

ARIES™ THINWALL DRIPLINE



**REVOLUTIONARY TURBUNEXT™
TECHNOLOGY IN A
NON-COMPENSATING DRIPPER
SETS A NEW STANDARD FOR CLOG
RESISTANCE AND ENHANCED PERFORMANCE**



**LOOK FOR THE
ORANGE STRIPES**
NETAFIM™

ARIES™ THINWALL DRIPLINE

Netafim's next generation of innovation - TurbuNext™ Technology - is a new dripper labyrinth in a smaller dripper. The physical principles of the TurbuNext™ labyrinth provide lower flow rates with a maximum filtration area while maximizing the internal turbulence. All this results in the durability and clog resistance growers need in challenging water conditions. The durability of Aries Thinwall Driplines mean enhanced and better performance for a longer length of time. And it fits the widest range of applications.

PRODUCT ADVANTAGES

- Large and wide dripper filtration area ensures optimal performance even under harsh water conditions.
- Injection molded dripper construction provides uniform flow and very low Cv.
- TurbuNext™ labyrinth assures wide water passages, large deep and wide cross section improves clog resistance.
- Consistent, reliable and uniform flow rates.
- Affordably priced for today's economic challenges.
- Available with a wide choice of dripper spacings, flow rates and wall thickness to tailor-make a system for your varied applications, soils and crops.

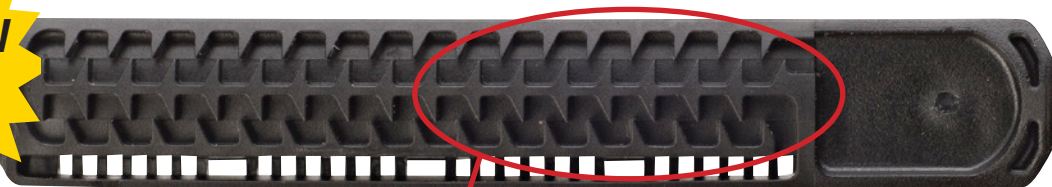


ARIES DRIPPER FEATURING TURBUNEXT

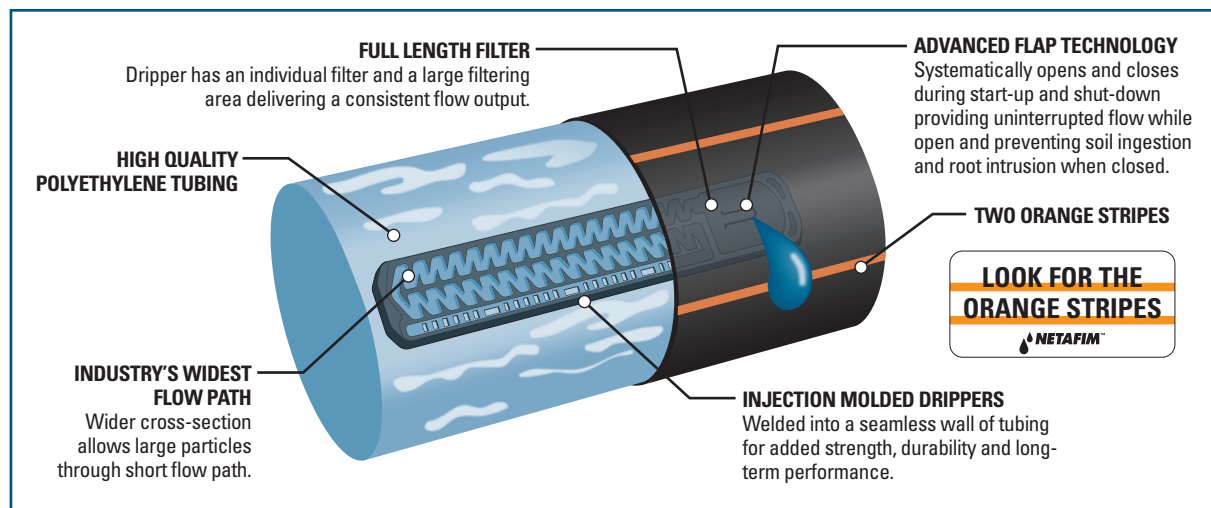
Innovative Labyrinth Passage

Our patented labyrinth water passage maintains a unique geometric tooth-shaped structure that increases turbulence, enabling the creation of wider, deeper and shorter passages.

ULTRA LOW
FLOW RATES
STARTING AT
0.11 GPH



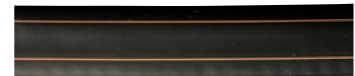
Wide Flow Path and Angled Teeth - maximizes water flow velocity while moving faster through the dripper to eliminate clogging.



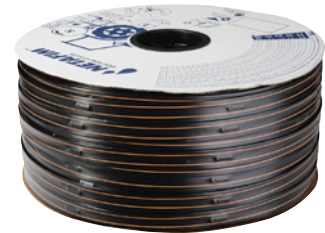
TECHNICAL INFORMATION

APPLICATIONS

- Subsurface multi-seasonal row crops
- On-surface multi-seasonal row crops



TWO VIBRANT ORANGE STRIPES
ALONG DRIPLINE



SPECIFICATIONS

ARIES SERIES	WALL THICKNESS (MIL)	INSIDE DIAMETER	NOMINAL FLOW RATES GPH @ 10 psi
638 SERIES	13, 15	0.638"	0.11, 0.18, 0.21, 0.30, 0.41, 0.62
875 SERIES	13, 15	0.875"	0.11, 0.18, 0.21, 0.30, 0.41, 0.62
990 SERIES	13, 15	0.990"	0.11, 0.18, 0.21, 0.30, 0.41, 0.62
1 1/8 SERIES	15	1.125"	0.11, 0.18, 0.21, 0.30, 0.41, 0.62
1 3/8 SERIES	15	1.375"	0.11, 0.18, 0.21, 0.30, 0.41, 0.62

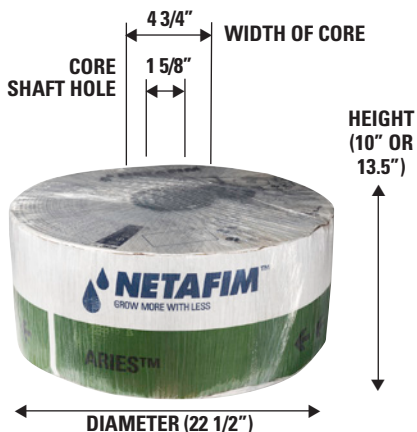
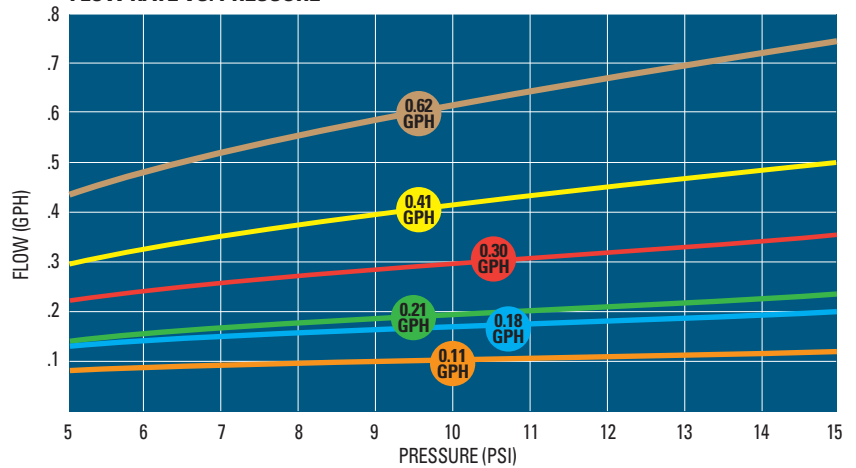
MAXIMUM PRESSURE RANGES

WALL THICKNESS	OPERATING (psi)	FLUSHING (psi)
638 SERIES 13 MIL	26	33
638 SERIES 15 MIL	32	42
875 SERIES 13 MIL	23	30
875 SERIES 15 MIL	26	33
990 SERIES 13 MIL	17	26
990 SERIES 15 MIL	20	30
1 1/8 SERIES 15 MIL	16	24
1 3/8 SERIES 15 MIL	17	25

FILTRATION REQUIREMENT

DRIPPER FLOW RATE	FILTRATION MESH
0.11 GPH	120
0.18 GPH	120
0.21 GPH	120
0.30 GPH	80
0.41 GPH	80
0.62 GPH	80

FLOW RATE VS. PRESSURE



PACKAGING DATA

WALL THICKNESS	REEL LENGTH	REELS PER PALLET	REEL HEIGHT	REEL WEIGHT
638 SERIES 13 MIL	3,600'	16	10"	47 LBS.
638 SERIES 15 MIL	3,300'	16	10"	47 LBS.
875 SERIES 13 MIL	3,000'	16	10"	51 LBS.
875 SERIES 15 MIL	2,700'	16	10"	51 LBS.
990 SERIES 13 MIL	3,000'	16	10"	52 LBS.
990 SERIES 15 MIL	2,700'	16	10"	48 LBS.
1 1/8 SERIES 15 MIL	2,300'	12	13.5"	52 LBS.
1 3/8 SERIES 15 MIL	2,700'	12	13.5"	71 LBS.

REEL DIAMETER: 22 1/2" for all Sizes
CORE SHAFT HOLE: 1 5/8" for all Sizes
WIDTH OF CORE: 4 3/4" for all Sizes

Weights are approximate. When calculating pallet weight, include 45 lbs. for the weight of pallet. Reels per pallet are for standard reel lengths only. Length of reels and reels per pallet may change for custom reel lengths.

TECHNICAL INFORMATION

DRIPPER DATA - CONSTANT, EXPONENT, KD AND CV ALL ARIES SERIES

FLOW RATE @ 10 PSI	CONSTANT	EXPONENT	KD 638 SERIES	KD 875 SERIES	KD 990 SERIES	KD 1 1/8 & 1 3/8 SERIES	CV
0.11 GPH	0.0386	0.46	0.3	0.06	0.04	0.04	0.025
0.18 GPH	0.0618	0.46	0.3	0.06	0.04	0.04	0.025
0.21 GPH	0.0734	0.46	0.3	0.06	0.04	0.04	0.025
0.30 GPH	0.1042	0.46	0.3	0.06	0.04	0.04	0.025
0.41 GPH	0.1428	0.46	0.3	0.06	0.04	0.04	0.025
0.62 GPH	0.2162	0.46	0.3	0.06	0.04	0.04	0.025

DRIPPER FLOW PATH DIMENSIONS

DRIPPER FLOW RATE	LENGTH (IN.)	DEPTH (IN.)	WIDTH (IN.)
0.11 GPH	2.559	0.020	0.019
0.18 GPH	2.559	0.027	0.021
0.21 GPH	2.559	0.030	0.024
0.30 GPH	2.559	0.037	0.028
0.41 GPH	2.559	0.041	0.030
0.62 GPH	2.559	0.047	0.035

DRIPPER FLOW CODE

DRIPPER FLOW RATE	DRIPPER FLOW CODE
0.11 GPH	.1
0.18 GPH	.18
0.21 GPH	.2
0.30 GPH	.3
0.41 GPH	.4
0.62 GPH	.6



LOW FLOW ARIES DRIPPER
FLOW PATH



HIGH FLOW ARIES DRIPPER
FLOW PATH

ORDERING INFORMATION

INSIDE DIAMETER

Inside Diameter	Code
.638"	638
.875"	875
.990"	990
1 1/8"	113
1 3/8"	138

WALL THICKNESS

Wall Thickness	Code
13 mil	13
15 mil	15

FLOW RATE

Flow Rate	Code
0.11 GPH	.1
0.18 GPH	.18
0.21 GPH	.2
0.30 GPH	.3
0.41 GPH	.4
0.62 GPH	.6

DRIPPER SPACING

Dripper Spacing	Code
12"	12
14"	14
16"	16
18"	18
20"	20
24"	24
27"	27
30"	30
36"	36

ARF

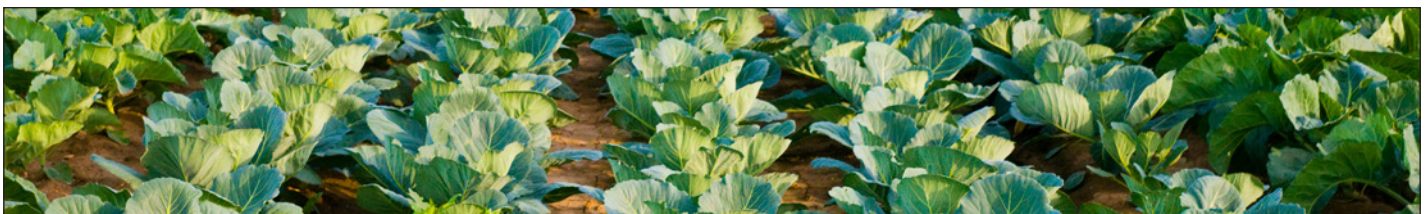
638	13	.18	-12
Inside Diameter	Wall Thickness	Flow Rate	Dripper Spacing

ORDERING EXAMPLE

To create the Model Number, select the appropriate codes from the options listed in the charts and insert them into the sequence. For the example above: Aries with Flap, .638" Inside Diameter, 13 mil Wall Thickness, 0.18 GPH Flow Rate, 12" Dripper Spacing

- Model Number: **ARF63813.18-12**

Notes: Flow rate based on 10 psi inlet pressure
Call Netafim Customer Service for dripper spacings not listed



LENGTH OF RUN CHARTS

NOTE: Information contained in these Length of Run Charts represents single lateral uniformities only. For further detail regarding block and system uniformity, please contact your Irrigation Design Professional.

ARIES 638 SERIES - LENGTH OF RUN @ 0% SLOPE

0.11 GPH DRIPPER (0.11 @ 10 psi)

DRIPPER SPACING	GPM/100 FT @ 94% EU	EMISSION UNIFORMITY (EU)		
		94%	92%	90%
12"	0.183	707'	847'	959'
14"	0.158	794'	953'	1,079'
16"	0.138	879'	1,053'	1,195'
18"	0.123	960'	1,149'	1,305'
20"	0.110	1,038'	1,243'	1,409'
24"	0.092	1,187'	1,420'	1,606'

0.18 GPH DRIPPER (0.18 @ 10 psi)

12"	0.300	516'	620'	707'
14"	0.258	581'	697'	791'
16"	0.225	642'	771'	876'
18"	0.201	700'	842'	955'
20"	0.180	756'	909'	1,032'
24"	0.150	856'	1,038'	1,175'

0.21 GPH DRIPPER (0.21 @ 10 psi)

12"	0.350	455'	554'	633'
14"	0.301	517'	623'	707'
16"	0.263	564'	689'	782'
18"	0.235	622'	747'	847'
20"	0.210	673'	807'	917'
24"	0.175	769'	921'	1,043'

0.30 GPH DRIPPER (0.30 @ 10 psi)

12"	0.500	363'	437'	498'
14"	0.430	408'	492'	558'
16"	0.375	451'	543'	617'
18"	0.335	492'	592'	679'
20"	0.300	531'	641'	728'
24"	0.250	607'	731'	829'

0.41 GPH DRIPPER (0.41 @ 10 psi)

12"	0.683	292'	356'	408'
14"	0.588	331'	399'	453'
16"	0.513	366'	441'	502'
18"	0.458	400'	481'	549'
20"	0.410	431'	519'	592'
24"	0.342	494'	594'	674'

ARIES 875 SERIES - LENGTH OF RUN @ 0% SLOPE

0.11 GPH DRIPPER (0.11 @ 10 psi)

DRIPPER SPACING	GPM/100 FT @ 94% EU	EMISSION UNIFORMITY (EU)		
		94%	92%	90%
12"	0.183	1,305'	1,573'	1,793'
14"	0.158	1,450'	1,749'	1,990'
16"	0.138	1,590'	1,913'	2,181'
18"	0.123	1,726'	2,076'	2,365'
20"	0.110	1,856'	2,232'	2,541'
24"	0.092	2,101'	2,525'	2,867'

0.18 GPH DRIPPER (0.18 @ 10 psi)

12"	0.300	951'	1,149'	1,311'
14"	0.258	1,057'	1,277'	1,454'
16"	0.225	1,159'	1,398'	1,539'
18"	0.201	1,257'	1,515'	1,727'
20"	0.180	1,352'	1,627'	1,854'
24"	0.150	1,529'	1,841'	2,093'

0.21 GPH DRIPPER (0.21 @ 10 psi)

12"	0.350	914'	1,026'	1,175'
14"	0.301	945'	1,141'	1,300'
16"	0.263	1,036'	1,251'	1,425'
18"	0.235	1,122'	1,354'	1,544'
20"	0.210	1,206'	1,454'	1,658'
24"	0.175	1,365'	1,644'	1,870'

0.30 GPH DRIPPER (0.30 @ 10 psi)

12"	0.500	676'	818'	941'
14"	0.430	752'	908'	1,036'
16"	0.375	822'	995'	1,135'
18"	0.335	959'	1,077'	1,230'
20"	0.300	989'	1,157'	1,320'
24"	0.250	1,083'	1,309'	1,489'

0.41 GPH DRIPPER (0.41 @ 10 psi)

12"	0.683	551'	668'	766'
14"	0.588	611'	741'	845'
16"	0.513	670'	811'	926'
18"	0.458	727'	878'	1,003'
20"	0.410	771'	943'	1,078'
24"	0.342	881'	1,067'	1,213'

LENGTH OF RUN CHARTS

NOTE: Information contained in these Length of Run Charts represents single lateral uniformities only. For further detail regarding block and system uniformity, please contact your Irrigation Design Professional.

ARIES 990 SERIES - LENGTH OF RUN @ 0% SLOPE

0.11 GPH DRIPPER (0.11 @ 10 psi)

DRIPPER SPACING	GPM/100 FT @ 94% EU	EMISSION UNIFORMITY (EU)		
		94%	92%	90%
12"	0.183	1,621'	1,958'	2,242'
14"	0.158	1,801'	2,173'	2,475'
16"	0.138	1,972'	2,378'	2,710'
18"	0.123	2,137'	2,575'	2,935'
20"	0.110	2,293'	2,766'	3,152'
24"	0.092	2,596'	3,125'	3,550'

0.18 GPH DRIPPER (0.18 @ 10 psi)

12"	0.300	1,183'	1,430'	1,634'
14"	0.258	1,314'	1,588'	1,810'
16"	0.225	1,439'	1,737'	1,984'
18"	0.201	1,559'	1,881'	2,145'
20"	0.180	1,673'	2,018'	2,302'
24"	0.150	1,892'	2,281'	2,593'

0.21 GPH DRIPPER (0.21 @ 10 psi)

12"	0.350	1,058'	1,279'	1,465'
14"	0.301	1,174'	1,420'	1,618'
16"	0.263	1,285'	1,554'	1,772'
18"	0.235	1,391'	1,681'	1,918'
20"	0.210	1,493'	1,804'	2,058'
24"	0.175	1,689'	2,039'	2,319'

0.30 GPH DRIPPER (0.30 @ 10 psi)

12"	0.500	842'	1,021'	1,174'
14"	0.430	935'	1,132'	1,291'
16"	0.375	1,023'	1,238'	1,413'
18"	0.335	1,108'	1,340'	1,529'
20"	0.300	1,188'	1,437'	1,641'
24"	0.250	1,342'	1,623'	1,847'

0.41 GPH DRIPPER (0.41 @ 10 psi)

12"	0.683	686'	833'	957'
14"	0.588	762'	924'	1,057'
16"	0.513	834'	1,010'	1,154'
18"	0.458	903'	1,094'	1,249'
20"	0.410	963'	1,170'	1,340'
24"	0.342	1,092'	1,324'	1,512'

ARIES 1 1/8" SERIES - LENGTH OF RUN @ 0% SLOPE

0.11 GPH DRIPPER (0.11 @ 10 psi)

DRIPPER SPACING	GPM/100 FT @ 94% EU	EMISSION UNIFORMITY (EU)		
		94%	92%	90%
12"	0.183	2,005'	2,425'	2,777'
14"	0.158	2,228'	2,691'	3,066'
16"	0.138	2,440'	2,945'	3,359'
18"	0.123	2,641'	3,191'	3,638'
20"	0.110	2,837'	3,425'	3,906'
24"	0.092	3,210'	3,870'	4,401'

0.18 GPH DRIPPER (0.18 @ 10 psi)

12"	0.300	1,463'	1,771'	2,025'
14"	0.258	1,626'	1,967'	2,242'
16"	0.225	1,781'	2,153'	2,456'
18"	0.201	1,927'	2,331'	2,695'
20"	0.180	2,071'	2,501'	2,854'
24"	0.150	2,341'	2,826'	3,217'

0.21 GPH DRIPPER (0.21 @ 10 psi)

12"	0.350	1,308'	1,568'	1,816'
14"	0.301	1,453'	1,759'	2,006'
16"	0.263	1,592'	1,926'	2,197'
18"	0.235	1,723'	2,084'	2,380'
20"	0.210	1,850'	2,238'	2,554'
24"	0.175	2,091'	2,527'	2,876'

0.30 GPH DRIPPER (0.30 @ 10 psi)

12"	0.500	1,042'	1,264'	1,454'
14"	0.430	1,158'	1,403'	1,600'
16"	0.375	1,267'	1,535'	1,753'
18"	0.335	1,372'	1,661'	1,898'
20"	0.300	1,473'	1,784'	2,037'
24"	0.250	1,662'	2,014'	2,405'

0.41 GPH DRIPPER (0.41 @ 10 psi)

12"	0.683	851'	1,032'	1,186'
14"	0.588	945'	1,145'	1,306'
16"	0.513	1,034'	1,254'	1,431'
18"	0.458	1,118'	1,356'	1,549'
20"	0.410	1,200'	1,455'	1,662'
24"	0.342	1,355'	1,642'	1,873'

NETAFIM SYSTEM COMPONENTS

To achieve maximum performance and increase the longevity of your Aries Thinwall Dripline and the complete irrigation system, include the following high quality Netafim system components.

FILTERS

Many factors should be considered when selecting a filter system including: flow rate, quality of incoming and discharged water and the type of dripper - the smaller the flow path, the more critical the required filtration. Netafim offers disc, sand and screen filters to fit all applications.



APOLLO DISC FILTER
Discs provide depth filtration for high flow water systems



MANUAL DISC FILTERS
Discs provide depth filtration



SAND MEDIA
Reliable, corrosion proof, trouble-free sand media filtration



SCREEN FILTERS
Durable, reinforced stainless steel screens

VALVES

Manufactured from high quality materials, Netafim offers control valves in nylon, pvc, iron and bronze materials. They provide superior hydraulic performance and are available in multiple sizes and control functions to meet any application.



IRON VALVES
Straight flow patterns for low friction loss



SERIES 80 VALVES
Electric 2-Way valve with flow control



PVC VALVES
High resistance to corrosive water

AIR VENTS

Air/Vacuum Relief Air Vents ensure maximum protection of an irrigation system with proper sizing and placement. A properly vented irrigation system will extend the life of the drippers and prevent potential clogging. Netafim offers Air Vents in many styles and sizes.



VACUUM RELIEF AND CONTINUOUS ACTING
Releases large volumes of air at pump and filter stations and at high elevations in the piping network



CONTINUOUS ACTING
For high spots where air accumulates



AIR/VACUUM VENT
For downstream of valves and at manifolds to break vacuum caused by system draining

WATER METERS

Reliable and accurate Water Meters are specifically designed for irrigation systems to provide the most accurate and reliable flow readings. Water meters can be the most accurate and easiest method for measuring water flow in the pipelines and improving efficiency. Netafim offers Water Meters with and without straightening vanes and in multiple sizes.



OCTAVE ULTRASONIC WATER METER
Double beam ultrasonic sensors provide highly accurate flow data



WST WATER METER
Low wear, long-life impeller shaft and bearings



NETAFIM USA
5470 E. Home Ave.
Fresno, CA 93727
CS 888 638 2346
www.netafimusa.com