

# TFXP

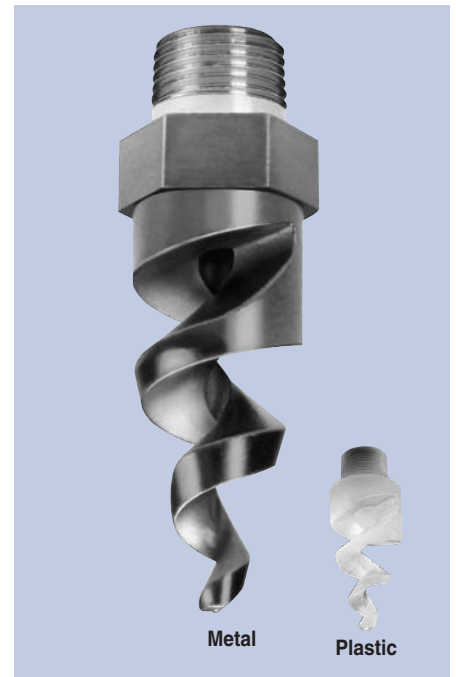
## Largest Free Passage

### DESIGN FEATURES

- Largest free passage in the original spiral nozzle invented by BETE and continuously improved!
- Passes particles equal to orifice size
- Clog-resistant
- One-piece, extra heavy construction
- High energy efficiency
- Male connection

### SPRAY CHARACTERISTICS

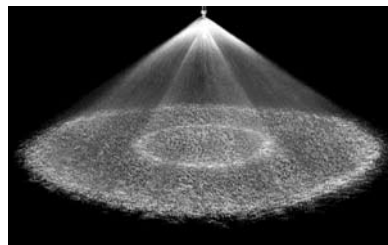
- Wide range of flow rates
  - Fine atomization
- Spray pattern:** Full Cone  
(Hollow Cone available by special order)
- Spray angles:** 90° and 120°
- Flow rates:** 3.0 to 3320 gpm



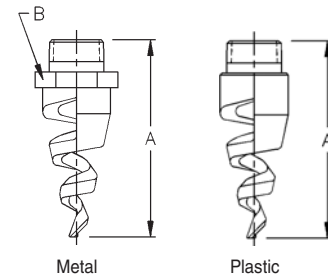
FULL CONE



Full Cone 90° (XPN)



Full Cone 120° (XP)



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

### TFXP Flow Rates and Dimensions

Full Cone, 90° (XPN) and 120° (XP) Spray Angles, 3/8" to 4" Pipe Sizes

| Male Pipe Size | Nozzle Number | K Factor | GALLONS PER MINUTE @ PSI |        |        |        |        |        | PTFE not recommended at pressures above red line |         |         |         | Approx. Free Pass. & Orifice Dia. (in.) | Approximate Dimensions (in.) for Metal Only |      | Wt. (lbs.) |       |
|----------------|---------------|----------|--------------------------|--------|--------|--------|--------|--------|--|---------|---------|---------|---|---|------|------------|-------|
|                |               |          | 10 PSI                   | 20 PSI | 30 PSI | 40 PSI | 50 PSI | 60 PSI | 80 PSI   | 100 PSI | 200 PSI | 400 PSI |   | A   | B    | Metal      | Plas. |
| 3/8            | TF12          | 0.949    | 3.00                     | 4.24   | 5.20   | 6.00   | 6.71   | 7.35   | 8.49   | 9.49    | 13.4    | 19.0    | 0.19                                    | 2.88  | 0.88 | 0.20       | 0.04  |
|                | TF14          | 1.28     | 4.05                     | 5.73   | 7.01   | 8.10   | 9.06   | 9.92   | 11.5   | 12.8    | 18.1    | 25.6    | 0.22                                    | 2.88  | 0.88 |            |       |
|                | TF16          | 1.68     | 5.30                     | 7.50   | 9.2    | 10.6   | 11.9   | 13.0   | 15.0   | 16.8    | 23.7    | 33.5    | 0.25                                    | 2.75  | 0.88 |            |       |
|                | TF20          | 2.61     | 8.25                     | 11.7   | 14.3   | 16.5   | 18.4   | 20.2   | 23.3   | 26.1    | 36.9    | 52.2    | 0.31                                    | 3.12  | 0.88 |            |       |
| 1/2            | TF24          | 3.81     | 12.1                     | 17.0   | 20.9   | 24.1   | 26.9   | 29.5   | 34.1   | 38.1    | 53.9    | 76.2    | 0.38                                    | 3.47  | 1.13 | 0.41       | 0.06  |
|                | TF28          | 5.22     | 16.5                     | 23.3   | 28.6   | 33.0   | 36.9   | 40.4   | 46.7   | 52.2    | 73.8    | 104     | 0.44                                    | 3.50  | 1.13 |            |       |
| 3/4            | TF32          | 6.64     | 21.0                     | 29.7   | 36.4   | 42.0   | 47.0   | 51.4   | 59.4   | 66.4    | 93.9    | 133     | 0.50                                    | 5.38  | 1.75 | 1.56       | 0.22  |
| 1              | TF40          | 10.6     | 33.5                     | 47.4   | 58.0   | 67.0   | 74.9   | 82.1   | 94.8   | 106     | 150     | 212     | 0.63                                    | 5.25  | 2.00 | 1.56       | 0.25  |
|                | TF48          | 15.0     | 47.5                     | 67.2   | 82.3   | 95.0   | 106    | 116    | 134  | 150     | 212     | 300     | 0.75                                    | 6.63  | 2.00 | 2.06       | 0.47  |
| 1 1/2          | TF56          | 20.4     | 64.5                     | 91.2   | 112    | 129    | 144    | 158    | 182  | 204     | 288     | 408     | 0.88                                    | 6.97  | 2.50 | 4.00       | 0.59  |
|                | TF64          | 26.7     | 84.5                     | 120    | 146    | 169    | 189    | 207    | 239  | 267     | 378     | 534     | 1.00                                    | 6.94  | 2.50 | 2.44       | 0.53  |
|                | TF72          | 30.4     | 96.0                     | 136    | 166    | 192    | 215    | 235    | 272  | 304     | 429     | 607     | 1.13                                    | 7.41  | 2.50 | 2.81       | 0.53  |
| 2              | TF88          | 44.3     | 140                      | 198    | 242    | 280    | 313    | 343    | 396  | 443     | 626     | 885     | 1.38                                    | 10.5  | 2.63 | 5.12       | 1.25  |
|                | TF96          | 55.9     | 177                      | 250    | 306    | 354    | 395    | 433    | 500  | 559     | 791     | 1120    | 1.50                                    | 11.0  | 2.63 | 6.31       | 1.25  |
| 3              | TF112         | 81.0     | 256                      | 362    | 443    | 512    | 572    | 627    | 724  | 810     | 1150    | 1620    | 1.75**                                  | 12.0  | 3.50 | 8.37       | 1.37  |
|                | TF128         | 107      | 339                      | 480    | 588    | 679    | 759    | 829    | 960  | 1070    | 1510    | 2150    | 2.00**                                  | 11.7  | 3.50 | 9.75       | 1.50  |
| 4              | TF160         | 166      | 525                      | 742    | 909    | 1050   | 1170   | 1290   | 1480   | 1660    | 2350    | 3320    | 2.50**                                  | 12.0  | 4.50 | 15.6       | 1.87  |

Flow Rate (GPM) = K √PSI    \*\*Free passage is 1.5"

Standard Materials: Brass, 316 Stainless Steel, PVC, Polypropylene, Cobalt Alloy 6, and PTFE.

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