

IS

Rectangular Coverage/Mounted in Pairs

DESIGN FEATURES

- Effective wherever rectangular pattern is required
- High energy efficiency
- Low coefficient of discharge and large unimpeded openings
- Excellent clog resistance
- Mounted in opposing pairs
- Male connection

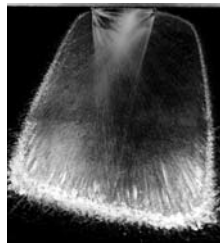
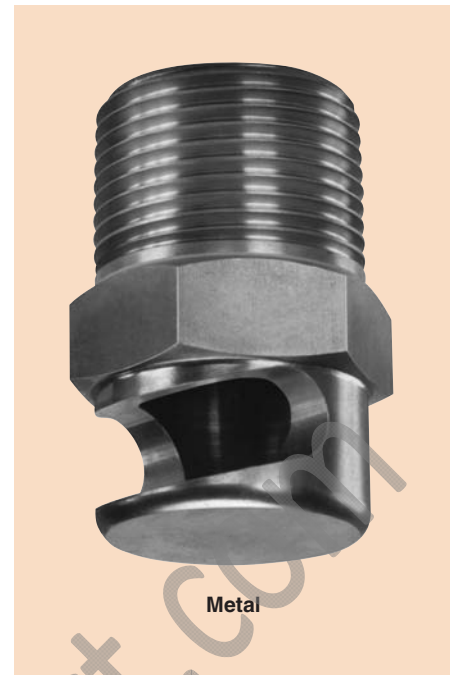
SPRAY CHARACTERISTICS

- Pattern widths of 18" to 120" can be achieved
- Good distribution with pressures as low as 0.035 bar
- Thick bands of droplets from opposing pairs intersect and fall uniformly

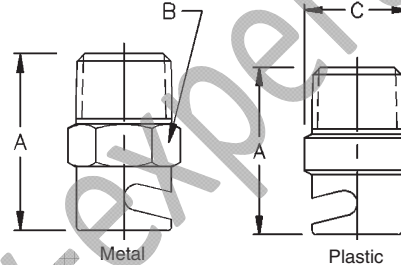
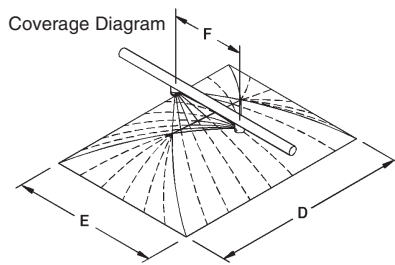
Spray pattern: Rectangular

Spray angle: See Pattern Width and Coverage Chart

Flow rates: 1.77 to 649 l/min per pair



Rectangular Spray



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

IS Flow Rates and Dimensions

Rectangular Spray Pattern, 1/16" to 1 1/2" Pipe Sizes, BSP or NPT

Coverage

300mm Mounting Height

| Male Pipe Size | Nozzle Number | K Factor | LITERS PER MINUTE PER PAIR @ BAR | | | | | | | | | Nozzle Dim. (mm) | | | Wt. (g) Metal Plas. | Spacing (mm) F | Approx. Cover. (mm) @ bar | | | | | | | |
|----------------|---------------|----------|----------------------------------|----------|---------|---------|---------|---------|-------|---------|------|------------------|------|----------|------------------------|-------------------|---------------------------|--|----------|--|----------|--|-----------|--|
| | | | 0.03 bar | 0.07 bar | 0.1 bar | 0.2 bar | 0.5 bar | 0.7 bar | 1 bar | 1.5 bar | A | B | C | 0.07 bar | | | 0.1 bar | | 0.25 bar | | 0.5 bar | | | |
| 1/16 | IS2 | 10.2 | 1.77 | 2.70 | 3.22 | 4.56 | 7.21 | 8.53 | 10.2 | 12.5 | 19.1 | 7.87 | 7.87 | 4 | 2 | 70 | 600 450 | | 850 650 | | 1500 750 | | 1800 750 | |
| | IS3 | 15.3 | 2.65 | 4.04 | 4.83 | 6.84 | 10.8 | 12.8 | 15.3 | 18.7 | | | | | | | 650 450 | | 900 650 | | 1200 750 | | 1500 900 | |
| 1/8 | IS4 | 20.4 | 3.53 | 5.39 | 6.45 | 9.12 | 14.4 | 17.1 | 20.4 | 25.0 | 22.2 | 12.7 | 11.1 | 28 | 7 | 100 | 500 350 | | 800 450 | | 1050 750 | | 1150 900 | |
| | IS6 | 30.6 | 5.30 | 8.09 | 9.67 | 13.7 | 21.6 | 25.6 | 30.6 | 37.4 | | | | | | | 650 450 | | 900 650 | | 1200 900 | | 1350 900 | |
| 1/4 | IS8 | 40.8 | 7.06 | 10.8 | 12.9 | 18.2 | 28.8 | 34.1 | 40.8 | 49.9 | 27.0 | 15.9 | 14.3 | 43 | 11 | 125 | 750 450 | | 1000 550 | | 1500 900 | | 1950 1050 | |
| | IS10 | 51.0 | 8.83 | 13.5 | 16.1 | 22.8 | 36.0 | 42.6 | 51.0 | 62.4 | | | | | | | 650 300 | | 900 500 | | 1350 600 | | 1000 600 | |
| 3/8 | IS12 | 61.1 | 10.6 | 16.2 | 19.3 | 27.3 | 43.2 | 51.2 | 61.1 | 74.9 | 31.8 | 19.1 | 17.5 | 57 | 14 | 150 | 650 300 | | 900 500 | | 1350 600 | | 1000 600 | |
| | IS14 | 71.3 | 12.4 | 18.9 | 22.6 | 31.9 | 50.4 | 59.7 | 71.3 | 87.4 | | | | | | | 900 300 | | 1200 500 | | 1650 600 | | 1000 600 | |
| | IS16 | 81.5 | 14.1 | 21.6 | 25.8 | 36.5 | 57.7 | 68.2 | 81.5 | 99.9 | | | | | | | 900 300 | | 1200 500 | | 1650 600 | | 1000 600 | |
| 1/2 | IS20 | 102 | 17.7 | 27.0 | 32.2 | 45.6 | 72.1 | 85.3 | 102 | 125 | 36.5 | 22.2 | 22.2 | 85 | 28 | 200 | 900 300 | | 1500 700 | | 2100 900 | | 2200 1050 | |
| | IS24 | 122 | 21.2 | 32.4 | 38.7 | 54.7 | 86.5 | 102 | 122 | 150 | | | | | | | 900 300 | | 1500 700 | | 2100 900 | | 2200 1050 | |
| | IS28 | 143 | 24.7 | 37.7 | 45.1 | 63.8 | 101 | 119 | 143 | 175 | | | | | | | 900 300 | | 1500 700 | | 2100 900 | | 2200 1050 | |
| 3/4 | IS32 | 163 | 28.2 | 43.1 | 51.6 | 72.9 | 115 | 136 | 163 | 200 | 44.5 | 28.6 | 28.6 | 170 | 43 | 250 | 1050 300 | | 1500 500 | | 1650 600 | | 2250 650 | |
| | IS40 | 204 | 35.3 | 53.9 | 64.5 | 91.2 | 144 | 171 | 204 | 250 | | | | | | | 1050 300 | | 1500 500 | | 1650 600 | | 2250 650 | |
| | IS48 | 245 | 42.4 | 64.7 | 77.3 | 109 | 173 | 205 | 245 | 300 | | | | | | | 1050 300 | | 1500 500 | | 1650 600 | | 2250 650 | |
| 1 | IS56 | 285 | 49.5 | 75.5 | 90.2 | 128 | 202 | 239 | 285 | 349 | 55.6 | 34.9 | 34.9 | 227 | 57 | 300 | 750 450 | | 1200 500 | | 1550 600 | | 2250 950 | |
| | IS64 | 326 | 56.5 | 86.3 | 103 | 146 | 231 | 273 | 326 | 399 | | | | | | | 750 450 | | 1200 500 | | 1550 600 | | 2250 950 | |
| 1 1/4 | IS72 | 367 | 63.5 | 97.1 | 116 | 164 | 259 | 307 | 367 | 449 | 63.5 | 44.5 | 44.5 | 340 | 85 | 350 | 1200 350 | | 1500 450 | | 2200 500 | | 2700 600 | |
| | IS80 | 408 | 70.6 | 108 | 129 | 182 | 288 | 341 | 408 | 499 | | | | | | | 1200 350 | | 1500 450 | | 2200 500 | | 2700 600 | |
| 1 1/2 | IS88 | 448 | 77.7 | 119 | 142 | 201 | 317 | 375 | 448 | 549 | 76.2 | 50.8 | 50.8 | 567 | 142 | 400 | 900 350 | | 1200 450 | | 1800 600 | | 3000 950 | |
| | IS96 | 489 | 84.7 | 129 | 155 | 219 | 346 | 409 | 489 | 599 | | | | | | | 900 350 | | 1200 450 | | 1800 600 | | 3000 950 | |
| | IS104 | 530 | 91.8 | 140 | 168 | 237 | 375 | 443 | 530 | 649 | | | | | | | 900 350 | | 1200 450 | | 1800 600 | | 3000 950 | |

$$\text{Flow Rate (l/min)} = K \sqrt{\text{bar}}$$

Standard Materials: Brass, 303 Stainless Steel, 316 Stainless Steel, and PVC

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