.5	0.4	0.3	0.3	0.1	–	–	–	–	–		
38					1.1	0.5	0.5	0.5	0.4	0.3	0.3	0.2	–	–	–	–	–		
44					1.2	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	–	–	–	–		
46					1.3	0.5	0.6	0.5	0.4	0.4	0.4	0.3	0.1	–	–	–	–		
52					1.4	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.2	–	–	–	–		
55					1.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.2	–	–	–	–		
61					1.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3	–	–	–	–		
64					1.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.3	–	–	–	–		
70					1.8	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.3	–	–	–	–		
73					1.9	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.2	–	–	–	–		
78					2.0	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.1	–	–	–	–		
81					2.1	0.5	0.6	0.6	0.5	0.4	0.4	0.2	–	–	–	–	–		
87					2.2	0.5	0.6	0.5	0.4	0.4	0.3	–	–	–	–	–	–		





Spray angle	Ordering number			Narrowest free cross section Ø [in]	Air		V̇ water [gal/h]								Spray dimensions				
	Type	Material number					Water column [in WC]				Aspiration height [in WC]								
		1Y	16																
		Stainless steel 316L	Stainless steel 303		p [psi]	V̇ _i [SCFM]	6	12	18	4	8	12	24	35	p air [psi]	Aspiration height [in WS]	Ø D ₁ [in]	Ø D ₂ [in]	
20°	136.324.xx.B2	●	●	0.03	12	0.5	–	–	–	0.7	0.5	–	–	–	17	12	2	5	
					17	0.6	–	–	–	0.8	0.7	0.5	–	–	46	12	3	5	
					20	0.7	–	–	–	0.9	0.7	0.6	–	–	70	12	3	5	
					26	0.9	–	–	–	1.0	0.9	0.7	–	–	87	12	3	5	
					29	0.9	–	–	–	1.0	0.9	0.8	0.2	–	–	–	–	–	
					35	1.1	–	–	–	1.1	1.0	0.8	0.4	–	–	–	–	–	
					38	1.1	–	–	–	1.2	1.0	0.9	0.4	–	–	–	–	–	
					44	1.2	1.4	–	–	1.2	1.1	1.0	0.5	–	–	–	–	–	
					46	1.3	1.5	–	–	1.3	1.1	1.0	0.6	–	–	–	–	–	
					52	1.4	1.5	–	–	1.3	1.2	1.1	0.7	–	–	–	–	–	
					55	1.5	1.6	–	–	1.4	1.2	1.2	0.8	0.6	–	–	–	–	
					61	1.6	1.7	1.8	–	1.5	1.4	1.2	0.8	0.8	–	–	–	–	
					64	1.7	1.7	1.8	1.9	1.6	1.4	1.3	1.0	0.8	–	–	–	–	
					70	1.8	1.7	1.7	1.8	1.6	1.4	1.4	1.0	0.5	–	–	–	–	
					73	1.9	1.6	1.7	1.8	1.6	1.4	1.3	1.1	–	–	–	–	–	
					78	2.0	1.5	1.6	1.7	1.5	1.3	1.2	1.0	–	–	–	–	–	
					81	2.1	1.5	1.6	1.7	1.4	1.3	1.2	1.0	–	–	–	–	–	
					87	2.2	1.4	1.5	1.6	1.3	1.2	1.1	0.5	–	–	–	–	–	
	136.334.xx.B2	●	●	0.03	9	0.7	–	–	–	0.6	–	–	–	–	12	12	65	5	
					12	0.8	–	–	–	0.7	0.6	0.4	–	–	46	12	65	5	
					17	1.1	–	–	–	0.9	0.8	0.7	0.2	–	70	12	70	5	
					20	1.2	–	–	–	1.0	0.9	0.8	0.3	–	87	12	75	5	
					26	1.4	1.4	–	–	1.1	1.0	0.9	0.6	–	–	–	–	–	
					29	1.5	1.4	1.6	1.7	1.2	1.1	1.0	0.7	0.2	–	–	–	–	
					35	1.6	1.5	1.7	1.8	1.3	1.2	1.1	0.9	0.4	–	–	–	–	
					38	1.8	1.6	1.7	1.8	1.3	1.2	1.2	0.9	0.5	–	–	–	–	
					44	2.0	1.7	1.8	1.9	1.4	1.3	1.2	1.0	0.6	–	–	–	–	
					46	2.1	1.7	1.8	1.9	1.5	1.4	1.3	1.1	0.7	–	–	–	–	
					52	2.3	1.8	1.9	2.0	1.5	1.5	1.4	1.1	0.9	–	–	–	–	
					55	2.4	1.8	1.9	2.1	1.6	1.5	1.4	1.2	1.0	–	–	–	–	
					61	2.6	1.9	2.1	2.2	1.7	1.6	1.5	1.3	1.1	–	–	–	–	
					64	2.7	2.0	2.2	2.3	1.8	1.7	1.6	1.4	1.2	–	–	–	–	
					70	2.9	2.2	2.3	2.4	1.9	1.8	1.8	1.5	1.3	–	–	–	–	
					73	3.0	2.3	2.3	2.4	2.0	1.9	1.9	1.6	1.4	–	–	–	–	
					78	3.2	2.2	2.3	2.3	2.0	2.0	1.9	1.7	1.5	–	–	–	–	
					81	3.3	2.2	2.2	2.3	2.0	2.0	1.9	1.7	1.5	–	–	–	–	
					87	3.5	2.1	2.2	2.2	1.9	1.9	1.8	1.6	1.5	–	–	–	–	





Spray angle	Ordering number			Narrowest free cross section Ø [in]	Air		V̇ water [gal/h]								Spray dimensions			
	Type	Material number					Water column [in WC]				Aspiration height [in WC]							
		1Y	16															
		Stainless steel 316L	Stainless steel 303		p [psi]	V̇ _i [SCFM]	6	12	18	4	8	12	24	35	p air [psi]	Aspiration height [in WS]	Ø D ₁ [in]	Ø D ₂ [in]
20°	136.342.xx.B2	●	●	0.06	20	2.1	–	–	–	2.3	–	–	1.0	–	26	300	3	5
					26	2.5	–	–	–	2.5	2.2	2.0	1.4	0.9	44	300	3	5
					29	2.6	3.2	–	–	2.6	2.4	2.1	1.5	1.1	61	300	3	5
					35	3.1	3.2	–	–	2.7	2.5	2.3	1.8	1.4	87	300	3	5
					38	3.2	3.2	3.5	–	2.8	2.6	2.4	1.9	1.5	–	–	–	–
					44	3.6	3.2	3.5	3.7	2.8	2.7	2.5	2.0	1.7	–	–	–	–
					46	3.8	3.2	3.5	3.7	2.8	2.7	2.5	2.1	1.8	–	–	–	–
					52	4.1	3.3	3.5	3.7	2.9	2.8	2.7	2.3	2.1	–	–	–	–
					55	4.3	3.3	3.5	3.7	3.0	2.9	2.8	2.5	2.2	–	–	–	–
					61	4.7	3.5	3.7	3.8	3.2	3.1	3.0	2.8	2.6	–	–	–	–
					64	4.9	3.6	3.7	3.9	3.3	3.2	3.1	2.9	2.7	–	–	–	–
					70	5.2	3.7	3.8	4.0	3.4	3.3	3.2	3.0	2.7	–	–	–	–
					73	5.4	3.7	3.8	4.0	3.4	3.3	3.2	2.9	2.7	–	–	–	–
					78	5.8	3.6	3.8	3.9	3.3	3.2	3.1	2.8	2.4	–	–	–	–
					81	5.9	3.5	3.7	3.9	3.2	3.1	3.0	2.7	2.3	–	–	–	–
					87	6.4	3.2	3.4	–	2.9	2.8	2.7	2.3	1.9	–	–	–	–
	136.351.xx.B2	●	●	0.10	46	6.8	–	–	–	–	10.3	–	–	–	55	12	4	5
					52	7.4	–	–	–	12.1	11.1	–	8.8	–	67	12	4	6
					55	7.7	–	–	–	12.6	11.9	11.2	9.3	–	78	12	4	6
					61	8.4	–	–	–	13.6	13.0	12.3	10.5	7.9	87	12	4	6
					64	8.7	–	–	–	14.0	13.4	12.8	11.0	8.3	–	–	–	–
					70	9.4	–	16.7	–	14.6	14.1	13.5	11.9	9.2	–	–	–	–
					73	9.7	–	16.8	17.6	14.8	14.3	13.8	12.2	9.5	–	–	–	–
					78	10.4	16.1	17.0	17.6	15.0	14.5	14.0	12.6	10.0	–	–	–	–
					81	10.7	16.1	16.9	17.6	15.0	14.5	14.1	12.6	10.2	–	–	–	–
					87	11.3	15.8	16.6	17.3	14.7	14.3	13.8	12.1	9.8	–	–	–	–

Ordering Type + Material no. = Ordering no.
example: 136.342.xx.B2 + 1Y = 136.342.1Y.B2

Pneumatic atomizing nozzles, wide flat fan, pressure principle, internal mixing Series 136.4

Features:

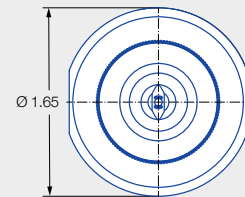
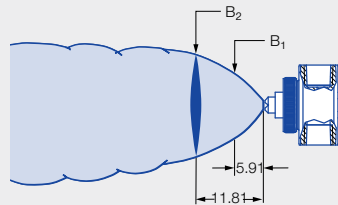
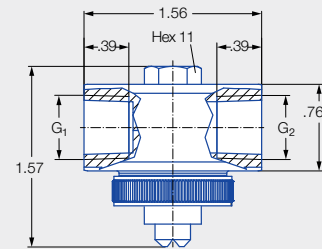
- Fine flat fan atomization
- Pressure principle
- Internal mixing

Applications:

- Humidification of goods
- Cooling
- Belt humidification



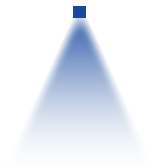
Series 136.4



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

Spray angle	Ordering number				Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number		Stainless steel 316L	Stainless steel 303	10				20				40				60			
		1Y	16			p air [psi]				p air [psi]				p air [psi]				p air [psi]			
						$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]	$\dot{V}_{\text{water}}$ [gal/h]	$\dot{V}_{\text{air}}$ [SCFM]
45°	136.414.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	–	–	–	–	–	–	–
	136.443.xx.B2	●	●	0.04		17	3.7	0.9	23	7.0	0.9	44	9.8	1.5	52	12.0	1.7	17	10	4	6
						20	3.1	1.0	26	6.4	1.1	49	8.7	1.8	58	11.1	1.9	29	22	5	7
						23	2.5	1.1	29	5.8	1.2	55	7.8	2.0	64	10.1	2.2	41	29	6	7
						26	2.1	1.2	32	5.3	1.3	61	6.9	2.2	70	9.2	2.4	55	44	6	8
						–	–	–	35	4.8	1.4	67	6.1	2.5	75	8.4	2.6	70	58	6	9
						–	–	–	38	4.3	1.5	73	5.3	2.7	81	7.7	2.9	–	–	–	–
						–	–	–	41	3.8	1.6	78	4.6	2.9	87	6.9	3.1	–	–	–	–
						–	–	–	44	3.4	1.8	84	3.9	3.1	–	–	–	–	–	–	–
						–	–	–	46	3.0	1.9	87	3.7	3.2	–	–	–	–	–	–	–
						–	–	–	49	2.6	2.0	–	–	–	–	–	–	–	–	–	–
						–	–	–	52	2.3	3.6	–	–	–	–	–	–	–	–	–	–





Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number																		
		1Y	16		10				20				40				60			
		Stainless steel 316L	Stainless steel 303		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]	p air [psi]	p water [psi]	B ₁ [in]	B ₂ [in]
45°	136.462.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	1.64	2.5	78	6.74	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	–	–	–	–
60°	136.425.xx.B2	●	●	0.02	12	1.7	0.7	20	2.5	1.0	35	3.5	1.5	35	4.3	1.5	17	10	6	8
					17	1.5	0.9	26	2.3	1.2	38	3.4	1.6	41	4.1	1.7	32	22	6	10
					23	1.2	1.1	32	2.1	1.4	44	3.2	1.8	46	4.0	1.9	44	29	7	10
					29	1.1	1.4	38	1.9	1.6	49	3.1	2.0	52	3.8	2.1	49	44	8	13
					35	0.8	1.5	44	1.7	1.8	55	2.9	2.2	58	3.7	2.2	81	58	8	13
					41	0.7	1.7	49	1.5	2.0	61	2.7	2.4	64	3.5	2.4	–	–	–	–
					44	0.6	1.8	55	1.3	2.2	67	2.6	2.5	70	3.4	2.6	–	–	–	–
					–	–	–	58	1.3	2.3	73	2.4	2.7	75	3.2	2.8	–	–	–	–
					–	–	–	64	1.1	2.5	78	2.3	2.9	81	3.1	3.0	–	–	–	–
					–	–	–	70	1.0	2.6	84	2.1	3.1	87	3.0	3.2	–	–	–	–
					–	–	–	75	0.7	2.8	87	2.1	3.2	–	–	–	–	–	–	–
					–	–	–	81	0.6	3.0	–	–	–	–	–	–	–	–	–	–
	–	–	–	87	0.4	3.2	–	–	–	–	–	–	–	–	–	–				
	136.452.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°					136.433.xx.B2	●	●	0.02	15	3.1	1.2	26	4.8	1.6	44	8.2	2.2	55	9.9	2.6
	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: 136.462.xx.B2 + 1Y = 136.462.1Y.B2

Pneumatic atomizing nozzles, wide flat fan, siphon principle, internal mixing Series 136.5

Features:

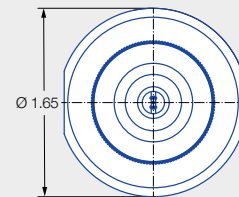
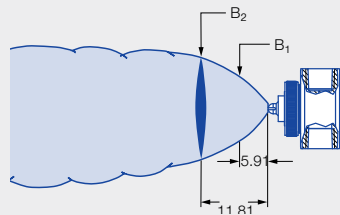
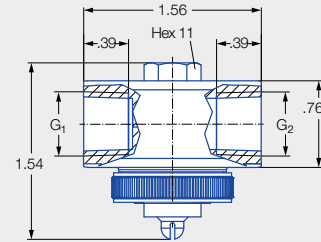
- Particularly fine flat fan atomization
- Siphon principle
- Internal mixing

Applications:

- Humidification of goods
- Cooling
- Belt humidification



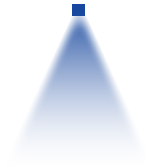
Series 136.5



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303 SS)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

Spray angle	Ordering number			Narrowest free cross section Ø [in]	Air		V̇ water [gal/h]								Spray dimensions			
	Type	Material number					Water column [in WC]			Aspiration height [in WC]								
		1Y	16															
		Stainless steel 316L	Stainless steel 303		p [psi]	V̇ _n [SCFM]	6	12	18	4	8	12	24	35	p air [psi]	Aspiration height [in WS]	B ₁ [in]	B ₂ [in]
60°	136.516.xx.B2	●	●	0.02	12	1.1	—	—	—	0.4	0.4	—	1.17	0.3	15	12	5	6
17					1.3	0.5	0.6	0.6	0.5	0.5	0.4	1.41	0.4	44	12	6	8	
20					1.5	0.5	0.6	0.6	0.5	0.5	0.4	1.47	0.4	67	12	7	9	
26					1.7	0.5	0.6	0.6	0.5	0.5	0.5	1.53	0.4	87	12	7	9	
29					1.8	0.5	0.6	0.6	0.5	0.5	0.4	1.50	0.4	—	—	—	—	
35					2.1	0.5	0.6	0.6	0.5	0.5	0.4	1.47	0.4	—	—	—	—	
38					2.2	0.5	0.6	0.6	0.5	0.5	0.4	1.44	0.4	—	—	—	—	
44					2.5	0.5	0.5	0.6	0.5	0.4	0.4	1.44	0.4	—	—	—	—	
46					2.6	0.5	0.5	0.6	0.4	0.4	0.4	1.59	0.4	—	—	—	—	
52					2.8	0.5	0.5	0.6	0.5	0.5	0.5	1.68	0.4	—	—	—	—	
55					2.9	0.5	0.5	0.6	0.5	0.5	0.5	1.71	0.5	—	—	—	—	
61					3.2	0.5	0.5	0.6	0.5	0.5	0.5	1.68	0.4	—	—	—	—	
64					3.4	0.5	0.5	0.6	0.5	0.5	0.5	1.74	0.5	—	—	—	—	
70					3.6	0.5	0.5	0.6	0.5	0.5	0.5	2.04	0.5	—	—	—	—	
73					3.7	0.6	0.6	0.6	0.6	0.6	0.6	2.10	0.6	—	—	—	—	
78					4.0	0.6	0.6	0.6	0.6	0.6	0.6	2.04	0.5	—	—	—	—	
81					4.1	0.6	0.6	0.6	0.6	0.6	0.6	2.01	0.5	—	—	—	—	
87					4.4	0.6	0.6	0.6	0.6	0.6	0.5	1.92	0.5	—	—	—	—	





Spray angle	Ordering number			Narrowest free cross section Ø [in]	Air		V̇ water [gal/h]									Spray dimensions			
	Type	Material number					Water column [in WC]			Aspiration height [in WC]									
		1Y	16																
		Stainless steel 316L	Stainless steel 303		p [psi]	V̇ _i [SCFM]	6	12	18	4	8	12	24	35	p air [psi]	Aspiration height [in WS]	B ₁ [in]	B ₂ [in]	
60°	136.525.xx.B2			0.02	9	0.9	–	–	–	0.5	–	–	–	–	15	12	6	9	
12					1.1	–	–	–	0.6	0.6	0.5	–	–	44	12	8	12		
17					1.4	0.7	0.8	–	0.7	0.6	0.6	0.5	0.4	67	12	8	13		
20					1.5	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5	87	12	10	16		
26					1.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.5	–	–	–	–		
29					1.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.5	–	–	–	–		
35					2.2	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	–	–	–	–		
38					2.3	0.7	0.8	0.8	0.7	0.6	0.6	0.5	0.4	–	–	–	–		
44					2.6	0.7	0.7	0.8	0.6	0.6	0.5	0.5	0.5	–	–	–	–		
46					2.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	–	–	–	–		
52					3.0	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.5	–	–	–	–		
55					3.1	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.5	–	–	–	–		
61					3.4	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	–	–	–	–		
64					3.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	–	–	–	–		
70					3.8	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	–	–	–	–		
73					3.9	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	–	–	–	–		
78					4.2	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.5	–	–	–	–		
81					4.3	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.5	–	–	–	–		
87					4.6	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	–	–	–	–		

Ordering Type + Material no. = Ordering no.
example: 136.525.xx.B2 + 1Y = 136.525.1Y.B2

Pneumatic atomizing nozzles, flat fan, pressure principle, external mixing Series 136.6

Features:

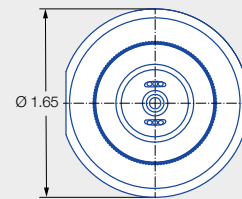
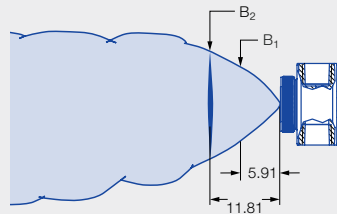
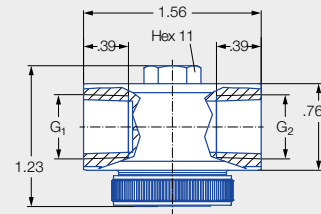
- Fine flat fan atomization
- Liquid pressure principle
- External mixing

Applications:

- Humidification of goods
- Cooling
- Belt humidification
- Atomization of viscous liquids



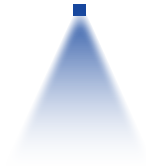
Series 136.6



Liquid connection G ₁	Air connection G ₂	Screw plug thread (size 11)	Weight [lb] (Stainless steel 303)
1/4 NPT	1/4 NPT	5/16-24 UNF-2A	0.5

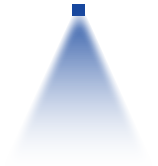
Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number																		
		1Y	16																	
		Stainless steel 316L	Stainless steel 303																	
					10	20			40			60								
					p air [psi]	Ṡ water [gal/h]	Ṡ _n air [SCFM]	p air [psi]	Ṡ water [gal/h]	Ṡ _n air [SCFM]	p air [psi]	Ṡ water [gal/h]	Ṡ _n air [SCFM]	p air [psi]	Ṡ water [gal/h]	Ṡ _n air [SCFM]	p air [psi]	Ṡ water [psi]	B ₁ [in]	B ₂ [in]
45°	136.616.xx.B2	●	●	0.02	12	0.4	1.5	12	0.6	1.4	12	0.9	1.5	15	1.0	1.6	20	1	3	5
					17	0.5	1.8	15	0.6	1.7	17	0.9	1.8	20	1.0	2.0	32	2	4	5
					23	0.5	2.2	20	0.7	2.1	23	0.9	2.2	26	1.0	2.4	46	3	4	5
					29	0.6	2.5	26	0.7	2.5	29	1.0	2.5	32	1.0	2.7	58	4	4	6
					35	0.5	2.9	32	0.7	2.8	35	1.0	2.9	38	1.0	3.1	73	5	4	6
					41	0.6	3.2	38	0.7	3.2	41	1.0	3.2	44	1.0	3.4	-	-	-	-
					46	0.6	3.6	44	0.7	3.5	46	1.0	3.6	49	1.0	3.8	-	-	-	-
					52	0.6	3.9	52	0.7	3.9	52	1.0	3.9	55	1.0	4.1	-	-	-	-
					58	0.6	4.3	58	0.7	4.3	58	1.0	4.3	61	1.0	4.5	-	-	-	-
					64	0.6	4.6	64	0.7	4.6	64	1.0	4.6	67	1.0	4.8	-	-	-	-
					70	0.6	5.0	70	0.7	5.0	70	1.0	4.9	73	1.0	5.2	-	-	-	-
					75	0.6	5.4	75	0.7	5.4	75	1.0	5.4	78	1.0	5.5	-	-	-	-
					81	0.6	5.7	81	0.7	5.7	81	1.0	5.7	84	1.0	5.9	-	-	-	-
					87	0.6	6.0	87	0.7	6.0	87	1.0	6.0	87	1.0	6.0	-	-	-	-





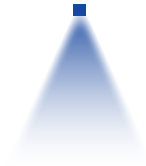
Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions									
	Type	Material number			10									20			40			60			p air [psi]	p water [psi]	B ₁ [in]	B ₂ [in]
		1Y	16		p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]										
		Stainless steel 316L	Stainless steel 303																							
45°	136.635.xx.B2	●	●	0.02	12	0.63	1.5	12	0.91	1.4	12	1.3	1.4	15	1.4	1.6	20	1	3	5						
					17	0.69	1.8	17	0.94	1.8	17	1.3	1.8	20	1.4	2.0	32	2	4	5						
					23	0.8	2.2	23	1.0	2.2	23	1.3	2.2	26	1.4	2.4	46	3	4	5						
					29	0.8	2.5	29	1.0	2.5	30	1.3	2.5	32	1.4	2.7	58	4	4	6						
					35	0.8	2.9	35	1.0	2.9	35	1.4	2.9	38	1.5	3.1	73	5	4	6						
					41	0.8	3.2	41	1.0	3.2	41	1.4	3.2	44	1.5	3.4	-	-	-	-						
					46	0.8	3.6	46	1.0	3.6	46	1.4	3.6	49	1.5	3.8	-	-	-	-						
					52	0.8	3.9	52	1.0	3.9	52	1.4	3.9	55	1.5	4.1	-	-	-	-						
					58	0.8	4.3	58	1.0	4.2	58	1.4	4.3	61	1.5	4.5	-	-	-	-						
					64	0.8	4.6	64	1.0	4.6	64	1.4	4.6	67	1.5	4.8	-	-	-	-						
					70	0.8	4.9	70	1.0	4.9	70	1.4	4.9	73	1.5	5.1	-	-	-	-						
					75	0.8	5.3	75	1.0	5.3	75	1.4	5.3	78	1.5	5.5	-	-	-	-						
					81	0.8	5.7	81	1.0	5.7	81	1.4	5.7	84	1.5	5.8	-	-	-	-						
					87	0.8	6.0	87	1.0	6.0	87	1.4	6.0	87	1.5	6.0	-	-	-	-						
	136.654.xx.B2	●	●	0.03	12	1.4	1.4	12	1.9	1.4	17	2.7	1.8	23	2.9	2.2	20	1	4	5						
					17	1.5	1.8	17	2.0	1.8	23	2.7	2.2	29	3.0	2.5	32	2	4	6						
					23	1.5	2.2	23	2.0	2.2	29	2.7	2.5	35	3.0	2.9	46	3	4	6						
					29	1.6	2.5	29	2.1	2.5	35	2.8	2.9	41	3.0	3.2	58	4	4	6						
					35	1.6	2.9	35	2.1	2.9	41	2.8	3.2	46	3.0	3.6	73	5	4	6						
					41	1.7	3.2	41	2.1	3.2	46	2.8	3.6	52	3.0	3.9	-	-	-	-						
					46	1.7	3.6	46	2.1	3.6	52	2.8	3.9	58	3.0	4.2	-	-	-	-						
					52	1.7	3.9	52	2.1	3.9	58	2.8	4.2	64	3.0	4.6	-	-	-	-						
					58	1.7	4.2	58	2.1	4.2	64	2.8	4.6	70	3.0	4.9	-	-	-	-						
					64	1.7	4.6	64	2.1	4.6	70	2.8	4.9	75	3.0	5.3	-	-	-	-						
					70	1.7	4.9	70	2.1	4.9	75	2.8	5.3	81	3.0	5.7	-	-	-	-						
					75	1.6	5.3	75	2.1	5.3	81	2.8	5.7	87	2.9	5.9	-	-	-	-						
					81	1.6	5.7	81	2.1	5.7	87	2.7	6.0	-	-	-	-	-	-	-						
					87	1.5	6.0	87	2.0	6.0	-	-	-	-	-	-	-	-	-	-						
60°	136.626.xx.B2	●	●	0.02	12	0.5	1.6	12	0.7	1.6	12	0.9	1.6	12	1.0	1.6	23	1	3	5						
					17	0.5	2.1	17	0.7	2.1	17	1.0	2.1	17	1.0	2.1	35	2	4	6						
					23	0.6	2.5	23	0.7	2.5	23	1.0	2.5	23	1.0	2.5	46	3	4	6						
					29	0.6	2.9	29	0.7	2.9	29	1.0	2.9	29	1.0	2.9	58	4	4	6						
					35	0.6	3.3	35	0.8	3.3	35	1.0	3.3	35	1.0	3.3	75	5	4	6						
					41	0.6	3.7	41	0.8	3.7	41	1.0	3.7	41	1.1	3.7	-	-	-	-						
					46	0.6	4.1	46	0.8	4.1	46	1.0	4.1	46	1.1	4.1	-	-	-	-						
					52	0.6	4.5	52	0.8	4.5	52	1.0	4.5	52	1.1	4.5	-	-	-	-						
					58	0.6	4.9	58	0.8	4.9	58	1.0	4.9	58	1.1	4.9	-	-	-	-						
					64	0.6	5.3	64	0.8	5.3	64	1.0	5.3	64	1.1	5.3	-	-	-	-						
					70	0.6	5.7	70	0.8	5.7	70	1.0	5.7	70	1.1	5.7	-	-	-	-						
					75	0.6	6.1	75	0.8	6.1	75	1.0	6.1	75	1.1	6.1	-	-	-	-						
					81	0.6	6.6	81	0.8	6.5	81	1.0	6.5	81	1.1	6.5	-	-	-	-						
					87	0.6	6.9	87	0.8	6.9	87	1.0	6.9	87	1.1	6.9	-	-	-	-						





Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions									
	Type	Material number			10						20						40						60			
		1Y	16		p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [psi]	B ₁ [in]	B ₂ [in]						
		Stainless steel 316L	Stainless steel 303																							
60°	136.645.xx.B2	●	●	0.02	12	40	1.6	12	0.97	1.6	15	1.4	1.9	1.00	1.5	1.8	23	1	4	6						
					17	41	2.1	17	1.02	2.1	20	1.4	2.3	1.40	1.5	2.3	35	2	4	6						
					23	45	2.5	23	1.1	2.5	26	1.4	2.7	1.80	1.5	2.7	46	3	5	6						
					29	47	2.9	29	1.1	2.9	32	1.4	3.1	2.20	1.5	3.1	58	4	5	6						
					35	49	3.3	35	1.1	3.3	38	1.4	3.5	2.60	1.5	3.5	75	5	5	6						
					41	49	3.6	41	1.1	3.7	44	1.5	3.9	3.00	1.5	3.9	-	-	-	-						
					46	50	4.1	46	1.1	4.1	49	1.5	4.2	3.40	1.6	4.3	-	-	-	-						
					52	50	4.5	52	1.1	4.5	55	1.5	4.7	3.80	1.6	4.7	-	-	-	-						
					58	51	4.9	58	1.1	4.9	61	1.5	5.1	4.20	1.6	5.1	-	-	-	-						
					64	51	5.3	64	1.1	5.3	67	1.5	5.5	4.60	1.6	5.5	-	-	-	-						
					70	52	5.7	70	1.2	5.7	73	1.5	5.9	5.00	1.6	5.9	-	-	-	-						
					75	52	6.1	75	1.1	6.1	78	1.5	6.3	5.40	1.6	6.3	-	-	-	-						
	136.664.xx.B2	●	●	0.03	81	52	6.5	81	1.1	6.5	84	1.5	6.7	5.80	1.6	6.7	-	-	-	-						
					87	52	6.9	87	1.2	6.9	87	1.5	6.9	6.00	1.6	6.9	-	-	-	-						
					12	79	1.6	15	2.0	1.9	15	2.8	1.9	1.00	3.0	1.9	23	1	4	6						
					17	86	2.1	20	2.1	2.3	20	2.8	2.3	1.40	3.0	2.3	35	2	5	6						
					23	89	2.5	26	2.1	2.7	26	2.9	2.7	1.80	3.1	2.6	46	3	6	7						
					29	93	2.9	32	2.2	3.1	32	2.9	3.1	2.20	3.1	3.1	58	4	6	7						
					35	96	3.3	38	2.2	3.5	38	2.9	3.5	2.60	3.1	3.5	75	5	6	8						
					41	98	3.7	44	2.3	3.9	44	2.9	3.9	3.00	3.1	3.9	-	-	-	-						
					46	101	4.1	49	2.3	4.3	49	3.0	4.3	3.40	3.2	4.3	-	-	-	-						
					52	101	4.5	55	2.3	4.7	55	3.0	4.7	3.80	3.2	4.7	-	-	-	-						
					58	102	4.9	61	2.3	5.1	61	3.0	5.1	4.20	3.2	5.1	-	-	-	-						
					64	103	5.3	67	2.3	5.5	67	3.0	5.5	4.60	3.2	5.5	-	-	-	-						
	136.673.xx.B2	●	●	0.04	70	103	5.7	73	2.3	5.9	73	3.0	5.9	5.00	3.2	5.9	-	-	-	-						
					75	104	6.1	78	2.3	6.3	78	3.0	6.3	5.40	3.2	6.3	-	-	-	-						
					81	103	6.5	84	2.3	6.7	84	3.0	6.7	5.80	3.2	6.7	-	-	-	-						
					87	104	6.9	87	2.3	6.9	87	3.0	6.9	6.00	3.2	6.9	-	-	-	-						
					9	201	3.3	15	4.89	4.5	23	6.6	10.20	2.00	7.0	6.9	23	1	5	6						
					15	207	4.5	20	4.89	5.5	29	6.5	11.70	6.9	7.0	7.9	35	2	5	6						
					20	207	5.5	26	4.8	6.5	35	6.5	13.30	7.8	6.8	8.9	46	3	5	6						
					26	205	6.5	32	4.7	7.5	41	6.2	15.10	8.9	6.5	9.8	58	4	5	6						
					32	198	7.4	38	4.6	8.4	46	5.9	16.60	9.8	6.2	10.8	75	5	5	7						
					38	198	8.4	44	4.4	9.4	52	5.6	18.40	10.8	5.8	11.7	-	-	-	-						
					44	193	11.1	49	4.2	10.2	58	5.3	19.80	11.7	5.4	12.7	-	-	-	-						
					49	187	10.2	55	4.0	11.2	64	5.0	21.50	12.7	5.1	13.6	-	-	-	-						
					55	182	11.2	61	3.9	12.2	70	4.6	23.20	13.7	4.8	14.5	-	-	-	-						
					61	177	12.2	67	3.7	13.1	75	4.4	24.80	14.6	4.5	15.5	-	-	-	-						
					67	171	13.2	73	3.5	14.1	81	4.1	26.40	15.5	4.2	16.5	-	-	-	-						
					73	159	14.1	78	3.2	15.1	84	4.0	27.30	16.1	-	-	-	-	-	-						
					78	151	15.1	84	3.0	16.0	87	3.9	28.00	16.5	-	-	-	-	-	-						
					84	139	16.0	87	2.9	16.5	-	-	-	-	-	-	-	-	-	-						
					87	130	16.5	-	-	-	-	-	-	-	-	-	-	-	-	-						





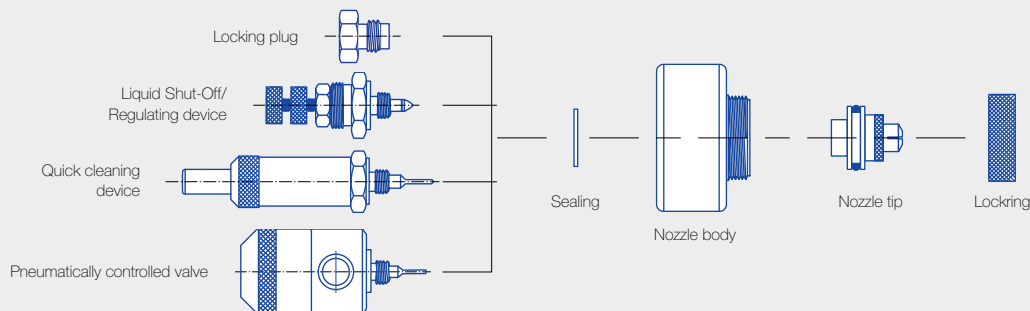
Spray angle	Ordering number			Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions			
	Type	Material number			10			20			40			60						
		1Y	16		p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇ _n air [SCFM]				
		Stainless steel 316L	Stainless steel 303																	
60°	136.682.xx.B2	●	●	0.06	15	5.9	4.4	20	7.6	5.5	26	10.9	6.5	29	11.6	6.9	23	1	4	6
					20	5.3	5.5	26	6.9	6.4	32	9.2	7.4	35	10.3	7.9	35	2	5	6
					26	5.0	6.5	32	6.3	7.4	38	8.8	8.4	41	9.3	8.9	46	3	5	6
					32	4.7	7.4	38	5.9	8.4	44	8.0	9.4	46	8.5	9.8	58	4	5	6
					38	4.5	8.4	44	5.6	9.4	49	7.5	10.3	52	8.0	10.8	75	5	5	7
					44	4.4	9.4	49	5.3	10.3	55	7.0	11.2	58	7.5	11.7	–	–	–	–
					49	4.2	10.3	55	5.1	11.2	61	6.7	12.2	64	7.1	12.7	–	–	–	–
					55	4.2	11.2	61	5.0	12.2	67	6.4	13.1	70	6.8	13.6	–	–	–	–
					61	4.2	12.2	67	4.9	13.1	73	6.1	14.1	75	6.4	14.6	–	–	–	–
					67	4.2	13.1	73	4.8	14.1	78	5.8	15.0	81	6.2	15.5	–	–	–	–
					73	4.0	14.1	78	4.6	14.9	84	5.6	16.0	87	5.9	16.5	–	–	–	–
					78	3.7	15.0	84	4.2	16.0	87	5.5	16.5	–	–	–	–	–	–	–
					84	3.2	16.0	87	3.9	16.5	–	–	–	–	–	–	–	–	–	–
					87	2.9	16.5	–	–	–	–	–	–	–	–	–	–	–	–	–
	136.691.xx.B2	●	●	0.10	20	13.7	8.1	29	17.8	10.3	38	24.4	12.5	38	27.0	12.5	23	1	6	8
					26	13.2	9.6	35	17.1	11.8	44	23.2	13.9	44	25.7	13.9	35	2	6	8
					32	12.8	11.1	41	16.4	13.2	49	22.3	15.3	49	24.4	15.4	46	3	6	8
					38	12.5	12.5	46	16.0	14.7	55	21.3	16.8	55	23.4	16.8	58	4	6	8
					44	12.3	13.9	52	15.3	16.1	61	20.3	18.2	61	22.5	18.2	75	5	6	8
					49	12.0	15.4	58	14.8	17.5	67	19.7	19.7	67	21.5	19.7	–	–	–	–
					55	11.7	16.8	64	14.3	18.9	73	18.8	21.1	73	20.7	21.1	–	–	–	–
					61	11.3	18.2	70	13.8	20.4	78	18.0	22.5	78	19.6	22.5	–	–	–	–
					67	11.0	19.7	75	13.2	21.8	84	17.0	24.0	84	18.8	24.0	–	–	–	–
					73	10.5	21.1	81	12.7	23.2	87	16.7	24.7	87	18.2	24.7	–	–	–	–
					78	10.3	22.5	87	12.3	24.7	–	–	–	–	–	–	–	–	–	–
					81	10.2	23.2	–	–	–	–	–	–	–	–	–	–	–	–	–

Ordering Type + Material no. = Ordering no.
example: 136.682.xx.B2 + 1Y = 136.682.1Y.B2

Accessories for pneumatic atomizing nozzles

Series 136.1 to 136.6

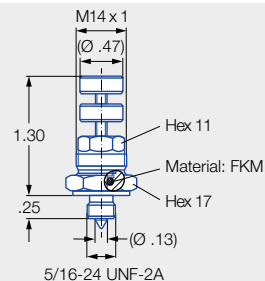
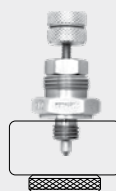
Overview of accessories



Regulating device and shut-off needle

Enables manual regulation of the flow rate and closing of the nozzle.

Material: Stainless steel 303
Weight: .07 lb



Ordering no.

Type

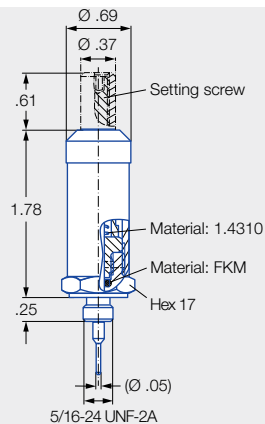
013.600.16

Suitable for
all nozzles of
series 136

Regulating device with quick-cleaning needle

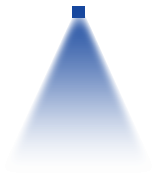
Enables manual regulation of the flow rate and cleaning of the nozzle orifice.

Material: Stainless steel 303
Weight: .17 lb



Ordering number	For nozzles	Needle diameter D [in]
Type		
013.601.16.30	136.xx1	0.08
013.602.16.30	136.xx2	0.05
013.603.16.30	136.xx3	0.03
013.604.16.30	136.xx4	0.02
013.605.16.30	136.xx5	0.02
013.606.16.30	136.xx6	0.01

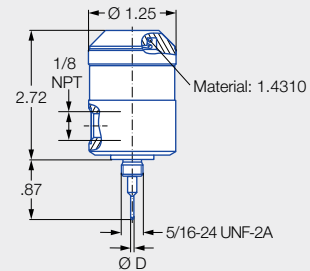




Pneumatically controlled valve. Opening pressure 30 psi, max. 180 cycles/min.

External control system via separate compressed air connection for switching the nozzle on and off.

Material: Stainless steel 303
Weight: .51 lb

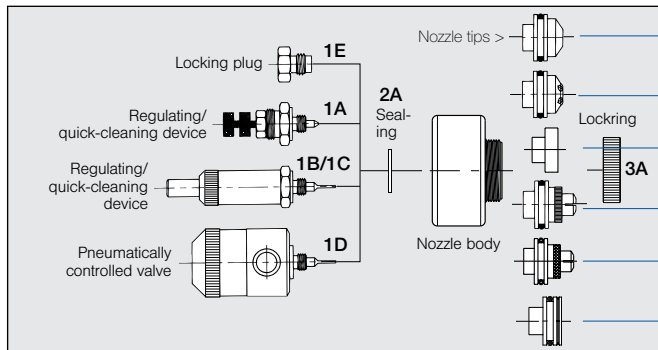


Ordering number		Needle diameter D [in]
Type	For nozzles	
013.601.16.10	136.xx1	0.08
013.602.16.10	136.xx2	0.05
013.603.16.10	136.xx3	0.03
013.604.16.10	136.xx4	0.02
013.605.16.10	136.xx5	0.02
013.606.16.10	136.xx6	0.01

1E for Series 136/166
Locking plug
156. 000. 1Y. 00. 04

2A for Series 136
Seal
095. 015. 7A. 03. 04

3A for Series 136/166
Lockring
136. 000. 1Y. 00. 07



Nozzle tips*
Series 136.1/166.1
136. xxx. 1Y. 00. 03
Series 136.2/166.2
136. xxx. 1Y. 00. 03
Series 136.3/166.3
136. xxx. 1Y. 00. 03
Series 136.4/166.4
136. xxx. 1Y. 00. 03
Series 136.5/166.5
136. xxx. 1Y. 00. 03
Series 136.6/166.6
136. xxx. 1Y. 00. 03

* Use the 3 digits from the full nozzle assembly for the spare tip part number
Example:
136.414.17.B2

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:

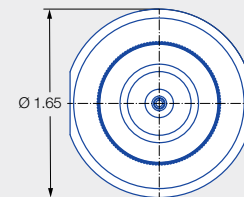
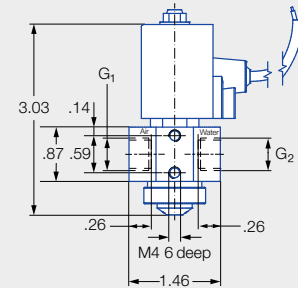
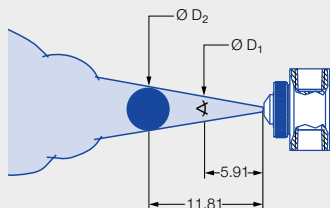
- Humidification
- Cooling

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



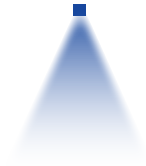
Series 166.1



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		10			20			40			60						
		16		p air [psi]	V̇ water [gal/h]	V̇n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇n air [SCFM]	p air [psi]	V̇ water [gal/h]	V̇n air [SCFM]				
		Stainless steel 303																	
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

Pneumatic atomizing nozzles, wide full cone, pressure principle, internal mixing Series 166.2

Features:

- Version with magnetic valve
- Fine full cone atomization
- Pressure principle
- Internal mixing
- Extra wide spray angle of 60°

Applications:

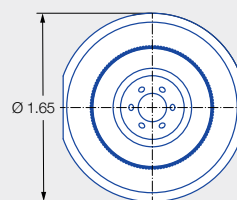
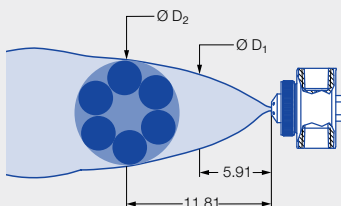
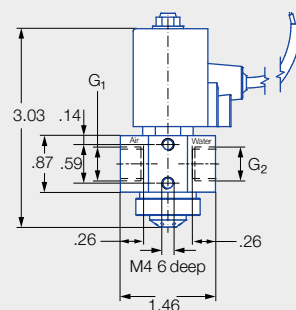
- Humidification of air
- Cooling

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 166.2



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]	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°	166.215.xx.B2	●	0.02	15	0.8	0.8		23	1.5	1.0		41	2.2	1.4		55	2.5	1.8	
				17	0.5	0.9		26	1.3	1.1		46	1.9	1.6		61	2.2	2.1	
				20	0.2	1.1		29	1.0	1.2		52	1.5	1.9		67	1.8	2.3	
				–	–	–		32	0.7	1.4		58	1.1	2.1		73	1.4	2.5	
				–	–	–		35	0.4	1.5		64	0.6	2.4		78	1.0	2.8	
				–	–	–		38	0.2	1.6		70	0.2	2.6		84	0.6	3.1	
				–	–	–		–	–	–		73	0.1	2.7		87	0.4	3.3	
				–	–	–		–	–	–		–	–	–		–	–	–	
	166.222.xx.B2	●	0.04	12	4.6	1.6		23	6.8	2.4		44	10.7	3.4		55	14.5	3.8	
				15	1.6	2.5		26	3.9	3.1		46	8.3	4.1		58	12.0	4.3	
				–	–	–		29	1.8	3.9		49	5.9	4.8		61	9.9	5.0	
				–	–	–		32	0.5	4.8		52	3.9	5.6		64	7.8	5.7	
				–	–	–		–	–	–		55	2.2	6.5		67	5.7	6.6	
				–	–	–		–	–	–		58	1.2	7.2		70	4.0	7.3	
				–	–	–		–	–	–		–	–	–		73	2.6	8.1	
				–	–	–		–	–	–		–	–	–		75	1.6	8.9	
	166.231.xx.B2	●	0.06	–	–	–		–	–	–		–	–	–		78	0.8	9.7	
				23	6.8	3.0		38	11.7	4.1		52	24.8	4.6		61	35.1	4.3	
				29	4.7	3.6		44	8.7	4.8		58	20.7	5.5		67	31.0	5.3	
				35	3.0	4.2		49	6.5	5.4		64	17.4	6.2		73	26.7	6.1	
				41	1.8	4.8		55	4.8	6.0		70	14.5	7.0		78	23.2	6.9	
				–	–	–		61	3.5	6.6		75	12.0	7.7		84	20.2	7.8	
				–	–	–		67	2.5	7.1		81	10.0	8.3		87	18.8	8.1	
				–	–	–		–	–	–		87	9.5	8.5		–	–	–	

Ordering Type + Material no. = Ordering no.
 example: 166.215.xx.B2 + 16 = 166.215.16.B2

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:

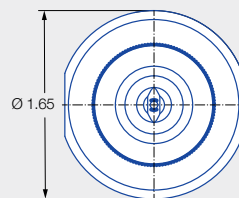
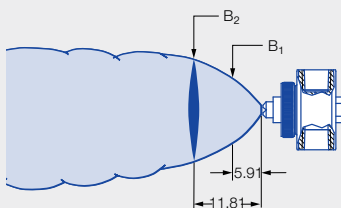
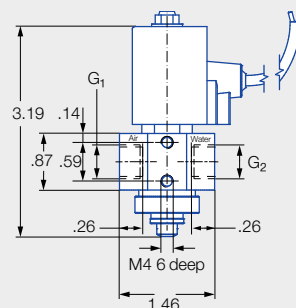
- Belt humidification
- Cooling
- Humidification of goods

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



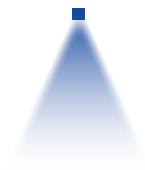
Series 166.4



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																	
		16																	
		Stainless steel 303																	
				10			20			40			60						
				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]	p air [psi]	p water [psi]	B ₁ [in]	B ₂ [in]
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

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

Features:

- Version with magnetic valve
- Fine flat fan atomization
- Liquid pressure principle
- External mixing

Applications:

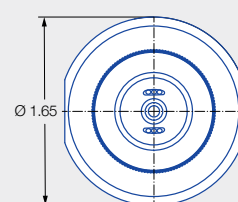
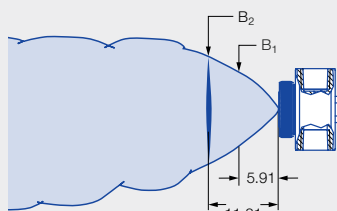
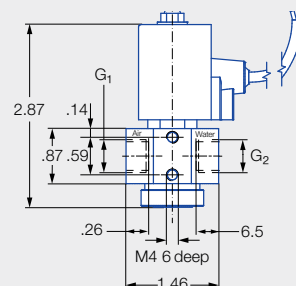
- Belt humidification
- Cooling
- Humidification of goods
- Atomization of viscous liquids

Technical data:

- Operating pressure: 0–8 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 166.6



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			0.30			0.35			p air [psi]	p water [bar]	B ₁ [in]	B ₂ [mm]
		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°	166.616.xx.B2	●	0.02	12	0.4	1.5	12	0.6	1.4	12	0.9	1.5	15	1.0	1.6	20	1	3	5
				17	0.5	1.8	15	0.6	1.7	17	0.9	1.8	20	1.0	2.0	32	2	4	5
				23	0.5	2.2	20	0.7	2.1	23	0.9	2.2	26	1.0	2.4	46	3	4	5
				29	0.6	2.5	26	0.7	2.5	29	1.0	2.5	32	1.0	2.7	58	4	4	6
				35	0.5	2.9	32	0.7	2.8	35	1.0	2.9	38	1.0	3.1	73	5	4	6
				41	0.6	3.2	38	0.7	3.2	41	1.0	3.2	44	1.0	3.4	–	–	–	–
				46	0.6	3.6	44	0.7	3.5	46	1.0	3.6	49	1.0	3.8	–	–	–	–
				52	0.6	3.9	52	0.7	3.9	52	1.0	3.9	55	1.0	4.1	–	–	–	–
				58	0.6	4.3	58	0.7	4.3	58	1.0	4.3	61	1.0	4.5	–	–	–	–
				64	0.6	4.6	64	0.7	4.6	64	1.0	4.6	67	1.0	4.8	–	–	–	–
				70	0.6	5.0	70	0.7	5.0	70	1.0	4.9	73	1.0	5.2	–	–	–	–
				75	0.6	5.4	75	0.7	5.4	75	1.0	5.4	78	1.0	5.5	–	–	–	–
				81	0.6	5.7	81	0.7	5.7	81	1.0	5.7	84	1.0	5.9	–	–	–	–
				87	0.6	6.0	87	0.7	6.0	87	1.0	6.0	87	1.0	6.0	–	–	–	–
	166.654.xx.B2	●	0.03	12	1.4	1.4	12	1.9	1.4	17	2.7	1.8	23	2.9	2.2	20	1	3	5
				17	1.5	1.8	17	2.0	1.8	23	2.7	2.2	29	3.0	2.5	32	2	4	5
				23	1.5	2.2	23	2.0	2.2	29	2.7	2.5	35	3.0	2.9	46	3	4	5
				29	1.6	2.5	29	2.1	2.5	35	2.8	2.9	41	3.0	3.2	58	4	4	6
				35	1.6	2.9	35	2.1	2.9	41	2.8	3.2	46	3.0	3.6	73	5	4	6
				41	1.7	3.2	41	2.1	3.2	46	2.8	3.6	52	3.0	3.9	–	–	–	–
				46	1.7	3.6	46	2.1	3.6	52	2.8	3.9	58	3.0	4.2	–	–	–	–
				52	1.7	3.9	52	2.1	3.9	58	2.8	4.2	64	3.0	4.6	–	–	–	–
				58	1.7	4.2	58	2.1	4.2	64	2.8	4.6	70	3.0	4.9	–	–	–	–
				64	1.7	4.6	64	2.1	4.6	70	2.8	4.9	75	3.0	5.3	–	–	–	–
				70	1.7	4.9	70	2.1	4.9	75	2.8	5.3	81	3.0	5.7	–	–	–	–
				75	1.6	5.3	75	2.1	5.3	81	2.8	5.7	87	2.9	5.9	–	–	–	–
				81	1.6	5.7	81	2.1	5.7	87	2.7	6.0	–	–	–	–	–	–	–
				87	1.5	6.0	87	2.0	6.0	–	–	–	–	–	–	–	–	–	–



Spray angle	Ordering number		Narrowest free cross section Ø [in]	Liquid pressure p [psi]												Spray dimensions							
	Type	Material number														p air [psi]	p water [bar]	B ₁ [in]	B ₂ [mm]				
		16																					
		Stainless steel 303		10			20			0.30			0.35										
			p air [psi]	ṽ water [gal/h]	ṽ air [SCFM]	p air [psi]	ṽ water [gal/h]	ṽ air [SCFM]	p air [psi]	ṽ water [gal/h]	ṽ air [SCFM]	p air [psi]	ṽ water [gal/h]	ṽ air [SCFM]									
60°	166.626.xx.B2	●	0.02	12	0.5	1.6	12	0.7	1.6	12	0.9	1.6	0.80	12	1.6	23	1	3	5				
				17	0.5	2.1	17	0.7	2.1	17	1.0	2.1	1.20	17	2.1	35	2	4	6				
				23	0.6	2.5	23	0.7	2.5	23	1.0	2.5	1.60	23	2.5	46	3	4	6				
				29	0.6	2.9	29	0.7	2.9	29	1.0	2.9	2.00	29	2.9	58	4	4	6				
				35	0.6	3.3	35	0.8	3.3	35	1.0	3.3	2.40	35	3.3	75	5	4	6				
				41	0.6	3.7	41	0.8	3.7	41	1.0	3.7	2.80	41	3.7	—	—	—	—				
				46	0.6	4.1	46	0.8	4.1	46	1.0	4.1	3.20	46	4.1	—	—	—	—				
				52	0.6	4.5	52	0.8	4.5	52	1.0	4.5	3.60	52	4.5	—	—	—	—				
				58	0.6	4.9	58	0.8	4.9	58	1.0	4.9	4.00	58	4.9	—	—	—	—				
				64	0.6	5.3	64	0.8	5.3	64	1.0	5.3	4.40	64	5.3	—	—	—	—				
				70	0.6	5.7	70	0.8	5.7	70	1.0	5.7	4.80	70	5.7	—	—	—	—				
				75	0.6	6.1	75	0.8	6.1	75	1.0	6.1	5.20	75	6.1	—	—	—	—				
				81	0.6	6.6	81	0.8	6.5	81	1.0	6.5	5.60	81	6.5	—	—	—	—				
				87	0.6	6.9	87	0.8	6.9	87	1.0	6.9	6.00	87	6.9	—	—	—	—				
	166.682.xx.B2	●	0.06	15	5.9	4.4	20	7.6	5.5	26	10.9	6.5	2.00	29	6.9	23	1	4	6				
				20	5.3	5.5	26	6.9	6.4	32	9.2	7.4	2.40	35	7.9	35	2	5	6				
				26	5.0	6.5	32	6.3	7.4	38	8.8	8.4	2.80	41	8.9	46	3	5	6				
				32	4.7	7.4	38	5.9	8.4	44	8.0	9.4	3.20	46	9.8	58	4	5	6				
				38	4.5	8.4	44	5.6	9.4	49	7.5	10.3	3.60	52	10.8	75	5	5	7				
				44	4.4	9.4	49	5.3	10.3	55	7.0	11.2	4.00	58	11.7	—	—	—	—				
				49	4.2	10.3	55	5.1	11.2	61	6.7	12.2	4.40	64	12.7	—	—	—	—				
				55	4.2	11.2	61	5.0	12.2	67	6.4	13.1	4.80	70	13.6	—	—	—	—				
				61	4.2	12.2	67	4.9	13.1	73	6.1	14.1	5.20	75	14.6	—	—	—	—				
				67	4.2	13.1	73	4.8	14.1	78	5.8	15.0	5.60	81	15.5	—	—	—	—				
				73	4.0	14.1	78	4.6	14.9	84	5.6	16.0	6.00	87	16.5	—	—	—	—				
				78	3.7	15.0	84	4.2	16.0	87	5.5	16.5	—	—	—	—	—	—	—				
				84	3.2	16.0	87	3.9	16.5	—	—	—	—	—	—	—	—	—	—				
				87	2.9	16.5	—	—	—	—	—	—	—	—	—	—	—	—	—				
	166.691.xx.B2	●	0.10	20	13.7	8.1	29	17.8	10.3	38	24.4	12.5	2.60	38	12.5	23	1	6	8				
				26	13.2	9.6	35	17.1	11.8	44	23.2	13.9	3.00	44	13.9	35	2	6	8				
				32	12.8	11.1	41	16.4	13.2	49	22.3	15.3	3.40	49	15.4	46	3	6	8				
				38	12.5	12.5	46	16.0	14.7	55	21.3	16.8	3.80	55	16.8	58	4	6	8				
				44	12.3	13.9	52	15.3	16.1	61	20.3	18.2	4.20	61	18.2	75	5	6	8				
				49	12.0	15.4	58	14.8	17.5	67	19.7	19.7	4.60	67	19.7	—	—	—	—				
				55	11.7	16.8	64	14.3	18.9	73	18.8	21.1	5.00	73	21.1	—	—	—	—				
				61	11.3	18.2	70	13.8	20.4	78	18.0	22.5	5.40	78	22.5	—	—	—	—				
				67	11.0	19.7	75	13.2	21.8	84	17.0	24.0	5.80	84	24.0	—	—	—	—				
				73	10.5	21.1	81	12.7	23.2	87	16.7	24.7	6.00	87	24.7	—	—	—	—				
				78	10.3	22.5	87	12.3	24.7	—	—	—	—	—	—	—	—	—	—				
				81	10.2	23.2	—	—	—	—	—	—	—	—	—	—	—	—	—				

Ordering Type + Material no. = Ordering no.
example: 166.626.xx.B2 + 16 = 166.626.16.B2

Pneumatic atomizing nozzles, full cone, siphon principle, internal mixing Series 140

Features:

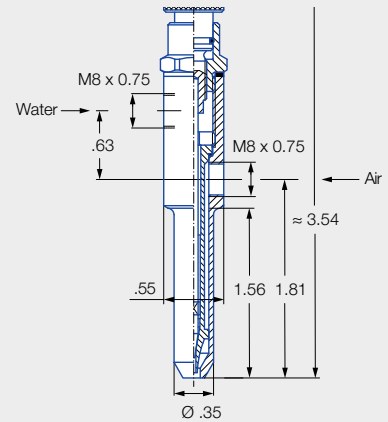
- Particularly fine full cone atomization
- Siphon principle
- Internal mixing
- Integrated regulating device
- Material: Brass

Applications:

- Lubrication
- Cooling
- Humidification



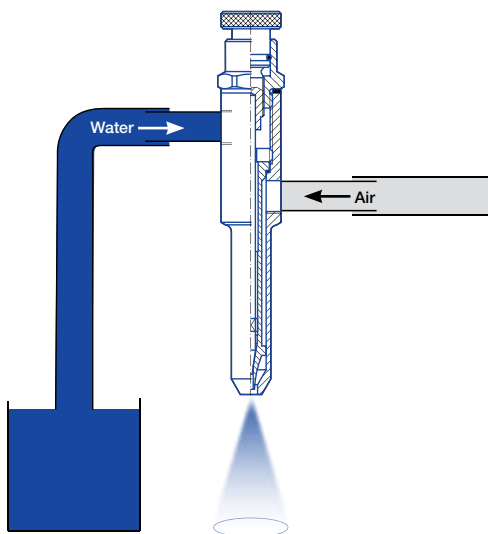
Series 140



Material	Weight [lb]
Brass	0.07

Spray angle	Ordering number	Narrowest free cross section Ø [in]		Hs Aspiration height [in WS]	Flow rate $\dot{V}_W$ = water $\dot{V}_L$ = air p [psi] air pressure							
					7		15		30		45	
		Water	Air		$\dot{V}_W$ [gal/h]	$\dot{V}_L$ [SCFM]	$\dot{V}_W$ [gal/h]	$\dot{V}_L$ [SCFM]	$\dot{V}_W$ [gal/h]	$\dot{V}_L$ [SCFM]	$\dot{V}_W$ [gal/h]	$\dot{V}_L$ [SCFM]
20°–30°	140.252.30.01	0.02	0.03	20	–	–	1.2	2.4	2.1	3.5	2.8	4.7
		0.02	0.03	8	1.2	1.50	1.8	2.4	2.6	3.5	3.2	4.7

Assembly scheme/Accessories

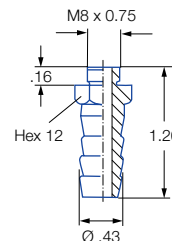


Accessories:

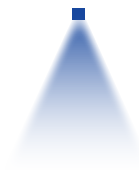
- Gasket
014.040.72
 7.8 x 12 x 1 (EWP 210)



- Nipple
014.010.30.04
 (Material: Brass)
 Weight: .04 lb



Pneumatic atomizing nozzles for atomizing viscous media Series 176 ViscoMist



The ViscoMist™ series offers independent regulation of both atomizing air and fan air, which provides the user with infinite control over the viscous fluid's spray pattern and roplet size.

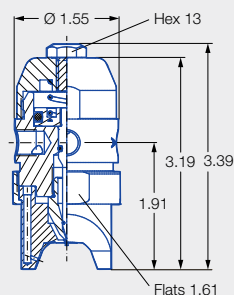
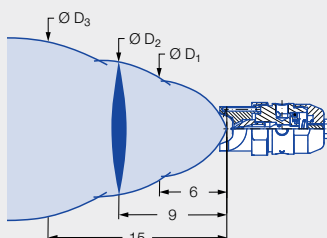
The ViscoMist™ nozzle features a standard 'Liquid Shut-Off/Clean-Out Needle' function. This design element activates and deactivates the liquid supply, while simultaneously removing excess fluid from the fluid nozzle preventing clogging. This feature is especially vital when the viscous liquids are being applied in continuous process environments.

The modular design of the ViscoMist™ allows maximum flexibility to meet the exact spray requirements.

Interchangeable air caps and various flow capacities are available to suit any spraying application needs.



Series 176 ViscoMist



External mixing nozzle for viscous liquids, e.g. for:

- Coating processes
- Moisturising
- Lubrication
- Glazing
- Disinfection

One nozzle – several spray characters:

- Spray characters
 - Solid stream
 - Full cone
 - Flat fan
- Independent regulation of liquid, atomizing air and fan air
- Fluid circulation possible (nozzle body with five connections)

Nozzle sizes:

- Ø 0.01 in to 0.10 in

Valve position:

- Normally closed, fail-safe with loss of air

Signal air pressure:

- Min. 30 psi, max. 45 psi

Cycles per minute:

- 180 cycles/min (short term)

Connection thread:

- 1/8 NPT
- BSPP thread available on request

Weight:

- 1.21 lb

Material:

- 1Y (stainless steel 316L)

Flow rate range:

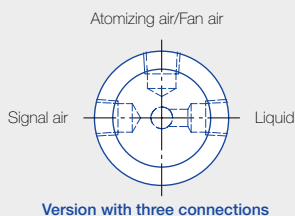
- Water: .55 to 21.4 gal/hr, at 30 psi
- Air 27.5 to 104.12 gal/min in normal condition, at 30 psi

Atomizing air/Signal air/Fan air:

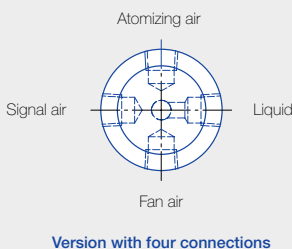
The atomizing air causes the liquid to atomize at the nozzle orifice. The spray character can be adjusted with the fan air to suit the application. The signal air activates the nozzle.

Nozzle body configurations

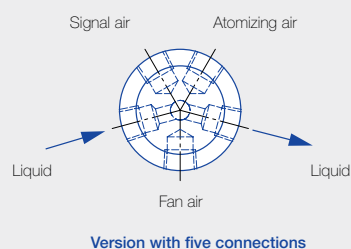
Nozzle body configuration 2

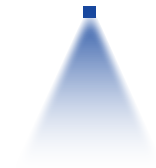


Nozzle body configuration 4



Nozzle body configuration 5





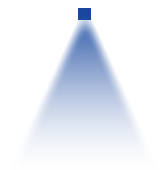
Ordering number	Narrowest free cross section Ø [in]	Liquid		Air			Spray dimensions [in] at distance D ₁ , D ₂ and D ₃																
							Fan air [psi]																
		Liquid pressure p [psi]	V water [gal/h]	Air pressure p air [psi]	Atomizing air [SCFM]	Fan air [SCFM]	Atomizing air [psi]	Liquid pressure p [psi]	0.00*			5			10			15			22		
									Ø D ₁ = 6 in	Ø D ₂ = 9 in	Ø D ₃ = 15 in	Ø D ₁ = 6 in	Ø D ₂ = 9 in	Ø D ₃ = 15 in	Ø D ₁ = 6 in	Ø D ₂ = 9 in	Ø D ₃ = 15 in	Ø D ₁ = 6 in	Ø D ₂ = 9 in	Ø D ₃ = 15 in	Ø D ₁ = 6 in	Ø D ₂ = 9 in	Ø D ₃ = 15 in
Type																							
176.201.1Y.01.00 176.401.1Y.01.00 176.501.1Y.01.00	0.01	2	0.5	2	0.2	0.6	4	5	2	2	4	6	7	8	7	9	11	7	9	10	7	9	11
		10	2	2	3	6		8	11	8	11	13	9	12	13	9	11	13					
		15	–	–	–	7		8	11	8	12	15	9	12	14	10	12	15					
		22	–	–	–	7		8	14	8	10	13	10	12	14	11	13	15					
		15	15	5	2	2	4	4	5	7	5	7	9	6	9	11	7	9	12				
		10		2	2	4	3	4	7	5	7	9	6	8	9	7	9	11					
		15		1	2	3	3	5	7	5	7	10	6	9	11	7	9	13					
		22		–	–	–	4	6	8	6	7	10	7	10	14	7	11	14					
		29	30	5	2	2	4	2	3	4	4	5	6	4	6	7	6	8	9				
		10		2	2	4	2	4	6	3	4	6	4	7	9	6	8	10					
		15		2	2	4	3	4	6	4	5	7	5	8	10	6	8	10					
		22		–	–	–	2	3	5	4	6	7	6	7	9	7	9	12					
		46	40	5	2	2	4	2	2	4	50	4	4	3	5	7	7	6	7				
		10		2	3	4	2	3	4	70	4	5	4	5	7	5	7	7					
		15		2	2	4	2	3	4	80	4	5	4	6	7	5	6	8					
		22		1	2	3	2	3	4	70	4	6	4	6	7	4	7	9					
176.202.1Y.01.00 176.402.1Y.01.00 176.502.1Y.01.00	0.02	2	1.1	2	0.3	0.6	4	5	2	2	4	6	7	11	2	10	12	7	9	11	8	9	12
		10	–	–	–	7		9	10	3	12	14	11	13	16	12	13	16					
		15	–	–	–	6		8	9	3	11	17	12	13	18	12	15	22					
		22	–	–	–	–		–	–	3	11	14	11	13	17	14	16	19					
		15	15	5	2	2	4	4	6	6	5	7	9	6	7	9	7	9	10				
		10		2	2	4	4	5	7	6	7	9	7	9	10	8	9	11					
		15		–	–	–	4	6	8	7	8	11	7	9	13	8	10	13					
		22		–	–	–	–	–	–	7	8	12	8	10	14	10	12	15					
		29	30	5	2	2	3	2	3	4	4	5	7	4	6	7	5	8	9				
		10		2	2	3	3	4	5	4	6	7	6	7	7	6	8	10					
		15		1	2	4	3	4	5	4	6	7	5	7	9	6	8	10					
		22		–	–	–	3	4	6	4	6	9	5	7	9	7	9	12					
		46	40	5	2	2	3	2	3	4	3	4	5	4	6	7	5	6	7				
		10		1	2	4	2	3	4	4	4	5	4	6	7	5	6	8					
		15		2	2	3	2	4	4	4	5	6	5	6	7	6	8	9					
		22		2	2	4	2	4	6	4	5	7	5	7	9	6	7	11					
176.203.1Y.01.00 176.403.1Y.01.00 176.503.1Y.01.00	0.03	2	2.2	2	0.2	0.6	4	5	–	–	–	9	12	16	13	16	19	13	16	20	12	15	18
		4	3.3	4	0.2	0.8		6	–	–	–	9	11	13	12	14	20	16	19	24	17	23	29
		10	5.1	10	0.4	1.3		10	–	–	–	–	–	–	13	16	21	16	18	25	18	21	28
		15	6.3	15	0.5	1.7		13	–	–	–	–	–	–	11	14	18	15	18	24	16	20	23
		20	16	5	2	2	4	6	8	11	7	9	11	9	12	15	11	14	16				
		15		–	–	–	6	8	10	9	12	15	12	14	18	13	15	17					
		10		–	–	–	–	–	–	9	11	16	12	15	20	12	16	19					
		25		8.2	25	0.6	2.3	22	–	–	–	–	–	–	9	11	15	11	15	20	13	17	21

Notice:

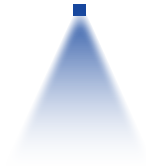
The fourth digit in the order number (2, 4 or 5) stands for the housing variant (for details see Page 139).

* A cone-shaped spray pattern is produced without fan air.





Ordering number	Narrowest free cross section Ø [in]	Liquid		Air			Spray dimensions [in] at distance D ₁ , D ₂ and D ₃																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Notice:

The fourth digit in the order number (2, 4 or 5) stands for the housing variant (for details see Page 139).

* A cone-shaped spray pattern is produced without fan air.





Ordering number	Narrowest free cross section Ø [in]	Liquid		Air			Spray dimensions [in] at distance D ₁ , D ₂ and D ₃																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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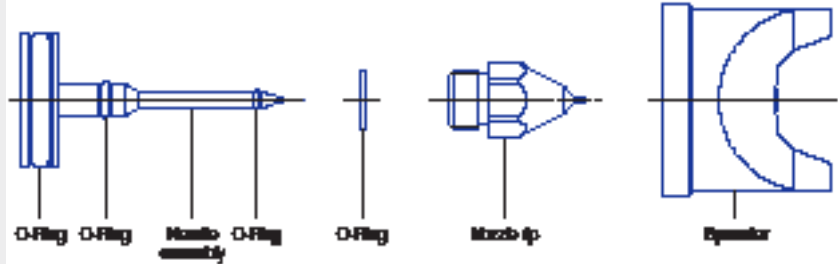
Notice:

The fourth digit in the order number (2, 4 or 5) stands for the housing variant (for details see Page 139).

* A cone-shaped spray pattern is produced without fan air.

Spare parts set for pneumatic atomizing nozzles Series 176 ViscoMist

Overview of the spare parts set and the power set



Spare parts set

Spare parts set for replacing the main wear parts of the nozzle, consisting of:

- Needle (stainless steel 316L)
- O-rings (Viton)
- Nozzle tip (stainless steel 316L)

Power set

Power set for replacing the main wear parts of the nozzle and the air hood, consisting of:

- Needle (stainless steel 316L)
- O-rings (Viton)
- Nozzle tip (stainless steel 316L)
- Spreader (stainless steel 316L)

Ordering number	Narrowest free cross section Ø [in]	For nozzles
Type		
017.601.1Y.01	0.015	176.xx1.1Y.11.00
017.602.1Y.01	0.023	176.xx2.1Y.11.00
017.603.1Y.01	0.03	176.xx3.1Y.11.00
017.604.1Y.01	0.042	176.xx4.1Y.11.00
017.605.1Y.01	0.052	176.xx5.1Y.11.00
017.606.1Y.01	0.067	176.xx6.1Y.11.00
017.607.1Y.01	0.081	176.xx7.1Y.11.00
017.608.1Y.01	0.093	176.xx8.1Y.11.00
017.609.1Y.01	0.100	176.xx9.1Y.11.00

Notice:

Instructions for replacing individual or all components of the nozzles are included in the scope of delivery of the spare parts sets and the power sets.

Ordering number	Narrowest free cross section Ø [in]	For nozzles
Type		
017.601.1Y.00	0.015	176.xx1.1Y.11.00
017.602.1Y.00	0.023	176.xx2.1Y.11.00
017.603.1Y.00	0.031	176.xx3.1Y.11.00
017.604.1Y.00	0.042	176.xx4.1Y.11.00
017.605.1Y.00	0.052	176.xx5.1Y.11.00
017.606.1Y.00	0.067	176.xx6.1Y.11.00
017.607.1Y.00	0.081	176.xx7.1Y.11.00
017.608.1Y.00	0.093	176.xx8.1Y.11.00
017.609.1Y.00	0.100	176.xx9.1Y.11.00

O-ring set

Type	Ordering number	
	Material number	
	7A	6C
	Viton	EPDM
017.600.xx.01.03	●	●

Consisting of
4 O-rings, suitable
for all nozzles of
series 176

Viton (7A) is the standard O-ring material.
EPDM (6C) is optionally available.

Ordering Type + Material no. = Ordering no.
example: 017.600.xx.01.03 + 7A = 017.600.7A.01.03