

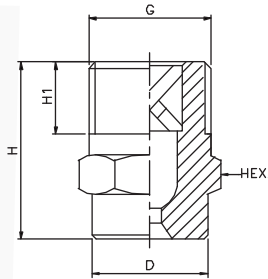
Full Cone Spray Nozzles Series



APPLICATION

- Absorption
- Chemical process engineering
- Chlorine precipitation
- Cleaning
- Cooling
- Desuperheating
- Dust control
- Fire protection
- Foam control
- Gas treatment
- Spraying onto mats in air
- Washers
- Spraying over packings
- Surface spraying
- Water treatment and many others...

DA Series Full Cone Spray Nozzles

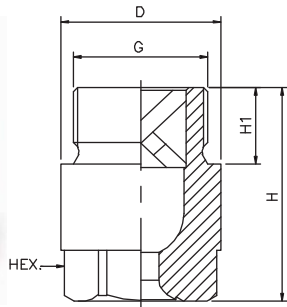


Full Cone Spray Nozzle form complete spray coverage in a round area. It provides an uniform spray distribution of medium to large size drops resulting from their vane design which features large flow passage and control characteristics.

Characteristic : Internal vane design features large flow passage and fine control.

Design : Removable vane, Axial flow.

Type : Round pattern, Threaded connection.



| MODEL NO. | CONNECTION END | | | | | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | | | |
|-------------|----------------|-----------|-----------|-----------|-----------|-----------|---------|-------------|-------------|---------|-------------------|---|----------------|--------|-------|--------|--------|-------------|---------------|--------|------|------|-----|----|
| | YA | YB | YC | YD | XE | XF | XG | XH | XK | | | | | | | | | M1/M2 | M3 | P1/P2 | | | | |
| SPRAY ANGLE | | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPP | 3/4" BSPP | 1" BSPP | 1 1/4" BSPP | 1 1/2" BSPP | 2" BSPP | | Flow Capacity in GPM | Pressure [bar] | | | | | SS304/SS316 | Brass | PVC/PP | | | | |
| 15° | 30° | | | | | | | | | | 40*psi | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | H | H1 | D | HEX | |
| DA11.100 | DA12.100 | YA | | | | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | | |
| DA11.150 | DA12.150 | YA | | | | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | | | | | |
| DA11.175 | DA12.175 | YA | | | | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | 18 | 6.5 | 10.2 | 11 | |
| DA11.200 | DA12.200 | YA | | | | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | | |
| DA11.250 | DA12.250 | YA | | | | | | | | | 1.9 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | | | | | |
| DA11.350 | DA12.350 | YA | | | | | | | | | 2.3 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | | | | |
| DA11.400 | DA12.400 | YA | | | | | | | | | 2.5 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | YC | 10 | 13 | 14 | |
| DA11.475 | DA12.475 | YA | YB | | | | | | | | 2.7 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | | |
| DA11.650 | DA12.650 | YA | YB | | | | | | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | YB | 10 | 16 | 17 | |
| DA11.800 | DA12.800 | YA | YB | | | | | | | | 3.5 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | | | |
| DA21.100 | DA22.100 | | YB | YC | | | | | | | 3.9 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | | | |
| DA21.125 | DA22.125 | | YB | YC | | | | | | | 4.3 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | YD | | | | |
| DA21.160 | DA22.160 | | | YD | | | | | | | 4.9 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | YD | 13.2 | 21 | 22 | |
| DA21.200 | DA22.200 | | | YD | | | | | | | 5.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | | |
| DA21.225 | DA22.225 | | | YD | | | | | | | 5.8 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | | |
| DA21.250 | DA22.250 | | | YD | XE | | | | | | 6.1 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | XE | 15 | 32 | 27 | |
| DA21.320 | DA22.320 | | | | XE | | | | | | 6.9 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | | |
| DA21.400 | DA22.400 | | | | XE | | | | | | 7.7 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | | |
| DA21.520 | DA22.520 | | | | XE | XF | | | | | 8.8 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | XF | 17 | 39 | 36 | |
| DA21.650 | DA22.650 | | | | | XF | | | | | 9.9 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | | |
| DA21.720 | DA22.720 | | | | | XF | | | | | 10.4 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.00 | | | | | |
| DA21.800 | DA22.800 | | | | | XF | XG | | | | 11.5 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | XG | | | | |
| DA31.100 | DA32.100 | | | | | | XG | | | | 12.9 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | XG | 19 | 49 | 41 | |
| DA31.118 | DA32.118 | | | | | | XG | | | | 14.0 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | | | | | |
| DA31.130 | DA32.130 | | | | | | XG | XH | | | 14.7 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | XH | | | | |
| DA31.160 | DA32.160 | | | | | | | XH | | | 16.3 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | XH | 22 | 59 | 50 | |
| DA31.200 | DA32.200 | | | | | | | XH | XK | | 18.2 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | XK | | | | |
| DA31.227 | DA32.227 | | | | | | | | XK | | 19.4 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | XK | 106 | 24 | 68 | 60 |
| DA31.250 | DA32.250 | | | | | | | | XK | | 20.4 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | | | | | |
| DA31.337 | DA32.337 | | | | | | | | XK | | 23.7 | 103.0 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | | | | | |

- X - BSPP, Y - BSPT, Z - NPT, As Required
- DB Series Stands For Female Connction

- *Flow rate in US GPM @40 psi Pressure
- Flanged Connection on Request

- Special Material on Request

DA Series Full Cone Spray Nozzles

DA
DB*

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | | |
|--------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|-------|-------|---------------|-------------------------------------|------------------------------------|-------|--------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 | |
| 45° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| G/A D IMENSION. MM | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | H | H1 | D | HEX | | | | | | | | |
| DA13.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DA13.150 | YA | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | 18 | 6.5 | 10.2 | 11 |
| DA13.175 | YA | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | Weight (Metals) = 9.1 gms. Approx | | | |
| DA13.200 | YA | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | YB | Weight (Metals) = 15.0 gms. Approx | | |
| DA13.250 | YA | YB | | | | | 1.6 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | 22 | 10 | 13 | 14 |
| DA13.350 | | YB | YC | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YC | Weight (Metals) = 32.0 gms. Approx | | |
| DA13.400 | | YB | YC | | | | 2.4 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | 25 | 10 | 16 | 17 |
| DA13.475 | | YB | YC | | | | 2.6 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YD | Weight (Metals) = 64.0 gms. Approx | | |
| DA13.650 | | | YC | YD | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 32 | 13.2 | 21 | 22 |
| DA13.800 | | | | YD | | | 3.4 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | XE | | | |
| DA23.100 | | | | YD | | | 3.8 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | 42 | 15 | 32 | 27 |
| DA23.125 | | | | YD | XE | | 4.2 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | Weight (Metals) = 150.0 gms. Approx | | | |
| DA23.160 | | | | YD | XE | | 4.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | | |
| DA23.200 | | | | | XE | | 5.4 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | |
| DA23.225 | | | | | | XF | 5.7 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XF | | | |
| DA23.250 | | | | | | XF | 6.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 56 | 17 | 39 | 36 |
| DA23.320 | | | | | | XF | 6.8 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | Weight (Metals) = 323.0 gms. Approx | | | |

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | | |
|--------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|-------|-------|---------------|-------|-------------|-------|--------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 | |
| 60° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| G/A D IMENSION. MM | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | H | H1 | D | HEX | | | | | | | | |
| DA14.100 | YA | | | | | | 1.1 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DA14.150 | YA | | | | | | 1.4 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | | | | |
| DA14.175 | YA | | | | | | 1.5 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | 18 | 6.5 | 10.2 | 11 |
| DA14.200 | YA | | | | | | 1.6 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DA14.250 | YA | | | | | | 1.8 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | | | | |
| DA14.350 | YA | YB | | | | | 2.1 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | | | |
| DA14.400 | | YB | YC | | | | 2.3 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | 22 | 10 | 13 | 14 |
| DA14.475 | | YB | YC | | | | 2.5 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DA14.650 | | YB | YC | | | | 2.9 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16 | 17 |
| DA14.800 | | | YC | | | | 3.25 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | | |
| DA24.100 | | | YC | | | | 3.6 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | | |
| DA24.125 | | | | YD | | | 4.1 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | | |
| DA24.160 | | | | YD | | | 4.6 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | YD | | | |
| DA24.200 | | | | | XE | | 5.1 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 32 | 13.2 | 21 | 22 |
| DA24.225 | | | | | XE | | 5.5 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | |
| DA24.250 | | | | | XE | | 5.8 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 |
| DA24.320 | | | | | | XF | 6.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | XF | | | |
| DA24.400 | | | | | | XF | 7.3 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | 56 | 17 | 39 | 36 |
| DA24.520 | | | | | | XF | 8.3 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | | |

- X - BSPP, Y - BSPT, Z - NPT, As Required
- DB Series Stands For Female Connection
- *Flow rate in US GPM @40 psi Pressure
- Flanged Connection on Request
- Special Material on Request

DA Series Full Cone Spray Nozzles

DA

DB*

- DB Series Stands For Female Connection

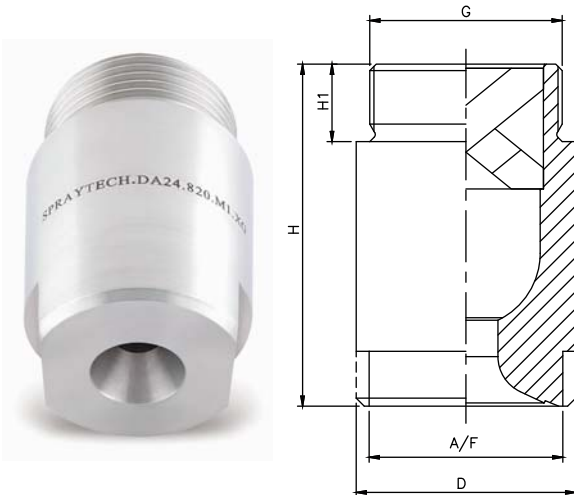
| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|-----------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|--------|--------|--------|-------------------------------------|-------|------|-------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 90° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | 40*psi | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSIION. MM | | | |
| | | | | | | | | | | | | | | | H | H1 | D | HEX | |
| DA16.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DA16.150 | YA | | | | | | 1.4 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | 18 | 6.5 | 10.2 | 11 |
| DA16.175 | YA | | | | | | 1.5 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | Weight (Metals) = 9.1 gms. Approx | | | |
| DA16.200 | YA | | | | | | 1.6 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DA16.250 | YA | | | | | | 1.8 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | YB | | | |
| DA16.350 | YA | | YC | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | 22 | 10 | 13 | 14 |
| DA16.400 | YA | YB | YC | | | | 2.3 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | Weight (Metals) = 15.0 gms. Approx | | | |
| DA16.475 | | YB | YC | | | | 2.5 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DA16.650 | | YB | YC | | | | 2.9 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16 | 17 |
| DA16.800 | | YB | YC | | | | 3.3 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | Weight (Metals) = 32.0 gms. Approx | | | |
| DA26.100 | | | YC | | | | 3.6 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | | |
| DA26.125 | | | YC | | | | 4.1 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | YD | | | |
| DA26.160 | | | YC | YD | | | 4.6 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | 32 | 13.2 | 21 | 22 |
| DA26.200 | | | | YD | | | 5.2 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | |
| DA26.225 | | | | YD | | | 5.5 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | Weight (Metals) = 150.0 gms. Approx | | | |
| DA26.250 | | | | YD | XE | | 5.8 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 |
| DA26.320 | | | | YD | XE | | 6.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | Weight (Metals) = 150.0 gms. Approx | | | |
| DA26.400 | | | | | XE | | 7.3 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | |
| DA26.520 | | | | | XE | XF | 8.3 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | 56 | 17 | 39 | 36 |
| DA26.650 | | | | | | XF | 9.3 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | |
| DA26.720 | | | | | | XF | 9.8 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.0 | Weight (Metals) = 323.0 gms. Approx | | | |

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|--------|--------|--------|---------------------|-------|------|-------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 120° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | 40*psi | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSIION. MM | | | |
| | | | | | | | | | | | | | | | H | H1 | D | HEX | |
| DA18.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DA18.150 | YA | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | | | | |
| DA18.175 | YA | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | 18 | 6.5 | 10.2 | 11 |
| DA18.200 | YA | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DA18.250 | YA | | | | | | 1.9 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | | | | |
| DA18.350 | YA | | | | | | 2.3 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | | | |
| DA18.400 | YA | YB | YC | | | | 2.5 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | 22 | 10 | 13 | 14 |
| DA18.475 | YA | YB | YC | | | | 2.7 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DA18.650 | | YB | YC | | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16 | 17 |
| DA18.800 | | YB | YC | | | | 3.5 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | | |
| DA28.100 | | | YC | | | | 3.9 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | | |
| DA28.125 | | | YC | | | | 4.3 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | YD | | | |
| DA28.160 | | | YC | YD | | | 4.9 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | 32 | 13.2 | 21 | 22 |
| DA28.200 | | | | YD | | | 5.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | |
| DA28.225 | | | | YD | | | 5.8 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | |
| DA28.250 | | | | YD | XE | | 6.1 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 |
| DA28.320 | | | | YD | XE | | 6.9 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | |
| DA28.400 | | | | | XE | | 7.7 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | |
| DA28.520 | | | | | | XF | 8.8 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | 56 | 17 | 39 | 36 |
| DA28.650 | | | | | | XF | 9.9 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | |
| DA28.720 | | | | | | XF | 10.4 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.0 | | | | |

*Flow rate in US GPM @40 psi Pressure

DA Series Full Cone Spray Nozzles (Axial Flow)

DA
DB*

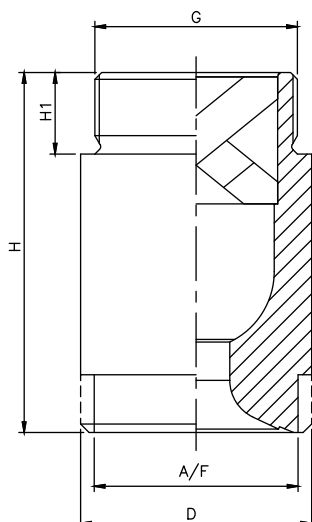


The larger spray nozzles in the D series are widely used in the industry, for a wide variety of applications. They maintain the simple design of the smaller nozzles, with the inherent resistance to clogging due to design of the X-vane, and are often manufactured out high quality alloys and special plastic materials.

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|-----------------|----------------|-------------|---------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|---------------|--------------------|----|-------|
| | XG | XH | XK | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 60° SPRAY ANGLE | 1 1/4" BSPP | 1 1/2" BSPP | 2" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | |
| | | | | | | | | | | | | | H | H1 | D | A/F |
| DA24.650 | XG | | | 9.0 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | XG | | | |
| DA24.800 | XG | | | 10.0 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | 74 | 19 | 49 | 41 |
| DA34.100 | XG | | | 11.20 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | | | | |
| DA34.118 | | XH | | 12.2 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | XH | | | |
| DA34.130 | | XH | | 12.8 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | 85 | 22 | 59 | 50 |
| DA34.160 | | XH | | 14.2 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | | | | |
| DA34.200 | | | XK | 15.8 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | | | | |
| DA34.227 | | | XK | 16.9 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | | | | |
| DA34.250 | | | XK | 17.7 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | XK | | | |
| DA34.337 | | | XK | 20.6 | 103 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | 106 | 24 | 68 | 60 |

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|-----------------|----------------|-------------|---------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|--------------------------------------|--------------------|----|-------|
| | XG | XH | XK | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 90° SPRAY ANGLE | 1 1/4" BSPP | 1 1/2" BSPP | 2" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | |
| | | | | | | | | | | | | | H | H1 | D | A/F |
| DA26.650 | XG | | | 9.7 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | XG | | | |
| DA26.800 | XG | | | 10.7 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | 74 | 19 | 49 | 41 |
| DA36.100 | XG | | | 12.0 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | Weight (Metals) = 525.0 gms. Approx | | | |
| DA36.118 | | XH | | 13.0 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | XH | | | |
| DA36.130 | | XH | | 13.7 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | 85 | 22 | 59 | 50 |
| DA36.160 | | XH | | 15.20 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | | | | |
| DA36.200 | | | XK | 17.0 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | Weight (Metals) = 915.0 gms. Approx | | | |
| DA36.227 | | | XK | 18.1 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | XK | | | |
| DA36.250 | | | XK | 19.0 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | 106 | 24 | 68 | 60 |
| DA36.337 | | | XK | 22.0 | 103.0 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | Weight (Metals) = 1535.0 gms. Approx | | | |

- X – BSPP, Y - BSPT, Z – NPT, As Required
- *Flow rate in US GPM @40 psi Pressure
- Special Material on Request
- DB Series Stands For Female Connection
- Flanged Connection on Request



- Application** : Surface spraying, Washing & Cooling of flue gasses to remove fly ash , Cooling condenser, Scrubbing, Foam breaking.
- Flow Rate** : 65 LPM to 1250 LPM
- Pressure** : 2.0 Kg/cm² or specified
- Spray Angle** : 60° to 120°
- End Connection** : 1 1/4" to 4" BSPT / NPT or BSPP
- M.O.C.** : S.S. 316, 304, Brass, PVC, PVDF, PP, Teflon

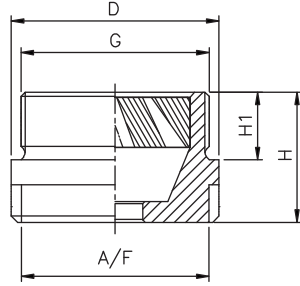
The larger spray nozzles in the DA Series are widely used in the industry, for a wide variety of applications. They maintain the simple design of the smaller nozzles, with the inherent resistance to clogging due to design of the X-vane and are often manufactured by any type of machinable material like SS304, SS316, PP/PVC etc.

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|------------------|----------------|-------------|---------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|--------------------|-------|-----|-------|
| | XG | XH | XK | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 120° SPRAY ANGLE | 1 1/4" BSPP | 1 1/2" BSPP | 2" BSPP | | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | | |
| | | | | | | | | | | | | H | H1 | D | A/F | |
| DA28.650 | XG | | | 10.2 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | XG | | | |
| DA28.800 | XG | | | 11.4 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | 74 | 19 | 49 | 41 |
| DA38.100 | XG | | | 12.7 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | XH | | | |
| DA38.118 | | XH | | 13.8 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | 85 | 22 | 59 | 50 |
| DA38.130 | | XH | | 14.5 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | | | | |
| DA38.160 | | XH | | 16.1 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | | | | |
| DA38.200 | | | XK | 18.0 | 61.31 | 100.0 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | XK | | | |
| DA38.227 | | | XK | 19.1 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | 106 | 24 | 68 | 60 |
| DA38.250 | | | XK | 20.1 | 76.63 | 125.0 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | | | | |
| DA38.337 | | | XK | 23.3 | 103.0 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | | | | |

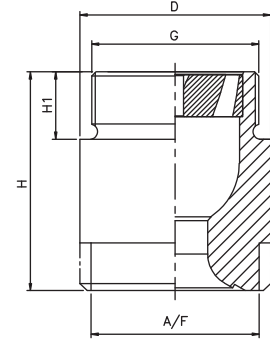
- X – BSPP, Y- BSPT, Z – NPT, As Required
- DB Series Stands For Female Connection
- *Flow rate in US GPM @40 psi Pressure
- Female / Flanged Connections on Request
- Special Material on Request

DA Series Full Cone Spray Nozzles

DA
DB*



Spray Angle 60°/ 90°



Spray Angle 90°/ 120°

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|-----------------|----------------|---------|-------------|-------------------|---|----------------|--------|-----|--------|---------|---------|---------|--------------------|-------|-------------|-------|
| | XL | XM | XN | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 60° SPRAY ANGLE | 2 1/2" BSPP | 3" BSPP | 3 1/2" BSPP | | | | | | | | | | | | SS304/SS316 | Brass |
| | | | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | | |
| | | | | | | H | H1 | D | A/F | | | | | | | |
| DA34.400 | XL | | | 25.0 | 122.61 | 200 | 282.84 | 400 | 489.90 | 632.46 | 748.33 | 894.43 | XL | | | |
| DA34.500 | XL | | | 28.0 | 153.27 | 250 | 353.55 | 500 | 612.37 | 790.57 | 935.41 | 1118.03 | 52 | 27 | 83 | 75 |
| DA34.625 | | XM | | 31.3 | 191.58 | 312.5 | 441.94 | 625 | 765.47 | 988.21 | 1169.27 | 1397.54 | XM | | | |
| DA34.710 | | XM | | 33.3 | 217.64 | 355 | 502.05 | 710 | 869.57 | 1122.61 | 1328.29 | 1587.61 | 60 | 30 | 98 | 85 |
| DA34.810 | | | XN | 35.4 | 245.23 | 400 | 565.69 | 800 | 979.80 | 1264.91 | 1496.66 | 1788.85 | XN | | | |
| | | | | | | | | | | | | | 70 | 32 | 118 | 105 |

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|-----------------|----------------|---------|-------------|-------------------|---|----------------|--------|------|---------|---------|---------|---------|--------------------|-------|-------------|------------------|
| | XL | XM | XN | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 90° SPRAY ANGLE | 2 1/2" BSPP | 3" BSPP | 3 1/2" BSPP | | | | | | | | | | | | SS304/SS316 | Brass |
| | | | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | | |
| | | | | | | H | H1 | D | A/F | | | | | | | |
| DA36.400 | XL | | | 25.0 | 122.61 | 200 | 282.84 | 400 | 489.90 | 632.46 | 748.33 | 894.43 | XL | | | 1318 gms. Approx |
| DA36.500 | XL | | | 28.0 | 153.27 | 250 | 353.55 | 500 | 612.37 | 790.57 | 935.41 | 1118.03 | 52 | 27 | 83 | 75 |
| DA36.625 | | XM | | 31.3 | 191.58 | 312.5 | 441.94 | 625 | 765.47 | 988.21 | 1169.27 | 1397.54 | XM | | | 1676 gms. Approx |
| DA36.710 | | XM | | 33.3 | 217.64 | 355 | 502.05 | 710 | 869.57 | 1122.61 | 1328.29 | 1587.61 | 60 | 30 | 98 | 85 |
| DA36.800 | | | XN | 35.4 | 245.23 | 400 | 565.69 | 800 | 979.80 | 1264.91 | 1496.66 | 1788.85 | XN | | | 3805 gms. Approx |
| DA46.1000 | | | XN | 39.5 | 306.54 | 500 | 707.11 | 1000 | 1224.74 | 1581.14 | 1870.83 | 2236.07 | 70 | 32 | 118 | 105 |

| MODEL NO. | CONNECTION END | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|------------------|----------------|---------|-------------|---------|-------------------|---|----------------|--------|------|---------|---------|---------|---------|--------------------|-------------|-------|------------------|
| | XL | XM | XN | XO | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 120° SPRAY ANGLE | 2 1/2" BSPP | 3" BSPP | 3 1/2" BSPP | 4" BSPP | | | | | | | | | | | SS304/SS316 | Brass | PVC/PP |
| | | | | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | | | |
| | | | | | | | H | H1 | D | A/F | | | | | | | |
| DA38.400 | XL | | | | 25.0 | 122.61 | 200 | 282.84 | 400 | 489.90 | 632.46 | 748.33 | 894.43 | XL | | | 2989 gms. Approx |
| DA38.500 | XL | | | | 28.0 | 153.27 | 250 | 353.55 | 500 | 612.37 | 790.57 | 935.41 | 1118.03 | 52 | 27 | 83 | 75 |
| DA38.625 | | XM | | | 31.3 | 191.58 | 312.5 | 441.94 | 625 | 765.47 | 988.21 | 1169.27 | 1397.54 | XM | | | 5073 gms. Approx |
| DA38.710 | | XM | | | 33.3 | 217.64 | 355 | 502.05 | 710 | 869.57 | 1122.61 | 1328.29 | 1587.61 | 60 | 30 | 98 | 85 |
| DA38.800 | | | XN | | 35.4 | 245.23 | 400 | 565.69 | 800 | 979.80 | 1264.91 | 1496.66 | 1788.85 | XN | | | 8380 gms. Approx |
| DA48.1000 | | | XN | | 39.5 | 306.54 | 500 | 707.11 | 1000 | 1224.74 | 1581.14 | 1870.83 | 2236.07 | 70 | 32 | 118 | 105 |
| DA48.1250 | | | | XO | 44.2 | 383.17 | 625 | 883.88 | 1250 | 1530.93 | 1976.42 | 2338.54 | 2795.08 | XO | | | 9513 gms. Approx |
| | | | | | | | | | | | | | | 165 | 36 | 128 | 110 |

*Flow rate in US GPM @40 psi Pressure

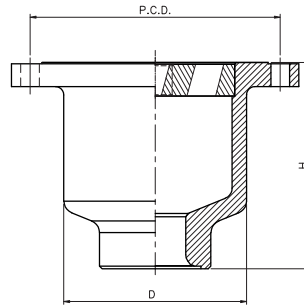
DC Series Full Cone Flanged Connection Spray Nozzles



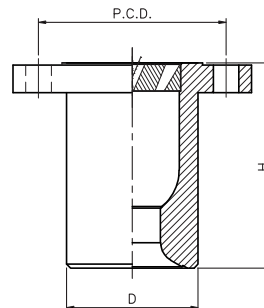
DC Type nozzles are designed to deliver large capacity value, with a carefully designed and machined inside profile, which offers uniform spray distribution and perfect performance even with very low inlet pressure values. The nozzle is made from castings or welded form steel bar.

Typical Application :

Even surface spraying, Cooling and washing of gas, column spraying as well as improvement of chemical reaction by surface enlargement



THIS DESIGN IS IN ABOVE 5° FLANGE END NOZZLE

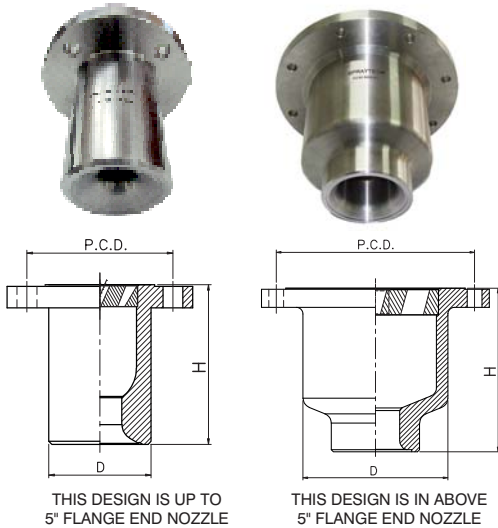


THIS DESIGN IS UP TO 5° FLANGE END NOZZLE



| MODEL NO. | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | | |
|------------------|-------------------|---|------|------|---------|------|---------|----------|-----------------------|-------|-----|
| | | Pressure [bar] | | | | | | | ANSI 16.5 Flange Ø mm | PCD | H |
| 60° SPRAY ANGLE | | 0.3 | 0.5 | 0.7 | 1.0 | 2.0 | 3.0 | 5.0 | | | |
| DC34.800 (A) | 37.0 | 309 | 400 | 473 | 565.69 | 800 | 979.80 | 1264.91 | (3") 190.5 | 152.4 | 140 |
| DC44.1000 (A) | 41.4 | 387 | 500 | 591 | 707.11 | 1000 | 1224.74 | 1581.14 | (3") 190.5 | 152.4 | 140 |
| DC44.1250 (A) | 46.3 | 484 | 625 | 739 | 883.88 | 1250 | 1530.93 | 1976.42 | (4") 228.6 | 190.5 | 160 |
| DC44.1600 (A) | 52.3 | 619 | 800 | 946 | 1131.37 | 1600 | 1959.59 | 2529.82 | (5") 254.0 | 215.9 | 177 |
| DC44.2000 (A) | 58.5 | 774 | 1000 | 1183 | 1414.21 | 2000 | 2449.49 | 3162.28 | (5") 254.0 | 215.9 | 177 |
| DC44.2500 (A, B) | 65.4 | 968 | 1250 | 1479 | 1767.77 | 2500 | 3061.86 | 3952.85 | (6") 279.4 | 241.3 | 190 |
| DC44.3125 (A, B) | 73.1 | 1210 | 1562 | 1848 | 2209.71 | 3125 | 3827.33 | 4941.06 | (6") 279.4 | 241.3 | 190 |
| DC44.4000 (B) | 82.7 | 1549 | 2000 | 2366 | 2828.43 | 4000 | 4898.98 | 6324.56 | (8") 342.9 | 298.4 | 250 |
| DC44.5000 (B) | 92.5 | 1936 | 2500 | 2958 | 3535.53 | 5000 | 6123.72 | 7905.69 | (8") 342.9 | 298.4 | 250 |
| DC44.6250 (B) | 103.4 | 2420 | 3125 | 3697 | 4419.42 | 6250 | 7654.66 | 9882.12 | (10") 406.4 | 361.9 | 290 |
| DC44.8000 (B) | 117.0 | 3098 | 4000 | 4732 | 5656.85 | 8000 | 9797.96 | 12649.11 | (10") 406.4 | 361.9 | 290 |

- Flange size can be changed to higher size on request
- Special Material on Request



DC Type nozzles are designed to deliver large capacity value, with a carefully designed and machined inside profile, which offers uniform spray distribution and perfect performance even with very low inlet pressure values. The nozzle is made from castings or welded form steel bar.

Typical Application :

Even surface spraying, Cooling and washing of gas, column spraying as well as improvement of chemical reaction by surface enlargement

| MODEL NO. | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | | |
|------------------|-------------------|---|------|------|---------|--------------|----------|----------|-----------------------|-------|-----|
| | | Pressure [bar] | | | | | | | ANSI 16.5 Flange Ø mm | PCD | H |
| 90° SPRAY ANGLE | | 0.3 | 0.5 | 0.7 | 1.0 | 2.0 | 3.0 | 5.0 | | | |
| DC36.800 (A) | 37.0 | 309 | 400 | 473 | 565.69 | 800 | 979.80 | 1264.91 | (3") 190.5 | 152.4 | 140 |
| DC46.1000 (A) | 41.4 | 387 | 500 | 591 | 707.11 | 1000 | 1224.74 | 1581.14 | (3") 190.5 | 152.4 | 140 |
| DC46.1250 (A) | 46.3 | 484 | 625 | 739 | 883.88 | 1250 | 1530.93 | 1976.42 | (4") 228.6 | 190.5 | 160 |
| DC46.1600 (A) | 52.3 | 619 | 800 | 946 | 1131.37 | 1600 | 1959.59 | 2529.82 | (5") 254.0 | 215.9 | 177 |
| DC46.2000 (A) | 58.5 | 774 | 1000 | 1183 | 1414.21 | 2000 | 2449.49 | 3162.28 | (5") 254.0 | 215.9 | 177 |
| DC46.2500 (A, B) | 65.4 | 968 | 1250 | 1479 | 1767.77 | 2500 | 3061.86 | 3952.85 | (6") 279.4 | 241.3 | 190 |
| DC46.3125 (A, B) | 73.1 | 1210 | 1562 | 1848 | 2209.71 | 3125 | 3827.33 | 4941.06 | (6") 279.4 | 241.3 | 190 |
| DC46.4000 (B) | 82.7 | 1549 | 2000 | 2366 | 2828.43 | 4000 | 4898.98 | 6324.56 | (8") 342.9 | 298.4 | 250 |
| DC46.5000 (B) | 92.5 | 1936 | 2500 | 2958 | 3535.53 | 5000 | 6123.72 | 7905.69 | (8") 342.9 | 298.4 | 250 |
| DC46.6250 (B) | 103.4 | 2420 | 3125 | 3697 | 4419.42 | 6250 | 7654.66 | 9882.12 | (10") 406.4 | 361.9 | 290 |
| DC46.8000 (B) | 117.0 | 3098 | 4000 | 4732 | 5656.85 | 8000 | 9797.96 | 12649.11 | (10") 406.4 | 361.9 | 290 |
| DC48.10000 (B) | 127.0 | 3872.98 | 3065 | 5000 | 7071.07 | 10000 | 12247.45 | 15811.39 | (10") 406.4 | 361.9 | 290 |

| MODEL NO. | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | | |
|------------------|-------------------|---|--------|------|---------|--------------|----------|----------|-----------------------|-------|-----|
| | | Pressure [bar] | | | | | | | ANSI 16.5 Flange Ø mm | PCD | H |
| 120° SPRAY ANGLE | | 0.3 | 0.5 | 0.7 | 1.0 | 2.0 | 3.0 | 5.0 | | | |
| DC38.800 (A) | 37.0 | 309 | 400 | 473 | 565.69 | 800 | 979.80 | 1264.91 | (3") 190.5 | 152.4 | 140 |
| DC48.1000 (A) | 41.4 | 387 | 500 | 591 | 707.11 | 1000 | 1224.74 | 1581.14 | (3") 190.5 | 152.4 | 140 |
| DC48.1250 (A) | 46.3 | 484 | 625 | 739 | 883.88 | 1250 | 1530.93 | 1976.42 | (4") 228.6 | 190.5 | 160 |
| DC48.1600 (A) | 52.3 | 619 | 800 | 946 | 1131.37 | 1600 | 1959.59 | 2529.82 | (5") 254.0 | 215.9 | 177 |
| DC48.2000 (A) | 58.5 | 774 | 1000 | 1183 | 1414.21 | 2000 | 2449.49 | 3162.28 | (5") 254.0 | 215.9 | 177 |
| DC48.2500 (A, B) | 65.4 | 968 | 1250 | 1479 | 1767.77 | 2500 | 3061.86 | 3952.85 | (6") 279.4 | 241.3 | 190 |
| DC48.3125 (A, B) | 73.1 | 1210 | 1562.5 | 1848 | 2209.71 | 3125 | 3827.33 | 4941.06 | (6") 279.4 | 241.3 | 190 |
| DC48.4000 (B) | 82.7 | 1549 | 2000 | 2366 | 2828.43 | 4000 | 4898.98 | 6324.56 | (8") 342.9 | 298.4 | 250 |
| DC48.5000 (B) | 92.5 | 1936 | 2500 | 2958 | 3535.53 | 5000 | 6123.72 | 7905.69 | (8") 342.9 | 298.4 | 250 |
| DC48.6250 (B) | 103.4 | 2420 | 3125 | 3697 | 4419.42 | 6250 | 7654.66 | 9882.12 | (10") 406.4 | 361.9 | 290 |
| DC48.8000 (B) | 117.0 | 3098 | 4000 | 4732 | 5656.85 | 8000 | 9797.96 | 12649.11 | (10") 406.4 | 361.9 | 290 |
| DC48.10000 (B) | 127.0 | 3872 | 3065 | 5000 | 7071.07 | 10000 | 12247.45 | 15811.39 | (10") 406.4 | 361.9 | 290 |

• Flange size can be changed to higher size on request

• Special Material on Request

DD Series Full Cone Spray Nozzles - Square Pattern

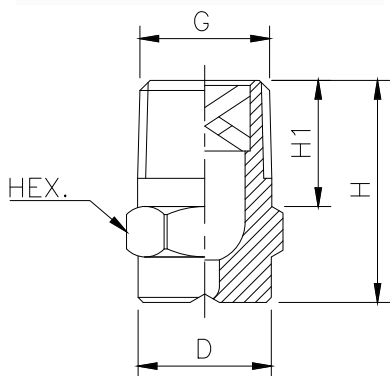


The square pattern full cone spray nozzle are used in continuous casting cooling areas. Secondary Cooling areas is of vital importance.

This nozzle gives uniform distribution of cooling water, fine sprays with narrow drop spectrums and quick removing of cooling water from the strand surface which are considered vital for obtaining a perfect steel quality.

Characteristic :

Full cone spray pattern with uniform distribution throughout the approximately square cone.



Typical Applications:

- Cooling and quenching
- Product washing
- Air and gas washers
- Scrubbers
- Liquor washers

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|--------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|--------|-------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 60° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | 40*psi | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP | |
| G/A D IMENSION. MM | | | | | | | | | | | | | | | | | | | |
| | H | H1 | D | HEX | | | | | | | | | | | | | | | |
| DD14.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DD14.150 | YA | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | 18 | 6.5 | 10.2 | 11 |
| DD14.175 | YA | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | Weight (Metals) = 8.0 gms. Approx | | | |
| DD14.200 | YA | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DD14.250 | YA | YB | | | | | 1.6 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | YB | | | |
| DD14.350 | | YB | YC | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | 22 | 10 | 13.2 | 14 |
| DD14.400 | | YB | YC | | | | 2.4 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | Weight (Metals) = 15.0 gms. Approx | | | |
| DD14.475 | | YB | YC | | | | 2.6 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DD14.650 | | | YC | YD | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16.2 | 17 |
| DD14.800 | | | | YD | | | 3.4 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | Weight (Metals) = 33.0 gms. Approx | | | |
| DD24.100 | | | | YD | | | 3.8 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | YD | | | |
| DD24.125 | | | | YD | XE | | 4.2 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | 32.5 | 13.2 | 21.2 | 22 |
| DD24.160 | | | | YD | XE | | 4.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | Weight (Metals) = 57.0 gms. Approx | | | |
| DD24.200 | | | | | XE | | 5.4 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | XE | | | |
| DD24.225 | | | | | | XF | 5.7 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | 42 | 15 | 32 | 27 |
| DD24.250 | | | | | | XF | 6.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | XF | | | |
| DD24.320 | | | | | | XF | 6.8 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | 56 | 17 | 40 | 36 |

- X - BSPP, Y - BSPT, Z - NPT, As Required
- DE Series Stands For Female Connection

- Flow rate in US GPM @40 psi Pressure
- Special Material on Request
- Female / Flanged Connections on Request

DD Series Full Cone Spray Nozzles - Square Pattern

DD
DE*

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | | |
|--------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|-------|-------|---------------|------------------------------------|-------------|-------|--------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 | |
| 90° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| G/A D IMENSION. MM | | | | | | | | | | | | | | | | | | | |
| | H | H1 | D | A/F | | | | | | | | | | | | | | | |
| DD16.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DD16.150 | YA | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | 18 | 6.5 | 10.2 | |
| DD16.175 | YA | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | Weight (Metals) = 8.0 gms. Approx | | | |
| DD16.200 | YA | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DD16.250 | YA | YB | | | | | 1.6 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | YB | | | |
| DD16.350 | | YB | YC | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | 22 | 10 | 13.2 | |
| DD16.400 | | YB | YC | | | | 2.4 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | Weight (Metals) = 15.0 gms. Approx | | | |
| DD16.475 | | YB | YC | | | | 2.6 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DD16.650 | | YB | YC | YD | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16.2 | |
| DD16.800 | | | YC | YD | | | 3.4 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | Weight (Metals) = 33.0 gms. Approx | | | |
| DD26.100 | | | | YD | | | 3.8 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | YD | | | |
| DD26.125 | | | | YD | XE | | 4.2 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | 32.5 | 13.2 | 21.2 | |
| DD26.160 | | | | YD | XE | | 4.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | XE | | | |
| DD26.200 | | | | YD | XE | | 5.4 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 42 | 15 | 32 | |
| DD26.225 | | | | | XE | XF | 5.7 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | Weight (Metals) = 57.0 gms. Approx | | | |
| DD26.250 | | | | | | XF | 6.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | XF | | | |
| DD26.320 | | | | | | XF | 6.8 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | 56 | 17 | 40 | |
| DD26.360 | | | | | | XF | 7.0 | 11.25 | 18.00 | 25.46 | 36.00 | 44.09 | 56.52 | 67.35 | 80.50 | | | | |

| MODEL NO. | CONNECTION END | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | |
|--------------------|----------------|-----------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|-------|-------|---------------|-------|-------------|-------|
| | YA | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 |
| 120° SPRAY ANGLE | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass |
| G/A D IMENSION. MM | | | | | | | | | | | | | | | | | | |
| | H | H1 | D | A/F | | | | | | | | | | | | | | |
| DD18.100 | YA | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | |
| DD18.150 | YA | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | 18 | 6.5 | 10.2 |
| DD18.175 | YA | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | | | |
| DD18.200 | YA | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | |
| DD18.250 | YA | YB | | | | | 1.6 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | YB | | |
| DD18.350 | | YB | YC | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | 22 | 10 | 13.2 |
| DD18.400 | | YB | YC | | | | 2.4 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | | | |
| DD18.475 | | YB | YC | | | | 2.6 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | |
| DD18.650 | | YB | YC | YD | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 25 | 10 | 16.2 |
| DD18.800 | | | YC | YD | | | 3.4 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | |
| DD28.100 | | | | YD | | | 3.8 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | YD | | |
| DD28.125 | | | | YD | XE | | 4.2 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | 32.5 | 13.2 | 21.2 |
| DD28.160 | | | | YD | XE | | 4.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | XE | | |
| DD28.200 | | | | YD | XE | | 5.4 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 42 | 15 | 32 |
| DD28.225 | | | | | XE | XF | 5.7 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | | | |
| DD28.250 | | | | | | XF | 6.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | XF | | |
| DD28.320 | | | | | | XF | 6.8 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | 56 | 17 | 40 |
| DD28.360 | | | | | | XF | 7.0 | 11.25 | 18.00 | 25.46 | 36.00 | 44.09 | 56.52 | 67.35 | 80.50 | | | |
| DD28.420 | | | | | | XF | 7.1 | 13.13 | 21.00 | 29.70 | 42.00 | 51.44 | 66.41 | 78.57 | 93.91 | | | |

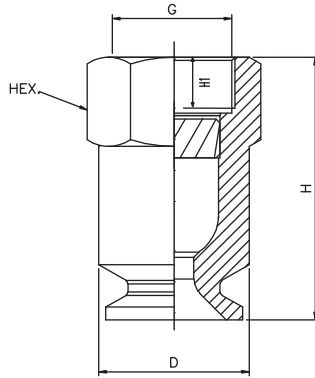
* Flow rate in US GPM @40 psi Pressure

• Special Material on Request

DD Series Full Cone Spray Nozzles - Square Pattern

DD

DE*



Typical Applications:

- Cooling and quenching
- Product washing
- Air and gas washers
- Scrubbers
- Liquor washers
- Dust control
- Fire protection

Full cone spray nozzle square spray pattern with a square impact area and uniform spray of medium to large drops across their entire spray area over a wide range of spraying pressure and flow rates. This uniform spray distribution is the result of unique vane design. Well suited for installation complete coverage of rectangular areas or spray zones

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | | |
|-----------------|----------------|------------|--------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|------------------------------------|--------------------|-------|--------|-----|
| | XG | XH | XK | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 | |
| 90° SPRAY ANGLE | 1 1/4" BSP | 1 1/2" BSP | 2" BSP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP | |
| | | | | | | | | | | | | | | G/A D IMENSION. MM | | | |
| | | | | | | | | | | | | | | H | H1 | D | HEX |
| DD26.650 | XG | | | 9.0 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | 87.5 | 20 | 50 | 51 | |
| DD26.800 | XG | | | 10.0 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | Weight (Metals) = 566 gms. Approx | | | | |
| DD36.100 | XG | | | 11.2 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | 103 | 20 | 59 | 60 | |
| DD36.118 | | XH | | 12.2 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | Weight (Metals) = 793 gms. Approx | | | | |
| DD36.130 | | XH | | 12.8 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD36.160 | | XH | | 14.2 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | 138 | 22 | 75 | 76 | |
| DD36.200 | | | XK | 15.8 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD36.227 | | | XK | 16.9 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD36.250 | | | XK | 17.7 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | Weight (Metals) = 1370 gms. Approx | | | | |

| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | | |
|------------------|----------------|------------|--------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|------------------------------------|--------------------|-------|--------|-----|
| | XG | XH | XK | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 | |
| 120° SPRAY ANGLE | 1 1/4" BSP | 1 1/2" BSP | 2" BSP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP | |
| | | | | | | | | | | | | | | G/A D IMENSION. MM | | | |
| | | | | | | | | | | | | | | H | H1 | D | HEX |
| DD28.650 | XG | | | 9.9 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | 87.5 | 20 | 50 | 51 | |
| DD28.800 | XG | | | 11.0 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | Weight (Metals) = 566 gms. Approx | | | | |
| DD38.100 | XG | | | 12.3 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | 103 | 20 | 59 | 60 | |
| DD38.118 | | XH | | 13.3 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | Weight (Metals) = 793 gms. Approx | | | | |
| DD38.130 | | XH | | 14.0 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD38.160 | | XH | | 15.5 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | 138 | 22 | 75 | 76 | |
| DD38.200 | | | XK | 17.4 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD38.227 | | | XK | 18.5 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD38.250 | | | XK | 19.4 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | Weight (Metals) = 1370 gms. Approx | | | | |
| DD38.337 | | | XK | 22.5 | 103 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | Weight (Metals) = 1370 gms. Approx | | | | |

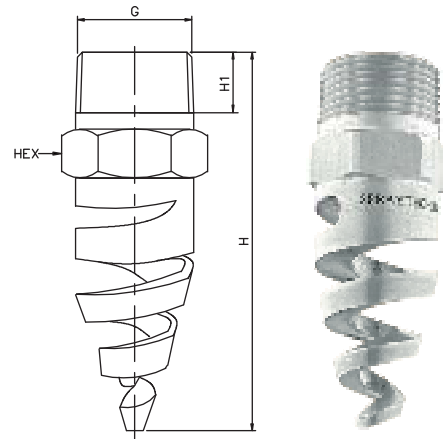
- X - BSPP, Y - BSPT, Z - NPT, As Required
- DE Series Stands For Female Connection

- *Flow rate in US GPM @40 psi Pressure
- Special Material on Request
- Female / Flanged Connections on Request

DF Series Spiral Full Cone Spray Nozzles

DF

- Characteristic** : The absence of any internal parts make these nozzles non-clogging.
- Design** : One piece construction, non clogging type.
- Application** : Gas Washing, Cooling Towers , Fire Fighting Systems.
- Flow Rate** : 5 LPM TO 3410 LPM
- Pressure** : 2.0 Kg/cm² or Specified
- Spray Angle** : 60° To 180°
- End Connection** : 1/4" TO 4" BSP/ BSPT / NPT
- M.O.C.** : SS. 316, 304, BRASS, PVDF, PVC, PP, Teflon



The helix spiral full cone nozzles combine small nozzle sizes with wide flow openings.

| MODEL NO. | CONNECTION END | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | |
|-----------------|----------------|-----------|-----------|-----------|---------|-------------------|---|----------------|--------|-------|--------|--------|--------|--------|-------------------------------------|--------------------|-----|
| | YB | YC | YD | YE | YF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 |
| 60° SPRAY ANGLE | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPT | 1" BSPT | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | G/A D IMENSION. MM | |
| | | | | | | | | | | | | | | | H | H1 | HEX |
| DF14.475 | YB | | | | | 2.4 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YB | | |
| DF14.650 | YB | | | | | 2.8 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 39 | 8.5 | 14 |
| DF14.800 | YB | | | | | 3.1 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | YB | | |
| DF24.100 | YB | YC | | | | 3.5 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | 48 | 10 | 14 |
| DF24.125 | YB | YC | | | | 3.9 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | Weight (Metals) = 27.0 gms. Approx | | |
| DF24.160 | | YC | | | | 4.4 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | YC | | |
| DF24.200 | | YC | | | | 4.9 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 58 | 10 | 17 |
| DF24.225 | | YC | | | | 5.2 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | Weight (Metals) = 53.7 gms. Approx | | |
| DF24.250 | | YC | | | | 5.5 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | | | |
| DF24.320 | | YC | | | | 6.2 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | |
| DF24.400 | | YC | | | | 7.0 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | |
| DF24.520 | | YC | | | | 7.9 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | |
| DF24.650 | | | YD | | | 8.9 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | YD | | |
| DF24.800 | | | YD | | | 9.8 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | 76 | 13.2 | 22 |
| DF34.100 | | | YD | | | 11.0 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | Weight (Metals) = 80.0 gms. Approx | | |
| DF34.118 | | | YD | | | 12.0 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | | | |
| DF34.130 | | | | YE | | 12.6 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | YE | | |
| DF34.160 | | | | YE | | 13.9 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | 86 | 14.5 | 27 |
| DF34.200 | | | | | YF | 15.6 | 61.31 | 100.0 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | Weight (Metals) = 170.0 gms. Approx | | |
| DF34.227 | | | | | YF | 16.6 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | YF | | |
| DF34.250 | | | | | YF | 17.4 | 76.63 | 125.0 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | 108 | 16.8 | 36 |
| DF34.337 | | | | | YF | 20.2 | 103.0 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | Weight (Metals) = 323.0 gms. Approx | | |

• X - BSPP, Y - BSPT, Z - NPT, As Required

• *Flow rate in US GPM @40 psi Pressure

• Special Material on Request

• Female / Flanged Connections on Request

DF Series Spiral Full Cone Spray Nozzles

| MODEL NO. | CONNECTION END | | | | | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | |
|-------------------------------------|----------------|-----------|-----------|-----------|---------|-------------|---------|---------|---------|----------------------|-------------------|---|-----|-----|-----|-----|-----|------|---------------|-------|--------|
| | YB | YC | YD | YE | YF | YH | YK | YM | YO | Flow Capacity in GPM | | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 |
| 90° SPRAY ANGLE | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPT | 1" BSPT | 1 1/2" BSPT | 2" BSPT | 3" BSPT | 4" BSPT | | 40°psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| G/A D IMENSIION. MM | | | | | | | | | | | | | | | | | | | | | |
| H | | | | | | | | | | | | | | | | | | | | | |
| YB | | | | | | | | | | | | | | | | | | | | | |
| 48 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 27.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YC | | | | | | | | | | | | | | | | | | | | | |
| 58 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 53.7 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YD | | | | | | | | | | | | | | | | | | | | | |
| 76 | | | | | | | | | | | | | | | | | | | | | |
| 13.2 | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 80.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YE | | | | | | | | | | | | | | | | | | | | | |
| 86 | | | | | | | | | | | | | | | | | | | | | |
| 14.5 | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 170.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YF | | | | | | | | | | | | | | | | | | | | | |
| 108 | | | | | | | | | | | | | | | | | | | | | |
| 16.8 | | | | | | | | | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 323.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YH | | | | | | | | | | | | | | | | | | | | | |
| 138 | | | | | | | | | | | | | | | | | | | | | |
| 19.1 | | | | | | | | | | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 634.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YK | | | | | | | | | | | | | | | | | | | | | |
| 148 | | | | | | | | | | | | | | | | | | | | | |
| 23.4 | | | | | | | | | | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | | | | | | | | | | |
| YM | | | | | | | | | | | | | | | | | | | | | |
| 216 | | | | | | | | | | | | | | | | | | | | | |
| 29.8 | | | | | | | | | | | | | | | | | | | | | |
| 89 | | | | | | | | | | | | | | | | | | | | | |

| MODEL NO. | CONNECTION END | | | | | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | |
|---------------------------------------|----------------|-----------|-----------|-----------|---------|-------------|---------|---------|---------|----------------------|-------------------|---|-----|-----|-----|-----|-----|------|---------------|-------|--------|
| | YB | YC | YD | YE | YF | YH | YK | YM | YO | Flow Capacity in GPM | | Pressure [bar] | | | | | | | M1/M2 | M3 | P1/P2 |
| 120° SPRAY ANGLE | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPT | 1" BSPT | 1 1/2" BSPT | 2" BSPT | 3" BSPT | 4" BSPT | | 40°psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| G/A D IMENSIION. MM | | | | | | | | | | | | | | | | | | | | | |
| H | | | | | | | | | | | | | | | | | | | | | |
| YB | | | | | | | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 27.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YC | | | | | | | | | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 53.7 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YD | | | | | | | | | | | | | | | | | | | | | |
| 58 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 80.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YE | | | | | | | | | | | | | | | | | | | | | |
| 76 | | | | | | | | | | | | | | | | | | | | | |
| 13.2 | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 170.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YF | | | | | | | | | | | | | | | | | | | | | |
| 86 | | | | | | | | | | | | | | | | | | | | | |
| 14.5 | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 323.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YH | | | | | | | | | | | | | | | | | | | | | |
| 108 | | | | | | | | | | | | | | | | | | | | | |
| 16.8 | | | | | | | | | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 634.0 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YK | | | | | | | | | | | | | | | | | | | | | |
| 138 | | | | | | | | | | | | | | | | | | | | | |
| 19.1 | | | | | | | | | | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | | | | | | | | |
| Weight (Metals) = 1788.85 gms. Approx | | | | | | | | | | | | | | | | | | | | | |
| YM | | | | | | | | | | | | | | | | | | | | | |
| 148 | | | | | | | | | | | | | | | | | | | | | |
| 23.4 | | | | | | | | | | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | | | | | | | | | | |
| YO | | | | | | | | | | | | | | | | | | | | | |
| 232 | | | | | | | | | | | | | | | | | | | | | |
| 35.8 | | | | | | | | | | | | | | | | | | | | | |
| 114 | | | | | | | | | | | | | | | | | | | | | |

• X - BSPP, Y - BSPT, Z - NPT, As Required

• Special Material on Request

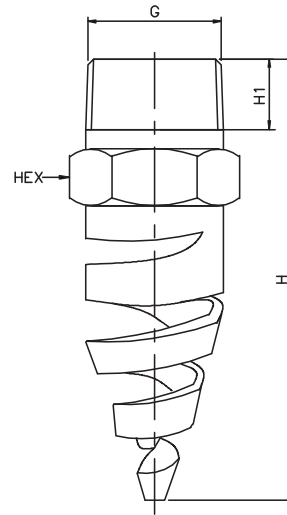
• *Flow rate in US GPM @40 psi Pressure

• Female / Flanged Connections on Request

DF Series Spiral Full Cone Spray Nozzles

DF

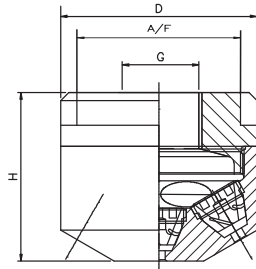
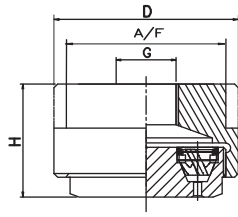
- Characteristic** : Absence of any internal parts make these nozzles non-clogging.
- Design** : One piece construction, non clogging type.
- Application** : Gas Scrubbing, Washing, Cooling Towers , Fire Fighting Systems.
- Flow Rate** : 5 LPM TO 3410 LPM
- Pressure** : 2.0 Kg/cm² or Specified
- Spray Angle** : 60° To 180°
- End Connection** : 1/4" TO 4" BSP/ BSPT / NPT
- M.O.C.** : SS. 316, 304, BRASS, PVDF, PVC, PP, Teflon



| MODEL NO. | CONNECTION END | | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | |
|------------------|----------------|-----------|-----------|-----------|---------|-------------|---------|-------------------|---|----------------|--------|-------|---------|---------|---------|---------------|-------------|-------|--------|
| | YB | YC | YD | YE | YF | YH | YK | | Flow Capacity in GPM | Pressure [bar] | | | | | | M1/M2 | M3 | P1/P2 | |
| 180° SPRAY ANGLE | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPT | 1" BSPT | 1 1/2" BSPT | 2" BSPT | | | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| | | | | | | | | | G/A D IMENSION. MM | | | | | | H | H1 | HEX | | |
| DF19.475 | YB | | | | | | | 2.4 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YB | | |
| DF19.650 | YB | | | | | | | 2.8 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 39 | 8.5 | 14 |
| DF19.800 | YB | | | | | | | 3.1 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | |
| DF29.100 | YB | YC | | | | | | 3.5 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | YB | | |
| DF29.125 | YB | YC | | | | | | 3.9 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | 45 | 10 | 14 |
| DF29.160 | | YC | | | | | | 4.4 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | |
| DF29.200 | | YC | | | | | | 4.9 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | |
| DF29.225 | | YC | | | | | | 5.2 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | YB | | |
| DF29.250 | | YC | | | | | | 5.5 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 58 | 10 | 17 |
| DF29.320 | | YC | | | | | | 6.2 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | |
| DF29.400 | | YC | | | | | | 7.0 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | |
| DF29.520 | | YC | | | | | | 7.9 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | |
| DF29.650 | | | YD | | | | | 8.9 | 19.92 | 32.5 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | YD | | |
| DF29.800 | | | YD | | | | | 9.8 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | 76 | 13.2 | 22 |
| DF39.100 | | | YD | | | | | 11.0 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | | | |
| DF39.118 | | | YD | | | | | 12.0 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | | | |
| DF39.130 | | | | YE | | | | 12.6 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | YE | | |
| DF39.160 | | | | YE | | | | 13.9 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | 86 | 14.5 | 27 |
| DF39.200 | | | | | YF | | | 15.6 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | | | |
| DF39.227 | | | | | YF | | | 16.6 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | | | |
| DF39.250 | | | | | YF | | | 17.4 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | | | |
| DF39.337 | | | | | YF | | | 20.2 | 103.00 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | | | |
| DF39.400 | | | | | | YH | | 22.0 | 122.61 | 200 | 282.84 | 400.0 | 489.90 | 632.46 | 748.33 | 894.43 | YH | | |
| DF39.500 | | | | | | YH | | 24.6 | 153.27 | 250 | 353.55 | 500.0 | 612.37 | 790.57 | 935.41 | 1118.03 | 138 | 19.1 | 51 |
| DF39.625 | | | | | | YH | | 27.5 | 191.58 | 312.5 | 441.94 | 625.0 | 765.47 | 988.21 | 1169.27 | 1397.54 | | | |
| DF39.710 | | | | | | | YK | 29.3 | 217.64 | 355 | 502.05 | 710.0 | 869.57 | 1122.61 | 1328.29 | 1587.61 | YK | | |
| DF39.800 | | | | | | | YK | 31.1 | 245.23 | 400 | 565.69 | 800.0 | 979.80 | 1264.91 | 1496.66 | 1788.85 | 148 | 23.4 | 64 |
| DF49.1000 | | | | | | | YK | 34.8 | 306.54 | 500 | 707.11 | 1000 | 1224.74 | 1581.14 | 1870.83 | 2236.07 | | | |
| DF49.1250 | | | | | | | YK | 38.9 | 383.17 | 625 | 883.88 | 1250 | 1530.93 | 1976.42 | 2338.54 | 2795.08 | | | |

*Flow rate in US GPM @40 psi Pressure

DG Series Multiple Full Cone Spray Nozzles



Multiple spray nozzles, consisting of seven fine atomizing hollow cone nozzles, provide a fog-like full cone pattern with relatively high flow volumes. The overlapping hollow cone nozzles produce a 130° full cone spray pattern of very fine droplets that cannot be achieved by a single orifice spray nozzle of the same flow rate size. The resulting increased droplet surface area of the atomized liquid provides greater efficiency in gas treatment and cooling application ideal for reaction towers which do not use packing.

Characteristic :

This type of nozzle gives fine atomization with the aid of several hollow cones spraying into one another.

Applications :

- Cooling Of Gaseous And Solid Material
- In Desuperheaters
- Chlorine Precipitation
- For Improving The Chemical Reaction By Means Of Enlarging the Contact Surface

| MODEL NO. | CONNECTION END | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | |
|-----------------|----------------|-----------|-------------------|---|----------------|-------|-------|-------|-------|-------|--------|-------------------------------------|-------|----|
| | XD | XE | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 |
| 75° SPRAY ANGLE | 1/2" BSPB | 3/4" BSPB | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | H | D |
| DG15.800 | XD | | 2.2 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | XD | | |
| DG25.100 | XD | | 2.5 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | 30 | 50 | 46 |
| DG25.125 | XD | | 2.8 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | Weight (Metals) = 216.0 gms. Approx | | |
| DG25.160 | | XE | 3.2 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | |
| DG25.200 | | XE | 3.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | XE | | |
| DG25.225 | | XE | 3.8 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | 46 | 75 | 65 |
| DG25.250 | | XE | 4.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | Weight (Metals) = 716.0 gms. Approx | | |
| DG25.320 | | XE | 4.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | |
| DG25.400 | | XE | 5.0 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | |
| DG25.520 | | XE | 5.7 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | |

| MODEL NO. | CONNECTION END | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | |
|------------------|----------------|-----------|-------------------|---|----------------|-------|-------|-------|--------|--------|--------|---------------|-------|----|
| | XD | XE | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 |
| 130° SPRAY ANGLE | 1/2" BSPB | 3/4" BSPB | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | H | D |
| DG19.800 | XD | | 2.0 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | |
| DG29.100 | XD | | 2.2 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | 38 | 40 | 30 |
| DG29.120 | XD | | 2.5 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | |
| DG29.160 | | XE | 2.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | |
| DG29.200 | | XE | 3.2 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | |
| DG29.225 | | XE | 3.4 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | 51.5 | 60 | 50 |
| DG29.250 | | XE | 3.5 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | | | |
| DG29.320 | | XE | 4.0 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | |
| DG29.400 | | XE | 4.5 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | |
| DG29.520 | | XE | 5.1 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | |
| DG29.650 | | XE | 5.7 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | |

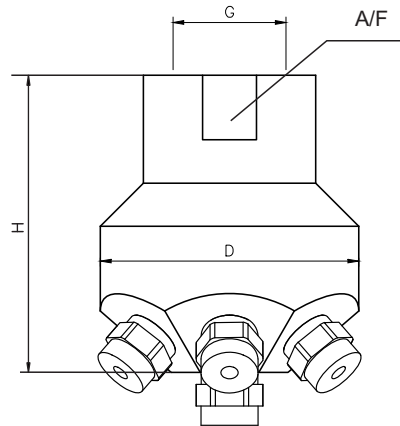
- X - BSPB, Y - BSPT, Z - NPT, As Required
- *Flow rate in US GPM @40 psi Pressure
- Special Material on Request

DH Series Multiple Full Cone Spray Nozzles

DH

Application :

- Gas Scrubbing
- Gas Cooling
- Dust Control
- Tank Rinsing
- Humidifying Applications



Multiple Full Cone Nozzles

The nozzle assembly consists of a nozzle body and seven removable atomizing spray caps. Each cap has an internal core which is easily removed for cleaning or replacement. The nozzle provides large flow capacities with relatively small drops.

Characteristic :

With the aid of multiple fine full cone nozzles it gives large full cone with small droplets.

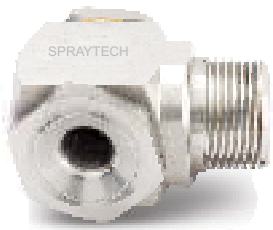
| MODEL NO. | CONNECTION END | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | |
|------------------|----------------|---------|-------------|-------------------|---|--------------------|--------|-------|--------|--------|--------|--------|-------------------------------------|-------------|-------|--------|
| | XE | XF | XH | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 |
| 130° SPRAY ANGLE | 3/4" BSPP | 1" BSPP | 1 1/2" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP |
| | | | | | | G/A D IMENSION. MM | | | | | | | | H | D | A/F |
| DH29.125 | XE | | | 2.5 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | | |
| DH29.160 | XE | | | 2.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | XE | | | |
| DH29.200 | XE | | | 3.2 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 44 | 60 | 55 | |
| DH29.225 | XE | | | 3.4 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | | | | |
| DH29.250 | XE | | | 3.5 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | | | | |
| DH29.320 | XE | | | 4.0 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | |
| DH29.400 | XE | | | 4.5 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | | |
| DH29.520 | XE | | | 5.1 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | | |
| DH29.650 | XE | | | 5.7 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | |
| DH29.800 | | XF | | 6.3 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | XF | | | |
| DH39.100 | | XF | | 7.1 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | 50 | 60 | 55 | |
| DH39.118 | | XF | | 7.7 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | Weight (Metals) = 922.0 gms. Approx | | | |
| DH39.130 | | XF | XH | 8.1 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | | | | |
| DH39.160 | | | XH | 8.9 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | XH | | | |
| DH39.200 | | | XH | 10.0 | 61.31 | 100.0 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | 65 | 90 | 85 | |
| DH39.227 | | | XH | 10.7 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | | | | |

• X - BSPP, Y - BSPT, Z - NPT, As Required

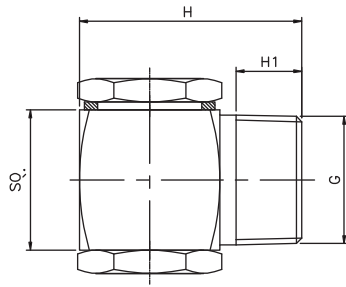
• *Flow rate in US GPM @40 psi Pressure

• Special Material on Request

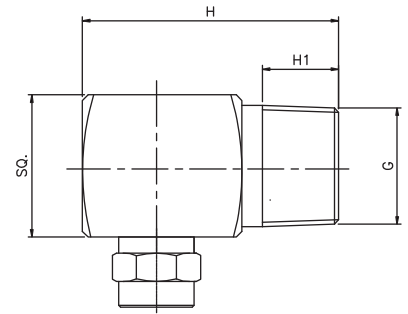
DI Series Tangential Entry Vaneless Full Cone Spray Nozzles



ONE PIECE BODY
VANE LESS FULL CONE (TANGENTIAL ENTRY)



TWO PIECE BODY
TANGENTIAL ENTRY FULL CONE



Typical Applications :

Washing and cleaning cooling of gas or solid product surface spraying Improvement of chemical reactions.

| MODEL NO. | CONNECTION END | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | |
|--------------------------|----------------|-----------|-----------|-----------|---------|-------------------|---|----------------|-------|-------|-------|--------|--------|--------|-------------------------------------|--------------------|-------|
| | YB | YC | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 |
| 60° SPRAY ANGLE | 1/4" BSPT | 3/8" BSPT | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass |
| | | | | | | | | | | | | | | | | G/A D IMENSION. MM | |
| | | | | | | | | | | | | | | | H | H1 | SQ |
| DI14.350 | YB | YC | | | | 2.6 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | | |
| DI14.400 | YB | YC | | | | 2.9 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | 35 | 10 | 16 |
| DI14.475 | | YC | | | | 3.2 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | Weight (Metals) = 72.0 gms. Approx | | |
| DI14.650 | | YC | | | | 3.5 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | | | |
| 90° SPRAY NOZZLE | | | | | | | | | | | | | | | | | |
| DI16.350 | YB | | | | | 2.6 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | 10 | 20 |
| DI16.400 | YB | | | | | 2.9 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | | | |
| DI16.475 | | YC | | | | 3.2 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | | | |
| DI16.650 | | YC | | | | 3.5 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | | | |
| DI16.800 | | YC | | | | 3.6 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | YC | 10 | 20 |
| DI26.100 | | YC | | | | 4.3 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | |
| DI26.125 | | YC | | | | 5.1 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | 35 | 10 | 20 |
| DI26.160 | | YC | | | | 5.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | Weight (Metals) = 108.0 gms. Approx | | |
| DI26.200 | | | YD | | | 6.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | YD | | |
| DI26.225 | | | YD | | | 7.3 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | 45 | 13.2 | 25 |
| DI26.250 | | | YD | | | 9.6 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | Weight (Metals) = 135.0 gms. Approx | | |
| DI26.320 | | | | XE | | 11.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | XE | | |
| DI26.400 | | | | | XF | 8.5 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | 57 | 16 | 30 |
| DI26.520 | | | | | XF | 10.5 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | Weight (Metals) = 630.0 gms. Approx | | |
| 120° SPRAY NOZZLE | | | | | | | | | | | | | | | | | |
| DI18.350 | YB | | | | | 2.2 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | | | |
| DI18.400 | YB | | | | | 2.2 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | | | |
| DI18.475 | | YC | | | | 2.9 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | | | |
| DI18.650 | | YC | | | | 3.5 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | | | |
| DI18.800 | | YC | | | | 3.6 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | |
| DI28.100 | | YC | | | | 4.3 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | |
| DI28.125 | | YC | | | | 5.1 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | |
| DI28.160 | | YC | YD | | | 5.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | |
| DI28.200 | | | YD | | | 6.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | |
| DI28.225 | | | YD | | | 7.3 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | | | |
| DI28.250 | | | YD | | | 9.6 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | | | |
| DI28.320 | | | | XE | | 11.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | |
| DI28.400 | | | | | XF | 8.5 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | | | |
| DI28.520 | | | | | XF | 10.5 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | XF | | |
| DI28.650 | | | | | XF | 11.7 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | 57 | 18 | 36 |
| DI28.720 | | | | | XF | 12.4 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.0 | | | |
| DI28.800 | | | | | XF | 13.0 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | | | |

- X - BSPP, Y - BSPT, Z - NPT, As Required
- DJ Series Stands For Female Connection

- *Flow rate in US GPM @40 psi Pressure
- Special Material on Request

DK Series Narrow Angle Full Cone Spray Nozzles



ONE PIECE BODY
3/4" TO 3" BSPT / NPT



TWO PIECE BODY (F)
1/8" TO 3/4" BSPT / NPT



TWO PIECE BODY (M)
1/8" TO 3/4" BSPT / NPT

These nozzles produce a solid cone spray with round spray pattern where coarse water drops are concentrated within a narrow spray angle to maximise their impact force per square surface unit spray angle values of 15° or 30° are available with a choice of male or female thread connection.

| MODEL NO. | CONNECTION END | | | | | | | | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | MATERIAL CODE | | | | | |
|-----------|----------------|-----------|-----------|-----------|-----------|---------|-------------|-------------|---------|----------------------|-------------------|---|-------|-------|--------|-------|--------|--------|---------------|-------------|-------|--------|------|-------|
| | YA | YB | YC | YD | XE | XF | XG | XH | XK | Flow Capacity in GPM | | Pressure [bar] | | | | | | M1/M2 | M3 | P1/P2 | | | | |
| | 1/8" BSPT | 1/4" BSPT | 3/8" BSPT | 1/2" BSPP | 3/4" BSPP | 1" BSPP | 1 1/4" BSPP | 1 1/2" BSPP | 2" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP | | |
| 15° | 30° | | | | | | | | | | | G/A DIMENSION. MM | | | | | | | H | H1 | D | HEX | | |
| DK11.100 | DK12.100 | YA | | | | | | | | | | 1.2 | 0.31 | 0.50 | 0.71 | 1.00 | 1.22 | 1.58 | 1.87 | 2.24 | YA | | | |
| DK11.150 | DK12.150 | YA | | | | | | | | | | 1.5 | 0.46 | 0.75 | 1.06 | 1.50 | 1.84 | 2.37 | 2.81 | 3.35 | | | | |
| DK11.175 | DK12.175 | YA | | | | | | | | | | 1.6 | 0.54 | 0.87 | 1.24 | 1.75 | 2.14 | 2.77 | 3.27 | 3.91 | 32.5 | 6.5 | 11.2 | 12/14 |
| DK11.200 | DK12.200 | YA | | | | | | | | | | 1.7 | 0.61 | 1.00 | 1.41 | 2.00 | 2.45 | 3.16 | 3.74 | 4.47 | | | | |
| DK11.250 | DK12.250 | YA | | | | | | | | | | 1.9 | 0.77 | 1.25 | 1.77 | 2.50 | 3.06 | 3.95 | 4.68 | 5.59 | | | | |
| DK11.350 | DK12.350 | YA | | | | | | | | | | 2.3 | 1.07 | 1.75 | 2.47 | 3.50 | 4.29 | 5.53 | 6.55 | 7.83 | YB | | | |
| DK11.400 | DK12.400 | YA | | | | | | | | | | 2.5 | 1.23 | 2.00 | 2.83 | 4.00 | 4.90 | 6.32 | 7.48 | 8.94 | 39 | 10 | 16.2 | 17 |
| DK11.475 | DK12.475 | YA | YB | | | | | | | | | 2.7 | 1.46 | 2.37 | 3.36 | 4.75 | 5.82 | 7.51 | 8.89 | 10.62 | YC | | | |
| DK11.650 | DK12.650 | | YB | | | | | | | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 47 | 10 | 21.2 | 22 |
| DK11.800 | DK12.800 | | YB | | | | | | | | | 3.5 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | | | | |
| DK21.100 | DK22.100 | | YB | YC | | | | | | | | 3.9 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | | | | |
| DK21.125 | DK22.125 | | | YC | | | | | | | | 4.3 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | YD | | | |
| DK21.160 | DK22.160 | | | YC | YD | | | | | | | 4.9 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | 70 | 13.2 | 26.2 | 27 |
| DK21.200 | DK22.200 | | | | YD | | | | | | | 5.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | |
| DK21.225 | DK22.225 | | | | YD | | | | | | | 5.8 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | |
| DK21.250 | DK22.250 | | | | YD | XE | | | | | | 6.1 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 66 | 16 | 28 | 24 |
| DK21.320 | DK22.320 | | | | | XE | | | | | | 6.9 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | |
| DK21.400 | DK22.400 | | | | | XE | | | | | | 7.7 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | |
| DK21.520 | DK22.520 | | | | | XE | XF | | | | | 8.8 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | 92 | 18 | 34 | 30 |
| DK21.650 | DK22.650 | | | | | | XF | | | | | 9.9 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | |
| DK21.720 | DK22.720 | | | | | | XF | | | | | 10.4 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.00 | | | | |
| DK21.800 | DK22.800 | | | | | | XF | XG | | | | 11.5 | 24.52 | 40.00 | 56.57 | 80.00 | 97.98 | 126.49 | 149.67 | 178.89 | XG | | | |
| DK31.100 | DK32.100 | | | | | | | XG | | | | 12.9 | 30.65 | 50.00 | 70.71 | 100.0 | 122.47 | 158.11 | 187.08 | 223.61 | 120 | 20 | 44 | 38 |
| DK31.118 | DK32.118 | | | | | | | XG | | | | 14.0 | 36.17 | 59.00 | 83.44 | 118.0 | 144.52 | 186.57 | 220.76 | 263.86 | | | | |
| DK31.130 | DK32.130 | | | | | | | XG | XH | | | 14.7 | 39.85 | 65.00 | 91.92 | 130.0 | 159.22 | 205.55 | 243.21 | 290.69 | XH | | | |
| DK31.160 | DK32.160 | | | | | | | | XH | | | 16.3 | 49.05 | 80.00 | 113.14 | 160.0 | 195.96 | 252.98 | 299.33 | 357.77 | 85 | 22 | 59 | 50 |
| DK31.200 | DK32.200 | | | | | | | | XH | XK | | 18.2 | 61.31 | 100 | 141.42 | 200.0 | 244.95 | 316.23 | 374.17 | 447.21 | XK | | | |
| DK31.227 | DK32.227 | | | | | | | | | XK | | 19.4 | 69.58 | 113.5 | 160.51 | 227.0 | 278.02 | 358.92 | 424.68 | 507.59 | | 24 | 68 | 60 |
| DK31.250 | DK32.250 | | | | | | | | | XK | | 20.4 | 76.63 | 125 | 176.78 | 250.0 | 306.19 | 395.19 | 467.71 | 559.02 | | | | |
| DK31.337 | DK32.337 | | | | | | | | | XK | | 23.7 | 103.0 | 168.5 | 238.29 | 337.0 | 412.74 | 532.84 | 630.47 | 753.55 | | | | |

- X - BSPP, Y - BSPT, Z - NPT, As Required
- DL Series Stands For Female Connection

- *Flow rate in US GPM @40 psi Pressure
- Special Material on Request

Full Cone Spray Nozzles *



Applications : Very uniform spray pattern.

Surface spraying, spraying over packings, cleaning and washing process, chemical process engineering, cooling of gaseous fluids and solids, water treatment.

*** Customized Spray Nozzle**

| MODEL NO. | END CONNECTION | | | ORIFICE SIZE (mm) | FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE VALUES | | | | | | | | MATERIAL CODE | | | | |
|-------------------------|----------------|-----------|---------|-------------------|---|----------------|-------|-------|-------|--------|--------|--------|---------------|--------------------|-------|--------|-----|
| | YD | XE | XF | | Flow Capacity in GPM | Pressure [bar] | | | | | | | | M1/M2 | M3 | P1/P2 | |
| 45° SPRAY ANGLE | 1/2" BSPT | 3/4" BSPP | 1" BSPP | | | 40*psi | 0.5 | 1.0 | 2.0 | 3.0 | 5.0 | 7.0 | 10.0 | SS304/SS316 | Brass | PVC/PP | |
| | | | | | | | | | | | | | | G/A D IMENSION. MM | | | |
| | | | | | | | | | | | | | | H | H1 | D | HEX |
| DM13.650 | YD | | | 3.1 | 1.99 | 3.25 | 4.60 | 6.50 | 7.96 | 10.28 | 12.16 | 14.53 | 32 | 13 | 21 | 22 | |
| DM13.800 | YD | | | 3.4 | 2.45 | 4.00 | 5.66 | 8.00 | 9.80 | 12.65 | 14.97 | 17.89 | XE | | | | |
| DM23.100 | YD | | | 3.8 | 3.07 | 5.00 | 7.07 | 10.00 | 12.25 | 15.81 | 18.71 | 22.36 | 42 | 15 | 32 | 27 | |
| DM23.125 | YD | XE | | 4.2 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | | | |
| DM23.160 | YD | XE | | 4.8 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | | | | | |
| DM23.200 | | XE | | 5.4 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | | |
| DM23.225 | | | XF | 5.7 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XF | | | | |
| DM23.250 | | | XF | 6.0 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 56 | 18 | 39 | 36 | |
| DM23.320 | | | XF | 6.8 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | | |
| 60° SPRAY ANGLE | | | | | | | | | | | | | | | | | |
| DM24.125 | YD | | | 4.1 | 3.83 | 6.25 | 8.84 | 12.50 | 15.31 | 19.76 | 23.39 | 27.95 | | | | | |
| DM24.160 | YD | | | 4.6 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | YD | | | | |
| DM24.200 | YD | XE | | 5.1 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | 32 | 13 | 21 | 22 | |
| DM24.225 | | XE | | 5.5 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | | |
| DM24.250 | | XE | | 5.8 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 | |
| DM24.320 | | XE | XF | 6.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | XF | | | | |
| DM24.400 | | | XF | 7.3 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | 56 | 18 | 39 | 36 | |
| DM24.520 | | | XF | 8.3 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | | | | | |
| 90° SPRAY ANGLE | | | | | | | | | | | | | | | | | |
| DM26.225 | YD | | | 5.5 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | | | | | |
| DM26.250 | YD | | | 5.8 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 | |
| DM26.320 | YD | | | 6.5 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | | |
| DM26.400 | YD | XE | | 7.3 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | | |
| DM26.520 | YD | XE | XF | 8.3 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | 56 | 18 | 39 | 36 | |
| DM26.650 | | XE | XF | 9.3 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | | |
| DM26.720 | | | XF | 9.8 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.0 | | | | | |
| 120° SPRAY ANGLE | | | | | | | | | | | | | | | | | |
| DM28.160 | YD | | | 4.9 | 4.90 | 8.00 | 11.31 | 16.00 | 19.60 | 25.30 | 29.93 | 35.78 | 32 | 13 | 21 | 22 | |
| DM28.200 | YD | | | 5.5 | 6.13 | 10.00 | 14.14 | 20.00 | 24.49 | 31.62 | 37.42 | 44.72 | | | | | |
| DM28.225 | YD | | | 5.8 | 6.90 | 11.25 | 15.91 | 22.50 | 27.56 | 35.58 | 42.09 | 50.31 | XE | | | | |
| DM28.250 | YD | XE | | 6.1 | 7.66 | 12.50 | 17.68 | 25.00 | 30.62 | 39.53 | 46.77 | 55.90 | 42 | 15 | 32 | 27 | |
| DM28.320 | YD | XE | | 6.9 | 9.81 | 16.00 | 22.63 | 32.00 | 39.19 | 50.60 | 59.87 | 71.55 | | | | | |
| DM28.400 | YD | XE | | 7.7 | 12.26 | 20.00 | 28.28 | 40.00 | 48.99 | 63.25 | 74.83 | 89.44 | XF | | | | |
| DM28.520 | | | XF | 8.8 | 15.94 | 26.00 | 36.77 | 52.00 | 63.69 | 82.22 | 97.28 | 116.28 | 56 | 18 | 39 | 36 | |
| DM28.650 | | | XF | 9.9 | 19.92 | 32.50 | 45.96 | 65.00 | 79.61 | 102.77 | 121.60 | 145.34 | | | | | |
| DM28.720 | | | XF | 10.4 | 22.07 | 36.00 | 50.91 | 72.00 | 88.18 | 113.8 | 134.7 | 161.0 | | | | | |

• X - BSPP, Y - BSPT, Z - NPT, As Required

• *Flow rate in US GPM @40 psi Pressure

• DN Series For Female Connection