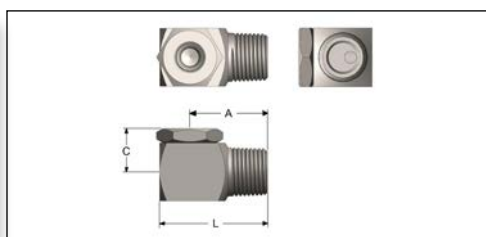
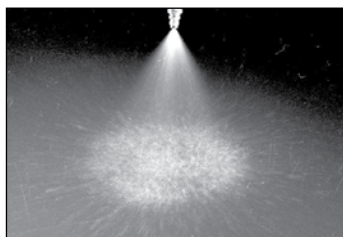




# HNS SERIES NOZZLE SPECIFICATIONS



## SPRAY CHARACTERISTICS:

The HNS series vaneless full-cone nozzle projects a medium to coarse full-cone spray in a direction perpendicular to the nozzle inlet axis. The maximum free passage in this nozzle is substantially larger than most full-cone nozzles due to the 'vaneless' design. This nozzle is suitable for applications where a relatively coarse full-cone spray is required, and where standard nozzles are subject to plugging.

## CONSTRUCTION:

The HNS series are made from bar stock and are a two piece construction. Standard materials are brass, 303 stainless steel and 316 stainless steel. Other materials are available upon request.

## SPECIAL FEATURES:

- 'Vaneless' full-cone design
- Large maximum free passage
- Easy disassembly/assembly and cleaning

## TYPICAL APPLICATIONS:

Wherever a medium to coarse full-cone spray is required from a nozzle with a larger maximum free passage.

| MODEL NUMBER FEMALE | Dim. A | Dim. C | Dim. L | MODEL NUMBER MALE | Dim. A | Dim. C | Dim. L |
|---------------------|--------|--------|--------|-------------------|--------|--------|--------|
| 1/4FHNS             | 0.94   | 0.50   | 1.2    | 1/4HNS            | 0.94   | 0.46   | 1.2    |
| 3/8FHNS             | 1.0    | 0.56   | 1.4    | 3/8HNS            | 1.1    | 0.56   | 1.5    |
| 1/2FHNS             | 1.4    | 0.75   | 1.9    | 1/2HNS            | 1.4    | 0.75   | 1.9    |

| Model   |        | Max. Free Passage (in) | CAPACITY AT VARIOUS PRESSURES (USGPM) |       |        |        |        |        |        |        |        |         |         |        | SPRAY ANGLE @ (degrees) |        |  |
|---------|--------|------------------------|---------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|-------------------------|--------|--|
| Female  | Male   |                        | 5 psi                                 | 7 psi | 10 psi | 15 psi | 20 psi | 30 psi | 40 psi | 60 psi | 80 psi | 100 psi | 125 psi | 10 psi | 20 psi                  | 40 psi |  |
| ¼FHNS5  | ¼HNS5  | 0.078                  | 0.35                                  | 0.42  | 0.50   | 0.61   | 0.71   | 0.87   | 1.00   | 1.22   | 1.41   | 1.58    | 1.77    | 60     | 75                      | 85     |  |
| ¼FHNS7  | ¼HNS7  | 0.094                  | 0.50                                  | 0.59  | 0.70   | 0.86   | 0.99   | 1.21   | 1.40   | 1.71   | 1.98   | 2.21    | 2.47    | 60     | 76                      | 90     |  |
| ¼FHNS8  | ¼HNS8  | 0.109                  | 0.57                                  | 0.67  | 0.80   | 0.98   | 1.13   | 1.39   | 1.60   | 1.96   | 2.26   | 2.53    | 2.83    | 63     | 76                      | 85     |  |
| ¼FHNS10 | ¼HNS10 | 0.125                  | 0.71                                  | 0.84  | 1.00   | 1.22   | 1.41   | 1.73   | 2.00   | 2.45   | 2.83   | 3.2     | 3.5     | 63     | 79                      | 84     |  |
| ¼FHNS11 | ¼HNS11 | 0.141                  | 0.78                                  | 0.92  | 1.10   | 1.35   | 1.56   | 1.91   | 2.20   | 2.69   | 3.11   | 3.5     | 3.9     | 70     | 83                      | 86     |  |
| ⅜FHNS11 | ⅜HNS11 | 0.125                  | 0.78                                  | 0.92  | 1.10   | 1.35   | 1.56   | 1.91   | 2.20   | 2.69   | 3.11   | 3.5     | 3.9     | 80     | 91                      | 95     |  |
| ⅜FHNS13 | ⅜HNS13 | 0.141                  | 0.92                                  | 1.09  | 1.30   | 1.59   | 1.84   | 2.25   | 2.60   | 3.2    | 3.7    | 4.1     | 4.6     | 75     | 81                      | 93     |  |
| ⅜FHNS16 | ⅜HNS16 | 0.156                  | 1.13                                  | 1.34  | 1.60   | 1.96   | 2.26   | 2.77   | 3.2    | 3.9    | 4.5    | 5.1     | 5.7     | 79     | 82                      | 86     |  |
| ⅜FHNS20 | ⅜HNS20 | 0.172                  | 1.41                                  | 1.67  | 2.00   | 2.45   | 2.83   | 3.5    | 4.0    | 4.9    | 5.7    | 6.3     | 7.1     | 77     | 80                      | 87     |  |
| ⅜FHNS23 | ⅜HNS23 | 0.188                  | 1.63                                  | 1.92  | 2.30   | 2.82   | 3.3    | 4.0    | 4.6    | 5.6    | 6.5    | 7.3     | 8.1     | 79     | 70                      | 91     |  |
| ⅜FHNS26 | ⅜HNS26 | 0.203                  | 1.84                                  | 2.18  | 2.60   | 3.2    | 3.7    | 4.5    | 5.2    | 6.4    | 7.4    | 8.2     | 9.2     | 82     | 86                      | 93     |  |
| ⅜FHNS29 | ⅜HNS29 | 0.219                  | 2.05                                  | 2.43  | 2.90   | 3.6    | 4.1    | 5.0    | 5.8    | 7.1    | 8.2    | 9.2     | 10.3    | 86     | 90                      | 96     |  |
| ⅜FHNS33 | ⅜HNS33 | 0.234                  | 2.33                                  | 2.76  | 3.3    | 4.0    | 4.7    | 5.7    | 6.6    | 8.1    | 9.3    | 10.4    | 11.7    | 87     | 90                      | 95     |  |
| ½FHNS32 | ½HNS32 | 0.203                  | 2.26                                  | 2.68  | 3.2    | 3.9    | 4.5    | 5.5    | 6.4    | 7.8    | 9.1    | 10.1    | 11.3    | 70     | 87                      | 94     |  |
| ½FHNS40 | ½HNS40 | 0.234                  | 2.83                                  | 3.3   | 4.0    | 4.9    | 5.7    | 6.9    | 8.0    | 9.8    | 11.3   | 12.6    | 14.1    | 84     | 90                      | 96     |  |
| ½FHNS48 | ½HNS48 | 0.281                  | 3.4                                   | 4.0   | 4.8    | 5.9    | 6.8    | 8.3    | 9.6    | 11.8   | 13.6   | 15.2    | 17.0    | 87     | 93                      | 96     |  |
| ½FHNS56 | ½HNS56 | 0.297                  | 4.0                                   | 4.7   | 5.6    | 6.9    | 7.9    | 9.7    | 11.2   | 13.7   | 15.8   | 17.7    | 19.8    | 91     | 94                      | 96     |  |
| ½FHNS64 | ½HNS64 | 0.328                  | 4.5                                   | 5.4   | 6.4    | 7.8    | 9.1    | 11.1   | 12.8   | 15.7   | 18.1   | 20.2    | 22.6    | 86     | 90                      | 94     |  |
| ½FHNS72 | ½HNS72 | 0.359                  | 5.1                                   | 6.0   | 7.2    | 8.8    | 10.2   | 12.5   | 14.4   | 17.6   | 20.4   | 22.8    | 25.5    | 89     | 93                      | 96     |  |