

# DripNet PC™ AS XR HWD

Integral compact pressure-compensated, anti-siphon mechanism and root intrusion protection dripper, for semi-permanent drip applications, for growers who seek quick ROI. Ideal for permanent crops in sub surface applications that require high-level root intrusion protection.

→ 12009 - 12010 - 16009 - 16010 - 16012 - 20010  
20012 - 23009



Root intrusion  
protection



Pressure-  
compensated



Anti-Siphon  
mechanism

## / Benefits & Features

- **Extra root intrusion protection (XR)** Drippers are protected against root intrusion better than all other options, utilizing a patented root inhibitor within the dripper cover that prevents root intrusion into the dripper labyrinth. Better protection against root intrusion without reliance on chemicals. Long-lasting protection due to non-migrating active ingredients embedded in the dripper cover.
- **Pressure-compensated** Precise and equal amounts of water delivered over a broad pressure range, ensuring 100% uniformity of water and nutrient distribution along the laterals.
- **Anti-Siphon mechanism** Prevents contaminants from being drawn into the dripper, making it ideal for sub surface applications.
- **Continuously self-flushing** Flushes debris throughout operation, while ensuring constant dripper operation even in challenging water quality.
- **Wide filtration area** Ensures optimal performance even under harsh water conditions, preventing the entrance of sediment into the labyrinths.
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediment into the drippers.

## / Specifications

- ✓ Pressure-compensated range according to table below.
- ✓ Recommended filtration: depending on dripper flow rate. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2 ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100 ppm, pre treatment shall be applied following Netafim expert instructions.
- ✓ TurboNet™ labyrinth with large water passage.
- ✓ Weldable into thick wall driplines (0.90, 1.00, 1.20 mm)
- ✓ Injected dripper, very low CV with injected silicon diaphragm.
- ✓ High UV resistant. Resistant to standard nutrients used in agriculture.
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production.

## → DRIPPERS TECHNICAL DATA

FLOW RATE* (L/H)	WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS WIDTH-DEPTH-LENGTH (MM)	FILTRATION AREA (MM <sup>2</sup> )	CONSTANT K	EXPONENT* X	RECOMMENDED FILTRATION (MICRON)/(MESH)
0.6	0.25 - 2.5	0.52 x 0.60 x 22	42	0.6	0	130/120
1.0	0.40 - 3.0	0.61 x 0.60 x 8	42	1.0	0	130/120
1.6	0.40 - 3.0	0.76 x 0.73 x 8	42	1.6	0	200/80
2.0	0.40 - 3.5	0.84 x 0.80 x 8	42	2.0	0	200/80
3.0	0.40 - 3.5	1.02 x 0.88 x 8	42	3.0	0	200/80
3.8	0.60 - 3.5	1.02 x 0.88 x 8	42	3.8	0	200/80

\* Within working pressure range

## → DRIPLINES TECHNICAL DATA

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
12009	10.60	0.90	12.40	2.5/3.0/3.5*	3.9	2.85
12010	10.60	1.00	12.60	2.5/3.0/3.5*	4.6	2.85
16009	14.20	0.90	16.00	2.5/3.0/3.5*	3.9	0.72
16010	14.20	1.00	16.20	2.5/3.0/3.5*	4.6	0.72
16012	14.20	1.20	16.60	2.5/3.0/3.5*	5.2	0.72
20010	17.50	1.00	19.50	2.5/3.0/3.5*	4.6	0.25
20012	17.50	1.20	19.90	2.5/3.0/3.5*	5.2	0.25
23009	20.80	0.90	22.60	2.5/3.0*	3.5	0.20

\*The maximum working pressure is defined by the dripper or by the dripline wall thickness

## → DRIPLINES PACKAGE DATA (ON BUNDLED COIL)\*\*

MODEL	WALL THICKNESS (MM)	DISTANCE BETWEEN DRIPPERS (M)	COIL LENGTH (M)	AVERAGE* COIL WEIGHT (KG)	COILS IN A 40 FEET CONTAINER (UNITS)	TOTAL IN A 40 FEET CONTAINER (M)
12009	0.90	0.15 to 1.00	500	16.5	384	192000
12010	1.00	0.15 to 1.00	500	18.3	384	192000
16009	0.90	0.15 to 1.00	500	18.5	330	165000
16010	1.00	0.15 to 1.00	500	20.4	330	165000
16012	1.20	0.15 to 1.00	400	21.0	352	140800
20010	1.00	0.15 to 1.00	300	16.3	330	99000
20012	1.20	0.15 to 1.00	300	20.0	330	99000
23009**	0.90	0.15 to 0.25	350	22.5	480	168000
		0.30 to 1.00	400	25.0		192000

\* Calculated weight average. For further details see "Average Coil Weight Disclaimer"

\*\*Dripline model 23009 on carton coil

## / Drippers flow rate vs. working pressure

In order to calculate the right flow rate of each dripper, under different working pressures, we use the following formula:

$$Q = K * P^X$$

Where:

Q = Dripper flow rate (liters/hour)

K = Constant (each dripper has his singular constant and must be defined by the dripper producer)

P = Real working pressure (meter)

X = Exponent (each dripper has its singular exponent and must be declared and defined by the dripper producer)

\*ISO 9261 require from the manufacturer to declare the constant K and dripper exponent

In all Netafim pressure compensated drippers - including DripNet PC™ (shown in this document) – the dripper exponent X is equal to 0 [zero] (within the pressure range defined for each of the drippers), so the right flow rate of the dripper will be always equal (+/- 7% as defined by the international standard: ISO 9261).

Each dripper has a compensation range which includes minimum and maximum pressure; under the minimum pressure defined, the dripper will perform as non-regulated dripper and provide flow that increases with the pressure increase until reaching the minimum defined limit working pressure.

If the compensated drippers are exposed to a higher pressure than the defined maximum pressure, the drippers will continue to regulate the flow rate, but become more sensitive to clogging, usually the maximum working pressure of the drippers are determined by the driplines limitations (diameter and wall thickness) and most importantly the pipe and its associated connections.

## / Max. Lateral length

Flow Variation (FV) expresses the flow variation between the dripper “sensing” the highest pressure and the one “sensing” the lowest pressure in an irrigation block (zone).

These drippers will not always be the first and last drippers on the dripline.

$$FV \% = (Q_{max} - Q_{min}) / Q_{max} * 100$$

\*International standards define 10% flow variation to be considered as uniform irrigation.

In order to calculate the maximum run lengths that can be planned for specific dripline (considering all the hydraulic factors influencing the flow within the same dripline), we use a calculation software that was developed by Netafim™ based on Darcy-Waisbach formulas + years of design experience and cooperation with academic institutes.

All the tables presented in this document are for initial reference only; the exact run length of the driplines is obtained from design software that considers various hydraulic factors in the entire system.

There might be small variance between the different software's in the market due to the calculation method and assumptions each software is using. For an initial estimate of the dripline length, the data that is presented in this document (within the tables shown) is sufficiently accurate.

As we have already seen, regulated drippers of Netafim™ will provide equal flow irrespective of the working pressure, therefore, the factors that are affecting the dripline run lengths will be: the dripline inlet pressure, the minimum working pressure set for the dripper and the slope.

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 12009/12010 • ID 10.6 mm • Kd 2.85 • Flow rate 0.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	55	77	97	114	130	144	155	167	176
	1.5	69	98	125	149	170	190	210	226	242
	2.0	79	113	145	174	200	225	247	269	289
	2.5	88	126	161	193	223	251	278	302	326
FLAT TERRAIN	1.0	59	86	111	135	157	179	200	221	240
	1.5	72	105	136	166	194	221	247	272	296
	2.0	82	120	155	189	221	251	282	310	338
	2.5	90	131	170	207	242	277	309	341	371
DOWNHILL 2%	1.0	63	94	125	156	186	216	248	281	315
	1.5	76	112	148	183	218	252	286	323	361
	2.0	85	126	165	204	242	279	317	356	396
	2.5	93	137	180	221	262	302	342	383	426

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 12009/12010 • ID 10.6 mm • Kd 2.85 • Flow rate 1.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	40	57	72	86	98	110	120	130	139
	1.5	50	72	92	110	127	143	158	171	184
	2.0	57	82	106	127	147	166	184	201	217
	2.5	63	91	117	141	164	185	206	225	243
	3.0	68	98	126	153	178	201	223	245	265
FLAT TERRAIN	1.0	42	61	79	97	113	128	143	158	172
	1.5	52	75	98	119	139	158	177	195	212
	2.0	59	86	111	135	158	180	202	222	242
	2.5	64	94	122	148	173	198	222	244	266
	3.0	69	101	131	160	187	213	238	263	287
DOWNHILL 2%	1.0	44	65	86	107	127	147	167	187	206
	1.5	53	79	103	128	151	174	197	219	241
	2.0	60	89	116	143	169	194	219	244	268
	2.5	66	97	126	155	184	211	238	264	290
	3.0	70	104	135	166	196	225	254	282	309

Minimum considered pressure 0.4 bar

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 12009/12010 • ID 10.6 mm • Kd 2.85 • Flow rate 1.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	30	43	54	65	75	84	93	101	108
	1.5	37	53	68	83	95	108	119	131	141
	2.0	42	61	78	95	110	125	138	152	165
	2.5	46	67	87	105	122	139	154	169	183
	3.0	50	72	94	114	132	150	167	184	199
FLAT TERRAIN	1.0	31	45	58	71	83	95	106	116	127
	1.5	38	55	72	87	102	116	130	143	156
	2.0	43	63	81	99	116	132	148	164	178
	2.5	47	69	89	109	127	146	163	180	196
	3.0	51	74	96	117	137	157	175	194	211
DOWNHILL 2%	1.0	32	47	62	77	91	104	118	132	145
	1.5	39	57	75	92	109	125	141	157	172
	2.0	44	64	84	104	122	140	158	175	192
	2.5	48	70	92	113	133	153	171	190	209
	3.0	51	75	98	121	142	163	183	203	223

Minimum considered pressure 0.4 bar

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 12009/12010 • ID 10.6 mm • Kd 2.85 • Flow rate 2.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	26	37	47	57	66	74	82	89	96
	1.5	32	46	59	72	83	95	105	114	124
	2.0	36	53	68	83	96	109	121	132	144
	2.5	40	58	75	91	106	120	134	148	160
	3.0	43	63	81	99	115	130	146	160	174
	3.5	46	67	86	105	122	139	155	171	186
FLAT TERRAIN	1.0	27	39	50	61	71	81	91	101	109
	1.5	33	48	62	75	88	101	113	124	135
	2.0	37	54	70	86	100	114	128	141	154
	2.5	41	59	77	94	110	126	141	156	169
	3.0	44	64	83	101	119	135	151	167	182
3.5	46	68	88	108	126	144	161	177	194	
DOWNHILL 2%	1.0	27	41	53	66	77	89	101	113	123
	1.5	33	49	64	79	93	107	121	134	147
	2.0	38	55	72	89	104	120	135	150	164
	2.5	41	60	79	97	114	131	147	163	179
	3.0	44	65	85	104	122	140	158	175	191
3.5	47	69	90	110	130	148	167	185	202	

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 12009/12010 • ID 10.6 mm • Kd 2.85 • Flow rate 3.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	20	29	37	45	52	58	64	70	76
	1.5	25	36	46	56	65	74	82	89	97
	2.0	28	41	52	64	74	85	94	104	112
	2.5	31	45	58	71	82	93	104	114	124
	3.0	33	48	62	76	89	101	113	124	135
	3.5	35	51	66	81	94	108	120	132	144
FLAT TERRAIN	1.0	20	30	38	47	55	62	70	77	84
	1.5	25	36	47	58	68	77	86	95	104
	2.0	28	41	54	66	77	88	98	108	118
	2.5	31	45	59	72	85	97	108	119	130
	3.0	33	49	64	78	91	104	116	129	140
	3.5	35	52	67	82	97	110	123	137	149
DOWNHILL 2%	1.0	21	31	40	50	58	67	75	84	92
	1.5	25	37	49	60	70	81	91	101	111
	2.0	29	42	55	68	79	91	102	113	124
	2.5	31	46	60	74	87	99	112	124	136
	3.0	34	50	64	79	93	106	120	132	145
	3.5	36	53	68	84	98	113	127	140	154

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 0.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	110	144	171	192	208	221	231	240	248
	1.5	143	193	234	268	296	321	342	361	378
	2.0	167	227	278	322	360	393	423	450	474
	2.5	185	254	314	365	410	451	487	520	551
FLAT TERRAIN	1.0	129	182	229	274	314	354	390	426	459
	1.5	159	224	283	338	389	438	484	527	570
	2.0	180	255	323	386	444	500	552	602	651
	2.5	198	280	355	424	489	550	608	663	717
DOWNHILL 2%	1.0	148	220	296	383	488	648	**	**	**
	1.5	174	256	340	434	544	710	**	**	**
	2.0	194	283	374	473	589	760	**	**	**
	2.5	211	306	403	507	627	801	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 1.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	82	111	134	153	169	183	194	204	213
	1.5	105	144	177	206	231	253	273	291	307
	2.0	122	168	208	244	275	303	329	353	374
	2.5	135	188	233	274	310	344	374	402	428
	3.0	146	204	254	299	340	377	412	444	474
FLAT TERRAIN	1.0	92	130	164	196	226	254	281	306	330
	1.5	113	161	203	243	280	314	348	380	410
	2.0	129	183	232	277	319	359	397	433	468
	2.5	136	197	255	311	369	429	493	563	647
	3.0	152	216	274	328	378	426	471	515	556
DOWNHILL 2%	1.0	102	149	196	242	291	343	399	464	540
	1.5	122	177	229	281	335	391	452	519	599
	2.0	136	197	255	311	369	429	493	563	647
	2.5	148	214	276	336	397	461	527	601	687
	3.0	159	228	294	358	422	488	558	634	722

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 1.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	62	85	104	121	135	148	158	168	178
	1.5	79	109	136	159	179	198	215	231	245
	2.0	91	127	158	186	211	235	256	275	294
	2.5	101	140	176	208	236	263	288	311	333
	3.0	109	152	191	226	258	288	315	341	365
FLAT TERRAIN	1.0	68	96	121	145	167	188	207	226	244
	1.5	83	118	150	179	206	232	257	280	303
	2.0	95	134	170	204	235	265	293	320	346
	2.5	104	148	187	224	259	291	322	352	381
	3.0	112	159	202	242	279	314	348	380	411
DOWNHILL 2%	1.0	73	106	138	169	199	229	259	292	324
	1.5	88	127	164	199	233	267	301	336	371
	2.0	99	142	183	222	259	296	333	370	408
	2.5	108	155	199	241	281	320	359	399	439
	3.0	115	166	213	258	300	341	382	424	466

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 2.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	55	75	92	107	121	132	142	152	161
	1.5	69	95	119	140	158	176	191	205	219
	2.0	79	110	138	163	185	207	226	244	260
	2.5	87	122	153	182	207	231	254	274	293
	3.0	94	132	166	197	226	252	277	300	321
	3.5	100	141	178	211	242	270	297	322	346

FLAT TERRAIN	1.0	58	83	105	125	144	162	179	195	211
	1.5	72	102	129	155	178	201	222	242	262
	2.0	82	116	147	177	203	229	254	277	299
	2.5	90	128	162	194	224	252	279	305	330
	3.0	97	137	174	209	241	272	301	329	355
	3.5	103	146	186	222	257	289	320	350	378

DOWNHILL 2%	1.0	62	91	118	144	169	193	218	241	267
	1.5	75	109	140	170	199	227	254	281	309
	2.0	85	122	157	190	221	252	282	311	341
	2.5	93	133	171	207	241	274	306	337	369
	3.0	99	142	182	221	257	292	326	359	392
	3.5	105	151	193	234	272	308	343	379	413

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 3.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	43	59	73	86	97	107	116	124	132
	1.5	53	74	93	110	125	139	153	165	176
	2.0	61	86	108	128	146	162	178	194	207
	2.5	67	95	119	142	162	181	199	216	232
	3.0	73	102	129	154	176	197	217	236	253
	3.5	77	109	138	164	188	211	233	253	272

FLAT TERRAIN	1.0	45	63	80	96	111	125	138	150	163
	1.5	55	78	99	119	137	155	171	186	202
	2.0	63	89	113	136	157	176	195	213	230
	2.5	69	98	124	149	172	194	214	235	254
	3.0	74	105	134	161	185	209	231	253	274
	3.5	79	112	142	171	197	223	246	269	291

DOWNHILL 2%	1.0	47	68	88	107	125	143	161	177	194
	1.5	57	82	106	128	149	169	190	209	228
	2.0	64	92	119	144	167	190	212	233	254
	2.5	70	101	130	157	182	207	230	253	275
	3.0	76	108	139	168	194	221	246	270	294
	3.5	80	115	147	177	206	234	260	285	311

Minimum considered pressure 0.4 bar



### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 16009/16010/16012 • ID 14.2 mm • Kd 0.72 • Flow rate 3.8 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	37	51	64	75	85	94	102	110	117
	1.5	46	64	80	96	109	121	133	144	154
	2.0	52	74	93	111	127	141	155	168	181
	2.5	58	82	103	123	140	157	173	188	202
	3.0	62	88	111	133	152	171	188	204	220
	3.5	66	94	119	142	163	183	202	219	236
FLAT TERRAIN	1.0	38	54	69	83	95	107	118	130	140
	1.5	47	67	85	102	118	132	146	160	173
	2.0	54	76	97	116	134	151	167	183	198
	2.5	59	84	106	128	148	167	184	202	218
	3.0	63	90	115	138	159	179	198	217	235
	3.5	67	96	122	147	169	190	211	231	250
DOWNHILL 2%	1.0	40	58	74	91	106	120	135	149	163
	1.5	49	70	90	109	127	144	161	176	193
	2.0	55	79	101	122	142	161	180	198	215
	2.5	60	86	110	133	155	176	196	215	234
	3.0	64	92	118	143	166	188	210	230	250
	3.5	68	98	125	151	176	199	222	243	264

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 0.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	179	211	232	246	256	264	270	275	278
	1.5	248	303	344	376	400	420	436	450	461
	2.0	298	371	426	472	508	540	566	589	608
	2.5	338	424	492	549	596	637	673	704	731
FLAT TERRAIN	1.0	248	326	394	456	514	568	619	668	715
	1.5	308	405	490	568	639	706	770	832	890
	2.0	353	464	561	650	732	809	882	952	1019
	2.5	389	511	619	717	807	893	974	1050	1125
DOWNHILL 2%	1.0	333	524	**	**	**	**	**	**	**
	1.5	381	584	**	**	**	**	**	**	**
	2.0	419	632	**	**	**	**	**	**	**
	2.5	451	672	**	**	**	**	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 1.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	142	173	195	212	225	235	244	251	257
	1.5	191	238	275	306	331	352	371	387	401
	2.0	226	285	333	374	408	438	465	489	510
	2.5	254	323	380	428	470	508	541	572	598
	3.0	278	355	419	474	523	566	605	641	674
FLAT TERRAIN	1.0	179	235	284	329	371	410	446	482	516
	1.5	222	292	354	410	461	510	556	600	642
	2.0	254	334	405	469	528	584	637	688	736
	2.5	280	369	446	517	583	644	702	758	812
	3.0	303	398	482	559	629	696	759	819	877
DOWNHILL 2%	1.0	217	308	409	535	812	**	**	**	**
	1.5	255	355	463	596	878	**	**	**	**
	2.0	283	392	506	644	931	**	**	**	**
	2.5	307	422	542	685	976	**	**	**	**
	3.0	328	449	574	721	1016	**	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 1.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	112	139	160	177	191	202	212	221	228
	1.5	147	186	218	245	268	288	307	323	338
	2.0	172	220	260	294	324	351	375	397	418
	2.5	193	248	294	334	369	401	430	457	482
	3.0	210	271	322	367	407	443	477	508	536
FLAT TERRAIN	1.0	132	174	210	244	274	303	331	357	382
	1.5	164	216	262	303	341	378	412	445	476
	2.0	188	248	300	347	391	433	472	509	545
	2.5	207	273	330	383	431	477	520	562	601
	3.0	224	295	357	414	466	515	562	607	650
DOWNHILL 2%	1.0	153	210	266	325	387	457	542	663	**
	1.5	182	247	309	373	440	515	602	728	**
	2.0	204	275	342	411	482	560	651	779	**
	2.5	222	299	370	442	517	598	693	824	**
	3.0	238	319	394	470	548	632	729	862	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 2.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	99	124	144	161	174	186	196	205	213
	1.5	129	165	194	219	241	260	278	293	307
	2.0	151	194	230	261	289	314	336	356	376
	2.5	169	218	259	295	327	356	383	408	431
	3.0	184	238	283	324	359	393	423	451	477
	3.5	197	255	305	349	388	424	458	489	518
FLAT TERRAIN	1.0	115	151	182	211	238	263	287	310	332
	1.5	142	188	227	263	296	328	357	385	413
	2.0	163	215	260	301	339	375	409	442	473
	2.5	180	236	286	332	374	414	451	487	521
	3.0	194	255	309	359	404	447	487	527	563
	3.5	207	272	330	382	431	476	519	561	600
DOWNHILL 2%	1.0	130	178	223	268	314	363	415	474	544
	1.5	156	211	261	311	361	414	470	533	605
	2.0	175	235	290	344	398	454	514	579	654
	2.5	191	256	315	372	430	489	550	617	695
	3.0	204	274	336	397	457	518	582	653	731
	3.5	216	289	355	418	481	545	611	683	764

Minimum considered pressure 0.4 bar

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 3.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	79	101	118	132	145	156	166	175	183
	1.5	102	131	155	177	195	212	227	241	255
	2.0	119	153	182	209	232	253	272	290	306
	2.5	132	171	204	234	260	285	307	329	348
	3.0	143	186	223	256	285	312	338	361	383
	3.5	153	200	239	275	307	337	364	390	414
FLAT TERRAIN	1.0	88	116	141	163	184	203	222	239	256
	1.5	110	145	175	203	229	253	276	298	319
	2.0	126	165	200	232	262	289	316	341	365
	2.5	138	182	221	256	289	319	348	376	403
	3.0	149	197	239	277	312	345	376	406	435
	3.5	159	210	254	295	332	368	401	433	463
DOWNHILL 2%	1.0	98	133	165	196	224	254	285	316	348
	1.5	118	158	195	230	263	296	330	364	398
	2.0	133	178	218	257	293	328	365	401	438
	2.5	145	194	238	279	317	356	394	432	471
	3.0	156	208	254	298	339	379	419	460	500
	3.5	165	220	269	315	358	400	442	484	526

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 20010/20012 • ID 17.5 mm • Kd 0.25 • Flow rate 3.8 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	69	88	104	117	129	139	149	158	165
	1.5	89	114	136	155	172	187	201	214	226
	2.0	103	133	159	182	203	221	239	255	270
	2.5	114	149	178	204	227	249	269	288	306
	3.0	124	161	194	223	248	272	295	316	336
	3.5	132	173	208	239	267	293	318	340	362
FLAT TERRAIN	1.0	76	100	121	140	158	174	190	205	220
	1.5	94	124	150	175	197	217	237	256	274
	2.0	108	142	172	200	225	249	271	293	314
	2.5	119	157	190	220	248	274	299	323	346
	3.0	128	169	205	238	268	297	323	349	374
	3.5	137	180	219	254	286	316	345	372	398
DOWNHILL 2%	1.0	83	112	139	164	188	211	234	258	282
	1.5	100	134	166	195	222	249	274	301	327
	2.0	113	151	186	218	248	277	305	333	362
	2.5	124	165	202	237	269	300	330	361	391
	3.0	133	177	217	254	288	321	353	384	416
	3.5	141	188	230	269	305	340	373	406	439

Minimum considered pressure 0.4 bar

### Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 23009 • ID 20.8 mm • Kd 0.2 • Flow rate 0.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	213	242	259	270	277	281	285	288	290	289
	307	366	406	435	455	471	483	493	501	498
	375	458	517	563	598	627	650	668	684	677
	430	531	608	668	717	757	790	818	842	832
FLAT TERRAIN	1.0	331	436	528	612	690	763	832	898	962
	1.5	412	542	657	762	859	949	1036	1118	1197
	2.0	471	621	752	872	983	1087	1186	1280	1371
	2.5	519	684	830	962	1084	1199	1308	1412	1512
DOWNHILL 2%	1.0	545	**	**	**	**	**	**	**	**
	1.5	605	**	**	**	**	**	**	**	**
	2.0	653	**	**	**	**	**	**	**	**
	2.5	693	**	**	**	**	**	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 23009 • ID 20.8 mm • Kd 0.2 • Flow rate 1.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	175	207	228	243	254	262	268	273	277
	1.5	241	296	337	369	394	414	430	445	456
	2.0	289	361	416	462	499	530	557	580	600
	2.5	327	413	480	536	584	624	660	691	719
	3.0	359	456	534	600	656	705	748	787	822
FLAT TERRAIN	1.0	239	314	381	442	497	550	600	648	694
	1.5	297	391	474	550	619	685	747	807	864
	2.0	339	447	542	629	709	784	856	923	989
	2.5	374	493	598	694	782	865	944	1019	1091
	3.0	404	533	646	749	845	935	1020	1101	1179
DOWNHILL 2%	1.0	315	489	**	**	**	**	**	**	**
	1.5	362	547	**	**	**	**	**	**	**
	2.0	399	593	**	**	**	**	**	**	**
	2.5	430	632	**	**	**	**	**	**	**
	3.0	456	667	**	**	**	**	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 23009 • ID 20.8 mm • Kd 0.2 • Flow rate 1.6 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	141	172	194	211	224	235	244	251	257
	1.5	189	236	274	305	330	351	370	386	400
	2.0	223	283	331	372	407	437	464	488	509
	2.5	251	320	377	426	468	505	539	570	597
	3.0	274	352	416	472	520	564	603	639	672
FLAT TERRAIN	1.0	177	233	282	327	368	407	445	480	514
	1.5	219	290	351	407	458	508	554	598	640
	2.0	251	331	402	466	525	581	634	684	733
	2.5	277	365	443	514	579	641	699	755	808
	3.0	298	394	478	555	626	692	755	815	873
DOWNHILL 2%	1.0	214	304	404	529	776	**	**	**	**
	1.5	251	351	458	589	842	**	**	**	**
	2.0	279	387	501	637	895	**	**	**	**
	2.5	303	417	536	677	939	**	**	**	**
	3.0	323	443	568	713	979	**	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 23009 • ID 20.8 mm • Kd 0.2 • Flow rate 2.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	126	155	177	195	208	220	230	238	244
	1.5	167	211	246	275	299	321	339	356	371
	2.0	197	251	295	333	365	394	420	444	464
	2.5	220	283	334	379	418	453	485	514	540
	3.0	240	310	368	418	463	503	540	573	604
FLAT TERRAIN	1.0	153	202	244	284	320	354	386	417	446
	1.5	190	251	304	353	398	440	480	518	555
	2.0	217	287	348	404	455	504	550	593	635
	2.5	240	317	384	446	502	556	606	654	701
	3.0	259	342	414	481	542	600	655	707	757
DOWNHILL 2%	1.0	181	252	326	408	504	643	**	**	**
	1.5	214	293	374	462	563	706	**	**	**
	2.0	239	325	412	505	611	757	**	**	**
	2.5	259	352	444	541	650	801	**	**	**
	3.0	277	375	472	572	686	839	**	**	**

Minimum considered pressure 0.4 bar

Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

\*\* In such a cases where the head losses are minor, due to low flow rate associated with wide drippers spacing and positive slope (downhill), the driplines lengths are exceeding the maximum lengths that we determined to achieve effective lateral flushing. In these cases we using smaller diameter driplines that can be found on the above tables .

## Max. Lateral length (meter) at different inlet pressure and different slopes

DripNet PC™ AS XR 23009 • ID 20.8 mm • Kd 0.2 • Flow rate 3.0 l/h

	DISTANCE BETWEEN DRIPPERS (METER)									
	INLET PRESSURE (BAR)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
UPHILL 2%	1.0	102	128	148	165	178	190	200	209	217
	1.5	133	170	200	225	247	267	285	301	315
	2.0	155	200	237	269	297	323	346	367	387
	2.5	185	244	296	344	388	429	468	505	541
	3.0	188	245	292	334	371	405	436	465	492
FLAT TERRAIN	1.0	118	156	189	219	247	273	298	321	344
	1.5	147	194	235	272	307	340	370	400	428
	2.0	168	221	268	312	352	389	424	458	490
	2.5	185	244	296	344	388	429	468	505	541
	3.0	199	263	320	371	419	463	506	545	585
DOWNHILL 2%	1.0	135	185	232	280	330	383	442	509	594
	1.5	161	218	271	324	379	436	498	569	656
	2.0	180	243	301	359	417	477	543	617	707
	2.5	196	265	326	388	449	512	581	657	749
	3.0	210	283	348	413	477	543	614	692	787

Minimum considered pressure 0.4 bar

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