

# ➤ Axial-flow full cone nozzles Series 4H7



## Features:

- Low weight
- Housingless design for screw-in
- Corrosion-resistant
- High resistance to clogging due to large free cross-sections
- Compact design

## Applications:

- Wet DeSOx in scrubbers
- Gas cooling/quenching
- Absorber technique



Series 4H7

## Technical data:



### Material

- Stainless steel 1.4462 (318LN)
- Other materials like 1.4404 (316L) or 1.4547 (SMO) upon request



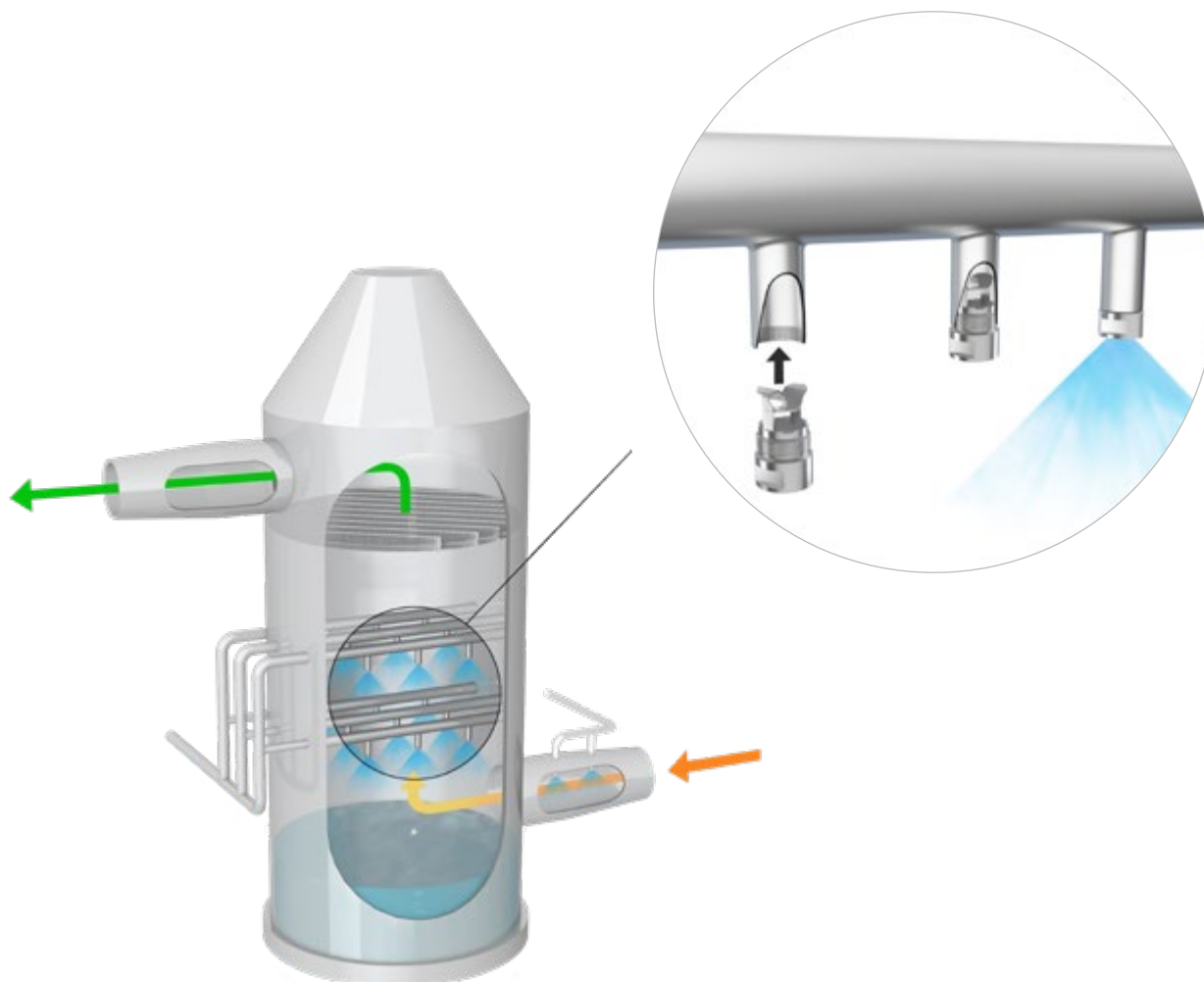
### Max. operating temperature

250 °C  
Higher temperatures are possible,  
depending on the material



### Recommended operating pressure

1–2 bar



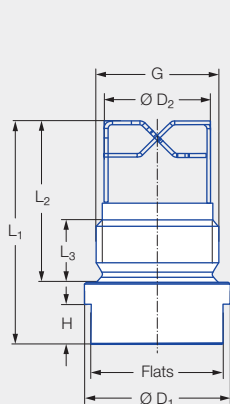


Figure 1

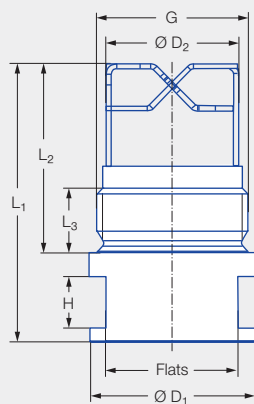
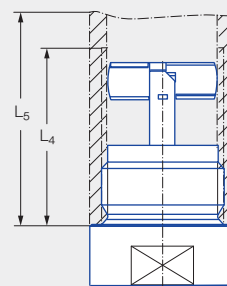


Figure 2



Installation example –  
recommended thread and  
connection pipe lengths

| Type    | Connection<br>thread<br>G<br>BSPP<br>male | Figure | Dimensions [mm] |                |                |                |                                                             |                                                                 |                  |                  |       | Weight<br>[g] |
|---------|-------------------------------------------|--------|-----------------|----------------|----------------|----------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------|------------------|-------|---------------|
|         |                                           |        | H               | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | Minimum<br>thread<br>connection<br>length<br>L <sub>4</sub> | Recom-<br>mended<br>connection<br>pipe length<br>L <sub>5</sub> | Ø D <sub>1</sub> | Ø D <sub>2</sub> | Flats |               |
| 4H7.208 | 1                                         | 1      | 11              | 61.0           | 44.0           | 17.0           | 60.0                                                        | 80.0                                                            | 39.6             | 30.0             | 36    | 170.0         |
| 4H7.328 | 1 1/4                                     | 2      | 14              | 76.0           | 52.0           | 17.0           | 60.0                                                        | 80.0                                                            | 45.0             | 38.0             | 36    | 270.0         |
| 4H7.368 | 1 1/4                                     | 2      | 14              | 78.0           | 53.0           | 17.0           | 60.0                                                        | 80.0                                                            | 45.0             | 38.0             | 36    | 300.0         |
| 4H7.408 | 1 1/2                                     | 2      | 15              | 77.0           | 53.0           | 17.0           | 60.0                                                        | 80.0                                                            | 54.5             | 43.0             | 46    | 400.0         |
| 4H7.448 | 1 1/2                                     | 2      | 15              | 77.0           | 53.0           | 17.0           | 60.0                                                        | 80.0                                                            | 54.5             | 43.0             | 46    | 380.0         |

| Spray<br>angle | Ordering no. |                                         | Connection<br>thread<br>G<br>BSPP<br>male | Bore<br>diameter<br>[mm] | Narrowest<br>cross<br>section<br>Ø<br>[mm] | V̇ [l/min]                         |       |       |       |       | Spray diameter<br>D<br>[mm]<br>(at p = 2 bar) |                   |
|----------------|--------------|-----------------------------------------|-------------------------------------------|--------------------------|--------------------------------------------|------------------------------------|-------|-------|-------|-------|-----------------------------------------------|-------------------|
|                | Type         | Mat. no.                                |                                           |                          |                                            | p [bar] (p <sub>max</sub> = 5 bar) |       |       |       |       | H = 500<br>[mm]                               | H = 1.000<br>[mm] |
|                |              | B2<br>Stainless steel<br>1.4462 (316LN) |                                           |                          |                                            | 0.3                                | 0.5   | 1.0   | 2.0   | 5.0   |                                               |                   |
| 120°           | 4H7.208      | ●                                       | 1                                         | 12.5                     | 7.5                                        | 46.8                               | 57.4  | 75.8  | 100.0 | 144.3 | 1.400                                         | 2.400             |
|                | 4H7.328      | ●                                       | 1 1/4                                     | 18.0                     | 10.0                                       | 93.6                               | 114.9 | 151.6 | 200.0 | 288.5 | 1.400                                         | 2.400             |
|                | 4H7.368      | ●                                       | 1 1/4                                     | 20.0                     | 10.5                                       | 117.1                              | 143.6 | 189.5 | 250.0 | 360.7 | 1.400                                         | 2.400             |
|                | 4H7.408      | ●                                       | 1 1/2                                     | 21.0                     | 13.0                                       | 147.5                              | 180.9 | 238.7 | 315.0 | 454.5 | 1.400                                         | 2.400             |
|                | 4H7.448      | ●                                       | 1 1/2                                     | 23.5                     | 13.5                                       | 187.3                              | 229.7 | 303.1 | 400.0 | 577.1 | 1.400                                         | 2.400             |

Ordering example: Type 4H7.208 + Material no. B2 = Ordering no. 4H7.208.B2

Conversion formula for this series:  $\dot{V}_2 = \dot{V}_1 \cdot \left(\frac{p_2}{p_1}\right)^{0.4}$   
(≤ 5 bar)