



# High-pressure solid stream nozzles Series 546/548/550



**Punctiform, extremely tight, non-dispersing solid stream. Highest impact.**

**Applications:**

High-pressure cleaning, cutting and separating.

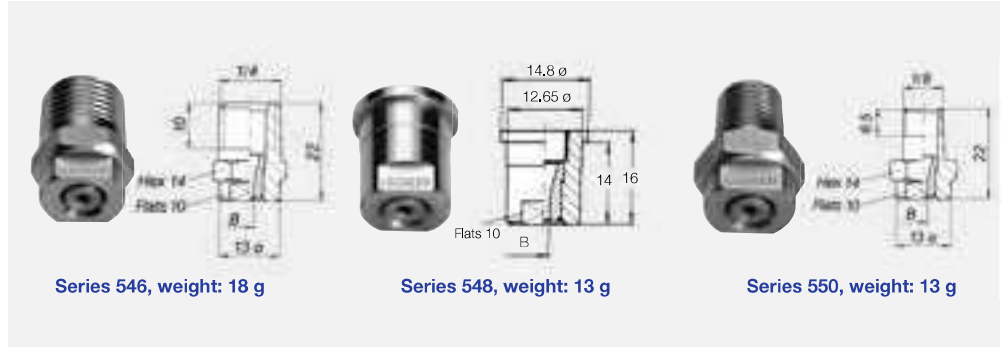
**Materials:**

Nozzle body:

303 SS

Insert:

Hardened steel 420F SS



| US gal/min. at 40 psi | Nozzle-Code |     |               | Flow rate code | B Ø [mm] | V [l/min] |       |       |       |       |       |       |        |
|-----------------------|-------------|-----|---------------|----------------|----------|-----------|-------|-------|-------|-------|-------|-------|--------|
|                       | Connection  |     |               |                |          | p [bar]   |       |       |       |       |       |       |        |
|                       | 1/8         | 1/4 | Retaining nut |                |          | 40        | 60    | 80    | 100   | 120   | 150   | 200   | 300    |
| 01                    | 550         | 546 | 548           | 300            | 0.60     | 1.44      | 1.77  | 2.04  | 2.28  | 2.50  | 2.79  | 3.22  | 3.95   |
| 02                    | 550         | 546 | 548           | 360            | 0.84     | 2.88      | 3.53  | 4.08  | 4.56  | 5.00  | 5.58  | 6.45  | 7.90   |
| 025                   | 550         | 546 | 548           | 380            | 0.94     | 3.60      | 4.42  | 5.10  | 5.70  | 6.24  | 6.98  | 8.06  | 9.87   |
| 027                   | 550         | 546 | 548           | 390            | 0.99     | 3.89      | 4.76  | 5.50  | 6.15  | 6.74  | 7.53  | 8.70  | 10.65  |
| 03                    | 550         | 546 | 548           | 400            | 1.03     | 4.33      | 5.30  | 6.12  | 6.84  | 7.49  | 8.38  | 9.67  | 11.85  |
| 034                   | 550         | 546 | 548           | 410            | 1.07     | 4.90      | 6.00  | 6.93  | 7.75  | 8.49  | 9.49  | 10.96 | 13.42  |
| 035                   | 550         | 546 | 548           | 420            | 1.11     | 5.05      | 6.18  | 7.14  | 7.98  | 8.74  | 9.77  | 11.29 | 13.82  |
| 038                   | 550         | 546 | 548           | 440            | 1.15     | 5.48      | 6.71  | 7.75  | 8.66  | 9.49  | 10.61 | 12.25 | 15.00  |
| 04                    | 550         | 546 | 548           | 450            | 1.19     | 5.77      | 7.06  | 8.16  | 9.12  | 9.99  | 11.17 | 12.90 | 15.80  |
| 045                   | 550         | 546 | 548           | 470            | 1.26     | 6.49      | 7.95  | 9.18  | 10.26 | 11.24 | 12.57 | 14.51 | 17.77  |
| 05                    | 550         | 546 | 548           | 480            | 1.33     | 7.21      | 8.83  | 10.20 | 11.40 | 12.49 | 13.96 | 16.12 | 19.75  |
| 055                   | 550         | 546 | 548           | 500            | 1.39     | 7.93      | 9.71  | 11.22 | 12.54 | 13.74 | 15.36 | 17.73 | 21.72  |
| 06                    | 550         | 546 | 548           | 520            | 1.46     | 8.65      | 10.60 | 12.24 | 13.68 | 14.99 | 16.75 | 19.35 | 23.69  |
| 065                   | 550         | 546 | 548           | 530            | 1.51     | 9.37      | 11.48 | 13.26 | 14.82 | 16.23 | 18.15 | 20.96 | 25.67  |
| 070                   | 550         | 546 | 548           | 540            | 1.58     | 10.09     | 12.36 | 14.28 | 15.96 | 17.48 | 19.55 | 22.57 | 27.64  |
| 074                   | 550         | 546 | 548           | 550            | 1.62     | 10.67     | 13.07 | 15.09 | 16.87 | 18.48 | 20.66 | 23.86 | 29.22  |
| 08                    | 550         | 546 | 548           | 570            | 1.69     | 11.54     | 14.13 | 16.31 | 18.24 | 19.98 | 22.34 | 25.80 | 31.59  |
| 087                   | 550         | 546 | 548           | 580            | 1.76     | 12.54     | 15.36 | 17.74 | 19.83 | 21.72 | 24.29 | 28.04 | 34.35  |
| 089                   | 550         | 546 | 548           | 590            | 1.78     | 12.83     | 15.72 | 18.15 | 20.29 | 22.23 | 24.85 | 28.69 | 35.14  |
| 10                    | 550         | 546 | 548           | 600            | 1.88     | 14.41     | 17.65 | 20.38 | 22.79 | 24.97 | 27.91 | 32.23 | 39.47  |
| 11                    | 550         | 546 | 548           | 620            | 1.97     | 15.86     | 19.42 | 22.42 | 25.07 | 27.46 | 30.70 | 35.45 | 43.42  |
| 124                   | 550         | 546 | 548           | 640            | 2.09     | 17.87     | 21.89 | 25.28 | 28.26 | 30.96 | 34.61 | 39.97 | 48.95  |
| 131                   | 550         | 546 | 548           | 650            | 2.15     | 18.89     | 23.13 | 26.71 | 29.86 | 32.71 | 36.57 | 42.23 | 51.72  |
| 139                   | 550         | 546 | 548           | 660            | 2.22     | 20.04     | 24.54 | 28.34 | 31.68 | 34.70 | 38.80 | 44.80 | 54.87  |
| 15                    | 550         | 546 | 548           | 670            | 2.30     | 21.62     | 26.48 | 30.58 | 34.19 | 37.45 | 41.87 | 48.35 | 59.22  |
| 165                   | 550         | 546 | 548           | 690            | 2.41     | 23.79     | 29.13 | 33.64 | 37.61 | 41.20 | 46.06 | 53.19 | 65.14  |
| 174                   | 550         | 546 | 548           | 700            | 2.48     | 25.08     | 30.72 | 35.47 | 39.66 | 43.45 | 48.57 | 56.09 | 68.69  |
| 183                   | 550         | 546 | 548           | 710            | 2.55     | 26.38     | 32.31 | 37.31 | 41.71 | 45.69 | 51.08 | 58.99 | 72.24  |
| 20                    | 550         | 546 | 548           | 720            | 2.66     | 28.83     | 35.31 | 40.78 | 45.59 | 49.94 | 55.84 | 64.47 | 78.96  |
| 218                   | 550         | 546 | 548           | 740            | 2.77     | 31.43     | 38.49 | 44.44 | 49.69 | 54.43 | 60.86 | 70.27 | 86.07  |
| 25                    | 550         | 546 | 548           | 760            | 2.96     | 36.04     | 44.14 | 50.97 | 56.99 | 62.43 | 69.80 | 80.60 | 98.71  |
| 294                   | 550         | 546 | 548           | 790            | 3.22     | 42.38     | 51.91 | 59.94 | 67.01 | 73.41 | 82.07 | 94.77 | 116.06 |
| 310                   | 550         | 546 | 548           | 800            | 3.30     | 44.69     | 54.73 | 63.20 | 70.66 | 77.40 | 86.54 | 99.93 | 122.39 |

Solid stream nozzles

B = bore diameter

| Connection code | Connection | p <sub>max</sub> * [bar] |
|-----------------|------------|--------------------------|
| A3.00           | BSPT       | ca. 700                  |
| A3.07           | NPT        | ca. 700                  |
| A3.29           | Lock nut   | ca. 300                  |

\* Only valid for operation at constant pressure

**Example for ordering:** Nozzle code 550 + Flow rate code 300 + Connection code A3.07 = Ordering no. 550.300.A3.07 (Solid stream; 2.28 l/min. at 100 bar; 1/8 NPT)

Conversion formula for the above series:  $\dot{V}_2 = \dot{V}_1 * \sqrt{\frac{p_2}{p_1}}$