



**TORO**<sup>®</sup>

# SUPERIOR DRIP TAPE

**AQUA-TRAXX**<sup>®</sup>

**FLOWCONTROL**<sup>™</sup>

# THE EVOLUTION OF PRECISION

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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 — first flood, then pivot and now drip irrigation. Each step giving 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®, the original drip tape, provides unmatched clog resistance, durability and precision placement of your valuable water and fertilizer. New FlowControl™ drip tape — the only flow-regulating drip tape available — is Toro's latest advancement in the evolution of drip irrigation, giving you increased uniformity and control wherever you farm.



# AQUA-TRAXX®



## The Standard in Drip Irrigation

Aqua-Traxx® drip tape can help you increase yield and water-use efficiency, and also improve crop quality by putting water and fertilizer right where you need them. Choose emitter spacing from 4 to 24 inches — 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 filtration. The PBX Advantage increases durability, clog resistance and uniformity to set Aqua-Traxx apart from ordinary drip tapes.

- Emitter spacing options for all soils
- Widest selection of flow rates
- Accurate delivery of water and fertilizer
- Superior clogging resistance

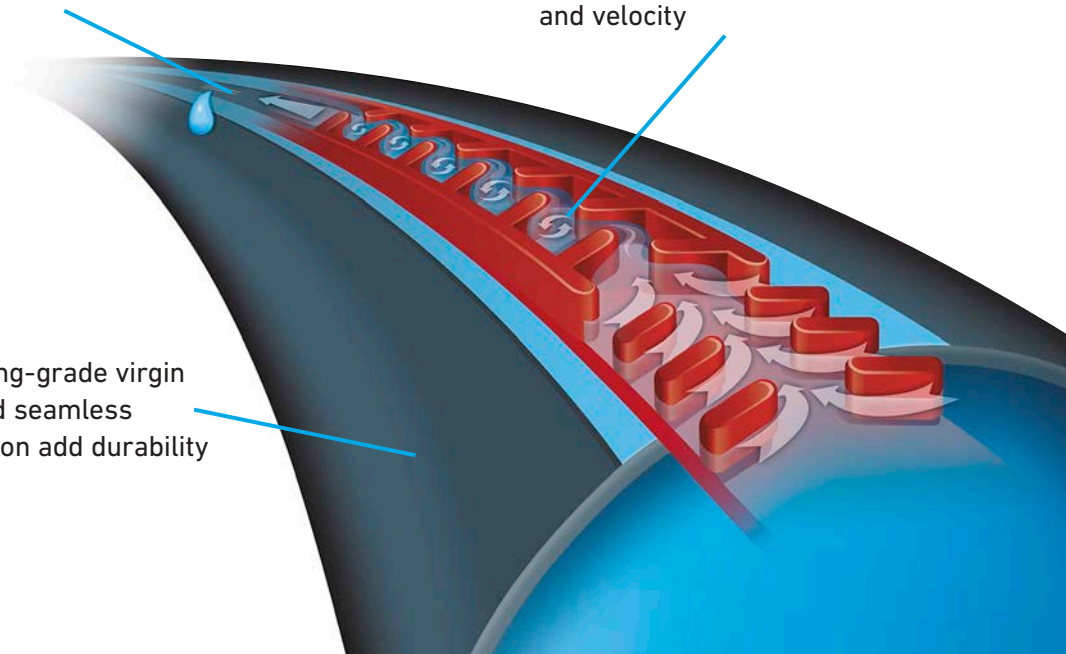
## The PBX Advantage:

Aqua-Traxx® and new FlowControl™ drip tapes are designed and molded with a high level of precision, resulting in manufacturing consistency over 97 percent — the best in the industry. With Toro Aqua-Traxx, you get greater reliability and more uniform output compared to ordinary tapes: That's the PBX Advantage.

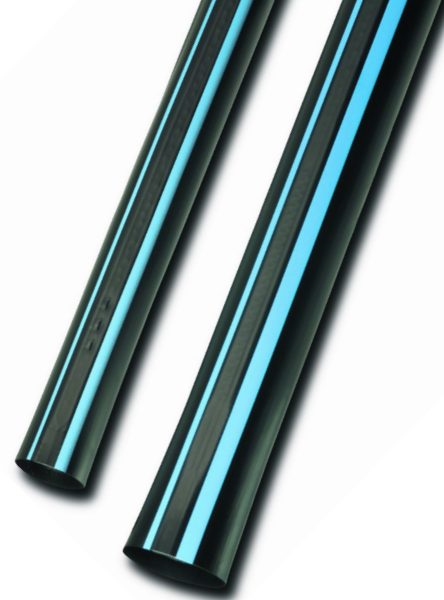
Precision-molded emitters resist clogging and promote uniform output

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

Engineering-grade virgin resins and seamless construction add durability



# FLOWCONTROL™



## The Next Level of Uniformity, Efficiency and Yield

The new Toro FlowControl 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 you with the 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.

ADVANTAGE

1

## MORE UNIFORM OUTPUT FOR ANY TERRAIN

### STANDARD TAPE

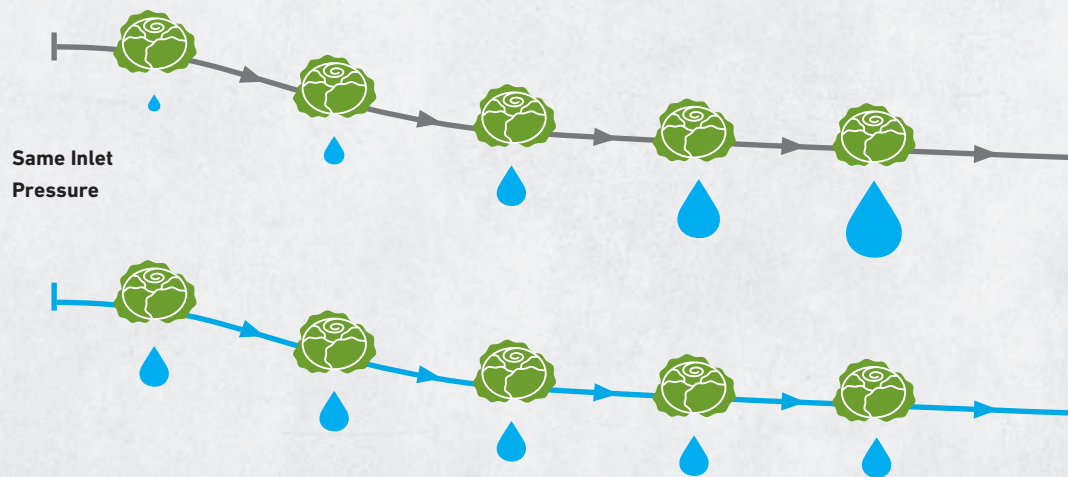
Standard tapes stress plants and reduce yield and efficiency by over- or under-watering as pressure changes throughout the run.

**RESULT:** Wasted water and fertilizer, stressed plants and reduced yields.

### FLOWCONTROL™

Toro FlowControl gives you uniform output regardless of elevation changes. So now you can adjust the amount of water you give your plants on hilly terrain, and they'll all receive the same amount through our uniform delivery system.

**RESULT:** More uniform plants and higher yields even in hilly terrain that might otherwise be impractical to farm.



## FEATURES:

- Designed and molded 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 five wall thicknesses, including more-affordable 5/8-inch 6 mil and 7/8-inch 8 mil
- Emitter spacing from 6–24 inches with no cost increase, for precise placement and flexibility when designing your system
- All flow rates require just 150-mesh filtration



ADVANTAGE

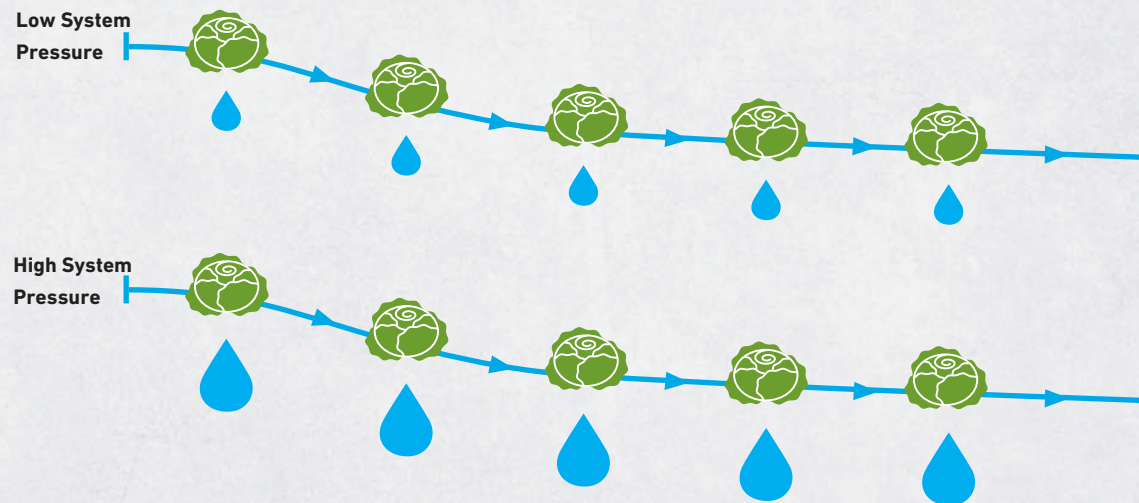
2

## THE ABILITY TO REGULATE THE FLOW

### FLOWCONTROL™

Toro FlowControl puts you in control of watering decisions. You control how much water your plants receive by increasing or decreasing the operating pressure — without sacrificing uniformity.

**RESULT:** More uniform delivery of water and fertilizer to the roots of your plants with the flexibility to control application rates.



# AQUA-TRAXX® PRODUCT SPECIFICATIONS

## AQUA-TRAXX® FLOW RATES

Emitter Flow Part Number	Outlet Spacing		Emitter Flow Rate								Emitter Exponent	Filtration Requirement		
			Q-100				Q-100							
			gph		lph		gpm/100 ft		lph/1 meter					
in	cm	@ 8 psi	@ 10 psi	@ 0.55 bar	@ 0.7 bar	@ 8 psi	@ 10 psi	@ 0.55 bar	@ 0.7 bar	mesh (micron)				
<b>0.07 gph emitter</b>														
EAXxx0817	8	20	0.07	0.08	0.26	0.30	0.17	0.20	1.30	1.47	0.55	200 (74)		
EAXxx1609	16	40	0.07	0.08	0.26	0.30	0.09	0.10	0.65	0.74				
<b>0.09 gph emitter</b>														
EAXxx0822	8	20	0.09	0.10	0.34	0.38	0.22	0.25	1.66	1.88	0.55	200 (74)		
EAXxx1611	16	40	0.09	0.10	0.34	0.38	0.11	0.13	0.83	0.94				
<b>0.10 gph emitter</b>														
EAXxx0825	8	20	0.10	0.11	0.38	0.43	0.25	0.28	1.86	2.11	0.55	200 (74)		
EAXxx1613	16	40	0.10	0.11	0.38	0.43	0.13	0.14	0.93	1.05				
<b>0.13 gph emitter</b>														
EAXxx0467	4	10	0.13	0.15	0.51	0.57	0.67	0.75	4.99	5.58	0.5	140 (105)		
EAXxx0644	6	15	0.13	0.15	0.51	0.57	0.44	0.50	3.33	3.72				
EAXxx0834	8	20	0.13	0.15	0.51	0.57	0.34	0.37	2.50	2.79				
EAXxx1222	12	30	0.13	0.15	0.51	0.57	0.22	0.25	1.66	1.86				
EAXxx1617	16	40	0.13	0.15	0.51	0.57	0.17	0.19	1.25	1.40				
EAXxx1814	18	45	0.13	0.15	0.51	0.57	0.14	0.17	1.11	1.24				
EAXxx2411	24	60	0.13	0.15	0.51	0.57	0.11	0.12	0.83	0.93				
<b>0.15 gph emitter</b>														
EAXxx0650	6	15	0.15	0.17	0.57	0.63	0.50	0.56	3.73	4.17			0.5	140 (105)
EAXxx1225	12	30	0.15	0.17	0.57	0.63	0.25	0.28	1.86	2.08				
EAXxx1817	18	45	0.15	0.17	0.57	0.63	0.17	0.19	1.24	1.39				
<b>0.20 gph emitter</b>														
EAXxx04100	4	10	0.20	0.22	0.76	0.85	1.00	1.12	7.47	8.36	0.5	140 (105)		
EAXxx0667	6	15	0.20	0.22	0.76	0.85	0.67	0.75	4.99	5.58				
EAXxx0850	8	20	0.20	0.22	0.76	0.85	0.50	0.56	3.74	4.18				
EAXxx1234	12	30	0.20	0.22	0.76	0.85	0.34	0.37	2.50	2.79				
EAXxx1625	16	40	0.20	0.22	0.76	0.85	0.25	0.28	1.87	2.09				
EAXxx1822	18	45	0.20	0.22	0.76	0.85	0.22	0.25	1.67	1.86				
EAXxx2417	24	60	0.20	0.22	0.76	0.85	0.17	0.19	1.25	1.40				
<b>0.27 gph emitter</b>														
EAXxx04134	4	10	0.27	0.30	1.01	1.13	1.34	1.50	9.99	11.16			0.5	140 (105)
EAXxx0690	6	15	0.27	0.30	1.01	1.13	0.90	1.00	6.66	7.44				
EAXxx0867	8	20	0.27	0.30	1.01	1.13	0.67	0.75	4.99	5.58				
EAXxx1245	12	30	0.27	0.30	1.01	1.13	0.45	0.50	3.33	3.72				
EAXxx1634	16	40	0.27	0.30	1.01	1.13	0.34	0.37	2.50	2.79				
EAXxx1830	18	45	0.27	0.30	1.01	1.13	0.30	0.33	2.22	2.48				
EAXxx2422	24	60	0.27	0.30	1.01	1.13	0.22	0.25	1.67	1.86				
<b>0.34 gph emitter</b>														
EAXxx04168	4	10	0.34	0.37	1.27	1.42	1.68	1.87	12.48	13.95	0.5	140 (105)		
EAXxx06112	6	15	0.34	0.37	1.27	1.42	1.12	1.25	8.33	9.31				
EAXxx0884	8	20	0.34	0.37	1.27	1.42	0.84	0.94	6.24	6.98				
EAXxx1256	12	30	0.34	0.37	1.27	1.42	0.56	0.62	4.16	4.65				
EAXxx1642	16	40	0.34	0.37	1.27	1.42	0.42	0.47	3.12	3.49				
EAXxx1838	18	45	0.34	0.37	1.27	1.42	0.38	0.42	2.78	3.10				
EAXxx2428	24	60	0.34	0.37	1.27	1.42	0.28	0.31	2.08	2.33				
<b>0.53 gph emitter</b>														
EAXxx04265	4	10	0.53	0.59	2.01	2.24	2.65	2.96	19.75	22.08			0.5	140 (105)
EAXxx08133	8	20	0.53	0.59	2.01	2.24	1.33	1.48	9.87	11.04				
EAXxx1288	12	30	0.53	0.59	2.01	2.24	0.88	0.99	6.58	7.36				
EAXxx1666	16	40	0.53	0.59	2.01	2.24	0.66	0.74	4.94	5.52				
EAXxx2444	24	60	0.53	0.59	2.01	2.24	0.44	0.49	3.29	3.68				
EAXxx3629	36	90	0.53	0.59	2.01	2.24	0.29	0.33	2.19	2.45				

## AQUA-TRAXX® WALL THICKNESS

Diameter	Wall Thickness	Operating Pressure				Reel Length		Reel Weight	
		psi		bar		ft	meters	lbs	kg
		min	max	min	max				
5/8" (16mm) 0.635"	4 mil	4	8	0.3	0.55	15,000	4,572	66	30
	5 mil	4	10	0.3	0.7	13,000	3,962	72	33
	6 mil	4	12	0.3	0.8	10,000	3,048	64	29
	8 mil	4	15	0.3	1.0	7,500	2,286	66	30
	10 mil	4	15	0.3	1.0	6,000	1,829	63	29
	12 mil	4	15	0.3	1.0	5,100	1,554	63	29
5/8" (16mm) Short Reels 0.635"	15 mil	4	15	0.3	1.0	4,000	1,219	63	29
	6 mil	4	12	0.3	0.8	2,500	762	17	8
	8 mil	4	15	0.3	1.0	2,000	610	17	8
7/8" (22mm) 0.880"	15 mil	4	15	0.3	1.0	1,000	305	16	7
	6 mil	4	10	0.3	0.7	7,380	2,250	68	31
	8 mil	4	15	0.3	1.0	6,000	1,829	72	33
	10 mil	4	15	0.3	1.0	4,400	1,341	71	32
	12 mil	4	15	0.3	1.0	4,000	1,219	72	33
1" (25mm) 0.990"	15 mil	4	15	0.3	1.0	3,000	914	66	30
	13 mil	4	15	0.3	1.0	3,000	914	66	30
	15 mil	4	15	0.3	1.0	3,000	914	71	32
1 3/8" (35mm) 1.380"	15 mil	4	15	0.3	1.0	2,700	823	87	39

### KEY

PART NUMBER: EA 5 05 04 67 - 1300

EA = Aqua-Traxx

EAFC = FlowControl

5 = Diameter (inch)

05 = Mil Thickness

04 = Emitter Spacing (inch)

67 = Flow Rate (gph/100)

1300 = Reel Length (feet/10)

\*X denotes the diameter. 5 for 5/8", 7 for 7/8", 8 for 1", 9 for 1 1/8" and 11 for 1 3/8"

\*\*\*xx denotes mil thickness.

\*\*\*1" only available in 13 mil; 1 1/8" only available in 15 mil; 1 3/8" only available in 15 mil.

Metric outlet spacing expressed in nominal length.

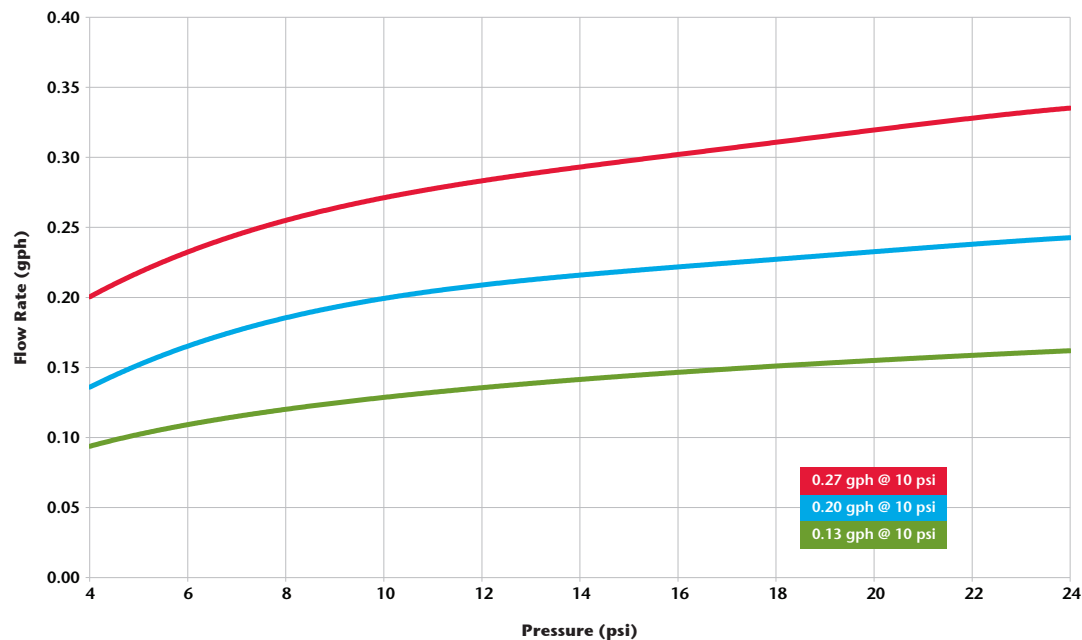
Coefficient of Variation (Cv) Less than 3%.

# FLOWCONTROL™ PRODUCT SPECIFICATIONS

FLOWCONTROL™ FLOW RATES								
Emitter Flow Part Number	Outlet Spacing		Emitter Flow Rate				Emitter Exponent	Filtration Requirement
			Q-100		Q-100			
			gph	lph	gpm/100 ft	lph/1 meter		
		@ 10 psi	@ 0.7 bar	@ 10 psi	@ 0.7 bar			
		in	cm					mesh (micron)
<b>0.13 gph emitter</b>								
EAFCXxx1222	12	30	0.13	0.51	0.22	1.66	0.3	150 (98)
EAFCXxx2411	24	60	0.13	0.51	0.11	0.83		
<b>0.20 gph emitter</b>								
EAFCXxx0667	6	15	0.20	0.76	0.67	4.99	0.3	150 (98)
EAFCXxx0850	8	20	0.20	0.76	0.50	3.74		
EAFCXxx1234	12	30	0.20	0.76	0.34	2.50		
EAFCXxx1625	16	40	0.20	0.76	0.25	1.87		
EAFCXxx1822	18	45	0.20	0.76	0.22	1.67		
EAFCXxx2417	24	60	0.20	0.76	0.17	1.25		
<b>0.27 gph emitter</b>								
EAFCXxx0690	6	15	0.27	1.01	0.90	6.66	0.3	150 (98)
EAFCXxx0867	8	20	0.27	1.01	0.67	4.99		
EAFCXxx1245	12	30	0.27	1.01	0.45	3.33		
EAFCXxx1634	16	40	0.27	1.01	0.34	2.50		
EAFCXxx1830	18	45	0.27	1.01	0.30	2.22		
EAFCXxx2422	24	60	0.27	1.01	0.22	1.67		

FLOWCONTROL™ WALL THICKNESS									
Diameter	Wall Thickness	Operating Pressure				Reel Length		Reel Weight	
		psi		bar		ft	meters	lbs	kg
		min	max	min	max				
5/8" (16mm) 0.635"	6 mil	4	16	0.3	1.1	10,000	3,048	64	29
	8 mil	4	16	0.3	1.1	7,500	2,286	66	30
	10 mil	4	25	0.3	1.7	6,000	1,829	63	29
	12 mil	4	25	0.3	1.7	5,100	1,554	63	29
	15 mil	4	25	0.3	1.7	4,000	1,219	63	29
7/8" (22mm) 0.880"	8 mil	4	15	0.3	1.0	6,000	1,829	72	33
	10 mil	4	20	0.3	1.4	4,400	1,341	71	32
	12 mil	4	20	0.3	1.4	4,000	1,219	72	33
1 3/8" (35mm) 1.380"	15 mil	4	22	0.3	1.5	3,000	914	66	30
	15 mil	4	18	0.3	1.3	2,700	823	87	39

## Emitter Flow vs Pressure



There is a Toro Aqua-Traxx® 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).



Visit [toro.com](http://toro.com) or call (800) 333-8125 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 your farm.



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