

The Toro logo is a red square with the word "TORO" in white, bold, sans-serif capital letters.

# AQUA-TRAXX<sup>®</sup> PREMIUM DRIP TAPES



AQUA-TRAXX<sup>®</sup> PBX



AQUA-TRAXX<sup>®</sup> FLOWCONTROL<sup>™</sup>

**THE EVOLUTION OF PRECISION |** Market demands, weather patterns and resource availability change every day, so precision agriculture practices must evolve to stay ahead. From increasing yield and improving quality to making the best use of available resources, irrigation technology is evolving too. Each step gives you more precise control over the time, energy and water you invest in your crop.

Toro drip tapes are innovative steps in the evolution of drip irrigation. Aqua-Traxx PBX, the original drip tape, provides unmatched clog resistance, durability and precision placement of your valuable water and fertiliser. And now, introducing the new Aqua-Traxx FlowControl drip tape – the only flow-regulating drip tape available – Toro's latest advancement in the evolution of drip irrigation, giving you increased uniformity and control wherever you grow.



# AQUA-TRAXX® PBX

## THE STANDARD IN DRIP IRRIGATION

Aqua-Traxx PBX premium drip tape can help you increase yield, water-use efficiency and improve crop quality by putting water and fertiliser right where you need them. Choose emitter spacing from 10 cm to 90 cm (4" to 36") – with no cost increase – for precise placement and flexibility when designing your system. Find the perfect tape for your application with a wide variety of available flow rates, wall thicknesses and internal diameters, most requiring just 140-mesh (105 micron) filtration. Moreover, the PBX Advantage increases durability, clog resistance and uniformity to set Aqua-Traxx apart from ordinary drip tapes.

## FEATURES

- Designed and moulded with the PBX Advantage for increased durability, clog resistance and uniform output.
- Available in three diameters and six wall thicknesses.
- Most flow rates require just 140-mesh (105 micron) filtration.
- Easily identifiable double blue stripe to aid in correct installation.
- Each coil laser etched with code and manufacture date for easy in-field identification.
- Precision laser incised outlet slit provides superior accuracy and consistency.

### THE PBX ADVANTAGE

Aqua-Traxx PBX premium drip tape is designed and moulded with a high level of precision, resulting in manufacturing consistency over 97 percent – the BEST in the industry. With Toro, you get greater reliability and more uniform output compared to ordinary tapes: that's the PBX Advantage.



Precision-moulded emitters resist clogging and promote uniform output

Proportionally Balanced Cross-Section (PBX) increases flow turbulence and velocity

Engineering-grade virgin resins and seamless construction add durability



# AQUA-TRAXX® PBX

## PRODUCT SPECIFICATIONS

### AQUA-TRAXX PBX FLOW RATES

| Emitter Flow Part Number | Outlet Spacing<br>cm | Emitter Flow Rate |                         | Emitter Exponent | Filtration Requirement |        |
|--------------------------|----------------------|-------------------|-------------------------|------------------|------------------------|--------|
|                          |                      | lph<br>@ 55 kPa   | lph/1 metre<br>@ 55 kPa |                  | mesh                   | micron |
| <b>0.07 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx0817                  | 20                   | 0.26              | 1.30                    | 0.55             | 200                    | 74     |
| AAx1609                  | 40                   | 0.26              | 0.65                    |                  |                        |        |
| <b>0.09 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx0822                  | 20                   | 0.34              | 1.66                    | 0.55             | 200                    | 74     |
| AAx1611                  | 40                   | 0.34              | 0.83                    |                  |                        |        |
| <b>0.10 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx0825                  | 20                   | 0.38              | 1.86                    | 0.55             | 200                    | 74     |
| AAx1613                  | 40                   | 0.38              | 0.93                    |                  |                        |        |
| <b>0.13 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx0467                  | 10                   | 0.51              | 4.99                    | 0.5              | 140                    | 105    |
| AAx0644                  | 15                   | 0.51              | 3.33                    |                  |                        |        |
| AAx0834                  | 20                   | 0.51              | 2.50                    |                  |                        |        |
| AAx1222                  | 30                   | 0.51              | 1.66                    |                  |                        |        |
| AAx1617                  | 40                   | 0.51              | 1.25                    |                  |                        |        |
| AAx1814                  | 45                   | 0.51              | 1.11                    |                  |                        |        |
| AAx2411                  | 60                   | 0.51              | 0.83                    |                  |                        |        |
| <b>0.15 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx0650                  | 15                   | 0.57              | 3.73                    | 0.5              | 140                    | 105    |
| AAx1225                  | 30                   | 0.57              | 1.86                    |                  |                        |        |
| AAx1817                  | 45                   | 0.57              | 1.24                    |                  |                        |        |
| <b>0.165 gph emitter</b> |                      |                   |                         |                  |                        |        |
| AAx1034                  | 25                   | 0.62              | 2.50                    | 0.5              | 140                    | 105    |
| <b>0.20 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx04100                 | 10                   | 0.76              | 7.47                    | 0.5              | 140                    | 105    |
| AAx0667                  | 15                   | 0.76              | 4.99                    |                  |                        |        |
| AAx0850                  | 20                   | 0.76              | 3.74                    |                  |                        |        |
| AAx1234                  | 30                   | 0.76              | 2.50                    |                  |                        |        |
| AAx1625                  | 40                   | 0.76              | 1.87                    |                  |                        |        |
| AAx1822                  | 45                   | 0.76              | 1.67                    |                  |                        |        |
| AAx2417                  | 60                   | 0.76              | 1.25                    |                  |                        |        |
| <b>0.27 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx04134                 | 10                   | 1.01              | 9.99                    | 0.5              | 140                    | 105    |
| AAx0690                  | 15                   | 1.01              | 6.66                    |                  |                        |        |
| AAx0867                  | 20                   | 1.01              | 4.99                    |                  |                        |        |
| AAx1245                  | 30                   | 1.01              | 3.33                    |                  |                        |        |
| AAx1634                  | 40                   | 1.01              | 2.50                    |                  |                        |        |
| AAx1830                  | 45                   | 1.01              | 2.22                    |                  |                        |        |
| AAx2422                  | 60                   | 1.01              | 1.67                    |                  |                        |        |
| <b>0.34 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx04168                 | 10                   | 1.27              | 12.48                   | 0.5              | 140                    | 105    |
| AAx06112                 | 15                   | 1.27              | 8.33                    |                  |                        |        |
| AAx0884                  | 20                   | 1.27              | 6.24                    |                  |                        |        |
| AAx1069                  | 25                   | 1.27              | 5.20                    |                  |                        |        |
| AAx1256                  | 30                   | 1.27              | 4.16                    |                  |                        |        |
| AAx1642                  | 40                   | 1.27              | 3.12                    |                  |                        |        |
| AAx1838                  | 45                   | 1.27              | 2.78                    |                  |                        |        |
| AAx2428                  | 60                   | 1.27              | 2.08                    |                  |                        |        |
| <b>0.53 gph emitter</b>  |                      |                   |                         |                  |                        |        |
| AAx04265                 | 10                   | 2.01              | 19.75                   | 0.5              | 140                    | 105    |
| AAx08133                 | 20                   | 2.01              | 9.87                    |                  |                        |        |
| AAx1288                  | 30                   | 2.01              | 6.58                    |                  |                        |        |
| AAx1666                  | 40                   | 2.01              | 4.94                    |                  |                        |        |
| AAx2444                  | 60                   | 2.01              | 3.29                    |                  |                        |        |
| AAx3629                  | 90                   | 2.01              | 2.19                    |                  |                        |        |

† Maximum pressure within laterals while operating or flushing.  
Not all configurations are available in all regions.

### AQUA-TRAXX PBX WALL THICKNESS

| Diameter                | Wall Thickness | Operating Pressure |            | Length<br>metres | Weight<br>kg |
|-------------------------|----------------|--------------------|------------|------------------|--------------|
|                         |                | kPa (min)          | kPa (max)† |                  |              |
| 5/8" (16mm)<br>0.635"   | 5 mil          | 30                 | 70         | 3,962            | 33           |
|                         | 6 mil          | 30                 | 80         | 3,048            | 29           |
|                         | 8 mil          | 30                 | 100        | 2,286            | 30           |
|                         | 10 mil         | 30                 | 100        | 1,829            | 29           |
|                         | 12 mil         | 30                 | 100        | 1,554            | 29           |
| 7/8" (22mm)<br>0.880"   | 15 mil         | 30                 | 100        | 1,219            | 29           |
|                         | 6 mil          | 30                 | 70         | 2,250            | 31           |
|                         | 8 mil          | 30                 | 100        | 1,829            | 33           |
|                         | 10 mil         | 30                 | 100        | 1,341            | 32           |
|                         | 12 mil         | 30                 | 100        | 1,219            | 33           |
| 1-1/8" (28mm)<br>1.130" | 15 mil         | 30                 | 100        | 914              | 30           |
|                         | 10 mil         | 30                 | 100        | 1,280            | 31           |
|                         | 12 mil         | 30                 | 100        | 1,005            | 30           |
|                         | 15 mil         | 30                 | 100        | 732              | 28           |

"X denotes the diameter - 5 for 5/8", 7 for 7/8" and 9 for 1 1/8"  
"xx denotes mil (1/1000th of an inch) thickness.  
Metric outlet spacing expressed in nominal length.  
† Coefficient of Variation (CV) less than 3%.



### PRO-LOC™ FITTINGS, ENGINEERED FOR USE WITH AQUA-TRAXX

Easy to install Pro-Loc fittings offer a comprehensive range of configurations including couplings, layflat take-offs and valve options. Engineered for use with Aqua-Traxx drip tape, Pro-Loc fittings are designed to last for the life of the irrigation system.

For best system results, always demand genuine Toro Pro-Loc fittings.

### PBX CODE BUILDER

## AA5100867-600

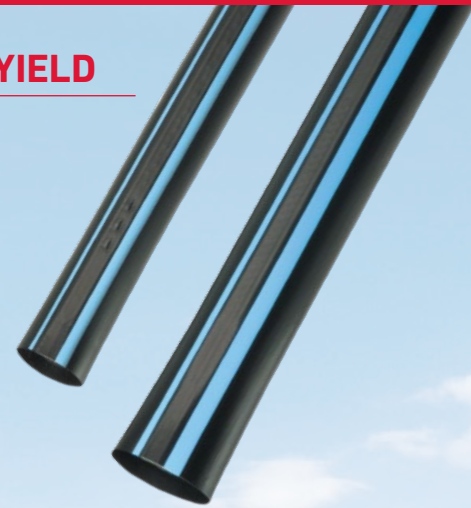
Aqua-Traxx® with the PBX Advantage    Tube Diameter (5/8"-16mm)    Wall Thickness (10 mil)    Emitter Spacing (08"-20 cm)    Flow Rate (0.67 gpm per 100'-4.99 lph/1 metre)    Roll Length (600 ft x 10' = 6000')



# AQUA-TRAXX® FLOWCONTROL™

## THE NEXT LEVEL OF UNIFORMITY, EFFICIENCY AND YIELD

The new Aqua-Traxx FlowControl premium drip tape is the latest advancement in precision drip irrigation. It's the only flow-regulating drip tape available – giving you more control and uniformity wherever you farm. The innovative emitter design provides flexibility to increase or decrease flow while maintaining a uniform output across changing elevations. Now you have more control over how much water your crops get, especially in long runs or hilly terrain, where water pressure can vary throughout the run.



## FEATURES

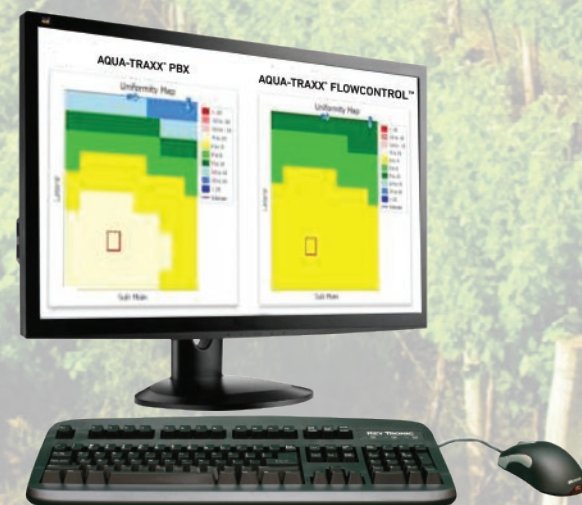
- Designed and moulded with the PBX Advantage for increased durability, clog resistance and uniform output.
- Flexibility to increase and decrease flow without sacrificing uniformity.
- Available in three diameters and four wall thicknesses.
- Emitter spacing from 15-60 cm with no cost increase, for precise placement and flexibility when designing your system.
- All flow rates require just 150-mesh filtration.



## MAXIMISE SYSTEM PERFORMANCE

Toro's FREE drip irrigation design software, AquaFlow™, allows you to see how different products will perform for your unique application. AquaFlow will calculate emission uniformity (EU) and generate color-coded Uniformity Maps to help illustrate how each product will perform - allowing you to select the right product for each application. The fewer colors displayed, the more even the irrigation uniformity. In the example shown at the side FlowControl provides superior uniformity compared to standard drip tapes and increases EU by 4.1%, resulting to lesser irrigation runtime.

Visit [aquaflow.toro.com](http://aquaflow.toro.com) to do your own comparison and learn how FlowControl can improve your system's performance



# AQUA-TRAXX® FLOWCONTROL™

## ADVANTAGES OF FLOWCONTROL

### vs STANDARD DRIP TAPE

- ✓ Higher uniformity on longer runs and hilly terrain.
- ✓ Improved system performance as a result of better irrigation uniformity.
- ✓ Increased planting and harvesting efficiency from longer lengths of run.
- ✓ Eliminate extra manifolds and labor-intensive jumpers (micro-tubing used to regulate pressure).

### vs PRESSURE-COMPENSATING TUBE

- ✓ Retain flexibility to increase or decrease application rate for greater control over watering and scheduling decisions.
- ✓ Available in wider range of thicknesses to meet the needs of all crops.
- ✓ One price for any emitter spacing from 15 to 60 cm giving you the wetting pattern you want without paying a premium.
- ✓ Designed with patented PBX technology for increased durability, clog resistance and uniform output.





5 REASONS TO SWITCH TO FLOWCONTROL

① Superior Uniformity

Standard drip tapes can stress plants and reduce yield & efficiency by over- or under-watering as pressure changes throughout the irrigation run. Aqua-Traxx FlowControl provides more uniform irrigation, regardless of elevation changes. This leads to better yields, even in challenging terrain that might otherwise be impractical to farm.



② Clog Resistance

When standard drip tapes and heavywall driplines get clogged they often stay permanently obstructed. Aqua-Traxx FlowControl's patented flexible emitter flowpath works to free debris every time you shut down your system to help remove obstructions and reduce clogging. Along with proper system maintenance, this increases system longevity and crop uniformity.



③ Increased Profitability

Aqua-Traxx FlowControl can provide more options when it comes to system design, including some lower cost alternatives. In many cases, growers can eliminate extra submains or labor-intensive lateral pressure chokes required in standard drip tape designs. These cost reductions combined with higher uniformity and yields give higher profitability than standard drip tape systems.



④ Exceptional Value

Pressure-compensating (PC) driplines are only available in heavier wall thicknesses and are more costly at closer emitter spacings. Aqua-Traxx FlowControl offers growers a wider range of wall thicknesses to meet the needs of all crops. With one price for any emitter spacing from 15 to 60 cm, you get the wetting pattern you want without paying a premium.



⑤ Longer Lengths of run

Aqua-Traxx FlowControl's patented and flexible flowpath emitter regulates water flow with changes in water pressure. Not only does this give you more uniform irrigation, it also extends your irrigation run length by 20% on average. This means you don't need to upgrade to larger diameter drip tape and incur additional costs.



PRODUCT SPECIFICATIONS

FLOWCONTROL™ FLOW RATES

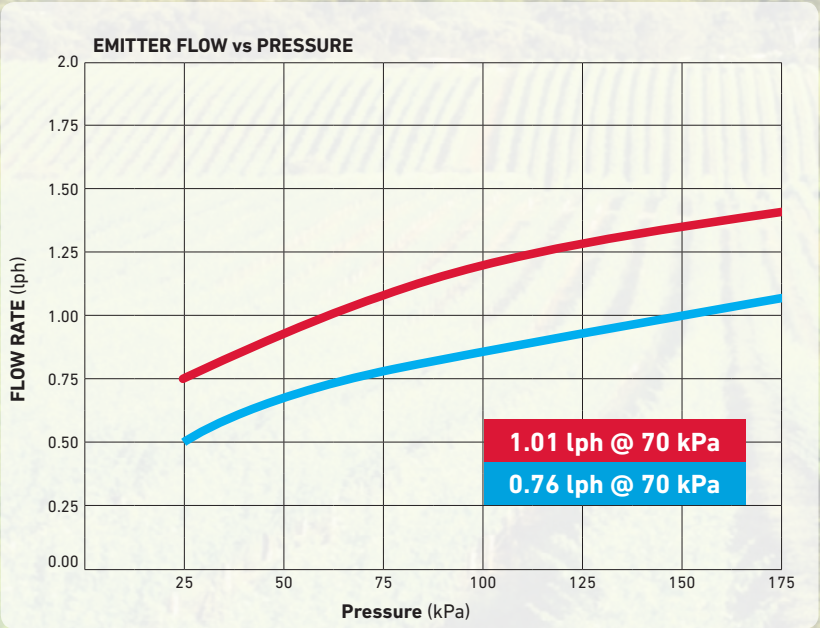
| Emitter Flow<br>Part Number | Outlet Spacing | Emitter Flow Rate |                         | Emitter<br>Exponent | Filtration Requirement |        |
|-----------------------------|----------------|-------------------|-------------------------|---------------------|------------------------|--------|
|                             | cm             | lph<br>@ 70 kPa   | lph/1 metre<br>@ 70 kPa |                     | mesh                   | micron |
| 0.20 gph emitter            |                |                   |                         | 0.3                 | 150                    | 98     |
| AAFCXx0667                  | 15             | 0.76              | 4.99                    |                     |                        |        |
| AAFCXx0850                  | 20             | 0.76              | 3.74                    |                     |                        |        |
| AAFCXx1234                  | 30             | 0.76              | 2.50                    |                     |                        |        |
| AAFCXx1625                  | 40             | 0.76              | 1.87                    |                     |                        |        |
| AAFCXx1822                  | 45             | 0.76              | 1.67                    |                     |                        |        |
| AAFCXx2417                  | 60             | 0.76              | 1.25                    |                     |                        |        |
| 0.27 gph emitter            |                |                   |                         | 0.3                 | 150                    | 98     |
| AAFCXx0690                  | 15             | 1.01              | 6.66                    |                     |                        |        |
| AAFCXx0867                  | 20             | 1.01              | 4.99                    |                     |                        |        |
| AAFCXx1245                  | 30             | 1.01              | 3.33                    |                     |                        |        |
| AAFCXx1634                  | 40             | 1.01              | 2.50                    |                     |                        |        |
| AAFCXx1830                  | 45             | 1.01              | 2.22                    |                     |                        |        |
| AAFCXx2422                  | 60             | 1.01              | 1.67                    |                     |                        |        |

↑ Maximum pressure within laterals while operating or flushing.  
Not all configurations are available in all regions

FLOWCONTROL™ WALL THICKNESS

| Diameter                 | Wall Thickness | Operating Pressure |                  |     |                  | Length | Weight |
|--------------------------|----------------|--------------------|------------------|-----|------------------|--------|--------|
|                          |                | kPa                |                  | bar |                  |        |        |
|                          |                | min                | max <sup>†</sup> | min | max <sup>†</sup> | metres | kg     |
| 5/8"<br>(16mm)<br>0.635" | 8 mil          | 28                 | 110              | 0.3 | 1.1              | 2,286  | 30     |
|                          | 10 mil         | 28                 | 172              | 0.3 | 1.7              | 1,829  | 29     |
|                          | 12 mil         | 28                 | 172              | 0.3 | 1.7              | 1,554  | 29     |
|                          | 15 mil         | 28                 | 172              | 0.3 | 1.7              | 1,219  | 29     |
| 7/8"<br>(22mm)<br>0.880" | 8 mil          | 28                 | 103              | 0.3 | 1.0              | 1,829  | 33     |
|                          | 10 mil         | 28                 | 138              | 0.3 | 1.4              | 1,341  | 32     |
|                          | 12 mil         | 28                 | 138              | 0.3 | 1.4              | 1,219  | 33     |
|                          | 15 mil         | 28                 | 152              | 0.3 | 1.5              | 914    | 30     |

"X denotes the diameter - 5 for 5/8" and 7 for 7/8".  
"xx denotes mil (1/1000th of an inch) thickness.  
Metric outlet spacing expressed in nominal length.  
† Coefficient of Variation (CV) less than 3%.



There is a Toro Aqua-Traxx PBX and FlowControl drip tape for every application. Call your local Toro dealer if you have any questions about choosing the best tape for your crop, soil type and terrain. You can also find AquaFlow, Toro's drip irrigation system design program, at [driptips.toro.com](http://driptips.toro.com).

FLOWCONTROL CODE BUILDER

AAFC5100867-600

Aqua-Traxx® FlowControl™ Tube Diameter (5/8" - 16 mm) Wall Thickness (10 mil) Emitter Spacing (08" - 20 cm) Flow Rate (0.67 Gph per 100' - 4.99 lph/1 metre) Roll Length x 10' (600 ft x 10' = 6000)





## WHEN WE SAY COUNT ON IT, WE MEAN IT

With an expanding population, growers around the world are looking to technologies that help increase productivity of existing land and maximise precious water resources. Toro's drip irrigation solutions help growers of permanent, field and row crops around the world realise substantial benefits in yield, quality and water savings from the precise application of water and nutrients.

### Australian made irrigation for Australian growers

With manufacturing facilities in South Australia, you can be certain Toro irrigation products are manufactured to withstand the harsh Australian environment.

Market demand, weather patterns and resource availability change every day, so precision agriculture practices must evolve to stay ahead. From increasing yield and improving quality to making the best use of available resources, irrigation technology is evolving, with more precise control over the time, energy and water you invest in your crop.

Toro Aqua-Traxx® PBX and FlowControl™ drip tapes are both innovative steps in the evolution of drip irrigation, providing unmatched clog resistance, durability and precision placement of your valuable water and fertiliser.



Visit [toro.com.au](http://toro.com.au) or call  
1300 130 898 for more information or  
to find your nearest Toro dealer.

Visit [driptips.toro.com](http://driptips.toro.com) to learn  
more about drip irrigation and how  
it can help you.



TORO AUSTRALIA  
53 Howards Road  
Beverley SA 5009

[toro.com.au](http://toro.com.au) 1300 130 898  
[info.au@toro.com](mailto:info.au@toro.com)  
PO Box 40, Kilkenny SA 5009