

# NEPTUNE PC AS and AL

## Pressure-Compensating Drip line



The NEPTUNE PC drip line is available in two versions, ANTI-SIPHON (AS) and NO-DRAIN (AL), with an integrated pressure-compensating emitter .

The pressure-compensating mechanism of the emitter constantly ensures:

- High resistance to clogging;
- High distribution uniformity;
- Multi-year durability.

The great distribution uniformity optimises the crop results; each plant receives the same amount of water, nutritional factors and fertilizers.

Neptune PC can be laid on the surface, underground or attached to a wire.

## RANGE

**Neptune PC is available in a complete range of configurations:**

- Diameter 16 mm  
Wall thickness 0.9, 1.0, 1.1 mm
- Diameter 20 mm  
Wall thickness 0.9, 1.0, 1.2 mm
- Emitter spacing  
20/25/30/40/45/50/60/70/75/80/90/100 cm  
(other spacing available on request)
- Grouped spacing (optional)
- 4 different Pressure-compensating emitters (PC)
  - 3.8 l/h between 0.5 and 3.5 bar;
  - 2.4 l/h between 0.5 and 3.5 bar;
  - 1.6 l/h between 0.5 and 3.5 bar;
  - 1.2 l/h between 0.5 and 3.5 bar.
- 2 different versions of emitters
  - ANTI-SIPHON, AS;
  - NO-DRAIN, AL.

## MAIN FEATURES

The pressure-compensating emitter makes Neptune PC the perfect choice for:

- Difficult topographic conditions, particularly on undulating ground;
- Installations requiring long side lines;
- Variable or low water pressure.

**Neptune PC** boasts the following advantages:

- A pressure-compensating system which maintains a constant flow rate even when the pressure varies (between 0.5 and 3.5 bar), guaranteeing precise water and nutrient delivery even in the toughest conditions;
- High resistance to clogging thanks to the AS (Anti-siphon) System (present both in the AS and in the AL version) which reduces the suction effects by preventing take-up of impurities;
- Extraordinary efficiency, allowing implementing long side lines with very uniform water distribution;

- Considerable design flexibility thanks to the wide range of Emitters and the choice of spacing;
- Blue line for easy identification;
- Outlet hole made using precision mechanical technology;
- Product ID code engraved on the tubing;
- The ANTI-SIPHON system prevents impurities from entering the emitter from the outside, therefore it can also be installed underground, perfectly maintaining both its irrigation characteristics and its multi-year durability.
- The NO-DRAIN system (which is also anti-siphon) is the version specifically designed to be installed in all those irrigation systems where short and frequent irrigation cycles are required. Thanks to its low-pressure closing system, the emitter allows:
  - Preventing leaks thus ensuring perfect irrigation uniformity;
  - Maintaining the system pressurised thus resulting in a further saving in time, water and energy.

# APPLICATIONS

The Neptune PC drip line is ideal for irrigating permanent and seasonal crops such as:

- Vitaceae (wine and table grapes);
- Oleaceae (olive tree);
- Rosaceae (apples, pears, plums, damsons, peaches, apricots, cherries, cherry plums, almonds, medlars, quinces);
- Rutaceae (oranges, lemons, clementines, citrons, grapefruit, tangerines, limes, tangelo, pomelo);
- Corylaceae (hazelnuts);
- Juglandaceae (walnuts, pecans);
- Actinidiaceae (kiwi);
- Anacardiaceae (pistachio, mango, cashew);
- Punicaceae (pomegranate);
- Ebenaceae (persimmon); Musaceae (banana);
- Rubiaceae (coffee);
- Sterculiaceae (cocoa);
- Moraceae (figs); Aracaceae (coconut, dates);
- Lauraceae (avocado);
- Caricaceae (papaya);
- Small fruits (bilberry, blackberry).

In topographically difficult soils, especially on undulating land and particularly with extended layouts, it is essential to use a pressure-compensating drip line able to ensure a constant distribution in all points of the irrigation system.

In all these situations, Neptune PC is the best choice.

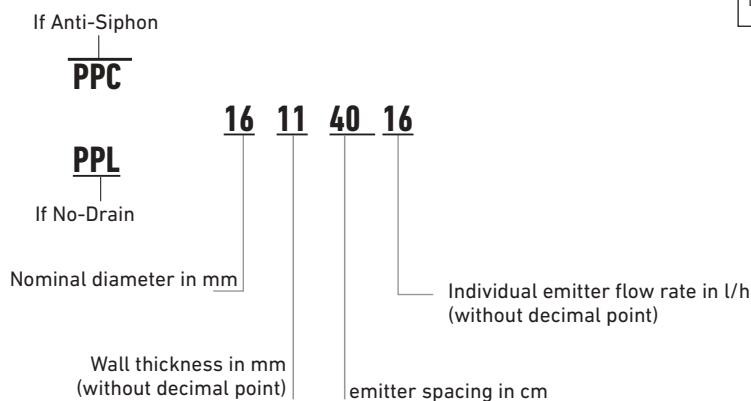


Code	Individual Emitter Flow Rate (l/h) between 0.5-3.5 bar	Emitter spacing	Flow rate of the drip line per metre (l/h/m) @ 0.5 bar and 3.5 bar	Required filtration mesh		
<b>Emitter PC (3.8 l/h)</b>						
PPxyzz2038	3.8 l/h	20 cm	19	150		
PPxyzz2538		25 cm	15.2			
PPxyzz3038		30 cm	12.7			
PPxyzz4038		40 cm	9.5			
PPxyzz4538		45 cm	8.4			
PPxyzz5038		50 cm	7.6			
PPxyzz6038		60 cm	6.3			
PPxyzz7038		70 cm	5.4			
PPxyzz7538		75 cm	5.1			
PPxyzz8038		80 cm	4.8			
PPxyzz9038	90 cm	4.2				
PPxyzz10038	100 cm	3.8				
<b>Emitter PC (2.4 l/h)</b>						
PPxyzz2024	2.4 l/h	20 cm	12	150		
PPxyzz2524		25 cm	9.6			
PPxyzz3024		30 cm	8.0			
PPxyzz4024		40 cm	6.0			
PPxyzz4524		45 cm	5.3			
PPxyzz5024		50 cm	4.8			
PPxyzz6024		60 cm	4.0			
PPxyzz7024		70 cm	3.4			
PPxyzz7524		75 cm	3.2			
PPxyzz8024		80 cm	3.0			
PPxyzz9024		90 cm	2.7			
PPxyzz10024		100 cm	2.4			
<b>Emitter PC (1.6 l/h)</b>						
PPxyzz2016		1.6 l/h	20 cm		8	150
PPxyzz2516	25 cm		6.4			
PPxyzz3016	30 cm		5.3			
PPxyzz4016	40 cm		4.0			
PPxyzz4516	45 cm		3.6			
PPxyzz5016	50 cm		3.2			
PPxyzz6016	60 cm		2.7			
PPxyzz7016	70 cm		2.3			
PPxyzz7516	75 cm		2.1			
PPxyzz8016	80 cm		2.0			
PPxyzz9016	90 cm		1.8			
PPxyzz10016	100 cm		1.6			
<b>Emitter PC (1.2 l/h)</b>						
PPxyzz2012	1.2 l/h	20 cm	6	150		
PPxyzz2510		25 cm	4.8			
PPxyzz3010		30 cm	4			
PPxyzz4010		40 cm	3			
PPxyzz4510		45 cm	2.66			
PPxyzz5010		50 cm	2.4			
PPxyzz6010		60 cm	2			
PPxyzz7010		70 cm	1.71			
PPxyzz7510		75 cm	1.6			
PPxyzz8010		80 cm	1.5			
PPxyzz9010		90 cm	1.33			
PPxyzz10010		100 cm	1.2			

NEPTUNE PC - AS and AL				
Flow rate l/h between 0.5 and 3.5 bar	1.2	1.6	2.4	3.8
Emitter code	12	16	24	38



## Codification



# NEPTUNE PC AS and AL

## Pressure-compensating Drip line

### PERFORMANCE

The following tables indicate the maximum length of the lines in relation to the inflow water pressure.

**Note:**

When determining the maximum line length, the maximum inflow pressure as indicated in the "Technical Data" table must be complied with.

### NEPTUNE PC - AS AND AL - DIAMETER 16 MM - Land slope 0%

Code	Individual Emitter Flow Rate (l/h) between 0.5-3.5 bar	Emitter spacing	Maximum lengths in metres					
			@ 1.0 bar	@ 1.5 bar	@ 2.0 bar	@ 2.5 bar	@ 3.0 bar	@ 3.5 bar
PPx16xx2038	3.8 l/h	20 cm	37	45	55	61	66	70
PPx16xx2538		25 cm	45	58	67	74	80	85
PPx16xx3038		30 cm	52	67	77	85	92	98
PPx16xx4038		40 cm	66	84	97	107	115	123
PPx16xx4538		45 cm	72	92	106	117	126	135
PPx16xx5038		50 cm	78	99	114	127	137	146
PPx16xx6038		60 cm	89	113	131	145	157	167
PPx16xx7038		70 cm	99	127	146	162	175	187
PPx16xx7538		75 cm	104	133	154	170	184	196
PPx16xx8038		80 cm	109	140	161	178	193	206
PPx16xx9038		90 cm	118	152	175	194	210	224
PPx16xx10038		100 cm	127	163	189	209	226	241
PPx16xx2024	2.4 l/h	20 cm	51	65	75	82	89	96
PPx16xx2524		25 cm	61	78	90	99	107	114
PPx16xx3024		30 cm	71	90	104	115	124	132
PPx16xx4024		40 cm	88	113	130	144	155	166
PPx16xx4524		45 cm	96	123	142	157	170	181
PPx16xx5024		50 cm	104	133	154	170	184	196
PPx16xx6024		60 cm	119	152	176	195	211	224
PPx16xx7024		70 cm	133	170	197	218	235	251
PPx16xx7524		75 cm	140	179	207	229	247	264
PPx16xx8024		80 cm	146	187	216	239	259	276
PPx16xx9024		90 cm	159	204	235	260	282	300
PPx16xx10024		100 cm	171	219	253	280	303	323
PPx16xx2016	1.6 l/h	20 cm	66	86	98	109	118	125
PPx16xx2516		25 cm	80	102	117	130	140	149
PPx16xx3016		30 cm	92	118	136	150	162	173
PPx16xx4016		40 cm	115	147	169	187	203	216
PPx16xx4516		45 cm	125	160	185	205	222	236
PPx16xx5016		50 cm	135	173	200	222	240	256
PPx16xx6016		60 cm	155	198	229	253	274	292
PPx16xx7016		70 cm	173	221	256	283	307	327
PPx16xx7516		75 cm	181	232	268	297	322	344
PPx16xx8016		80 cm	190	243	281	311	337	360
PPx16xx9016		90 cm	206	264	305	338	366	391
PPx16xx10016		100 cm	222	284	329	364	396	421
PPx16xx2012	1.2 l/h	20 cm	72	90	105	114	122	129
PPx16xx2512		25 cm	84	107	123	136	147	156
PPx16xx3012		30 cm	98	125	144	159	172	183
PPx16xx4012		40 cm	126	161	185	205	221	236
PPx16xx4512		45 cm	139	177	205	226	245	261
PPx16xx5012		50 cm	152	194	224	248	268	286
PPx16xx6012		60 cm	177	226	261	289	312	333
PPx16xx7012		70 cm	200	256	296	327	354	377
PPx16xx7512		75 cm	211	271	312	346	374	399
PPx16xx8012		80 cm	222	285	329	364	394	420
PPx16xx9012		90 cm	244	312	361	399	433	461
PPx16xx10012		100 cm	265	339	392	435	470	501

The Irrloc application allows you to quickly and easily dimension your irrigation system, including on uneven land. With Irrloc you can also dimension the drip line feed manifold and view delivery uniformity on the line and the irrigation block.

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**NEPTUNE PC - AS AND AL - DIAMETER 20 MM - Land slope 0%**

Code	Individual Emitter Flow Rate (l/h) between 0.5-3.5 bar	Emitter spacing	Maximum lengths in metres					
			@ 1.0 bar	@ 1.5 bar	@ 2.0 bar	@ 2.5 bar	@ 3.0 bar	@ 3.5 bar
PPx20xx2038	3.8 l/h	20 cm	54	69	80	88	95	101
PPx20xx2538		25 cm	66	84	97	107	116	123
PPx20xx3038		30 cm	77	98	113	124	134	143
PPx20xx4038		40 cm	97	123	142	157	170	181
PPx20xx4538		45 cm	106	135	156	172	186	198
PPx20xx5038		50 cm	115	147	169	187	202	215
PPx20xx6038		60 cm	132	168	194	215	232	247
PPx20xx7038		70 cm	148	189	218	241	260	278
PPx20xx7538		75 cm	155	199	229	253	274	292
PPx20xx8038		80 cm	163	208	240	266	287	306
PPx20xx9038		90 cm	177	227	262	290	313	334
PPx20xx10038		100 cm	191	244	282	312	338	360
PPx20xx2024	2.4 l/h	20 cm	73	93	108	108	128	136
PPx20xx2524		25 cm	89	114	131	144	156	166
PPx20xx3024		30 cm	104	132	152	168	181	193
PPx20xx4024		40 cm	130	166	191	211	228	243
PPx20xx4524		45 cm	143	182	210	232	250	267
PPx20xx5024		50 cm	155	197	227	251	272	289
PPx20xx6024		60 cm	177	226	261	289	312	332
PPx20xx7024		70 cm	198	254	293	324	350	373
PPx20xx7524		75 cm	209	267	308	341	368	393
PPx20xx8024		80 cm	219	280	323	357	386	412
PPx20xx9024		90 cm	238	304	351	389	421	448
PPx20xx10024		100 cm	256	328	379	419	454	484
PPx20xx2016	1.6 l/h	20 cm	95	121	140	155	167	178
PPx20xx2516		25 cm	116	148	171	189	204	217
PPx20xx3016		30 cm	135	172	198	219	237	252
PPx20xx4016		40 cm	169	216	249	275	298	317
PPx20xx4516		45 cm	185	237	272	301	326	348
PPx20xx5016		50 cm	201	256	296	327	354	377
PPx20xx6016		60 cm	230	294	339	376	407	433
PPx20xx7016		70 cm	258	330	380	421	456	486
PPx20xx7516		75 cm	271	347	400	443	480	511
PPx20xx8016		80 cm	284	365	419	464	503	536
PPx20xx9016		90 cm	309	395	456	505	547	584
PPx20xx10016		100 cm	332	426	492	545	591	630
PPx20xx2012	1.2 l/h	20 cm	119	151	170	192	207	212
PPx20xx2512		25 cm	145	184	212	234	252	268
PPx20xx3012		30 cm	168	213	245	271	293	312
PPx20xx4012		40 cm	210	267	309	340	368	392
PPx20xx4512		45 cm	230	293	337	373	403	430
PPx20xx5012		50 cm	249	317	366	404	437	466
PPx20xx6012		60 cm	285	364	420	464	502	535
PPx20xx7012		70 cm	319	407	470	520	563	600
PPx20xx7512		75 cm	335	428	495	547	592	631
PPx20xx8012		80 cm	351	450	518	573	620	661
PPx20xx9012		90 cm	382	488	563	624	675	720
PPx20xx10012		100 cm	411	526	607	672	728	776

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# NEPTUNE PC AS and AL

## Pressure-compensating Drip line

### Technical and Logistical data

Nominal diameter	Inner diameter	Wall thickness	Outer diameter	Min pressure	Max pressure	Reel length
16 mm	13.8 mm	0.9 mm	15.6 mm	0.5 bar	3.5 bar	450 m
		1.0 mm	15.8 mm			
		1.1 mm	16.0 mm			
20 mm	17.6 mm	0.9 mm	19.4 mm			
		1.0 mm	19.6 mm			
		1.2 mm	20.0 mm			

	Container 20'	Container 40'	Container 40' HC	Truck 13.6
Quantity of reels	160	320	360	400

