

irritec[®]
don't wait for rain[®]

Catalogue
Drip Irrigation Catalogue

Through its direct presence and widespread international sales network, Irritec[®] follows farmers around the world, assisting them in the choice, design, installation and use of the most appropriate irrigation systems.



Fresno
USA

Valdosta
USA

Querétaro
MEXICO



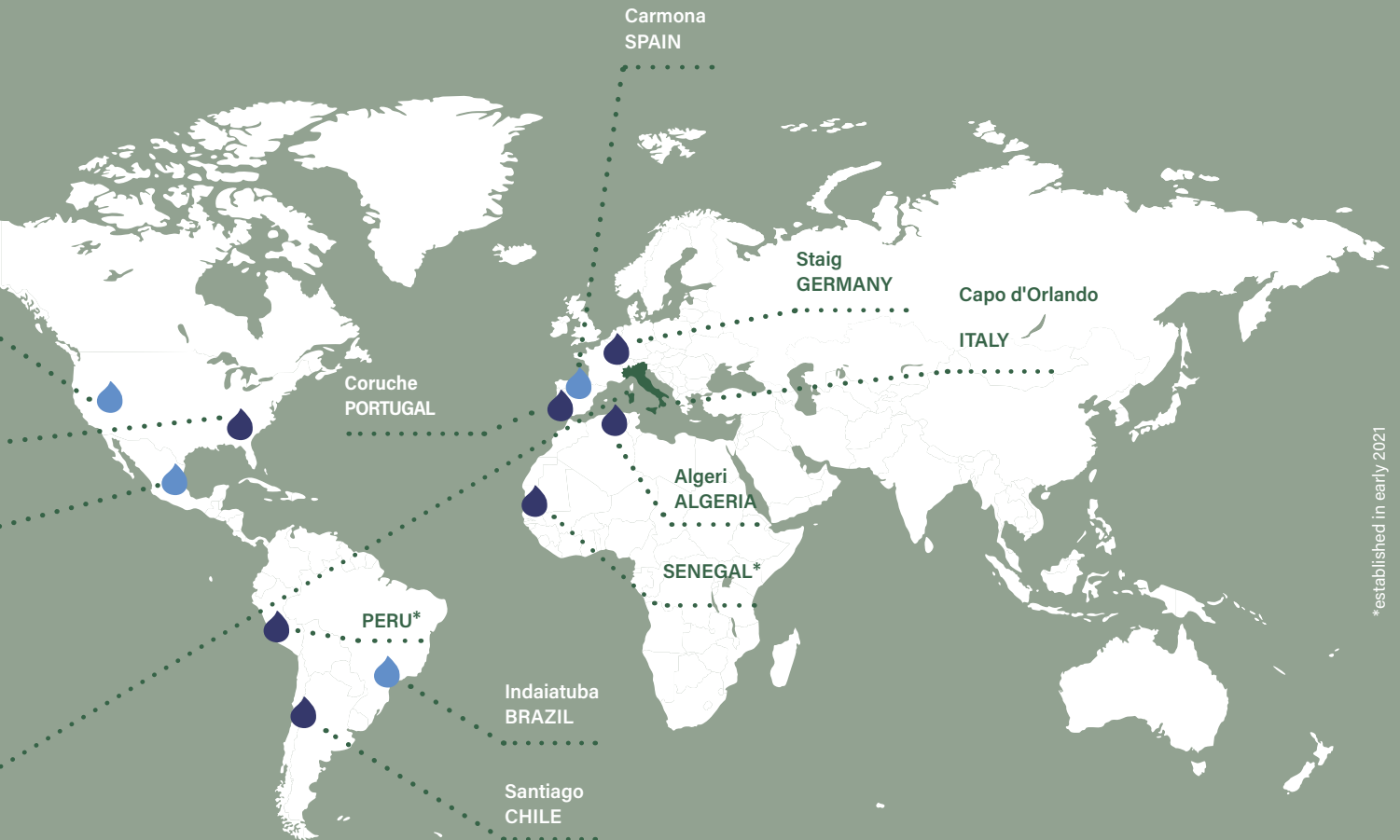
PRODUCTION SITES



SALES OFFICES



LOGISTICS CENTRES



*established in early 2021

since

1974

irritec

A global brand established in Sicily

16



Production and commercial sites

+120



Countries in the world

>900



Professionals worldwide










We want to make life easier for people who care for plants, for their work and as their passion. We work to ensure that every drop is put to the best possible use, minimising the ecological footprint and waste of resources.

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Example table of applications

PRODUCT	 TREE AND FRUIT CROPS	 OPEN FIELD CROPS	 SUBIRRIGATION	 VINEYARDS	 OLIVE GROVES	 PROTECTED CROPS	 SOILLESS CROPS	 NURSERIES	 HEDGES, TREES AND FLOWER BEDS
eXXtreme Tape [®]		●				●			
IrritecTape [™]		●				●			
P0 [™]		●				●			
P1 [®]		●				●			
P5 [™]		●				●			
D5 [™] / M5 [™]	●	●		●	●	●			●
D7 [™]	●	●		●	●	●			●
Tandem [®]	●			●	●	●		●	●
Junior [®]	●			●	●	●		●	●
Minidrip [®]								●	●
Multibar [™] C	●			●	●			●	
Multibar [™] C a.s. - d.s.	●		●	●	●	●		●	
Multibar [™] F	●			●	●			●	
Multibar [™] F a.s.	●		●	●	●	●		●	
Multibar [™] C a.s. - d.s.	●		●	●	●	●		●	
Multibar [™] C Rootguard [™]			●						
iDrop [®] Normal	●					●	●	●	●
iDrop [®] PC						●	●	●	●
iDrop [®] PCDS						●	●	●	●
iDrop [®] light PC						●	●	●	●
iDrop [®] light PCDS						●	●	●	●
DSV and DSH	●			●	●				
Capillar System [™]							●	●	



Drip Irrigation | Light continuous labyrinth drip line

eXXtreme Tape® - irritecTape™

The light continuous labyrinth drip line is ideal for closely spaced planting patterns, and well- drained, sandy soils due to the presence of drip points with narrow spacing. It is the result of a single extrusion process, which avoids issues with bonding. The double green line identifies the side of the outlet holes to correctly lay the tape.

Features and advantages:

- The laser-cut outlet reduces the ingress of solid particles
- Excellent resistance to peaks in pressure, even with minimal thicknesses
- Excellent tensile strength
- The particular design of the labyrinth allows maximum uniformity over extended lengths
- Excellent levels of performance in terms of uniformity, even during fertigation cycles
- Reduction of phytopathological issues as a result of keeping the leaf system dry
- Ideal for closely spaced planting patterns, and well- drained, sandy soils due to the presence of drip points with narrow spacing
- Excellent filtration capacity; this increases the range of fertilisers that can be used, including water-soluble fertilisers
- Complies with ISO 9261 standards
- Resistant to UV light and commonly used fertilisers

TWO VERSIONS ARE AVAILABLE:



IDEAL FOR USE WITH
DIRTY WATER

LIGHT DRIP LINE WITH CONTINUOUS LABYRINTH AND CONTINUOUS DOUBLE INLET FILTER

Availability of product types

Product	nominal internal Ø		Packaging type	Thickness
	mm	inch		
eXXtreme Tape	16	5/8	standard	5-6-7-8-10-12
			medium	5-6-7-8-10-12
			small	6-7-8-10-12
	22	7/8	standard	6-7-8-10-12



Field of application



irritecTape™

LIGHT DRIP LINE WITH CONTINUOUS LABYRINTH

Availability of product types

Product	nominal internal Ø		Packaging type	Thickness
	mm	inch		
irritecTape	16	5/8	standard	4-5-6-7-8-10-12-15
			medium	5-6-7-8-10-12
			small	6-7-8-10-12
	22	7/8	standard	6-7-8-10-12-15
	25	1	standard	10-12
	29	1 1/8	standard	10-12



Field of application



** Description of the Fittings, see page 63

Drip Irrigation | Light dripline with continuous labyrinth and double continuous inlet filter

eXXtreme Tape®

PATENTED

THE DRIP LINE WITH THE MOST EXTENSIVE FILTRATION SURFACE IN THE WORLD!

eXXtreme Tape®, has a **double continuous inlet filter with a length equal to twice the length of the tube**. Designed using an **exclusive Irritec® patented system**, it guarantees excellent filtering performance even when using "difficult" to filter water which is laden with sediments, mud and dirt, thanks to the continuous double filter present along the entire length of the drip line.

Features and advantages

- The double continuous filter allows excellent uniformity during emission and wetting, even when the water contains a significant quantity of solid particles.
- Ideal for closely spaced planting patterns, and well- drained, sandy soils due to the presence of drip points with narrow spacing.
- It is the result of a single extrusion process, which avoids issues with bonding.
- Excellent tensile strength.
- The laser-cut outlet reduces the ingress of solid particles.
- Excellent resistance to peaks in pressure, even with minimal thicknesses.
- The particular design of the labyrinth allows maximum uniformity over extended lengths.
- Excellent filtration capacity: this increases the range of fertilisers that can be used, including water-soluble fertilisers.
- The double green line identifies the side of the outlet holes to correctly lay the tape.
- Reduction of phytopathological issues as a result of keeping the leaf system dry.

Flow rate in LPH/metre, according to spacing and the operating pressure

Flow rate LPH	Operating in bar	Spacing (cm)					
		7.5	10	15	20	30	40
0.60	0.55	-	5.40	3.60	2.70	1.80	1.40
	0.70	-	6.00	4.00	3.00	2.00	1.50
0.90	0.55	10.60	8.00	5.30	4.00	2.70	2.00
	0.70	12.00	9.00	6.00	4.50	3.00	2.30
1.20	0.55	14.2	10.70	7.10	5.30	3.50	2.70
	0.70	16.0	12.00	8.00	6.00	4.00	3.00

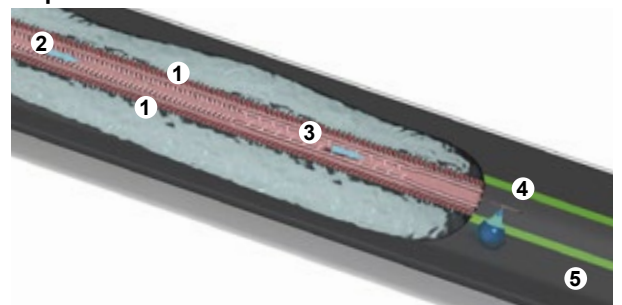
*eXXtreme Tape with a spacing of 10 cm and a flow rate of 0.60 LPH requires a 155 mesh filter.

EXTREME
TAPE

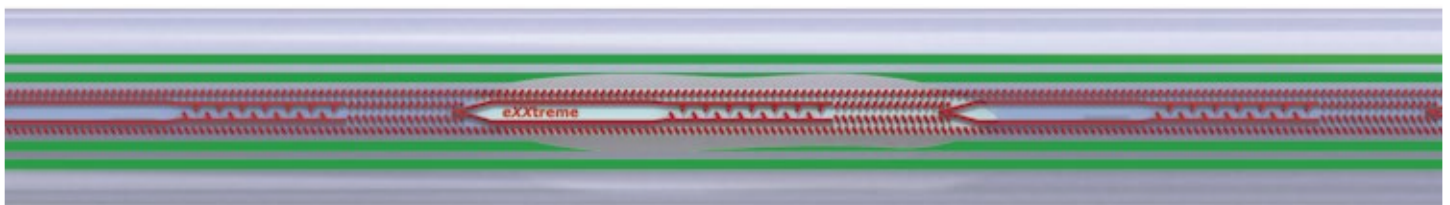
Field of application



Drip line EXXTREME TAPE



- 1 - Continuous double external filter
- 2 - Inlet filter
- 3 - Turbulent flow labyrinth with low pressure sensitivity
- 4 - Outlet hole
- 5 - Polyethylene tube



** Description of the Fittings, see page 63

Drip Irrigation | Light dripline with continuous labyrinth and double continuous inlet filter

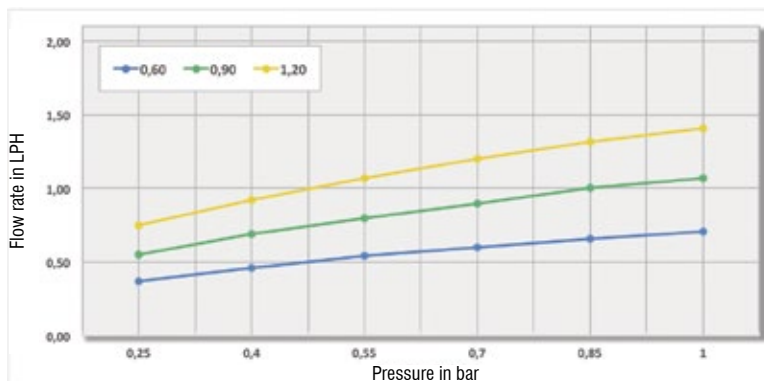
eXXtreme Tape®

Specifications of the incorporated filter

Spacing cm		Inlet Filter		Double Continuous Filter, per metre of tube	
cm	inch	area mm ²	no. of holes	area mm ²	no. of holes
7.5	3	2.2	20	254	2,120
10	4	3.3	30	254	2,120
15	6	5.5	50	254	2,120
20	8	14.9	136	254	2,120
30	12	16.5	150	254	2,120

Drip line specifications

Nominal flow rate LPH to 0.7 bar	Recommended filtration	Pressure (bar) / flow rate (LPH) ratio					
		0.25	0.40	0.55	0.70	0.85	1.00
0.60	120 mesh	0.37	0.46	0.54	0.60	0.66	0.71
0.90	120 mesh	0.55	0.69	0.80	0.90	1.00	1.07
1.20	120 mesh	0.75	0.92	1.07	1.20	1.32	1.41



Characteristics of PE tube

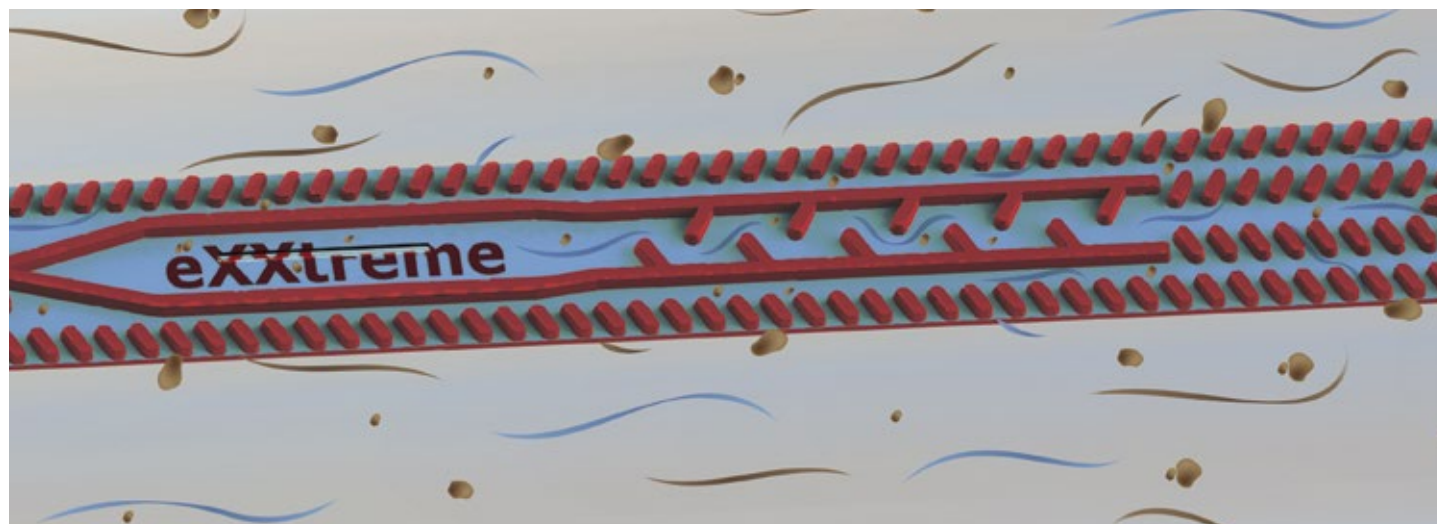
nominal Ø mm	Internal Ø inch	Internal Ø mm	External Ø			Thickness mm	Fittings and valve connections unit	Max. Operating pressure	
			mm	mils	mm			bar	psi
16	5/8	16.1	16.35	5	0.125	A1	0.6	8.7	
			16.4	6	0.150	A1	0.7	10.1	
			16.5	8	0.200	A1	1.0	14.5	
			16.6	10	0.250	A1	1.0	14.5	
			16.7	12	0.300	A1	1.0	14.5	
22	7/8	22.3	22.7	8	0.200	A2	0.7	10.1	
			22.8	10	0.250	A2	1.0	14.5	
			22.9	12	0.300	A2	1.0	14.5	

Recommended lengths in metres, based on EU

Q LPH	EU %	EXXTREME TAPE 16 mm					
		Spacing cm					
0.60	90	-	113	148	177	230	277
	85	-	140	184	220	285	343
0.90	90	73	91	116	142	181	221
	85	90	113	143	176	224	274
1.20	90	61	75	101	117	153	185
	85	75	91	125	144	189	229

Q LPH	EU %	EXXTREME TAPE 22 mm					
		Spacing cm					
0.60	90	-	204	265	312	404	484
	85	-	252	328	366	500	600
0.90	90	128	160	204	249	316	388
	85	158	199	253	309	391	480
1.20	90	107	131	177	208	268	324
	85	132	162	219	257	332	400

EU = emission uniformity
• Inlet pressure = 0.7 bar



** Description of the Fittings, see page 63

Drip Irrigation | Continuous labyrinth drip line

IrritecTape™

irritecTape™ is a product that has been tried and tested over many years and whose outstanding performance makes it one of the best performing drip lines. The lightweight continuous-labyrinth drip line is **ideal in cases of low spacing** for application in open field horticultural and floricultural crops. The small distance between the drip points and the low flow rate make it **perfect for very sandy soils**.

Features and advantages:

- Excellent resistance to peaks in pressure, even with minimal thicknesses
- Excellent tensile strength
- The particular design of the labyrinth allows maximum uniformity over extended lengths
- Excellent levels of performance in terms of uniformity, even during fertigation cycles
- Compared to other products, it is the result of a single extrusion process, which avoids issues with bonding.

Characteristics of PE tube

nominal Ø		Internal Ø		External Ø		Thickness		Fittings and valve connections		Max. Operating pressure	
mm	inch	mm	mm	mm	mils	mm	unit	bar	psi		
16	5/8	16.1	16.30	4	0.100	A1	0.5	7.2			
			16.35	5	0.125	A1	0.6	8.7			
			16.40	6	0.150	A1	0.7	10.1			
			16.45	7	0.175	A1	0.8	11.6			
			16.50	8	0.200	A1	1.0	14.5			
			16.60	10	0.250	A1	1.0	14.5			
			16.70	12	0.300	A1	1.0	14.5			
			16.90	15	0.400	A1	1.0	14.5			
22	7/8	22.3	22.60	6	0.150	A2	0.5	7.2			
			22.65	7	0.177	A2	0.6	8.7			
			22.70	8	0.200	A2	0.7	10.1			
			22.80	10	0.250	A2	1.0	14.5			
			22.90	12	0.300	A2	1.0	14.5			
			23.10	15	0.400	A2	1.0	14.5			
25	1	25.1	25.60	10	0.250	A3	0.8	11.6			
			25.70	12	0.300	A3	0.9	13.0			
			29.10	10	0.250	A4	0.7	10.1			
29	1 1/8	28.6	29.20	12	0.300	A4	0.8	11.6			

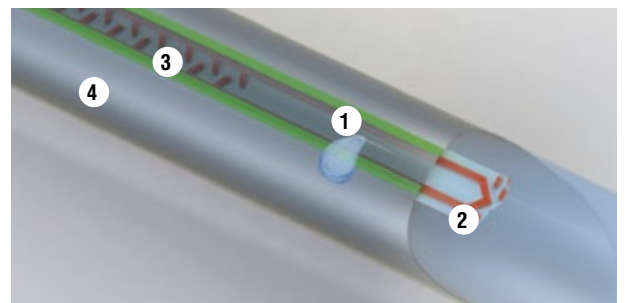


irritecTape™

Field of application



irritecTape drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

Drip Irrigation | Light continuous labyrinth drip line

IrritecTape™

Dripper specifications

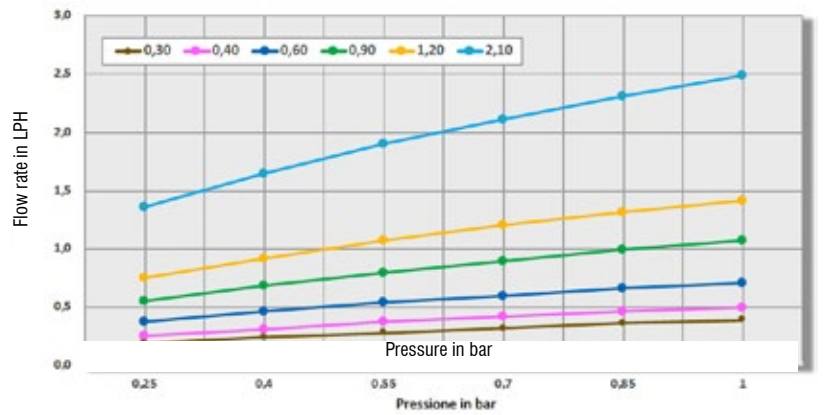
Nominal flow rate in LPH	Flow rate LPH at 0.55 bar / 8 psi	Pressure / flow rate (bar) ratio						Recommended filtration mesh	Flow Equation		Spacing cm	Inlet Filter	
		0.25	0.40	0.55	0.70	0.85	1.00		x	k		Area mm ²	No. of Holes
at 0.7 bar / 10 psi	at 0.55 bar / 8 psi	0.25	0.40	0.55	0.70	0.85	1.00						
0.30	0.28	0.19	0.24	0.28	0.32	0.36	0.39	200	0.49	0.12	10	3.4	30
0.40	0.37	0.25	0.31	0.37	0.42	0.46	0.50	200	0.49	0.15	15	7.3	60
0.60	0.54	0.37	0.46	0.54	0.60	0.66	0.71	155	0.49	0.23	20	9.7	80
0.90	0.80	0.55	0.69	0.80	0.90	1.00	1.07	155	0.49	0.34	30	14.5	120
1.20	1.07	0.75	0.92	1.07	1.20	1.32	1.41	155	0.49	0.44	40	9.7	80
2.10	1.90	1.36	1.65	1.90	2.11	2.31	2.49	120	0.49	0.83			

*10 cm pitch 0.6 LPH requires 200 Mesh filtration

Flow rate in LPH/metre, according to spacing and operating pressure

Flow rate LPH	Pressure in bar	Spacing (cm)				
		10	15	20	30	40
0.30	0.55	-	1.75	1.30	-	0.65
	0.70	-	2.00	1.50	-	0.75
0.40	0.55	-	-	1.75	-	0.90
	0.70	-	-	2.00	-	1.00
0.60	0.55	5.40	3.60	2.70	1.80	1.40
	0.70	6.00*	4.00	3.00	2.00	1.50
0.90	0.55	8.00	5.30	4.00	2.70	2.00
	0.70	9.00	6.00	4.50	3.00	2.30
1.20	0.55	10.70	7.10	5.30	3.50	2.70
	0.70	12.00	8.00	6.00	4.00	3.00
2.10	0.55	19.00	-	9.50	-	-
	0.70	21.00	-	10.50	-	-

*irritecTape with a spacing of 10 cm and a flow rate of 0.60 LPH requires a 200 mesh filter.



Recommended lengths in metres, based on EU

irritecTape 16 mm							
Flow rate LPH	S %	EU %	Spacing (cm)				
			10	15	20	30	40
0.30	0	90	-	222	268	-	416
		85	-	276	332	-	516
0.40	0	90	-	-	231	-	361
		85	-	-	287	-	447
0.60	0	90	114	147	178	230	277
		85	141	182	220	285	343
0.90	0	90	91	116	142	181	221
		85	113	143	176	224	274
1.20	0	90	75	101	117	153	185
		85	91	125	144	189	229
2.10	0	90	53	-	83	-	128
		85	66	-	102	-	158

irritecTape 22 mm							
Flow rate LPH	S %	EU %	Spacing (cm)				
			10	15	20	30	40
0.30	0	90	-	391	470	-	731
		85	-	485	582	-	906
0.40	0	90	-	-	404	-	634
		85	-	-	502	-	785
0.60	0	90	200	258	312	404	484
		85	247	320	386	500	600
0.90	0	90	160	204	249	316	388
		85	199	253	309	391	480
1.20	0	90	131	177	208	268	324
		85	162	219	257	332	400
2.10	0	90	93	-	144	-	224
		85	114	-	178	-	277

irritecTape 25 mm							
Flow rate LPH	S %	EU %	Spacing (cm)				
			10	15	20	30	40
0.30	0	90	-	483	580	-	903
		85	-	599	719	-	1119
0.40	0	90	-	-	519	-	807
		85	-	-	643	-	999
0.60	0	90	245	317	395	512	615
		85	303	393	490	634	761
0.90	0	90	198	257	308	399	479
		85	246	318	382	494	594
1.20	0	90	167	216	260	336	404
		85	207	268	322	416	500
2.10	0	90	114	-	178	-	276
		85	141	-	220	-	342

irritecTape 29 mm							
Flow rate LPH	S %	EU %	Spacing (cm)				
			10	15	20	30	40
0.30	0	90	-	601	722	-	1123
		85	-	745	895	-	1392
0.40	0	90	-	-	646	-	1004
		85	-	-	800	-	1243
0.60	0	90	307	397	492	637	765
		85	380	492	609	789	947
0.90	0	90	247	320	384	497	596
		85	306	396	475	615	739
1.20	0	90	208	269	323	418	503
		85	258	333	400	518	622
2.10	0	90	142	-	221	-	344
		85	176	-	274	-	426

S = slope - EU = emission uniformity • Inlet pressure = 0.7 bar

** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with flat dripper

P0™ - P1® - P5™

The light drip line with flat dripper allows seasonal and multi-seasonal use thanks to the wide range of thicknesses and flow rates available. The flat dripper guarantees extremely low localised head losses, with the possibility of achieving high line lengths for each of the many available diameters.

Features and advantages:

- The wide range of available thicknesses means that it has good abrasion resistance and can be used for multiple years in the presence of soil insects
- The special design of the labyrinth reduces sensitivity to pressure and increases the self-cleaning effect due to the higher degree of turbulence that is developed
- Ability to create drip lines of significantly greater length for each of the many available diameters
- Excellent uniformity and the ability to combine the low flow rates of drippers with very large diameters (up to 29 mm) makes it possible to lay the tube over very long distances.
- The integrated filter prevents clogging
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- The presence of the special internal Flap system means it can be used in subirrigation
- In addition to open field horticultural crops, the wide range of available spacings means it can also be used for orchards, or emergency and root irrigation.
- Complies with ISO 9261 standards
- Resistant to UV light and commonly used fertilisers



IDEAL IN CONDITIONS OF
REDUCED SPACING

LIGHT DRIP LINE WITH FLAT ULTRA-COMPACT DRIPPER

Availability of product types

Product	nominal internal Ø		Packaging type	Thickness
	mm	inch		
-			reel	mils
P0	16	5/8	standard	5-6-8
P0 ULTRA	22	7/8	standard	6-7-8



Example of a dripper



THE HISTORIC DRIP
LINE BY IRRITEC

LIGHT DRIP LINE WITH FLAT DRIPPER

Availability of product types

Product	nominal internal Ø		Packaging type	Thickness
	mm	inch		
-			reel	mils
P1 Small	12	1/2	standard	6-8-12-15-24
P1	16	5/8	standard	5-6-7-8-10-12-15-18-24
			medium	6-7-8-10-12-15-18
			small	6-7-8-10-12-15-18
P1 ULTRA	22	7/8	standard	6-7-8-10-12-15-18-24
P1 MAXI	25	1	standard	10-12-15
P1 EXTRA	29	1 1/8	standard	10-12



Example of a dripper



LONGER, LARGER AND STRONGER
LABYRINTH PATH

LIGHTDRIP LINE WITH LONG LABYRINTH FLAT DRIPPER

Availability of product types

Product	nominal internal Ø		Packaging type	Thickness
	mm	inch		
-			reel	mils
P5	16	5/8	standard	6-7-8-10-12-15-18-24
			medium	6-7-8-10-12-15-18
			small	6-7-8-10-12-15-18
P5 ULTRA	22	7/8	standard	6-7-8-10-12-15-18-24
P5 MAXI	25	1	standard	10-12-15
P5 EXTRA	29	1 1/8	standard	10-12



Example of a dripper



** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with ultra-compact dripper

P0™

IDEAL FOR NARROW SPACING

LIGHT DRIP LINE WITH FLAT ULTRA-COMPACT HIGH PERFORMANCE DRIPPER

P0™ is the brand new Irritec® light drip line, realised with the extremely small and innovative, flat moulded dripper that generates imperceptible head losses, ideal for narrow spacing and long length lines. The compact and efficient dripper makes P0™ ideal for single-season crops with narrow spacing.

Features and advantages:

- Dripline manufactured using only top-quality virgin raw materials.
- Dripper developed and manufactured with the most modern and advanced technologies.
- Inlet filter with 3D development that significantly increases the filtering surface area of the dripper.
- Large filtering surface area in comparison to the small surface area of the dripper itself.
- High-performance turbulent labyrinth with wide passage cross-sections enables very low flow exponents to be achieved.
- The turbulence developed inside the labyrinth prevents the accumulation of sedimentation and reduces the risk of clogging.
- Coefficient of variation (CV) among the lowest on the market.
- Drippers bonded to the inner wall of the co-extruded drip line.
- Complies with ISO 9261 standards.
- Resistant to UV light and commonly used fertilisers.
- Precision and efficiency alternative for single-season crops with spacings from 10 cm.

Characteristics of PE tube

nominal internal Ø	Internal Ø	External Ø	Thickness			Fittings and valve connections	Max. Operating pressure		kd
			mm	mils	mm		bar	psi	
16 P0	5/8	16.1	16.35	5	0.12	A1 - C2	0.60	8.70	0.10
			16.40	6	0.15	A1 - C2	0.70	10.10	
			16.50	8	0.20	A1 - C2	0.90	13.00	
22 P0 ULTRA	7/8	22.3	22.60	6	0.15	A2 - C3	0.50	7.30	0.02
			22.65	7	0.18	A2 - C3	0.60	8.70	
			22.70	8	0.20	A2 - C3	0.70	10.10	

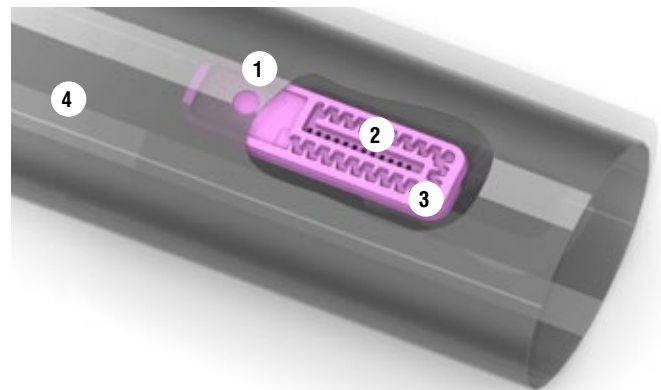
Pressure - flow rate ratio

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Pressure (bar)					
	0.5	0.7	1.0	1.2	1.4	1.6
0.60	0.43	0.50	0.60	0.65	0.71	0.76
0.80	0.59	0.69	0.82	0.90	0.96	1.03
1.10	0.80	0.95	1.12	1.22	1.31	1.40
1.60	1.14	1.36	1.60	1.75	1.89	2.00
2.00	1.44	1.70	2.00	2.20	2.38	2.51

Field of application



Drip line P0™



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent flow labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with ultra-compact dripper

PO™

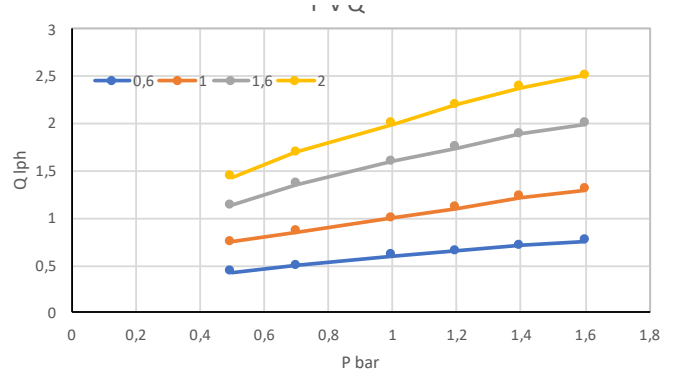
Dripper specifications

Nominal flow rate at 1.0 bar/14.5 psi	Flow rate at 0.7 bar / 10 psi	Size of Labyrinth in mm			Inlet Filter		Recommended filtration Mesh	Flow equation		CV %
		Height	Width	Length	Area mm ²	No. of Holes		k	x	
0.60 LPH	0.50 LPH	0.5	0.5	24	1.8	10	155	0.20	0.48	3
1.00 LPH	0.86 LPH	0.6	0.5	24	1.8	10	155	0.34	0.48	3
1.60 LPH	1.36 LPH	0.7	0.7	24	1.8	10	120	0.53	0.48	3
2.00 LPH	1.70 LPH	0.7	0.8	24	1.8	10	120	0.67	0.48	3



Pressure - flow rate ratio

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Pressure (bar)					
	0.5	0.7	1.0	1.2	1.4	1.6
0.60	0.43	0.50	0.60	0.65	0.71	0.76
1.00	0.75	0.86	1.00	1.11	1.22	1.30
1.60	1.14	1.36	1.60	1.75	1.89	2.00
2.00	1.44	1.70	2.00	2.20	2.38	2.51



Recommended lengths in metres with 1 bar of pressure

Q LPH	EU %	PO 16 mm						
		Spacing (cm)						
		10	15	20	25	30	40	50
0.60	95	74	96	115	133	149	179	206
	90	136	176	211	244	274	329	379
	85	168	218	261	301	338	406	468
1.00	95	54	70	84	97	108	130	150
	90	99	128	154	177	199	239	275
	85	122	158	190	219	246	295	340
1.60	95	40	52	62	72	80	96	111
	90	73	95	114	131	147	177	204
	85	90	117	141	162	182	218	252
2.00	95	35	45	54	62	69	83	96
	90	63	82	98	113	127	152	176
	85	78	101	121	140	157	188	217

EU= emission uniformity - Slope=0

Q LPH	EU %	PO 22 mm ULTRA						
		Spacing (cm)						
		10	15	20	25	30	40	50
0.60	95	129	167	200	231	259	311	358
	90	237	307	368	424	476	572	659
	85	293	379	455	525	589	708	815
1.00	95	94	121	146	168	188	226	261
	90	172	223	268	309	346	416	480
	85	213	276	331	381	428	514	593
1.60	95	70	90	108	124	140	167	193
	90	127	165	198	228	256	308	355
	85	157	204	245	282	317	381	439
2.00	95	60	78	93	107	120	144	166
	90	110	142	171	197	221	265	306
	85	136	176	211	243	273	328	378

Recommended lengths in metres with 0.7 bar of pressure

Q LPH	EU %	PO 16 mm						
		Spacing (cm)						
		10	15	20	25	30	40	50
0.50	95	73	94	113	130	146	175	202
	90	133	172	207	239	268	322	371
	85	165	213	256	295	331	398	458
0.86	95	53	68	82	95	106	127	147
	90	97	125	151	174	195	234	270
	85	120	155	186	214	241	289	333
1.36	95	39	51	61	70	79	94	109
	90	72	93	111	128	144	173	200
	85	89	115	138	159	178	214	247
1.70	95	34	44	52	60	68	81	94
	90	62	80	96	111	124	149	172
	85	76	99	119	137	153	184	212

EU= emission uniformity - Slope=0

Q LPH	EU %	PO 22 mm ULTRA						
		Spacing (cm)						
		10	15	20	25	30	40	50
0.50	95	126	163	196	226	254	305	351
	90	232	300	360	415	467	560	646
	85	287	371	446	514	577	693	798
0.86	95	92	119	143	164	185	222	255
	90	169	218	262	302	339	407	470
	85	208	270	324	373	419	504	581
1.36	95	68	88	106	122	137	164	189
	90	125	162	194	224	251	301	347
	85	154	200	240	276	310	373	429
1.70	95	59	76	91	105	118	141	163
	90	108	139	167	193	216	260	299
	85	133	172	206	238	267	321	370

** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with flat dripper

P1®

THE HISTORIC IRRITEC® drip line



The light drip line with flat dripper P1® is a “historic” product, synonymous with reliability, excellent performance, strength and versatility. Known across the world for its excellent characteristics, P1® is ideal for situations where the spacing is greater than 20 cm. The flat drip head guarantees extremely low, localised head losses, resulting in the uniformity of emission along the entire length of the drip line, and with the same uniformity, allows longer lateral lines to be laid out.

Features and advantages

- Lightweight drip lines are the ideal solution when spacing is greater than 20 cm.
- The wide range of available thicknesses and flow rates allows for seasonal and multi-seasonal use, even in the presence of stones and soil insects.
- The special design of the labyrinth reduces the sensitivity to pressure and increases the self-cleaning effect due to the higher degree of turbulence that is developed.
- The flat drip head guarantees extremely low, localised head losses, resulting in the uniformity of emission along the entire length of the drip line.
- Excellent uniformity and the ability to combine the low flow rates of drippers with very large diameters (up to 29 mm) makes it possible to lay the tube over very long distances.
- The integrated filter prevents clogging.
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water.
- The presence of the special internal Flap system means it can be used in subirrigation.

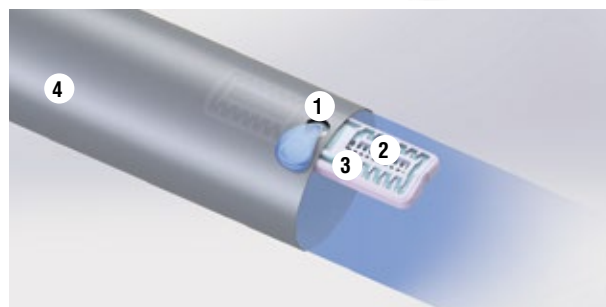


Characteristics of PE tube

nominal Ø	Internal Ø		External Ø		Thickness		Fittings and valve connections		Max. Operating pressure	
	mm	inch	mm	mm	mils	mm	unit	bar	psi	
12	1/2	11.8	12.10	6	0.150		C1	0.70	10.15	
			12.20	8	0.200		C1	0.90	13.00	
			12.40	12	0.300		C1	1.30	18.80	
			12.60	15	0.400		C1	1.60	23.20	
			13.00	24	0.600		C1	2.50	36.00	
16	5/8	16.1	16.35	5	0.125	A1 - B1 (from 15 to 24 mil) - C2	0.60	8.70		
			16.40	6	0.150	A1 - B1 (from 15 to 24 mil) - C2	0.70	10.10		
			16.45	7	0.180	A1 - B1 (from 15 to 24 mil) - C2	0.80	11.60		
			16.50	8	0.200	A1 - B1 (from 15 to 24 mil) - C2	0.90	13.00		
			16.60	10	0.250	A1 - B1 (from 15 to 24 mil) - C2	1.10	16.00		
			16.70	12	0.300	A1 - B1 (from 15 to 24 mil) - C2	1.30	18.90		
			16.90	15	0.400	A1 - B1 (from 15 to 24 mil) - C2	1.60	23.20		
			17.00	18	0.450	A1 - B1 (from 15 to 24 mil) - C2	1.80	26.10		
			17.30	24	0.600	A1 - B1 (from 15 to 24 mil) - C2	2.00	29.00		
22	7/8	22.3	22.60	6	0.150	A2 - B2 (from 15 to 24 mil) - C3	0.50	7.30		
			22.65	7	0.177	A2 - B2 (from 15 to 24 mil) - C3	0.60	8.70		
			22.70	8	0.200	A2 - B2 (from 15 to 24 mil) - C3	0.70	10.10		
			22.80	10	0.250	A2 - B2 (from 15 to 24 mil) - C3	0.90	13.00		
			22.90	12	0.300	A2 - B2 (from 15 to 24 mil) - C3	1.00	14.50		
			23.10	15	0.400	A2 - B2 (from 15 to 24 mil) - C3	1.20	17.40		
			23.20	18	0.450	A2 - B2 (from 15 to 24 mil) - C3	1.30	18.80		
			23.50	24	0.600	A2 - B2 (from 15 to 24 mil) - C3	1.70	24.60		
			25.60	10	0.250	A3 - C4	0.80	11.60		
			25.70	12	0.300	A3 - C4	0.90	13.00		
25	1	25.1	25.90	15	0.380	A3 - C4	1.10	16.00		
			29.10	10	0.250	A4 - C5	0.70	10.10		
			29.20	12	0.300	A4 - C5	0.80	11.60		



Drip line P1



- 1 - Round or flap Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube






Field of application



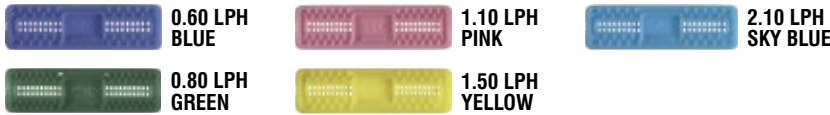
** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with flat dripper

Dripper specifications

Flow rate nominal LPH at 1.0 bar/14.5 psi	Colour	Flow rate LPH		Size of Labyrinth in mm			Inlet Filter		Recommended filtration	Flow equation		CV
		at 0.7 bar / 10 psi		Height	Width	Length	Area mm ²	No. of Holes	Mesh	k	x	%
0.60		0.50		0.45	0.45	40	6.0	20	155	0.19	0.48	≤ 2.5
0.80		0.66		0.48	0.50	40	6.3	20	155	0.26	0.48	≤ 2.5
1.10		0.92		0.60	0.55	40	7.0	20	120	0.38	0.48	≤ 2.5
1.50		1.20		0.65	0.65	40	7.0	20	120	0.51	0.48	≤ 2.5
2.10		1.75		0.78	0.70	40	7.6	20	120	0.69	0.48	≤ 2.5

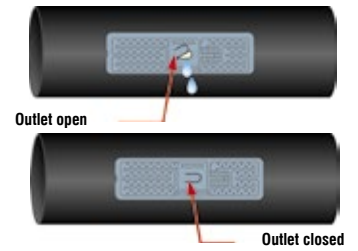
Flow rates available



Protected outlet

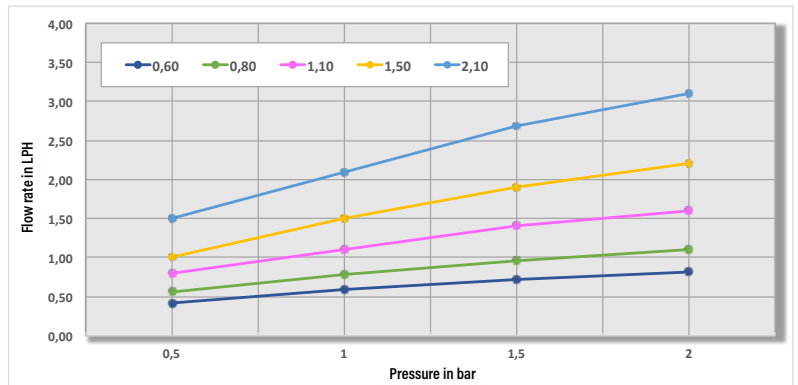
The protected outlet system, fine-tuned by the research and development office at Irritec® allows the P1™ to be buried in the soil, eliminating issues with the aspiration of mud and debris, and minimising the possibility of root intrusion. The system operates by means of a "flap" achieved by the special machining of the emission hole. During the irrigation cycle the flap lifts up and guarantees a steady outflow of water and, at the end of the irrigation cycle, the flap returns to its standby position, closing the emission hole and, therefore, prevents any infiltration of mud and debris.

P1 available in 6-8 mil and P1 ULTRA available 10-12 and 15 mil, with flow rates of 0.6-0.80-1.10-1.50-2.10



Pressure - flow rate ratio

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Pressure (bar)					
	0.5	0.7	1.0	1.2	1.5	2.0
0.60	0.42	0.50	0.60	0.65	0.72	0.82
0.80	0.56	0.66	0.79	0.87	0.96	1.10
1.10	0.80	0.92	1.11	1.22	1.40	1.60
1.50	1.00	1.20	1.50	1.69	1.90	2.20
2.10	1.50	1.75	2.09	2.34	2.68	3.10



Recommended lengths in metres, based on EU

P1 12 mm SMALL						
Q LPH	EU %	Spacing (cm)				
		20	30	40	50	60
0.60	90	121	157	189	218	245
	85	149	194	234	270	304
0.80	90	99	129	156	180	202
	85	123	160	193	223	250
1.10	90	80	105	126	146	164
	85	99	129	156	180	202
1.50	90	66	86	104	120	135
	85	82	107	128	148	167
2.10	90	55	71	86	99	111
	85	68	88	106	122	137

P1 16 mm						
Q LPH	EU %	Spacing (cm)				
		20	30	40	50	60
0.60	90	210	272	326	376	423
	85	260	336	404	465	523
0.80	90	172	223	268	309	346
	85	214	276	332	383	430
1.10	90	140	181	218	251	282
	85	173	224	269	311	349
1.50	90	117	151	181	209	234
	85	144	186	224	258	290
2.10	90	96	124	149	172	193
	85	119	154	185	213	239

P1 22 mm ULTRA						
Q LPH	EU %	Spacing (cm)				
		20	30	40	50	60
0.60	90	368	477	573	660	742
	85	456	590	709	817	918
0.80	90	302	391	470	542	608
	85	375	485	582	671	754
1.10	90	244	316	379	437	491
	85	302	391	469	541	608
1.50	90	203	263	315	363	408
	85	251	325	390	449	505
2.10	90	167	217	260	300	337
	85	207	268	322	371	416

P1 25 mm MAXI						
Q LPH	EU %	Spacing (cm)				
		20	30	40	50	60
0.60	90	455	589	708	816	916
	85	563	729	875	1009	1133
0.80	90	373	483	580	669	751
	85	462	599	719	829	931
1.10	90	304	393	472	544	611
	85	376	486	584	673	756
1.50	90	252	327	392	452	508
	85	312	404	485	559	628
2.10	90	208	270	324	373	419
	85	257	333	400	461	518

P1 29 mm EXTRA						
Q LPH	EU %	Spacing (cm)				
		20	30	40	50	60
0.60	90	566	733	880	1015	1140
	85	700	907	1089	1256	1410
0.80	90	465	601	722	833	935
	85	576	746	895	1032	1159
1.10	90	378	489	588	677	761
	85	467	605	727	838	941
1.50	90	314	407	488	563	632
	85	388	503	604	696	782
2.10	90	259	335	403	464	522
	85	320	415	498	574	645

EU = emission uniformity
• Inlet pressure = 1.0 bar

For fittings and connection valves, see page Xxx
For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with long labyrinth flat dripper

P5™

**LONGER,
LARGER AND STRONGER LABYRINTH
PATH!**

P5™ is the light drip line with a long labyrinth flat dripper that is both larger and more resistant to clogging. The larger cross-section of the labyrinth means it is ideal for difficult-to-filter waters. It is particularly recommended when large volumes of water need to be delivered quickly and where spacing of more than 60 cm is required.

Features and advantages

- Retains all the excellent characteristics of the drip line P1®.
- The long labyrinth guarantees high performance in terms of uniformity of emission.
- The larger cross-section of the labyrinth therefore makes it ideal with difficult to filter waters.
- It also offers a wide range of spacing over 60 cm, and is suitable for high flow rates and where large volumes of water need to be delivered quickly.
- In addition to open field horticultural crops, the wide range of available spacings means it can also be used for orchards, or emergency and root irrigation.
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- Excellent uniformity of emission and the ability to combine the low flow rates of drippers with very large diameters (up to 29 mm) makes it possible to extend the lateral lines over very long distances.
- The special design of the labyrinth reduces sensitivity to pressure and increases the self-cleaning effect due to the higher degree of turbulence that is developed.

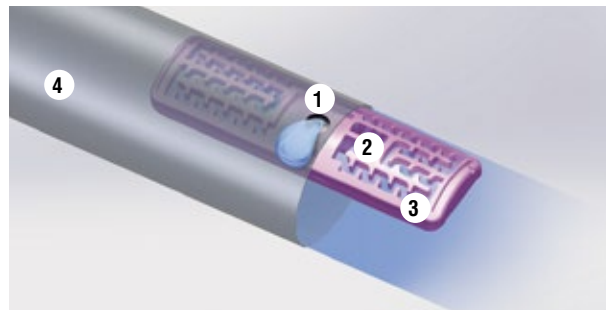


Characteristics of PE tube

nominal Ø		Internal Ø	External Ø	Thickness		Fittings and connection valves	Max. Operating pressure	
mm	inch	mm	mm	mils	mm	unit	bar	psi
16 P5	5/8	16.1	16.40	6	0.150	A1 - B1 (from 15 to 24 mil) - C2	0.70	10.10
			16.45	7	0.180	A1 - B1 (from 15 to 24 mil) - C2	0.80	11.60
			16.50	8	0.200	A1 - B1 (from 15 to 24 mil) - C2	0.90	13.00
			16.60	10	0.250	A1 - B1 (from 15 to 24 mil) - C2	1.10	16.00
			16.70	12	0.300	A1 - B1 (from 15 to 24 mil) - C2	1.30	18.90
			16.90	15	0.400	A1 - B1 (from 15 to 24 mil) - C2	1.60	23.20
			17.00	18	0.450	A1 - B1 (from 15 to 24 mil) - C2	1.80	26.10
			17.30	24	0.600	A1 - B1 (from 15 to 24 mil) - C2	2.00	29.00
22 P5 ULTRA	7/8	22.3	22.60	6	0.150	A2 - B2 (from 15 to 24 mil) - C3	0.50	7.30
			22.65	7	0.177	A2 - B2 (from 15 to 24 mil) - C3	0.60	8.70
			22.70	8	0.200	A2 - B2 (from 15 to 24 mil) - C3	0.70	10.10
			22.80	10	0.250	A2 - B2 (from 15 to 24 mil) - C3	0.90	13.00
			22.90	12	0.300	A2 - B2 (from 15 to 24 mil) - C3	1.00	14.50
			23.10	15	0.400	A2 - B2 (from 15 to 24 mil) - C3	1.20	17.40
			23.20	18	0.450	A2 - B2 (from 15 to 24 mil) - C3	1.30	18.90
			23.50	24	0.600	A2 - B2 (from 15 to 24 mil) - C3	1.70	24.70
25 P5 MAXI	1	25.1	25.60	10	0.250	A3 - C4	0.80	11.60
			25.70	12	0.300	A3 - C4	0.90	13.00
			25.85	15	0.380	A3 - C4	1.10	16.00
29 P5 EXTRA	1 1/8	28.6	29.10	10	0.250	A4 - C5	0.70	10.10
			29.20	12	0.300	A4 - C5	0.80	11.60



Drip line



- 1 - Round or flap Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

Field of application



** Description of the Fittings, see page 63

Drip Irrigation | Light drip line with long labyrinth flat dripper

Dripper specifications

Nominal flow rate at 1.0 bar/14.5 psi	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Recommended filtration mesh	CV %
	Height	Width	Length	Area mm ²	No. of Holes	k	x		
1.10	0.60	0.60	78	5.8	8	0.37	0.48	155	≤ 2.5
1.50	0.70	0.65	78	5.8	8	0.46	0.52	155	≤ 2.5
2.10	0.78	0.85	78	7.5	8	0.68	0.50	120	≤ 2.5
2.80	0.80	0.95	78	7.5	8	0.93	0.48	120	≤ 2.5
3.80	1.05	0.95	78	8.1	8	1.26	0.48	120	≤ 2.5

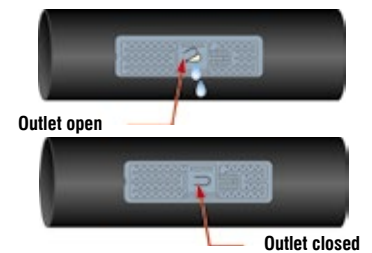
Flow rates available



Protected outlet

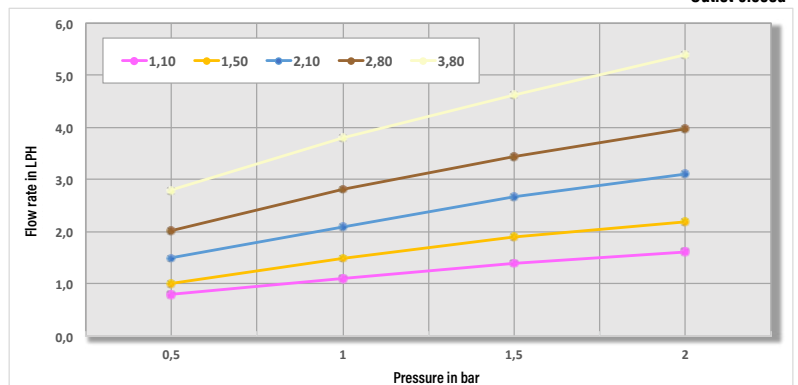
The protected outlet system, fine-tuned by the research and development office at Irritec® allows the P5 to be buried in the soil, eliminating issues with the aspiration of mud and debris, and minimising the possibility of root intrusion. The system operates by means of a "flap" achieved by the special machining of the emission hole. During the irrigation cycle the flap lifts up and guarantees a steady outflow of water and, at the end of the irrigation cycle, the flap returns to its standby position, closing the emission hole and, therefore, prevents any infiltration of mud and debris.

P5 available in 6-8 mil and P5 ULTRA in 10 - 12 and 15 mil, with flow rates of 1.10-1.50-2.10-2.80-3.80



Pressure - flow rate ratio

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Pressure (bar)					
	0.5	0.7	1.0	1.2	1.5	2.0
1.10	0.80	0.92	1.11	1.22	1.40	1.60
1.50	1.00	1.20	1.50	1.69	1.90	2.20
2.10	1.50	1.75	2.09	2.34	2.68	3.10
2.80	1.99	2.32	2.76	3.01	3.35	3.88
3.80	2.73	3.20	3.81	4.15	4.60	5.30



Recommended lengths in metres, based on EU

Q LPH		P5 16 mm							
		EU % Spacing (cm)							
		20	30	40	50	60	75	100	
1.10	90	143	185	222	256	287	331	397	
	85	176	228	274	316	355	409	491	
1.50	90	115	148	178	205	230	266	319	
	85	142	184	221	254	286	329	395	
2.10	90	93	121	145	167	188	217	260	
	85	116	150	180	207	233	268	322	
2.80	90	79	102	122	141	158	183	219	
	85	97	126	151	174	196	226	271	
3.80	90	65	85	102	117	131	151	182	
	85	81	104	125	145	162	187	225	

Q LPH		P5 22 mm ULTRA							
		EU % Spacing (cm)							
		20	30	40	50	60	75	100	
1.10	90	250	324	389	449	504	580	697	
	85	309	401	481	555	623	718	863	
1.50	90	201	260	312	360	404	466	560	
	85	249	322	387	446	501	578	649	
2.10	90	164	212	255	294	330	380	457	
	85	203	263	316	364	409	471	566	
2.80	90	137	177	213	246	276	318	382	
	85	169	219	264	304	341	393	472	
3.80	90	115	148	178	205	231	266	319	
	85	142	183	220	254	285	328	394	

Q LPH		P5 25 mm MAXI						
		EU % Spacing (cm)						
		20	30	40	50	60	75	100
1.10	90	313	406	487	561	631	725	873
	85	387	501	602	694	779	899	1079
1.50	90	248	321	386	445	499	575	691
	85	308	398	478	552	619	714	857
2.10	90	201	261	313	361	406	467	561
	85	249	323	388	447	502	579	695
2.80	90	170	221	265	306	343	395	475
	85	211	273	328	378	425	490	588
3.80	90	142	184	220	254	286	329	395
	85	175	227	272	314	353	406	488

Q LPH		P5 29 mm EXTRA							
		EU % Spacing (cm)							
		20	30	40	50	60	75	100	
1.10	90	385	499	599	699	785	905	1086	
	85	482	624	749	864	970	1118	1343	
1.50	90	309	400	480	554	622	716	860	
	85	383	496	596	687	771	889	1067	
2.10	90	251	325	390	450	505	582	699	
	85	311	402	483	557	626	721	866	
2.80	90	212	275	330	381	427	493	592	
	85	263	340	409	471	529	610	732	
3.80	90	177	228	275	316	355	410	492	
	85	218	282	339	391	439	506	608	

EU = emission uniformity
* Inlet pressure = 1.0 bar

For fittings and connection valves, see page Xxxx
For packaging - packing specifications, see page Xxxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with flat dripper

M5™ - M7™

The classic drip line with flat dripper is ideal for orchards and perfect for multiannual crops. Available with a compact drip head, with lower head loss benefiting uniformity and maximum lengths, or a larger drip head with a long labyrinth path allowing better pressure control.

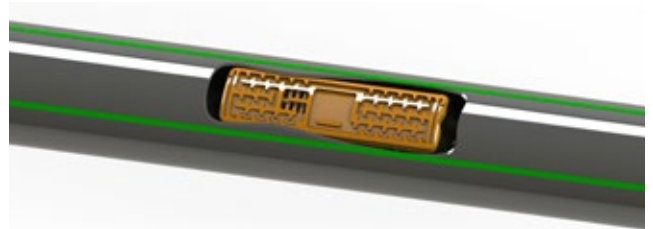
Features and advantages:

- Ideal for orchards and perfect for multiannual crops
- The special design of the flat dripper allows for excellent emission uniformity
- The special design of the labyrinth reduces sensitivity to pressure and increases the self-cleaning effect due to the higher degree of turbulence that is developed
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- Reduced sensitivity of the flow rate when the pressure changes

M5™ **NEW REEL OF CARTON** LIGHT DRIP LINE WITH FLAT DRIPPER

Available product type

Product	Nominal Outside Ø	Packaging type	Wall thickness
	mm	reel	mil
M5™	16	standard	24-35
	20	standard	35



Example of a dripper

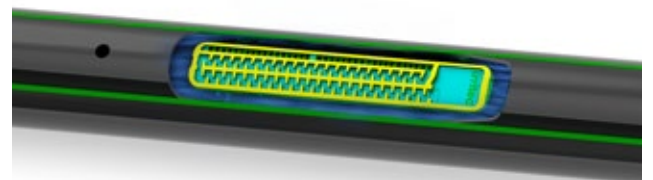


2.10 LPH
SKY BLUE

M7™ **NEW REEL OF CARTON** CLASSIC DRIPLINE WITH FLAT DRIPPER AND LONG LABYRINTH

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
	mm	roll	mils
M7	16	standard	35-40
	20	standard	40-44



Example of a dripper



2.10 LPH
SKY BLUE

Field of application



** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with flat dripper

D5™ - D7™

The classic drip line with flat dripper **D5™** and **D7™** is ideal for orchards and use with multiannual crops. The special design of the flat dripper allows optimal uniformity while the special design of the labyrinth reduces sensitivity to pressure and increases the self-cleaning effect due to the higher degree of turbulence that is developed. The **D5™** model has the same dimensions as the classic drip line but is packaged in a cardboard reel.

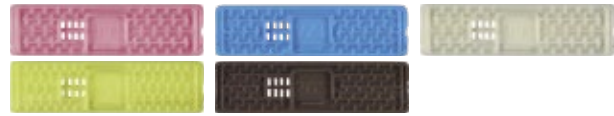
Features and advantages

- The heavy drip line has minimal localised head loss as a result of the special design of the dripper.
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- Excellent uniformity of emission and the ability to combine the low flow rates of drippers with very large diameters (up to 29 mm) makes it possible to extend the lateral lines over very long distances.
- D5 is produced in rolls.
- M5 is produced in reels.



Drip line specifications

Nominal flow rate LPH at 1.0 bar	Recommended filtration	Colour	Pressure (bar) / flow rate (LPH) ratio					
			0.5	0.7	1.0	1.2	1.5	2.0
1.10	120 mesh	pink	0.80	0.92	1.11	1.22	1.40	1.60
1.50	120 mesh	yellow	1.00	1.25	1.50	1.65	1.90	2.20
2.10	120 mesh	blue	1.50	1.77	2.09	2.32	2.59	3.00
2.80	120 mesh	green	1.99	2.32	2.76	3.01	3.35	3.88
3.80	100 mesh	brown	2.73	3.20	3.81	4.15	4.60	5.30



Available product type

Product	Nominal Outside Ø	Packaging type	Wall thickness
	mm		
D5™	16	standard	35-40
	20	standard	40



CLASSIC DRIPLINE WITH FLAT DRIPPER AND LONG LABYRINTH



Dripper characteristics D7

Nominal flow rate lph a 1,0 bar	Recommended filtration	Color	Pressure (bar) /flow-rate (lph)					
			0,5	1,0	1,5	2,0	2,5	3,0
1,10	120 mesh	pink	0,81	1,13	1,37	1,57	1,75	1,91
1,50	120 mesh	yellow	1,09	1,52	1,85	2,13	2,37	2,58
2,10	120 mesh	blue	1,53	2,11	2,56	2,93	3,25	3,54
3,80	100 mesh	green	2,76	3,74	4,51	5,09	5,66	6,16
7,80	100 mesh	brown	5,62	7,84	9,52	10,93	12,16	13,28



Availability of product types

Product	nominal external Ø	Packaging type	Thickness
	mm		
D7	16	standard	35-40
	20	standard	40-44
	23	standard	47
	25	standard	47

Field of application



** Description of the Fittings, see page 63

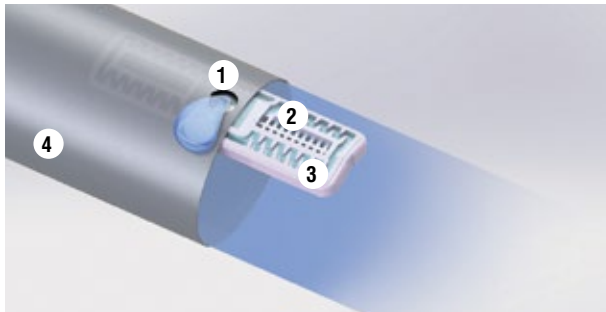
Drip Irrigation | Classic drip line with flat dripper

D5™ - M5™

Dripper specifications

Nominal flow rate at 1.0 bar/14.5 psi	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Recommended filtration mesh	CV %
	Height	Width	Length	Area mm ²	No. of Holes	k	x		
1.10	0.60	0.60	78	5.8	8	0.38	0.48	155	≤ 2.5
1.50	0.70	0.65	78	5.8	8	0.51	0.52	155	≤ 2.5
2.10	0.78	0.85	78	7.5	8	0.69	0.50	120	≤ 2.5
2.80	0.80	0.95	78	7.5	8	0.93	0.48	120	≤ 2.5
3.80	1.05	0.95	78	8.1	8	1.26	0.48	100	≤ 2.5

Drip line



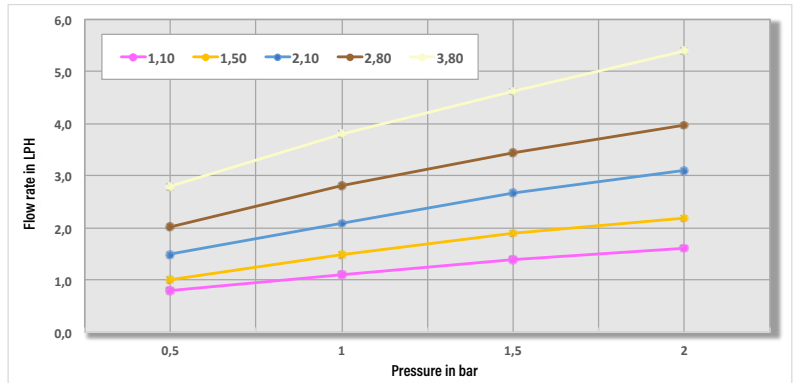
- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

Flow rates available



Pressure - flow rate ratio

Nominal flow rate LPH at 1.0 bar / 14.5 psi	Pressure (bar)					
	0.5	0.7	1.0	1.2	1.5	2.0
1.10	0.80	0.92	1.11	1.22	1.40	1.60
1.50	1.00	1.20	1.50	1.69	1.90	2.20
2.10	1.50	1.75	2.09	2.34	2.68	3.10
2.80	2.01	2.38	2.82	3.06	3.45	3.98
3.80	2.80	3.20	3.81	4.15	4.62	5.40



Recommended lengths in metres, based on EU

Flow rate lph	EU %	Ø 16 mm						
		Spacing (cm)						
		20	30	40	50	60	75	100
1.10	90	108	140	168	194	217	250	301
	85	133	173	207	239	269	310	372
1.50	90	87	112	135	155	174	201	241
	85	107	139	167	193	216	249	299
2.10	90	71	91	110	126	142	163	196
	85	87	113	136	156	175	202	243
2.80	90	60	77	93	107	120	138	166
	85	74	95	115	132	148	171	205
3.80	90	50	64	77	89	100	115	138
	85	61	79	95	110	123	142	171

Flow rate lph	EU %	Ø 20 mm						
		Spacing (cm)						
		20	30	40	50	60	75	100
1.10	90	163	212	256	295	332	383	460
	85	201	262	316	365	410	473	569
1.50	90	133	173	209	241	271	313	376
	85	165	215	259	299	336	387	466
2.10	90	107	139	167	193	217	251	301
	85	132	172	207	239	269	310	373
2.80	90	91	118	142	164	184	212	255
	85	112	146	175	203	228	263	316
3.80	90	75	98	118	136	153	176	212
	85	93	121	146	168	189	218	262

S = slope - EU = emission uniformity

• Inlet pressure = 1.0 bar

For fittings and connection valves, see page Xxx

For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with flat dripper

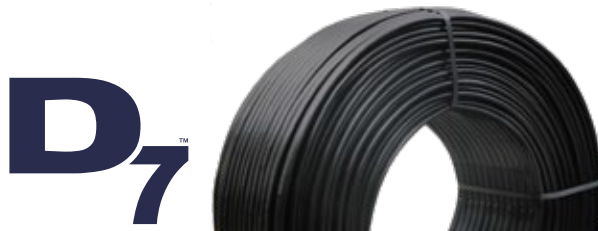
D7™

LASTS THE ENTIRE DURATION OF THE CROP!

The long labyrinth flat dripper version **D7™**, as a result of the large size of the innovative flat dripper, has an extensive filtering surface area, which, combined with the turbulent labyrinth with wide passage cross-sections, makes it ideal for water that is heavily laden with solid particles. High filtration capacity.

Features and advantages

- Ideal for orchards. Perfect for multiannual crops with very long lateral lines.
- The innovative, medium-sized flat dripper has a large filtering surface area, and can be used with water that is heavily laden with solid particles as a result of the turbulent labyrinth with wide passage cross-sections. This guarantees a compact form and ensures maximum uniformity even when very long lateral lines need to be laid.
- Classic DRIP LINE with flat dripper
- Excellent uniformity of emission and the ability to combine the low flow rates of drippers with very large diameters (up to 25 mm) makes it possible to extend the lateral lines over very long distances.
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- The long path of the labyrinth allows better pressure control.
- Reduced sensitivity of the flow rate when the pressure changes.



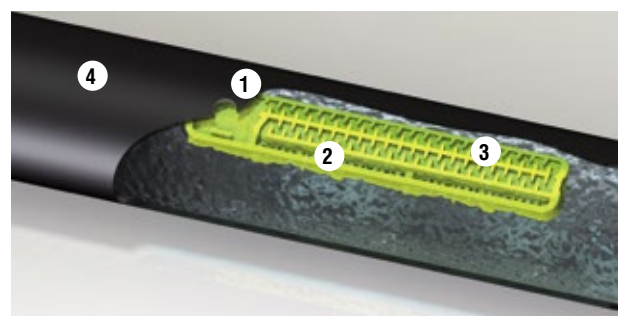
Characteristics of PE tube

nominal external Ø	Internal diameter	External diameter	Price list reference	Thickness		Fittings and valve connections	Max. operating pressure		Kd
				mils	mm		bar	psi	
16	13.6	15.3	FAGA30	30	0.75	F1-G1	2.5	36	0.4
		15.6	FAGA35	35	0.90	F1-G1	3.0	43	
		15.8	FAGA40	40	1.00	F1-G1	4.0	58	
20	17.5	19.5	FAGB35	35	0.90	D3-E2-F2	3.0	43	0.1
		19.7	FAGB40	40	1.00	D3-E2-F2	3.5	51	
		19.9	FAGB44	44	1.10	D3-E2-F2	3.5	51	
		20.1	FAGB47	47	1.20	D3-E2-F2	4.0	58	
23	20.8	23.2	FAGH47	47	1.20	H1	3.5	51	0.09
25	22.6	25.0	FAGF47	47	1.20	H1	3.0	43	0.08

Field of application



Drip line








- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

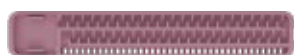
Drip Irrigation | Classic drip line with flat dripper

D7™

Dripper specifications

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Colour	Size of Labyrinth in mm			Inlet Filter		Recommended filtration Mesh	Flow equation		CV %
		height	width	length	area mm ²	no. of holes		k	x	
1.1		0.8	0.60	78	12	38	120	0.37	0.48	2.5
1.5		0.9	0.70	78	12.8	38	120	0.50	0.48	2.5
2.1		1.1	0.85	78	14.5	38	120	0.71	0.47	2.5
3.8		1.1	1.20	39	15.6	38	100	1.27	0.48	2.5
7.8		1.4	1.30	39	15.0	38	100	2.57	0.48	2.5

Flow rates available



1.1 LPH - PINK



1.5 LPH - YELLOW



2.1 LPH - SKY BLUE



3.8 LPH - GREEN



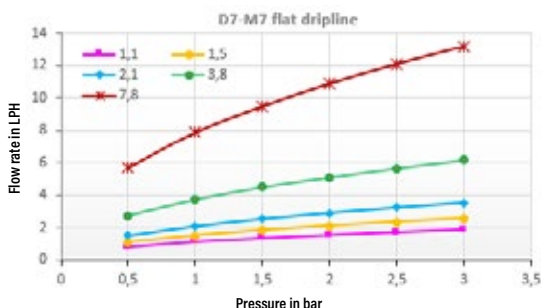
7.8 LPH - RED

Characteristics of PE tube

nominal Ø mm	Internal Ø inch	External Ø mm	Thickness		Fittings and valve connections unit	Max. Operating pressure	
			mm	mils		bar	psi
16	5/8	14.0	15.5	35	F1-G1	2.5	36
			15.8	35	F1-G1	3.0	43
			16.0	40	F1-G1	3.5	51
20	-	17.5	19.3	35	D3-E2-F2	3.0	43
			19.5	44	D3-E2-F2	3.5	51
			19.7	47	D3-E2-F2	3.5	51
			19.9	44	D3-E2-F2	4.0	58
23	-	20.8	23.2	47	H1	3.5	51
25	1	22.6	25.0	47	I1	3.0	43

Pressure - flow rate ratio

Nominal flow rate in LPH at 1.0 bar/14.5 psi	Pressure (bar)						
	0.5	1.0	1.5	2.0	2.5	3	
1.1	0.81	1.13	1.37	1.57	1.75	1.91	
1.5	1.09	1.52	1.85	2.13	2.37	2.58	
2.1	1.53	2.11	2.56	2.93	3.25	3.54	
3.8	2.76	3.74	4.51	5.09	5.66	6.16	
7.8	5.70	7.90	9.50	10.9	12.1	13.2	



Recommended lengths in metres, based on EU

Ø 16 mm								
Q lph	EU %	Spacing (cm)						
		20	30	40	50	60	75	100
1.10	90	111	144	173	200	225	259	312
	85	137	178	214	247	278	321	385
1.50	90	92	119	143	165	186	214	257
	85	113	147	177	204	229	265	318
2.10	90	75	97	117	135	152	175	210
	85	92	120	144	167	187	216	260
3.80	90	51	66	80	92	103	119	143
	85	63	82	98	113	127	147	177
7.80	90	32	42	51	58	65	75	91
	85	40	52	62	72	81	93	112

Ø 20 mm								
Q lph	EU %	Spacing (cm)						
		20	30	40	50	60	75	100
1.10	90	163	212	255	294	330	381	458
	85	201	262	315	363	409	471	567
1.50	90	134	175	210	243	273	315	378
	85	166	216	260	300	337	389	468
2.10	90	111	144	173	200	225	260	312
	85	137	178	214	247	278	321	385
3.80	90	75	97	117	135	152	175	210
	85	92	120	144	167	187	216	260
7.80	90	48	62	74	86	96	111	133
	85	59	76	91	106	119	137	164

EU = emission uniformity
• Slope = 0%
• Inlet pressure = 1.0 bar

For fittings and connection valves, see page Xxxx
For packaging - packing specifications, see page Xxxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with cylindrical dripper

Tandem® - Junior®

CLASSIC DRIP LINE WITH CYLINDRICAL DRIPPER

The classic drip line with cylindrical dripper is characterised by an outlet with four opposing emission holes that prevent the aspiration of impurities and simplify the installation. The dripper, equipped with an inlet filter, significantly reduces the risk of clogging caused by using poor quality water; The outlet holes of the dripper allow quick and easy installation without the need to check the position of the emission point, ensuring the tube is emptied at the end of the irrigation cycle.

WITH 4 EMISSION HOLES



TANDEM® CLASSIC DRIP LINE WITH CYLINDRICAL DRIPPER

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Tandem	16	standard	44
	20	standard	47



Example of a dripper



Field of application



SMALL DRIPPERS,
MINIMUM HEAD LOSS



JUNIOR® CLASSIC DRIP LINE WITH COMPACT CYLINDRICAL DRIPPER

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Junior®	16	standard	35-44
	20	standard	35-47



Example of a dripper



Field of application



** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with cylindrical dripper

Tandem®



Tandem® is the classic Irritec drip line with cylindrical dripper. The drip head with double perforation makes it possible to increase the surface area to be irrigated. Its four emission holes, positioned opposite to one another prevent the aspiration of impurities, make it easier to install.

- The turbulent flow dripper (self-cleaning) prevents the accumulation of sediment inside the labyrinth;
- The dripper, equipped with an inlet filter, greatly reduces the risk of clogging caused by using poor quality water;
- The outlet holes of the dripper allow quick and easy installation without the need to check the position of the emission point and ensure the pipework is emptied at the end of the irrigation cycle.
- Larger irrigated surface area with reduction in percolation;
- Ability to install lines with wider spacing but with the same yield in terms of flow rate and irrigated area, and with the possibility of installing longer lines



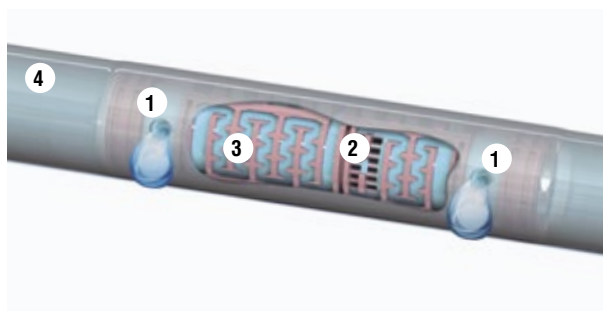
Characteristics of PE tube

Nominal diameter mm	Internal diameter mm	External diameter mm	Price list reference	Thickness		Fittings and valve connections unit	Max. operating pressure		Kd
				mils	mm		bar	psi	
16	13.6	15.6	FATA35	35	0.90	D1-E1-F1-G1	3.0	43	0.55
		16.0	FATA44	44	1.10	D1-E1-F1-G1	4.0	58	
20	17.5	19.5	FATB35	35	0.90	D3-E2-F2	3.0	43	0.30
		20.1	FATB47	47	1.20	D3-E2-F2	4.0	58	

Field of application



TANDEM drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

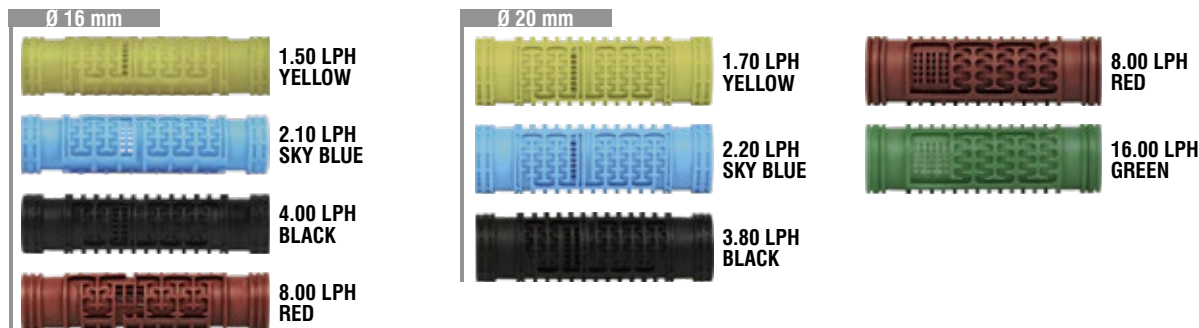
Drip Irrigation | Classic drip line with cylindrical dripper

Tandem®

Dripper specifications

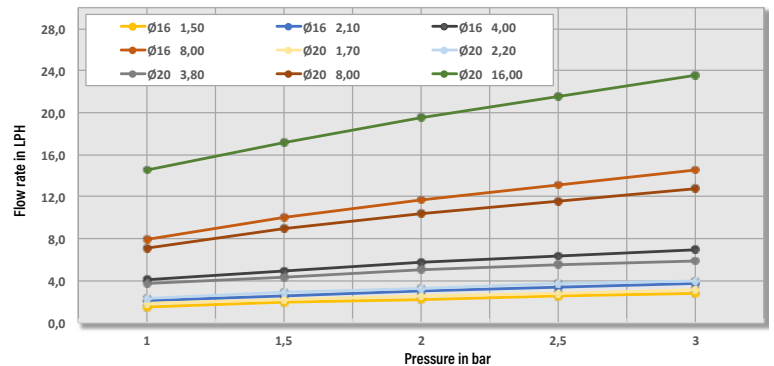
Nominal diameter	Nominal flow rate	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Recommended filtration	CV
		Length	Width	Height	Area mm ²	No. of Holes	k	x		
16	1.50	240	1.25	0.85	5	7	0.43	0.55	150	≤ 3
	2.10	240	1.35	1.00	10	10	0.69	0.50	120	≤ 3
	4.00	200	1.30	1.30	10	10	1.32	0.49	100	≤ 3
	8.00	140	1.90	1.40	34	24	2.48	0.51	100	≤ 3
20	1.70	320	1.30	1.00	10	7	0.56	0.52	150	≤ 3
	2.20	320	1.20	1.20	10	7	0.80	0.49	120	≤ 3
	3.80	310	1.40	1.50	19	14	1.20	0.48	100	≤ 3
	8.00	75	1.40	1.50	30	30	2.35	0.49	100	≤ 3
	16.00	150	1.40	1.50	60	60	4.94	0.47	100	≤ 3

Flow rates available



Pressure / flow rate ratio

Nominal diameter	Nominal flow rate	Pressure (bar)				
		1	1.5	2	2.5	3
16	1.50	1.49	1.90	2.20	2.50	2.80
	2.10	2.10	2.60	3.00	3.40	3.70
	4.00	4.05	4.90	5.70	6.30	6.90
	8.00	7.93	10.00	11.70	13.10	14.50
20	1.70	1.78	2.20	2.50	2.80	3.10
	2.20	2.26	2.90	3.30	3.70	4.00
	3.80	3.73	4.30	5.00	5.50	5.90
	8.00	7.10	9.00	10.40	11.60	12.70
	16.00	14.50	17.10	19.50	21.60	23.60



Recommended lengths in metres, based on EU

Flow rate LPH	EU %	TANDEM 16 mm								
		Spacing (cm)								
1.50	90	65	91	113	134	153	180	221	259	292
	85	81	113	141	167	191	224	275	321	363
2.10	90	54	75	94	111	127	149	183	216	244
	85	67	93	116	137	157	185	227	267	303
4.00	90	37	51	64	75	86	101	124	114	164
	85	45	63	79	93	107	125	154	179	202
8.00	90	24	33	41	48	55	65	80	93	106
	85	29	40	50	60	68	80	99	115	131

Flow rate LPH	EU %	TANDEM 20 mm								
		Spacing (cm)								
1.70	95	52	71	89	104	119	140	171	199	225
	90	95	131	163	193	220	258	315	368	416
2.20	85	118	162	202	239	272	319	391	456	516
	95	44	61	76	89	102	119	145	172	194
2.20	90	81	111	139	164	187	219	268	316	357
	85	100	138	171	202	213	271	331	391	442
3.80	95	34	48	59	70	79	93	114	132	150
	90	63	87	108	128	146	171	209	243	275
3.80	85	78	107	134	158	180	211	258	301	340
	95	22	31	38	48	51	60	73	85	96
8.00	90	41	56	70	82	94	110	134	155	176
	85	50	69	86	102	116	136	166	192	217
16.00	95	14	20	25	29	33	39	48	55	62
	90	26	36	45	53	61	71	87	101	114
	85	32	45	56	66	75	88	107	125	141

EU = emission uniformity

• Inlet pressure = 1.0 bar • Slope = 0

For fittings and connection valves, see page Xxx

For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with cylindrical dripper

Junior®



Junior® is the standard integrated drip line with smaller emitters than the Tandem®. This results in minimal head losses, allowing the installation of drip lines of significant lengths. The dripper regulates the flow rate, ensuring optimum uniformity during irrigation.

Features and advantages

- Reduced head loss as a result of the compactness of the dripper
- Retains all the technical features of the tandem dripper
- Also available in the 35 mil version
- Drip line with four emission holes positioned opposite to one another (applies to all cylindrical models) which prevent the aspiration of impurities, making it easier to install.
- The outlet holes of the dripper allow quick and easy installation without the need to check the position of the emission point, ensuring the tube is emptied at the end of the irrigation cycle.



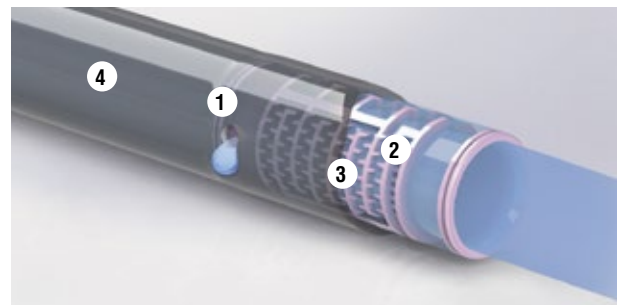
Characteristics of PE tube

Nominal diameter mm	Internal diameter mm	External diameter mm	Price list reference	Thickness		Fittings and valve connections unit	Max. operating pressure		Kd
				mils	mm		bar	psi	
16	13.6	15.6	FAJA35	35	0.90	D1-E1-F1-G1	3.0	43	0.25
		16.0	FAJA44	44	1.10	D1-E1-F1-G1	4.0	58	
20	17.5	19.5	FAJB35	35	0.90	D3-E2-F2	3.0	43	0.15
		20.1	FAJB47	47	1.20	D3-E2-F2	4.0	58	

Field of application



Drip line JUNIOR



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with cylindrical dripper

Junior®

Dripper specifications

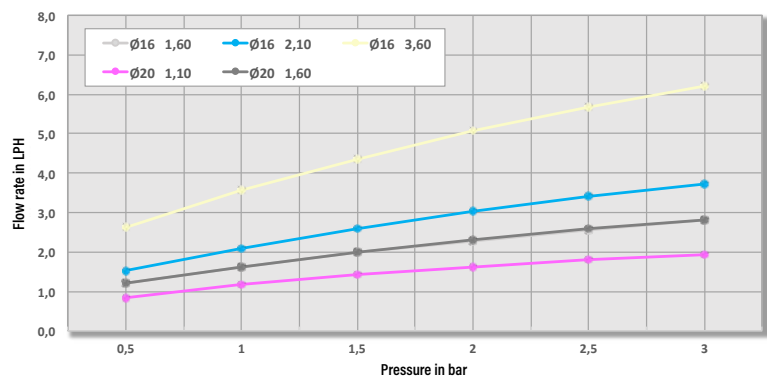
Nominal diameter	Nominal flow rate	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Recommended filtration	CV
		mm	LPH at 1.0 bar	Depth	Width	Length	Area mm ²	No. of Holes		
16	1.60	0.85	0.8	94	4.3	5	0.57	0.46	155	≤ 3
	2.10	0.90	0.9	70	12.0	20	0.66	0.50	120	≤ 3
	3.60	1.25	1.2	94	6.3	5	1.13	0.50	120	≤ 3
20	1.10	0.90	0.7	120	10.0	16	0.36	0.48	155	≤ 3
	1.60	0.90	0.8	110	6.0	7	0.57	0.46	155	≤ 3

Flow rates available



Pressure / Flow Rate Ratio, according to the thickness of the tube (mil)

Nominal diameter	Nominal flow rate	THK	Pressure (bar)						
			mm	LPH	mils	0.5	1	1.5	2
16	1.60	35	1.21	1.61	1.98	2.29	2.57	2.81	
		44	1.15	1.52	1.92	2.22	2.50	2.72	
	2.10	35	1.53	2.08	2.58	3.03	3.41	3.73	
		44	1.42	1.98	2.47	2.95	3.30	3.63	
	3.60	35	2.61	3.57	4.35	5.06	5.66	6.22	
		44	2.55	3.51	4.27	4.92	5.50	6.05	
20	1.10	35	0.84	1.19	1.43	1.63	1.82	1.94	
		47	0.77	1.09	1.34	1.52	1.69	1.80	
	1.60	35	1.21	1.61	1.98	2.30	2.58	2.82	
		47	1.14	1.51	1.90	2.21	2.49	2.71	



Recommended lengths in metres, based on EU

Flow rate LPH	EU %	JUNIOR 16 mm									
		Spacing (cm)									
		20	30	40	50	60	75	100	125	150	
1.60	90	82	108	131	152	171	198	239	276	310	
	85	102	134	162	187	211	244	294	340	382	
2.10	90	69	91	110	128	144	166	200	231	260	
	85	86	112	136	158	178	206	248	286	322	
3.60	90	49	64	78	90	101	117	141	163	184	
	85	60	79	96	111	125	145	175	202	227	

Flow rate LPH	EU %	JUNIOR 20 mm									
		Spacing (cm)									
		20	30	40	50	60	75	100	125	150	
1.10	90	163	214	258	298	336	388	467	540	607	
	85	201	264	319	369	415	480	578	667	750	
1.60	90	130	170	205	237	267	308	371	425	477	
	85	160	209	253	292	329	380	458	524	589	

EU = emission uniformity
 • Inlet pressure = 1.0 bar

• Slope = 0

For fittings and connection valves, see page Xxx
 For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating cylindrical dripper

Multibar™

The classic drip line with a pressure compensating cylindrical dripper is the ideal solution for irrigating multi-season crops and is also suitable for sloping terrain and uneven topography. The special design of the dripper allows efficient pressure compensation within a very wide range.

Features and advantages:

- The pressure compensating system of the dripper is ensured by a silicone membrane that maintains a constant flow rate when the operating pressure changes.
- Suitable for sloping terrain and uneven topography.
- The special design of the dripper allows efficient pressure compensation within a very wide range.
- Perfect fertiliser dosing at any part of the plant.
- Line lengths in excess of 800 metres can be realised.
- The Drop Stop model is characterised by the special design of the dripper that stops the flow at the end of the irrigation cycle, making it particularly suitable for crops that require short irrigation cycles.
- The version with the Anti-Siphon System prevents the aspiration of impurities.

Multibar™ C CLASSIC DRIP LINE WITH PRESSURE COMPENSATING CYLINDRICAL DRIPPER

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Multibar™ C	16	standard	35-44
	20	standard	35-47



Example of the dripper



2.10 LPH

Field of application



Multibar™ C a.s. - d.s. CLASS DRIP LINE WITH FLAT PRESSURE COMPENSATING, ANTI-SIPHON, AND DROP STOP DRIPPER

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Multibar C a.s. - d.s.	16	standard	35-44



Example of the dripper



2.10 LPH

Field of application



Drip Irrigation | Classic drip line with pressure compensating cylindrical dripper

Multibar™ C



Multibar™ C is the classic drip line with a pressure compensating cylindrical dripper, ideal for installations in areas with significant changes in ground level, where increased line lengths, constant flow rates in every section of the system and high precision emissions are required.

Features and advantages

- Ideal for irrigating multi-season crops.
- The pressure compensating system of the dripper is ensured by a silicone membrane that maintains a constant flow rate when the operating pressure changes.
- Suitable for sloping terrains and uneven topography.
- The special design of the dripper allows efficient pressure compensation within a very wide range.
- Perfect fertiliser dosing at any part of the plant.
- Drip line with two emission holes positioned opposite to one another (applies to all cylindrical models) which prevent the aspiration of impurities, making it easier to install.
- Line lengths in excess of 800 metres can be realised.

Drip line specifications

nominal Ø	Nominal flow rate LPH at 2.0 bar	Recommended filtration	Pressure (bar) / flow rate (LPH) ratio								
			0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	
16	1.10	155 mesh	0.91	1.04	1.08	1.13	1.15	1.15	1.15	1.13	
	1.60	155 mesh	1.56	1.58	1.55	1.60	1.62	1.65	1.62	1.60	
	2.10	155 mesh	2.05	2.12	2.12	2.10	2.10	2.09	2.08	2.06	
	2.90	155 mesh	2.86	2.92	2.96	2.98	2.94	2.91	2.85	2.80	
	3.80	155 mesh	3.70	3.84	3.85	3.92	3.94	3.92	3.88	3.81	
20	1.60	155 mesh	1.54	1.57	1.61	1.66	1.66	1.64	1.60	1.54	
	2.10	155 mesh	2.05	2.10	2.16	2.20	2.16	2.11	2.06	2.02	
	2.90	155 mesh	2.78	2.95	3.04	3.03	3.03	3.01	2.96	2.92	
	3.80	155 mesh	3.65	3.92	3.85	3.92	3.96	3.97	3.96	3.90	



Characteristics of PE tube

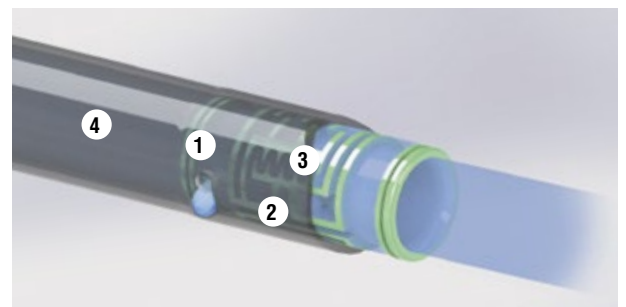
nominal Ø	Internal Ø	External Ø	Thickness	Fittings and valve connections			Operating pressure			
				unit	min.		max.			
mm	inch	mm	mm	mm	mm	unit	bar	psi	bar	psi
16	5/8	13.6	15.4	35	0.9	D1-E1-F1-G1	0.5	7.3	3.0	43
			15.8	44	1.10	D1-E1-F1-G1	0.5	7.3	4.0	58
20	-	17.5	19.3	35	0.9	D3-E2-F2	0.5	7.3	3.0	43
			19.9	47	1.20	D3-E2-F2	0.5	7.3	4.0	58



Field of application



MULTIBAR C drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

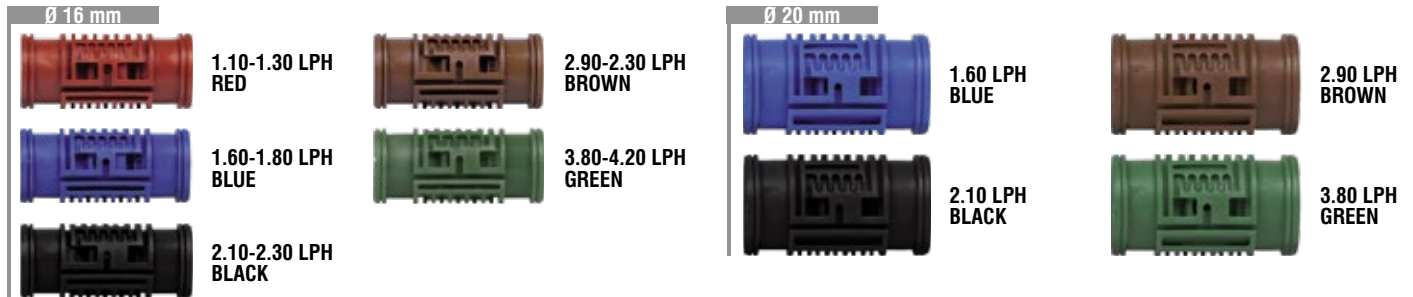
Drip Irrigation | Classic drip line with pressure compensating cylindrical dripper

Multibar™ C

Dripper specifications

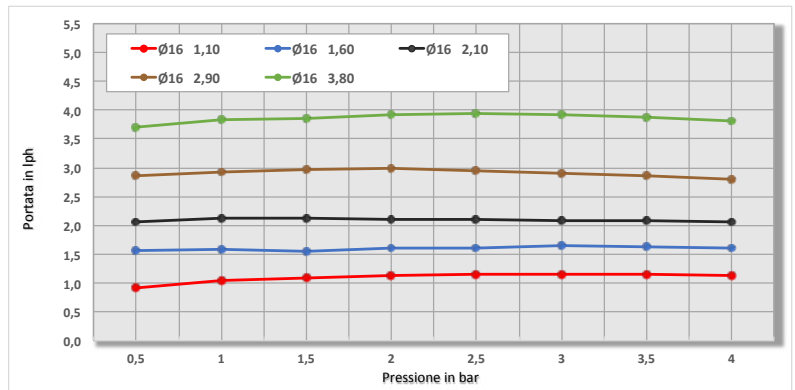
Nominal diameter	Nominal flow rate		Flow rate 35 mil	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Minimum operating pressure		Recommen- ded filtration	CV
	mm	LPH at 2.0 bar		LPH at 2.0 bar	Depth	Width	Length	Area mm²	No. of Holes	k	x	bar		
16	1.10	1.30	0.70	0.7	35	3.6	12	0.86	0.035	0.5	7.3	155	≤ 4	
	1.60	1.80	1.00	0.8	35	3.6	12	1.51	0.020	0.5	7.3	155	≤ 4	
	2.10	2.30	1.10	0.8	35	3.6	12	2.06	0.020	0.5	7.3	155	≤ 4	
	2.90	3.20	1.10	0.8	22	3.6	12	2.90	0.025	0.5	7.3	155	≤ 4	
	3.80	4.20	1.30	1.1	35	3.6	12	3.65	0.020	0.5	7.3	155	≤ 4	
20	1.60	-	1.10	0.8	42	3.6	12	1.53	0.020	0.5	7.3	155	≤ 4	
	2.10	-	1.25	0.8	42	3.6	12	2.10	0.020	0.5	7.3	155	≤ 4	
	2.90	-	1.25	0.8	32	3.6	12	2.75	0.027	0.5	7.3	155	≤ 4	
	3.80	-	1.25	1.3	42	3.6	12	3.55	0.030	0.5	7.3	155	≤ 4	

Flow rates available



Pressure - flow rate ratio

Nominal diameter	Nominal flow rate	Pressure (bar)							
		LPH	0.5	1	1.5	2	2.5	3	3.5
16	1.10	0.91	1.04	1.08	1.13	1.15	1.15	1.15	1.13
	1.60	1.56	1.58	1.55	1.60	1.62	1.65	1.62	1.60
	2.10	2.05	2.12	2.12	2.10	2.10	2.09	2.08	2.06
	2.90	2.86	2.92	2.96	2.98	2.94	2.91	2.85	2.80
	3.80	3.70	3.84	3.85	3.92	3.94	3.92	3.88	3.81
20	1.60	1.54	1.57	1.61	1.66	1.66	1.64	1.60	1.54
	2.10	2.05	2.10	2.16	2.20	2.16	2.11	2.06	2.02
	2.90	2.78	2.95	3.04	3.03	3.03	3.01	2.96	2.92
	3.80	3.65	3.92	3.85	3.92	3.96	3.97	3.96	3.90



Recommended length in metres, based on inlet pressure

MULTIBAR C 16 mm										
Flow rate LPH	Pressure bar	Spacing (cm)								
		20	30	40	50	60	75	100	125	150
1.10	1.0	66	95	122	148	172	206	259	308	353
	2.0	99	142	182	220	256	308	386	459	526
	3.0	119	171	219	265	309	370	465	552	633
	4.0	134	193	248	300	349	418	525	624	716
1.60	1.0	51	73	93	113	131	157	197	236	270
	2.0	75	108	139	168	195	234	294	351	403
	3.0	90	130	167	202	235	282	354	423	485
	4.0	102	146	188	228	265	318	400	478	548
2.10	1.0	43	62	80	96	112	134	169	200	230
	2.0	64	92	119	144	167	200	252	299	343
	3.0	77	111	143	173	201	241	303	359	412
	4.0	87	125	161	195	227	272	342	406	466
2.90	1.0	35	50	64	77	90	107	135	160	183
	2.0	51	74	95	115	133	160	201	238	273
	3.0	62	89	114	138	160	192	241	287	329
	4.0	70	100	129	156	181	217	273	324	371
3.80	1.0	30	42	54	66	76	92	115	136	156
	2.0	44	63	81	98	114	136	171	203	233
	3.0	53	76	97	118	137	164	206	244	280
	4.0	59	85	110	133	154	185	233	276	317

MULTIBAR C 20 mm										
Flow rate LPH	Pressure in bar	Spacing (cm)								
		20	30	40	50	60	75	100	125	150
1.60	1.0									
	2.0									
	3.0									
	4.0									
2.10	1.0									
	2.0									
	3.0									
	4.0									
2.90	1.0									
	2.0									
	3.0									
	4.0									
3.80	1.0									
	2.0									
	3.0									
	4.0									

• Slope=0

For fittings and connection valves, see page Xxx
For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating cylindrical dripper Anti-siphon and Drop Stop

Multibar™ C a.s. - d.s.

Multibar™ C The anti-siphon and drop stop version is ideal for installation in areas with significant changes in ground level. The ant-drainage Irritec Drop Stop System of the Multibar drippers ensures high precision during irrigation cycles, providing all the drippers on the line with simultaneous opening and closing. This allows for a more uniform harvest at the end of the irrigation cycle. The anti-siphon system also prevents the ingress of dirt into the dripper when the tube is emptied.

Features and advantages

- Retaining all the excellent features of the Multibar C, it is characterised by the special design of the dripper that stops the flow at the end of the irrigation cycle, making it particularly suitable for crops that require short irrigation cycles.
- The anti-siphon system prevents the aspiration of impurities.
- Drip line with two emission holes positioned opposite to one another (applies to all cylindrical models) which prevent the aspiration of impurities, making it easier to install.
- The pressure compensating system of the dripper is ensured by a silicone membrane that maintains a constant flow rate when the operating pressure changes.



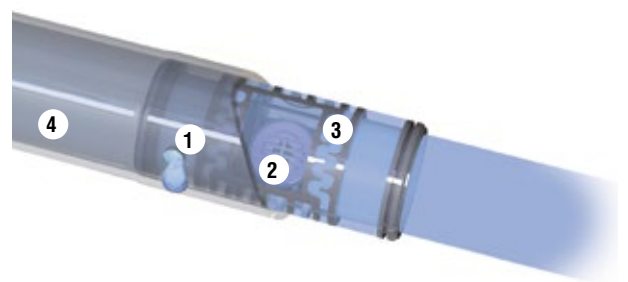
Characteristics of PE tube

Nominal diameter mm	Internal diameter mm	External diameter mm	Price list reference	Thickness		Fittings and valve connections unit	Max. operating pressure		Kd
				mils	mm		bar	PSI	
16	13.6	15.6	FADA35	35	0.90	D1-E1-F1-G1	3.0	43	1
		16.0	FADA44	44	1.10	D1-E1-F1-G1	4.0	58	

Field of application



Drip line MULTIBAR C a.s - d.s.



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

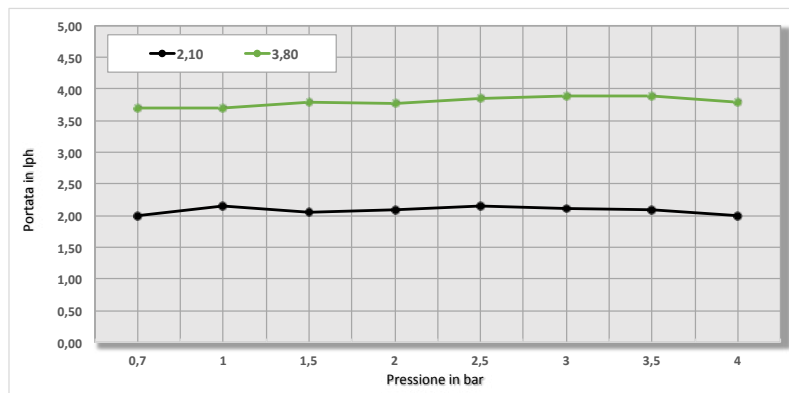
Drip Irrigation | Classic drip line with pressure compensating cylindrical dripper
Anti-siphon and Drop Stop

Multibar™ C a.s. - d.s.

Dripper specifications

Nominal diameter mm	Nominal flow rate LPH at 2.0 bar	Size of the Labyrinth in mm			Inlet Filter		Flow Equation		Minimum operating pressure		Recommended filtration	CV	Drop Stop System in bar
		Depth	Width	Length	Area mm ²	No. of Holes	k	x	bar	psi	mesh	%	closed
16	2.10	0.85	0.85	35	4.5	10	1.97	0.035	0.7	10	155	≤ 4	0.15
	3.80	1.30	1.10	35	4.5	10	3.51	0.035	0.7	10	155	≤ 4	0.15

Flow rates available



Pressure / flow rate ratio

Flow rate nominal LPH	Pressure (bar)							
	0.7	1	1.5	2	2.5	3	3.5	4
2.10	2.0	2.15	2.05	2.10	2.15	2.12	2.10	2.00
3.80	3.7	3.80	3.78	3.85	3.90	3.90	3.85	3.80

Recommended length in metres, based on inlet pressure

MULTIBAR C a.s. - d.s. 16 mm										
Flow rate LPH	Pressure in bar	Spacing (cm)								
		20	30	40	50	60	75	100	125	150
2.10	1.0	33	47	60	73	85	102	128	151	174
	2.0	59	84	108	131	152	182	229	272	311
	3.0	72	104	134	162	188	225	283	336	386
	4.0	83	119	153	185	215	258	323	384	441
3.80	1.0	24	35	45	54	63	75	94	112	128
	2.0	41	59	75	91	106	127	160	190	218
	3.0	50	72	93	112	131	157	197	234	268
	4.0	57	82	106	128	149	179	224	266	306

* Slope=0

For fittings and connection valves, see page Xxx
For packaging - packing specifications, see page Xxx

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F

WITH FLAT DRIPPER

The classic drip line with pressure compensating flat dripper guarantees steady performance as a result of its special design, even when the temperature conditions change during open field use. The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water.

Features and advantages:

- The special design of the dripper guarantees steady performance even in extreme temperature conditions (as thermal conditions change during use in the open field).
- The particular positioning of the filter, which faces towards the centre of the tube, allows the water to enter the labyrinth free from areas of standing water
- The Drop Stop model is characterised by the special design of the dripper that stops the flow at the end of the irrigation cycle, making it particularly suitable for crops that require short irrigation cycles.
- The model with the Anti-Siphon System prevents the aspiration of impurities.
- The wide opening and closing range further enhances the drop stop effect, thereby increasing the possibility of application, even on steep slopes.
- Maximum precision in water distribution in any topographical situation.
- Complies with ISO 9261 standards.
- Resistant to UV light and commonly used fertilisers.

Multibar™ F CLASSIC DRIP LINE WITH PRESSURE COMPENSATING FLAT DRIPPER

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Multibar F	16	standard	24-35-40
	20	standard	35-40
	23	standard	47
	25	standard	47



Example of a dripper



2.10 LPH
BLACK

Multibar™ F a.s. CLASSIC DRIP LINE WITH PRESSURE COMPENSATING FLAT DRIPPER WITH ANTI-SIPHON SYSTEM

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Multibar™ F a.s.	16	standard	40
	20	standard	40
	23	standard	47
	25	standard	47



Example of a dripper



2.10 LPH
BLACK

Multibar™ F a.s. - d.s. CLASSIC DRIP LINE WITH PRESSURE COMPENSATING FLAT DRIPPER WITH ANTI-SIPHON AND DROP STOP SYSTEM

Availability of product types

Product	nominal external Ø	Packaging type	Thickness
-	mm	roll	mils
Multibar F a.s.-d.s.	16	standard	40
	20	standard	40



Example of a dripper



2.10 LPH
BLACK

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F

Multibar™ F is the classic drip line with a flat pressure compensating dripper which guarantees high uniformity of water and nutrient emission when the pressure changes. The very high precision in distribution in any topographical situation is guaranteed by the regulation of the flow rate provided by the silicone membrane in the dripper.

Features and advantages

- The flat dripper with turbulent flow labyrinth is self-cleaning during normal operation. Respect the recommended filtration types.
- The position of the integrated filter, which faces towards the centre of the tube, away from the water accumulation zones, allows clean water to enter the labyrinth
- Low manufacturing coefficients of variation
- High uniformity during emission.
- Multiseason use.



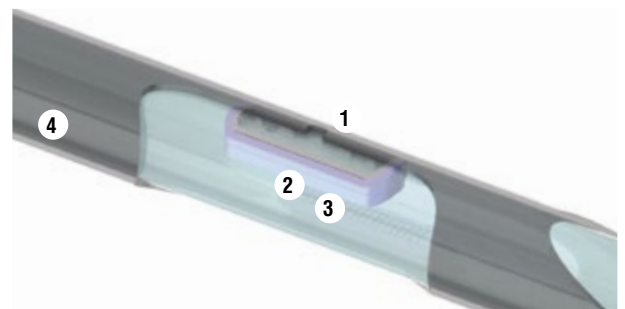
Characteristics of PE tube

nominal Ø		Internal Ø	External Ø	Thickness		Fittings and connection valves	Operating pressure			
mm	inch	mm	mm	mils	mm		min.		max.	
16	5/8	14.0	15.2	24	0.6	F1-G1	0.5	7.3	2.0	29
16	5/8	14.0	15.8	35	0.9	F1-G1	0.5	7.3	3.0	43
16	5/8	14.0	16.0	40	1.0	F1-G1	0.5	7.3	3.5	51
20	-	17.5	19.3	35	0.9	D3-E2-F2	0.5	7.3	3.0	43
20	-	17.5	19.5	40	1.0	D3-E2-F2	0.5	7.3	3.5	51
23	-	20.8	23.2	47	1.2	H1	0.5	7.3	3.5	51
25	-	22.6	25.0	47	1.2	I1	0.5	7.3	3.0	43

Min. operating pressure: 0.5 bar



MULTIBAR F drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

Field of application



Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F

Dripper specifications

Nominal flow rate	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Minimum operating pressure		Recommended filtration	CV
LPH at 2.0 bar	Depth	Width	Length	Area mm ²	No. of Holes	k	x	bar	psi	mesh	%
1.10	0.6	060	30	3	9	1.12	0.030	0.5	7	155	4
1.60	0.6	0.70	30	3	9	1.48	0.030	0.5	7	155	4
2.10	0.9	0.70	30	3	9	1.98	0.025	0.5	7	155	4
3.80	0.9	1.05	30	3	9	3.62	0.025	0.5	7	155	4

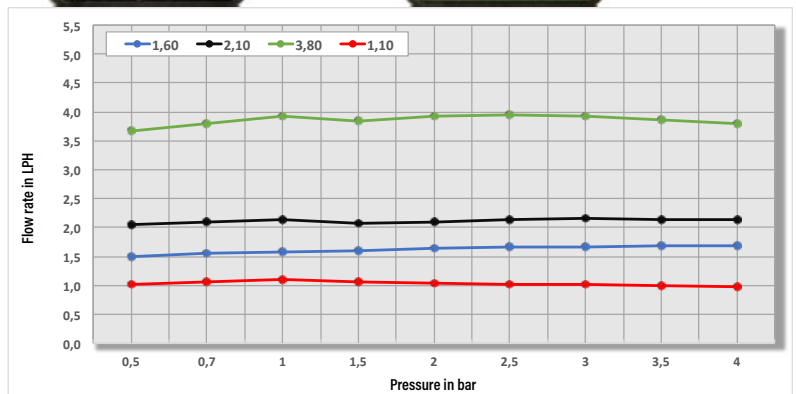
Compensation range: from 0.5 to 4.0 bar

Flow rates available



Pressure / flow rate ratio

Nominal flow rate	Pressure (bar)								
	0.5	0.7	1	1.5	2	2.5	3	3.5	4
1.10	1.03	1.07	1.10	1.06	1.05	1.03	1.02	1.00	0.98
1.60	1.50	1.55	1.59	1.61	1.64	1.66	1.67	1.68	1.63
2.10	2.05	2.09	2.15	2.08	2.10	2.14	2.16	2.15	2.15
3.80	3.67	3.79	3.93	3.83	3.92	3.95	3.93	3.87	3.79



Recommended length in metres, based on pressure

Ø 16 mm											Ø 20 mm										
Q lph	P bar	Spaziatura (cm)									Q lph	P bar	Spaziatura (cm)								
		20	30	40	50	60	80	100	125	150			20	30	40	50	60	80	100	125	150
1.1	1	74	105	133	160	186	233	276	325	372	1.1	1	121	170	214	255	293	363	427	500	568
	2	109	155	198	238	275	345	409	483	551		2	180	252	318	378	434	538	633	742	842
	3	131	187	238	286	331	415	492	581	663		3	216	303	382	455	523	648	761	892	1014
	3.5	140	199	254	306	354	443	525	620	708		3.5	231	324	408	486	558	692	813	953	1083
1.6	1	58	82	105	126	146	183	216	255	292	1.6	1	95	134	169	201	231	286	336	394	448
	2	85	122	155	186	216	271	321	379	433		2	141	198	250	297	342	424	498	584	664
	3	103	146	187	224	260	325	386	456	520		3	170	238	300	358	411	510	599	703	798
	3.5	110	156	199	239	277	348	412	487	556		3.5	181	254	321	382	439	544	640	750	852
2.1	1	49	69	88	106	123	154	182	215	246	2.1	1	80	112	141	168	193	239	281	329	374
	2	72	103	131	157	182	228	270	319	365		2	118	166	209	249	286	354	416	488	555
	3	86	123	157	189	219	274	325	384	438		3	142	199	251	299	344	429	501	587	667
	3.5	92	132	168	202	234	293	347	410	468		3.5	152	213	268	319	367	455	535	627	713
3.8	1	34	48	61	73	85	106	126	149	170	3.8	1	55	76	96	114	131	163	191	224	255
	2	50	71	90	109	126	157	187	220	252		2	81	113	142	169	195	241	284	333	378
	3	60	85	109	130	151	189	224	265	302		3	97	136	171	204	234	290	341	400	455
	3.5	64	91	116	139	161	202	240	283	323		3.5	103	145	183	218	250	310	364	427	486

Ø 23 mm											Ø 25 mm										
Q lph	P bar	Spaziatura (cm)									Q lph	P bar	Spaziatura (cm)								
		20	30	40	50	60	80	100	125	150			20	30	40	50	60	80	100	125	150
1.1	1	180	248	309	364	415	510	595	694	784	1.1	1	212	291	361	425	484	593	691	804	909
	2	267	368	458	540	616	755	883	1029	1164		2	314	431	535	630	718	878	1025	1193	1350
	3	322	443	551	650	742	909	1062	1238	1401		3	378	519	644	757	863	1057	1233	1436	1624
	3.5	344	473	589	694	750	971	1135	1322	1497		3.5	404	554	688	809	922	1129	1318	1534	1735
1.6	1	142	195	243	287	327	401	469	547	618	1.6	1	167	229	284	334	381	467	545	634	717
	2	210	290	360	425	485	595	696	810	917		2	247	339	421	496	565	692	807	940	1063
	3	253	348	433	511	584	716	836	974	1103		3	295	405	503	592	675	825	963	1130	1278
	3.5	270	372	463	546	623	764	893	1041	1178		3.5	318	436	541	637	726	899	1037	1207	1366
2.1	1	119	163	203	240	273	335	392	457	517	2.1	1	140	191	237	279	318	390	455	530	599
	2	176	242	301	355	405	497	581	677	765		2	207	284	352	414	472	578	675	785	887
	3	211	291	362	427	488	598	699	811	917		3	249	341	423	498	568	696	811	944	1068
	3.5	226	311	387	456	521	639	747	869	984		3.5	266	364	452	532	607	747	866	1008	1140
3.8	1	81	111	138	163	186	229	267	311	352	3.8	1	95	130	162	190	217	266	310	361	408
	2	120	165	205	242	276	339	396	461	522		2	141	193	240	282	322	394	460	535	605
	3	144	193	247	291	332	408	476	555	628		3	169	232	288	340	387	474	553	644	728
	3.5	154	212	264	311	355	435	509	593	671		3.5	181	248	308	363	413	461	591	688	777

• Q = flow rate in LPH • P = pressure in bar • Slope = 0
Minimum operating 0.5 bar.

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F a.s.

Multibar F™ AS is the classic drip line with flat PC (pressure compensating) and Anti-siphon dripper, which maintains a constant flow rate when the pressure changes, due to the characteristics of the dripper and the internal silicone membrane. It guarantees a high level of emission uniformity, water and nutrients, all combined with maximum precision in the distribution of emission in any topographical situation. The anti-siphon system prevents the aspiration of impurities and soil particles into the dripper.

Features and advantages

- Particularly suitable for subirrigation and sloping terrain, therefore it avoids inducing water stress on the roots
- The flat dripper with turbulent flow labyrinth is self-cleaning during normal operation. Respect the recommended filtration types.
- The position of the integrated filter, which faces towards the centre of the tube, away from the water accumulation zones, allows clean water to enter the labyrinth.
- Low manufacturing coefficients of variation
- High uniformity during emission
- Multiseason use.



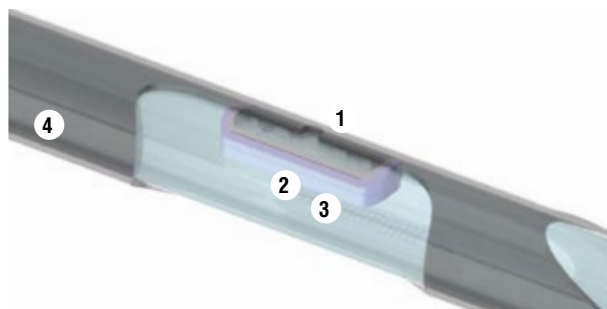
Characteristics of PE tube

Nominal diameter mm	Internal diameter mm	External diameter mm	Price list reference	Thickness		Fittings and valve connections unit	Max. operating pressure		Kd
				mils	mm		bar	PSI	
16	14.0	15.2	FASA24	24	0.6	F1-G1	2.0	29	1.00
		15.8	FASA35	35	0.9	F1-G1	3.0	43.5	
		16.0	FASA40	40	1.0	F1-G1	3.5	51.0	
20	17.5	19.3	FASB35	35	0.9	D3-E2-F2	3.0	43.5	0.30
		19.5	FASB40	40	1.0	D3-E2-F2	3.5	51.0	
23	20.8	23.2	FASH47	47	1.2	H1	3.5	51.0	0.20
25	22.6	25.0	FASF47	47	1.2	I1	3.0	43.0	0.15

Field of application



MULTIBAR F a.s. drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F a.s.

Dripper specifications

Nominal flow rate	Size of Labyrinth in mm			Inlet Filter		Flow Equation		Minimum operating pressure		Recommended filtration	CV
	LPH at 2.0 bar	Depth	Width	Length	Area mm ²	No. of Holes	k	x	bar	psi	mesh
1.10	0.7	0.70	50	2.4	3	1.09	0.035	0.5	7	155	4
1.60	0.6	0.70	30	3	9	1.48	0.030	0.5	7	155	4
2.10	0.9	0.70	30	3	9	1.98	0.025	0.5	7	155	4
3.80	0.9	1.05	30	3	9	3.62	0.025	0.5	7	155	4

Compensation range: from 0.5 to 4.0 bar

Flow rates available



1.10 LPH
PINK



1.60 LPH
BLUE



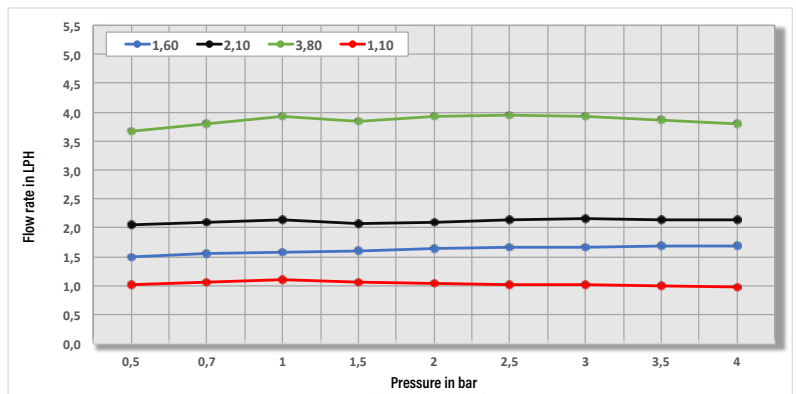
2.10 LPH
BLACK



3.80 LPH
GREEN

Pressure / flow rate ratio

Nominal flow rate	Pressure (bar)									
	LPH	0.5	0.7	1	1.5	2	2.5	3	3.5	4
1.10	1.03	1.07	1.10	1.06	1.05	1.03	1.02	1.00	0.98	
1.60	1.50	1.55	1.59	1.61	1.64	1.66	1.67	1.68	1.63	
2.10	2.05	2.09	2.15	2.08	2.10	2.14	2.16	2.15	2.15	
3.80	3.67	3.79	3.93	3.83	3.92	3.95	3.93	3.87	3.79	



Recommended length in metres, based on the pressure

Ø 16 mm											Ø 20 mm										
Q lph	P bar	Spaziatura (cm)									Q lph	P bar	Spaziatura (cm)								
		20	30	40	50	60	80	100	125	150			20	30	40	50	60	80	100	125	150
1.1	1	55	78	99	119	138	173	205	241	276	1.1	1	90	125	158	188	216	268	315	369	420
	2	102	145	185	223	258	323	383	453	517		2	168	235	296	352	405	502	590	692	785
	3	127	181	231	277	321	402	477	563	643		3	208	292	368	438	504	624	734	860	977
	3.5	137	195	258	298	346	443	513	606	692		3.5	224	315	396	472	542	672	790	926	1052
1.6	1	42	60	77	92	107	134	158	187	213	1.6	1	69	97	122	146	167	207	244	286	325
	2	79	113	143	172	200	250	296	350	400		2	130	182	229	273	313	388	457	535	608
	3	98	140	178	214	248	311	369	435	497		3	161	226	285	339	390	483	568	666	756
	3.5	106	150	192	231	267	335	397	469	536		3.5	173	243	306	365	419	520	611	717	814
2.1	1	36	50	64	77	89	112	133	156	179	2.1	1	58	81	102	122	140	173	204	239	272
	2	66	94	120	144	167	209	248	293	335		2	108	152	192	228	262	325	382	448	509
	3	82	117	149	179	208	260	308	364	416		3	135	189	238	284	326	404	475	557	633
	3.5	88	126	161	193	224	280	332	392	448		3.5	145	203	256	305	351	435	511	600	681
3.8	1	24	35	44	53	61	76	90	107	122	3.8	1	40	56	70	83	96	118	139	163	183
	2	45	64	82	98	114	143	169	200	228		2	74	104	131	155	179	221	260	305	347
	3	56	80	102	122	142	177	210	248	283		3	92	129	162	193	222	275	324	379	431
	3.5	60	86	110	132	152	191	226	267	305		3.5	99	139	175	208	239	296	349	409	464

Ø 23 mm											Ø 25 mm										
Q lph	P bar	Spaziatura (cm)									Q lph	P bar	Spaziatura (cm)								
		20	30	40	50	60	80	100	125	150			20	30	40	50	60	80	100	125	150
1.1	1	133	183	228	269	307	376	440	512	580	1.1	1	157	215	266	313	357	437	510	594	672
	2	249	343	427	504	575	705	823	959	1086		2	293	402	499	587	670	819	956	1113	1259
	3	310	427	531	626	715	876	1024	1193	1351		3	365	500	621	731	832	1019	1189	1384	1566
	3.5	334	460	572	672	750	944	1102	1285	1454		3.5	393	539	668	786	896	1097	1280	1491	1686
1.6	1	103	142	176	208	237	291	340	396	448	1.6	1	121	166	206	243	276	338	395	460	520
	2	193	265	330	390	445	546	637	743	840		2	227	311	386	454	518	634	740	861	973
	3	240	330	411	484	553	678	792	923	1044		3	282	387	480	565	644	788	919	1071	1211
	3.5	258	355	442	522	595	730	852	994	1125		3.5	304	416	517	608	694	848	990	1153	1304
2.1	1	86	119	148	174	199	244	285	332	375	2.1	1	101	139	172	203	231	283	330	385	435
	2	161	222	276	326	372	456	533	621	703		2	190	260	323	380	433	531	619	721	814
	3	200	276	344	405	463	568	663	772	874		3	236	324	402	473	539	660	769	895	1013
	3.5	226	297	370	436	498	611	714	831	941		3.5	254	348	432	509	580	711	828	964	1090
3.8	1	59	81	101	119	135	166	194	226	256	3.8	1	69	95	118	138	158	193	225	262	296
	2	110	151	188	222	254	311	363	423	479		2	129	177	220	259	295	362	422	491	555
	3	137	188	234	276	315	387	452	527	596		3	161	237	274	322	367	450	525	611	691
	3.5	147	203	252	297	339	416	486	567	642		3.5	173	237	295	347	395	484	565	658	744

• Q = flow rate in LPH • P = pressure in bar • Slope = 0
Minimum operating 0.5 bar.

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Multibar™ F a.s. - d.s.

CLASSIC DRIP LINE WITH FLAT PRESSURE COMPENSATING, ANTI-SIPHON AND DROP STOP DRIPPER

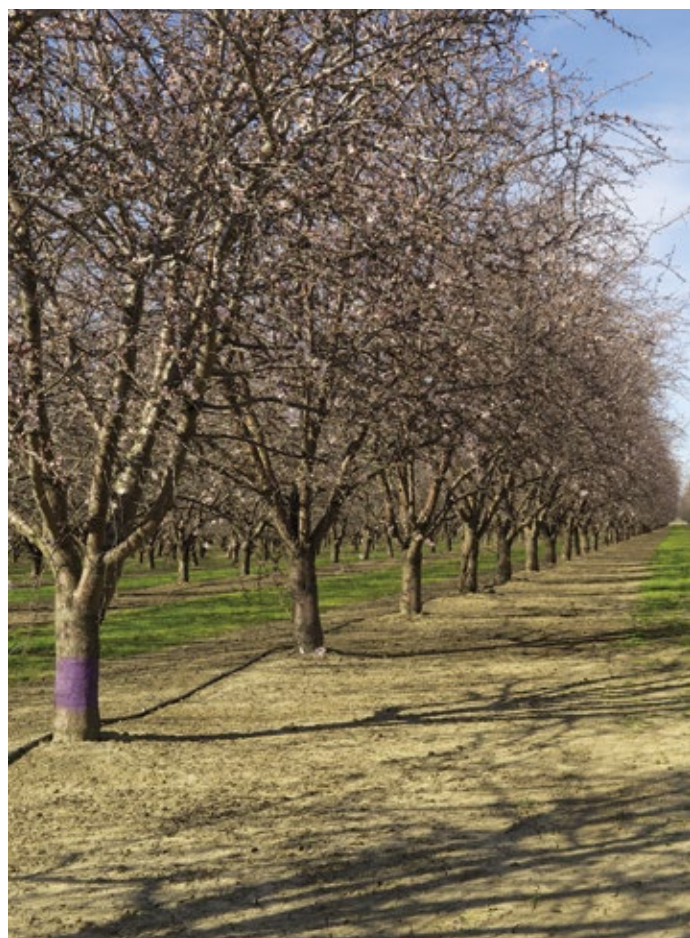
Multibar® F AS and DS is the classic drip line with flat PC Anti-siphon and Drop Stop dripper, which maintains a constant flow rate when the pressure changes due to the characteristics of the dripper and the internal silicone membrane. It guarantees a high level of emission uniformity, water and nutrients, with maximum precision in the distribution of emission in any topographical situation, as a result of its wide field of application.

The anti-siphon system prevents the aspiration of impurities and soil particles into the dripper.

The anti-drainage, Drop Stop system prevents the line from emptying at the end of each cycle by equalising the emission times and quantities for each plant. The synchronised opening and closing of each irrigation cycle improves the uniformity of plant growth, promoting a better harvest.

Features and advantages

- Particularly suitable for subirrigation and sloping terrain, avoiding water stress on the roots
- The flat dripper with turbulent flow labyrinth develops self-cleaning of the passages during normal operation. Respect the recommended filtration types.
- The position of the integrated filter, which faces towards the centre of the tube, away from the water accumulation zones, allows clean water to enter the labyrinth.
- Low manufacturing coefficients of variation.
- High uniformity during emission.
- Multiseason use.



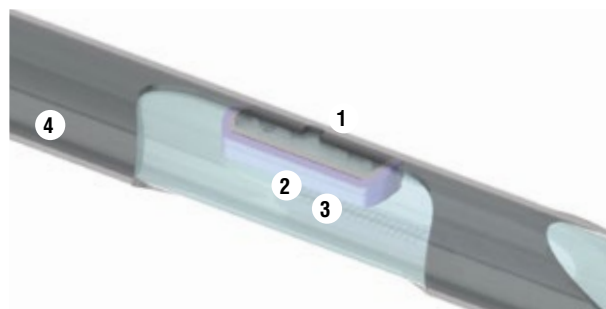
Characteristics of PE tube

Nominal diameter mm	Internal diameter mm	External diameter mm	Price list reference	Thickness		Fittings and valve connections** unit	Max. operating pressure		Kd
				mils	mm		bar	PSI	
16	13.6	15.6	FAQA35	35	0.9	F1-G1	3.0	43.5	1.00
		15.8	FAQA40	40	1.0	F1-G1	3.5	51.0	
20	17.5	19.5	FAQB35	35	0.9	D3-E2-F2	3.0	43.5	0.30
		19.7	FAQB40	40	1.0	D3-E2-F2	3.5	51.0	
23	20.8	22.8	FAQH40	40	1.0	H1	3.0	43.5	0.20
25	22.6	25.0	FAQF47	47	1.2	I1	3.5	51.0	0.15

Field of application



MULTIBAR F a.s. - d.s. drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

** Description of the Fittings, see page 63

Drip Irrigation | Classic drip line with pressure compensating flat dripper

Dripper specifications

Nominal flow rate	Size of the Labyrinth in mm			Inlet Filter		Flow Equation		Minimum operating pressure		Recommended filtration	DS System bar - psi		HDS System bar - psi		CV
	LPH at 2.0 bar	Depth	Width	Length	Area mm ²	No. of Holes	k	x	bar	psi	mesh	opening	closure	opening	closure
1.10	0.7	0.70	50	2.4	3	1.09	0.035	0.7	10	155	0.30 - 4	0.15 - 3	0.40 - 5.8	0.25 - 3.6	4
1.60	0.6	0.70	30	3	9	1.48	0.030	0.7	10	155	0.30 - 4	0.15 - 3	0.40 - 5.8	0.25 - 3.6	4
2.10	0.9	0.70	30	3	9	1.98	0.025	0.7	10	155	0.30 - 4	0.15 - 3	0.40 - 5.8	0.25 - 3.6	4
3.80	0.9	1.05	30	3	9	3.62	0.025	0.7	10	155	0.30 - 4	0.15 - 3	0.40 - 5.8	0.25 - 3.6	4

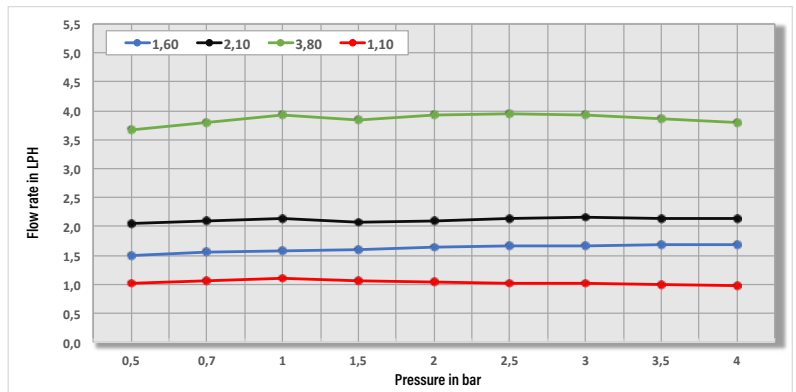
Compensation range: DS version from 0.7 to 4.0 bar - HDS version from 1.0 to 4.0 bar

Flow rates available



Pressure / flow rate ratio

Nominal flow rate	Pressure (bar)								
	0.5	0.7	1	1.5	2	2.5	3	3.5	4
1.10	1.03	1.07	1.10	1.06	1.05	1.03	1.02	1.00	0.98
1.60	1.50	1.55	1.59	1.61	1.64	1.66	1.67	1.68	1.63
2.10	2.05	2.09	2.15	2.08	2.10	2.14	2.16	2.15	2.15
3.80	3.67	3.79	3.93	3.83	3.92	3.95	3.93	3.87	3.79



Recommended length in metres, based on pressure

Multibar F a.s. - d.s. 16 mm										
Q LPH	P bar	Spacing (cm)								
		20	30	40	50	60	80	100	125	150
1.10	1	59	84	106	128	148	167	220	260	297
	2	99	140	179	215	249	281	370	437	500
	3	121	173	220	264	306	346	455	537	614
	3.5	130	185	236	284	329	371	489	577	659
1.60	1	47	67	86	103	119	135	177	209	239
	2	79	113	144	173	200	226	297	351	401
	3	97	138	176	212	246	278	365	431	493
	3.5	104	148	189	228	264	298	392	463	529
2.10	1	40	56	72	86	100	113	148	175	200
	2	66	94	120	144	167	189	249	294	336
	3	81	116	148	177	205	232	305	361	412
	3.5	87	124	158	190	221	249	328	387	443
3.80	1	28	40	51	61	71	89	106	125	142
	2	46	65	83	100	116	145	172	203	232
	3	56	80	102	122	142	178	211	249	284
	3.5	60	86	109	131	152	191	226	267	305

Multibar F a.s. - d.s. 20 mm										
Q LPH	P bar	Spacing (cm)								
		20	30	40	50	60	80	100	125	150
1.10	1	103	144	180	214	245	275	356	416	472
	2	173	242	303	360	413	463	599	700	794
	3	213	297	373	442	507	569	736	860	976
	3.5	229	319	400	475	545	611	789	923	1048
1.60	1	83	115	145	172	197	221	286	335	380
	2	139	194	244	289	332	372	481	563	639
	3	171	238	299	355	407	457	591	691	784
	3.5	183	256	321	381	437	490	634	742	841
2.10	1	69	97	121	144	165	185	239	280	318
	2	116	162	204	242	277	311	402	471	534
	3	143	199	250	297	341	382	494	578	656
	3.5	153	214	269	319	366	410	530	621	704
3.80	1	47	66	83	98	113	126	163	191	216
	2	79	111	139	165	189	212	274	321	364
	3	97	136	171	202	232	260	337	394	447
	3.5	105	146	183	217	249	279	361	423	480

Multibar F a.s. - d.s. 23 mm										
Q LPH	P bar	Spacing (cm)								
		20	30	40	50	60	80	100	125	150
1.10	1	147	203	252	297	339	379	486	566	641
	2	247	341	424	500	571	637	817	952	1078
	3	304	419	521	614	701	782	1004	1170	1324
1.60	1	118	163	203	239	273	304	391	455	515
	2	199	274	341	402	458	512	657	765	866
	3	244	336	418	493	563	629	806	940	1064
2.10	1	99	136	169	200	228	255	327	381	431
	2	166	229	285	336	383	428	550	640	725
	3	204	281	350	413	471	526	675	786	889
3.80	1	68	93	116	136	155	174	223	259	294
	2	113	156	194	229	261	292	374	436	494
	3	139	192	238	281	321	358	460	536	607

MULTIBAR F a.s. - d.s. 25 mm										
Q LPH	P bar	Spacing (cm)								
		20	30	40	50	60	80	100	125	150
1.10	1	170	234	291	343	391	437	561	654	740
	2	286	393	489	577	659	735	943	1099	1244
	3	350	482	600	708	750	901	1157	1348	1526
	3.5	377	519	645	750	750	969	1200	1450	1641
1.60	1	139	191	237	279	318	354	454	528	597
	2	234	321	398	469	534	596	762	887	1004
	3	287	394	489	575	656	732	936	1090	1233
	3.5	308	423	525	618	704	785	1005	1171	1324
2.10	1	116	160	198	233	266	296	379	442	499
	2	196	268	333	392	447	498	638	743	839
	3	240	329	409	481	549	612	783	912	1031
	3.5	258	354	439	517	589	657	841	979	1107
3.80	1	79	109	135	159	181	202	259	301	340
	2	133	183	227	267	304	339	435	506	572
	3	164	224	279	328	374	417	534	622	703
	3.5	176	241	299	352	401	448	573	667	754

• Q = flow rate in LPH • P = pressure in bar • Slope = 0
Minimum operating pressure 0.7 bar.

For fittings and connection valves, see page Xxxx
For packaging - packing specifications, see page Xxxx

Drip Irrigation | Classic drip line with small diameter cylindrical dripper

Minidrip®

The classic Minidrip drip line® is ideal for watering gardens, flowerbeds and small vegetable gardens, thanks to its low cost, aesthetic impact and the excellent watering characteristics of the turbulent flow labyrinth dripper, as well as the double inlet filter which reduces the accumulation of sediment and the risk of clogging.

Features and advantages

- Small dripper (7 mm in diameter).
- Dripper with turbulent flow labyrinth and double inlet filter guarantees a lower accumulation of sediment, thereby reducing the risk of clogging.
- Ideal drip line for gardens.

Product available in:

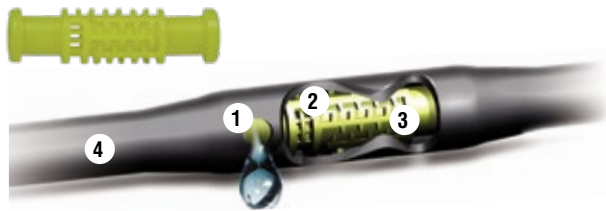
- reels:
 - of 1,200 m for 15 cm spacings
 - of 1,300 m for 20 cm spacings
 - of 1,500 m for 30 cm spacings
- boxes: containing 4 x 15 m reels



Characteristics of PE tube

External diameter mm	Internal diameter mm	Price list reference	Thickness mm	Recommended filtration mesh	Max. pressure bar
6.6	5	FALC30	0.8	120	2.5

MINIDRIP drip line



- 1 - Outlet Holes
- 2 - Inlet filter with large filter surface area
- 3 - Turbulent Flow Labyrinth with low pressure sensitivity
- 4 - Polyethylene tube

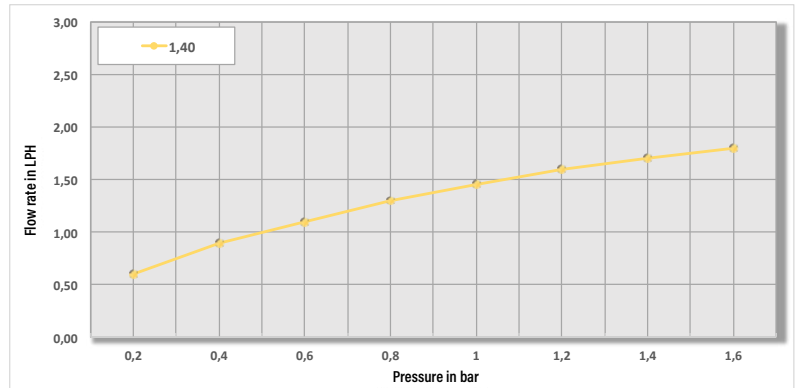
Field of application



Drip Irrigation | Classic drip line with small diameter cylindrical dripper

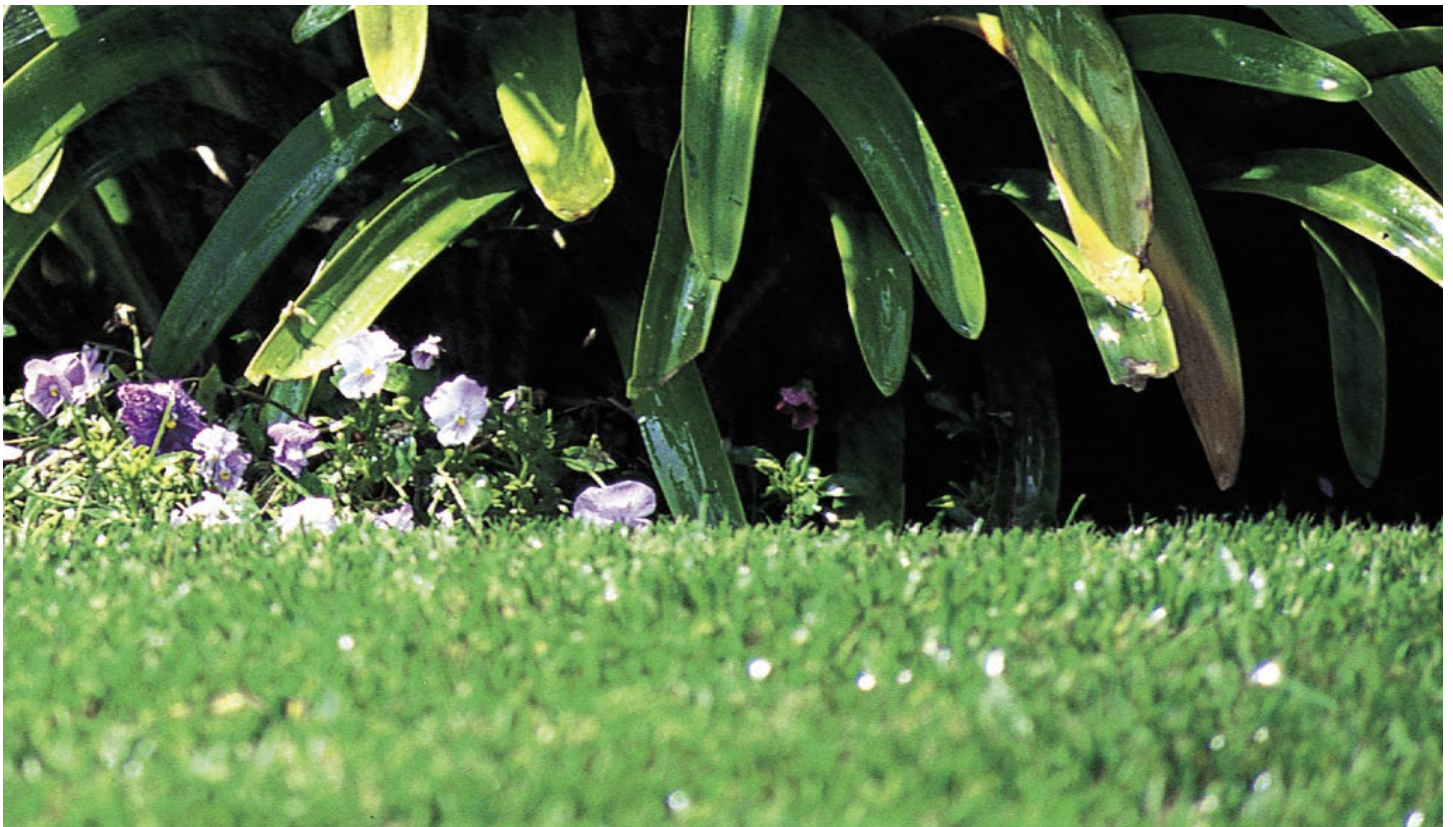
Pressure / Flow Rate Ratio

Internal nominal mm	Flow rate nominal at 1.0 bar	Pressure in bar								
		0.2	0.4	0.6	0.8	1	1.2	1.4	1.6	
6.6	1.5 LPH	0.6	0.9	1.1	1.3	1.4	1.6	1.7	1.8	



Recommended length in metres, based on inlet pressure and EU, with slope=0

Pi bar	Qi LPH	EU %	Spacing cm		
			20	30	40
0.2	0.6	95	14	18	23
		85	17	22	27
0.5	1	95	15	19	23
		85	18	24	29
1	1.5	95	15	20	24
		85	18	24	30
1.5	1.7	95	15	20	24
		85	19	25	30
2	2	95	15	20	24
		85	19	25	30



For fittings and connection valves, see page Xxx
For packaging - packing specifications, see page Xxx

Drip Irrigation | Classic pressure compensating drip line for subirrigation

Multibar™ C Rootguard

PRESSURE COMPENSATING DRIP LINE FOR SUBIRRIGATION

Multibar™ C Rootguard™ is the ideal drip line for subirrigation installations ensuring high precision emission during irrigation cycles. The Rootguard™ system allows the drip line to be buried and withstand the test of time without suffering problems of root intrusion.

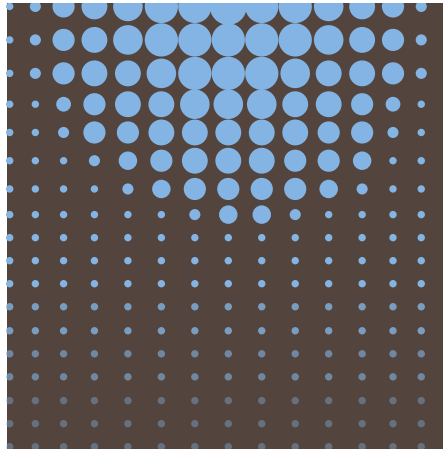
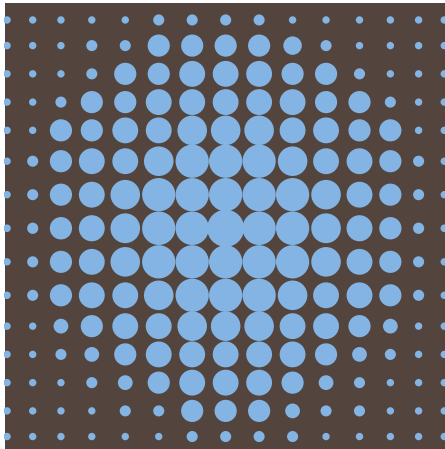
Features and advantages

- Retains the excellent features of the traditional Multibar™ C.
- The pressure compensating system of the dripper is ensured by the sophisticated design and the silicone membrane that maintains a constant flow rate even when the operating pressure changes.
- Allows greater lengths, ensuring a high emission uniformity.
- It allows the precise distribution of water and nutrients directly at the root zone of the plants, optimising and therefore reducing the consumption of water and the products used, resulting in reduced costs and environmental impact.
- Ideal for burying, it is resistant to clogging and ensures constant emission uniformity throughout the service life of the product.
- Complies with ISO 9261 standards.
- Resistant to UV light and commonly used fertilisers.



Subirrigation

Surface irrigation



Distribution of water after 10 hours with 1 hour of irrigation

For the same amount of water emitted, drip irrigation increases the volume of wetted soil by 46% compared to surface irrigation. This decreases the saturation point of the soil, which not only leaves more space for increased aeration, but also promotes the capillary movement of water and reduces water loss through percolation.



Field of application



Drip Irrigation | Classic pressure compensating drip line for subirrigation

Why subirrigation

- Higher yield. Water and nutrients distributed directly to the root system promote healthy plant growth and reduce stress.
 - Better crop quality. Both soil and foliage are kept dry, reducing fungal diseases which are promoted by overhead irrigation and eliminating fruit and leaf spots often caused by irrigation from above the foliage.
 - Safe and efficient distribution of fertilisers and insecticides. The chemical products go directly to the root system, reducing the amount needed and minimising environmental pollution.
 - Fewer weeds. The dry soil surface inhibits the growth of weeds.
 - Improved soil aeration. Smaller soil particles are not washed away, thereby reducing soil compaction and promoting root growth.
 - Dry soil surface. With a dry soil surface, the tending and harvesting of crops can be carried out while irrigation is in progress. Allows the use of turf, even during irrigation.
 - Longer system service life. Turbulent flow drippers and tubes are manufactured from high quality raw materials that guarantee a long service life.
- When buried, the irrigation system is protected from damage caused by ultraviolet rays, fluctuations in temperature and damage due to crop tending.
- Substantial water savings. No losses through evaporation, deep percolation, surface run-off and de-localisation of moisture due to wind.
 - Elimination of damage caused by machinery or vandalism. The absence of sprinkler heads, surface hoses or drip lines that may cause damage, or are susceptible to damage by vandalism, animals or from harvesting of the plot.
 - Less salt. Less water also means less salt in the soil and groundwater.
 - Lower maintenance costs. The system is permanently buried under the crops and requires no further handling or movement.
 - Less use of pesticides. Fungicides and insecticides are not washed away with the irrigation water, and direct distribution through the system reduces waste.
 - Reduced labour costs. Easier distribution of fertilisers, fewer weeds, disease control and lower maintenance all mean less labour is required.
 - No obstacles during mechanised harvesting operations (harvesting, use of shakers, olive growing).
 - Aesthetic improvement of the orchard as the tubes cannot be seen.

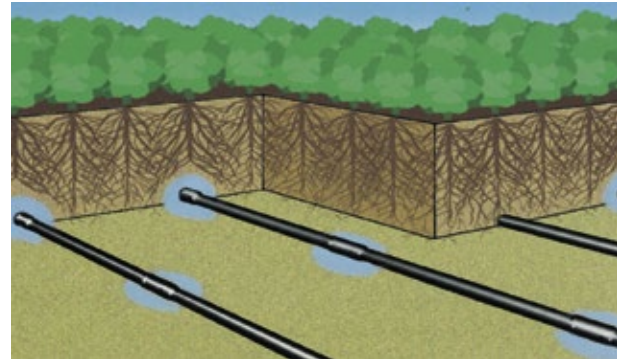
Installation

The **ROOTGUARD™** subirrigation system uses the same components as a traditional surface drip system, such as filtering, water treatment, the injection of fertilisers and pesticides, air venting and discharge valves, as well as both manual and automated control.

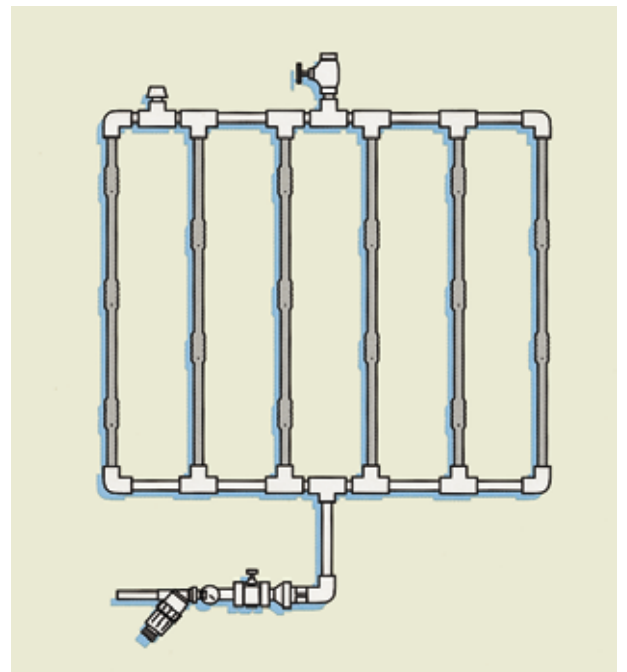
The only important and essential difference is the drip line produced with **ROOTGUARD™** technology.

Irritec® is able to supply **ROOTGUARD™** technology in combination with well-established drip line system, **MULTIBAR™**.

The hydraulic characteristics of the above-mentioned drippers are described in their respective technical catalogues.



Typical diagram of a subirrigation system



The installation manual and user manual for the **ROOTGUARD®** Subirrigation system are available upon request, and can also be downloaded from www.subirrigazione.it
In addition, our technical department can provide the necessary technical support for the design and installation of the **ROOTGUARD®** system.

On-line drippers | Pressure compensating turbulent flow dripper

iDrop®

The iDrop line® consists of on-line turbulent flow drippers which are suitable for orchards, vineyards, nurseries, greenhouses and all situations where a flow rate with minimum variations is required. The turbulent flow of the labyrinth makes the iDrop® line ideal for the prevention of clogging and requires very little maintenance, as a result. Functional quality, ease of installation in countless possible combinations and low costs are its main features.

IDROP® LIGHT / PC

iDrop® LIGHT / PC with pressure compensating turbulent flow which packs all of the iDrop® technology into a truly compact size. It features a double inlet filter and a durable silicone membrane. Available in version with Drop-Stop DS. iDrop® LIGHT / PC is Irritec's economical and versatile solution to meet the needs of farmers.

Dripper specifications

Flow rate	Inlet filter		Flow equation		Recommended filtration	CV	Min. operating pressure				Max. operating pressure				Hole coupling			
	LPH	Area mm ²	No. of Holes	x			k	mesh	%	PC		PCDS		PC		PCDS		
								Bar	PSI	Bar	PSI	Bar	PSI	Bar	PSI	Bar	PSI	mm
1.10	2.9	4	0.03	1.01	155	5	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
2.10	2.9	4	0.03	1.92	120	3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
3.80	2.9	4	0.03	3.55	120	3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
7.80	2.9	4	0.03	7.30	120	3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
25.0	2.9	4	0.04	22.20	120	3	1.0	14.5	1.0	14.5	4.0	58	4.0	58	4.0	58	2.5	



Drop-Stop anti-drainage system

close	
bar	psi
0.15	2.20

Field of application



IDROP® PC

iDrop® in its PC version, is available in both classic and Drop Stop versions. Pre-assembled together with the K-Drop System, it is the most advanced irritec® proposal for soilless systems. IT IS particularly suitable for steeply sloping terrain and for crops with frequent fertigation cycles. It is the ideal solution for installations with long lines and on steep slopes. Two types of outlet are available: Standard and Multifunction

Dripper specifications

Flow rate	Inlet filter		Flow equation		Recommended filtration	CV	Min. operating pressure				Max. operating pressure				Hole coupling			
	LPH	Area mm ²	x	k			mesh	%	PC		PCDS		PC			PCDS		
								Bar	PSI	Bar	PSI	Bar	PSI	Bar	PSI	Bar	PSI	mm
2.2	2	2	0.02	2.08	120	≤ 3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
3.2	2	2	0.02	3.15	120	≤ 3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
4.0	2	2	0.02	3.71	120	≤ 3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
6.0	2	2	0.02	6.05	120	≤ 3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	
7.8	2	2	0.02	7.94	120	≤ 3	0.5	7.3	0.8	11.6	4.0	58	4.0	58	4.0	58	2.5	



Drop-Stop anti-drainage system

close	
bar	psi
0.30	4.40

Field of application



IDROP® NORMAL

iDrop® is the on-line turbulent flow dripper suitable for orchards, vineyards, nurseries, greenhouses and all situations where a precise flow rate is required. The turbulent flow of the labyrinth makes it ideal for the prevention of clogging.

Dripper specifications

Flow rate	Inlet Filter	Flow equation		Recommended filtration	CV	Hole coupling
LPH	Area mm ²	x	k	mesh	%	mm
2.1	2	0.46	0.76	120	≤ 3	2.5
4.0	2	0.46	1.44	120	≤ 3	2.5
8.2	2	0.46	2.90	120	≤ 3	2.5



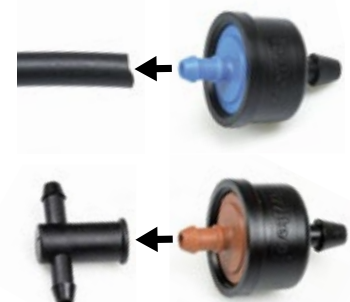
Field of application



iDROP®

iDrop PC Multifunction Outlet




The new multifunctional iDrop allows the assembly of all Irritec manifolds, as well as ø 6x4 mm or ø 5x3 mm micro tubes as a result of its innovative multi-purpose outlet.



On-line drippers | Pressure compensating turbulent flow dripper

iDrop® normal

Dripper specifications

Flow rate	Colour	Inlet Filter	Flow equation		Recommended filtration	CV	Hole coupling
LPH	-	Area mm ²	x	k	mesh	%	mm
2.1		2	0.46	0.76	120	≤ 3	2.5-3.0
4.0		2	0.46	1.44	120	≤ 3	2.5-3.0
8.2		2	0.46	2.90	120	≤ 3	2.5-3.0

iDrop Normal flow rates available



2.10 LPH
SKY BLUE



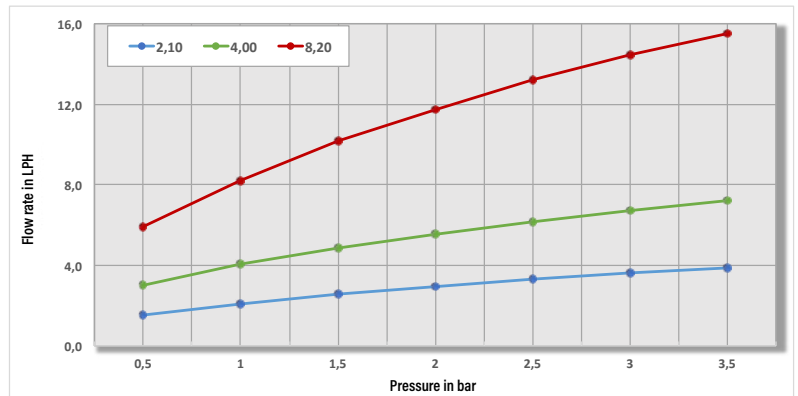
4.00 LPH
GREEN



8.20 LPH
RED

Pressure / flow rate ratio

Flow rate	Pressure (bar)							
	0.5	1	1.5	2	2.5	3	3.5	
2.1	1.53	2.09	2.58	2.95	3.30	3.60	3.89	
4.0	3.00	4.03	4.85	5.56	6.17	6.74	7.22	
8.2	5.90	8.20	10.19	11.76	13.20	14.47	15.52	



Recommended lengths in metres

based on Emission Uniformity (EU%) with an operating pressure of 1 bar

Flow rate LPH	S %	EU %	Tube D.E. 16 D.I. 14 mm							
			Spacing (m)							
			0.2	0.3	0.4	0.5	0.6	0.75	1.0	
2.1	0	95	41	53	63	73	82	94	113	
		90	75	97	116	134	150	173	208	
		85	92	119	143	165	185	213	256	
4.0	0	95	27	35	42	49	55	63	75	
		90	50	64	77	89	100	115	138	
		85	61	79	95	109	123	142	170	
8.2	0	95	18	23	27	31	35	41	49	
		90	32	41	50	57	64	74	89	
		85	39	51	61	70	79	91	109	

Flow rate LPH	S %	EU %	Tube D.E. 20 D.I. 17.6 mm							
			Spacing (m)							
			0.2	0.3	0.4	0.5	0.6	0.75	1.0	
2.1	0	95	61	78	94	108	122	140	168	
		90	111	143	172	198	223	257	308	
		85	137	177	212	245	275	317	380	
4.0	0	95	40	52	63	72	81	93	112	
		90	74	95	114	132	148	170	205	
		85	91	117	141	162	182	210	252	
8.2	0	95	26	34	40	46	52	60	72	
		90	47	61	74	85	95	110	132	
		85	58	75	91	104	117	135	162	

• S = slope

On-line drippers | Pressure compensating turbulent flow dripper

iDrop® PC

Dripper specifications

Flow rate	Colour	Inlet filter	Flow equation		Recommended filtration	CV	Min. operating pressure in bar		Drop Stop DS System in bar closure	Hole coupling
			x	k			PC	PCDS		
LPH	-	Area mm ²			mesh	%				mm
2.2		2	0.02	2.08	155	≤ 3	0.5	0.8	0.3	2.5-3.0
3.2		2	0.02	3.15	155	≤ 3	0.5	0.8	0.3	2.5-3.0
4.0		2	0.02	3.71	155	≤ 3	0.5	0.8	0.3	2.5-3.0
6.0		2	0.02	6.05	155	≤ 3	0.5	0.8	0.3	2.5-3.0
7.8		2	0.02	7.94	155	≤ 3	0.5	0.7	0.3	2.5-3.0

Range of operation: DS version from 0.8 to 4.0 bar

iDrop PC flow rates available



2.20 LPH - SKY BLUE



3.20 LPH - BROWN



4.00 LPH - GREEN



6.00 LPH - GREY



7.80 LPH - RED

iDrop PC multifunction outlet flow rates available



2.20 LPH - SKY BLUE



3.20 LPH - BROWN



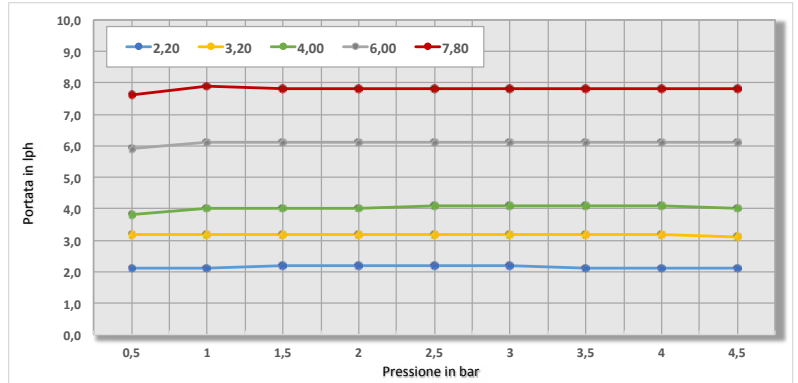
4.00 LPH - GREEN



7.80 LPH - RED

Pressure / flow rate ratio

Flow rate LPH	Pressure (bar)									
	0.5	1	1.5	2	2.5	3	3.5	4	4.5	4.5
2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1
3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1
4.0	3.8	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.0	4.0
6.0	5.9	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
7.8	7.6	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8



Recommended length in metres, based on operating pressure

Flow rate LPH	P bar	Tube D.E. 16 D.I. 14 mm Kd=0.4								
		Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5	
2.2	1	66	86	103	118	133	153	184	238	
	2	104	135	162	186	209	241	289	374	
	3	127	164	197	227	254	293	352	455	
	4	144	186	223	257	289	333	399	517	
3.2	1	53	69	82	95	106	123	147	190	
	2	83	108	129	149	168	193	232	300	
	3	101	131	157	181	204	235	282	365	
	4	115	149	179	206	231	266	320	414	
4.0	1	45	59	70	81	91	105	126	163	
	2	71	92	110	127	142	164	197	254	
	3	86	111	134	154	173	199	239	309	
	4	98	127	152	175	196	226	271	351	
6.0	1	35	45	54	62	69	80	96	124	
	2	54	70	84	97	109	126	151	195	
	3	66	86	103	118	133	153	184	238	
	4	75	97	116	134	151	174	208	270	
7.8	1	29	38	45	52	58	67	81	104	
	2	46	59	71	82	92	106	127	164	
	3	56	72	86	99	112	129	154	200	
	4	63	82	98	113	127	146	175	227	

Flow rate LPH	P bar	Tube D.E.20 D.I. 17.6 mm Kd=0.2								
		Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5	
2.2	1	98	127	152	176	197	227	273	353	
	2	154	200	240	276	310	358	429	556	
	3	188	243	292	336	377	435	522	676	
	4	213	276	331	381	428	494	593	750	
3.2	1	79	102	122	141	158	182	218	282	
	2	124	160	192	221	249	286	344	445	
	3	150	194	234	269	302	348	418	541	
	4	170	221	265	305	343	395	475	614	
4.0	1	67	87	104	120	135	155	186	241	
	2	105	136	163	188	211	243	291	377	
	3	128	165	198	228	256	295	355	459	
	4	145	188	225	259	291	335	403	521	
6.0	1	51	66	80	92	103	119	142	184	
	2	81	104	125	144	162	187	224	290	
	3	98	127	152	175	197	227	273	353	
	4	111	144	173	199	223	258	309	400	
7.8	1	43	56	67	77	87	100	120	155	
	2	68	88	105	121	136	157	188	244	
	3	82	107	128	148	166	191	229	296	
	4	94	121	145	167	188	217	260	336	

• P= Operating pressure in bar • Slope=0

On-line drippers | Pressure compensating turbulent flow dripper

iDrop® Light/PC

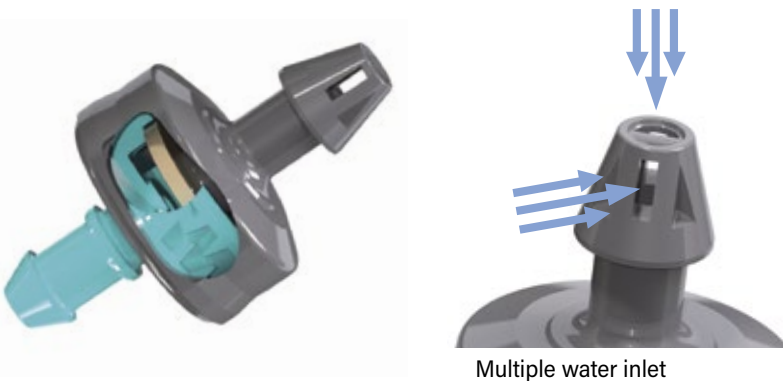
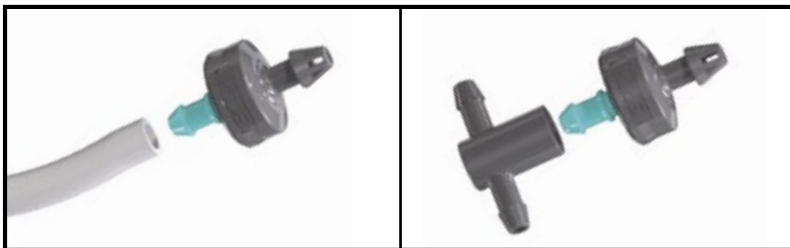
iDrop® in the LIGHT - PC version is the Irritec® on-line dripper with pressure compensating turbulent flow which packs all of its technology into a truly compact size. It has a double inlet filter, a tough silicone membrane and a turbulent labyrinth path that all contribute to its excellent hydraulic characteristics. Functional quality, ease of installation in countless possible combinations and low costs are its main features. iDrop Light was developed specifically for soilless use and is Irritec's economical and versatile answer to the needs of farmers.

Features and advantages

- Available with Drop Stop (ANTI-DRIP) system
- Ideal for greenhouses and nurseries and for all situations where maximum precision in water emission is required
- Turbulent flow to prevent sedimentation and clogging
- Multiple inlet filter: the dripper has a dual inlet system, one axial and the other lateral, which improves the flow of water to the unit
- Determination of the flow rate via the colour of the base of the outlet
- Multifunction outlet suitable for connection to micro tubes and manifolds

Multifunction Outlet

The new iDrop light - PC, with its multifunction outlet, allows the assembly of all Irritec manifolds, as well as \varnothing 6x4mm or \varnothing 5x3mm micro tubes as a result of its innovative multi-purpose outlet.



Field of application



On-line drippers | Pressure compensating turbulent flow dripper

iDrop® Light/PC

Dripper specifications

Flow rate	Colour	Inlet Filter		Flow equation		Recommended filtration mesh	CV %	Min. operating pressure in bar		Drop Stop System DS in bar closure	Hole coupling mm
		Area mm ²	No. of Holes	x	k			PC	PCDS		
1.10	Pink	2.9	4	0.03	1.01	150	5.00	0.5	0.8	0.15	2.5-3.0
2.10	Sky Blue	2.9	4	0.03	1.92	120	3.00	0.5	0.8	0.15	2.5-3.0
3.80	Green	2.9	4	0.03	3.55	120	3.00	0.5	0.8	0.15	2.5-3.0
7.80	Red	2.9	4	0.03	7.30	100	3.00	0.5	0.8	0.15	2.5-3.0
25.0	Grey	2.9	4	0.04	22.2	100	3.00	1.0	1.0	0.15	2.5-3.0

Range of operation: DS version from 0.8 to 4.0 bar - 25 LPH range of operation from 1 to 4 bar

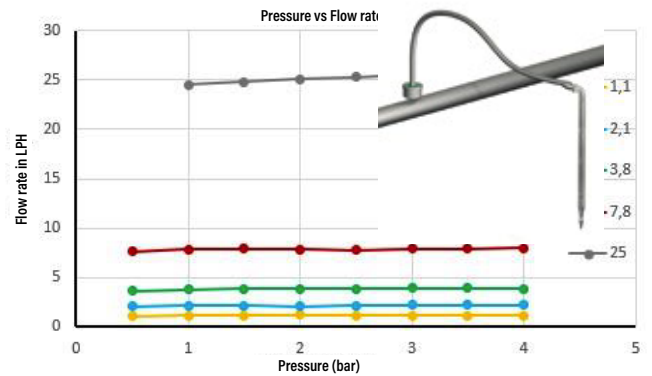
iDrop flow rates available® light/pc



1.10 LPH - PINK 2.10 LPH - SKY BLUE 3.80 LPH - GREEN 7.80 LPH - RED 25.0 LPH - GREY

Pressure / flow rate ratio

Flow rate LPH	Pressure (bar)							
	0.5	1	1.5	2	2.5	3	3.5	4
1.10	1.08	1.14	1.12	1.18	1.16	1.15	1.14	1.13
2.10	2.11	2.12	2.13	2.11	2.17	2.20	2.22	2.21
3.80	3.65	3.80	3.85	3.87	3.88	3.90	3.91	3.87
7.80	7.65	7.82	7.91	7.84	7.79	7.88	7.93	7.98
25.0	24.5	24.8	25.1	25.3	25.5	7.88	7.93	7.98



Recommended length in metres, based on operating pressure

Flow rate LPH	P bar	Tube D.E. 16 D.I. 13.6 mm Kd=0.4							
		Spacing (m)							
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5
1.1	1	108	140	169	195	219	253	304	394
	2	159	207	250	289	325	375	450	584
	3	191	249	301	347	390	450	542	702
	4	219	282	339	392	441	509	612	792
2.1	1	72	93	112	130	146	168	202	262
	2	106	138	166	192	216	249	299	388
	3	127	166	200	231	259	299	360	467
	4	144	187	226	261	293	338	407	527
3.8	1	48	63	75	87	98	113	136	176
	2	71	93	112	129	145	167	201	260
	3	85	111	134	155	174	201	241	313
	4	96	126	151	175	196	227	273	353
7.8	1	31	40	48	56	63	72	87	112
	2	46	59	71	82	92	107	128	166
	3	55	71	86	99	111	128	154	200
	4	62	80	97	112	125	145	174	225
25.0	1	16	21	25	28	32	37	44	57
	2	23	30	36	42	47	54	65	84
	3	28	36	44	50	57	65	78	101
	4	31	41	49	57	64	74	88	115

Flow rate LPH	P bar	Tube D.E.20 D.I. 17.4 mm Kd=0.2							
		Spacing (m)							
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5
1.1	1	164	214	258	298	335	386	465	602
	2	244	317	382	442	497	573	689	892
	3	293	382	460	531	597	689	828	1073
	4	331	431	519	600	675	778	935	1213
2.1	1	109	142	171	198	223	257	309	400
	2	162	211	254	294	330	381	458	594
	3	195	254	306	353	397	458	551	714
	4	220	286	345	399	448	517	622	806
3.8	1	73	96	115	133	149	172	207	268
	2	109	142	171	197	221	255	307	398
	3	131	170	205	237	266	307	369	479
	4	147	192	231	267	301	347	417	541
7.8	1	47	61	74	85	95	110	132	171
	2	69	90	109	126	141	163	196	254
	3	83	109	131	151	170	196	236	305
	4	94	123	148	171	192	221	266	345
25.0	1	23	30	36	42	47	54	65	85
	2	34	45	54	62	70	80	97	125
	3	41	54	65	75	84	97	116	151
	4	47	61	73	84	95	109	131	170

Flow rate LPH	P bar	Tube D.E. 16 D.I. 13.6 mm Kd=0.4							
		Spacing (m)							
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5
1.1	1	78	102	122	141	159	183	220	285
	2	146	190	229	265	297	343	413	535
	3	181	236	285	329	370	427	513	665
	4	208	271	326	376	423	489	588	760
2.1	1	52	68	81	94	106	122	147	190
	2	97	126	152	176	198	228	274	355
	3	121	157	189	219	246	284	341	442
	4	138	180	217	250	281	325	390	506
3.8	1	35	46	55	63	71	82	98	127
	2	65	85	102	118	133	153	184	238
	3	81	105	127	147	165	190	229	296
	4	93	121	145	168	189	218	262	339
7.8	1	23	29	35	40	45	52	63	81
	2	42	54	65	75	85	98	118	152
	3	52	67	81	94	105	121	146	189
	4	59	77	93	107	120	139	167	217
25.0	1	12	15	18	21	23	27	32	42
	2	21	28	33	39	43	50	60	78
	3	27	34	41	48	54	62	74	96
	4	30	39	47	55	61	71	85	110

Flow rate LPH	P bar	Tube D.E.20 D.I. 17.4 mm Kd=0.2							
		Spacing (m)							
		0.2	0.3	0.4	0.5	0.6	0.75	1.0	1.5
1.1	1	119	155	187	216	243	280	337	437
	2	223	291	350	405	455	525	631	817
	3	278	362	436	503	566	653	784	1017
	4	318	414	499	576	648	748	898	1164
2.1	1	79	103	124	144	162	186	224	290
	2	148	193	233	269	302	349	420	544
	3	185	240	290	334	376	434	522	676
	4	211	275	323	383	431	497	597	773
3.8	1	53	69	84	96	108	125	150	195
	2	100	130	156	180	203	234	281	365
	3	124	161	194	224	252	291	350	454
	4	142	185	222	257	289	333	401	519
7.8	1	34	44	53	62	69	80	96	124
	2	64	83	100	115	130	149	180	233
	3	79	103	124	143	161	186	223	289
	4	90	118	142	164	184	213	256	331
25.0	1	17	22	27	31	34	40	48	62
	2	32	41	49	57	64	74	89	115
	3	39	51	61	71	80	92	110	143
	4	45	58	70	81	91	105	126	164

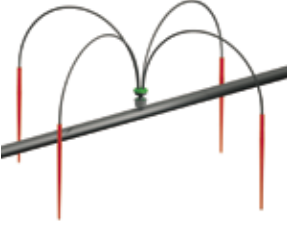
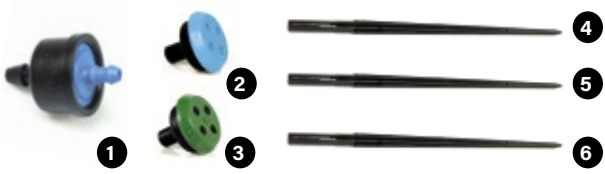

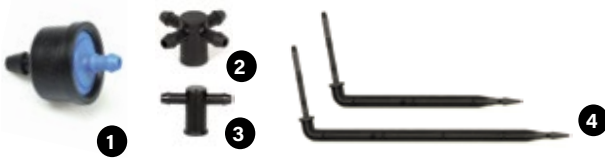

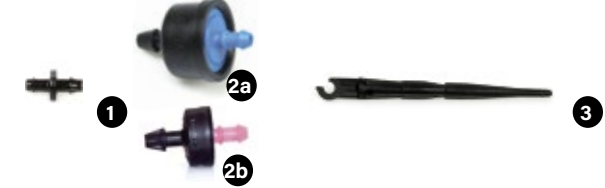

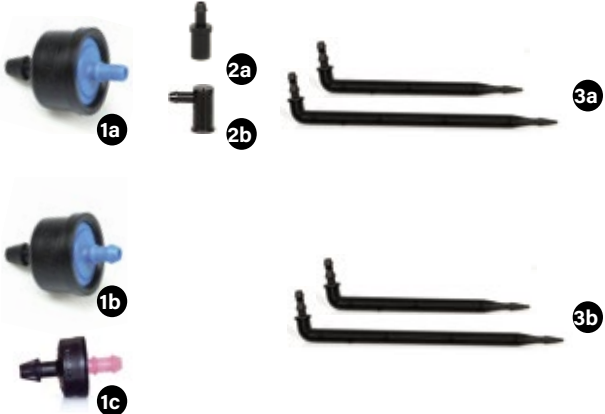
• P= Operating pressure in bar • Slope=0
Minimum operating pressure=0.7 bar

On-line drippers | Greenhouse Systems

K-drop System

K- Drop System is a pre-assembled kit consisting of iDrop drippers, cigar drippers and micro tubes, and is available in various diameters. Both practical and functional, it is available pre-assembled in standard dimensions, or modular form (by selecting manifold and stake) if dimensions other than those proposed in the price list are required. It is ideal for irrigating crops in greenhouses or in pots: the answer to the needs of soilless irrigation.

K-Drop System

EXAMPLE KIT	COMPONENTS REQUIRED	DESCRIPTION
 <p>A</p>		<ul style="list-style-type: none"> 1 - iDrop or iDrop multifunction 2 - IMMC22000A032 3 - IMMC42000V032 4 - IMAST2000A000 5 - IMAST2000N000 6 - IMAST2000R000 capillary ø 3.2 mm ext.
 <p>B</p>		<ul style="list-style-type: none"> 1 - iDrop or iDrop multifunction 2 - IMMO42000N030 3 - IMMO22000N030 4 - IMAID2015N026 micro tube PVC200 ø 5.5x3 mm.
 <p>C</p>		<ul style="list-style-type: none"> 1 - IM7156000N050 2a - iDrop multifunction 2b - iDrop light 3 - IMASG2000N000 micro tube PE ø 6x4 mm.
 <p>D</p>		<ul style="list-style-type: none"> 1a - iDrop 2a - IMMO12000N030 2b - IMML12000N030 3a - IMAIP2015N030 micro tubePE or PVC200 ø 6x4 mm. 1b - iDrop multifunction 2b - iDrop light 3b - IMAIP2015N030 micro tubePE or PVC200 ø 6x4 mm.

On-line drippers | Greenhouse Systems

K-drop System

Recommended combinations with MC2-MC4 manifold

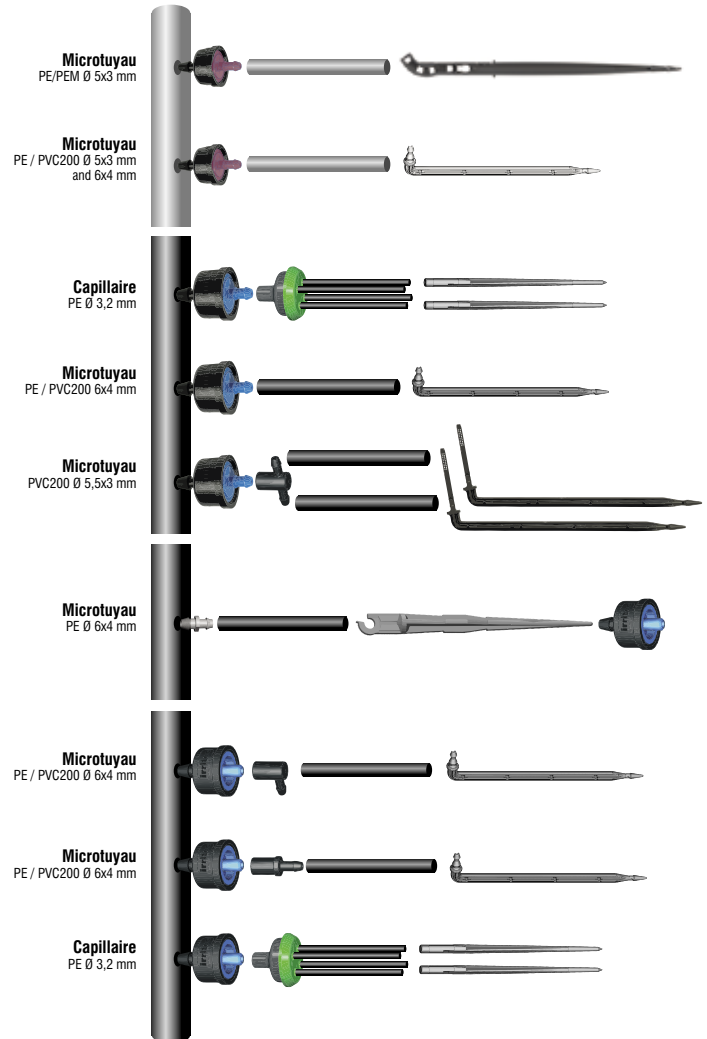
Flow rate per droplet point	Capillary Ø 3.2 mm X Ø int.												Manifold mod.	Idrop LPH
	L= 40 cm				L= 60 cm				L= 100 cm					
	0.8	1.0	1.2	1.5	0.8	1.0	1.2	1.5	0.8	1.0	1.2	1.5		
0.5 LPH				x				x				x	MC4	2.2
1.0 LPH	x			x	x			x				x	MC2	2.2
1.0 LPH				x	x			x				x	MC4	4.0
1.0 LPH	x			x				x				x	MC2	2.2
1.0 LPH				x				x				x	MC4	4.0
2.0 LPH	x	x	x	x	x	x	x	x	x	x	x		MC2	4.0
2.0 LPH				x				x				x	MC4	7.8
3.0 LPH		x	x		x	x	x		x	x	x		MC2	6.0
4.0 LPH			x			x	x				x		MC2	7.8

Recommended combinations with MO2-MO4 manifold

Flow rate per droplet point	No. of droplet points	Manifold mod.	Length of micro tube mm	Type of Stake	Idrop LPH
0.5 LPH	4	MO4	50 - 80	ASD - AID	2.2
0.7 LPH	4	MO4	50 - 80	ASD - AID	3.2
1.0 LPH	4	MO4	50 - 80	ASD - AID	4.0
1.0 LPH	2	MO2	50 - 80	ASD - AID	2.2
1.5 LPH	4	MO4	50 - 80	ASD - AID	6.0
1.5 LPH	2	MO2	50 - 80	ASD - AID	3.2
1.7 LPH	4	MO4	50 - 80	ASD - AID	7.8
2.0 LPH	2	MO2	50 - 80	ASD - AID	4.0

It is recommended not to exceed 10 cm difference in the level between droplet points.

COMBINATIONS Hole coupling ø 2.5 mm



Tubes and accessori



black grey
Tube in PE Ø 16 and 20 mm



black grey
Micro tube in PE Ø 5x3 and 6x4 mm



black
Micro tube in PVC200 Ø 5.5x3 and 6x4 mm



Hole puncher

On-line drippers | Inspectable cigar dripper with flow

DSV - DSH



DSV

Ref.	Description	LPH
IMDSV2000N004	inspectable turbulent flow cigar dripper with filter and vertical outlet	4
IMDSV2000N008		8
IMDSV2000N016		16

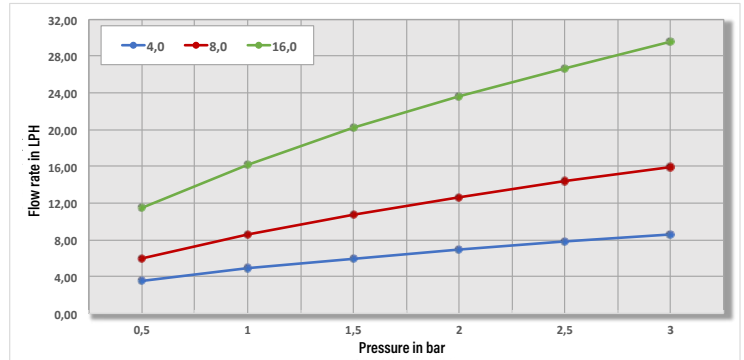


DSH

Ref.	Description	LPH
IMDSH2000N004	inspectable turbulent flow cigar dripper with filter and rear outlet	4
IMDSH2000N008		8
IMDSH2000N016		16

Pressure / flow rate ratio

Nominal flow rate in LPH at 1.0 bar	Pressure (bar)						CV %	Flow Equation	
	0.5	1	1.5	2	2.5	3		x	k
4	3.5	4.9	6.0	6.9	7.8	8.6	≤ 5	0.53	1.5
8	6.0	8.6	10.7	12.7	14.4	15.9	≤ 5	0.54	2.5
16	11.5	16.2	20.2	23.7	26.7	29.6	≤ 5	0.53	4.8



Field of application



On-line drippers | Capillary irrigation system

Capillar System™ +

THE CAPILLAR SYSTEM™ is the localised Irritec irrigation system, conceived for the nursery, flower-growing and greenhouse sector. The main feature of the system is the capillary, a micro tube with an internal diameter from 0.6 to 1.5 mm, manufactured by a process of coextrusion. Monitoring of quality, using laser equipment to check dimensional characteristics, allows accuracy to within a hundredth of a millimetre to be achieved.

What is it?

The system consists of a polyethylene tube and the capillary:

- The tube, available in diameters of 16 mm, 20 mm, and 25 mm, is perforated at the requested spacing;
- The capillary, with a diameter of 3.2 mm, is inserted in the tube and a stake is inserted into the end of the capillary, then placed in the soil in proximity to the plant.

How does it work?

The laminar flow generated by the extremely fine diameter of the capillary allows a constant flow rate to be achieved, relative to the length of the capillary and the operating pressure.

What are the advantages?

II CAPILLAR SYSTEM™ is a reliable and economical irrigation system:

- installation is carried out by laying the tube, supplied with the capillary pre-inserted, on the ground or crop bed and, using the stake, the capillary is then secured to the ground near the stem of the plant;
- for maintenance, or if the capillary is damaged, simply remove it from the tube and insert a new one;
- the flexibility of the system allows the emission points to be varied by modifying the length of the capillary.

Products

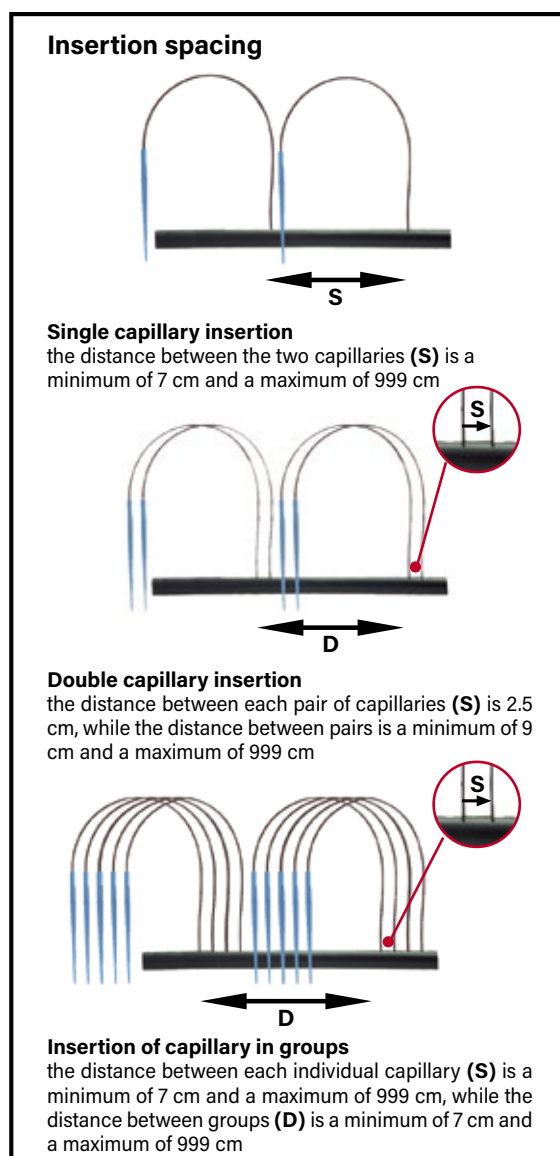
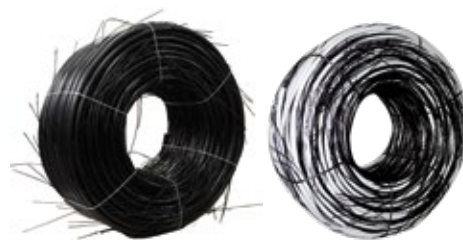
supplied by Irritec:

- complete, pre-assembled irrigation system consisting of the tube with capillary and stake (supplied separately);
- the tube can be perforated manually using the dedicated hole puncher or, on request, be pre-perforated at the desired spacing and for the diameter of the capillary to be inserted;
- three different stakes are available, to be affixed to the end of the capillary according to the type of use.

Flow rate tables of the capillaries based on the internal \varnothing , the length and the operating pressure

5 m c.a.					10 m c.a.				
Internal \varnothing mm	Capillary length in cm				Internal \varnothing mm	Capillary length in cm			
	40	60	80	94		40	60	80	94
0.6	1.6	1.1	0.9	0.8	0.6	2.4	2.0	1.6	1.4
0.8	3.2	2.4	2.0	1.8	0.8	5.4	4.3	3.5	3.1
1.0	5.8	4.7	4.0	3.4	1.0	9.0	7.6	6.6	5.9
1.2	10.1	8.3	7.1	6.2	1.2	14.5	12.4	11.0	9.8
1.5	19.0	15.0	13.0	12.5	1.5	26.5	22.0	19.0	18.0

Field of application



External \varnothing	Internal \varnothing	reels	pre-cut
3.2 mm	0.6 mm	500 m	500 pcs.
	0.8 mm	500 m	500 pcs.
	1.0 mm	500 m	500 pcs.
	1.2 mm	500 m	500 pcs.
	1.5 mm	500 m	500 pcs.

* length as required

On-line drippers | Capillary irrigation system

External diameter of tube 16 mm - nominal thickness 1.4

Internal Ø	0.6 mm								0.8 mm								1.0 mm								1.2 mm								1.5 mm							
	40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm									
Capillary length Emission point	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
Spacing																																								
7.5 cm	16	9	18	10	21	11	22	12	10	6	11	7	12	7	14	8	8	4	8	5	9	5	9	5	6	3	6	3	7	4	7	4	4	2	4	2	5	2	5	2
10 cm	18	11	23	13	27	15	28	16	13	7	15	8	17	9	18	10	10	5	10	6	11	6	12	7	8	4	8	4	9	5	9	5	5	3	5	3	6	3	7	3
12.5 cm	25	14	28	16	32	18	34	19	15	9	18	10	20	11	21	12	11	7	12	7	13	7	14	8	9	5	10	5	10	6	11	6	7	4	6	4	7	4	8	4
15 cm	28	16	32	18	37	21	39	22	18	10	20	12	23	12	25	14	13	8	14	8	15	8	16	9	10	6	11	6	12	7	12	7	8	4	8	4	9	5	9	5
17.5 cm	32	18	36	21	42	24	44	25	20	12	23	13	26	15	28	16	15	9	16	9	17	9	18	10	11	7	12	7	13	8	13	8	8	5	9	5	9	5	10	6
20 cm	35	20	40	23	46	27	48	28	22	13	25	15	29	17	31	18	16	10	17	10	19	11	20	12	12	8	14	8	14	9	15	9	9	5	10	5	11	6	12	7
25 cm	41	25	47	28	54	32	57	34	26	16	30	18	34	20	36	22	19	11	20	12	22	13	23	14	13	9	16	10	17	10	18	10	11	6	12	7	13	8	14	8
30 cm	47	28	53	32	62	37	65	39	30	18	34	20	39	23	41	25	22	13	23	14	25	15	26	16	17	10	18	11	19	12	21	12	12	7	13	8	15	9	16	9
35 cm	52	32	59	36	69	42	72	44	33	20	38	23	44	26	46	28	24	15	26	16	28	17	29	18	19	11	20	12	22	13	23	14	14	8	15	9	16	10	17	10
40 cm	58	35	65	40	76	46	79	48	37	22	41	25	48	29	50	31	26	16	29	17	31	19	32	20	21	12	22	14	24	14	25	15	15	9	16	10	18	11	19	12
Nominal flow rate	2.5		2.0		1.6		1.4		5.2		4.1		3.4		3.0		9.0		7.5		6.6		5.9		14.5		12.4		10.9		9.7		26.5		22.0		19.0		18.0	

External diameter of tube 20 mm - nominal thickness 1.4

Internal Ø	0.6 mm								0.8 mm								1.0 mm								1.2 mm								1.5 mm							
	40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm									
Capillary length Emission point	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
Spacing																																								
7.5 cm	26	15	30	16	34	19	36	20	17	9	19	10	22	12	23	13	12	6	13	7	14	7	15	8	10	5	10	6	11	6	12	6	10	6	11	6	13	7	13	8
10 cm	33	20	37	21	43	24	45	26	21	11	24	13	27	15	29	16	15	8	16	9	18	9	18	10	12	6	13	7	14	8	14	8	13	7	14	8	16	9	17	10
12.5 cm	39	22	44	25	51	29	54	31	25	14	28	16	33	18	34	20	18	10	20	11	21	12	22	13	14	8	15	9	16	9	17	10	15	9	16	9	18	11	19	11
15 cm	45	26	51	29	59	34	62	36	28	16	32	19	37	21	39	23	21	12	22	13	24	14	25	15	16	9	17	10	18	11	20	11	17	10	19	11	21	13	22	13
17.5 cm	50	29	57	33	66	39	69	40	32	18	36	21	42	24	44	26	23	13	25	14	27	15	28	16	18	10	19	11	21	12	22	13	19	11	21	12	23	14	24	15
20 cm	55	33	63	37	73	43	76	45	35	21	40	23	46	27	48	29	25	15	28	16	29	17	31	18	20	12	21	13	23	13	24	14	21	13	23	14	26	16	27	17
25 cm	65	39	74	44	86	51	90	53	41	25	47	28	54	32	57	34	30	18	32	19	35	21	36	22	23	14	25	15	27	16	28	17	25	15	27	17	30	19	32	20
30 cm	74	45	84	50	98	59	102	61	47	28	53	32	61	37	64	39	34	20	37	22	39	24	41	25	27	16	29	17	30	18	32	19	28	17	31	19	34	21	36	22
35 cm	82	50	93	57	109	66	114	69	52	32	59	36	68	41	72	44	38	23	41	25	44	27	46	28	30	18	32	19	34	20	36	22	31	20	34	21	38	23	40	25
40 cm	90	55	102	62	119	73	125	76	57	35	65	40	75	46	79	49	41	25	45	27	48	29	50	31	32	20	35	21	37	23	39	24	35	22	38	23	42	26	42	27
Nominal flow rate	2.5		2.0		1.6		1.4		5.2		4.1		3.4		3.0		9.0		7.5		6.6		5.9		14.5		12.4		10.9		9.7		26.5		22.0		19.0		18.0	

External diameter of tube 25 mm - nominal thickness 1.5

Internal Ø	0.6 mm								0.8 mm								1.0 mm								1.2 mm								1.5 mm							
	40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm		40 cm		60 cm		80 cm		94 cm									
Capillary length Emission point	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
Spacing																																								
7.5 cm	47	28	53	31	61	37	64	38	30	19	33	20	39	23	41	25	21	13	23	14	25	15	26	16	17	10	18	10	19	11	20	12	10	6	11	6	13	7	13	8
10 cm	57	35	65	39	75	46	79	48	36	22	41	25	48	29	50	31	26	16	29	17	30	18	32	19	20	11	22	13	23	14	25	15	13	7	14	8	16	9	17	10
12.5 cm	67	41	76	46	88	54	92	56	42	26	48	29	56	34	58	36	31	19	33	20	36	22	37	23	24	14	26	16	27	17	29	18	15	9	16	9	18	11	19	11
15 cm	76	47	86	53	100	61	105	64	48	30	54	33	63	39	66	41	35	21	38	23	40	25	42	26	27	16	29	18	31	19	33	20	17	10	19	11	21	13	22	13
17.5 cm	84	52	95	59	111	69	116	72	53	33	60	37	70	43	73	46	38	24	42	26	45	28	47	29	30	19	32	20	34	21	37	23	19	11	21	12	23	14	24	15
20 cm	92	57	104	65	122	75	127	78	58	36	66	41	77	48	80	50	42	26	46	29	49	30	51	32	33	20	36	22	38	23	40	25	21	13	23	14	26	16	27	17
25 cm	107	67	121	76	141	88	148	92	68	42	77	48	89	56	93	59	49	31	53	33	57	36	59	37	38	24	41	26	44	27	46	29	25	15	27	17	30	19	32	20
30 cm	121	76	137	86	159	100	167	105	76	48	87	54	100	63	105	67	55	35	60	38	64	40	67	42	43	27	46	29	49	31	52	33	28	17	31	19	34	21	36	22
35 cm	134	84	152	95	176	111	185	116	85	53	96	60	111	70	116	74	61	38	66	42	71	45	74	47	48	30	51	32	55	34	58	37	31	20	34	21	38	23	40	25
40 cm	146	92	165	104	193	122	202	127	92	58	105	66	121	77	127	81	66	42	73	46	77	49	81	51	52	33	56	36	60	38	63	40	35	22	38	23	42	26	42	27
Nominal flow rate	2.5		2.0		1.6		1.4		5.2		4.1		3.4		3.0		9.0		7.5		6.6		5.9		14.5		12.4		10.9		9.7		26.5		22.0		19.0		18.0	

S = single emission points
D = double emission points

** Description of the Fittings, see page 63

Micro irrigation systems | Cleaning and disinfecting irrigation systems

I-DRIP CARE



Biologically safe

- uses biocompatible substances
- prevents and resolves problems with scaling and biofilm formation
- prevents and solves problems related to bacteria, legionellosis and protozoa
- keeps systems efficient over time by improving their functionality

Products in the **I-DRIP CARE** line are compatible with the principles of the protocol on BIOSAFETY. Their formulations use active ingredients that are also used in the food industry, and which do not cause toxicity when in contact with cultivated lands or even with plants. They are non-toxic to humans, animals and the plants themselves. In some cases, they can become supporting and nourishing elements for the plants. They are therefore particularly suitable for use in organic farming where, by preventing the formation of biofilm and eliminating harmful bacteria such as Legionella, they fully comply with regulations concerning the protection of health and safety in the workplace (L:81/2008).



MAIN PROBLEMS WITH CLOGGING FOR CONVENTIONAL MICRO IRRIGATION SYSTEMS

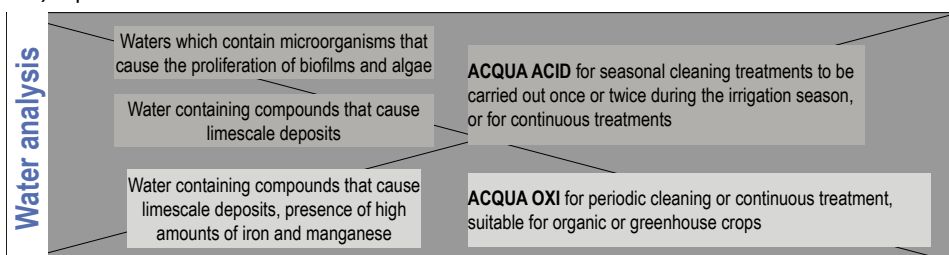
- Clogging due to limescale
- Clogging due to the presence of iron and manganese
- Clogging caused by biofilms and organic matter

MAIN PROBLEMS WITH CLOGGING FOR MICRO IRRIGATION SYSTEMS IN GREENHOUSES

- Clogging due to limescale
- Clogging due to the presence of iron and manganese
- Clogging caused by biofilms and organic matter
- Hazard of exposing workers to toxic products in enclosed environments, as well as exposure to the risk of inhalation of water which may contain legionellosis

MAIN PROBLEMS WITH CLOGGING FOR ORGANIC FARMING MICRO IRRIGATION SYSTEMS

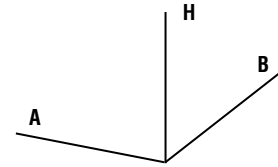
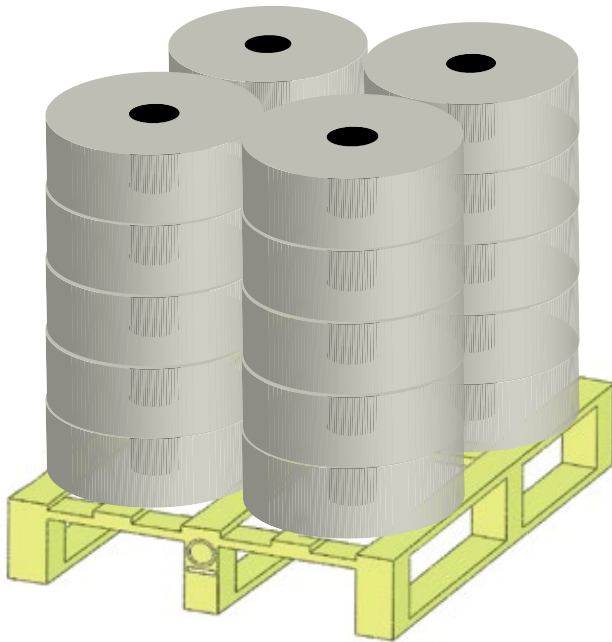
- Clogging due to limescale
- Clogging due to the presence of iron and manganese
- Clogging caused by biofilms and organic matter
- The use of incompatible substances (inorganic acids, chlorine and its derivatives, heavy metals, etc.) is prohibited.



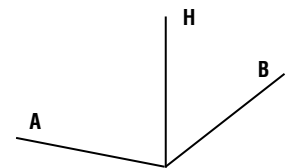
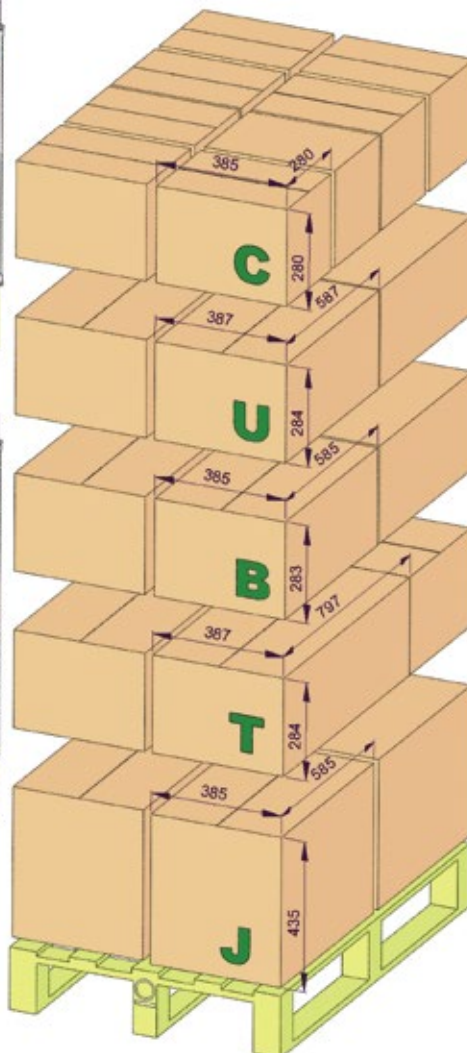
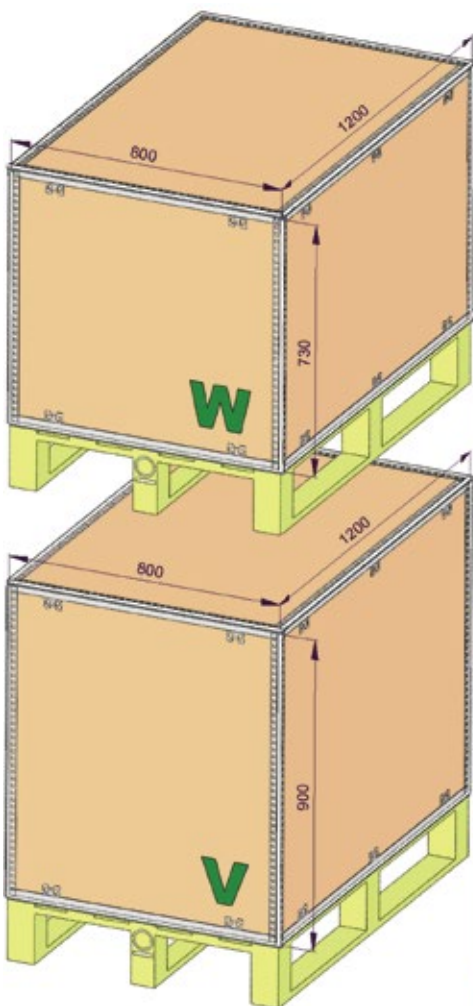
Product	I-DROP CARE ACID	I-DROP CARE OXI
Prevents formation of limescale	OK	OK
Prevents deposits of Ca and Mg	OK	
Prevents deposits of Fe and Mn	OK	
Removal of deposits of Ca, Mg, Fe, Mn	OK	
Supplies the soil with phosphorous	OK	
Lowers pH level (for water with basic pH)	OK	
Prevents the formation of biofilm		OK

Product	I-DROP CARE ACID	I-DROP CARE OXI
Removes biofilm	OK	OK
Suitable for organic crops		OK
Suitable for greenhouse crops		OK
Continuous treatments	OK	OK
Seasonal treatments	OK	OK
Disinfection with medical device		
Prevents legionella in greenhouse crops		OK

Packaging specifications | Packing



Model	Type	A x B mm	H mm	Qty per pallet	No. reels per level	No. of levels per pallet
Tape / P1	Large	1140 x 114	1150	20	4	5
	Large	1140 x 114	1150	16	4	4
	Medium	1140 x 114	2170	72	9	8
	Small	1140 x 114	1180	99	9	11
drip line	Ø 12 - 400 m	1140 x 114	2170	72	9	8
	Ø 16 - 25 m	1160 x 1160	2340	110	5	22
	Ø 16 - 50 m	1160 x 1160	2440	80	4	20
	Ø 16 - 100 m	1140 x 114	2480	56	4	14
	Ø 16 - 200 m	1140 x 114	2260	28	4	7
	Ø 16 - 400 m	1400 x 1400	2260	28	4	7
	Ø 16 - 500 m	1140 x 114	1120	16	4	4
	Ø 20 - 100 m	1400 x 1400	2270	44	4	11
Ø 20 - 300 m	1800 x 1800	2260	28	4	7	



Model	A mm	B mm	H mm	Vol. m ³
B	385	585	283	0.064
C	385	280	280	0.030
F	567	490	445	0.120
U	387	587	284	0.065
T	387	797	284	0.088
J	385	585	435	0.098
W	800	1200	730	0.701
V	800	1200	900	0.864

Packaging specifications | Packing

EXXTREME Tape

nominal internal Ø mm	Thickness mils	L m	no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA-40' HIGH CUBE
16	5	3962	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	6	3050	20	ø 57 x 20 cm cut-out ø 40 mm		
	7	2700				
	8	2300				
	10	1830				
22	12	1555	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	6	2250				
	7	2100				
	8	1830				
	10	1340				
	12	1219				

EXXTREME Tape - medium reels

nominal internal Ø mm	Thickness mils	L m	no. reels per pallet -	Reel size -	Pallet sizes cm
16	5	1350	72	ø 39 x 25 cm cut-out ø 40 mm	114 x 114 x 114
	6	1250			
	7	1100			
	8	1000			
	10	800			
	12	700			

irritecTape

nominal internal Ø mm	Thickness mils	L m	no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA-40' HIGH CUBE
16	4	4572	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	5	3962				
	6	3050	20	ø 57 x 20 cm hole out ø 40 mm		
	7	2700				
	8	2300				
	10	1830				
	12	1555				
22	15	-	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	6	2250				
	7	2100				
	8	1830				
	10	1340				
25	12	1219	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	10	1400				
29	12	1200	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	10	1300				
	12	1100				

irritecTape - medium reel

nominal internal Ø mm	Thickness mils	L m	no. reels per pallet -	Reel size -	Pallet sizes cm
16	5	1350	72	ø 39 x 25 cm cut-out ø 40 mm	114 x 114 x 114
	6	1250			
	7	1100			
	8	1000			
	10	800			
	12	700			

irritecTape - small reel

nominal internal Ø mm	Thickness mils	L m	no. reels per pallet -	Reel size -	Pallet sizes cm
16	6	300	99	ø 39 x 9.5 cm cut-out ø 40 mm	114 x 114 x 114
	7	250			
	8	250			
	10	220			
	12	190			

Packaging specifications | Packing

P1

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
12 P1 SMALL	Data not currently available. The item will be produced by the end of the year.							
16 P1	5	3500	3700	4000	16	ø 57 x 25 cm cut- out ø 40 mm	114 x 114 x 114	40
	6	2900	3200	3500				
	7	2700	2900	3100				
	8	2300	2600	2800				
	10	1900	2100	2300				
	12	1300	1500	1700				
	15	1100	1300	1400				
	18	800	1000	1100				
22 P1 ULTRA	6	2200	2200	2500	16	ø 57 x 25 cm cut- out ø 40 mm	114 x 114 x 114	40
	7	2000	2000	2400				
	8	1500	1800	2200				
	10	1300	1500	1800				
	12	1200	1300	1500				
	15	900	900	1000				
	18	800	800	900				
25 P1 MAXI	10	600	600	600	16	ø 57 x 25 cm cut- out ø 40 mm	114 x 114 x 114	40
	12	1200	1200	1400				
	15	1100	1100	1200				
29 P1 EXTRA	10	800	800	900	16	ø 57 x 25 cm cut- out ø 40 mm	114 x 114 x 114	40
	12	1100	1100	1300				

P1 - medium reel

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
16 P1	6	1500	1500	1500	72	ø 39 x 25 cm hole out ø 40 mm	114 x 114 x 114	20
	7	1300	1300	1300				
	8	1200	1200	1200				
	10	1000	1000	1000				
	12	700	700	700				
	15	500	500	500				
	18	300	300	300				

P1 - small reel

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
16 P1	6	300	300	300	99	ø 39 x 9.5 cm hole out ø 40 mm	114 x 114 x 114	40
	7	250	250	250				
	8	250	250	250				
	10	220	220	220				
	12	190	190	190				
	15	140	140	140				
	18	115	115	115				

Packaging specifications | Packing

P5

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
16 P5	6	2500	2800	3000	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	7	2300	2500	2700				
	8	2000	2200	2500				
	10	1700	1800	2000				
	12	1300	1500	1700				
	15	1100	1300	1400				
	18	800	1000	1100				
22 P5 ULTRA	6	2200	2200	2500	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	7	2000	2000	2400				
	8	1500	1500	1800				
	10	1300	1300	1600				
	12	1200	1200	1300				
	15	900	900	1000				
	18	800	800	900				
25 P5 MAXI	10	1200	1200	1400	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	12	1100	1100	1200				
	15	800	800	900				
29 P5 EXTRA	10	1100	1100	1300	16	ø 57 x 25 cm cut-out ø 40 mm	114 x 114 x 114	40
	12	1000	1000	1100				

P5 - medium reel

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
16 P5	6	1000	1000	1000	72	ø 39 x 25 cm hole out ø 40 mm	114 x 114 x 114	20
	7	800	800	800				
	8	800	800	800				
	10	600	600	600				
	12	600	600	600				
	15	400	400	400				
	18	300	300	300				

P5 - small reel

nominal internal Ø of the Tube mm	Thickness mils	L (m)			no. reels per pallet -	Reel size -	Pallet sizes cm	no. pallet container 1AAA 40' HIGH CUBE
		<19 cm	20<>29 cm	>30 cm				
16 P5	6	300	300	300	99	ø 39 x 9.5 cm hole out ø 40 mm	114 x 114 x 114	40
	7	250	250	250				
	8	250	250	250				
	10	220	220	220				
	12	190	190	190				
	15	140	140	140				
	18	115	115	115				

D5-M5

nominal internal Ø of the Tube mm	Thickness mils	L. reel m	no. reels per pallet no.	Reel size cm	Pallet sizes cm	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
12	24	400	72	39 x 25	114 x 114 x 114	720	1440	1440
	35	400	16	57 x 20	114 x 114 x 114	1440	640	640
16	24	500	16	57 x 25	114 x 114 x 114	320	640	720
	35	500	loose	80 x 28	-	170	400	460
	40	500	loose	80 x 30	-	170	400	460
20	35	300	loose	90 x 30	-	170	400	460

D7

Data not currently available. The item will be produced by the end of the year.

Packaging specifications | Packing

Tandem / Junior

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mils	m	no.	cm	cm			
16	35 - 44	400	loose	80 x 30	-	150	350	400
20	35 - 47	300	loose	90 x 30	-			

Multibar C / Multibar C d.s. - a.s.

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mils	m	no.	cm	cm			
16	35 - 44	400	loose	80 x 30	-	150	350	400
20	35 - 47	300	loose	90 x 30	-			

Multibar C / Multibar F d.s. - a.s.

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mils	m	no.	cm	cm			
16	24 - 35	500	16	∅ 57 x 20 cm hole out ∅ 40 mm	114 x 114 x 114	170	400	460
	40	500	loose	80 x 28	-			
20	35 - 40	300	loose	90 x 30	-			
23	47	300	loose	60 x 30	-			
25	47	200	loose	60 x 30	-			

Tandem / Junior / Multibar C / Multibar C d.s. - a.s. / Multibar F / Multibar F d.s. - a.s. - reels reduced

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mils	m	no.	cm	cm			
16	35 - 44	25	110	50 x 10	116 x 116 x 110	-	1100	2200
	35 - 44	50	80	57 x 11.5	116 x 116 x 110	-	-	1600
	35 - 44	100	56	62 x 16.5	114 x 114 x 114	-	-	1120

Minidrip

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mils	m	no.	cm	cm			
6.6	30	15	256	22.5 x 15.5 x 6	116 x 116 x 110	5,120	10,240	-

iDrop / iDrop light PC

Model	Pack Quantity	Box Quantity	Boxes per pallet	Box sizes	Pallet sizes	Boxes per container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
-	pcs.	m	no.	cm	cm			
iDrop Normal	500	3,000	56	38.5 x 28 x 28	80 x 120 x 220	742	1,540	1,760
iDrop® PC	500	3,000	56	38.5 x 28 x 28	80 x 120 x 220	742	1,540	1,760
iDrop PC ND	500	3,000	56	38.5 x 28 x 28	80 x 120 x 220	742	1,540	1,760
iDrop light PC	500	3,500	112	38.5 x 28 x 12.5	80 x 120 x 220	1,484	3,080	3,520



DSV / DSH



Model	Pack Quantity	Box Quantity	Boxes per pallet	Box sizes	Pallet sizes	Boxes per container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	pcs.	m	no.	cm	cm			
DSV	-	1,200	28	60 x 40 x 30	80 x 120 x 220	371	770	880
DSH	-	1,200	28	60 x 40 x 30	80 x 120 x 220	371	770	880

Capillar system

nominal internal Ø of the Tube	Thickness	L. reel	no. reels per pallet	Reel size	Pallet sizes	Reel for container		
						1CC 20' STANDARD	1AA 40' STANDARD	1AAA 40' HIGH CUBE
mm	mm	m	no.	cm	cm			
16	1.4	500	loose	100 x 25 (indicative)	-	-	-	-
20	1.4	300	loose	100 x 25 (indicative)	-	-	-	-
25	1.5	200	loose	100 x 25 (indicative)	-	-	-	-

Certifications

System	Brand	Standard / Regulation	Description	Body	Certificate no.
		UNI EN ISO 9001:2015	Quality Management System	IIP / CISQ	964
		UNI EN ISO 14001:2015	Environmental Management System	IIP / CISQ	174
	UE 952/2013	Authorised Economic Operator	Customs Agency and State Monopolies	IT AEOF 16 1155	

Product	Country	Brand	Standard	Description	Body	Certificate no.
	ITALY		UNI 9561:2006	Connecto™ +Ultra	IIP	1430
			UNI 7990:2015	Irritec® BD Genlene® BD potable	IIP	1746 1438
			ISO 9261:2004	Drip line Tandem® - Multibar™ C Multibar™ C Rootguard	IIP	1441 - 1442
				Drip line D5™	IIP	1441 - 1442
				Drip line Junior®	IIP	1441 - 1442
				Drip line P1®	IIP	1441 - 1442
				EN 12201-2:2011 + A1:2013	Irritec® - Genlene®	IIP
		ISO 8779:2010	Gpipe® BD	IIP	1439	

Fittings Table

Group	Group ID	Group Description	Internal Diameter	Internal Diameter (mm)	Thicknesses (mil)	Notes
A	A1	TAPE FITTINGS AND VALVES	16	16.10	4 - 24	
	A2	TAPE FITTINGS AND VALVES	22	22.30	6 - 24	
	A3	TAPE FITTINGS AND VALVES	25	25.10	10 - 24	
	A4	TAPE FITTINGS AND VALVES	29	28.60	10 - 24	
B	B1	EASYBLOCK FITTINGS AND VALVES 15-24 MIL	16	16.10	15 - 24	Not recommended for use with tape
	B2	EASYBLOCK FITTINGS AND VALVES 15-24 MIL	22	22.30	15 - 24	Not recommended for use with tape
C	C1	EASYBLOCK FITTINGS AND VALVES	12	11.80	12 - 24	Not recommended for use with tape
	C11	EASYBLOCK FITTINGS AND VALVES	12	11.80	30 - 35	Not recommended for use with tape
	C2	EASYBLOCK FITTINGS AND VALVES	16	16.10	5 - 18	Not recommended for use with tape
	C3	EASYBLOCK FITTINGS AND VALVES	22	22.30	6 - 18	Not recommended for use with tape
	C4	EASYBLOCK FITTINGS AND VALVES	25	25.10	10 - 18	Not recommended for use with tape
	C5	EASYBLOCK FITTINGS AND VALVES	29	28.60	10 - 18	Not recommended for use with tape
D	D1	FITTINGS FOR HEAVY LINES (830, etc.)	16	13.60 ± 0.10	35 - 47	
	D2	FITTINGS FOR HEAVY LINES (830, etc.)	17	14.30 ÷ 14.60	35 - 47	
	D3	FITTINGS FOR HEAVY LINES (830, etc.)	20	17.50 ± 0.10	35 - 60	
E	E1	FITTINGS FOR HEAVY LINES WITH RETAINING RING	16	13.60 ± 0.10	35 - 47	
	E2	FITTINGS FOR HEAVY LINES WITH RETAINING RING	20	17.50 ± 0.10	35 - 47	
F	F1	FITTINGS FOR HEAVY LINES WITH FLOATING RING NUT	16	13.50 ÷ 14.10	24 - 47	
	F2	FITTINGS FOR HEAVY LINES WITH FLOATING RING NUT	20	17.50 ± 0.20	24 - 47	
G	G1	FITTINGS FOR HEAVY LINES (730, etc.)	16	13.80 ÷ 14.10	35 - 47	
H	H1	EL 500 SERIES	16	12.90 ÷ 14.70	35 - 55	
	H2	EL 550 SERIES	17	13.70 ÷ 15.70	45 - 60	
	H3	EL 600 SERIES	18	15.00 ÷ 16.00	25 - 50	
	H4	EL 700 SERIES	20	17.40 ÷ 18.90	40 - 55	
	H5	EL 800 SERIES	25	20.00 ÷ 21.50	45 - 65	
I	I1	ECONOMY SERIES FITTINGS AND VALVES WITH NEW RING NUT	25	22.60	47 - 55	



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