



## Pneumatic atomizing nozzles, Full cone, pressure principle, internal mixing Series 166.2

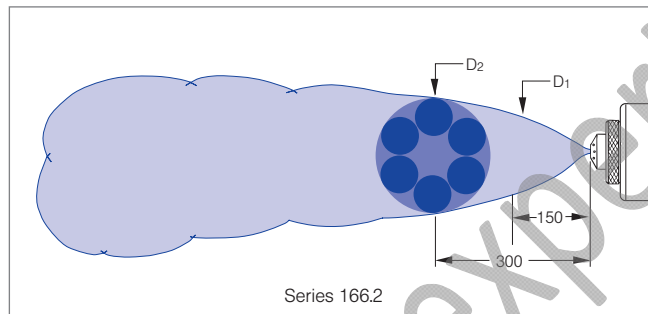
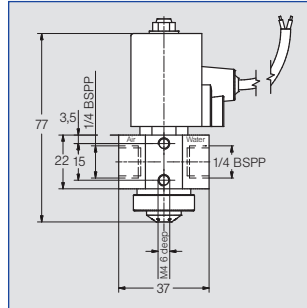
**Version with magnetic valve.**  
**Fine full cone atomization and fogging with air or gas.**  
**Especially wide spray angle of 60°.**

**Pressure principle.**  
**Internal mixing of fluids.**

Applications:  
 Humidification of air, cooling.

**Technical Datas:**

- 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
- Material of gasket: EPDM



**Accessories for series 166 please refer to page 1.29**

| Spray angle      | Ordering no.     |          | E<br>∅<br>[mm] | Liquid pressure p [bar] |               |                           |             |               |                           |             |               |                           |             |               |                           | Spray dimensions |               |                     |                     |      |     |     |
|------------------|------------------|----------|----------------|-------------------------|---------------|---------------------------|-------------|---------------|---------------------------|-------------|---------------|---------------------------|-------------|---------------|---------------------------|------------------|---------------|---------------------|---------------------|------|-----|-----|
|                  | Type             | Mat. no. |                | 0.7                     |               |                           |             | 1.5           |                           |             |               | 3.0                       |             |               |                           | 4.0              |               |                     |                     |      |     |     |
|                  |                  |          |                | p Air [bar]             | ṽ Water [l/h] | ṽ <sub>n</sub> Air [m³/h] | p Air [bar] | ṽ Water [l/h] | ṽ <sub>n</sub> Air [m³/h] | p Air [bar] | ṽ Water [l/h] | ṽ <sub>n</sub> Air [m³/h] | p Air [bar] | ṽ Water [l/h] | ṽ <sub>n</sub> Air [m³/h] | p Air [bar]      | p Water [bar] | D <sub>1</sub> [mm] | D <sub>2</sub> [mm] |      |     |     |
| 60°              | 166. 215. xx. A2 | ○        | 16             | AISI 303                | 0.5           | 1.00                      | 3.00        | 1.30          | 1.60                      | 5.80        | 1.70          | 2.80                      | 8.50        | 2.40          | 3.80                      | 9.40             | 3.10          | 1.00                | 0.70                | 200  | 330 |     |
|                  |                  |          |                |                         |               | 1.20                      | 1.80        | 1.50          | 1.80                      | 4.90        | 1.90          | 3.20                      | 7.20        | 2.80          | 4.20                      | 8.20             | 3.50          | 1.60                | 1.50                | 230  | 380 |     |
|                  |                  |          |                |                         |               | 1.40                      | 0.70        | 1.80          | 2.00                      | 3.80        | 2.10          | 3.60                      | 5.70        | 3.20          | 4.60                      | 6.90             | 3.90          | 2.40                | 2.00                | 230  | 385 |     |
|                  |                  |          |                |                         |               | -                         | -           | -             | 2.20                      | 2.80        | 2.30          | 4.00                      | 4.00        | 3.60          | 5.00                      | 5.40             | 4.20          | 3.20                | 3.00                | 245  | 390 |     |
|                  |                  |          |                |                         |               | -                         | -           | -             | 2.40                      | 1.70        | 2.50          | 4.40                      | 2.20        | 4.10          | 5.40                      | 3.80             | 4.70          | 4.20                | 4.00                | 250  | 410 |     |
|                  |                  |          |                |                         |               | -                         | -           | -             | 2.60                      | 0.80        | 2.80          | 4.80                      | 0.80        | 4.50          | 5.80                      | 2.30             | 5.20          | -                   | -                   | -    | -   | -   |
|                  | 166. 222. xx. A2 | ○        | 1.0            | 16                      | AISI 303      | 1.0                       | 0.80        | 17.50         | 2.80                      | 1.60        | 25.90         | 4.00                      | 3.00        | 40.40         | 5.80                      | 3.80             | 54.90         | 6.40                | 0.80                | 0.70 | 250 | 450 |
|                  |                  |          |                |                         |               |                           | 1.00        | 6.00          | 4.30                      | 1.80        | 14.70         | 5.30                      | 3.20        | 31.50         | 6.90                      | 4.00             | 45.60         | 7.30                | 1.60                | 1.50 | 245 | 465 |
|                  |                  |          |                |                         |               |                           | -           | -             | -                         | 2.00        | 6.70          | 6.70                      | 3.40        | 22.20         | 8.20                      | 4.20             | 37.60         | 8.50                | 2.30                | 2.00 | 245 | 465 |
|                  |                  |          |                |                         |               |                           | -           | -             | -                         | 2.20        | 1.90          | 8.10                      | 3.60        | 14.60         | 9.50                      | 4.40             | 29.60         | 9.70                | 3.20                | 3.00 | 250 | 465 |
|                  |                  |          |                |                         |               |                           | -           | -             | -                         | -           | -             | -                         | 3.80        | 8.50          | 11.00                     | 4.60             | 21.60         | 11.20               | 4.20                | 4.00 | 245 | 465 |
|                  |                  |          |                |                         |               |                           | -           | -             | -                         | -           | -             | -                         | 4.00        | 4.50          | 12.30                     | 4.80             | 15.30         | 12.40               | -                   | -    | -   | -   |
| 166. 231. xx. A2 | ○                | 1.4      | 16             | AISI 303                | 1.4           | 1.60                      | 25.60       | 5.10          | 2.60                      | 44.20       | 7.00          | 3.60                      | 93.70       | 7.90          | 4.20                      | 132.90           | 7.30          | 2.00                | 0.70                | 235  | 380 |     |
|                  |                  |          |                |                         |               | 2.00                      | 17.80       | 6.20          | 3.00                      | 33.00       | 8.20          | 4.00                      | 78.30       | 9.30          | 4.60                      | 117.20           | 9.00          | 2.60                | 1.50                | 245  | 415 |     |
|                  |                  |          |                |                         |               | 2.40                      | 11.30       | 7.20          | 3.40                      | 24.70       | 9.20          | 4.40                      | 65.80       | 10.60         | 5.00                      | 101.10           | 10.40         | 2.40                | 2.00                | 255  | 420 |     |
|                  |                  |          |                |                         |               | 2.80                      | 6.90        | 8.10          | 3.80                      | 18.10       | 10.20         | 4.80                      | 54.90       | 11.90         | 5.40                      | 87.90            | 11.80         | 3.60                | 3.00                | 255  | 425 |     |
|                  |                  |          |                |                         |               | -                         | -           | -             | 4.20                      | 13.20       | 11.20         | 5.20                      | 45.60       | 13.00         | 5.80                      | 76.60            | 13.20         | 4.20                | 4.00                | 265  | 430 |     |
|                  |                  |          |                |                         |               | -                         | -           | -             | 4.60                      | 9.30        | 12.00         | 5.60                      | 38.00       | 14.10         | 6.00                      | 71.20            | 13.80         | -                   | -                   | -    | -   | -   |

E = narrowest free cross section (water)

**Example**    **Type**    + **Material no. (xx)** = **Ordering no.**  
**for ordering:** 166. 215. xx. A2 + 16 = 166. 215. 16. A2