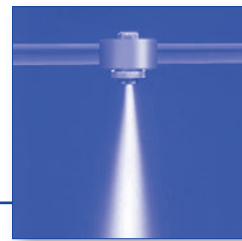


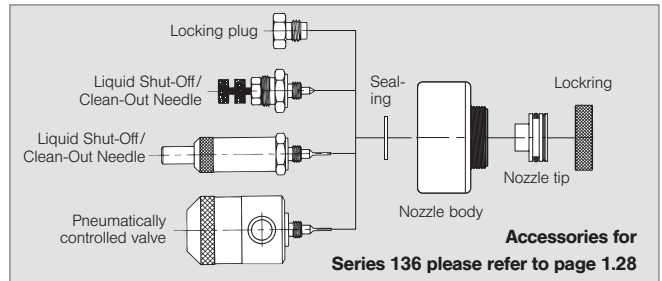
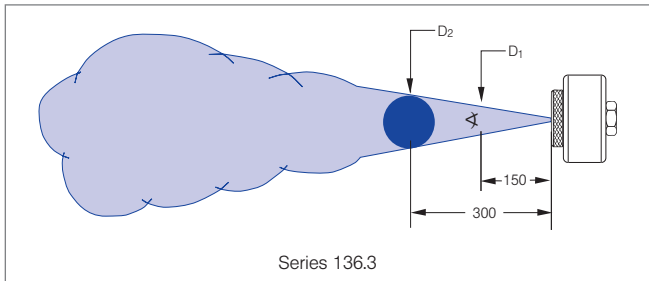
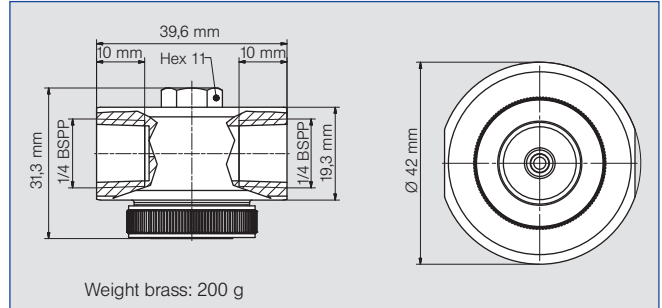


Pneumatic atomizing nozzles, Full cone, siphon principle, external mixing Series 136.3



Particularly fine full cone atomization with air or gas. Siphon principle. External mixing of fluids.

Applications:
Chemical industry, cooling,
atomization of viscous liquids.



Spray angle	Ordering no.		E ∅ [mm]	Air		V̇ Water [l/h]									Spray dimensions					
	Type	Mat. no.		p [bar]	V̇ _n [m³/h]	Water column [mm WS]			Aspiration height [mm WS]					p _{Air} [bar]	Aspiration height [mm WS]	D ₁ [mm]	D ₂ [mm]			
						1Y	35	150	300	450	100	200	300					600	900	
20°	136. 316. xx. A2	○	○	0.4	0.6	0.70	-	1.38	1.32	-	-	-	-	-	1.40	300	60	110		
					0.8	0.90	1.29	1.44	1.38	-	-	-	-	-	3.20	300	60	120		
					1.20	1.10	1.47	1.62	1.53	1.02	0.84	-	-	-	4.80	300	80	135		
					1.40	1.20	1.50	1.68	1.62	1.14	0.96	0.66	-	-	6.00	300	70	120		
					1.80	1.40	1.62	1.80	1.71	1.26	1.11	0.90	-	-	-	-	-	-	-	-
					2.00	1.60	1.68	1.86	1.77	1.32	1.17	0.96	-	-	-	-	-	-	-	-
					2.40	1.80	1.74	1.92	1.86	1.44	1.32	1.14	0.51	-	-	-	-	-	-	-
					2.60	1.90	1.80	1.98	1.89	1.50	1.32	1.20	0.63	-	-	-	-	-	-	-
					3.00	2.10	1.92	2.07	1.95	1.59	1.44	1.29	0.84	0.39	-	-	-	-	-	-
					3.20	2.20	1.95	2.10	1.98	1.65	1.50	1.35	0.96	0.48	-	-	-	-	-	-
					3.60	2.40	2.07	2.19	2.10	1.80	1.65	1.50	1.14	0.72	-	-	-	-	-	-
					3.80	2.60	2.13	2.25	2.16	1.83	1.71	1.59	1.23	0.81	-	-	-	-	-	-
					4.20	2.80	2.22	2.37	2.28	1.95	1.80	1.68	1.38	1.08	-	-	-	-	-	-
					4.40	2.90	2.25	2.40	2.34	1.98	1.89	1.77	1.44	1.14	-	-	-	-	-	-
					4.80	3.10	2.25	2.34	2.28	1.92	1.86	1.77	1.50	1.14	-	-	-	-	-	-
					5.00	3.20	2.25	2.31	2.22	1.89	1.83	1.71	1.41	0.84	-	-	-	-	-	-
5.40	3.40	2.13	2.25	2.16	1.80	1.68	1.56	1.05	0.30	-	-	-	-	-	-					
5.60	3.60	2.07	2.19	2.10	1.74	1.65	1.44	0.72	-	-	-	-	-	-	-					
6.00	3.80	1.98	2.10	1.95	1.56	1.50	1.26	-	-	-	-	-	-	-	-					

E = narrowest free cross section (water)

Continued on next page.

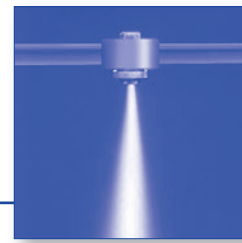
Operational information:

Liquid flow of pneumatic atomizing nozzles with external mixing can be turned down to 0 with air pressure remaining constant.

Example **Type** + **Material no. (xx)** = **Ordering no.**
for ordering: 136. 316. xx. A2 + 1Y = 136. 316. 1Y. A2



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



Spray angle	Ordering no.		E ∅ [mm]	Air		V̇ Water [l/h]							Spray dimensions					
	Type	Mat. no.		p [bar]	V̇ _n [m³/h]	Water column [mm WS]			Aspiration height [mm WS]				p _{Air} [bar]	Aspiration- height [mm WS]	D ₁ [mm]	D ₂ [mm]		
						1Y	35	150	300	450	100	200					300	600
20°	136. 324. xx. A2	○	○	0.7	0.80	0.90	-	-	-	2.49	1.71	-	-	-	1.20	300	60	115
					1.20	1.10	-	-	-	3.12	2.53	1.86	-	-	3.20	300	65	125
					1.40	1.20	-	-	-	3.36	2.78	2.22	-	-	4.80	300	70	135
					1.80	1.50	-	-	-	3.75	3.22	2.67	-	-	6.00	300	80	135
					2.00	1.60	-	-	-	3.96	3.39	2.85	0.66	-				
					2.40	1.80	-	-	-	4.29	3.73	3.21	1.41	-				
					2.60	1.90	-	-	-	4.41	3.91	3.39	1.68	-				
					3.00	2.10	5.43	-	-	4.71	4.18	3.75	2.07	-				
					3.20	2.20	5.55	-	-	4.80	4.31	3.90	2.25	-				
					3.60	2.40	5.82	-	-	5.07	4.56	4.20	2.61	-				
					3.80	2.60	6.03	-	-	5.22	4.72	4.38	2.88	2.10				
					4.20	2.80	6.30	6.66	-	5.64	5.15	4.71	3.21	2.85				
					4.40	2.90	6.36	6.72	7.05	5.88	5.38	4.92	3.60	2.97				
					4.80	3.10	6.27	6.57	6.84	5.97	5.47	5.22	3.93	1.93				
	5.00	3.20	6.12	6.42	6.75	5.88	5.36	5.10	4.05	-								
	5.40	3.40	5.82	6.12	6.48	5.49	5.03	4.71	3.81	-								
	5.60	3.50	5.67	5.97	6.30	5.22	4.84	4.53	3.63	-								
	6.00	3.80	5.31	5.58	6.00	4.80	4.48	4.08	1.92	-								
	136. 334. xx. A2	○	○	0.7	0.60	1.20	-	-	-	2.19	-	-	-	-	0.80	300	65	120
					0.80	1.40	-	-	-	2.64	2.28	1.44	-	-	3.20	300	65	115
					1.20	1.80	-	-	-	3.39	3.00	2.73	0.78	-	4.80	300	70	115
					1.40	2.00	-	-	-	3.69	3.33	3.06	1.11	-	6.00	300	75	120
					1.80	2.30	5.19	-	-	4.20	3.87	3.51	2.16	-				
					2.00	2.50	5.43	5.97	6.42	4.47	4.08	3.78	2.58	0.84				
					2.40	2.80	5.79	6.27	6.72	4.86	4.53	4.20	3.30	1.44				
					2.60	3.00	6.00	6.48	6.90	4.98	4.68	4.41	3.57	1.77				
					3.00	3.40	6.30	6.75	7.14	5.37	5.07	4.71	3.87	2.31				
					3.20	3.50	6.42	6.90	7.29	5.52	5.19	4.89	4.02	2.52				
3.60					3.90	6.75	7.17	7.59	5.82	5.55	5.19	4.29	3.42					
3.80					4.00	6.87	7.32	7.80	6.03	5.73	5.37	4.47	3.81					
4.20					4.40	7.29	7.80	8.34	6.39	6.09	5.79	4.83	4.17					
4.40					4.60	7.62	8.16	8.73	6.69	6.39	6.09	5.13	4.38					
4.80	4.90	8.37	8.85	9.21	7.32	6.99	6.69	5.76	4.86									
5.00	5.10	8.52	8.85	9.15	7.71	7.32	7.05	6.06	5.19									
5.40	5.40	8.34	8.64	8.88	7.71	7.53	7.29	6.48	5.67									
5.60	5.60	8.19	8.49	8.76	7.59	7.41	7.20	6.45	5.73									
6.00	5.90	7.86	8.16	8.43	7.26	7.05	6.84	6.15	5.64									

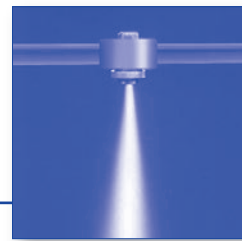
E = narrowest free cross section (water)

Continued on next page.

Example Type + Material no. (xx) = Ordering no.
for ordering: 136. 324. xx. A2 + 1Y = 136. 324. 1Y. A2



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



Spray angle	Ordering no.		E ∅ [mm]	Air		V̇ Water [l/h]							Spray dimensions							
	Type	Mat. no.		p [bar]	V̇ _n [m³/h]	Water column [mm WS]			Aspiration height [mm WS]				p _{Air} [bar]	Aspirati- on- height [mm WS]	D ₁ [mm]	D ₂ [mm]				
			1Y			35	150	300	450	100	200	300					600	900		
20°	136. 342. xx. A2	○	○	1.5	1.40	3.60	-	-	-	8.82	-	-	3.93	-	1.80	300	70	120		
					1.80	4.20	-	-	-	9.45	8.49	7.5	5.22	3.39	3.00	300	70	120		
					2.00	4.50	11.97	-	-	9.75	8.91	7.95	5.76	4.05	4.20	300	70	120		
					2.40	5.20	12.18	-	-	10.26	9.51	8.73	6.75	5.19	6.00	300	70	120		
					2.60	5.50	12.27	13.32	-	10.47	9.75	9.03	7.14	5.58						
					3.00	6.10	12.27	13.23	14.16	10.65	10.05	9.42	7.74	6.39						
					3.20	6.40	12.30	13.17	14.07	10.74	10.23	9.63	8.13	6.81						
					3.60	7.00	12.42	13.20	14.07	11.01	10.53	10.05	8.85	7.86						
					3.80	7.30	12.54	13.26	14.10	11.28	10.86	10.44	9.30	8.46						
					4.20	8.00	13.17	13.83	14.49	12.12	11.76	11.40	10.41	9.69						
					4.40	8.30	13.53	14.13	14.73	12.48	12.15	11.76	10.80	10.08						
					4.80	8.90	13.98	14.52	15.15	12.99	12.63	12.18	11.19	10.29						
					5.00	9.20	14.04	14.52	15.15	13.05	12.66	12.30	11.16	10.11						
					5.40	9.80	13.74	14.31	14.94	12.66	12.24	11.79	10.62	9.21						
	5.60	10.10	13.35	14.04	14.64	12.27	11.82	11.37	10.08	8.52										
	6.00	10.80	12.21	12.90	-	10.98	10.50	10.17	8.70	7.05										
	136. 351. xx. A2	○	○	2.5	3.20	11.50	-	-	-	-	38.92	-	-	-	3.80	300	95	135		
					3.60	12.50	-	-	-	45.73	41.94	-	33.17	-	4.60	300	95	145		
					3.80	13.10	-	-	-	47.81	45.14	42.29	35.36	-	5.40	300	100	150		
					4.20	14.20	-	-	-	51.61	49.07	46.46	39.58	29.94	6.00	300	95	150		
					4.40	14.80	-	-	-	53.10	50.87	48.30	41.59	31.59						
					4.80	15.90	-	63.39	-	55.30	53.40	51.26	45.06	34.68						
					5.00	16.50	-	63.75	66.69	56.05	54.15	52.18	46.29	35.88						
					5.40	17.60	61.12	64.17	66.72	56.71	55.04	53.17	47.62	37.83						
					5.60	18.10	60.93	63.87	66.48	56.66	55.04	53.22	47.68	38.43						
					6.00	19.20	59.89	62.88	65.43	55.69	53.98	52.11	45.78	37.05						

E = narrowest free cross section (water)

Example **Type** + **Material no. (xx)** = **Ordering no.**
for ordering: **136. 342. xx. A2** + **1Y** = **136. 342. 1Y. A2**