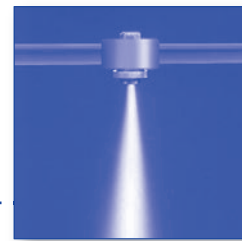




Pneumatic atomizing nozzles, Full cone, pressure principle, internal mixing Series 166.1

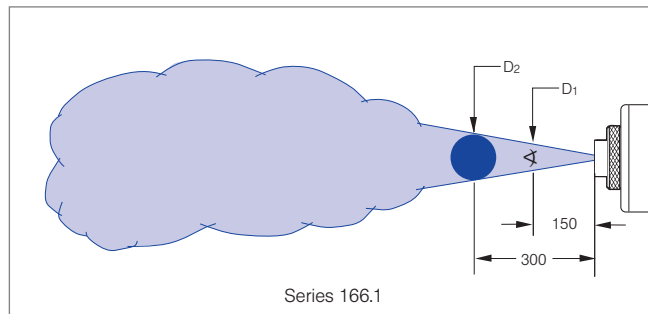
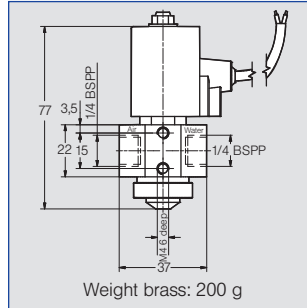


Version with magnetic valve.
Fine full cone atomization and fogging with air or gas.
Liquid pressure principle.
Internal mixing of fluids.

Applications:
Humidification of air, cooling.

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 ∅ [mm]	Liquid pressure p [bar]												Spray dimensions							
	Type	Mat. no.		0.7			1.5			3.0			4.0			p Air [bar]	p Water [bar]	D1 [mm]	D2 [mm]				
				p Air [bar]	V̇ Water [l/h]	V̇n Air [m³/h]	p Air [bar]	V̇ Water [l/h]	V̇n Air [m³/h]	p Air [bar]	V̇ Water [l/h]	V̇n Air [m³/h]	p Air [bar]	V̇ Water [l/h]	V̇n Air [m³/h]								
20°	166. 115. xx. A2	○	16	AISI 303	0.50	0.40	5.90	0.30	1.40	5.80	0.80	2.40	9.10	1.10	3.00	11.00	1.20	0.80	0.70	60	100		
						0.80	3.80	0.60	1.80	4.10	1.00	2.80	7.50	1.20	3.40	9.60	1.40	1.80	1.50	60	95		
						1.20	1.70	0.90	2.20	2.20	1.40	3.20	5.90	1.50	3.80	8.20	1.60	2.60	2.00	60	100		
						-	-	-	2.60	1.20	1.70	3.60	4.40	1.80	4.20	6.80	1.90	3.20	3.00	55	95		
						-	-	-	-	-	-	4.00	2.90	2.10	4.60	5.50	2.20	4.40	4.00	55	100		
						-	-	-	-	-	-	4.40	2.00	2.50	5.00	4.10	2.50	-	-	-	-	-	
						-	-	-	-	-	-	4.80	1.10	2.80	5.40	2.90	2.80	-	-	-	-	-	
						-	-	-	-	-	-	5.20	0.40	3.00	5.80	2.10	3.10	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	166. 125. xx. A2	○	16	AISI 303	0.50	0.80	4.70	1.50	1.20	7.00	1.80	2.80	9.10	3.30	3.40	10.60	3.90	1.40	0.70	55	90		
						1.20	4.40	1.90	1.60	6.60	2.20	3.20	8.70	3.70	3.80	10.30	4.30	2.20	1.50	55	95		
						1.60	4.00	2.30	2.00	6.20	2.60	3.60	8.40	4.10	4.20	9.90	4.60	2.80	2.00	55	100		
						2.00	3.50	2.60	2.40	5.80	3.00	4.00	8.00	4.50	4.60	9.60	5.00	3.40	3.00	60	100		
						2.40	3.00	3.00	2.80	5.40	3.40	4.40	7.70	4.80	5.00	9.30	5.40	4.20	4.00	60	100		
						2.80	2.70	3.20	3.20	4.90	3.70	4.80	7.30	5.20	5.40	8.90	5.80	-	-	-	-	-	
						3.20	2.00	3.70	3.60	4.40	4.10	5.20	7.00	5.60	5.80	8.60	6.10	-	-	-	-	-	
						3.60	1.60	4.10	4.00	3.90	4.50	5.60	6.60	5.90	-	-	-	-	-	-	-	-	-
						4.00	1.30	4.50	4.40	3.50	4.80	6.00	6.20	6.30	-	-	-	-	-	-	-	-	-
						4.40	1.00	4.90	4.80	3.10	5.20	-	-	-	-	-	-	-	-	-	-	-	-
4.80	0.60	5.20	5.20	2.70	5.60	-	-	-	-	-	-	-	-	-	-	-	-						
-	-	-	5.60	2.30	5.90	-	-	-	-	-	-	-	-	-	-	-	-						
-	-	-	6.00	1.90	6.30	-	-	-	-	-	-	-	-	-	-	-	-						

E = narrowest free cross section (water)

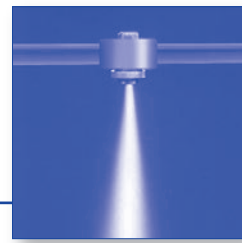
Continued on next page.

Example **Type** + **Material no. (xx)** = **Ordering no.**
for ordering: 166. 115. xx. A2 + 16 = 166. 115. 16. A2





Pneumatic atomizing nozzles, Full cone, pressure principle, internal mixing Series 166.1



Spray angle A	Ordering no.		E Ø [mm]	Liquid pressure p [bar]												Spray dimensions				
	Type	Mat. no.		0.7			1.5			3.0			4.0			p Air [bar]	p Water [bar]	D ₁ [mm]	D 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]					
				16		16		16		16		16		16						
AISI 303		AISI 303		AISI 303		AISI 303		AISI 303		AISI 303		AISI 303		AISI 303		AISI 303				
20°	166. 134. xx. A2	○	0.7	1.20	13.20	2.70	2.00	19.40	3.90	3.00	28.30	5.20	3.80	32.60	6.20	1.80	0.70	55	95	
				1.60	12.40	3.30	2.40	18.10	4.40	3.40	27.50	5.70	4.20	32.00	6.80	2.80	1.50	60	105	
				2.00	11.80	3.90	2.80	17.30	4.90	3.80	26.70	6.30	4.60	31.30	7.30	3.80	2.00	60	105	
				2.40	11.40	4.40	3.20	16.70	5.50	4.20	25.90	6.80	5.00	30.60	7.80	5.20	3.00	65	110	
				2.80	11.10	4.90	3.60	16.10	6.00	4.60	25.00	7.30	5.40	29.90	8.40	6.00	4.00	65	110	
				3.20	10.80	5.50	4.00	15.60	6.50	5.00	24.20	7.80	5.80	29.30	8.90	-	-	-	-	-
				3.60	10.60	6.00	4.40	15.20	7.00	5.40	23.60	8.40	-	-	-	-	-	-	-	-
				4.00	10.40	6.50	4.80	15.00	7.60	5.80	23.10	8.90	-	-	-	-	-	-	-	-
				4.40	10.10	7.00	5.20	14.60	8.10	-	-	-	-	-	-	-	-	-	-	-
				4.80	9.90	7.60	5.60	14.10	8.60	-	-	-	-	-	-	-	-	-	-	-
				5.20	9.50	8.10	6.00	13.80	9.10	-	-	-	-	-	-	-	-	-	-	-
				5.60	9.00	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				6.00	8.50	9.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				1.40	24.20	5.10	1.60	53.40	4.70	3.20	70.80	8.00	3.80	93.20	9.20	0.80	0.70	60	100	
	1.80	20.40	6.30	2.00	42.60	5.90	3.60	62.50	9.20	4.20	83.10	10.10	1.60	1.50	65	105				
	2.20	20.00	7.20	2.40	35.30	7.20	4.00	55.70	10.60	4.60	75.30	11.30	3.00	2.00	60	105				
	2.60	19.30	8.20	2.80	30.40	8.40	4.40	49.30	11.70	5.00	69.00	12.50	4.00	3.00	65	110				
	3.00	17.60	9.30	3.20	28.60	9.50	4.80	44.60	12.90	5.40	63.40	13.70	6.00	4.00	65	110				
	3.40	16.50	10.40	3.60	28.20	10.50	5.20	41.90	14.10	5.80	57.50	14.90	-	-	-	-				
	3.80	17.00	11.40	4.00	27.30	11.50	5.60	40.40	15.10	-	-	-	-	-	-	-				
	4.20	16.30	12.40	4.40	25.90	12.50	6.00	39.70	16.10	-	-	-	-	-	-	-				
	4.60	15.10	13.30	4.80	24.30	13.50	-	-	-	-	-	-	-	-	-	-				
	5.00	14.00	14.30	5.20	22.30	14.60	-	-	-	-	-	-	-	-	-	-				
	5.40	13.10	15.30	5.60	21.80	15.70	-	-	-	-	-	-	-	-	-	-				
	5.80	12.40	16.20	6.00	21.40	16.70	-	-	-	-	-	-	-	-	-	-				

E = narrowest free cross section (water)

Example **Type** + **Material no. (xx)** = **Ordering no.**
for ordering: 166. 134. xx. A2 + 16 = 166. 134. 16. A2