GOODRICH

DELAVAN® Spray Technologies

# Airless Products

**Delavan airless tips are used on a variety of airless equipment and applications. We recognise the needs of the industry for the highest possible performance which is why the material used is the most wear resistant now available. Every tip is checked to ensure calibration and design features are continually achieved. Delavan's continued research assures all users of quality unsurpassed in the industry.**

**"Specifically designed for all airless spraying applications"**

Delavan airless tips give a uniform flat spray pattern with tapered edges and fine atomisation.

The tips feature a flanged tip design for use with standard handguns. Tip orifice is elliptical in shape.

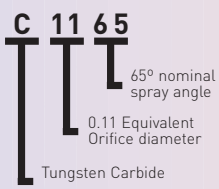
The term "equivalent orifice diameter" refers to a circular orifice diameter which will provide the same flow rate as the elliptical orifice. The equivalent orifice diameter does not indicate actual orifice dimensions.

The flow rates of Delavan Airless Tips are given in GMP flow on water at pressures shown. Capacities would vary to some degree on other materials.

## Examples of applications that use Airless products.

- → ***Automotive*** – injection of liquid wax to prevent corrosion and for application of underseal to underbodies.
- → ***Construction*** – to spray protective coatings and to clean.
- → ***Decorating*** – spray painting with paints and lacquers.
- → ***Canning*** – application of protective lacquers to food and drinks cans.
- → ***Furniture*** – application of glue in construction and of paint and lacquer finishes.

## Numbering System




## Selection Guide

**EQUIVALENT ORIFICE:** Airless tip orifices are elliptical in shape. The term 'eqivalent orifice diameter' refers to the circular orifice diameter which will provide the same flow rates as the elliptical orifice. The equivalent orifice diameter does not indicate actual orifice dimensions.

**FLOW RATE IN GPM:** The flow rates of Delavan airless tips are given in GPM flow on water at pressures shown. Capacities would vary to some degree on other materials.

**PATTERN WIDTH:** This dimension is the nominal pattern width of each tip when tested on a coating material of 20 seconds - # 40Zahn cup viscosity at 1500 PSI at a 12" distance from the tip

**FLOW RATE - IN U.S. GALS. PER MIN.**

## Capacity Chart

| TIP NUMBER | EQUIV. ORIF. (Inches) | PATTERN WIDTH (Inches) | FLOW RATE IN US GPM AT PSIG PRESSURE 500 | 1000 | 1500 | 2000 | PRE-ORIFICE DISC NO. |
|---|---|---|---|---|---|---|---|
| C515 | | 3 | | | | | |
| C525 | 0,005 | 5 | 0,015 | 0,02 | 0,025 | 0,03 | 9 |
| C540 | | 7 | | | | | |
| C715 | | 3 | | | | | |
| C725 | 0,007 | 5 | 0,03 | 0,04 | 0,05 | 0,06 | 9 |
| C735 | | 6 | | | | | |
| C740 | | 7 | | | | | |
| C915 | | 3 | | | | | |
| C925 | | 5,5 | | | | | |
| C940 | 0,009 | 7 | 0,04 | 0,06 | 0,067 | 0,08 | 9 |
| C950 | | 8,5 | | | | | |
| C965 | | 10 | | | | | |
| C1115 | | 3 | | | | | |
| C1125 | | 5,5 | | | | | |
| C1140 | | 7 | | | | | 11 |
| C1150 | 0,011 | 8,5 | 0,06 | 0,08 | 0,10 | 0,12 | OR |
| C1165 | | 10 | | | | | 13 |
| C1180 | | 11,5 | | | | | |
| C1315 | | 3 | | | | | |
| C1325 | | 5,5 | | | | | |
| C1340 | | 8 | | | | | |
| C1350 | 0,013 | 9 | 0,09 | 0,12 | 0,15 | 0,18 | 16 |
| C1365 | | 11 | | | | | |
| C1380 | | 13 | | | | | |
| C1395 | | 14 | | | | | |
| C1515 | | 4 | | | | | |
| C1525 | | 6 | | | | | |
| C1540 | | 8 | | | | | |
| C1550 | 0,15 | 10 | 0,12 | 0,16 | 0,20 | 0,23 | 16 |
| C1565 | | 12 | | | | | |
| C1580 | | 14 | | | | | |
| C1595 | | 15,5 | | | | | |
| C1615 | | 4 | | | | | |
| C1625 | | 6 | | | | | |
| C1640 | | 8 | | | | | |
| C1650 | 0,016 | 10 | 0,14 | 0,19 | 0,24 | 0,28 | 20 |
| C1665 | | 12 | | | | | |
| C1673 | | 14 | | | | | |
| C1680 | | 15 | | | | | |
| C1695 | | 17 | | | | | |

Other sizes available - contact the Factory

Continued overleaf

| TIP NUMBER | EQUIV. ORIF. (Inches) | PATTERN WIDTH (Inches) | FLOW RATE IN US GPM AT PSIG PRESSURE 500 | 1000 | 1500 | 2000 | PRE-ORIFICE DISC NO. |
|---|---|---|---|---|---|---|---|
| C1825 | | 6 | | | | | |
| C1840 | | 8,5 | | | | | |
| C1850 | 0,018 | 10 | 0,18 | 0,25 | 0,30 | 0,36 | 20 |
| C1865 | | 13 | | | | | |
| C1880 | | 15 | | | | | |
| C1895 | | 17 | | | | | |
| C2025 | | 6 | | | | | |
| C2040 | | 8,5 | | | | | |
| C2050 | | 10 | | | | | |
| C2060 | 0,020 | 12 | 0,20 | 0,28 | 0,35 | 0,40 | 25 |
| C2065 | | 14 | | | | | |
| C2080 | | 16 | | | | | |
| C2095 | | 18 | | | | | |
| C2125 | | 6 | | | | | |
| C2140 | | 8,5 | | | | | |
| C2150 | 0,021 | 11,5 | 0,24 | 0,33 | 0,41 | 0,47 | 25 |
| C2165 | | 15 | | | | | |
| C2180 | | 17 | | | | | |
| C2195 | | 19 | | | | | |
| C2425 | | 7 | | | | | |
| C2440 | | 9 | | | | | |
| C2450 | | 12 | | | | | |
| C2465 | 0,024 | 15 | 0,30 | 0,42 | 0,52 | 0,60 | 25 |
| C2473 | | 17 | | | | | |
| C2480 | | 18,5 | | | | | |
| C2495 | | 21 | | | | | |
| C2625 | | 7 | | | | | |
| C2640 | | 9 | | | | | |
| C2650 | 0,026 | 12 | 0,35 | 0,50 | 0,61 | 0,71 | 28 |
| C2665 | | 15 | | | | | |
| C2680 | | 18,5 | | | | | |
| C2695 | | 21 | | | | | |

| TIP NUMBER | EQUIV. ORIF. (Inches) | PATTERN WIDTH (Inches) | FLOW RATE IN US GPM AT PSIG PRESSURE 500 | 1000 | 1500 | 2000 | PRE-ORIFICE DISC NO. |
|---|---|---|---|---|---|---|---|
| C2925 | | 7 | | | | | |
| C2940 | | 9 | | | | | |
| C2950 | | 12 | | | | | |
| C2965 | 0,029 | 15 | 0,45 | 0,63 | 0,80 | 0,90 | 31 |
| C2973 | | 17 | | | | | |
| C2980 | | 18,5 | | | | | |
| C2995 | | 21,5 | | | | | |
| C3140 | | 9 | | | | | |
| C3150 | | 12 | | | | | |
| C3165 | 0,031 | 15 | 0,53 | 0,75 | 0,92 | 1,1 | 39 |
| C3180 | | 18,5 | | | | | |
| C3195 | | 21,5 | | | | | |
| C3640 | | 9 | | | | | |
| C3650 | | 12 | | | | | |
| C3665 | 0,036 | 15 | 0,71 | 1,0 | 1,2 | 1,4 | 39 |
| C3680 | | 18,5 | | | | | |
| C3695 | | 21,5 | | | | | |
| C4195 | 0,041 | 21,5 | 0,88 | 1,2 | 1,5 | 1,8 | 45 |
| C4340 | | 9 | | | | | |
| C4350 | | 12 | | | | | |
| C4365 | 0,043 | 15 | 1,1 | 1,5 | 1,8 | 2,1 | 45 |
| C4380 | | 18,5 | | | | | |
| C4395 | | 21,5 | | | | | |
| C4880 | 0,048 | 18,5 | 1,2 | 1,7 | 2,1 | 2,5 | 55 |
| C4895 | | 22 | | | | | |
| C5240 | 0,052 | 9 | 1,4 | 2,0 | 2,4 | 2,8 | 55 |
| C5265 | | 15 | | | | | |
| C6240 | 0,062 | 9 | 2,1 | 3,0 | 3,7 | 4,2 | 65 |
| C6265 | | 15 | | | | | |
| C7265 | 0,072 | 15 | 2,8 | 4,0 | 4,9 | 5,7 | 76 |
| C8565 | 0,085 | 15 | 4,1 | 5,7 | 6,7 | 8,1 | 76 |

**Other sizes available - contact the Factory**

Airless Products

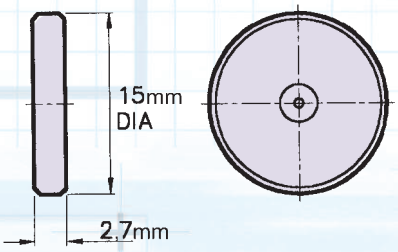
# Pre-Orifice Discs

## Applications previously considered impractical can now be handled by adding a Delavan Pre-Orifice.

This flat disc has been designed for use with airless tips and standard handguns and is constructed with a Carbide insert mounted in a stainless steel housing.

The easily installed pre-orifice disc sits directly behind the Airless Tip and also serves as a seal, eliminating the need for a separate gasket.

Substantially lower operating pressures can now be used without sacrificing spray quality and larger Airless Tip sizes may be used at lower pressures, resulting in low flow rates without clogging.




**"Improve the spray quality of most Airless Tips"**

## Orifice Dimensions

| DISC NO. | 9 | 11 | 13 | 16 | 20 | 25 | 28 | 31 | 39 | 45 | 55 | 65 | 76 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ORIFICE DIA. (inches) | 0,009 | 0,011 | 0,013 | 0,016 | 0,020 | 0,025 | 0,028 | 0,031 | 0,039 | 0,045 | 0,055 | 0,065 | 0,076 |

Airless Products

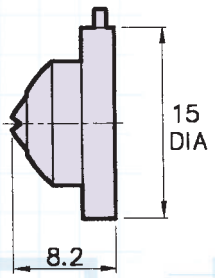
# Air Assisted Tips

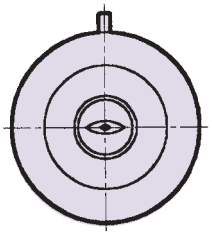
## Delavan manufacture various types of flanged tip assemblies for use with air assisted airless spray guns.

These are supplied with Carbide Inserts from our standard range of Airless Tips.

They give a uniform flat spray pattern with tapered edges and fine atomisation and help to eliminate hard edges.

Typical example of Air Assisted Tip



Dimensions shown are in mm.

**Other sizes available - contact the Factory**

# Turnatip Kit

**The turnatip kit utilises the same carbide insert as the airless tip but with a brass housing to fit a turnaflo adapter.**

Each of the turnatip kits is supplied with grubscrews for both Delavan and competitive units and an alignment tool.

The brass housing is bonded to the carbide insert and is slotted in the orifice area. The slot is utilised for orientation purposes by using the special alignment tool.

For ease of identification, the turnatip number is stamped on the Brass housing, for example: D2, and each turnatip is flow tested and pattern width checked in the same way as the Airless Tip.

**Typical order example: Turnatip Kit D2**

## Each Turnatip Kit Contains:

- Tungsten carbide insert with attached brass seal as per your order (see chart for sizes)
- Hardened steel safety grubscrew for use with turnaflo. (**W00126**)
- Hardened steel safety grubscrew for use with competitive units. (**W00127**)
- Turnatip alignment tool (**W00761**)

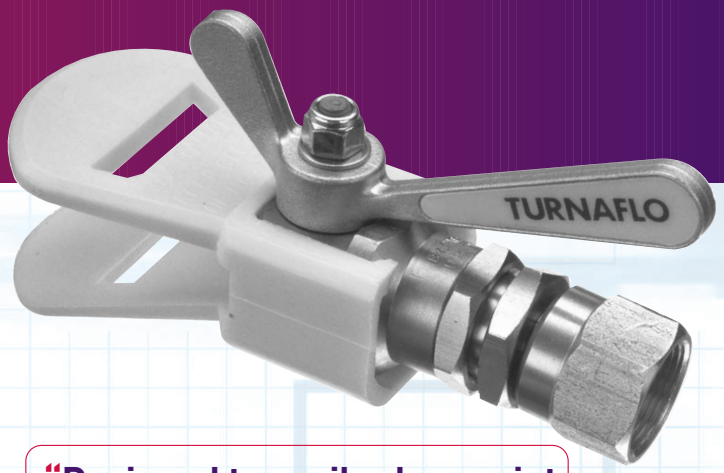
| TURNATIP NUMBER | AIRLESS TIP REF. | EQUIV. ORIFICE (INCHES) | PATTERN WIDTH (INCHES) | FLOW RATE* |
|---|---|---|---|---|
| X-2 | C515 | | 3 | |
| X-3 | C525 | 0,005 | 5 | 0,02 |
| X-4 | C540 | | 7 | |
| A-2 | C715 | | 3 | |
| A-3 | C725 | 0,007 | 5 | 0,4 |
| A-4 | C735 | | 6 | |
| A-5 | C740 | | 7 | |
| B-2 | C915 | | 3 | |
| B-3 | C925 | | 5,5 | |
| B-4 | C940 | 0,009 | 7 | 0,06 |
| B-5 | C950 | | 8,5 | |
| B-6 | C965 | | 10 | |
| C-2 | C1115 | | 3 | |
| C-3 | C1125 | | 5,5 | |
| C-4 | C1140 | 0,011 | 7 | 0,08 |
| C-5 | C1150 | | 8,5 | |
| C-6 | C1165 | | 10 | |
| C-7 | C1180 | | 11,5 | |
| D-2 | C1315 | | 3 | |
| D-3 | C1325 | | 5,5 | |
| D-4 | C1340 | | 8 | |
| D-5 | C1350 | 0,013 | 9 | 0,12 |
| D-6 | C1365 | | 11 | |
| D-7 | C1380 | | 13 | |
| D-8 | C1395 | | 14 | |
| E-2 | C1515 | | 4 | |
| E-3 | C1525 | | 6 | |
| E-4 | C1540 | | 8 | |
| E-5 | C1550 | 0,015 | 10 | 0,16 |
| E-6 | C1565 | | 12 | |
| E-7 | C1580 | | 14 | |
| E-8 | C1595 | | 15,5 | |
| F-2 | C1615 | | 4 | |
| F-3 | C1625 | 0,016 | 6 | 0,19 |
| F-4 | C1640 | | 8 | |
| F-5 | C1650 | | 10 | |

| TURNATIP NUMBER | AIRLESS TIP REF. | EQUIV. ORIFICE (INCHES) | PATTERN WIDTH (INCHES) | FLOW RATE* |
|---|---|---|---|---|
| F-6 | C1665 | | 12 | |
| F-7 | C1673 | 0,016 | 14 | 0,19 |
| F-8 | C1680 | | 15 | |
| F-9 | C1695 | | 17 | |
| G-2 | C1825 | | 6 | |
| G-3 | C1840 | | 8,5 | |
| G-4 | C1850 | 0,018 | 10 | 0,25 |
| G-5 | C1865 | | 13 | |
| G-6 | C1880 | | 15 | |
| G-7 | C1895 | | 17 | |
| H-2 | C2025 | | 6 | |
| H-3 | C2040 | | 8,5 | |
| H-4 | C2050 | | 10 | |
| H-5 | C2060 | 0,020 | 12 | 0,28 |
| H-6 | C2065 | | 14 | |
| H-7 | C2080 | | 16 | |
| H-8 | C2095 | | 18 | |
| J-2 | C2125 | | 6 | |
| J-3 | C2140 | | 8,5 | |
| J-4 | C2150 | 0,021 | 11,5 | 0,33 |
| J-5 | C2165 | | 15 | |
| J-6 | C2180 | | 17 | |
| J-7 | C2195 | | 19 | |
| K-2 | C2425 | | 7 | |
| K-3 | C2440 | | 9 | |
| K-4 | C2450 | | 12 | |
| K-5 | C2465 | 0,024 | 15 | 0,42 |
| K-6 | C2473 | | 17 | |
| K-7 | C2480 | | 18,5 | |
| K-8 | C2495 | | 21 | |
| L-2 | C2625 | | 7 | |
| L-3 | C2640 | | 9 | |
| L-4 | C2650 | 0,026 | 12 | 0,50 |
| L-5 | C2665 | | 15 | |
| L-6 | C2680 | | 18,5 | |
| L-7 | C2695 | | 21 | |

| TURNATIP NUMBER | AIRLESS TIP REF. | EQUIV. ORIFICE (INCHES) | PATTERN WIDTH (INCHES) | FLOW RATE* |
|---|---|---|---|---|
| M-2 | C2925 | | 7 | |
| M-3 | C2940 | | 9 | |
| M-4 | C2950 | | 12 | |
| M-5 | C2965 | 0,029 | 15 | 0,63 |
| M-6 | C2973 | | 17 | |
| M-7 | C2980 | | 18,5 | |
| M-8 | C2995 | | 21,5 | |
| N-2 | C3140 | | 9 | |
| N-3 | C3150 | | 12 | |
| N-4 | C3165 | 0,031 | 15 | 0,75 |
| N-5 | C3180 | | 18,5 | |
| N-6 | C3195 | | 21,5 | |
| P-2 | C3640 | | 9 | |
| P-3 | C3650 | | 12 | |
| P-4 | C3665 | 0,036 | 15 | 1,0 |
| P-5 | C3680 | | 18,5 | |
| P-6 | C3695 | | 21,5 | |
| P-7 | C36110 | | 24 | |
| R-2 | C4195 | 0,041 | 21,5 | 1,2 |
| R-3 | C4340 | | 9 | |
| R-4 | C4350 | | 12 | |
| R-5 | C4365 | 0,043 | 15 | 1,5 |
| R-6 | C4380 | | 18,5 | |
| R-7 | C4395 | | 21,5 | |
| S-2 | C4880 | 0,048 | 18,5 | 1,7 |
| S-3 | C4895 | | 22 | |
| T-2 | C5240 | 0,052 | 9 | 2,0 |
| T-3 | C5265 | | 15 | |
| V-3 | C6240 | 0,062 | 9 | 3,0 |
| V-4 | C6265 | | 15 | |
| W-2 | C7265 | 0,072 | 15 | 4,0 |
| W-3 | C8565 | 0,085 | 15 | 5,7 |

*Flow rates are indicated in US galls/min (water) at an operating pressure of 1000 PSIG (69 Bar.G.).

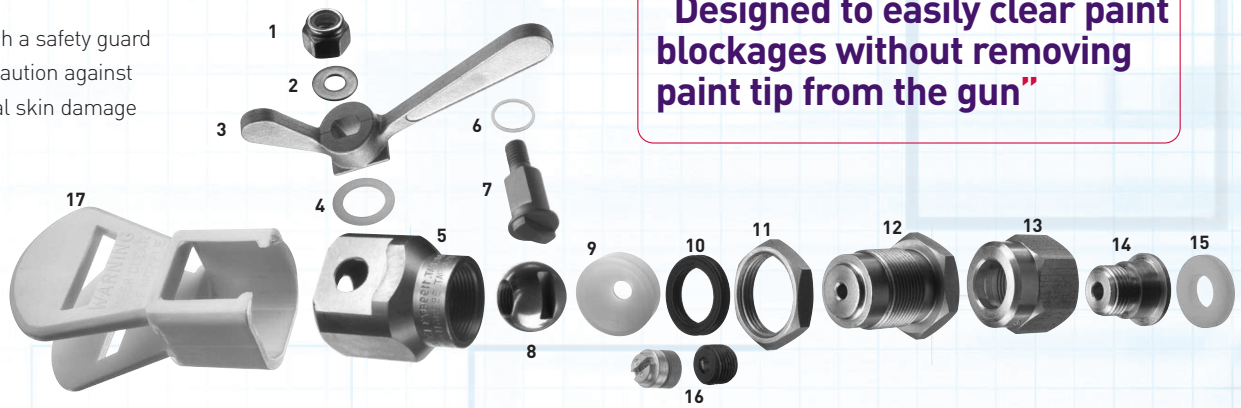
# Turnaflo Adapter




**The Delavan turnaflo adapter is a quick and easy method for the removal of particles blocking the spray tip during operation.**

When a spray tip is blocked, turn handle 180°. This reverses the flow through the tip and flushes out foreign matter.

Fitted with a safety guard as a precaution against accidental skin damage




**"Designed to easily clear paint blockages without removing paint tip from the gun"**

## Parts List

| ITEM | DESCRIPTION | PART NUMBER |
|---|---|---|
| 1 | Nut | W01744 |
| 2 | Nut Washer | W01741 |
| 3 | Handle | W01468 |
| 4 | Handle Washer | W01563 |
| 5 | Body | W01561 |
| 6 | Drive Shank Washer | W01564 |
| 7 | Drive Shank | W01560 |
| 8 | Ball | W01482 |
| 9 | Ball Gasket | W01086 |
| 10 | Nu-lip Seal | W00075 |
| 11 | Locknut | W00916 |
| 12 | Seal-Retainer | W00915 |
| 13 | Cap | See Table |
| 14 | Connecting Piece | W00747 |
| 15 | Gasket | See Table |
| 16 | Turnatip Kit | |
| 17 | Safety Guard | W05758 |
| 18 | Seal Kit | 4600 SK* |
| 19 | Ball and Seal Kit | 4600 BSK* |

* Not illustrated.

## Turnaflo Selection Guide

| TURNAFLO PART NUMBER | TO FIT GUN TYPE | SCREW CAP THREAD | SREW CAP PART NUMBER | GUN SEALING GASKET |
|---|---|---|---|---|
| 4500 - AG | Speeflo | 3/8" NPS | W00056 | W06428 |
| 4500 - AG | Kremlin | 3/8" NPS | W00056 | W06428 |
| 4500 - AG | Nordson | 3/8" NPS | W00056 | W06428 |
| 4500 - AG | De Vilbiss | 3/8" NPS | W00056 | W06428 |
| 4510 - AG | Graco* | 11/16" x 16 UN | W00057 | W06428 |
| 4510 - AG | Alemite | 11/16" x 16 UN | W00057 | W06428 |
| 4510 - AG | S.S. Co. 24-A & 25A | 11/16" x 16 UN | W00057 | W06428 |
| 4510 - AG | Wagner Super G15 | 11/16" x 16 UN | W00057 | W06428 |
| 4510 - AG | Rexson | 11/16" x 16 UN | W00057 | W06428 |
| 4510 - AG | Binks 43 | 11/16" x 16 UN | W00057 | W06428 |
| 4520 - AG | Blinks 50 | 3/4" x 20 UNEF | W00058 | W01776 |
| 4530 - AG | Graco** | 7/8" x 14 NF | W00059 | W00064 |
| 4540 - AG | S.S. Co. 44A | 1" x 14 NF | W00060 | W00079 |
| 4550 - AG | Atlas Copco | M18 x 1 | W01684 | W06428 |
| 4550 - AG | Bede | M18 x 1 | W01684 | W06428 |
| 4550 - AG | Kopperschmidt | M18 x 1 | W01684 | W06428 |
| 4560 - AG | Iwata | M18 x 1 | W01684 | W00063 |
| 4570 - AG | Aro 651-516 | 11/16" x 16 UN | W00697 | W06428 |
| 4580 - AG | - | 5/8" BSPP | W01324 | W00064 |
| 4590 - AG | - | M18 x 1,5 | W15151 | W06428 |

* Attach Turnaflo after removing Airless Tip retaining nut only.
** Attach Turnaflo after removing filter retainer.

Distributor Stamp

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