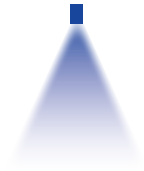


# ➤ Pneumatic atomizing nozzles, full cone, pressure principle, internal mixing Series 166.1



### Features:

- Version with magnetic valve
- Fine full cone atomization
- Liquid pressure principle
- Internal mixing

### Applications:

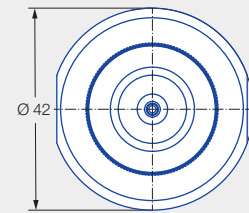
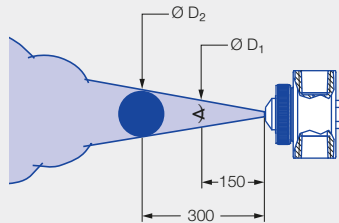
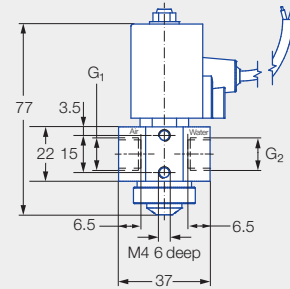
- Humidification of air
- Cooling

### Technical data:

- Operating pressure: 0–6 bar
- Voltage: 24 V DC
- Power: 8 W
- Switching frequency: Approx. 500/min
- Protective system: IP 67
- Ambient temperature: +10 °C/+50 °C
- Cable length: 1,000 mm
- Material of gasket: EPDM



Series 166.1



Air connection G <sub>1</sub>	Water connection G <sub>2</sub>	Weight [g]
1/4 BSPP	1/4 BSPP	410

Spray angle	Ordering no.		Narrowest free cross section 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]	Ø D <sub>1</sub> [mm]	Ø D <sub>2</sub> [mm]			
		16		p air [bar]	V̇ water [l/h]	V̇ <sub>n</sub> air [m <sup>3</sup> /h]	p air [bar]	V̇ water [l/h]	V̇ <sub>n</sub> air [m <sup>3</sup> /h]	p air [bar]	V̇ water [l/h]	V̇ <sub>n</sub> air [m <sup>3</sup> /h]	p air [bar]	V̇ water [l/h]	V̇ <sub>n</sub> air [m <sup>3</sup> /h]							
20°	166.115.xx.A2	●	0.5	0.4	<b>5.9</b>	0.3	1.4	<b>5.8</b>	0.8	2.4	<b>9.1</b>	1.1	3.0	<b>11.0</b>	1.2	0.8	0.7	60	100			
				0.8	<b>3.8</b>	0.6	1.8	<b>4.1</b>	1.0	2.8	<b>7.5</b>	1.2	3.4	<b>9.6</b>	1.4	1.8	1.5	60	95			
				1.2	<b>1.7</b>	0.9	2.2	<b>2.2</b>	1.4	3.2	<b>5.9</b>	1.5	3.8	<b>8.2</b>	1.6	2.6	2.0	60	100			
				-	-	-	2.6	<b>1.2</b>	1.7	3.6	<b>4.4</b>	1.8	4.2	<b>6.8</b>	1.9	3.2	3.0	55	95			
				-	-	-	-	-	-	4.0	<b>2.9</b>	2.1	4.6	<b>5.5</b>	2.2	4.4	4.0	55	100			
				-	-	-	-	-	-	4.4	<b>2.0</b>	2.5	5.0	<b>4.1</b>	2.5	-	-	-	-	-		
				-	-	-	-	-	-	4.8	<b>1.1</b>	2.8	5.4	<b>2.9</b>	2.8	-	-	-	-	-		
				-	-	-	-	-	-	5.2	<b>0.4</b>	3.0	5.8	<b>2.1</b>	3.1	-	-	-	-	-		
				166.125.xx.A2	●	0.5	0.8	<b>4.7</b>	1.5	1.2	<b>7.0</b>	1.8	2.8	<b>9.1</b>	3.3	3.4	<b>10.6</b>	3.9	1.4	0.7	55	90
							1.2	<b>4.4</b>	1.9	1.6	<b>6.6</b>	2.2	3.2	<b>8.7</b>	3.7	3.8	<b>10.3</b>	4.3	2.2	1.5	55	95
	1.6	<b>4.0</b>	2.3				2.0	<b>6.2</b>	2.6	3.6	<b>8.4</b>	4.1	4.2	<b>9.9</b>	4.6	2.8	2.0	55	100			
	2.0	<b>3.5</b>	2.6				2.4	<b>5.8</b>	3.0	4.0	<b>8.0</b>	4.5	4.6	<b>9.6</b>	5.0	3.4	3.0	60	100			
	2.4	<b>3.0</b>	3.0				2.8	<b>5.4</b>	3.4	4.4	<b>7.7</b>	4.8	5.0	<b>9.3</b>	5.4	4.2	4.0	60	100			
	2.8	<b>2.7</b>	3.2				3.2	<b>4.9</b>	3.7	4.8	<b>7.3</b>	5.2	5.4	<b>8.9</b>	5.8	-	-	-	-	-		
	3.2	<b>2.0</b>	3.7				3.6	<b>4.4</b>	4.1	5.2	<b>7.0</b>	5.6	5.8	<b>8.6</b>	6.1	-	-	-	-	-		
	3.6	<b>1.6</b>	4.1				4.0	<b>3.9</b>	4.5	5.6	<b>6.6</b>	5.9	-	-	-	-	-	-	-	-		
	4.0	<b>1.3</b>	4.5				4.4	<b>3.5</b>	4.8	6.0	<b>6.2</b>	6.3	-	-	-	-	-	-	-	-		
	4.4	<b>1.0</b>	4.9				4.8	<b>3.1</b>	5.2	-	-	-	-	-	-	-	-	-	-	-		
	4.8	<b>0.6</b>	5.2	5.2	<b>2.7</b>	5.6	-	-	-	-	-	-	-	-	-	-	-					
	-	-	-	5.6	<b>2.3</b>	5.9	-	-	-	-	-	-	-	-	-	-	-					
-	-	-	6.0	<b>1.9</b>	6.3	-	-	-	-	-	-	-	-	-	-	-						

Spray angle	Ordering no.		Narrowest free cross section Ø [mm]	Liquid pressure p [bar]												Spray dimensions					
	Type	Mat. no.		0.7			1.5			3.0			4.0								
		16		Stainless steel 303	p air [bar]	$\dot{V}$ water [l/h]	$\dot{V}_n$ air [m³/h]	p air [bar]	$\dot{V}$ water [l/h]	$\dot{V}_n$ air [m³/h]	p air [bar]	$\dot{V}$ water [l/h]	$\dot{V}_n$ air [m³/h]	p air [bar]	$\dot{V}$ water [l/h]	$\dot{V}_n$ air [m³/h]	p air [bar]	p water [bar]	Ø D <sub>1</sub> [mm]	Ø D <sub>2</sub> [mm]	
20°	166.134.xx.A2	●	0.7	1.2	<b>13.2</b>	2.7	2.0	<b>19.4</b>	3.9	3.0	<b>28.3</b>	5.2	3.8	<b>32.6</b>	6.2	1.8	0.7	55	95		
				1.6	<b>12.4</b>	3.3	2.4	<b>18.1</b>	4.4	3.4	<b>27.5</b>	5.7	4.2	<b>32.0</b>	6.8	2.8	1.5	60	105		
				2.0	<b>11.8</b>	3.9	2.8	<b>17.3</b>	4.9	3.8	<b>26.7</b>	6.3	4.6	<b>31.3</b>	7.3	3.8	2.0	60	105		
				2.4	<b>11.4</b>	4.4	3.2	<b>16.7</b>	5.5	4.2	<b>25.9</b>	6.8	5.0	<b>30.6</b>	7.8	5.2	3.0	65	110		
				2.8	<b>11.1</b>	4.9	3.6	<b>16.1</b>	6.0	4.6	<b>25.0</b>	7.3	5.4	<b>29.9</b>	8.4	6.0	4.0	65	110		
				3.2	<b>10.8</b>	5.5	4.0	<b>15.6</b>	6.5	5.0	<b>24.2</b>	7.8	5.8	<b>29.3</b>	8.9	-	-	-	-	-	
				3.6	<b>10.6</b>	6.0	4.4	<b>15.2</b>	7.0	5.4	<b>23.6</b>	8.4	-	-	-	-	-	-	-	-	-
				4.0	<b>10.4</b>	6.5	4.8	<b>15.0</b>	7.6	5.8	<b>23.1</b>	8.9	-	-	-	-	-	-	-	-	-
				4.4	<b>10.1</b>	7.0	5.2	<b>14.6</b>	8.1	-	-	-	-	-	-	-	-	-	-	-	-
				4.8	<b>9.9</b>	7.6	5.6	<b>14.1</b>	8.6	-	-	-	-	-	-	-	-	-	-	-	-
	5.2	<b>9.5</b>	8.1	6.0	<b>13.8</b>	9.1	-	-	-	-	-	-	-	-	-	-	-	-			
	5.6	<b>9.0</b>	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	6.0	<b>8.5</b>	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	166.142.xx.A2	●	2.5	1.4	<b>24.2</b>	5.1	1.6	<b>53.4</b>	4.7	3.2	<b>70.8</b>	8.0	3.8	<b>93.2</b>	9.2	0.8	0.7	60	100		
				1.8	<b>20.4</b>	6.3	2.0	<b>42.6</b>	5.9	3.6	<b>62.5</b>	9.2	4.2	<b>83.1</b>	10.1	1.6	1.5	65	105		
				2.2	<b>20.0</b>	7.2	2.4	<b>35.3</b>	7.2	4.0	<b>55.7</b>	10.6	4.6	<b>75.3</b>	11.3	3.0	2.0	60	105		
				2.6	<b>19.3</b>	8.2	2.8	<b>30.4</b>	8.4	4.4	<b>49.3</b>	11.7	5.0	<b>69.0</b>	12.5	4.0	3.0	65	110		
				3.0	<b>17.6</b>	9.3	3.2	<b>28.6</b>	9.5	4.8	<b>44.6</b>	12.9	5.4	<b>63.4</b>	13.7	6.0	4.0	65	110		
				3.4	<b>16.5</b>	10.4	3.6	<b>28.2</b>	10.5	5.2	<b>41.9</b>	14.1	5.8	<b>57.5</b>	14.9	-	-	-	-	-	
				3.8	<b>17.0</b>	11.4	4.0	<b>27.3</b>	11.5	5.6	<b>40.4</b>	15.1	-	-	-	-	-	-	-	-	
4.2				<b>16.3</b>	12.4	4.4	<b>25.9</b>	12.5	6.0	<b>39.7</b>	16.1	-	-	-	-	-	-	-	-		
4.6				<b>15.1</b>	13.3	4.8	<b>24.3</b>	13.5	-	-	-	-	-	-	-	-	-	-	-		
5.0				<b>14.0</b>	14.3	5.2	<b>22.3</b>	14.6	-	-	-	-	-	-	-	-	-	-	-		
5.4	<b>13.1</b>	15.3	5.6	<b>21.8</b>	15.7	-	-	-	-	-	-	-	-	-	-	-					
5.8	<b>12.4</b>	16.2	6.0	<b>21.4</b>	16.7	-	-	-	-	-	-	-	-	-	-	-					

Ordering Type + Material no. = Ordering no.  
example: 166.134.xx.A2 + 16 = 166.134.16.A2

