

# PC on-line dripper

Pressure-compensated on-line dripper, designed for robust and reliable performance in demanding field conditions. Featuring large water passages, it is particularly suited for orchard applications and long-term irrigation systems requiring durability and clogging resistance.



## Benefits & Features

### Uniform water distribution

Ensures precise and stable flow regulation across a wide pressure range, delivering uniform water distribution along irrigation lines and across varying topographies.

### Prevents drainage (LCNL or HCNL) (optional)

The LCNL (anti-drain) mechanism prevents drainage from emitters located in low areas, maintaining system pressure and ensuring uniform water distribution.

The HCNL (high anti-drain) mechanism operates at a higher shut-off threshold, preventing drainage even under steep slope conditions.

Improves pulse irrigation performance; eliminates drainage and refill effects, enhancing irrigation efficiency in pulse irrigation applications.

### Long-lasting, high clogging resistance

Designed with large internal water passages that improve tolerance to suspended solids, ensuring reliable performance in challenging water quality conditions.

A built-in filtration area, uncommon in most on-line drippers, helps reduce the risk of suspended particle ingress, ensuring dependable performance across a wide range of water qualities.

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

### Flexible system design and installation

Emitters can be positioned precisely where required, enabling accurate adaptation to the irrigation layout.

Available with a range of outlet options, including flat and press-fit connections, supporting flexible system design and compatibility with "Spider" assemblies.

Flow rate is color-coded for quick identification, and the nominal flow rate is marked directly on the emitter, simplifying installation and operation.

## Applications



Open field



Orchards



Protected crops

- Suitable for on-surface installation across a wide range of field conditions.
- Delivers uniform hydraulic performance on flat terrain, sloping fields and variable topographies.
- Ideal for precision irrigation applications in orchards, greenhouses and nurseries.



# Specifications

- Pressure-compensated operating range: according to dripper model (see tables below).
- Filtration requirements: A filtration grade of 130 micron / 120 mesh is recommended to ensure long-term operational reliability. When sand content exceeds 2 ppm, a Hydrocyclone must be installed upstream of the main filter. For sand/silt/clay solids above 100 ppm, apply pre-treatment in line with Netafim™ expert guidelines.
- TurboNet™ labyrinth with extra-wide flow passages for enhanced clogging resistance.
- Insertable into thick-wall PE pipes: 0.90, 1.00 and 1.20 mm.
- Injection-molded dripper with ultra-low coefficient of variation (CV) and an injection-molded silicone diaphragm for exceptional uniformity and long-term performance.
- High UV resistance and fully compatible with standard agricultural nutrients and fertilizers.
- Compliant with ISO 9261 international manufacturing and performance standards.
- Available outlet configurations: flat and press-fit (nipple).

## Drippers technical data

### PC AS dripper

| Flow rate*<br>(l/h) | Working pressure range<br>(bar) | Water passages dimensions<br>width-depth-length<br>(mm x mm x mm) | Filtration area<br>(mm <sup>2</sup> ) | Constant K | Exponent* X | Recommended filtration<br>(micron)/(mesh) | Base color code | Upper body color code |
|---------------------|---------------------------------|-------------------------------------------------------------------|---------------------------------------|------------|-------------|-------------------------------------------|-----------------|-----------------------|
| 2.0                 | 0.5 - 4.0                       | 1.17 x 1.04 x 61                                                  | 2.0                                   | 2.0        | 0           | 130/120                                   | Red             | Black                 |
| 4.0                 |                                 | 1.32 x 1.44 x 60                                                  | 2.0                                   | 4.0        | 0           | 130/120                                   | Black           | Black                 |
| 8.5                 |                                 | 1.60 x 1.60 x 17                                                  | 2.0                                   | 8.5        | 0           | 130/120                                   | Green           | Black                 |

\* Within working pressure range.

PC AS dripper. Identified by its specific base color code combined with a black upper body.

### PC LCNL dripper

| Flow rate*<br>(l/h) | Working pressure range<br>(bar) | Water passages dimensions<br>width-depth-length<br>(mm x mm x mm) | Filtration area<br>(mm <sup>2</sup> ) | Constant K | Exponent* X | Recommended filtration<br>(micron)/(mesh) | Base color code | Upper body color code |
|---------------------|---------------------------------|-------------------------------------------------------------------|---------------------------------------|------------|-------------|-------------------------------------------|-----------------|-----------------------|
| 2.0                 | 1.0 - 4.0                       | 1.17 x 1.04 x 61                                                  | 2.0                                   | 2.0        | 0           | 130/120                                   | Red             | Brown                 |
| 4.0                 |                                 | 1.32 x 1.44 x 60                                                  | 2.0                                   | 4.0        | 0           | 130/120                                   | Black           | Brown                 |
| 8.5                 |                                 | 1.60 x 1.60 x 17                                                  | 2.0                                   | 8.5        | 0           | 130/120                                   | Green           | Brown                 |

\* Within working pressure range.

PC LCNL dripper nominal shut-off pressure: 0.15 bar. Identified by its specific base color code combined with a brown upper body.

### PC HCNL dripper

| Flow rate*<br>(l/h) | Working pressure range<br>(bar) | Water passages dimensions<br>width-depth-length<br>(mm x mm x mm) | Filtration area<br>(mm <sup>2</sup> ) | Constant K | Exponent* X | Recommended filtration<br>(micron)/(mesh) | Base color code | Upper body color code |
|---------------------|---------------------------------|-------------------------------------------------------------------|---------------------------------------|------------|-------------|-------------------------------------------|-----------------|-----------------------|
| 3.0                 | 1.4 - 4.0                       | 1.17 x 1.04 x 61                                                  | 2.0                                   | 3.0        | 0           | 130/120                                   | Black           | Black                 |
| 6.0                 |                                 | 1.32 x 1.44 x 60                                                  | 2.0                                   | 6.0        | 0           | 130/120                                   | Black           | Black                 |
| 12.0                |                                 | 1.60 x 1.60 x 17                                                  | 2.0                                   | 12.0       | 0           | 130/120                                   | Black           | Black                 |

\* Within working pressure range.

PC HCNL dripper nominal shut-off pressure: 0.30 bar. Identified by its black base and upper body combination. The nominal flow rate is printed on the dripper upper body.

Both the K constant and the X exponent are fundamental hydraulic parameters used to calculate the actual flow rate of each dripper at a given operating pressure (within its specified working range), as detailed in the following pages.



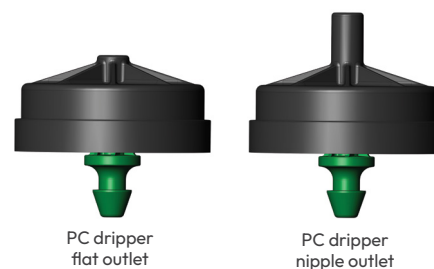
## Driplines technical data

| PE pipe | Inner diameter (mm) | Kd   |
|---------|---------------------|------|
| 12/4    | 9.80                | 1.65 |
| 16/4    | 13.20               | 0.39 |
| 20/4    | 17.00               | 0.13 |
| 25/4    | 21.20               | 0.10 |

| Blank dripline | Inner diameter (mm) | Kd   |
|----------------|---------------------|------|
| 12009 - 12010  | 10.60               | 1.61 |
| 16010 - 16012  | 14.20               | 0.37 |
| 20010 - 20012  | 17.50               | 0.12 |

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



## Drippers package data (on carton box)

| Model                                     | Quantity p/box (units) | Box dimensions (cm x cm x cm) | Average* box weight (kg) | Boxes p/pallet (units) | Pallet dimensions (cm x cm x cm) | Average* pallet weight (kg) |
|-------------------------------------------|------------------------|-------------------------------|--------------------------|------------------------|----------------------------------|-----------------------------|
| PC AS and LCNL drippers, flat outlet      | 2500                   | 57 x 28 x 27                  | 18.8                     | 32                     | 114 x 114 x 112                  | 611                         |
| PC, LCNL and HCNL drippers, nipple outlet | 2300                   |                               | 17.3                     |                        |                                  | 565                         |

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



## Catalog numbers

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

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

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

| Product name |    | Additional features |      | Flow rate (l/h)<br>PC and PC LCNL model |        | Outlet type |     | Emitters per package           |          |
|--------------|----|---------------------|------|-----------------------------------------|--------|-------------|-----|--------------------------------|----------|
| PC dripper   | PC | No added            | AS   | 2.0                                     | 2.0L/H | Flat        | FLT | 1                              | -        |
|              |    | Anti-drain          | LCNL | 4.0                                     | 4.0L/H | Nipple      | NIP | 25                             | 25/BAG   |
|              |    | High anti-drain     | HCNL | 8.5                                     | 8.5L/H |             |     | 50                             | 50/BAG   |
|              |    |                     |      |                                         |        |             |     | 100                            | 100/BAG  |
|              |    |                     |      |                                         |        |             |     | 250                            | 250/BAG  |
|              |    |                     |      |                                         |        |             |     | 500                            | 500/BAG  |
|              |    |                     |      |                                         |        |             |     | 1000                           | 1000/BAG |
|              |    |                     |      |                                         |        |             |     | According to the dripper model | 2500/CA  |
|              |    |                     |      |                                         |        |             |     |                                | 2300/CA  |

**PC LCNL 4.0L/H NIP 1000/BAG**

Catalog description example

# Drippers flow rate vs working pressure

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

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

Where:

Q = Dripper flow rate (liters per hour)

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

P = Actual working pressure (meters of water column)

X = Dripper-specific exponent (manufacturer-defined)

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

In all Netafim™ pressure-compensated drippers, including PC dripper (featured in this document), the dripper exponent X is equal to 0 within the specified pressure-compensation range for each model. This ensures that the actual dripper flow rate remains constant within  $\pm 7\%$ , in full compliance with ISO 9261 international standards.

Each pressure-compensated dripper model operates within a defined compensation range, with clearly specified minimum and maximum pressure limits. Below the minimum compensation pressure, the dripper behaves as a non-pressure-compensated emitter, and its flow rate increases proportionally with pressure until the minimum operating threshold is reached.

Above the maximum compensation pressure, Netafim™ pressure-compensated drippers will continue to regulate flow; however, they become more susceptible to clogging. In most cases, the maximum operating pressure is determined by the physical limitations of the dripline, such as diameter, wall thickness and, most importantly, the structural integrity of the pipe and its associated connections.

In LCNL and HCNL drippers, the flow rate remains zero until the pressure exceeds the minimum working pressure.

As the pressure within the dripline decreases below the minimum working pressure, the flow rate gradually decreases until it reaches the shut-off pressure. When the pressure falls below the shut-off pressure, the flow rate returns to zero.

## Maximum driplines length

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

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

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

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



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

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

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

PC AS drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.0                               | 54  | 88  | 130 | 159 | 176 | 190 | 204 | 210 | 216 | 225 | 230  |
|           | 1.5                               | 71  | 118 | 184 | 231 | 268 | 295 | 318 | 343 | 360 | 369 | 390  |
|           | 2.0                               | 83  | 139 | 220 | 282 | 328 | 370 | 402 | 434 | 456 | 486 | 500  |
|           | 2.5                               | 92  | 156 | 250 | 321 | 376 | 425 | 468 | 504 | 544 | 567 | 600  |
|           | 3.0                               | 100 | 170 | 274 | 354 | 420 | 475 | 522 | 567 | 608 | 648 | 680  |
|           | 3.5                               | 107 | 182 | 294 | 381 | 456 | 515 | 570 | 623 | 664 | 711 | 750  |
|           | 4.0                               | 113 | 193 | 314 | 408 | 484 | 555 | 612 | 672 | 720 | 765 | 810  |

|              |     |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Flat terrain | 1.0 | 59  | 102 | 168 | 225 | 272 | 315 | 360 | 399 | 432 | 468 | 500  |
|              | 1.5 | 75  | 129 | 216 | 288 | 348 | 405 | 456 | 511 | 552 | 603 | 640  |
|              | 2.0 | 86  | 149 | 248 | 330 | 404 | 470 | 528 | 588 | 640 | 693 | 740  |
|              | 2.5 | 95  | 165 | 276 | 366 | 448 | 520 | 588 | 651 | 712 | 765 | 820  |
|              | 3.0 | 103 | 178 | 298 | 396 | 484 | 560 | 636 | 707 | 768 | 828 | 890  |
|              | 3.5 | 109 | 190 | 318 | 423 | 516 | 600 | 678 | 749 | 824 | 891 | 950  |
|              | 4.0 | 115 | 201 | 336 | 447 | 544 | 635 | 714 | 791 | 864 | 936 | 1010 |

|             |     |     |     |     |     |     |     |     |     |      |      |      |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Downhill 2% | 1.0 | 64  | 116 | 210 | 294 | 380 | 460 | 540 | 616 | 696  | 774  | 840  |
|             | 1.5 | 79  | 141 | 248 | 345 | 436 | 525 | 606 | 693 | 776  | 855  | 930  |
|             | 2.0 | 90  | 160 | 278 | 384 | 480 | 575 | 666 | 749 | 840  | 918  | 1000 |
|             | 2.5 | 98  | 175 | 302 | 414 | 516 | 615 | 708 | 805 | 888  | 981  | 1060 |
|             | 3.0 | 106 | 187 | 324 | 441 | 552 | 655 | 750 | 847 | 936  | 1026 | 1120 |
|             | 3.5 | 112 | 199 | 342 | 465 | 580 | 685 | 786 | 889 | 984  | 1080 | 1170 |
|             | 4.0 | 118 | 209 | 358 | 489 | 604 | 715 | 822 | 924 | 1024 | 1116 | 1210 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.0                               | 36  | 59  | 92  | 117 | 136 | 150 | 162 | 175 | 184 | 189 | 200  |
|           | 1.5                               | 46  | 78  | 126 | 162 | 192 | 215 | 240 | 259 | 272 | 288 | 300  |
|           | 2.0                               | 54  | 91  | 148 | 192 | 228 | 260 | 288 | 315 | 336 | 360 | 380  |
|           | 2.5                               | 59  | 102 | 166 | 216 | 260 | 295 | 330 | 357 | 384 | 414 | 440  |
|           | 3.0                               | 64  | 111 | 182 | 237 | 284 | 325 | 366 | 399 | 432 | 459 | 490  |
|           | 3.5                               | 69  | 118 | 194 | 255 | 308 | 350 | 396 | 434 | 464 | 495 | 530  |
|           | 4.0                               | 73  | 125 | 206 | 270 | 328 | 375 | 420 | 462 | 496 | 531 | 570  |

|              |     |    |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.0 | 38 | 65  | 108 | 144 | 176 | 205 | 234 | 259 | 280 | 306 | 330 |
|              | 1.5 | 48 | 83  | 138 | 186 | 224 | 260 | 294 | 329 | 360 | 387 | 420 |
|              | 2.0 | 55 | 96  | 160 | 213 | 260 | 305 | 342 | 378 | 416 | 450 | 480 |
|              | 2.5 | 61 | 106 | 178 | 237 | 288 | 335 | 378 | 420 | 456 | 495 | 530 |
|              | 3.0 | 66 | 114 | 192 | 255 | 312 | 365 | 408 | 455 | 496 | 540 | 580 |
|              | 3.5 | 70 | 122 | 204 | 273 | 332 | 385 | 438 | 483 | 528 | 576 | 610 |
|              | 4.0 | 74 | 128 | 216 | 288 | 352 | 410 | 462 | 511 | 560 | 603 | 650 |

|             |     |    |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Downhill 2% | 1.0 | 40 | 71  | 126 | 174 | 220 | 265 | 306 | 350 | 392 | 432 | 470 |
|             | 1.5 | 49 | 88  | 152 | 210 | 260 | 310 | 360 | 406 | 448 | 495 | 540 |
|             | 2.0 | 56 | 100 | 172 | 234 | 292 | 345 | 396 | 448 | 496 | 540 | 590 |
|             | 2.5 | 62 | 110 | 188 | 255 | 316 | 375 | 432 | 483 | 536 | 585 | 630 |
|             | 3.0 | 67 | 118 | 202 | 273 | 340 | 400 | 456 | 511 | 568 | 621 | 670 |
|             | 3.5 | 71 | 125 | 214 | 291 | 360 | 420 | 480 | 539 | 600 | 648 | 700 |
|             | 4.0 | 75 | 132 | 226 | 303 | 376 | 440 | 504 | 567 | 624 | 684 | 730 |

Minimum considered pressure 0.5 bar

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

PC AS drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 8.5 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 1.0                               | 23  | 38  | 62  | 78  | 96  | 105 | 120 | 126 | 136 | 144 | 150  |
|              | 1.5                               | 29  | 50  | 82  | 105 | 128 | 145 | 162 | 175 | 192 | 207 | 220  |
|              | 2.0                               | 33  | 57  | 94  | 123 | 148 | 170 | 192 | 210 | 232 | 243 | 260  |
|              | 2.5                               | 37  | 64  | 106 | 138 | 168 | 195 | 216 | 238 | 256 | 279 | 300  |
|              | 3.0                               | 40  | 69  | 114 | 153 | 184 | 210 | 240 | 259 | 280 | 306 | 320  |
|              | 3.5                               | 43  | 74  | 122 | 162 | 196 | 225 | 258 | 280 | 304 | 324 | 350  |
|              | 4.0                               | 45  | 78  | 130 | 171 | 208 | 240 | 270 | 301 | 328 | 351 | 370  |
| Flat terrain | 1.0                               | 23  | 40  | 68  | 90  | 112 | 130 | 144 | 161 | 176 | 189 | 210  |
|              | 1.5                               | 30  | 51  | 86  | 114 | 140 | 165 | 186 | 203 | 224 | 243 | 260  |
|              | 2.0                               | 34  | 59  | 100 | 132 | 160 | 190 | 216 | 238 | 256 | 279 | 300  |
|              | 2.5                               | 37  | 65  | 110 | 147 | 180 | 210 | 234 | 259 | 288 | 306 | 330  |
|              | 3.0                               | 40  | 70  | 118 | 159 | 192 | 225 | 258 | 280 | 312 | 333 | 360  |
|              | 3.5                               | 43  | 75  | 126 | 168 | 208 | 240 | 270 | 301 | 328 | 360 | 380  |
|              | 4.0                               | 45  | 79  | 134 | 177 | 216 | 255 | 288 | 322 | 352 | 378 | 400  |
| Downhill 2%  | 1.0                               | 24  | 43  | 74  | 102 | 128 | 150 | 174 | 196 | 216 | 243 | 260  |
|              | 1.5                               | 30  | 53  | 92  | 123 | 156 | 180 | 210 | 238 | 256 | 288 | 310  |
|              | 2.0                               | 34  | 61  | 104 | 141 | 176 | 205 | 234 | 266 | 288 | 315 | 340  |
|              | 2.5                               | 38  | 67  | 114 | 153 | 192 | 225 | 258 | 287 | 312 | 342 | 370  |
|              | 3.0                               | 41  | 72  | 122 | 165 | 204 | 240 | 276 | 308 | 336 | 369 | 400  |
|              | 3.5                               | 43  | 76  | 130 | 177 | 216 | 255 | 288 | 322 | 352 | 387 | 420  |
|              | 4.0                               | 46  | 80  | 138 | 186 | 228 | 265 | 306 | 336 | 376 | 405 | 440  |

Minimum considered pressure 0.5 bar

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

PC AS drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 2.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |      |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 1.0                               | 95  | 138 | 184 | 207 | 220  | 230  | 234  | 238  | 240  | 243  | 250  |
|              | 1.5                               | 129 | 197 | 280 | 333 | 368  | 395  | 414  | 427  | 440  | 450  | 460  |
|              | 2.0                               | 153 | 237 | 348 | 423 | 480  | 520  | 558  | 581  | 608  | 621  | 640  |
|              | 2.5                               | 172 | 269 | 402 | 495 | 568  | 625  | 672  | 707  | 744  | 765  | 790  |
|              | 3.0                               | 187 | 296 | 446 | 555 | 640  | 710  | 768  | 819  | 856  | 891  | 930  |
|              | 3.5                               | 201 | 319 | 486 | 606 | 704  | 785  | 852  | 910  | 960  | 1008 | 1050 |
|              | 4.0                               | 213 | 340 | 520 | 654 | 760  | 850  | 930  | 994  | 1056 | 1107 | 1150 |
| Flat terrain | 1.0                               | 112 | 184 | 294 | 384 | 464  | 535  | 606  | 665  | 728  | 783  | 840  |
|              | 1.5                               | 144 | 235 | 376 | 492 | 596  | 690  | 774  | 854  | 936  | 1008 | 1080 |
|              | 2.0                               | 166 | 272 | 436 | 570 | 688  | 795  | 894  | 987  | 1080 | 1161 | 1250 |
|              | 2.5                               | 183 | 301 | 482 | 633 | 764  | 880  | 996  | 1099 | 1200 | 1296 | 1380 |
|              | 3.0                               | 198 | 326 | 522 | 684 | 828  | 955  | 1074 | 1190 | 1296 | 1404 | 1500 |
|              | 3.5                               | 212 | 348 | 558 | 732 | 884  | 1020 | 1152 | 1267 | 1384 | 1494 | 1600 |
|              | 4.0                               | 223 | 367 | 590 | 771 | 932  | 1080 | 1218 | 1344 | 1464 | 1584 | 1690 |
| Downhill 2%  | 1.0                               | 130 | 232 | 418 | 594 | 768  | 920  | 1062 | 1204 | 1336 | 1467 | 1600 |
|              | 1.5                               | 158 | 275 | 478 | 666 | 848  | 1010 | 1164 | 1316 | 1456 | 1602 | 1740 |
|              | 2.0                               | 179 | 307 | 526 | 726 | 916  | 1090 | 1248 | 1407 | 1560 | 1710 | 1850 |
|              | 2.5                               | 195 | 333 | 566 | 777 | 972  | 1155 | 1320 | 1484 | 1648 | 1800 | 1950 |
|              | 3.0                               | 210 | 356 | 602 | 819 | 1024 | 1210 | 1386 | 1554 | 1720 | 1881 | 2040 |
|              | 3.5                               | 222 | 377 | 634 | 861 | 1072 | 1265 | 1446 | 1624 | 1792 | 1953 | 2120 |
|              | 4.0                               | 233 | 395 | 662 | 897 | 1112 | 1310 | 1500 | 1680 | 1856 | 2025 | 2190 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 4.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 1.0                               | 65  | 99  | 142 | 168 | 188 | 200 | 210 | 217  | 224  | 225  | 230  |
|              | 1.5                               | 86  | 135 | 202 | 249 | 284 | 315 | 336 | 357  | 376  | 387  | 400  |
|              | 2.0                               | 101 | 160 | 244 | 306 | 352 | 395 | 426 | 455  | 480  | 504  | 530  |
|              | 2.5                               | 113 | 180 | 276 | 348 | 408 | 460 | 498 | 539  | 576  | 603  | 630  |
|              | 3.0                               | 123 | 197 | 304 | 387 | 452 | 510 | 564 | 609  | 648  | 684  | 720  |
|              | 3.5                               | 131 | 211 | 328 | 417 | 492 | 555 | 612 | 665  | 712  | 756  | 790  |
|              | 4.0                               | 139 | 225 | 350 | 447 | 528 | 600 | 660 | 714  | 768  | 819  | 860  |
| Flat terrain | 1.0                               | 72  | 118 | 190 | 249 | 300 | 345 | 390 | 434  | 472  | 504  | 540  |
|              | 1.5                               | 92  | 151 | 242 | 318 | 384 | 445 | 498 | 553  | 600  | 648  | 700  |
|              | 2.0                               | 106 | 174 | 280 | 366 | 444 | 515 | 576 | 637  | 696  | 756  | 810  |
|              | 2.5                               | 117 | 193 | 310 | 408 | 492 | 570 | 642 | 707  | 776  | 837  | 890  |
|              | 3.0                               | 127 | 209 | 336 | 441 | 532 | 615 | 696 | 770  | 840  | 900  | 970  |
|              | 3.5                               | 135 | 223 | 358 | 471 | 568 | 660 | 738 | 819  | 896  | 963  | 1030 |
|              | 4.0                               | 143 | 236 | 380 | 498 | 600 | 695 | 780 | 868  | 944  | 1017 | 1090 |
| Downhill 2%  | 1.0                               | 79  | 138 | 240 | 336 | 428 | 515 | 606 | 693  | 776  | 855  | 930  |
|              | 1.5                               | 98  | 167 | 284 | 390 | 488 | 585 | 678 | 770  | 864  | 945  | 1020 |
|              | 2.0                               | 111 | 189 | 318 | 432 | 536 | 640 | 738 | 833  | 928  | 1017 | 1100 |
|              | 2.5                               | 122 | 207 | 346 | 465 | 580 | 685 | 786 | 889  | 984  | 1080 | 1170 |
|              | 3.0                               | 132 | 222 | 368 | 495 | 616 | 725 | 834 | 938  | 1040 | 1134 | 1220 |
|              | 3.5                               | 140 | 235 | 390 | 522 | 644 | 760 | 870 | 980  | 1088 | 1179 | 1280 |
|              | 4.0                               | 147 | 247 | 408 | 549 | 676 | 795 | 912 | 1022 | 1128 | 1233 | 1330 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 8.5 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 1.0                               | 42  | 66  | 98  | 123 | 140 | 155 | 168 | 175 | 184 | 198 | 200  |
|              | 1.5                               | 55  | 87  | 134 | 171 | 200 | 225 | 246 | 266 | 280 | 297 | 310  |
|              | 2.0                               | 64  | 102 | 160 | 204 | 240 | 270 | 300 | 329 | 352 | 369 | 390  |
|              | 2.5                               | 71  | 114 | 180 | 231 | 272 | 310 | 342 | 371 | 400 | 423 | 450  |
|              | 3.0                               | 77  | 125 | 196 | 252 | 300 | 340 | 378 | 413 | 448 | 477 | 500  |
|              | 3.5                               | 82  | 133 | 210 | 273 | 324 | 370 | 408 | 448 | 480 | 513 | 550  |
|              | 4.0                               | 87  | 141 | 224 | 288 | 344 | 395 | 438 | 483 | 520 | 549 | 590  |
| Flat terrain | 1.0                               | 45  | 73  | 118 | 153 | 188 | 215 | 246 | 266 | 296 | 315 | 340  |
|              | 1.5                               | 57  | 93  | 150 | 198 | 240 | 275 | 312 | 343 | 376 | 405 | 430  |
|              | 2.0                               | 66  | 108 | 174 | 228 | 276 | 320 | 360 | 399 | 432 | 468 | 500  |
|              | 2.5                               | 72  | 119 | 192 | 252 | 304 | 355 | 396 | 441 | 480 | 522 | 560  |
|              | 3.0                               | 78  | 129 | 208 | 273 | 332 | 385 | 432 | 476 | 520 | 558 | 600  |
|              | 3.5                               | 83  | 138 | 222 | 291 | 352 | 410 | 462 | 511 | 552 | 603 | 640  |
|              | 4.0                               | 88  | 146 | 234 | 309 | 372 | 430 | 486 | 539 | 584 | 630 | 680  |
| Downhill 2%  | 1.0                               | 47  | 81  | 138 | 189 | 236 | 280 | 324 | 371 | 416 | 459 | 500  |
|              | 1.5                               | 59  | 100 | 166 | 225 | 280 | 330 | 378 | 427 | 472 | 522 | 570  |
|              | 2.0                               | 68  | 113 | 188 | 252 | 312 | 365 | 420 | 469 | 520 | 576 | 620  |
|              | 2.5                               | 74  | 124 | 206 | 276 | 340 | 400 | 456 | 511 | 560 | 612 | 670  |
|              | 3.0                               | 80  | 134 | 220 | 294 | 360 | 425 | 486 | 539 | 600 | 648 | 700  |
|              | 3.5                               | 85  | 142 | 234 | 312 | 384 | 450 | 510 | 567 | 632 | 684 | 740  |
|              | 4.0                               | 90  | 150 | 246 | 327 | 400 | 470 | 534 | 595 | 656 | 711 | 770  |

Minimum considered pressure 0.5 bar

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

PC AS drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |      |      |      |      |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.0                               | 138 | 183 | 220 | 234 | 240  | 245  | 246  | 252  | 248  | 252  | 250  |
|           | 1.5                               | 196 | 279 | 368 | 414 | 440  | 455  | 468  | 476  | 480  | 486  | 490  |
|           | 2.0                               | 236 | 346 | 476 | 552 | 600  | 635  | 660  | 679  | 688  | 702  | 710  |
|           | 2.5                               | 268 | 399 | 562 | 666 | 736  | 790  | 828  | 854  | 880  | 900  | 910  |
|           | 3.0                               | 295 | 444 | 636 | 762 | 852  | 920  | 972  | 1015 | 1048 | 1080 | 1100 |
|           | 3.5                               | 318 | 483 | 700 | 846 | 956  | 1040 | 1104 | 1162 | 1200 | 1242 | 1270 |
|           | 4.0                               | 339 | 517 | 756 | 921 | 1048 | 1145 | 1224 | 1288 | 1344 | 1386 | 1430 |

|              |     |     |     |     |      |      |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| Flat terrain | 1.0 | 183 | 291 | 460 | 597  | 720  | 830  | 936  | 1036 | 1128 | 1215 | 1300 |
|              | 1.5 | 234 | 374 | 590 | 768  | 924  | 1070 | 1200 | 1323 | 1448 | 1557 | 1670 |
|              | 2.0 | 271 | 432 | 682 | 888  | 1068 | 1235 | 1392 | 1533 | 1672 | 1800 | 1930 |
|              | 2.5 | 300 | 480 | 758 | 984  | 1188 | 1370 | 1542 | 1701 | 1856 | 1998 | 2140 |
|              | 3.0 | 325 | 520 | 820 | 1068 | 1288 | 1485 | 1668 | 1848 | 2008 | 2169 | 2320 |
|              | 3.5 | 347 | 555 | 876 | 1140 | 1372 | 1585 | 1782 | 1967 | 2144 | 2313 | 2480 |
|              | 4.0 | 366 | 586 | 926 | 1206 | 1452 | 1675 | 1884 | 2086 | 2272 | 2448 | 2620 |

|             |     |     |     |      |      |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Downhill 2% | 1.0 | 231 | 414 | 760  | 1053 | 1324 | 1585 | 1836 | 2086 | 2328 | 2574 | 2810 |
|             | 1.5 | 273 | 475 | 842  | 1155 | 1444 | 1720 | 1992 | 2254 | 2512 | 2763 | 3010 |
|             | 2.0 | 306 | 523 | 908  | 1239 | 1544 | 1835 | 2118 | 2387 | 2656 | 2925 | 3180 |
|             | 2.5 | 332 | 563 | 966  | 1311 | 1628 | 1935 | 2226 | 2506 | 2784 | 3060 | 3330 |
|             | 3.0 | 355 | 598 | 1016 | 1377 | 1708 | 2020 | 2322 | 2618 | 2904 | 3177 | 3460 |
|             | 3.5 | 375 | 629 | 1062 | 1434 | 1776 | 2100 | 2412 | 2709 | 3008 | 3294 | 3570 |
|             | 4.0 | 394 | 657 | 1104 | 1488 | 1840 | 2170 | 2490 | 2800 | 3104 | 3393 | 3680 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.0                               | 98  | 140 | 184 | 207 | 220 | 230 | 234 | 238 | 240  | 243  | 250  |
|           | 1.5                               | 134 | 200 | 282 | 333 | 368 | 395 | 414 | 427 | 440  | 450  | 460  |
|           | 2.0                               | 159 | 242 | 350 | 423 | 480 | 520 | 552 | 581 | 608  | 621  | 640  |
|           | 2.5                               | 179 | 275 | 404 | 495 | 568 | 625 | 672 | 707 | 744  | 765  | 790  |
|           | 3.0                               | 196 | 302 | 450 | 555 | 640 | 710 | 768 | 812 | 856  | 891  | 930  |
|           | 3.5                               | 211 | 326 | 490 | 609 | 704 | 785 | 852 | 910 | 960  | 1008 | 1040 |
|           | 4.0                               | 224 | 348 | 524 | 654 | 760 | 850 | 924 | 994 | 1048 | 1107 | 1150 |

|              |     |     |     |     |     |     |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Flat terrain | 1.0 | 117 | 187 | 296 | 384 | 464 | 535  | 606  | 665  | 728  | 783  | 840  |
|              | 1.5 | 150 | 240 | 380 | 495 | 596 | 690  | 774  | 854  | 928  | 1008 | 1080 |
|              | 2.0 | 174 | 278 | 440 | 573 | 688 | 795  | 894  | 987  | 1080 | 1161 | 1240 |
|              | 2.5 | 192 | 308 | 486 | 633 | 764 | 880  | 990  | 1099 | 1192 | 1287 | 1380 |
|              | 3.0 | 208 | 334 | 528 | 687 | 828 | 955  | 1074 | 1190 | 1296 | 1395 | 1490 |
|              | 3.5 | 222 | 356 | 564 | 735 | 884 | 1020 | 1146 | 1267 | 1384 | 1494 | 1600 |
|              | 4.0 | 235 | 377 | 596 | 777 | 936 | 1080 | 1212 | 1344 | 1464 | 1575 | 1690 |

|             |     |     |     |     |     |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Downhill 2% | 1.0 | 137 | 238 | 422 | 597 | 768  | 920  | 1062 | 1197 | 1336 | 1467 | 1590 |
|             | 1.5 | 166 | 282 | 484 | 672 | 852  | 1015 | 1164 | 1309 | 1456 | 1593 | 1730 |
|             | 2.0 | 188 | 315 | 532 | 729 | 920  | 1090 | 1248 | 1400 | 1552 | 1701 | 1850 |
|             | 2.5 | 206 | 342 | 572 | 780 | 976  | 1155 | 1320 | 1484 | 1640 | 1791 | 1940 |
|             | 3.0 | 221 | 366 | 608 | 825 | 1028 | 1210 | 1386 | 1554 | 1720 | 1872 | 2030 |
|             | 3.5 | 234 | 387 | 640 | 864 | 1072 | 1265 | 1446 | 1617 | 1784 | 1953 | 2110 |
|             | 4.0 | 246 | 406 | 670 | 900 | 1116 | 1315 | 1500 | 1680 | 1848 | 2016 | 2180 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 8.5 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.0                               | 65  | 97  | 138 | 165 | 184 | 195 | 204 | 217 | 224 | 225 | 230  |
|           | 1.5                               | 87  | 133 | 196 | 243 | 276 | 305 | 330 | 350 | 368 | 378 | 390  |
|           | 2.0                               | 102 | 158 | 238 | 297 | 344 | 385 | 414 | 448 | 472 | 495 | 510  |
|           | 2.5                               | 114 | 178 | 270 | 339 | 396 | 445 | 486 | 525 | 560 | 585 | 610  |
|           | 3.0                               | 124 | 194 | 296 | 375 | 440 | 495 | 546 | 588 | 624 | 666 | 700  |
|           | 3.5                               | 133 | 209 | 320 | 405 | 476 | 540 | 594 | 644 | 688 | 729 | 770  |
|           | 4.0                               | 141 | 222 | 342 | 435 | 512 | 580 | 642 | 693 | 744 | 792 | 830  |

|              |     |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Flat terrain | 1.0 | 73  | 116 | 184 | 240 | 288 | 335 | 378 | 413 | 456 | 486 | 520  |
|              | 1.5 | 93  | 149 | 236 | 306 | 368 | 425 | 480 | 532 | 576 | 621 | 670  |
|              | 2.0 | 107 | 172 | 272 | 354 | 428 | 495 | 558 | 616 | 672 | 720 | 770  |
|              | 2.5 | 119 | 191 | 302 | 393 | 472 | 545 | 618 | 679 | 744 | 801 | 860  |
|              | 3.0 | 129 | 206 | 326 | 426 | 512 | 595 | 666 | 735 | 800 | 864 | 930  |
|              | 3.5 | 137 | 220 | 348 | 456 | 548 | 635 | 714 | 784 | 856 | 927 | 990  |
|              | 4.0 | 145 | 233 | 368 | 480 | 580 | 670 | 750 | 833 | 904 | 981 | 1050 |

|             |     |     |     |     |     |     |     |     |     |      |      |      |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Downhill 2% | 1.0 | 80  | 135 | 232 | 321 | 408 | 490 | 576 | 658 | 736  | 819  | 890  |
|             | 1.5 | 99  | 165 | 276 | 375 | 468 | 560 | 648 | 735 | 816  | 900  | 980  |
|             | 2.0 | 113 | 186 | 308 | 414 | 516 | 610 | 702 | 791 | 880  | 972  | 1050 |
|             | 2.5 | 124 | 204 | 334 | 450 | 556 | 655 | 750 | 847 | 936  | 1026 | 1110 |
|             | 3.0 | 133 | 219 | 358 | 477 | 588 | 695 | 798 | 896 | 992  | 1080 | 1170 |
|             | 3.5 | 142 | 232 | 378 | 504 | 620 | 730 | 834 | 938 | 1032 | 1134 | 1220 |
|             | 4.0 | 149 | 244 | 396 | 528 | 648 | 760 | 870 | 973 | 1072 | 1179 | 1270 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |      |      |      |      |      |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0  | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.0                               | 175 | 214 | 238 | 243  | 248  | 250  | 252  | 252  | 256  | 252  | 250  |
|           | 1.5                               | 263 | 353 | 430 | 459  | 476  | 485  | 486  | 490  | 496  | 495  | 500  |
|           | 2.0                               | 323 | 453 | 582 | 645  | 680  | 700  | 714  | 721  | 728  | 729  | 740  |
|           | 2.5                               | 372 | 533 | 710 | 804  | 860  | 895  | 918  | 938  | 952  | 963  | 970  |
|           | 3.0                               | 412 | 601 | 818 | 942  | 1020 | 1075 | 1110 | 1141 | 1160 | 1179 | 1190 |
|           | 3.5                               | 447 | 659 | 914 | 1068 | 1168 | 1240 | 1290 | 1330 | 1360 | 1377 | 1400 |
|           | 4.0                               | 478 | 711 | 998 | 1179 | 1300 | 1390 | 1458 | 1505 | 1544 | 1575 | 1600 |

|              |     |     |     |      |      |      |      |      |      |      |      |      |
|--------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Flat terrain | 1.0 | 267 | 426 | 672  | 873  | 1052 | 1215 | 1368 | 1512 | 1640 | 1773 | 1900 |
|              | 1.5 | 342 | 547 | 862  | 1122 | 1352 | 1560 | 1752 | 1939 | 2112 | 2277 | 2440 |
|              | 2.0 | 396 | 632 | 998  | 1299 | 1564 | 1805 | 2028 | 2240 | 2440 | 2637 | 2820 |
|              | 2.5 | 438 | 701 | 1108 | 1440 | 1736 | 2005 | 2250 | 2485 | 2712 | 2925 | 3130 |
|              | 3.0 | 475 | 760 | 1200 | 1560 | 1880 | 2170 | 2442 | 2695 | 2936 | 3168 | 3390 |
|              | 3.5 | 507 | 811 | 1282 | 1668 | 2008 | 2320 | 2610 | 2877 | 3136 | 3384 | 3620 |
|              | 4.0 | 536 | 858 | 1354 | 1764 | 2124 | 2450 | 2760 | 3045 | 3320 | 3573 | 3830 |

|             |     |     |      |      |      |      |      |      |      |      |      |      |
|-------------|-----|-----|------|------|------|------|------|------|------|------|------|------|
| Downhill 2% | 1.0 | 369 | 684  | 1214 | 1689 | 2140 | 2580 | 3006 | 3430 | 3848 | 4257 | 4660 |
|             | 1.5 | 427 | 763  | 1328 | 1833 | 2308 | 2770 | 3222 | 3661 | 4096 | 4518 | 4940 |
|             | 2.0 | 471 | 826  | 1422 | 1950 | 2448 | 2930 | 3396 | 3850 | 4296 | 4743 | 5180 |
|             | 2.5 | 508 | 880  | 1502 | 2052 | 2572 | 3065 | 3546 | 4018 | 4480 | 4932 | 5380 |
|             | 3.0 | 540 | 928  | 1574 | 2145 | 2676 | 3190 | 3684 | 4165 | 4640 | 5103 | 5560 |
|             | 3.5 | 568 | 971  | 1638 | 2226 | 2776 | 3300 | 3810 | 4305 | 4784 | 5256 | 5730 |
|             | 4.0 | 594 | 1010 | 1698 | 2304 | 2868 | 3405 | 3924 | 4424 | 4920 | 5400 | 5880 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 4.0 l/h

|              | Distance between drippers (meter) |     |     |      |      |      |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|------|------|------|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0  | 3.0  | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 1.0                               | 132 | 177 | 216  | 231  | 240  | 245  | 246  | 245  | 248  | 252  | 250  |
|              | 1.5                               | 186 | 267 | 356  | 402  | 432  | 450  | 462  | 469  | 480  | 486  | 490  |
|              | 2.0                               | 224 | 330 | 458  | 534  | 584  | 620  | 648  | 665  | 680  | 693  | 700  |
|              | 2.5                               | 253 | 380 | 538  | 642  | 712  | 765  | 804  | 840  | 864  | 882  | 900  |
|              | 3.0                               | 278 | 421 | 608  | 732  | 824  | 890  | 948  | 987  | 1024 | 1053 | 1080 |
|              | 3.5                               | 300 | 457 | 666  | 810  | 920  | 1005 | 1074 | 1127 | 1176 | 1215 | 1240 |
|              | 4.0                               | 320 | 490 | 720  | 882  | 1004 | 1105 | 1182 | 1253 | 1304 | 1350 | 1390 |
| Flat terrain | 1.0                               | 172 | 274 | 432  | 561  | 676  | 785  | 882  | 973  | 1056 | 1143 | 1220 |
|              | 1.5                               | 220 | 351 | 554  | 723  | 868  | 1005 | 1128 | 1246 | 1360 | 1467 | 1570 |
|              | 2.0                               | 254 | 406 | 642  | 834  | 1008 | 1160 | 1308 | 1442 | 1576 | 1692 | 1820 |
|              | 2.5                               | 281 | 450 | 712  | 927  | 1116 | 1290 | 1452 | 1603 | 1744 | 1881 | 2010 |
|              | 3.0                               | 305 | 488 | 772  | 1005 | 1208 | 1395 | 1572 | 1736 | 1888 | 2043 | 2180 |
|              | 3.5                               | 325 | 521 | 824  | 1071 | 1292 | 1490 | 1680 | 1855 | 2016 | 2178 | 2330 |
|              | 4.0                               | 343 | 551 | 870  | 1134 | 1364 | 1575 | 1776 | 1960 | 2136 | 2304 | 2460 |
| Downhill 2%  | 1.0                               | 214 | 382 | 698  | 975  | 1228 | 1465 | 1698 | 1932 | 2152 | 2376 | 2590 |
|              | 1.5                               | 254 | 441 | 776  | 1074 | 1340 | 1595 | 1848 | 2086 | 2320 | 2556 | 2790 |
|              | 2.0                               | 285 | 486 | 842  | 1152 | 1436 | 1705 | 1962 | 2219 | 2464 | 2709 | 2940 |
|              | 2.5                               | 310 | 524 | 896  | 1221 | 1516 | 1795 | 2064 | 2331 | 2584 | 2835 | 3080 |
|              | 3.0                               | 331 | 557 | 944  | 1281 | 1588 | 1880 | 2160 | 2429 | 2696 | 2952 | 3210 |
|              | 3.5                               | 350 | 587 | 988  | 1338 | 1656 | 1955 | 2244 | 2520 | 2792 | 3060 | 3320 |
|              | 4.0                               | 367 | 613 | 1028 | 1389 | 1716 | 2025 | 2316 | 2604 | 2880 | 3150 | 3420 |

Minimum considered pressure 0.5 bar

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

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

PC AS drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 8.5 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 1.0                               | 90  | 130 | 174 | 198 | 216 | 225  | 228  | 238  | 240  | 243  | 240  |
|              | 1.5                               | 123 | 184 | 264 | 315 | 352 | 380  | 402  | 413  | 432  | 441  | 450  |
|              | 2.0                               | 145 | 222 | 324 | 396 | 448 | 495  | 528  | 553  | 576  | 603  | 620  |
|              | 2.5                               | 163 | 251 | 372 | 459 | 528 | 585  | 630  | 672  | 704  | 729  | 760  |
|              | 3.0                               | 178 | 276 | 414 | 513 | 596 | 660  | 720  | 763  | 808  | 846  | 880  |
|              | 3.5                               | 191 | 297 | 448 | 561 | 652 | 730  | 792  | 854  | 904  | 945  | 990  |
|              | 4.0                               | 203 | 317 | 480 | 603 | 704 | 790  | 864  | 924  | 984  | 1035 | 1080 |
| Flat terrain | 1.0                               | 106 | 169 | 268 | 348 | 420 | 485  | 546  | 602  | 656  | 711  | 760  |
|              | 1.5                               | 136 | 217 | 344 | 447 | 540 | 625  | 702  | 777  | 840  | 909  | 970  |
|              | 2.0                               | 157 | 251 | 398 | 516 | 624 | 720  | 810  | 896  | 976  | 1053 | 1130 |
|              | 2.5                               | 174 | 278 | 440 | 573 | 692 | 800  | 900  | 994  | 1080 | 1170 | 1250 |
|              | 3.0                               | 188 | 302 | 478 | 621 | 748 | 865  | 972  | 1078 | 1168 | 1260 | 1350 |
|              | 3.5                               | 201 | 322 | 510 | 663 | 800 | 925  | 1038 | 1148 | 1248 | 1350 | 1440 |
|              | 4.0                               | 212 | 340 | 538 | 702 | 844 | 975  | 1098 | 1211 | 1320 | 1431 | 1530 |
| Downhill 2%  | 1.0                               | 122 | 211 | 370 | 522 | 672 | 815  | 942  | 1064 | 1176 | 1296 | 1410 |
|              | 1.5                               | 149 | 251 | 428 | 591 | 748 | 900  | 1032 | 1162 | 1288 | 1413 | 1530 |
|              | 2.0                               | 168 | 281 | 474 | 648 | 812 | 970  | 1110 | 1246 | 1384 | 1512 | 1640 |
|              | 2.5                               | 184 | 306 | 510 | 693 | 864 | 1030 | 1176 | 1323 | 1456 | 1593 | 1730 |
|              | 3.0                               | 198 | 328 | 544 | 735 | 912 | 1085 | 1236 | 1386 | 1528 | 1674 | 1810 |
|              | 3.5                               | 210 | 347 | 572 | 771 | 956 | 1130 | 1290 | 1442 | 1592 | 1737 | 1880 |
|              | 4.0                               | 221 | 364 | 598 | 804 | 996 | 1175 | 1338 | 1498 | 1648 | 1800 | 1950 |

Minimum considered pressure 0.5 bar

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

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

PC LCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 54  | 88  | 130 | 159 | 176 | 190 | 204 | 210 | 216 | 225 | 230  |
|           | 2.0                               | 71  | 118 | 184 | 231 | 268 | 295 | 318 | 343 | 360 | 369 | 390  |
|           | 2.5                               | 83  | 139 | 220 | 282 | 328 | 370 | 402 | 434 | 456 | 486 | 500  |
|           | 3.0                               | 92  | 156 | 250 | 321 | 376 | 425 | 468 | 504 | 544 | 567 | 600  |
|           | 3.5                               | 100 | 170 | 274 | 354 | 420 | 475 | 522 | 567 | 608 | 648 | 680  |
|           | 4.0                               | 107 | 182 | 294 | 381 | 456 | 515 | 570 | 623 | 664 | 711 | 750  |

|              |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.5 | 59  | 102 | 168 | 225 | 272 | 315 | 360 | 399 | 432 | 468 | 500 |
|              | 2.0 | 75  | 129 | 216 | 288 | 348 | 405 | 456 | 511 | 552 | 603 | 640 |
|              | 2.5 | 86  | 149 | 248 | 330 | 404 | 470 | 528 | 588 | 640 | 693 | 740 |
|              | 3.0 | 95  | 165 | 276 | 366 | 448 | 520 | 588 | 651 | 712 | 765 | 820 |
|              | 3.5 | 103 | 178 | 298 | 396 | 484 | 560 | 636 | 707 | 768 | 828 | 890 |
|              | 4.0 | 109 | 190 | 318 | 423 | 516 | 600 | 678 | 749 | 824 | 891 | 950 |

|             |     |     |     |     |     |     |     |     |     |     |      |      |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Downhill 2% | 1.5 | 64  | 116 | 210 | 294 | 380 | 460 | 540 | 616 | 696 | 774  | 840  |
|             | 2.0 | 79  | 141 | 248 | 345 | 436 | 525 | 606 | 693 | 776 | 855  | 930  |
|             | 2.5 | 90  | 160 | 278 | 384 | 480 | 575 | 666 | 749 | 840 | 918  | 1000 |
|             | 3.0 | 98  | 175 | 302 | 414 | 516 | 615 | 708 | 805 | 888 | 981  | 1060 |
|             | 3.5 | 106 | 187 | 324 | 441 | 552 | 655 | 750 | 847 | 936 | 1026 | 1120 |
|             | 4.0 | 112 | 199 | 342 | 465 | 580 | 685 | 786 | 889 | 984 | 1080 | 1170 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 36  | 59  | 92  | 117 | 136 | 150 | 162 | 175 | 184 | 189 | 200  |
|           | 2.0                               | 46  | 78  | 126 | 162 | 192 | 215 | 240 | 259 | 272 | 288 | 300  |
|           | 2.5                               | 54  | 91  | 148 | 192 | 228 | 260 | 288 | 315 | 336 | 360 | 380  |
|           | 3.0                               | 59  | 102 | 166 | 216 | 260 | 295 | 330 | 357 | 384 | 414 | 440  |
|           | 3.5                               | 64  | 111 | 182 | 237 | 284 | 325 | 366 | 399 | 432 | 459 | 490  |
|           | 4.0                               | 69  | 118 | 194 | 255 | 308 | 350 | 396 | 434 | 464 | 495 | 530  |

|              |     |    |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.5 | 38 | 65  | 108 | 144 | 176 | 205 | 234 | 259 | 280 | 306 | 330 |
|              | 2.0 | 48 | 83  | 138 | 186 | 224 | 260 | 294 | 329 | 360 | 387 | 420 |
|              | 2.5 | 55 | 96  | 160 | 213 | 260 | 305 | 342 | 378 | 416 | 450 | 480 |
|              | 3.0 | 61 | 106 | 178 | 237 | 288 | 335 | 378 | 420 | 456 | 495 | 530 |
|              | 3.5 | 66 | 114 | 192 | 255 | 312 | 365 | 408 | 455 | 496 | 540 | 580 |
|              | 4.0 | 70 | 122 | 204 | 273 | 332 | 385 | 438 | 483 | 528 | 576 | 610 |

|             |     |    |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Downhill 2% | 1.5 | 40 | 71  | 126 | 174 | 220 | 265 | 306 | 350 | 392 | 432 | 470 |
|             | 2.0 | 49 | 88  | 152 | 210 | 260 | 310 | 360 | 406 | 448 | 495 | 540 |
|             | 2.5 | 56 | 100 | 172 | 234 | 292 | 345 | 396 | 448 | 496 | 540 | 590 |
|             | 3.0 | 62 | 110 | 188 | 255 | 316 | 375 | 432 | 483 | 536 | 585 | 630 |
|             | 3.5 | 67 | 118 | 202 | 273 | 340 | 400 | 456 | 511 | 568 | 621 | 670 |
|             | 4.0 | 71 | 125 | 214 | 291 | 360 | 420 | 480 | 539 | 600 | 648 | 700 |

Minimum considered pressure 1.0 bar

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

PC LCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 8.5 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 23  | 38  | 62  | 78  | 96  | 105 | 120 | 126 | 136 | 144 | 150  |
|           | 2.0                               | 29  | 50  | 82  | 105 | 128 | 145 | 162 | 175 | 192 | 207 | 220  |
|           | 2.5                               | 33  | 57  | 94  | 123 | 148 | 170 | 192 | 210 | 232 | 243 | 260  |
|           | 3.0                               | 37  | 64  | 106 | 138 | 168 | 195 | 216 | 238 | 256 | 279 | 300  |
|           | 3.5                               | 40  | 69  | 114 | 153 | 184 | 210 | 240 | 259 | 280 | 306 | 320  |
|           | 4.0                               | 43  | 74  | 122 | 162 | 196 | 225 | 258 | 280 | 304 | 324 | 350  |

|              |     |    |    |     |     |     |     |     |     |     |     |     |
|--------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.5 | 23 | 40 | 68  | 90  | 112 | 130 | 144 | 161 | 176 | 189 | 210 |
|              | 2.0 | 30 | 51 | 86  | 114 | 140 | 165 | 186 | 203 | 224 | 243 | 260 |
|              | 2.5 | 34 | 59 | 100 | 132 | 160 | 190 | 216 | 238 | 256 | 279 | 300 |
|              | 3.0 | 37 | 65 | 110 | 147 | 180 | 210 | 234 | 259 | 288 | 306 | 330 |
|              | 3.5 | 40 | 70 | 118 | 159 | 192 | 225 | 258 | 280 | 312 | 333 | 360 |
|              | 4.0 | 43 | 75 | 126 | 168 | 208 | 240 | 270 | 301 | 328 | 360 | 380 |

|             |     |    |    |     |     |     |     |     |     |     |     |     |
|-------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Downhill 2% | 1.5 | 24 | 43 | 74  | 102 | 128 | 150 | 174 | 196 | 216 | 243 | 260 |
|             | 2.0 | 30 | 53 | 92  | 123 | 156 | 180 | 210 | 238 | 256 | 288 | 310 |
|             | 2.5 | 34 | 61 | 104 | 141 | 176 | 205 | 234 | 266 | 288 | 315 | 340 |
|             | 3.0 | 38 | 67 | 114 | 153 | 192 | 225 | 258 | 287 | 312 | 342 | 370 |
|             | 3.5 | 41 | 72 | 122 | 165 | 204 | 240 | 276 | 308 | 336 | 369 | 400 |
|             | 4.0 | 43 | 76 | 130 | 177 | 216 | 255 | 288 | 322 | 352 | 387 | 420 |

Minimum considered pressure 1.0 bar

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

PC LCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0  | 10.0 |
| Uphill 2% | 1.5                               | 95  | 138 | 184 | 207 | 220 | 230 | 234 | 238 | 240 | 243  | 250  |
|           | 2.0                               | 129 | 197 | 280 | 333 | 368 | 395 | 414 | 427 | 440 | 450  | 460  |
|           | 2.5                               | 153 | 237 | 348 | 423 | 480 | 520 | 558 | 581 | 608 | 621  | 640  |
|           | 3.0                               | 172 | 269 | 402 | 495 | 568 | 625 | 672 | 707 | 744 | 765  | 790  |
|           | 3.5                               | 187 | 296 | 446 | 555 | 640 | 710 | 768 | 819 | 856 | 891  | 930  |
|           | 4.0                               | 201 | 319 | 486 | 606 | 704 | 785 | 852 | 910 | 960 | 1008 | 1050 |

|              |     |     |     |     |     |     |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Flat terrain | 1.5 | 112 | 184 | 294 | 384 | 464 | 535  | 606  | 665  | 728  | 783  | 840  |
|              | 2.0 | 144 | 235 | 376 | 492 | 596 | 690  | 774  | 854  | 936  | 1008 | 1080 |
|              | 2.5 | 166 | 272 | 436 | 570 | 688 | 795  | 894  | 987  | 1080 | 1161 | 1250 |
|              | 3.0 | 183 | 301 | 482 | 633 | 764 | 880  | 996  | 1099 | 1200 | 1296 | 1380 |
|              | 3.5 | 198 | 326 | 522 | 684 | 828 | 955  | 1074 | 1190 | 1296 | 1404 | 1500 |
|              | 4.0 | 212 | 348 | 558 | 732 | 884 | 1020 | 1152 | 1267 | 1384 | 1494 | 1600 |

|             |     |     |     |     |     |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 130 | 232 | 418 | 594 | 768  | 940  | 1110 | 1281 | 1448 | 1602 | 1740 |
|             | 2.0 | 158 | 275 | 478 | 666 | 848  | 1025 | 1200 | 1379 | 1552 | 1710 | 1850 |
|             | 2.5 | 179 | 307 | 526 | 726 | 916  | 1100 | 1284 | 1463 | 1632 | 1800 | 1950 |
|             | 3.0 | 195 | 333 | 566 | 777 | 972  | 1165 | 1350 | 1533 | 1712 | 1881 | 2040 |
|             | 3.5 | 210 | 356 | 602 | 819 | 1024 | 1220 | 1410 | 1603 | 1784 | 1953 | 2120 |
|             | 4.0 | 222 | 377 | 634 | 861 | 1072 | 1275 | 1470 | 1659 | 1848 | 2025 | 2190 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 65  | 99  | 142 | 168 | 188 | 200 | 210 | 217 | 224 | 225 | 230  |
|           | 2.0                               | 86  | 135 | 202 | 249 | 284 | 315 | 336 | 357 | 376 | 387 | 400  |
|           | 2.5                               | 101 | 160 | 244 | 306 | 352 | 395 | 426 | 455 | 480 | 504 | 530  |
|           | 3.0                               | 113 | 180 | 276 | 348 | 408 | 460 | 498 | 539 | 576 | 603 | 630  |
|           | 3.5                               | 123 | 197 | 304 | 387 | 452 | 510 | 564 | 609 | 648 | 684 | 720  |
|           | 4.0                               | 131 | 211 | 328 | 417 | 492 | 555 | 612 | 665 | 712 | 756 | 790  |

|              |     |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Flat terrain | 1.5 | 72  | 118 | 190 | 249 | 300 | 345 | 390 | 434 | 472 | 504 | 540  |
|              | 2.0 | 92  | 151 | 242 | 318 | 384 | 445 | 498 | 553 | 600 | 648 | 700  |
|              | 2.5 | 106 | 174 | 280 | 366 | 444 | 515 | 576 | 637 | 696 | 756 | 810  |
|              | 3.0 | 117 | 193 | 310 | 408 | 492 | 570 | 642 | 707 | 776 | 837 | 890  |
|              | 3.5 | 127 | 209 | 336 | 441 | 532 | 615 | 696 | 770 | 840 | 900 | 970  |
|              | 4.0 | 135 | 223 | 358 | 471 | 568 | 660 | 738 | 819 | 896 | 963 | 1030 |

|             |     |     |     |     |     |     |     |     |     |      |      |      |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Downhill 2% | 1.5 | 79  | 138 | 240 | 336 | 428 | 515 | 606 | 693 | 776  | 855  | 930  |
|             | 2.0 | 98  | 167 | 284 | 390 | 488 | 585 | 678 | 770 | 864  | 945  | 1020 |
|             | 2.5 | 111 | 189 | 318 | 432 | 536 | 640 | 738 | 833 | 928  | 1017 | 1100 |
|             | 3.0 | 122 | 207 | 346 | 465 | 580 | 685 | 786 | 889 | 984  | 1080 | 1170 |
|             | 3.5 | 132 | 222 | 368 | 495 | 616 | 725 | 834 | 938 | 1040 | 1134 | 1220 |
|             | 4.0 | 140 | 235 | 390 | 522 | 644 | 760 | 870 | 980 | 1088 | 1179 | 1280 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 8.5 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 42  | 66  | 98  | 123 | 140 | 155 | 168 | 175 | 184 | 198 | 200  |
|           | 2.0                               | 55  | 87  | 134 | 171 | 200 | 225 | 246 | 266 | 280 | 297 | 310  |
|           | 2.5                               | 64  | 102 | 160 | 204 | 240 | 270 | 300 | 329 | 352 | 369 | 390  |
|           | 3.0                               | 71  | 114 | 180 | 231 | 272 | 310 | 342 | 371 | 400 | 423 | 450  |
|           | 3.5                               | 77  | 125 | 196 | 252 | 300 | 340 | 378 | 413 | 448 | 477 | 500  |
|           | 4.0                               | 82  | 133 | 210 | 273 | 324 | 370 | 408 | 448 | 480 | 513 | 550  |

|              |     |    |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.5 | 45 | 73  | 118 | 153 | 188 | 215 | 246 | 266 | 296 | 315 | 340 |
|              | 2.0 | 57 | 93  | 150 | 198 | 240 | 275 | 312 | 343 | 376 | 405 | 430 |
|              | 2.5 | 66 | 108 | 174 | 228 | 276 | 320 | 360 | 399 | 432 | 468 | 500 |
|              | 3.0 | 72 | 119 | 192 | 252 | 304 | 355 | 396 | 441 | 480 | 522 | 560 |
|              | 3.5 | 78 | 129 | 208 | 273 | 332 | 385 | 432 | 476 | 520 | 558 | 600 |
|              | 4.0 | 83 | 138 | 222 | 291 | 352 | 410 | 462 | 511 | 552 | 603 | 640 |

|             |     |    |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Downhill 2% | 1.5 | 47 | 81  | 138 | 189 | 236 | 280 | 324 | 371 | 416 | 459 | 500 |
|             | 2.0 | 59 | 100 | 166 | 225 | 280 | 330 | 378 | 427 | 472 | 522 | 570 |
|             | 2.5 | 68 | 113 | 188 | 252 | 312 | 365 | 420 | 469 | 520 | 576 | 620 |
|             | 3.0 | 74 | 124 | 206 | 276 | 340 | 400 | 456 | 511 | 560 | 612 | 670 |
|             | 3.5 | 80 | 134 | 220 | 294 | 360 | 425 | 486 | 539 | 600 | 648 | 700 |
|             | 4.0 | 85 | 142 | 234 | 312 | 384 | 450 | 510 | 567 | 632 | 684 | 740 |

Minimum considered pressure 1.0 bar

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

PC LCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |      |      |      |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.5                               | 138 | 183 | 220 | 234 | 240 | 245  | 246  | 252  | 248  | 252  | 250  |
|           | 2.0                               | 196 | 279 | 368 | 414 | 440 | 455  | 468  | 476  | 480  | 486  | 490  |
|           | 2.5                               | 236 | 346 | 476 | 552 | 600 | 635  | 660  | 679  | 688  | 702  | 710  |
|           | 3.0                               | 268 | 399 | 562 | 666 | 736 | 790  | 828  | 854  | 880  | 900  | 910  |
|           | 3.5                               | 295 | 444 | 636 | 762 | 852 | 920  | 972  | 1015 | 1048 | 1080 | 1100 |
|           | 4.0                               | 318 | 483 | 700 | 846 | 956 | 1040 | 1104 | 1162 | 1200 | 1242 | 1270 |

|              |     |     |     |     |      |      |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| Flat terrain | 1.5 | 183 | 291 | 460 | 597  | 720  | 830  | 936  | 1036 | 1128 | 1215 | 1300 |
|              | 2.0 | 234 | 374 | 590 | 768  | 924  | 1070 | 1200 | 1323 | 1448 | 1557 | 1670 |
|              | 2.5 | 271 | 432 | 682 | 888  | 1068 | 1235 | 1392 | 1533 | 1672 | 1800 | 1930 |
|              | 3.0 | 300 | 480 | 758 | 984  | 1188 | 1370 | 1542 | 1701 | 1856 | 1998 | 2140 |
|              | 3.5 | 325 | 520 | 820 | 1068 | 1288 | 1485 | 1668 | 1848 | 2008 | 2169 | 2320 |
|              | 4.0 | 347 | 555 | 876 | 1140 | 1372 | 1585 | 1782 | 1967 | 2144 | 2313 | 2480 |

|             |     |     |     |      |      |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 231 | 414 | 760  | 1053 | 1324 | 1585 | 1836 | 2086 | 2328 | 2574 | 2810 |
|             | 2.0 | 273 | 475 | 842  | 1155 | 1444 | 1720 | 1992 | 2254 | 2512 | 2763 | 3010 |
|             | 2.5 | 306 | 523 | 908  | 1239 | 1544 | 1835 | 2118 | 2387 | 2656 | 2925 | 3180 |
|             | 3.0 | 332 | 563 | 966  | 1311 | 1628 | 1935 | 2226 | 2506 | 2784 | 3060 | 3330 |
|             | 3.5 | 355 | 598 | 1016 | 1377 | 1708 | 2020 | 2322 | 2618 | 2904 | 3177 | 3460 |
|             | 4.0 | 375 | 629 | 1062 | 1434 | 1776 | 2100 | 2412 | 2709 | 3008 | 3294 | 3570 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0  | 10.0 |
| Uphill 2% | 1.5                               | 98  | 140 | 184 | 207 | 220 | 230 | 234 | 238 | 240 | 243  | 250  |
|           | 2.0                               | 134 | 200 | 282 | 333 | 368 | 395 | 414 | 427 | 440 | 450  | 460  |
|           | 2.5                               | 159 | 242 | 350 | 423 | 480 | 520 | 552 | 581 | 608 | 621  | 640  |
|           | 3.0                               | 179 | 275 | 404 | 495 | 568 | 625 | 672 | 707 | 744 | 765  | 790  |
|           | 3.5                               | 196 | 302 | 450 | 555 | 640 | 710 | 768 | 812 | 856 | 891  | 930  |
|           | 4.0                               | 211 | 326 | 490 | 609 | 704 | 785 | 852 | 910 | 960 | 1008 | 1040 |

|              |     |     |     |     |     |     |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Flat terrain | 1.5 | 117 | 187 | 296 | 384 | 464 | 535  | 606  | 665  | 728  | 783  | 840  |
|              | 2.0 | 150 | 240 | 380 | 495 | 596 | 690  | 774  | 854  | 928  | 1008 | 1080 |
|              | 2.5 | 174 | 278 | 440 | 573 | 688 | 795  | 894  | 987  | 1080 | 1161 | 1240 |
|              | 3.0 | 192 | 308 | 486 | 633 | 764 | 880  | 990  | 1099 | 1192 | 1287 | 1380 |
|              | 3.5 | 208 | 334 | 528 | 687 | 828 | 955  | 1074 | 1190 | 1296 | 1395 | 1490 |
|              | 4.0 | 222 | 356 | 564 | 735 | 884 | 1020 | 1146 | 1267 | 1384 | 1494 | 1600 |

|             |     |     |     |     |     |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 137 | 238 | 422 | 597 | 768  | 920  | 1062 | 1197 | 1336 | 1467 | 1590 |
|             | 2.0 | 166 | 282 | 484 | 672 | 852  | 1015 | 1164 | 1309 | 1456 | 1593 | 1730 |
|             | 2.5 | 188 | 315 | 532 | 729 | 920  | 1090 | 1248 | 1400 | 1552 | 1701 | 1850 |
|             | 3.0 | 206 | 342 | 572 | 780 | 976  | 1155 | 1320 | 1484 | 1640 | 1791 | 1940 |
|             | 3.5 | 221 | 366 | 608 | 825 | 1028 | 1210 | 1386 | 1554 | 1720 | 1872 | 2030 |
|             | 4.0 | 234 | 387 | 640 | 864 | 1072 | 1265 | 1446 | 1617 | 1784 | 1953 | 2110 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 8.5 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 65  | 97  | 138 | 165 | 184 | 195 | 204 | 217 | 224 | 225 | 230  |
|           | 2.0                               | 87  | 133 | 196 | 243 | 276 | 305 | 330 | 350 | 368 | 378 | 390  |
|           | 2.5                               | 102 | 158 | 238 | 297 | 344 | 385 | 414 | 448 | 472 | 495 | 510  |
|           | 3.0                               | 114 | 178 | 270 | 339 | 396 | 445 | 486 | 525 | 560 | 585 | 610  |
|           | 3.5                               | 124 | 194 | 296 | 375 | 440 | 495 | 546 | 588 | 624 | 666 | 700  |
|           | 4.0                               | 133 | 209 | 320 | 405 | 476 | 540 | 594 | 644 | 688 | 729 | 770  |

|              |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Flat terrain | 1.5 | 73  | 116 | 184 | 240 | 288 | 335 | 378 | 413 | 456 | 486 | 520 |
|              | 2.0 | 93  | 149 | 236 | 306 | 368 | 425 | 480 | 532 | 576 | 621 | 670 |
|              | 2.5 | 107 | 172 | 272 | 354 | 428 | 495 | 558 | 616 | 672 | 720 | 770 |
|              | 3.0 | 119 | 191 | 302 | 393 | 472 | 545 | 618 | 679 | 744 | 801 | 860 |
|              | 3.5 | 129 | 206 | 326 | 426 | 512 | 595 | 666 | 735 | 800 | 864 | 930 |
|              | 4.0 | 137 | 220 | 348 | 456 | 548 | 635 | 714 | 784 | 856 | 927 | 990 |

|             |     |     |     |     |     |     |     |     |     |      |      |      |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Downhill 2% | 1.5 | 80  | 135 | 232 | 321 | 408 | 490 | 576 | 658 | 736  | 819  | 890  |
|             | 2.0 | 99  | 165 | 276 | 375 | 468 | 560 | 648 | 735 | 816  | 900  | 980  |
|             | 2.5 | 113 | 186 | 308 | 414 | 516 | 610 | 702 | 791 | 880  | 972  | 1050 |
|             | 3.0 | 124 | 204 | 334 | 450 | 556 | 655 | 750 | 847 | 936  | 1026 | 1110 |
|             | 3.5 | 133 | 219 | 358 | 477 | 588 | 695 | 798 | 896 | 992  | 1080 | 1170 |
|             | 4.0 | 142 | 232 | 378 | 504 | 620 | 730 | 834 | 938 | 1032 | 1134 | 1220 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 2.0 l/h

|           | Distance between drippers (meter) |     |     |     |      |      |      |      |      |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0  | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.5                               | 175 | 214 | 238 | 243  | 248  | 250  | 252  | 252  | 256  | 252  | 250  |
|           | 2.0                               | 263 | 353 | 430 | 459  | 476  | 485  | 486  | 490  | 496  | 495  | 500  |
|           | 2.5                               | 323 | 453 | 582 | 645  | 680  | 700  | 714  | 721  | 728  | 729  | 740  |
|           | 3.0                               | 372 | 533 | 710 | 804  | 860  | 895  | 918  | 938  | 952  | 963  | 970  |
|           | 3.5                               | 412 | 601 | 818 | 942  | 1020 | 1075 | 1110 | 1141 | 1160 | 1179 | 1190 |
|           | 4.0                               | 447 | 659 | 914 | 1068 | 1168 | 1240 | 1290 | 1330 | 1360 | 1377 | 1400 |

|              |     |     |     |      |      |      |      |      |      |      |      |      |
|--------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Flat terrain | 1.5 | 267 | 426 | 672  | 873  | 1052 | 1215 | 1368 | 1512 | 1640 | 1773 | 1900 |
|              | 2.0 | 342 | 547 | 862  | 1122 | 1352 | 1560 | 1752 | 1939 | 2112 | 2277 | 2440 |
|              | 2.5 | 396 | 632 | 998  | 1299 | 1564 | 1805 | 2028 | 2240 | 2440 | 2637 | 2820 |
|              | 3.0 | 438 | 701 | 1108 | 1440 | 1736 | 2005 | 2250 | 2485 | 2712 | 2925 | 3130 |
|              | 3.5 | 475 | 760 | 1200 | 1560 | 1880 | 2170 | 2442 | 2695 | 2936 | 3168 | 3390 |
|              | 4.0 | 507 | 811 | 1282 | 1668 | 2008 | 2320 | 2610 | 2877 | 3136 | 3384 | 3620 |

|             |     |     |     |      |      |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 369 | 684 | 1214 | 1689 | 2140 | 2580 | 3006 | 3430 | 3848 | 4257 | 4660 |
|             | 2.0 | 427 | 763 | 1328 | 1833 | 2308 | 2770 | 3222 | 3661 | 4096 | 4518 | 4940 |
|             | 2.5 | 471 | 826 | 1422 | 1950 | 2448 | 2930 | 3396 | 3850 | 4296 | 4743 | 5180 |
|             | 3.0 | 508 | 880 | 1502 | 2052 | 2572 | 3065 | 3546 | 4018 | 4480 | 4932 | 5380 |
|             | 3.5 | 540 | 928 | 1574 | 2145 | 2676 | 3190 | 3684 | 4165 | 4640 | 5103 | 5560 |
|             | 4.0 | 568 | 971 | 1638 | 2226 | 2776 | 3300 | 3810 | 4305 | 4784 | 5256 | 5730 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 4.0 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |      |      |      |      |      |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2% | 1.5                               | 132 | 177 | 216 | 231 | 240 | 245  | 246  | 245  | 248  | 252  | 250  |
|           | 2.0                               | 186 | 267 | 356 | 402 | 432 | 450  | 462  | 469  | 480  | 486  | 490  |
|           | 2.5                               | 224 | 330 | 458 | 534 | 584 | 620  | 648  | 665  | 680  | 693  | 700  |
|           | 3.0                               | 253 | 380 | 538 | 642 | 712 | 765  | 804  | 840  | 864  | 882  | 900  |
|           | 3.5                               | 278 | 421 | 608 | 732 | 824 | 890  | 948  | 987  | 1024 | 1053 | 1080 |
|           | 4.0                               | 300 | 457 | 666 | 810 | 920 | 1005 | 1074 | 1127 | 1176 | 1215 | 1240 |

|              |     |     |     |     |      |      |      |      |      |      |      |      |
|--------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| Flat terrain | 1.5 | 172 | 274 | 432 | 561  | 676  | 785  | 882  | 973  | 1056 | 1143 | 1220 |
|              | 2.0 | 220 | 351 | 554 | 723  | 868  | 1005 | 1128 | 1246 | 1360 | 1467 | 1570 |
|              | 2.5 | 254 | 406 | 642 | 834  | 1008 | 1160 | 1308 | 1442 | 1576 | 1692 | 1820 |
|              | 3.0 | 281 | 450 | 712 | 927  | 1116 | 1290 | 1452 | 1603 | 1744 | 1881 | 2010 |
|              | 3.5 | 305 | 488 | 772 | 1005 | 1208 | 1395 | 1572 | 1736 | 1888 | 2043 | 2180 |
|              | 4.0 | 325 | 521 | 824 | 1071 | 1292 | 1490 | 1680 | 1855 | 2016 | 2178 | 2330 |

|             |     |     |     |     |      |      |      |      |      |      |      |      |
|-------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 214 | 382 | 698 | 975  | 1228 | 1465 | 1698 | 1932 | 2152 | 2376 | 2590 |
|             | 2.0 | 254 | 441 | 776 | 1074 | 1340 | 1595 | 1848 | 2086 | 2320 | 2556 | 2790 |
|             | 2.5 | 285 | 486 | 842 | 1152 | 1436 | 1705 | 1962 | 2219 | 2464 | 2709 | 2940 |
|             | 3.0 | 310 | 524 | 896 | 1221 | 1516 | 1795 | 2064 | 2331 | 2584 | 2835 | 3080 |
|             | 3.5 | 331 | 557 | 944 | 1281 | 1588 | 1880 | 2160 | 2429 | 2696 | 2952 | 3210 |
|             | 4.0 | 350 | 587 | 988 | 1338 | 1656 | 1955 | 2244 | 2520 | 2792 | 3060 | 3320 |

Minimum considered pressure 1.0 bar

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

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

PC LCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 8.5 l/h

|           | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|-----------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|           | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2% | 1.5                               | 90  | 130 | 174 | 198 | 216 | 225 | 228 | 238 | 240 | 243 | 240  |
|           | 2.0                               | 123 | 184 | 264 | 315 | 352 | 380 | 402 | 413 | 432 | 441 | 450  |
|           | 2.5                               | 145 | 222 | 324 | 396 | 448 | 495 | 528 | 553 | 576 | 603 | 620  |
|           | 3.0                               | 163 | 251 | 372 | 459 | 528 | 585 | 630 | 672 | 704 | 729 | 760  |
|           | 3.5                               | 178 | 276 | 414 | 513 | 596 | 660 | 720 | 763 | 808 | 846 | 880  |
|           | 4.0                               | 191 | 297 | 448 | 561 | 652 | 730 | 792 | 854 | 904 | 945 | 990  |

|              |     |     |     |     |     |     |     |      |      |      |      |      |
|--------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Flat terrain | 1.5 | 106 | 169 | 268 | 348 | 420 | 485 | 546  | 602  | 656  | 711  | 760  |
|              | 2.0 | 136 | 217 | 344 | 447 | 540 | 625 | 702  | 777  | 840  | 909  | 970  |
|              | 2.5 | 157 | 251 | 398 | 516 | 624 | 720 | 810  | 896  | 976  | 1053 | 1130 |
|              | 3.0 | 174 | 278 | 440 | 573 | 692 | 800 | 900  | 994  | 1080 | 1170 | 1250 |
|              | 3.5 | 188 | 302 | 478 | 621 | 748 | 865 | 972  | 1078 | 1168 | 1260 | 1350 |
|              | 4.0 | 201 | 322 | 510 | 663 | 800 | 925 | 1038 | 1148 | 1248 | 1350 | 1440 |

|             |     |     |     |     |     |     |      |      |      |      |      |      |
|-------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Downhill 2% | 1.5 | 122 | 211 | 370 | 522 | 672 | 815  | 942  | 1064 | 1176 | 1296 | 1410 |
|             | 2.0 | 149 | 251 | 428 | 591 | 748 | 900  | 1032 | 1162 | 1288 | 1413 | 1530 |
|             | 2.5 | 168 | 281 | 474 | 648 | 812 | 970  | 1110 | 1246 | 1384 | 1512 | 1640 |
|             | 3.0 | 184 | 306 | 510 | 693 | 864 | 1030 | 1176 | 1323 | 1456 | 1593 | 1730 |
|             | 3.5 | 198 | 328 | 544 | 735 | 912 | 1085 | 1236 | 1386 | 1528 | 1674 | 1810 |
|             | 4.0 | 210 | 347 | 572 | 771 | 956 | 1130 | 1290 | 1442 | 1592 | 1737 | 1880 |

Minimum considered pressure 1.0 bar

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

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

PC HCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 3.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 43  | 70  | 108 | 132 | 152 | 170 | 180 | 189 | 200 | 207 | 210  |
|              | 2.5                               | 55  | 93  | 148 | 189 | 220 | 250 | 270 | 294 | 312 | 324 | 340  |
|              | 3.0                               | 64  | 109 | 176 | 225 | 268 | 305 | 336 | 364 | 384 | 405 | 430  |
|              | 3.5                               | 71  | 122 | 196 | 255 | 304 | 345 | 384 | 420 | 448 | 477 | 500  |
|              | 4.0                               | 77  | 132 | 216 | 279 | 336 | 380 | 426 | 462 | 496 | 531 | 560  |
| Flat terrain | 2.0                               | 45  | 78  | 130 | 174 | 212 | 245 | 276 | 308 | 336 | 360 | 390  |
|              | 2.5                               | 58  | 100 | 166 | 222 | 272 | 315 | 354 | 392 | 432 | 468 | 500  |
|              | 3.0                               | 66  | 115 | 192 | 255 | 312 | 365 | 408 | 455 | 496 | 540 | 580  |
|              | 3.5                               | 73  | 127 | 212 | 282 | 344 | 400 | 456 | 504 | 552 | 594 | 640  |
|              | 4.0                               | 79  | 137 | 230 | 306 | 372 | 435 | 492 | 546 | 592 | 648 | 690  |
| Downhill 2%  | 2.0                               | 48  | 87  | 154 | 216 | 276 | 330 | 384 | 441 | 496 | 549 | 600  |
|              | 2.5                               | 60  | 107 | 186 | 255 | 320 | 385 | 444 | 504 | 560 | 621 | 670  |
|              | 3.0                               | 68  | 121 | 210 | 288 | 356 | 425 | 492 | 553 | 616 | 675 | 730  |
|              | 3.5                               | 75  | 133 | 228 | 312 | 388 | 460 | 528 | 595 | 656 | 720 | 780  |
|              | 4.0                               | 81  | 143 | 246 | 333 | 412 | 490 | 558 | 630 | 696 | 765 | 830  |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 6.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 28  | 47  | 74  | 96  | 112 | 125 | 138 | 147 | 160 | 162 | 170  |
|              | 2.5                               | 36  | 61  | 100 | 129 | 152 | 175 | 192 | 210 | 224 | 243 | 250  |
|              | 3.0                               | 42  | 71  | 116 | 153 | 184 | 210 | 234 | 252 | 272 | 297 | 310  |
|              | 3.5                               | 46  | 79  | 130 | 171 | 204 | 235 | 264 | 287 | 312 | 333 | 360  |
|              | 4.0                               | 50  | 86  | 142 | 186 | 224 | 260 | 288 | 315 | 344 | 369 | 390  |
| Flat terrain | 2.0                               | 29  | 50  | 84  | 111 | 136 | 160 | 180 | 203 | 216 | 234 | 250  |
|              | 2.5                               | 37  | 64  | 108 | 144 | 176 | 205 | 228 | 252 | 280 | 306 | 320  |
|              | 3.0                               | 42  | 74  | 124 | 165 | 200 | 235 | 264 | 294 | 320 | 351 | 370  |
|              | 3.5                               | 47  | 81  | 136 | 183 | 224 | 260 | 294 | 329 | 360 | 387 | 410  |
|              | 4.0                               | 50  | 88  | 148 | 198 | 240 | 280 | 318 | 350 | 384 | 414 | 450  |
| Downhill 2%  | 2.0                               | 30  | 54  | 94  | 129 | 164 | 195 | 228 | 259 | 288 | 315 | 340  |
|              | 2.5                               | 38  | 67  | 116 | 156 | 196 | 230 | 270 | 301 | 336 | 369 | 400  |
|              | 3.0                               | 43  | 76  | 130 | 177 | 220 | 260 | 300 | 336 | 368 | 405 | 440  |
|              | 3.5                               | 48  | 84  | 144 | 195 | 240 | 285 | 324 | 364 | 400 | 441 | 470  |
|              | 4.0                               | 51  | 90  | 154 | 207 | 256 | 305 | 348 | 385 | 424 | 468 | 500  |

Minimum considered pressure 1.5 bar

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

PC HCNL drippers • On PE pipe 12/4 • ID 9.8 mm • Kd 1.65 • Flow rate 12.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 18  | 31  | 50  | 66  | 80  | 90  | 102 | 112 | 120 | 126 | 130  |
|              | 2.5                               | 23  | 40  | 66  | 87  | 104 | 120 | 132 | 147 | 160 | 171 | 180  |
|              | 3.0                               | 27  | 46  | 76  | 102 | 124 | 140 | 162 | 175 | 192 | 207 | 220  |
|              | 3.5                               | 30  | 51  | 86  | 114 | 136 | 160 | 180 | 196 | 216 | 225 | 240  |
|              | 4.0                               | 32  | 56  | 92  | 123 | 148 | 175 | 192 | 217 | 232 | 252 | 270  |
| Flat terrain | 2.0                               | 19  | 33  | 54  | 72  | 88  | 105 | 120 | 133 | 144 | 153 | 170  |
|              | 2.5                               | 24  | 41  | 70  | 93  | 112 | 130 | 150 | 168 | 184 | 198 | 210  |
|              | 3.0                               | 27  | 47  | 80  | 108 | 132 | 150 | 174 | 189 | 208 | 225 | 240  |
|              | 3.5                               | 30  | 52  | 88  | 117 | 144 | 170 | 192 | 210 | 232 | 252 | 270  |
|              | 4.0                               | 32  | 56  | 96  | 129 | 156 | 180 | 204 | 231 | 248 | 270 | 290  |
| Downhill 2%  | 2.0                               | 19  | 34  | 58  | 81  | 100 | 120 | 138 | 154 | 168 | 189 | 200  |
|              | 2.5                               | 24  | 42  | 72  | 99  | 124 | 145 | 168 | 182 | 208 | 225 | 240  |
|              | 3.0                               | 28  | 48  | 82  | 111 | 140 | 165 | 186 | 210 | 232 | 252 | 270  |
|              | 3.5                               | 30  | 53  | 90  | 123 | 152 | 180 | 204 | 224 | 248 | 270 | 290  |
|              | 4.0                               | 33  | 57  | 98  | 132 | 164 | 190 | 216 | 245 | 264 | 288 | 310  |

Minimum considered pressure 1.5 bar

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

PC HCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 3.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 76  | 114 | 160 | 186 | 204 | 215 | 222  | 231  | 232  | 234  | 240  |
|              | 2.5                               | 102 | 159 | 232 | 282 | 320 | 350 | 372  | 392  | 408  | 414  | 430  |
|              | 3.0                               | 120 | 189 | 284 | 351 | 404 | 445 | 480  | 511  | 536  | 558  | 580  |
|              | 3.5                               | 134 | 213 | 324 | 405 | 472 | 525 | 570  | 609  | 640  | 675  | 700  |
|              | 4.0                               | 146 | 234 | 358 | 450 | 524 | 590 | 642  | 693  | 736  | 774  | 800  |
| Flat terrain | 2.0                               | 87  | 142 | 228 | 297 | 360 | 415 | 468  | 518  | 568  | 612  | 650  |
|              | 2.5                               | 111 | 181 | 290 | 381 | 460 | 530 | 600  | 665  | 720  | 783  | 830  |
|              | 3.0                               | 128 | 210 | 336 | 441 | 532 | 615 | 696  | 763  | 832  | 900  | 970  |
|              | 3.5                               | 141 | 232 | 372 | 489 | 588 | 680 | 768  | 847  | 928  | 999  | 1070 |
|              | 4.0                               | 153 | 251 | 404 | 528 | 640 | 740 | 834  | 917  | 1000 | 1080 | 1160 |
| Downhill 2%  | 2.0                               | 97  | 171 | 300 | 423 | 540 | 660 | 774  | 889  | 1000 | 1116 | 1230 |
|              | 2.5                               | 119 | 205 | 352 | 486 | 612 | 735 | 858  | 973  | 1096 | 1215 | 1330 |
|              | 3.0                               | 135 | 231 | 390 | 534 | 668 | 800 | 924  | 1050 | 1168 | 1287 | 1410 |
|              | 3.5                               | 148 | 251 | 422 | 573 | 716 | 850 | 984  | 1113 | 1232 | 1359 | 1480 |
|              | 4.0                               | 159 | 269 | 450 | 609 | 756 | 895 | 1032 | 1162 | 1296 | 1422 | 1550 |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 6.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 51  | 80  | 118 | 144 | 160 | 175 | 186 | 196 | 208 | 216 | 220  |
|              | 2.5                               | 68  | 107 | 164 | 204 | 236 | 265 | 288 | 308 | 328 | 342 | 350  |
|              | 3.0                               | 79  | 126 | 194 | 246 | 288 | 325 | 354 | 385 | 408 | 432 | 450  |
|              | 3.5                               | 88  | 141 | 220 | 279 | 328 | 375 | 414 | 448 | 480 | 504 | 530  |
|              | 4.0                               | 95  | 154 | 240 | 309 | 364 | 415 | 456 | 497 | 536 | 567 | 600  |
| Flat terrain | 2.0                               | 56  | 91  | 146 | 192 | 232 | 270 | 300 | 336 | 368 | 396 | 420  |
|              | 2.5                               | 71  | 117 | 188 | 246 | 296 | 345 | 390 | 427 | 464 | 504 | 540  |
|              | 3.0                               | 82  | 135 | 216 | 285 | 344 | 395 | 450 | 497 | 536 | 585 | 620  |
|              | 3.5                               | 91  | 149 | 240 | 315 | 380 | 440 | 498 | 546 | 600 | 648 | 690  |
|              | 4.0                               | 98  | 161 | 260 | 342 | 412 | 475 | 534 | 595 | 648 | 702 | 750  |
| Downhill 2%  | 2.0                               | 60  | 103 | 176 | 243 | 308 | 370 | 432 | 490 | 552 | 612 | 670  |
|              | 2.5                               | 75  | 126 | 212 | 288 | 360 | 430 | 492 | 560 | 624 | 684 | 750  |
|              | 3.0                               | 85  | 143 | 238 | 321 | 400 | 470 | 540 | 609 | 680 | 747 | 810  |
|              | 3.5                               | 93  | 157 | 260 | 351 | 432 | 510 | 582 | 658 | 728 | 792 | 860  |
|              | 4.0                               | 101 | 169 | 280 | 375 | 460 | 540 | 618 | 693 | 768 | 837 | 910  |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 16/4 • ID 13.2 mm • Kd 0.39 • Flow rate 12.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 34  | 54  | 82  | 102 | 120 | 135 | 144 | 154 | 168 | 171 | 180  |
|              | 2.5                               | 44  | 71  | 110 | 141 | 168 | 190 | 210 | 224 | 240 | 252 | 270  |
|              | 3.0                               | 51  | 83  | 130 | 168 | 200 | 225 | 252 | 273 | 296 | 315 | 330  |
|              | 3.5                               | 57  | 93  | 146 | 189 | 224 | 255 | 288 | 308 | 336 | 360 | 380  |
|              | 4.0                               | 62  | 101 | 160 | 207 | 248 | 280 | 312 | 343 | 368 | 396 | 420  |
| Flat terrain | 2.0                               | 36  | 59  | 94  | 123 | 152 | 175 | 198 | 217 | 240 | 261 | 280  |
|              | 2.5                               | 46  | 75  | 120 | 159 | 192 | 225 | 252 | 280 | 304 | 324 | 350  |
|              | 3.0                               | 53  | 87  | 140 | 183 | 220 | 255 | 288 | 322 | 352 | 378 | 400  |
|              | 3.5                               | 58  | 96  | 154 | 204 | 244 | 285 | 318 | 357 | 384 | 414 | 450  |
|              | 4.0                               | 63  | 104 | 168 | 219 | 264 | 310 | 348 | 385 | 416 | 450 | 480  |
| Downhill 2%  | 2.0                               | 38  | 64  | 108 | 147 | 184 | 215 | 252 | 280 | 312 | 351 | 380  |
|              | 2.5                               | 47  | 79  | 132 | 177 | 220 | 255 | 294 | 329 | 368 | 405 | 440  |
|              | 3.0                               | 54  | 90  | 148 | 198 | 244 | 290 | 330 | 371 | 408 | 441 | 480  |
|              | 3.5                               | 59  | 99  | 164 | 219 | 268 | 315 | 354 | 399 | 440 | 477 | 520  |
|              | 4.0                               | 64  | 107 | 176 | 234 | 284 | 335 | 384 | 427 | 472 | 513 | 550  |

Minimum considered pressure 1.5 bar

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

PC HCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 3.0 l/h

|              | Distance between drippers (meter) |     |     |     |      |      |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0  | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 114 | 158 | 200 | 219  | 232  | 235  | 240  | 245  | 248  | 252  | 250  |
|              | 2.5                               | 158 | 231 | 318 | 369  | 400  | 425  | 438  | 455  | 464  | 468  | 470  |
|              | 3.0                               | 188 | 282 | 400 | 477  | 532  | 570  | 600  | 630  | 648  | 657  | 670  |
|              | 3.5                               | 212 | 322 | 466 | 564  | 636  | 695  | 738  | 777  | 808  | 828  | 850  |
|              | 4.0                               | 233 | 356 | 522 | 639  | 728  | 800  | 858  | 903  | 944  | 972  | 1010 |
| Flat terrain | 2.0                               | 141 | 225 | 356 | 462  | 556  | 645  | 726  | 798  | 872  | 936  | 1010 |
|              | 2.5                               | 181 | 289 | 456 | 594  | 716  | 825  | 930  | 1022 | 1120 | 1206 | 1290 |
|              | 3.0                               | 209 | 334 | 528 | 687  | 828  | 955  | 1074 | 1183 | 1296 | 1395 | 1490 |
|              | 3.5                               | 231 | 370 | 584 | 762  | 916  | 1060 | 1194 | 1316 | 1432 | 1548 | 1650 |
|              | 4.0                               | 250 | 401 | 634 | 825  | 992  | 1150 | 1290 | 1428 | 1552 | 1674 | 1790 |
| Downhill 2%  | 2.0                               | 170 | 298 | 536 | 765  | 992  | 1215 | 1440 | 1659 | 1880 | 2106 | 2310 |
|              | 2.5                               | 204 | 349 | 606 | 846  | 1080 | 1310 | 1542 | 1764 | 1992 | 2214 | 2420 |
|              | 3.0                               | 230 | 388 | 662 | 915  | 1156 | 1395 | 1626 | 1855 | 2088 | 2313 | 2530 |
|              | 3.5                               | 250 | 420 | 710 | 972  | 1224 | 1465 | 1704 | 1939 | 2176 | 2403 | 2620 |
|              | 4.0                               | 268 | 448 | 750 | 1023 | 1280 | 1530 | 1776 | 2016 | 2248 | 2484 | 2710 |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 6.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 79  | 116 | 160 | 186 | 204 | 215 | 222  | 231  | 232  | 234  | 240  |
|              | 2.5                               | 107 | 161 | 234 | 285 | 320 | 350 | 372  | 392  | 408  | 414  | 430  |
|              | 3.0                               | 126 | 193 | 286 | 351 | 404 | 445 | 480  | 511  | 536  | 558  | 580  |
|              | 3.5                               | 141 | 218 | 326 | 408 | 472 | 525 | 570  | 609  | 640  | 675  | 700  |
|              | 4.0                               | 153 | 239 | 360 | 453 | 528 | 590 | 642  | 693  | 728  | 765  | 800  |
| Flat terrain | 2.0                               | 91  | 145 | 228 | 297 | 360 | 415 | 468  | 518  | 560  | 603  | 650  |
|              | 2.5                               | 116 | 186 | 294 | 381 | 460 | 530 | 600  | 658  | 720  | 774  | 830  |
|              | 3.0                               | 134 | 215 | 340 | 441 | 532 | 615 | 690  | 763  | 832  | 900  | 960  |
|              | 3.5                               | 148 | 238 | 376 | 489 | 592 | 680 | 768  | 847  | 928  | 999  | 1070 |
|              | 4.0                               | 161 | 258 | 408 | 531 | 640 | 740 | 834  | 917  | 1000 | 1080 | 1160 |
| Downhill 2%  | 2.0                               | 102 | 175 | 304 | 426 | 544 | 660 | 774  | 889  | 1000 | 1116 | 1230 |
|              | 2.5                               | 126 | 210 | 356 | 489 | 612 | 735 | 858  | 973  | 1088 | 1206 | 1320 |
|              | 3.0                               | 143 | 237 | 394 | 537 | 668 | 800 | 924  | 1043 | 1168 | 1287 | 1400 |
|              | 3.5                               | 156 | 258 | 428 | 576 | 716 | 850 | 978  | 1106 | 1232 | 1359 | 1480 |
|              | 4.0                               | 168 | 277 | 456 | 612 | 760 | 900 | 1032 | 1162 | 1288 | 1413 | 1540 |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 20/4 • ID 17.0 mm • Kd 0.13 • Flow rate 12.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |     |     |     |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
| Uphill 2%    | 2.0                               | 54  | 81  | 118 | 144 | 160 | 175 | 186 | 196 | 208 | 216 | 220  |
|              | 2.5                               | 71  | 109 | 164 | 204 | 236 | 265 | 288 | 308 | 328 | 342 | 350  |
|              | 3.0                               | 83  | 129 | 196 | 246 | 288 | 325 | 354 | 385 | 408 | 432 | 450  |
|              | 3.5                               | 92  | 145 | 222 | 282 | 332 | 375 | 408 | 448 | 472 | 504 | 530  |
|              | 4.0                               | 100 | 158 | 244 | 309 | 364 | 415 | 456 | 497 | 528 | 567 | 590  |
| Flat terrain | 2.0                               | 58  | 93  | 148 | 192 | 232 | 270 | 300 | 336 | 368 | 396 | 420  |
|              | 2.5                               | 75  | 119 | 190 | 246 | 296 | 345 | 384 | 427 | 464 | 504 | 540  |
|              | 3.0                               | 86  | 138 | 218 | 285 | 344 | 395 | 450 | 497 | 536 | 585 | 620  |
|              | 3.5                               | 95  | 153 | 242 | 315 | 380 | 440 | 498 | 546 | 600 | 648 | 690  |
|              | 4.0                               | 103 | 166 | 262 | 342 | 412 | 475 | 534 | 595 | 648 | 693 | 750  |
| Downhill 2%  | 2.0                               | 63  | 106 | 178 | 246 | 308 | 370 | 432 | 490 | 552 | 612 | 670  |
|              | 2.5                               | 79  | 130 | 214 | 291 | 360 | 430 | 492 | 560 | 624 | 684 | 740  |
|              | 3.0                               | 90  | 147 | 242 | 324 | 400 | 475 | 540 | 609 | 680 | 738 | 810  |
|              | 3.5                               | 99  | 161 | 264 | 351 | 432 | 510 | 582 | 658 | 728 | 792 | 860  |
|              | 4.0                               | 106 | 174 | 282 | 375 | 460 | 540 | 618 | 693 | 768 | 837 | 910  |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 3.0 l/h

|              | Distance between drippers (meter) |     |     |      |      |      |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|------|------|------|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0  | 3.0  | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 149 | 194 | 226  | 237  | 244  | 245  | 246  | 252  | 248  | 252  | 250  |
|              | 2.5                               | 216 | 303 | 388  | 429  | 452  | 465  | 474  | 483  | 488  | 486  | 490  |
|              | 3.0                               | 262 | 379 | 512  | 585  | 628  | 660  | 678  | 693  | 704  | 711  | 720  |
|              | 3.5                               | 298 | 440 | 610  | 711  | 780  | 825  | 864  | 889  | 904  | 918  | 930  |
|              | 4.0                               | 328 | 490 | 692  | 822  | 912  | 975  | 1026 | 1064 | 1088 | 1116 | 1130 |
| Flat terrain | 2.0                               | 206 | 329 | 518  | 675  | 812  | 940  | 1056 | 1169 | 1272 | 1368 | 1470 |
|              | 2.5                               | 264 | 422 | 666  | 867  | 1044 | 1205 | 1356 | 1498 | 1632 | 1755 | 1880 |
|              | 3.0                               | 305 | 488 | 770  | 1002 | 1208 | 1395 | 1572 | 1736 | 1888 | 2034 | 2180 |
|              | 3.5                               | 338 | 541 | 854  | 1113 | 1340 | 1550 | 1740 | 1925 | 2096 | 2259 | 2420 |
|              | 4.0                               | 366 | 586 | 926  | 1206 | 1452 | 1680 | 1884 | 2086 | 2272 | 2448 | 2620 |
| Downhill 2%  | 2.0                               | 267 | 484 | 898  | 1305 | 1708 | 2110 | 2460 | 2779 | 3096 | 3402 | 3710 |
|              | 2.5                               | 314 | 551 | 986  | 1404 | 1812 | 2220 | 2580 | 2912 | 3240 | 3555 | 3870 |
|              | 3.0                               | 350 | 603 | 1058 | 1488 | 1908 | 2320 | 2688 | 3031 | 3368 | 3690 | 4020 |
|              | 3.5                               | 379 | 648 | 1120 | 1563 | 1988 | 2410 | 2784 | 3136 | 3480 | 3816 | 4150 |
|              | 4.0                               | 405 | 686 | 1176 | 1629 | 2064 | 2490 | 2874 | 3234 | 3592 | 3933 | 4270 |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 6.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |      |      |      |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0  | 5.0  | 6.0  | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 108 | 152 | 196 | 216 | 228  | 235  | 240  | 245  | 248  | 252  | 250  |
|              | 2.5                               | 149 | 220 | 306 | 357 | 392  | 415  | 432  | 448  | 456  | 468  | 470  |
|              | 3.0                               | 178 | 268 | 384 | 459 | 516  | 555  | 588  | 616  | 632  | 648  | 660  |
|              | 3.5                               | 200 | 305 | 446 | 540 | 612  | 670  | 714  | 756  | 784  | 810  | 830  |
|              | 4.0                               | 219 | 337 | 496 | 609 | 696  | 770  | 828  | 875  | 912  | 954  | 980  |
| Flat terrain | 2.0                               | 132 | 211 | 334 | 435 | 524  | 605  | 678  | 749  | 816  | 882  | 950  |
|              | 2.5                               | 169 | 271 | 428 | 558 | 672  | 775  | 876  | 966  | 1048 | 1134 | 1210 |
|              | 3.0                               | 196 | 314 | 496 | 645 | 776  | 900  | 1008 | 1113 | 1216 | 1314 | 1400 |
|              | 3.5                               | 217 | 348 | 550 | 717 | 864  | 995  | 1122 | 1239 | 1352 | 1458 | 1560 |
|              | 4.0                               | 235 | 377 | 596 | 777 | 936  | 1080 | 1212 | 1344 | 1464 | 1575 | 1690 |
| Downhill 2%  | 2.0                               | 157 | 276 | 494 | 702 | 908  | 1115 | 1314 | 1519 | 1720 | 1926 | 2120 |
|              | 2.5                               | 190 | 324 | 562 | 783 | 996  | 1205 | 1416 | 1624 | 1824 | 2034 | 2240 |
|              | 3.0                               | 214 | 361 | 614 | 846 | 1068 | 1285 | 1500 | 1708 | 1920 | 2124 | 2330 |
|              | 3.5                               | 234 | 391 | 660 | 903 | 1132 | 1355 | 1578 | 1792 | 2000 | 2214 | 2420 |
|              | 4.0                               | 251 | 418 | 698 | 951 | 1188 | 1420 | 1644 | 1862 | 2080 | 2295 | 2510 |

Minimum considered pressure 1.5 bar

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

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

PC HCNL drippers • On PE pipe 25/4 • ID 21.2 mm • Kd 0.10 • Flow rate 12.0 l/h

|              | Distance between drippers (meter) |     |     |     |     |     |     |     |      |      |      |      |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
|              | Inlet pressure (bar)              | 0.5 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0  | 8.0  | 9.0  | 10.0 |
| Uphill 2%    | 2.0                               | 75  | 111 | 154 | 180 | 196 | 210 | 216 | 224  | 232  | 234  | 240  |
|              | 2.5                               | 101 | 153 | 224 | 273 | 308 | 335 | 360 | 378  | 392  | 405  | 420  |
|              | 3.0                               | 118 | 182 | 272 | 336 | 388 | 430 | 462 | 490  | 520  | 540  | 560  |
|              | 3.5                               | 132 | 206 | 310 | 387 | 448 | 500 | 546 | 581  | 616  | 648  | 680  |
|              | 4.0                               | 144 | 225 | 342 | 429 | 500 | 560 | 612 | 658  | 704  | 738  | 770  |
| Flat terrain | 2.0                               | 85  | 136 | 216 | 279 | 340 | 390 | 438 | 483  | 528  | 567  | 610  |
|              | 2.5                               | 109 | 174 | 276 | 360 | 432 | 500 | 564 | 623  | 680  | 729  | 780  |
|              | 3.0                               | 126 | 202 | 320 | 417 | 500 | 580 | 654 | 721  | 784  | 846  | 910  |
|              | 3.5                               | 139 | 223 | 354 | 462 | 556 | 640 | 720 | 798  | 872  | 936  | 1000 |
|              | 4.0                               | 151 | 242 | 384 | 498 | 604 | 695 | 780 | 861  | 944  | 1017 | 1090 |
| Downhill 2%  | 2.0                               | 95  | 163 | 282 | 393 | 500 | 605 | 714 | 812  | 920  | 1017 | 1120 |
|              | 2.5                               | 117 | 196 | 330 | 453 | 568 | 680 | 792 | 896  | 1008 | 1116 | 1220 |
|              | 3.0                               | 133 | 221 | 368 | 498 | 624 | 740 | 858 | 966  | 1080 | 1188 | 1300 |
|              | 3.5                               | 146 | 241 | 398 | 537 | 668 | 790 | 912 | 1029 | 1144 | 1251 | 1370 |
|              | 4.0                               | 157 | 259 | 426 | 573 | 708 | 835 | 960 | 1078 | 1200 | 1314 | 1430 |

Minimum considered pressure 1.5 bar

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