

Twist & Dry®

Twist & Dry Component System

The Twist & Dry® series of nozzles was designed and developed for the spray drying industry, with the dryer operator specifically in mind. The patented locking system locks the swirl and orifice components into place prior to installation on the spray lance, eliminating many of the hassles associated with replacing wear parts and allowing for easier installs. Through continuous development and innovation, BETE offers solutions for high pressure, high temperature, and abrasive media applications.

DESIGN FEATURES

- Product consistency
- Premium tungsten carbide disc available for extended wear life
- Hand tighten - no special tools required for assembly
- Easy to maintain
- Clog-resistant design
- 218SS body for anti-galling

SPRAY SET-UPS

The spray angle and flow rate of a Twist and Dry assembly is determined by the swirl and orifice combination. The Twist & Dry series has almost 1,000 different combinations of swirl and orifice discs to provide flow rates and spray angles that best to fit your needs. To locate the right swirl and orifice combination refer to the following TD/TD-K and TDL pages.



TD Series

The original TD series features BETE's innovative and patented locking lug feature, single piece thick swirl component, clog-resistant design, and multiple carrier options to provide ease of installation, operation, and maintenance.

- BETE's patented lug design
- Clog-resistant design

TDL Series

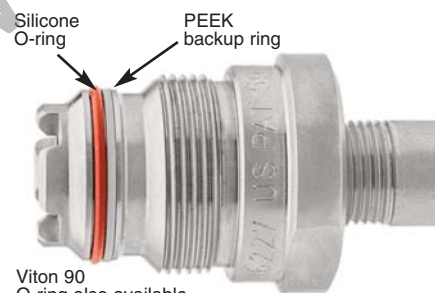
The TDL series offers a compact nozzle design that is ideal for small-scale applications and pilot testing.

- BETE's patented lug design
- Small-scale applications
- Pilot testing

TD-K High Pressure Design

The TD-K series incorporates a PEEK back-up ring and optional Duplex carrier to allow for operation in high-pressure applications. Higher operating pressures can help increase yield, saving time and money. The TD series includes:

- TD-7K: rated for 485 bar
- TD-10K: rated for 690 bar



Side View: TD-K body with PEEK backup ring

High Temperature (HT) Design

The HT set-up utilizes a special body design and carrier #7 to replace the traditional O-ring seals with metal gaskets, allowing for operation at high temperatures.

- HT rated for 485 bar at 427 °C
- No O-rings



TD/TD-K Drip Pro Check Valve

The TD Drip Pro check valve's patented design offers a high-flow solution to reduce drips which can lead to scorched particles and ruined product.

- Fits standard BETE carriers
- Replaces standard TD/TD-K bodies (except HT set-up)
- Drip-free operation
- Easy to assemble



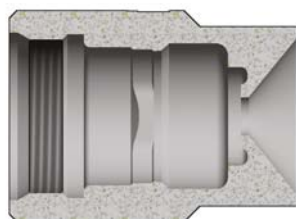
Same day shipping for wear parts!

Tungsten Carbide Options

| | |
|---------------|---|
| Pro Grade | Suitable for most general spray drying applications |
| Premium Grade | Superior wear resistance for extremely abrasive spray media |

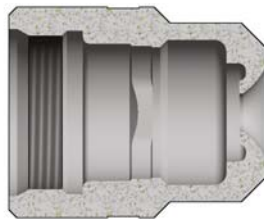
Twist & Dry® Components & Options

Talk to one of our engineers; we're here to help you find the right solution for your application!
413-772-0846



Durable Beard-Deterring

Carrier 1 (C11) (shown)
Carrier 11 (C111) - without lug



Standard Carrier

Carrier 2 (C12) (shown)
Carrier 5 (C15) - without lug



Knife Edge Anti-Bearding

Carrier 10 (C110) (shown)
Carrier 12 (C112) - without lug

To Order: Spray Set-up Number

1/4 TD 2 - 025 - C11 - 7K - 45 - CVB - B

| | | | | | | | |
|--|--|--------|--------------|---------|---|--|---|
| | pipe size add xx-BW if Butt Weld (include pipe schedule where xx) | series | swirl number | orifice | carrier style omit for standard carrier (model #2) or if using HT set-up (HT body and carrier #7) | pressure omit for TD/TDL or if using HT set-up (HT body and carrier #7) 7K see Material Selection Guide includes PEEK backup ring 10K see Material Selection Guide includes PEEK backup ring and Duplex 2205 carrier material | connection type omit if NPT or Butt Weld B if BSP |
| | | | | | | | check valve omit if no check valve is needed or using HT body CVB for 30 psi (2 bar) cracking pressure CVC for 75 psi (5 bar) cracking pressure |
| | | | | | | | temperature omit if temperature is less than or equal to 400 °F (204 °C) 45 if temperature is greater than 400 °F (204 °C) and less than or equal to 450 °F (232 °C); includes Silicone O-ring and PTFE CV seal if applicable HT if temperature is greater than 450 °F (232 °C) and less than or equal to 800 °F (427 °C); max pressure 7000 psi (485 bar) |

SPECIAL PURPOSE

Twist & Dry Material Selection Guide

| Pressure | | Temperature | | | |
|----------|-----|--|--|---|--|
| psi | bar | up to 302 °F (150 °C) | up to 400 °F (204 °C) | up to 450 °F (232 °C) | up to 800 °F (427 °C) |
| 10,000 | 690 | 10K Set-up Viton O-ring w/ PEEK Backup Ring Carrier in Duplex 2205 | 10K Set-up Viton O-ring w/ PEEK Backup Ring Carrier in Duplex 2205 | 10K Set-up Silicone O-ring w/ PEEK Backup Ring Carrier in Duplex 2205 | HT Set-up Metal Gaskets High Temperature Body Carrier #7 |
| | | 7K Set-up Viton O-ring w/ PEEK Backup Ring | 7K Set-up Viton O-ring w/ PEEK Backup Ring | 7K Set-up Silicone O-ring w/ PEEK Backup Ring | |
| 5,000 | 345 | TD/TDL Set-up Viton O-ring | TD/TDL Set-up Viton O-ring | TD/TDL Set-up Silicone O-ring | |
| 3,500 | 240 | | | | |
| 800 | 55 | | | | |

TD/TD-K

Twist & Dry® Hollow Cone

DESIGN FEATURES

- Patented locking mechanism for quick and easy change-out and maintenance

High pressure applications:

- TD-K with PEEK backup ring
- HT body with Carrier #7

High temperature applications:

- TD/TD-K bodies with silicone O-ring
- HT body with Carrier #7
- Female-threaded or butt weld connections
- Hand tighten, no special tools required
- Orifice size: 0.864mm through 3.99mm
- Interchangeable swirl and orifice discs for variable patterns and flow rates

- Drip Pro check valve available upon request
- **Multiple grades of tungsten carbide to suit application needs**

- Same day shipping of wear parts
- Clog-resistant design
- Easy to maintain

SPRAY CHARACTERISTICS

Spray pattern: Hollow Cone

Flow rates: 35.3 to 8,379 L/h

Spray angle: 50° through 85°, as listed



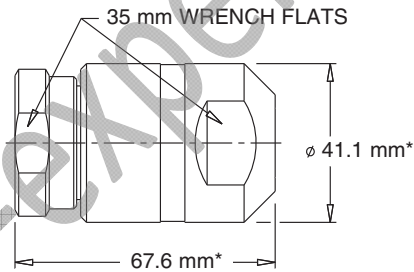
TD Assembly



70° Hollow Cone



Cutaway view of carrier showing BETE's unique locking lug feature



| Pipe Size | Weight* (g) |
|-----------|-------------|
| 1/4" | 539 |
| 3/8" | 524 |
| 1/2" | 510 |
| 3/4" | 482 |

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

Twist & Dry/TD-K Flow Rates

Hollow Cone; 50° to 85° Spray Angles; 1/4", 3/8", 1/2", and 3/4" Pipe Sizes; NPT, BSP, or Weld Prep

| Female Pipe Size | Nozzle Number | Spray Angle | Swirl | Orifice Dia (mm) | K Factor | LITERS PER HOUR @ BAR | | | | | | | | | | Use TD-K for operation over 240 bar | | |
|------------------|---------------|-------------|-------|------------------|----------|-----------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|-------------------------------------|---------|---------|
| | | | | | | 15 bar | 35 bar | 50 bar | 70 bar | 90 bar | 100 bar | 120 bar | 150 bar | 175 bar | 200 bar | 300 bar | 500 bar | 690 bar |
| 1/4" | TD2-34 | 70° | SW2 | 0.864 | 9.12 | 35.3 | 53.9 | 64.5 | 76.3 | 86.5 | 91.2 | 99.9 | 112 | 121 | 129 | 158 | 204 | 240 |
| | TD1-37 | 80° | SW1 | 0.94 | | | | | | | | | | | | | | |
| | TD2-40 | 75° | SW2 | 1.02 | | | | | | | | | | | | | | |
| | TD1-49 | 85° | SW1 | 1.24 | | | | | | | | | | | | | | |
| 3/8" | TD4-34 | 60° | SW4 | 0.864 | 13.7 | 53.0 | 80.9 | 96.7 | 114 | 130 | 137 | 150 | 167 | 181 | 193 | 237 | 306 | 360 |
| | TD3-40 | 70° | SW3 | 1.02 | | | | | | | | | | | | | | |
| | TD5-34 | 50° | SW5 | 0.864 | | | | | | | | | | | | | | |
| | TD4-40 | 65° | SW4 | 1.02 | | | | | | | | | | | | | | |
| 1/2" | TD4-43 | 65° | SW4 | 1.09 | 18.2 | 70.6 | 108 | 129 | 153 | 173 | 182 | 200 | 223 | 241 | 258 | 315 | 407 | 478 |
| | TD3-49 | 75° | SW3 | 1.24 | | | | | | | | | | | | | | |
| | TD6-37 | 50° | SW6 | 0.94 | | | | | | | | | | | | | | |
| | TD5-40 | 60° | SW5 | 1.02 | | | | | | | | | | | | | | |
| 3/4" | TD4-46 | 70° | SW4 | 1.17 | 20.5 | 79.4 | 121 | 145 | 172 | 195 | 205 | 225 | 251 | 271 | 290 | 355 | 458 | 538 |
| | TD3-55 | 75° | SW3 | 1.40 | | | | | | | | | | | | | | |
| | TD6-40 | 50° | SW6 | 1.02 | | | | | | | | | | | | | | |
| | TD5-43 | 60° | SW5 | 1.09 | | | | | | | | | | | | | | |
| OR | TD4-52 | 70° | SW4 | 1.32 | 22.8 | 88.3 | 135 | 161 | 191 | 216 | 228 | 250 | 279 | 301 | 322 | 395 | 510 | 599 |
| | TD5-49 | 60° | SW5 | 1.24 | | | | | | | | | | | | | | |
| | TD4-58 | 70° | SW4 | 1.47 | | | | | | | | | | | | | | |
| | TD3-67 | 80° | SW3 | 1.70 | | | | | | | | | | | | | | |

Flow Rate (L/h) = K √ bar

Standard Materials: Carrier: Stainless Steel, Duplex; Body: Stainless Steel; Swirl/Orifice: Tungsten Carbide

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

*Applies to threaded TD body and standard carrier(s)

SPECIAL PURPOSE

Twist & Dry/TD-K Flow Rates

Hollow Cone; 50° to 80° Spray Angles; 1/4", 3/8", 1/2", and 3/4" Pipe Sizes; NPT, BSP, or Weld Prep

| Female Pipe Size | Nozzle Number | Spray Angle | Swirl | Orifice Dia (mm) | K Factor | LITERS PER HOUR @ BAR | | | | | | | | | | Use TD-K for operation over 240 bar | | |
|------------------|---------------|-------------|-------|------------------|----------|-----------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|-------------------------------------|---------|---------|
| | | | | | | 15 bar | 35 bar | 50 bar | 70 bar | 90 bar | 100 bar | 120 bar | 150 bar | 175 bar | 200 bar | 300 bar | 500 bar | 690 bar |
| 1/4" | TD6-46 | 55° | SW6 | 1.17 | 27.4 | 106 | 162 | 193 | 229 | 259 | 273 | 300 | 335 | 362 | 387 | 475 | 613 | 720 |
| | TD5-52 | 65° | SW5 | 1.32 | | | | | | | | | | | | | | |
| | TD4-61 | 75° | SW4 | 1.55 | | | | | | | | | | | | | | |
| | TD3-70 | 80° | SW3 | 1.78 | | | | | | | | | | | | | | |
| | TD6-52 | 55° | SW6 | 1.32 | 31.9 | 124 | 189 | 226 | 267 | 303 | 319 | 349 | 391 | 422 | 451 | 553 | 713 | 838 |
| | TD5-58 | 65° | SW5 | 1.47 | | | | | | | | | | | | | | |
| | TD4-70 | 75° | SW4 | 1.78 | | | | | | | | | | | | | | |
| | TD7-49 | 50° | SW7 | 1.24 | 36.5 | 141 | 216 | 258 | 305 | 346 | 365 | 399 | 447 | 482 | 516 | 632 | 816 | 959 |
| | TD6-55 | 60° | SW6 | 1.4 | | | | | | | | | | | | | | |
| | TD5-64 | 70° | SW5 | 1.63 | | | | | | | | | | | | | | |
| | TD4-76 | 80° | SW4 | 1.93 | | | | | | | | | | | | | | |
| | TD7-52 | 50° | SW7 | 1.32 | 41.0 | 159 | 243 | 290 | 343 | 389 | 410 | 449 | 502 | 543 | 580 | 710 | 917 | 1077 |
| TD6-61 | 60° | SW6 | 1.55 | | | | | | | | | | | | | | | |
| TD5-70 | 70° | SW5 | 1.78 | | | | | | | | | | | | | | | |
| TD7-58 | 55° | SW7 | 1.47 | 45.6 | 177 | 270 | 322 | 381 | 432 | 456 | 499 | 558 | 603 | 645 | 790 | 1020 | 1198 | |
| TD6-64 | 65° | SW6 | 1.63 | | | | | | | | | | | | | | | |
| TD5-76 | 75° | SW5 | 1.93 | | | | | | | | | | | | | | | |
| TD4-91 | 80° | SW4 | 2.31 | | | | | | | | | | | | | | | |
| OR | TD7-61 | 55° | SW7 | 1.55 | 50.1 | 194 | 297 | 355 | 419 | 476 | 501 | 549 | 614 | 663 | 709 | 868 | 1120 | 1316 |
| TD6-70 | 65° | SW6 | 1.78 | | | | | | | | | | | | | | | |
| TD5-82 | 75° | SW5 | 2.08 | | | | | | | | | | | | | | | |
| TD7-64 | 55° | SW7 | 1.63 | 54.7 | 212 | 324 | 387 | 458 | 519 | 547 | 599 | 670 | 724 | 773 | 947 | 1223 | 1437 | |
| TD6-76 | 65° | SW6 | 1.93 | | | | | | | | | | | | | | | |
| TD5-88 | 75° | SW5 | 2.24 | | | | | | | | | | | | | | | |
| 3/8" | TD8-67 | 50° | SW8 | 1.7 | 68.4 | 265 | 404 | 483 | 572 | 649 | 684 | 749 | 837 | 904 | 967 | 1185 | 1529 | 1797 |
| TD7-76 | 60° | SW7 | 1.93 | | | | | | | | | | | | | | | |
| TD6-88 | 70° | SW6 | 2.24 | | | | | | | | | | | | | | | |
| TD5-109 | 80° | SW5 | 2.77 | | | | | | | | | | | | | | | |
| OR | TD8-76 | 50° | SW8 | 1.93 | 82.0 | 318 | 485 | 580 | 686 | 778 | 820 | 899 | 1010 | 1090 | 1160 | 1420 | 1834 | 2154 |
| TD7-85 | 65° | SW7 | 2.16 | | | | | | | | | | | | | | | |
| TD6-103 | 75° | SW6 | 2.62 | | | | | | | | | | | | | | | |
| TD8-82 | 55° | SW8 | 2.08 | 95.7 | 371 | 566 | 677 | 801 | 908 | 957 | 1050 | 1170 | 1270 | 1350 | 1658 | 2140 | 2514 | |
| TD7-97 | 65° | SW7 | 2.46 | | | | | | | | | | | | | | | |
| TD6-115 | 75° | SW6 | 2.92 | | | | | | | | | | | | | | | |
| 1/2" | TD9-82 | 50° | SW9 | 2.08 | 109 | 424 | 647 | 773 | 915 | 1040 | 1090 | 1200 | 1340 | 1450 | 1550 | 1888 | 2437 | 2863 |
| TD8-91 | 60° | SW8 | 2.31 | | | | | | | | | | | | | | | |
| TD7-106 | 70° | SW7 | 2.69 | | | | | | | | | | | | | | | |
| TD6-127 | 80° | SW6 | 3.23 | | | | | | | | | | | | | | | |
| OR | TD9-88 | 50° | SW9 | 2.24 | 123 | 477 | 728 | 870 | 1030 | 1170 | 1230 | 1350 | 1510 | 1630 | 1740 | 2130 | 2750 | 3231 |
| TD8-100 | 60° | SW8 | 2.54 | | | | | | | | | | | | | | | |
| TD7-118 | 70° | SW7 | 3.00 | | | | | | | | | | | | | | | |
| TD6-142 | 80° | SW6 | 3.61 | | | | | | | | | | | | | | | |
| OR | TD9-94 | 55° | SW9 | 2.39 | 137 | 530 | 809 | 967 | 1140 | 1300 | 1370 | 1500 | 1680 | 1810 | 1930 | 2373 | 3063 | 3599 |
| TD8-106 | 65° | SW8 | 2.69 | | | | | | | | | | | | | | | |
| TD7-127 | 75° | SW7 | 3.23 | | | | | | | | | | | | | | | |
| 3/4" | TD9-106 | 55° | SW9 | 2.69 | 160 | 618 | 944 | 1130 | 1340 | 1510 | 1600 | 1750 | 1950 | 2110 | 2260 | 2771 | 3578 | 4203 |
| TD8-121 | 65° | SW8 | 3.07 | | | | | | | | | | | | | | | |
| TD7-145 | 75° | SW7 | 3.68 | | | | | | | | | | | | | | | |
| TD10-103 | 50° | SW10** | 2.62 | 182 | 706 | 1080 | 1290 | 1530 | 1730 | 1820 | 2000 | 2230 | 2410 | 2580 | 3152 | 4070 | 4781 | |
| TD9-115 | 60° | SW9 | 2.92 | | | | | | | | | | | | | | | |
| TD8-133 | 70° | SW8 | 3.38 | | | | | | | | | | | | | | | |
| TD10-118 | 55° | SW10** | 3.00 | 205 | 794 | 1210 | 1450 | 1720 | 1950 | 2050 | 2250 | 2510 | 2710 | 2900 | 3551 | 4584 | 5385 | |
| TD9-127 | 60° | SW9 | 3.23 | | | | | | | | | | | | | | | |
| TD8-145 | 70° | SW8 | 3.68 | | | | | | | | | | | | | | | |
| TD9-136 | 65° | SW9 | 3.45 | 228 | 883 | 1350 | 1610 | 1910 | 2160 | 2280 | 2500 | 2790 | 3020 | 3220 | 3949 | 5098 | 5989 | |
| TD8-157 | 75° | SW8 | 3.99 | | | | | | | | | | | | | | | |
| TD9-148 | 65° | SW9 | 3.76 | 251 | 971 | 1480 | 1770 | 2100 | 2380 | 2510 | 2750 | 3070 | 3320 | 3550 | 4347 | 5613 | 6593 | |
| TD10-136 | 60° | SW10** | 3.45 | | | | | | | | | | | | | | | |
| TD9-154 | 70° | SW9 | 3.91 | 274 | 1060 | 1620 | 1930 | 2290 | 2590 | 2740 | 3000 | 3350 | 3620 | 3870 | 4746 | 6127 | 7197 | |
| TD10-151 | 60° | SW10** | 3.84 | | | | | | | | | | | | | | | |
| TD10-157 | 65° | SW10** | 3.99 | | | | | | | | | | | | | | | |
| | | | | | 319 | 1240 | 1890 | 2260 | 2670 | 3030 | 3190 | 3500 | 3910 | 4220 | 4510 | 5525 | 7133 | 8379 |

Flow Rate (L/h) = K √ bar

Standard Materials: Carrier: Stainless Steel, Duplex; Body: Stainless Steel; Swirl/Orifice: Tungsten Carbide

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

**SW10 only available in Pro Grade Tungsten Carbide

SPECIAL PURPOSE

TDL

Twist & Dry® Low Flow Hollow Cone

DESIGN FEATURES

- Patented locking mechanism for quick and easy change-out and maintenance
- Lower flow rates than the Twist & Dry series
- Female-threaded or butt weld pipe connections
- Orifice size: 0.457mm through 1.47mm
- Interchangeable swirl and orifice discs for variable patterns and flow rates

SPRAY CHARACTERISTICS

- Hollow Cone
- Flow rates:** 11.3 to 416 L/h
- Spray angle:** 70° - 75°

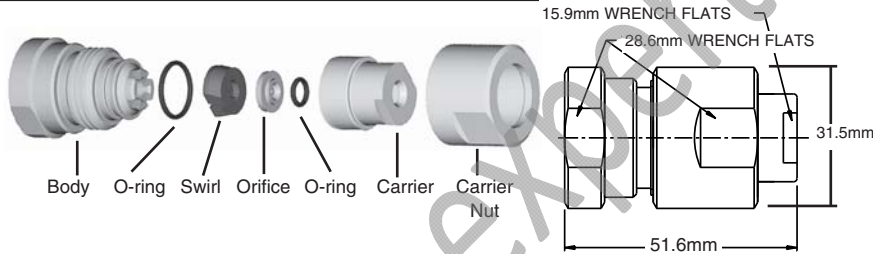
Ideal for small-scale applications and pilot tests



Female



70° Hollow Cone



| Pipe Size | Weight (g) |
|-----------|------------|
| 1/4" | 119 |
| 3/8" | 107 |

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

TDL Flow Rates

Hollow Cone; 70° - 75° Spray Angles; 1/4" and 3/8" Pipe Sizes; NPT or BSP

| Female Pipe Size | Nozzle Number | Swirl | Orifice Dia. (mm) | K Factor | LITERS PER HOUR @ BAR | | | | | | | | | | |
|------------------|---------------|-------|-------------------|----------|-----------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| | | | | | 15 bar | 35 bar | 50 bar | 70 bar | 90 bar | 100 bar | 120 bar | 150 bar | 175 bar | 200 bar | 275 bar |
| 1/4" | TDL4-18 | SWL4 | 0.457 | 2.92 | 11.3 | 17.3 | 20.6 | 24.4 | 27.7 | 29.2 | 32.0 | 35.7 | 36.6 | 41.3 | 48.4 |
| | TDL4-20 | SWL4 | 0.508 | 3.10 | 12.0 | 18.3 | 21.9 | 25.9 | 29.4 | 31.0 | 34.0 | 38.0 | 41.0 | 43.8 | 51.4 |
| | TDL4-22 | SWL4 | 0.559 | 3.42 | 13.2 | 20.2 | 24.2 | 28.6 | 32.4 | 34.2 | 37.4 | 41.9 | 45.2 | 48.3 | 56.7 |
| | TDL4-24 | SWL4 | 0.610 | 3.92 | 15.2 | 23.2 | 27.7 | 32.8 | 37.2 | 39.2 | 42.9 | 48.0 | 51.9 | 55.4 | 65.0 |
| | TDL4-27 | SWL4 | 0.686 | 4.56 | 17.7 | 27.0 | 32.2 | 38.1 | 43.2 | 45.6 | 49.9 | 55.8 | 60.3 | 64.5 | 75.6 |
| | TDL1-22 | SWL1 | 0.559 | 5.01 | 19.4 | 29.7 | 35.5 | 41.9 | 47.6 | 50.1 | 54.9 | 61.4 | 66.3 | 70.9 | 83.1 |
| | TDL1-24 | SWL1 | 0.610 | 5.70 | 22.1 | 33.7 | 40.3 | 47.7 | 54.0 | 57.0 | 62.4 | 69.8 | 75.4 | 80.6 | 94.5 |
| OR | TDL1-27 | SWL1 | 0.686 | 6.61 | 25.6 | 39.1 | 46.7 | 55.3 | 62.7 | 66.1 | 72.4 | 80.9 | 87.4 | 93.5 | 110 |
| | TDL1-30 | SWL1 | 0.762 | 7.52 | 29.1 | 44.5 | 53.2 | 62.9 | 71.3 | 75.2 | 82.4 | 92.1 | 99.5 | 106 | 125 |
| | TDL2-30 | SWL2 | 0.762 | 9.12 | 35.3 | 53.9 | 64.5 | 76.3 | 86.5 | 91.2 | 100 | 112 | 121 | 129 | 151 |
| | TDL2-33 | SWL2 | 0.838 | 10.3 | 39.7 | 60.7 | 72.5 | 85.5 | 97.3 | 103 | 112 | 126 | 136 | 145 | 170 |
| | TDL2-36 | SWL2 | 0.914 | 11.4 | 44.1 | 67.4 | 80.6 | 95.3 | 108 | 114 | 125 | 140 | 151 | 161 | 189 |
| | TDL2-38 | SWL2 | 0.965 | 12.1 | 46.8 | 71.5 | 85.4 | 101 | 115 | 121 | 132 | 148 | 160 | 171 | 200 |
| | TDL2-40 | SWL2 | 1.02 | 13.2 | 51.2 | 78.2 | 93.5 | 111 | 125 | 132 | 145 | 162 | 175 | 187 | 219 |
| | TDL2-42 | SWL2 | 1.07 | 13.7 | 53.0 | 80.9 | 96.7 | 114 | 130 | 137 | 150 | 167 | 181 | 193 | 227 |
| | TDL2-44 | SWL2 | 1.12 | 14.1 | 54.7 | 83.6 | 100 | 118 | 134 | 141 | 155 | 173 | 187 | 200 | 234 |
| | TDL2-46 | SWL2 | 1.17 | 14.8 | 57.4 | 87.6 | 105 | 124 | 141 | 148 | 162 | 181 | 196 | 209 | 246 |
| | TDL2-48 | SWL2 | 1.22 | 16.0 | 61.8 | 94.4 | 113 | 133 | 151 | 160 | 175 | 195 | 211 | 226 | 265 |
| | TDL2-50 | SWL2 | 1.27 | 16.6 | 64.4 | 98.4 | 118 | 139 | 158 | 166 | 182 | 204 | 220 | 235 | 276 |
| | TDL2-52 | SWL2 | 1.32 | 18.0 | 69.7 | 107 | 127 | 151 | 171 | 180 | 197 | 220 | 238 | 255 | 298 |
| | TDL2-54 | SWL2 | 1.37 | 18.7 | 72.4 | 111 | 132 | 156 | 177 | 187 | 205 | 229 | 247 | 264 | 310 |
| TDL2-56 | SWL2 | 1.42 | 19.1 | 74.1 | 113 | 135 | 160 | 182 | 191 | 210 | 234 | 253 | 271 | 317 | |
| 3/8" | TDL3-50 | SWL3 | 1.27 | 20.4 | 79.1 | 121 | 144 | 171 | 194 | 204 | 224 | 250 | 270 | 289 | 339 |
| | TDL3-52 | SWL3 | 1.32 | 21.8 | 84.4 | 129 | 154 | 182 | 207 | 218 | 239 | 267 | 288 | 308 | 361 |
| | TDL3-54 | SWL3 | 1.37 | 23.0 | 89.1 | 136 | 163 | 193 | 218 | 230 | 252 | 282 | 304 | 326 | 382 |
| | TDL3-56 | SWL3 | 1.42 | 24.4 | 94.4 | 144 | 172 | 204 | 231 | 244 | 267 | 299 | 323 | 345 | 404 |
| | TDL3-58 | SWL3 | 1.47 | 25.1 | 97.1 | 148 | 177 | 210 | 238 | 251 | 275 | 307 | 332 | 355 | 416 |

$$\text{Flow Rate (L/h)} = K \sqrt{\text{bar}}$$

Standard Materials: Carrier: Stainless Steel; Body: Stainless Steel; Swirl/Orifice: Tungsten Carbide

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

SPECIAL PURPOSE