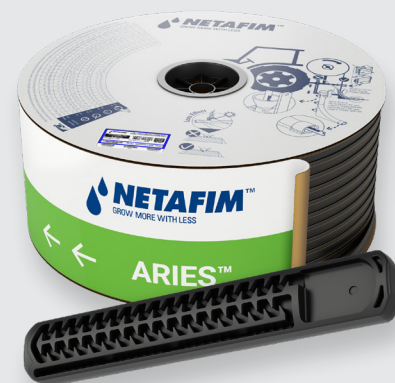


Aries™ MWD

Integral dripper (non-pressure-compensated) with high clogging resistance. Designed for few-season drip irrigation applications in semi-permanent and seasonal crops.



Benefits & Features

Hydraulic performance adaptability

Flow rate varies with pressure, following pressure-dependent flow characteristics that enable flexible system design under specific field conditions.

A low exponent (X) allows improved irrigation uniformity and enables longer dripline lengths under similar operating conditions.

Long-lasting, high clogging resistance

Ensures reliable performance even under challenging water quality conditions through a self-cleaning labyrinth that continuously flushes debris during operation.

A large filtration area prevents suspended particles from entering the dripper, maintaining dependable performance across a wide range of water quality levels.

The TurbuNext™ labyrinth features wide, deep flow passages with large cross-sections that significantly enhance clogging resistance. Water is drawn from the center of the flow stream to further minimize suspended particle ingress.

Guided installation orientation

Dual orange stripes indicate the dripper position, enabling quick and accurate installation. Installing the dripper facing upwards helps reduce sediment accumulation away from the inlet, improving long-term performance and reliability.

Applications



Open field



Orchards



Protected crops

- Suitable for on-surface and sub-surface installation.
- Delivers uniform hydraulic performance on flat terrain and slightly sloping fields.
- Ideal for irrigation in semi-permanent and seasonal row crops and orchards.



Specifications

- Maximum operating pressure: According to dripline wall thickness and diameter. See tables below.
- Filtration requirements: Filtration level depends on the dripper flow rate and must be selected according to the type and concentration of particles in the water. When sand content exceeds 2 ppm, a Hydrocyclone must be installed upstream of the main filter. For sand/silt/clay solids above 100 ppm, apply pre-treatment in line with Netafim™ expert guidelines.
- TurbuNext™ labyrinth with enhanced clogging resistance and superior hydraulic performance.
- Weldable into medium-wall driplines: 0.50, 0.63 and 0.80 mm.
- Injection-molded dripper with very low coefficient of variation (CV) for reliable uniformity.
- High UV resistance and compatible with standard agricultural nutrients and fertilizers.
- Compliant with ISO 9261 international standards.
- Driplines are black with two orange stripes.

Drippers technical data

Flow rate* 32 (mil) / 0.80 (mm) (l/h)	Water passages dimensions width-depth-length (mm x mm x mm)	Filtration area (mm²)	Constant K	Exponent X	Recommended filtration (micron)/(mesh)
0.55	0.47 x 0.53 x 65	36	0.191	0.46	130/120
0.80	0.54 x 0.69 x 65	43	0.295	0.46	130/120
1.00	0.60 x 0.74 x 65	49	0.364	0.46	130/120
1.50	0.71 x 0.85 x 65	53	0.554	0.46	200/80
2.00	0.76 x 1.03 x 65	54	0.728	0.46	200/80
3.00	0.90 x 1.20 x 65	54	1.092	0.46	200/80
4.00	0.94 x 1.28 x 33	54	1.455	0.46	200/80
8.00	1.52 x 1.28 x 28	50	2.912	0.46	200/80

* Nominal flow rate at 1.0 bar. WT = dripline wall thickness

Flow rate* 20-25 (mil) / 0.50-0.63 (mm) WT (l/h)	Water passages dimensions width-depth-length (mm x mm x mm)	Filtration area (mm²)	Constant K	Exponent X	Recommended filtration (micron)/(mesh)
0.55	0.47 x 0.53 x 65	36	0.191	0.46	130/120
0.80	0.54 x 0.69 x 65	43	0.277	0.46	130/120
1.00	0.60 x 0.74 x 65	49	0.347	0.46	130/120
1.40	0.71 x 0.85 x 65	53	0.485	0.46	200/80
1.90	0.76 x 1.03 x 65	54	0.659	0.46	200/80
2.85	0.90 x 1.20 x 65	54	0.988	0.46	200/80
3.80	0.94 x 1.28 x 33	54	1.316	0.46	200/80
8.00	1.52 x 1.28 x 28	50	2.773	0.46	200/80

* Nominal flow rate at 1.0 bar. WT = dripline wall thickness

Both the K constant and the X exponent are fundamental hydraulic parameters used to calculate the actual flow rate of each dripper at a given operating pressure as detailed in the following pages.

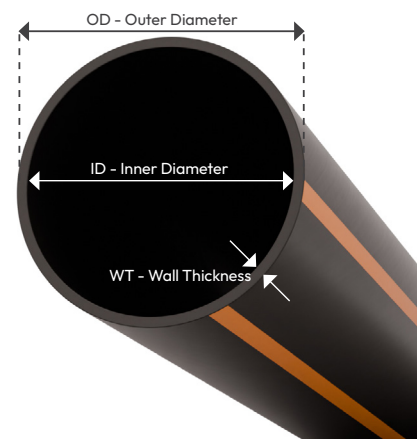


Driplines technical data

Model	Inner diameter (mm)	Wall thickness (mil) / (mm)	Outer diameter (mm)	Max. working pressure (bar)	Max. flushing pressure (bar)	Kd
12200	11.80	20 / 0.50	12.80	3.0	3.9	0.53
12250	11.80	25 / 0.63	13.06	3.5	4.6	0.53
16200	15.50	20 / 0.50	16.50	2.5	3.3	0.35
16250	15.50	25 / 0.63	16.76	2.8	3.6	0.35
16008	14.20	32 / 0.80	15.80	3.0	3.9	0.40
22200	22.20	20 / 0.50	23.20	2.0	2.3	0.06
22250	22.20	25 / 0.63	23.56	2.5	3.3	0.06

Kd: An integral dripper installed inside the dripline creates a localized disturbance in the water flow, generating minor head losses (Kd) as its shape and volume partially obstruct the internal flow path. The lower the Kd value for a given inner diameter, the longer the driplines can be designed under similar operating conditions.

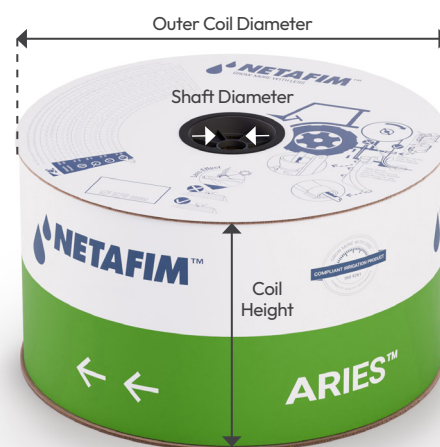
Max. flushing pressure: The maximum permissible flushing pressures shown in the table apply to continuous flushing cycles of up to 30 minutes, with the ends of at least five driplines opened for flushing.



Driplines package data (on carton coil)

Model	Wall thickness (mil) / (mm)	Distance between drippers (m)	Coil length (m)	Average* coil weight (kg)	Outer coil diameter (cm)	Shaft diameter (cm)	Coil height (cm)
12200	20 / 0.50	0.15 to 0.25	800	17.6	57.0	3.8	32.5
		0.30 to 1.00	900	18.8			
12250	25 / 0.63	0.15 to 0.25	700	19.0	57.0	3.8	32.5
		0.30 to 1.00	750	19.6			
16200	20 / 0.50	0.15 to 0.25	850	23.1	57.0	3.8	32.5
		0.30 to 1.00	900	23.7			
16250	25 / 0.63	0.15 to 0.25	750	25.4	57.0	3.8	32.5
		0.30 to 1.00	800	26.3			
16008	32 / 0.80	0.15	450	19.4	57.0	3.8	32.5
		0.20 to 1.00	500	21.0			
22200	20 / 0.50	0.15 to 0.25	700	17.9	57.0	3.8	24.0
		0.30 to 1.00	800	20.4			
22250	25 / 0.63	0.15 to 0.25	550	25.7	57.0	3.8	24.0
		0.30 to 1.00	600	27.4			

*Values shown are average weights and may vary due to dripper spacing and extrusion tolerances. Refer to the official Netafim™ disclaimers for details.



Driplines package data (on carton coil) within container

Model	Coil length (m)	Coils p/pallet (units)	Pallet dimensions (cm x cm x cm)	Average* pallet weight (kg)	Coils in a 40 foot container (units)	Total in a 40 foot container (m)
12200	800	12	109 x 109 x 110	221	480	384000
	900			236		432000
12250	700	12	109 x 109 x 110	238	480	336000
	750			245		360000
16200	850	12	109 x 109 x 110	287	480	408000
	900			294		432000
16250	750	12	109 x 109 x 110	315	480	360000
	800			326		384000
16008	450	12	109 x 109 x 110	243	480	216000
	500			262		240000
22200	700	12	109 x 109 x 110	224	480	336000
	800			255		384000
22250	550	12	109 x 109 x 110	318	480	264000
	600			339		288000

*Values shown are average weights and may vary due to dripper spacing and extrusion tolerances. Refer to the official Netafim™ disclaimers for details.

A standard 40-foot container has internal dimensions of 12.0 m (L) × 2.35 m (W) × 2.39 m (H).

In certain cases, a 40-foot High Cube container may be used, providing an increased internal height of 2.69 m, allowing improved volume utilization depending on product configuration.



Catalog numbers

Because of the wide range of available configurations (different flow rates, emitter spacings, coil lengths and additional specifications), the final catalog number must be confirmed with your local Netafim™ representative after completing the product definition.

Complete the product specification using the options provided in the following flow chart.

How to use: Select one option from each category in the chart to define the most appropriate product configuration for your application.

Product name		Commercial diameter (mm)		Wall thickness (mil) / (mm)		Flow rate (l/h) 32 mil / 0.80 mm WT		Distance between drippers (m)		Coil length (m)	Special features	
Aries™ MWD	ARIES	12	12	20 / 0.50	200	0.55	0.55L/H	0.2	0.20M	Coil length according to the values presented in the corresponding table.	No added	-
		16	16	25 / 0.63	250	0.80	0.80L/H	0.3	0.30M		Other	XXX
		20	20	32 / 0.80	008	1.00	1.00L/H	0.4	0.40M			
						1.50	1.50L/H	0.5	0.50M			
						2.00	2.00L/H	0.6	0.60M			
						3.00	3.00L/H	0.7	0.70M			
						4.00	4.00L/H	*Other distances between drippers can be ordered.				
						8.00	8.00L/H					
						Flow rate (l/h) 20-25 mil / 0.50-0.63 mm WT						
						0.55	0.55L/H					
						0.80	0.80L/H					
						1.00	1.00L/H					
						1.40	1.40L/H					
						1.90	1.90L/H					
						2.85	2.85L/H					
						3.80	3.80L/H					
						8.00	8.00L/H					

ARIES 16250 1.40L/H 0.40M 800M

Catalog description example

Drippers flow rate vs working pressure

To determine the actual flow rate of a dripper under different operating pressures, the following equation is applied:

$$Q = K \times P^X$$

Where:

Q = Dripper flow rate (liters per hour)

K = Dripper-specific flow constant (manufacturer-defined)

P = Actual working pressure (meters of water column)

X = Dripper-specific exponent (manufacturer-defined)

In accordance with ISO 9261, manufacturers must declare both the K constant and the X exponent for each dripper model.

Non-pressure-compensated drippers deliver a flow rate that varies with operating pressure, following the relationship defined by the formula presented above.

To provide a general understanding of how flow rate responds to changes in operating pressure, tables are provided showing the dripper flow rate at different working pressures for each model in this document.

Aries™ MWD flow (l/h) vs pressure (bar)

Dripper	Flow rate* (l/h)	Working pressure (bar)								
		0.20	0.40	0.60	0.80	1.00	1.50	2.00	2.50	3.00
Aries™ MWD 32 (mil) / 0.80 (mm) WT	0.55	0.26	0.36	0.44	0.50	0.55	0.66	0.76	0.84	0.91
	0.80	0.38	0.52	0.63	0.72	0.80	0.96	1.10	1.22	1.32
	1.00	0.48	0.66	0.79	0.90	1.00	1.21	1.38	1.53	1.66
	1.50	0.72	0.98	1.19	1.35	1.50	1.81	2.06	2.29	2.49
	2.00	0.95	1.31	1.58	1.80	2.00	2.41	2.75	3.05	3.31
	3.00	1.43	1.97	2.37	2.71	3.00	3.61	4.13	4.57	4.97
	4.00	1.91	2.62	3.16	3.61	4.00	4.82	5.50	6.10	6.63
	8.00	3.81	5.25	6.32	7.22	8.00	9.64	11.00	12.19	13.26

* Nominal flow rate at 1.0 bar.

Dripper	Flow rate* (l/h)	Working pressure (bar)								
		0.20	0.40	0.60	0.80	1.00	1.50	2.00	2.50	3.00
Aries™ MWD 20-25 (mil) / 0.50-0.63 (mm) WT	0.55	0.26	0.36	0.44	0.50	0.55	0.66	0.76	0.84	0.91
	0.80	0.38	0.52	0.63	0.72	0.80	0.96	1.10	1.22	1.32
	1.00	0.48	0.66	0.79	0.90	1.00	1.21	1.38	1.53	1.66
	1.40	0.67	0.92	1.11	1.26	1.40	1.69	1.92	2.13	2.32
	1.90	0.91	1.25	1.50	1.72	1.90	2.29	2.61	2.90	3.15
	2.85	1.36	1.87	2.25	2.57	2.85	3.43	3.92	4.34	4.72
	3.80	1.81	2.49	3.00	3.43	3.80	4.57	5.22	5.79	6.29
	8.00	3.81	5.25	6.32	7.22	8.00	9.64	11.00	12.19	13.26

* Nominal flow rate at 1.0 bar.

Maximum driplines length

To determine the maximum feasible run length for a given dripline, considering all hydraulic factors that influence flow within the dripline, Netafim™ uses proprietary design software based on the Darcy-Weisbach equations, supported by decades of engineering expertise and long-standing collaboration with leading academic institutions.

The precise maximum run length for any installation must be calculated using this dedicated design software, which evaluates all relevant hydraulic parameters across the system.

Minor differences may occur between design tools available on the market, due to variations in calculation methodologies and underlying design assumptions.

To calculate the maximum feasible dripline length, taking into account the required variables, such as flow rate and emitter spacing, pipe inner diameter, field slope, inlet pressure and other parameters, Netafim™ HydroCalc design software can be used.



The following tables present the maximum dripline lengths that can be used in driplines to achieve optimal performance.

The values provided here are intended to offer a preliminary reference. The actual maximum dripline length must be calculated by a hydraulic engineer responsible for designing the complete system, in order to account for additional constraints and site-specific limitations.

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 0.50 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	74	92	106	116	124	130	134	138	141
	1%	83	109	130	147	162	175	186	196	206
Flat terrain	0	92	126	156	184	209	232	255	277	298
Downhill	-1%	100	141	179	216	251	286	320	354	386
	-2%	108	157	204	252	298	345	392	439	487

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 0.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	58	74	87	97	105	112	118	122	126
	1%	63	83	101	115	128	140	150	160	168
Flat terrain	0	68	93	116	136	155	172	190	204	220
Downhill	-1%	72	101	128	153	177	201	223	246	268
	-2%	76	110	141	172	202	232	262	291	320

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 1.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	51	66	78	89	96	103	109	114	119
	1%	55	73	89	103	114	125	134	143	151
Flat terrain	0	59	80	100	118	134	149	164	178	191
Downhill	-1%	62	86	109	130	151	170	190	208	226
	-2%	65	93	119	144	169	193	218	241	265

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 1.40 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	42	55	66	75	83	90	95	100	105
	1%	45	60	73	85	95	104	112	120	127
Flat terrain	0	47	65	80	95	107	120	131	142	153
Downhill	-1%	49	68	86	102	118	133	147	162	176
	-2%	51	72	92	111	130	148	166	183	200

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 1.90 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	36	47	56	65	72	78	84	89	93
	1%	37	50	61	71	80	88	96	103	110
Flat terrain	0	39	53	66	78	89	99	109	119	127
Downhill	-1%	40	56	70	84	96	108	120	131	142
	-2%	41	58	74	89	104	118	131	145	158

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MW 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 2.85 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	28	38	46	53	58	64	69	73	77
	1%	29	39	48	57	64	70	76	82	87
Flat terrain	0	30	41	51	61	68	76	84	91	98
Downhill	-1%	30	42	53	63	73	82	90	99	107
	-2%	31	44	56	67	77	88	98	107	117

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 3.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	24	32	38	45	50	55	59	64	68
	1%	24	33	40	48	53	60	65	70	75
Flat terrain	0	25	34	42	50	57	64	70	77	82
Downhill	-1%	25	35	44	52	60	67	74	81	88
	-2%	26	36	46	55	63	71	79	87	94

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MW 12200/12250 • ID 11.8 mm • Kd 0.40 • Flow rate 8.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	15	20	25	30	33	36	39	42	45
	1%	15	21	26	31	34	38	42	45	48
Flat terrain	0	15	21	27	32	36	40	44	48	51
Downhill	-1%	15	21	27	32	37	41	46	50	53
	-2%	16	22	28	33	38	43	47	51	56

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 0.50 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	101	120	132	140	145	148	150	153	154
	1%	121	155	182	202	218	232	242	252	260
Flat terrain	0	144	197	246	290	330	368	404	439	472
Downhill	-1%	162	234	304	372	439	505	571	637	704
	-2%	183	275	369	465	562	658	754	850	946

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 0.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	82	102	115	125	131	137	141	145	147
	1%	93	122	146	165	181	195	206	216	226
Flat terrain	0	106	146	181	214	244	272	299	325	350
Downhill	-1%	116	165	212	258	302	345	388	430	473
	-2%	127	187	246	307	367	428	490	551	612

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 1.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	73	92	106	117	124	130	135	139	142
	1%	82	108	130	148	163	176	188	198	208
Flat terrain	0	91	126	157	185	211	235	259	281	303
Downhill	-1%	99	140	180	218	254	290	325	359	394
	-2%	107	156	205	253	301	350	398	448	498

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 1.40 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	62	80	93	103	112	118	124	129	133
	1%	68	90	109	125	139	151	162	172	181
Flat terrain	0	74	101	126	150	170	190	209	227	244
Downhill	-1%	78	111	141	170	198	225	251	277	303
	-2%	83	121	157	193	228	263	298	333	368

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 1.90 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	52	68	81	91	99	106	112	117	121
	1%	56	75	92	106	119	130	139	149	157
Flat terrain	0	60	83	104	123	140	156	172	186	201
Downhill	-1%	63	89	113	136	158	179	200	220	240
	-2%	67	96	124	152	178	204	230	257	283

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 2.85 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	42	55	66	76	83	90	95	101	105
	1%	44	59	73	85	95	105	113	121	129
Flat terrain	0	46	64	80	95	108	120	133	144	155
Downhill	-1%	48	68	86	103	118	134	149	164	178
	-2%	50	71	92	111	130	148	167	185	203

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 3.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	35	47	57	65	73	79	85	90	94
	1%	37	50	62	72	81	90	97	104	111
Flat terrain	0	39	53	66	79	90	101	110	121	130
Downhill	-1%	39	56	70	84	97	109	122	133	145
	-2%	41	58	74	90	105	120	134	148	162

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16200/16250 • ID 16.2 mm • Kd 0.35 • Flow rate 8.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	23	31	38	44	49	54	58	63	67
	1%	23	32	39	46	52	58	64	68	74
Flat terrain	0	24	33	41	49	56	62	69	75	81
Downhill	-1%	24	34	42	51	58	66	73	79	86
	-2%	25	35	44	53	61	69	78	85	93

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 0.55 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	97	117	129	137	143	146	150	152	153
	1%	115	148	174	194	211	224	235	245	253
Flat terrain	0	135	185	230	272	310	345	380	412	443
Downhill	-1%	151	218	282	344	405	466	526	586	646
	-2%	169	253	338	425	511	583	653	723	793

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 0.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	82	102	115	125	131	137	141	145	147
	1%	93	122	146	165	181	195	206	216	226
Flat terrain	0	106	146	181	214	244	272	299	325	350
Downhill	-1%	116	165	212	258	302	345	388	430	473
	-2%	127	187	246	307	367	428	490	197	182

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 1.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	73	92	106	117	124	130	135	139	142
	1%	82	108	130	148	163	176	188	198	208
Flat terrain	0	91	126	157	185	211	235	259	281	303
Downhill	-1%	99	140	180	218	254	290	325	359	394
	-2%	107	156	205	253	301	350	398	448	498

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 1.50 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	60	77	90	101	109	116	121	126	130
	1%	65	86	105	121	134	146	157	167	176
Flat terrain	0	70	97	121	143	163	182	200	218	234
Downhill	-1%	74	105	134	162	188	214	238	263	287
	-2%	79	115	149	183	215	248	281	313	346

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MW 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 2.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	51	66	79	89	97	104	110	115	120
	1%	55	73	89	103	115	126	136	145	154
Flat terrain	0	58	80	100	119	135	151	166	181	195
Downhill	-1%	61	86	110	132	152	173	193	212	231
	-2%	64	92	120	146	171	197	222	247	271

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 3.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	40	53	64	74	82	88	94	99	103
	1%	43	58	71	83	92	102	110	118	125
Flat terrain	0	45	62	78	92	104	116	128	140	150
Downhill	-1%	46	65	82	99	114	130	143	158	171
	-2%	48	69	88	107	125	143	160	177	195

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 4.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	34	46	55	64	71	77	82	88	92
	1%	36	48	60	70	79	87	94	102	108
Flat terrain	0	37	51	64	76	87	97	107	116	125
Downhill	-1%	38	54	68	81	94	106	117	129	139
	-2%	39	56	72	87	101	115	129	142	155

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 16008 • ID 14.2 mm • Kd 0.40 • Flow rate 8.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	23	31	38	44	49	54	58	63	67
	1%	23	32	39	46	52	58	64	68	74
Flat terrain	0	24	33	41	49	56	62	69	75	81
Downhill	-1%	24	34	42	51	58	66	73	79	86
	-2%	25	35	44	53	61	69	78	85	93

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 0.50 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	142	151	155	157	158	159	159	160	161
	1%	209	243	264	278	287	295	299	303	306
Flat terrain	0	307	407	494	575	649	718	784	846	907
Downhill	-1%	401	578	753	930	397	358	342	334	328
	-2%	508	169	161	159	157	156	155	155	154

Due to considerations related to dripline filling time and flushing effectiveness, it is not recommended to exceed a dripline length of 800 meters.

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 0.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	128	141	148	152	154	156	158	158	159
	1%	171	206	230	248	261	271	278	284	291
Flat terrain	0	227	301	366	425	480	531	580	627	671
Downhill	-1%	277	392	503	614	723	834	945	431	379
	-2%	333	496	177	167	162	160	158	157	156

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 1.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	120	135	143	148	152	154	155	157	158
	1%	154	188	213	232	245	257	266	273	279
Flat terrain	0	196	260	317	368	416	460	503	543	582
Downhill	-1%	234	328	419	508	596	683	771	860	949
	-2%	275	404	208	177	167	163	161	159	158

Due to considerations related to dripline filling time and flushing effectiveness, it is not recommended to exceed a dripline length of 800 meters.

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 1.40 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	107	124	134	141	145	148	150	153	154
	1%	131	162	186	205	220	232	242	252	259
Flat terrain	0	158	210	256	297	335	372	406	438	470
Downhill	-1%	182	254	321	387	451	515	578	640	703
	-2%	208	301	394	488	190	175	169	165	162

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 1.90 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	94	112	124	132	137	141	146	148	150
	1%	111	140	162	180	196	208	219	230	237
Flat terrain	0	130	173	210	245	276	306	334	361	386
Downhill	-1%	146	202	254	304	353	400	448	495	541
	-2%	163	233	302	370	439	509	190	178	172

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 2.85 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	78	96	108	117	125	130	134	139	141
	1%	89	113	133	150	164	176	187	197	206
Flat terrain	0	100	133	162	189	214	236	258	279	299
Downhill	-1%	109	150	188	224	258	292	325	357	389
	-2%	120	169	216	262	308	354	399	446	492

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 3.80 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	68	84	97	106	114	120	125	130	133
	1%	76	97	115	130	143	155	165	175	183
Flat terrain	0	83	111	135	157	178	197	215	232	249
Downhill	-1%	90	122	152	181	208	235	261	286	311
	-2%	97	135	172	207	242	277	311	346	380

Max. dripline length (meters) at different slopes - 10.0% flow variation

Aries™ MWD 22200/22250 • ID 22.2 mm • Kd 0.60 • Flow rate 8.00 l/h • Inlet pressure 1.5 bar

	Distance between drippers (meter)									
	Slope	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Uphill	2%	46	59	68	77	85	91	96	101	105
	1%	49	64	76	87	97	106	114	122	128
Flat terrain	0	52	69	84	98	111	123	134	145	155
Downhill	-1%	54	73	90	107	122	137	151	165	178
	-2%	57	78	98	117	134	152	170	186	203