

Nozzle deflected, soft and wide-angle flat spray

### Characteristics

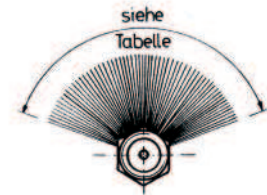
Flat fan spray pattern with low force of impact, Clog-resistant, Made in one piece.

### Application

Rinsing  
Cooling  
Fire protection

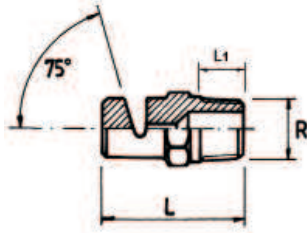
### Material

Brass  
Stainl. steel 1.4305, 1.4404  
Plastic - PVC, POM  
Other materials on request



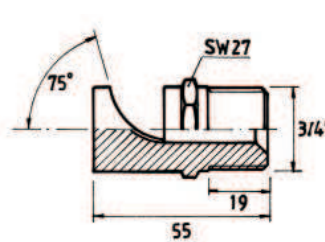
Wide-angle flat fan with square impact area

Illu. 1



Spray width standard according to table

Illu. 2



Tongue-shaped nozzle with cylindrical thread, on request

| Dimensions in mm |    |    |    |
|------------------|----|----|----|
| Thread R         | L  | L1 | SW |
| 1/8"             | 25 | 7  | 11 |
| 1/4"             | 32 | 10 | 14 |
| 3/8"             | 36 | 10 | 17 |
| 1/2"             | 42 | 13 | 22 |
| 3/4"             | 49 | 13 | 27 |
| 1"               | 65 | 17 | 36 |

R = DIN 2999

Plastic nozzles can feature different SWs.

Order example: (thread - type - material) R 1/8" - Z 4 - VA

| Male thread R               | Type  | Bore (mm) | Flow rate $\dot{V}$ (l/min.) at pressure p (bar) |         |         |         |       |         |       |       |       |         | Angle at p |       |  |
|-----------------------------|-------|-----------|--|---------|---------|---------|-------|---------|-------|-------|-------|---------|------------|-------|--|
|                             |       |           | bar 0.2  | bar 0.3 | bar 0.5 | bar 0.7 | bar 1 | bar 1.5 | bar 2 | bar 3 | bar 4 | bar 0.5 | bar 1.5    | bar 4 |  |
| 1/8" 1/4" 3/8" 1/2" 3/4" 1" | Z 0.5 | 0.6       |  |         |         |         | 0.20  | 0.25    | 0.30  | 0.40  | 0.50  | 90°     | 120°       |       |  |
|                             | Z 0.7 | 0.7       |  |         |         | 0.30    | 0.35  | 0.40    | 0.50  | 0.60  | 0.75  | 105°    | 125°       |       |  |
|                             | Z 1   | 0.8       |  |         |         | 0.40    | 0.45  | 0.50    | 0.60  | 0.75  | 1.00  | 110°    | 130°       |       |  |
|                             | Z 1.5 | 1.0       |  |         | 0.50    | 0.60    | 0.70  | 0.80    | 1.00  | 1.20  | 1.50  | 75°     | 110°       | 130°  |  |
|                             | Z 2   | 1.2       |  |         | 0.60    | 0.70    | 0.90  | 1.00    | 1.30  | 1.50  | 2.00  | 85°     | 115°       | 130°  |  |
|                             | Z 2.5 | 1.3       |  | 0.70    | 0.80    | 0.90    | 1.20  | 1.30    | 1.60  | 2.00  | 2.50  | 85°     | 120°       | 135°  |  |
|                             | Z 3   | 1.4       |  | 0.80    | 0.90    | 1.20    | 1.40  | 1.60    | 2.00  | 2.30  | 3.00  | 85°     | 110°       | 125°  |  |
|                             | Z 4   | 1.6       |  | 1.00    | 1.20    | 1.50    | 1.90  | 2.20    | 2.60  | 3.00  | 4.00  | 95°     | 125°       | 130°  |  |
|                             | Z 5   | 1.8       | 1.00   | 1.30    | 1.60    | 1.90    | 2.30  | 2.70    | 3.30  | 3.80  | 4.50  | 115°    | 130°       | 140°  |  |
|                             | Z 7.5 | 2.3       | 1.50   | 2.00    | 2.50    | 3.00    | 3.50  | 4.00    | 5.00  | 5.50  | 7.00  | 100°    | 120°       | 135°  |  |
|                             | Z 10  | 2.6       | 2.00   | 2.50    | 3.00    | 4.00    | 4.50  | 5.00    | 6.50  | 7.50  | 9.50  | 115°    | 135°       | 145°  |  |
|                             | Z 12  | 2.9       | 2.50   | 3.00    | 4.00    | 4.50    | 5.50  | 6.50    | 8.00  | 9.00  | 11.0  | 130°    | 140°       | 155°  |  |
|                             | Z 15  | 3.3       | 3.00   | 4.00    | 5.00    | 5.50    | 7.00  | 8.00    | 10.0  | 11.0  | 14.0  | 100°    | 115°       | 125°  |  |
|                             | Z 18  | 3.6       | 3.50   | 4.50    | 5.50    | 7.00    | 8.00  | 9.50    | 11.0  | 14.0  | 16.0  | 105°    | 120°       | 130°  |  |
|                             | Z 20  | 3.8       | 4.00   | 5.00    | 6.50    | 7.50    | 9.00  | 10.5    | 13.0  | 15.0  | 18.0  | 110°    | 120°       | 135°  |  |
|                             | Z 22  | 3.9       | 4.50   | 6.00    | 7.00    | 8.00    | 10.0  | 12.0    | 14.0  | 17.0  | 20.0  | 110°    | 125°       | 135°  |  |
|                             | Z 24  | 4.0       | 5.00   | 6.50    | 7.50    | 9.00    | 11.0  | 13.0    | 16.0  | 18.0  | 22.0  | 115°    | 130°       | 145°  |  |
|                             | Z 27  | 4.4       | 5.50   | 7.00    | 8.50    | 10.0    | 12.0  | 14.0    | 17.0  | 21.0  | 25.0  | 120°    | 135°       | 150°  |  |
|                             | Z 30  | 4.5       | 6.00   | 8.00    | 9.50    | 11.0    | 14.0  | 16.0    | 19.0  | 23.0  | 27.0  | 100°    | 110°       | 120°  |  |
|                             | Z 35  | 5.0       | 7.00   | 9.50    | 11.0    | 13.0    | 16.0  | 19.0    | 23.0  | 27.0  | 32.0  | 105°    | 120°       | 130°  |  |
|                             | Z 40  | 5.3       | 8.00   | 10.0    | 12.0    | 15.0    | 18.0  | 21.0    | 26.0  | 30.0  | 37.0  | 110°    | 125°       | 135°  |  |
|                             | Z 45  | 5.6       | 9.50   | 12.0    | 14.0    | 17.0    | 20.0  | 24.0    | 29.0  | 34.0  | 38.0  | 115°    | 130°       | 140°  |  |
|                             | Z 50  | 6.0       | 10.0   | 13.0    | 16.0    | 19.0    | 23.0  | 26.0    | 33.0  | 38.0  | 46.0  | 115°    | 130°       | 140°  |  |
|                             | Z 60  | 6.5       | 12.0   | 16.0    | 19.0    | 23.0    | 27.0  | 32.0    | 39.0  | 45.0  | 55.0  | 120°    | 135°       | 140°  |  |
|                             | Z 70  | 7.0       | 14.0   | 19.0    | 22.0    | 26.0    | 32.0  | 37.0    | 45.0  | 53.0  | 65.0  | 125°    | 135°       | 145°  |  |
|                             | Z 80  | 7.5       | 16.0   | 21.0    | 25.0    | 30.0    | 37.0  | 42.0    | 52.0  | 60.0  | 74.0  | 125°    | 140°       | 150°  |  |
|                             | Z 90  | 8.0       | 18.0   | 24.0    | 28.0    | 34.0    | 41.0  | 48.0    | 60.0  | 68.0  | 75.0  | 120°    | 130°       | 140°  |  |
|                             | Z 100 | 8.4       | 21.0   | 27.0    | 32.0    | 38.0    | 46.0  | 53.0    | 65.0  | 76.0  | 90.0  | 120°    | 130°       | 140°  |  |
|                             | Z 110 | 8.8       | 23.0   | 29.0    | 35.0    | 42.0    | 51.0  | 59.0    | 72.0  | 83.0  | 102   | 125°    | 140°       | 150°  |  |
|                             | Z 120 | 9.3       | 25.0   | 32.0    | 38.0    | 45.0    | 56.0  | 64.0    | 79.0  | 91.0  | 109   | 130°    | 140°       | 150°  |  |
|                             | Z 180 | 11.5      | 38.0   | 48.0    | 57.0    | 68.0    | 83.0  | 94.0    | 117   | 136   | 166   | 125°    | 135°       | 140°  |  |
|                             | Z 210 | 12.3      | 43.0   | 56.0    | 66.0    | 79.0    | 98.0  | 113     | 136   | 159   | 192   | 130°    | 140°       | 145°  |  |
|                             | Z 300 | 14.7      | 62.0   | 79.0    | 94      | 113     | 140   | 162     | 196   | 227   | 279   | 110°    | 130°       | 135°  |  |
|                             | Z 400 | 17.8      | 94.0   | 121     | 143     | 170     | 208   | 242     | 294   | 340   | 420   | 120°    | 130°       | 140°  |  |