

NFS

Stubby Flat Fan

DESIGN FEATURES

- Extremely short length for minimum projection and maximum clearance
- Produces a flat fan spray pattern available in a variety of spray angles
- Available in straight (parallel) threads only, NPS and BSPP
- Requires gasket to seal connection

SPRAY CHARACTERISTICS

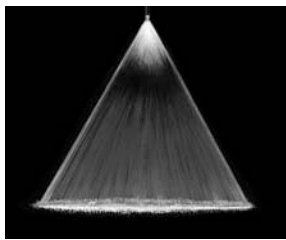
Spray pattern: Fan

Spray angles: 20°, 30°, 45°, 60°, 90° and 120° standard

Flow rates: 0.20 to 951 l/min



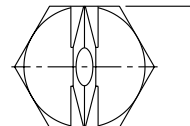
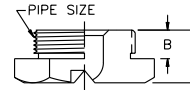
Metal



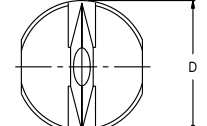
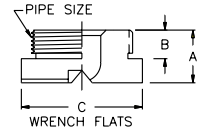
Fan 45°



Fan 90°



Metal



Plastic



FAN

NFS Flow Rates and Dimensions

Flat Fan, 20°, 30°, 45°, 60°, 90° & 120° Spray Angles, 1/4" to 2" Pipe Sizes

| Male Pipe Size | Nozzle Number | K Factor | LITERS PER MINUTE @ BAR | | | | | | | Equiv. Orifice Dia. (mm) |
|----------------|---------------|----------|-------------------------|-------|-------|-------|-------|-------|--------|--------------------------|
| | | | 0.5 bar | 1 bar | 2 bar | 3 bar | 5 bar | 7 bar | 10 bar | |
| 1/4 | NFS 012 | 0.28 | 0.20 | 0.28 | 0.40 | 0.49 | 0.63 | 0.75 | 0.89 | 0.800 |
| | NFS 019 | 0.44 | 0.31 | 0.44 | 0.63 | 0.77 | 0.99 | 1.18 | 1.41 | 1.00 |
| | NFS 031 | 0.71 | 0.50 | 0.71 | 1.00 | 1.23 | 1.59 | 1.88 | 2.25 | 1.20 |
| | NFS 039 | 0.88 | 0.62 | 0.88 | 1.25 | 1.53 | 1.98 | 2.34 | 2.79 | 1.35 |
| | NFS 050 | 1.13 | 0.80 | 1.13 | 1.60 | 1.96 | 2.53 | 2.99 | 3.58 | 1.50 |
| | NFS 059 | 1.35 | 0.95 | 1.35 | 1.90 | 2.33 | 3.01 | 3.56 | 4.25 | 1.65 |
| | NFS 077 | 1.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.67 | 5.59 | 2.00 |
| | NFS 098 | 2.23 | 1.58 | 2.23 | 3.15 | 3.86 | 4.98 | 5.90 | 7.05 | 2.20 |
| | NFS 12 | 2.83 | 2.00 | 2.83 | 4.00 | 4.90 | 6.33 | 7.48 | 8.95 | 2.50 |
| | NFS 15 | 3.36 | 2.38 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.6 | 2.70 |
| 1/4 or 3/4" | NFS 25 | 5.66 | 4.00 | 5.66 | 8.00 | 9.80 | 12.7 | 15.0 | 17.9 | 3.50 |
| | NFS 31 | 7.10 | 5.02 | 7.10 | 10.0 | 12.3 | 15.9 | 18.8 | 22.5 | 4.00 |
| | NFS 39 | 8.83 | 6.25 | 8.83 | 12.5 | 15.3 | 19.8 | 23.4 | 27.9 | 4.50 |
| | NFS 50 | 11.3 | 8.00 | 11.3 | 16.0 | 19.6 | 25.3 | 29.9 | 35.8 | 5.00 |
| | NFS 62 | 14.1 | 10.0 | 14.1 | 20.0 | 24.5 | 31.6 | 37.4 | 44.7 | 5.50 |
| | NFS 77 | 17.7 | 12.5 | 17.7 | 25.0 | 30.6 | 39.5 | 46.7 | 55.9 | 6.00 |
| 3/4 or 1-1/4 | NFS 93 | 21.2 | 15.0 | 21.2 | 30.0 | 36.7 | 47.4 | 56.1 | 67.0 | 6.90 |
| | NFS 124 | 28.3 | 20.0 | 28.3 | 40.0 | 49.0 | 63.3 | 74.8 | 89.5 | 8.00 |
| | NFS 155 | 35.3 | 25.0 | 35.3 | 50.0 | 61.2 | 79.0 | 93.5 | 112 | 9.00 |
| | NFS 185 | 42.1 | 29.8 | 42.1 | 59.6 | 73.0 | 94.2 | 112 | 133 | 9.50 |
| 1-1/4 | NFS 195 | 44.6 | 31.5 | 44.6 | 63.0 | 77.2 | 100 | 118 | 141 | 10.0 |
| | NFS 309 | 70.4 | 49.8 | 70.4 | 100 | 122 | 158 | 186 | 223 | 12.0 |
| 2 | NFS 496 | 113 | 80.0 | 113 | 160 | 196 | 253 | 299 | 358 | 15.0 |
| | NFS 557 | 127 | 89.8 | 127 | 180 | 220 | 284 | 336 | 402 | 16.0 |
| | NFS 620 | 141 | 100 | 141 | 200 | 245 | 316 | 374 | 447 | 17.0 |
| | NFS 775 | 177 | 125 | 177 | 250 | 306 | 395 | 467 | 559 | 19.0 |
| | NFS 977 | 223 | 158 | 223 | 315 | 386 | 498 | 590 | 705 | 21.0 |
| | NFS 1130 | 258 | 182 | 258 | 365 | 447 | 577 | 683 | 816 | 22.5 |
| | NFS 1320 | 301 | 213 | 301 | 425 | 521 | 673 | 796 | 951 | 24.5 |

Flow Rate (l/min) = K √bar *NF93 available in 120° only

NFS Dimensions and Spray Angles

| Pipe Size | Nozzle Number | Spray Angles Available | Dimensions (mm) | | | |
|-----------|---------------------|-----------------------------|-----------------|------|---|------|
| | | | A | B | C | D |
| 1/4 | NFS 012 To NFS 39 | 20° 30° 45° 60° 90° 120° | 11.9 | | | |
| | NFS 50 To NFS 77 | 20° 30° 45° 60° 90° | 7.11 | | | 17.5 |
| | NFS 25 To NFS 77 | 20° 30° 45° 60° 90° 120° | 15.0 | | | |
| | NFS 93 | 120° | 7.87 | | | |
| | NFS 124 To NFS 155 | 20° 30° 45° 60° 90° 120° | 31.8 | | | |
| 3/4 | NFS 185 To NFS 195 | 20° 30° 45° 60° 90° 120° | 35.1 | | | |
| | NFS 309 | 20° 30° 45° 60° 90° 120° | | | | |
| | NFS 124* To NFS 496 | 20° 30° 45° 60° 90° 120° | 22.1 | 11.9 | | 55.4 |
| 1 1/4 | NFS 557 To NFS 1320 | 20° 30° 45° 60° 90° 120° | 31.8 | 20.1 | | 76.2 |

Standard Materials: Brass, 316 Stainless Steel, 303 Stainless Steel and PVC. See chart on page 21 for complete list.

Call for the name of your nearest BETE representative.

CALL 1-413-772-2166