

# NF

## Standard Fan Nozzle

### DESIGN FEATURES

- One-piece construction
- No internal parts
- Sizes for all applications
- Male connection

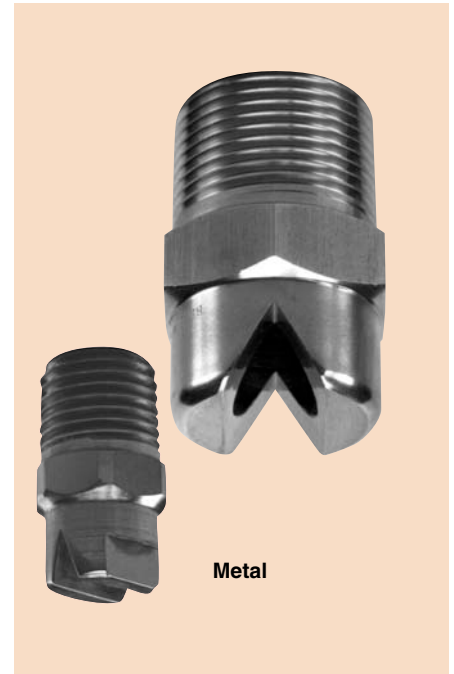
### SPRAY CHARACTERISTICS

- High impact
- Uniform distribution with tapered edges for overlapping sprays
- Extra-wide angles available

**Spray pattern:** Fan and Straight Jet

**Spray angles:** 0° to 120°

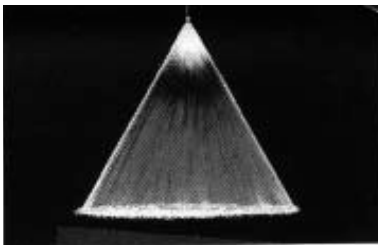
**Flow rates:** 0.161 to 3430 l/min



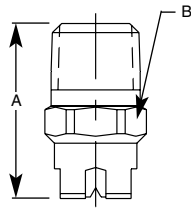
Metal



FAN



Fan 50°



3/8" - 2" Metal

Dimensions are approximate. Check with BETE for critical dimension applications.

### NF Flow Rates

Call BETE to verify spray angle performance at operating pressures above 5 bar.

Fan and Straight Jet, 0°, 15°, 30°, 50°, 65°, 80°, 90°, 110°, and 120° Spray Angles, 1/8" to 2" Pipe Sizes

### NF Dimensions BSP or NPT

| Male Pipe Size                | Nozzle Number | K Factor | LITERS PER MINUTE @ BAR |         |       |       |       |       |        |        | Equivalent Orifice Dia. (mm) | Pipe Size | Dim. for Metal Only (mm) |      | Wt. (g)<br>Metal Plas. |      |
|-------------------------------|---------------|----------|-------------------------|---------|-------|-------|-------|-------|--------|--------|------------------------------|-----------|--------------------------|------|------------------------|------|
|                               |               |          | 0.5 bar                 | 0.7 bar | 1 bar | 2 bar | 3 bar | 5 bar | 10 bar | 30 bar |                              |           | A                        | B    |                        |      |
| 1/8<br>or<br>1/4              | NF01          | 0.228    | 0.16                    | 0.19    | 0.23  | 0.32  | 0.39  | 0.51  | 0.72   | 1.25   | 0.66                         | 1/8       | 22.2                     | 11.1 | 28.4                   | 7.09 |
|                               | NF015         | 0.342    | 0.24                    | 0.29    | 0.34  | 0.48  | 0.59  | 0.76  | 1.08   | 1.87   |                              |           |                          |      |                        |      |
|                               | NF02          | 0.455    | 0.32                    | 0.38    | 0.46  | 0.64  | 0.79  | 1.02  | 1.44   | 2.49   |                              |           |                          |      |                        |      |
|                               | NF025         | 0.569    | 0.40                    | 0.48    | 0.57  | 0.81  | 0.99  | 1.27  | 1.80   | 3.12   |                              |           |                          |      |                        |      |
| 1/4<br>or<br>3/8              | NF03          | 0.683    | 0.48                    | 0.57    | 0.68  | 0.97  | 1.18  | 1.53  | 2.16   | 3.74   | 1.09                         | 1/4       | 27.0                     | 14.3 | 42.5                   | 10.6 |
|                               | NF04          | 0.911    | 0.64                    | 0.76    | 0.91  | 1.29  | 1.58  | 2.04  | 2.88   | 4.99   |                              |           |                          |      |                        |      |
|                               | NF05          | 1.14     | 0.81                    | 0.95    | 1.14  | 1.61  | 1.97  | 2.55  | 3.60   | 6.24   |                              |           |                          |      |                        |      |
|                               | NF06          | 1.37     | 0.97                    | 1.14    | 1.37  | 1.93  | 2.37  | 3.06  | 4.33   | 7.49   |                              |           |                          |      |                        |      |
| 1/8<br>or<br>1/4<br>or<br>3/8 | NF08          | 1.82     | 1.28                    | 1.52    | 1.82  | 2.57  | 3.15  | 4.06  | 5.74   | 9.95   | 1.83                         | 3/8       | 31.8                     | 17.5 | 56.7                   | 14.2 |
|                               | NF10          | 2.28     | 1.61                    | 1.91    | 2.28  | 3.22  | 3.95  | 5.10  | 7.21   | 12.5   |                              |           |                          |      |                        |      |
|                               | NF15          | 3.42     | 2.42                    | 2.86    | 3.42  | 4.83  | 5.92  | 7.64  | 10.8   | 18.7   |                              |           |                          |      |                        |      |
|                               | NF20          | 4.56     | 3.22                    | 3.81    | 4.56  | 6.45  | 7.89  | 10.2  | 14.4   | 25.0   |                              |           |                          |      |                        |      |
| 1/4<br>or<br>3/8              | NF30          | 6.84     | 4.83                    | 5.72    | 6.84  | 9.67  | 11.8  | 15.3  | 21.6   | 37.4   | 3.57                         | 1/2       | 38.1                     | 22.2 | 85.1                   | 28.4 |
|                               | NF40          | 9.12     | 6.45                    | 7.63    | 9.12  | 12.9  | 15.8  | 20.4  | 28.8   | 49.9   |                              |           |                          |      |                        |      |
|                               | NF50          | 11.4     | 8.06                    | 9.53    | 11.4  | 16.1  | 19.7  | 25.5  | 36.0   | 62.4   |                              |           |                          |      |                        |      |
|                               | NF60          | 13.7     | 9.67                    | 11.4    | 13.7  | 19.3  | 23.7  | 30.6  | 43.2   | 74.9   |                              |           |                          |      |                        |      |
| 3/8<br>or<br>1/2              | NF70          | 16.0     | 11.3                    | 13.3    | 16.0  | 22.6  | 27.6  | 35.7  | 50.4   | 87.4   | 5.16                         | 3/4       | 44.5                     | 28.6 | 170                    | 42.5 |
|                               | NF60          | 13.7     | 9.67                    | 11.4    | 13.7  | 19.3  | 23.7  | 30.6  | 43.2   | 74.9   |                              |           |                          |      |                        |      |
|                               | NF70          | 16.0     | 11.3                    | 13.3    | 16.0  | 22.6  | 27.6  | 35.7  | 50.4   | 87.4   |                              |           |                          |      |                        |      |
|                               | NF80          | 18.2     | 12.9                    | 15.3    | 18.2  | 25.8  | 31.6  | 40.8  | 57.7   | 99.9   |                              |           |                          |      |                        |      |
| 1/2<br>or<br>3/4              | NF90          | 20.5     | 14.5                    | 17.2    | 20.5  | 29.0  | 35.5  | 45.9  | 64.9   | 112    | 5.95                         | 1         | 55.6                     | 34.9 | 227                    | 56.7 |
|                               | NF100         | 22.8     | 16.1                    | 19.1    | 22.8  | 32.2  | 39.5  | 51.0  | 72.1   | 125    |                              |           |                          |      |                        |      |
|                               | NF120         | 27.3     | 19.3                    | 22.9    | 27.3  | 38.7  | 47.4  | 61.1  | 86.5   | 150    |                              |           |                          |      |                        |      |
|                               | NF150         | 34.2     | 24.2                    | 28.6    | 34.2  | 48.3  | 59.2  | 76.4  | 108    | 187    |                              |           |                          |      |                        |      |
| 3/4<br>or<br>1                | NF200         | 45.6     | 32.2                    | 38.1    | 45.6  | 64.5  | 78.9  | 102   | 144    | 250    | 8.73                         | 1 1/4     | 63.5                     | 44.5 | 340                    | 85.1 |
|                               | NF300         | 68.4     | 48.3                    | 57.2    | 68.4  | 96.7  | 118   | 153   | 216    | 374    |                              |           |                          |      |                        |      |
|                               | NF400         | 91.2     | 64.5                    | 76.3    | 91.2  | 129   | 158   | 204   | 288    | 499    |                              |           |                          |      |                        |      |
|                               | NF750         | 171      | 121                     | 143     | 171   | 242   | 296   | 382   | 540    | 936    |                              |           |                          |      |                        |      |
| 1<br>or<br>1 1/4              | NF800         | 182      | 129                     | 153     | 182   | 258   | 316   | 408   | 577    | 999    | 18.3                         | 1 1/2     | 76.2                     | 50.8 | 567                    | 142  |
|                               | NF1150        | 262      | 185                     | 219     | 262   | 371   | 454   | 586   | 829    | 1440   |                              |           |                          |      |                        |      |
|                               | NF1500        | 342      | 242                     | 286     | 342   | 483   | 592   | 764   | 1080   | 1870   |                              |           |                          |      |                        |      |
|                               | NF2250        | 513      | 362                     | 429     | 513   | 725   | 890   | 1150  | 1620   | 2810   |                              |           |                          |      |                        |      |

Flow Rate ( $l/min$ ) =  $K \sqrt{\text{bar}}$  Standard Materials: Brass, 303 Stainless Steel, 316 Stainless Steel, PVC and PTFE (PTFE not available in nozzle numbers below NF025).

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.