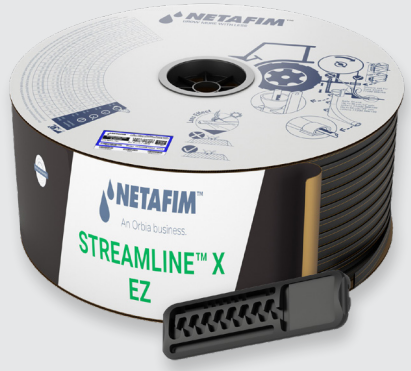
Streamline™ X EZ

Compact integral dripper (non-pressure-compensated) with high clogging resistance, designed specifically for thin-wall dripline (TWD) applications. Optimized for single-season drip irrigation in vegetables and other intensive row 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.

Enhanced toughness

Streamline™ X EZ features a unique ribbed outer surface that creates a barrier between the soil and the dripline, improving durability and enabling smoother deployment and retrieval.

The ribbed structure reduces friction with the soil and minimizes mechanical damage during installation and retrieval operations.

Long-lasting, high clogging resistance

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

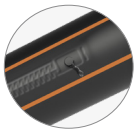
Guided installation orientation

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.

Flap outlet protection (optional)

Reduces the risk of particle ingress from surrounding soil through a flexible outlet cover that closes when irrigation stops, acting as a mechanical barrier against soil, sand and debris.

*Does not provide full anti-siphon functionality or guarantee complete sealing under all field conditions. Proper system design, installation and maintenance, including the correct use of air valves, are recommended to prevent suction within the dripline.



ReGen™ (optional)

ReGen™ dripline incorporates high-quality recycled materials, supporting the sustainability goals of modern agricultural operations while maintaining reliable irrigation performance.

*ReGen™ is currently available in selected markets and is being progressively introduced worldwide. Please consult your local Netafim™ representative for availability.

Applications

Open field | Orchards | Protected crops

- Suitable for on-surface installation.
- Delivers uniform hydraulic performance on flat terrain and slightly sloping fields.
- Ideal for irrigation in seasonal vegetables and other row crops.



NETAFIM™
An Orbia business.

Specifications

- Maximum operating pressure: According to dripline 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.
- TurboNet™ labyrinth with enhanced clogging resistance and superior hydraulic performance.
- Weldable into thin-wall driplines.
- 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* (l/h)	Water passages dimensions width-depth-length (mm x mm x mm)	Filtration area (mm^2)	Constant K	Exponent X	Recommended filtration (micron)/(mesh)
0.35	0.35 x 0.34 x 23	11	0.116	0.48	130/120
0.75	0.48 x 0.53 x 25	15	0.248	0.48	130/120
1.10	0.51 x 0.51 x 13	16	0.389	0.45	130/120
1.60	0.64 x 0.60 x 13	14	0.568	0.45	130/120
2.20	0.75 x 0.70 x 13	14	0.780	0.45	130/120
2.80	0.84 x 0.75 x 13	15	0.993	0.45	200/80

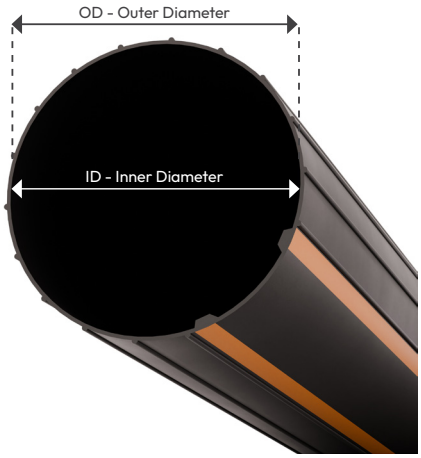


* Nominal flow rate at 1.0 bar.

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)	Outer diameter (mm)	Max. working pressure (bar)	Max. flushing pressure (bar)	Kd
12 EZ	11.80	12.10	1.6	1.8	0.15
16 EZ	16.20	16.46	0.8	0.9	0.10
22 EZ	22.20	22.46	0.8	0.9	0.01



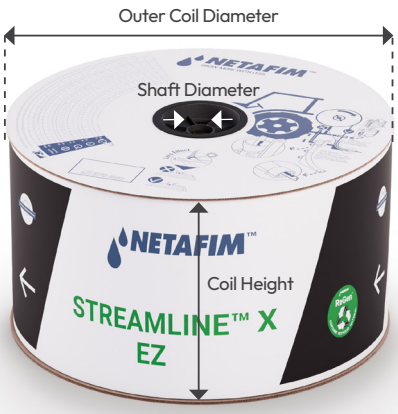
Kd: An integral dripper installed inside the dripline creates a localized disturbance in the water flow, generating minor head losses (Kd) as its shape and volume partially obstruct the internal flow path. The lower the Kd value for a given inner diameter, the longer the driplines can be designed under 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	Distance between drippers (m)	Coil length (m)	Average* coil weight (kg)	Outer coil diameter (cm)	Shaft diameter (cm)	Coil height (cm)
12 EZ	0.15 to 0.25	3000	22.1	52	3.8	24
	0.30 to 1.00	3500	21.8			
16 EZ	0.15 to 0.25	3200	24.5	57	3.8	24
	0.30 to 1.00	3600	25.6			
22 EZ	0.15 to 0.25	2800	26.0	57	3.8	24
	0.30 to 1.00	3000	27.9			

*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)
12 X EZ	3000	16	109 x 109 x 106	364	640	1920000
	3500			359		2240000
16 X EZ	3200	16	109 x 109 x 106	402	640	2048000
	3600			420		2304000
22 X EZ	2800	16	109 x 109 x 106	426	640	1792000
	3000			456		1920000





*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	
Streamline™ X	STRM X

Commercial diameter (mm)	
12	12 EZ
16	16 EZ
22	22 EZ

Flow rate (l/h)	
0.35	0.35L/H
0.75	0.75L/H
1.10	1.10L/H
1.60	1.60L/H
2.20	2.20L/H
2.80	2.80L/H

Distance between drippers (m)	
0.2	0.20M
0.3	0.30M
0.4	0.40M
0.5	0.50M
0.6	0.60M
0.7	0.70M

*Other distances between drippers can be ordered.

Coil length (m)
Coil length according to the values presented in the corresponding table.

Special features	
No added	-
Flap outlet	FL
Other	XXX

*Other features available upon request. Consult your local Netafim™ distributor.

STRM X 16 EZ 1.60L/H 0.40M 3600M FL

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.

Streamline™ X EZ flow (l/h) vs pressure (bar)

Dripper	Flow rate* (l/h)	Working pressure (bar)										
		0.30	0.40	0.50	0.60	0.70	0.80	1.00	1.20	1.40	1.60	1.80
Streamline™ X EZ	0.35	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	0.41	0.44	0.46
	0.75	0.42	0.48	0.54	0.59	0.63	0.67	0.75	0.82	0.88	0.94	0.99
	1.10	0.64	0.73	0.80	0.87	0.93	0.99	1.10	1.19	1.28	1.35	1.43
	1.60	0.93	1.06	1.17	1.27	1.36	1.45	1.60	1.74	1.86	1.98	2.09
	2.20	1.28	1.46	1.61	1.75	1.87	1.99	2.20	2.39	2.56	2.72	2.86
	2.80	1.63	1.85	2.05	2.22	2.38	2.53	2.80	3.04	3.26	3.46	3.65

* 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.

HydroCalc 3.0 by NETAFIM

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 0.35 l/h • Inlet pressure 1.0 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	83	88	91	92	94	95	95	96
	1%	95	116	131	142	151	158	163	167	171
Flat terrain	0	121	161	196	228	257	284	310	336	360
Downhill	-1%	146	205	262	317	372	427	482	536	592
	-2%	171	251	143	115	108	105	103	102	101

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 0.75 l/h • Inlet pressure 1.0 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%	55	66	73	79	82	85	87	89	90
	1%	64	81	94	106	115	123	129	135	140
Flat terrain	0	74	99	120	140	158	175	191	207	222
Downhill	-1%	84	116	145	174	201	228	254	281	307
	-2%	93	132	170	209	247	285	323	125	116

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 1.10 l/h • Inlet pressure 1.0 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%	49	61	70	76	81	85	89	92	95
	1%	55	70	83	94	103	112	119	125	131
Flat terrain	0	61	81	99	115	130	144	157	169	182
Downhill	-1%	65	89	111	133	152	172	191	210	228
	-2%	71	99	126	153	178	204	230	256	282

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 1.60 l/h • Inlet pressure 1.0 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%	41	51	59	66	71	76	79	83	86
	1%	44	57	68	78	86	94	99	106	112
Flat terrain	0	48	64	78	91	103	113	124	134	144
Downhill	-1%	51	69	86	101	116	131	145	158	172
	-2%	54	75	94	114	132	151	169	186	204

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 2.20 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	34	44	51	57	62	67	71	75	77
Uphill	1%	37	48	57	65	73	79	86	91	96
Flat terrain	0	39	52	64	74	84	93	102	110	117
Downhill	-1%	41	55	68	81	92	104	115	126	136
	-2%	43	59	74	89	103	117	130	144	157

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

Streamline™ X 12 EZ • ID 11.8 mm • Kd 0.15 • Flow rate 2.80 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	30	38	45	51	56	60	64	68	71
Uphill	1%	32	41	50	57	64	69	75	80	85
Flat terrain	0	34	45	55	64	71	80	87	95	101
Downhill	-1%	35	47	58	69	78	88	97	105	114
	-2%	36	50	62	75	86	97	108	119	130

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 0.35 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	89	93	95	97	97	97	98	98	98
Uphill	1%	136	156	168	175	180	183	186	188	189
Flat terrain	0	209	278	338	393	443	491	536	580	621
Downhill	-1%	284	413	541	281	233	220	214	210	207
	-2%	122	106	102	101	100	99	99	99	99

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 0.75 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	75	84	89	92	94	95	95	96	96
Uphill	1%	99	120	135	147	155	161	166	171	174
Flat terrain	0	129	171	208	242	273	302	330	357	382
Downhill	-1%	157	221	282	344	404	464	524	585	647
	-2%	185	274	124	111	106	104	102	102	101

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 1.10 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	72	84	92	97	100	103	104	106	107
Uphill	1%	87	109	126	139	149	158	166	172	177
Flat terrain	0	105	140	170	198	224	248	270	293	313
Downhill	-1%	119	167	211	254	296	337	378	419	460
	-2%	136	197	257	318	134	121	116	113	111

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 1.60 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	62	74	82	89	93	97	98	101	103
Uphill	1%	72	91	106	119	129	138	146	152	159
Flat terrain	0	83	110	134	156	176	195	214	231	248
Downhill	-1%	91	126	159	190	220	250	279	308	337
	-2%	102	145	187	229	271	313	150	128	121

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 2.20 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	53	65	74	81	85	90	93	95	98
Uphill	1%	60	77	90	102	112	120	128	135	141
Flat terrain	0	68	90	110	128	144	160	174	189	203
Downhill	-1%	73	101	126	150	173	195	218	239	261
	-2%	80	113	144	175	205	236	266	297	328

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

Streamline™ X 16 EZ • ID 16.2 mm • Kd 0.10 • Flow rate 2.80 l/h • Inlet pressure 1.0 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	47	59	67	74	79	83	87	90	93
Uphill	1%	52	68	80	91	100	108	115	122	128
Flat terrain	0	58	77	94	110	124	137	150	162	174
Downhill	-1%	62	85	106	126	145	163	181	198	216
	-2%	67	93	119	144	168	192	216	240	264

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 0.35 l/h • Inlet pressure 0.8 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	78	78	78	79	79	79	79	79	79
Uphill	1%	146	151	153	155	155	156	156	157	157
Flat terrain	0	379	493	593	685	770	850	926	998	1068
Downhill	-1%	179	166	162	161	160	159	158	158	158
	-2%	80	79	79	79	79	78	78	78	78

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 0.75 l/h • Inlet pressure 0.8 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	75	77	78	78	78	78	78	78	79
Uphill	1%	127	139	145	149	151	152	153	154	155
Flat terrain	0	233	303	365	422	474	524	570	615	658
Downhill	-1%	354	512	183	172	167	165	162	161	161
	-2%	84	81	80	80	79	79	78	78	79

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 1.10 l/h • Inlet pressure 0.8 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	81	85	87	88	89	89	90	90	90
Uphill	1%	123	141	151	158	163	167	169	170	172
Flat terrain	0	190	247	298	344	387	427	465	501	537
Downhill	-1%	256	363	469	235	197	187	182	178	176
	-2%	100	89	86	86	85	84	84	84	84

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 1.60 l/h • Inlet pressure 0.8 bar

	Distance between drippers (meter)									
	Slope	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**	**0.70**	**0.80**	**0.90**	**1.00**
	2%	76	82	84	87	87	88	89	89	89
Uphill	1%	107	125	138	146	152	157	161	164	166
Flat terrain	0	150	195	235	272	305	337	367	396	424
Downhill	-1%	190	266	339	412	486	561	207	194	187
	-2%	237	98	90	88	86	85	85	85	84

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 2.20 l/h • Inlet pressure 0.8 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%	70	77	82	84	85	86	87	88	88
	1%	93	111	124	134	142	147	152	156	159
Flat terrain	0	123	160	192	222	250	275	301	324	346
Downhill	-1%	149	206	260	314	367	420	474	528	229
	-2%	179	259	99	92	89	88	86	86	85

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

Streamline™ X 22 EZ • ID 22.2 mm • Kd 0.01 • Flow rate 2.80 l/h • Inlet pressure 0.8 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%	65	73	78	82	83	85	86	87	87
	1%	83	101	114	124	131	138	143	148	151
Flat terrain	0	105	137	165	191	214	237	258	278	297
Downhill	-1%	124	170	214	257	299	341	382	425	467
	-2%	146	208	271	100	93	90	88	87	86