



UNIRAM™ RC

INTEGRAL PRESSURE-COMPENSATING,
CONTINUOUSLY SELF-CLEANING DRIPPER

16009 - 16010 - 16012 - 17012 - 20010 - 20012 - 23010

APPLICATIONS:

- Deciduous and tree irrigation
- On-surface multi seasonal row crops

SPECIFICATIONS:

- Pressure-compensating range: 0.5-4.0 bar.
- Largest filter in each dripper. Recommended filtration: according to drippers flow rate
- Double TurboNet™ labyrinth with large water passage.
- To be "welded" into thick-walled dripperlines (0.9, 1.0 and 1.2 mm).
- Injected dripper, very low CV.
- Injected silicon diaphragm.
- UV resistant. Resistant to standard nutrients used in agricultural
- UniRam™ drippers meet ISO 9261 Standards with production certified by the Israel Standards Institute (SII)

FEATURES AND BENEFITS:

- Pressure compensated : Precise and equal amounts of water are delivered over a broad pressure range. 100 % uniformity of water and nutrient distribution along the laterals.
- Continuously self flushing : Flushes debris as it is detected, throughout operation, not just at the beginning or end of a cycle, ensuring uninterrupted dripper operation.
- Self-flushing system with wide filtration area improves resistance to clogging thus making UniRam™ highly resistant when using low quality water.
- Physical root barrier : Better protection against root intrusion without reliance on chemicals.
- TurboNet™ labyrinth assures wide water passages, large deep and wide cross section improves clogging resistance. Widest water passages within the dripper.
- The water is drawn in to the dripper from the stream center, preventing the entrance of sediments in to the drippers.

DRIPPERS TECHNICAL DATA

| FLOW RATE (L/H.) | WORKING PRESSURE RANGE (BAR) | WATER PASSAGES DIMENSIONS WIDTH-DEPTH-LENGTH (MM.) | FILTRATION AREA (MM2) | CONSTANT K | EXPONENT * | RECOMMENDED FILTRATION (MICRON)/(MESH) |
|---------------------|------------------------------------|--|-----------------------------|---------------|------------|--|
| 0.7 | 0.5 - 4.0 | 0.70 x 0.65 x 40 | 98 | 0.7 | 0 | 130/120 |
| 1.0 | 0.5 - 4.0 | 0.83 x 0.74 x 40 | 130 | 1.0 | 0 | 130/120 |
| 1.6 | 0.5 - 4.0 | 1.26 x 0.70 x 40 | 130 | 1.6 | 0 | 200/80 |
| 2.3 | 0.5 - 4.0 | 1.26 x 1.00 x 40 | 130 | 2.3 | 0 | 200/80 |
| 3.5 | 0.5 - 4.0 | 1.59 x 1.15 x 40 | 150 | 3.5 | 0 | 200/80 |

* Within working pressure range

DRIPPERLINES TECHNICAL DATA

| MODEL | INSIDE DIAMETER (MM.) | WALL THICKNESS (MM.) | OUTSIDE DIAMETER (MM.) | MAX. WORKING PRESSURE (BAR) | MAXIMUM FLUSHING PRESSURE (BAR) | KD |
|-------|--------------------------|-------------------------|---------------------------|--------------------------------|------------------------------------|-----|
| 16009 | 14.2 | 0.9 | 16.0 | 3.0 | 3.5 | 1.3 |
| 16010 | 14.2 | 1.0 | 16.2 | 3.5 | 4.0 | 1.3 |
| 16012 | 14.2 | 1.2 | 16.6 | 4.0 | 4.6 | 1.3 |
| 17012 | 14.6 | 1.2 | 17.0 | 4.0 | 4.6 | 1.1 |
| 20010 | 17.5 | 1.0 | 19.5 | 3.5 | 4.0 | 0.4 |
| 20012 | 17.5 | 1.2 | 19.9 | 4.0 | 4.6 | 0.4 |
| 23010 | 20.8 | 1.0 | 22.8 | 3.0 | 3.5 | 0.3 |

DRIPPERLINES PACKAGE DATA (ON BUNDLED COILS)

| MODEL | WALL THICKNESS (MM.) | COIL LENGTH (M.) | DISTANCE BETWEEN DRIPPERS (M.) | AVERAGE* COIL WEIGHT (KG.) | COILS IN A 40 FEET CONTAINER (UNITS) | TOTAL IN A 40 FEET CONTAINER (M.) |
|---------|-------------------------|---------------------|--------------------------------------|----------------------------------|--|---|
| 16009 | 0.9 | 500 | 0.2 to 1.0 | 20.3 | 330 | 165000 |
| 16010 | 1.0 | 500 | 0.2 to 1.0 | 22.1 | 330 | 165000 |
| 16012 | 1.2 | 400 | 0.2 to 1.0 | 21.2 | 352 | 140800 |
| 17012 | 1.2 | 400 | 0.2 to 1.0 | 22.4 | 352 | 140800 |
| 20010 | 1.0 | 300 | 0.2 to 1.0 | 17.4 | 330 | 99000 |
| 20012 | 1.2 | 300 | 0.2 to 1.0 | 20.2 | 330 | 99000 |
| 23010** | 1.0 | 300 | 0.2 to 0.3 | 21.6 | 480 | 144000 |
| | | 350 | 0.4 to 1.0 | 23.6 | | 168000 |

* According to drippers spacing

** Package only on carton/plastic coils

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 16009/16010/16012 • ID 14.2 MM • KD 1.3 • FLOW RATE 0.7 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 83 | 112 | 135 | 153 | 168 | 180 | 190 | 197 | 204 |
| | 1.5 | 111 | 154 | 190 | 221 | 248 | 271 | 291 | 310 | 326 |
| | 2.0 | 130 | 182 | 227 | 267 | 302 | 334 | 362 | 388 | 411 |
| | 2.5 | 145 | 204 | 256 | 303 | 345 | 383 | 418 | 449 | 478 |
| | 3.0 | 158 | 223 | 281 | 333 | 380 | 424 | 463 | 500 | 534 |
| | 3.5 | 169 | 239 | 302 | 359 | 412 | 459 | 503 | 545 | 583 |
| | 4.0 | 179 | 254 | 321 | 383 | 439 | 491 | 539 | 584 | 626 |

| | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FLAT TERRAIN | 1.0 | 96 | 137 | 176 | 213 | 247 | 279 | 310 | 340 | 369 |
| | 1.5 | 121 | 174 | 224 | 270 | 314 | 356 | 395 | 434 | 471 |
| | 2.0 | 139 | 200 | 257 | 311 | 361 | 410 | 456 | 500 | 543 |
| | 2.5 | 153 | 221 | 284 | 343 | 400 | 453 | 504 | 554 | 600 |
| | 3.0 | 165 | 239 | 306 | 371 | 431 | 489 | 545 | 598 | 649 |
| | 3.5 | 176 | 254 | 326 | 395 | 460 | 522 | 581 | 637 | 692 |
| 4.0 | 185 | 268 | 344 | 417 | 485 | 550 | 613 | 673 | 731 | |

| | | | | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DOWNHILL 2% | 1.0 | 108 | 163 | 219 | 275 | 331 | 387 | 443 | 500 | 557 |
| | 1.5 | 131 | 195 | 258 | 321 | 382 | 444 | 505 | 565 | 626 |
| | 2.0 | 148 | 218 | 288 | 355 | 422 | 488 | 553 | 617 | 681 |
| | 2.5 | 161 | 238 | 312 | 384 | 455 | 524 | 593 | 661 | 727 |
| | 3.0 | 173 | 254 | 332 | 409 | 483 | 557 | 628 | 698 | 768 |
| | 3.5 | 183 | 269 | 351 | 431 | 509 | 585 | 659 | 733 | 805 |
| 4.0 | 192 | 281 | 368 | 451 | 532 | 610 | 688 | 763 | 838 | |

Minimum considered pressure 0.5 bar Max. working pressure according the dripperline wall thickness definition
Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 16009/16010/16012 • ID 14.2 MM • KD 1.3 • FLOW RATE 1.0 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 68 | 93 | 113 | 131 | 145 | 158 | 167 | 176 | 184 |
| | 1.5 | 90 | 125 | 156 | 183 | 207 | 228 | 247 | 265 | 280 |
| | 2.0 | 105 | 147 | 185 | 219 | 249 | 277 | 302 | 326 | 347 |
| | 2.5 | 116 | 164 | 208 | 247 | 282 | 315 | 345 | 373 | 399 |
| | 3.0 | 126 | 179 | 227 | 270 | 310 | 347 | 381 | 412 | 442 |
| | 3.5 | 135 | 192 | 243 | 291 | 334 | 375 | 412 | 447 | 480 |
| | 4.0 | 142 | 203 | 258 | 309 | 355 | 399 | 439 | 478 | 514 |

| | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FLAT TERRAIN | 1.0 | 76 | 109 | 140 | 169 | 196 | 222 | 246 | 270 | 293 |
| | 1.5 | 96 | 138 | 177 | 214 | 249 | 282 | 314 | 345 | 374 |
| | 2.0 | 110 | 158 | 204 | 246 | 286 | 325 | 362 | 397 | 431 |
| | 2.5 | 121 | 175 | 225 | 272 | 317 | 359 | 400 | 439 | 477 |
| | 3.0 | 131 | 189 | 243 | 294 | 342 | 388 | 432 | 474 | 515 |
| | 3.5 | 139 | 201 | 258 | 313 | 364 | 414 | 461 | 506 | 549 |
| 4.0 | 147 | 212 | 272 | 330 | 384 | 436 | 486 | 534 | 580 | |

| | | | | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DOWNHILL 2% | 1.0 | 83 | 125 | 166 | 208 | 248 | 290 | 330 | 372 | 412 |
| | 1.5 | 102 | 151 | 199 | 246 | 292 | 337 | 382 | 428 | 472 |
| | 2.0 | 115 | 170 | 223 | 274 | 325 | 374 | 422 | 471 | 518 |
| | 2.5 | 126 | 185 | 242 | 298 | 352 | 404 | 456 | 507 | 556 |
| | 3.0 | 135 | 198 | 259 | 318 | 374 | 430 | 484 | 537 | 590 |
| | 3.5 | 144 | 210 | 274 | 336 | 395 | 453 | 510 | 565 | 620 |
| 4.0 | 151 | 221 | 287 | 352 | 413 | 474 | 533 | 590 | 647 | |

Minimum considered pressure 0.5 bar Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 16009/16010/16012 • ID 14.2 MM • KD 1.3 • FLOW RATE 1.6 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 51 | 71 | 88 | 103 | 116 | 127 | 138 | 147 | 155 |
| | 1.5 | 67 | 95 | 119 | 141 | 160 | 179 | 195 | 210 | 224 |
| | 2.0 | 78 | 110 | 140 | 166 | 191 | 214 | 234 | 254 | 272 |
| | 2.5 | 86 | 123 | 156 | 187 | 214 | 241 | 265 | 288 | 309 |
| | 3.0 | 93 | 133 | 170 | 204 | 235 | 263 | 290 | 316 | 340 |
| | 3.5 | 100 | 143 | 182 | 218 | 251 | 284 | 313 | 341 | 367 |
| | 4.0 | 105 | 151 | 192 | 231 | 267 | 301 | 333 | 363 | 391 |
| FLAT TERRAIN | 1.0 | 56 | 80 | 103 | 124 | 144 | 163 | 182 | 200 | 216 |
| | 1.5 | 70 | 101 | 130 | 158 | 184 | 208 | 231 | 254 | 276 |
| | 2.0 | 81 | 116 | 150 | 181 | 211 | 239 | 266 | 293 | 318 |
| | 2.5 | 89 | 128 | 165 | 200 | 233 | 265 | 294 | 324 | 352 |
| | 3.0 | 96 | 139 | 178 | 216 | 252 | 286 | 318 | 350 | 380 |
| | 3.5 | 102 | 147 | 190 | 230 | 268 | 305 | 339 | 373 | 405 |
| DOWNHILL 2% | 1.0 | 60 | 89 | 117 | 145 | 173 | 200 | 228 | 255 | 282 |
| | 1.5 | 74 | 108 | 142 | 175 | 206 | 238 | 269 | 299 | 329 |
| | 2.0 | 84 | 122 | 160 | 197 | 232 | 266 | 300 | 333 | 365 |
| | 2.5 | 92 | 134 | 175 | 214 | 252 | 289 | 325 | 360 | 395 |
| | 3.0 | 98 | 144 | 187 | 229 | 269 | 309 | 346 | 384 | 421 |
| | 3.5 | 104 | 152 | 198 | 242 | 285 | 326 | 366 | 405 | 444 |
| 4.0 | 110 | 160 | 208 | 254 | 299 | 342 | 384 | 425 | 464 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 16009/16010/16012 • ID 14.2 MM • KD 1.3 • FLOW RATE 2.3 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 46 | 68 | 90 | 111 | 132 | 153 | 173 | 193 | 212 |
| | 1.5 | 57 | 84 | 110 | 135 | 160 | 183 | 206 | 230 | 252 |
| | 2.0 | 65 | 95 | 124 | 153 | 179 | 206 | 231 | 257 | 281 |
| | 2.5 | 72 | 105 | 136 | 167 | 196 | 224 | 252 | 279 | 305 |
| | 3.0 | 77 | 113 | 146 | 179 | 209 | 240 | 270 | 298 | 326 |
| | 3.5 | 82 | 119 | 155 | 189 | 222 | 254 | 285 | 315 | 344 |
| | 4.0 | 86 | 125 | 163 | 199 | 233 | 267 | 298 | 330 | 361 |
| FLAT TERRAIN | 1.0 | 44 | 63 | 81 | 98 | 114 | 130 | 144 | 158 | 171 |
| | 1.5 | 55 | 80 | 103 | 125 | 145 | 165 | 183 | 201 | 218 |
| | 2.0 | 64 | 92 | 118 | 143 | 167 | 189 | 210 | 231 | 251 |
| | 2.5 | 70 | 101 | 130 | 158 | 184 | 209 | 233 | 256 | 278 |
| | 3.0 | 76 | 109 | 141 | 171 | 199 | 226 | 252 | 276 | 301 |
| | 3.5 | 80 | 116 | 150 | 182 | 212 | 241 | 268 | 294 | 320 |
| DOWNHILL 2% | 1.0 | 41 | 58 | 72 | 85 | 97 | 106 | 116 | 124 | 132 |
| | 1.5 | 53 | 76 | 96 | 114 | 130 | 146 | 160 | 174 | 186 |
| | 2.0 | 62 | 88 | 112 | 134 | 154 | 173 | 190 | 207 | 222 |
| | 2.5 | 68 | 98 | 124 | 150 | 172 | 194 | 214 | 233 | 251 |
| | 3.0 | 74 | 106 | 135 | 163 | 188 | 211 | 234 | 256 | 276 |
| | 3.5 | 79 | 113 | 145 | 174 | 202 | 228 | 251 | 275 | 297 |
| 4.0 | 83 | 119 | 153 | 184 | 214 | 241 | 267 | 292 | 315 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 16009/16010/16012 • ID 14.2 MM • KD 1.3 • FLOW RATE 3.5 L/H

| | | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | |
|-----------------|----------------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| | UPHILL 2% | 1.0 | 32 | 45 | 56 | 67 | 77 | 85 | 94 | 101 |
| 1.5 | | 41 | 58 | 74 | 89 | 102 | 114 | 126 | 137 | 147 |
| 2.0 | | 47 | 68 | 86 | 104 | 119 | 134 | 149 | 162 | 175 |
| 2.5 | | 52 | 75 | 96 | 115 | 133 | 151 | 166 | 182 | 196 |
| 3.0 | | 56 | 81 | 104 | 125 | 145 | 164 | 182 | 198 | 215 |
| 3.5 | | 60 | 86 | 111 | 134 | 155 | 175 | 194 | 213 | 230 |
| 4.0 | | 63 | 91 | 117 | 142 | 164 | 186 | 206 | 226 | 244 |
| FLAT TERRAIN | 1.0 | 33 | 48 | 62 | 75 | 87 | 99 | 110 | 121 | 131 |
| | 1.5 | 42 | 61 | 78 | 95 | 110 | 125 | 139 | 153 | 166 |
| | 2.0 | 48 | 70 | 90 | 109 | 127 | 144 | 161 | 176 | 192 |
| | 2.5 | 53 | 77 | 99 | 120 | 140 | 159 | 178 | 195 | 212 |
| | 3.0 | 57 | 83 | 107 | 130 | 151 | 172 | 192 | 211 | 229 |
| | 3.5 | 61 | 88 | 114 | 138 | 161 | 183 | 204 | 224 | 244 |
| DOWNHILL 2% | 1.0 | 35 | 51 | 67 | 82 | 97 | 112 | 126 | 140 | 154 |
| | 1.5 | 43 | 63 | 82 | 101 | 119 | 136 | 153 | 169 | 186 |
| | 2.0 | 49 | 72 | 94 | 114 | 134 | 153 | 173 | 191 | 209 |
| | 2.5 | 54 | 79 | 102 | 125 | 147 | 168 | 188 | 208 | 228 |
| | 3.0 | 58 | 85 | 110 | 134 | 158 | 180 | 202 | 223 | 244 |
| | 3.5 | 62 | 90 | 117 | 143 | 167 | 191 | 214 | 236 | 258 |
| 4.0 | 65 | 95 | 123 | 150 | 176 | 200 | 225 | 248 | 271 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 17012 • ID 14.6 MM • KD 1.1 • FLOW RATE 0.7 L/H

| | | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | |
|-----------------|----------------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| | UPHILL 2% | 1.0 | 89 | 119 | 142 | 160 | 175 | 186 | 195 | 203 |
| 1.5 | | 120 | 164 | 202 | 234 | 260 | 284 | 304 | 322 | 338 |
| 2.0 | | 141 | 195 | 242 | 283 | 319 | 351 | 380 | 406 | 429 |
| 2.5 | | 157 | 219 | 274 | 323 | 365 | 405 | 440 | 472 | 501 |
| 3.0 | | 171 | 240 | 300 | 355 | 404 | 449 | 490 | 527 | 562 |
| 3.5 | | 183 | 257 | 324 | 383 | 437 | 487 | 533 | 574 | 614 |
| 4.0 | | 193 | 273 | 344 | 409 | 467 | 521 | 570 | 617 | 660 |
| FLAT TERRAIN | 1.0 | 104 | 148 | 190 | 228 | 264 | 299 | 331 | 363 | 393 |
| | 1.5 | 131 | 188 | 241 | 290 | 337 | 381 | 422 | 463 | 502 |
| | 2.0 | 151 | 216 | 277 | 334 | 388 | 438 | 487 | 534 | 579 |
| | 2.5 | 166 | 239 | 306 | 369 | 428 | 484 | 538 | 590 | 640 |
| | 3.0 | 180 | 258 | 330 | 399 | 463 | 524 | 582 | 638 | 692 |
| | 3.5 | 191 | 274 | 352 | 425 | 493 | 559 | 621 | 680 | 738 |
| DOWNHILL 2% | 1.0 | 118 | 179 | 239 | 300 | 361 | 422 | 483 | 545 | 606 |
| | 1.5 | 143 | 212 | 281 | 349 | 415 | 482 | 547 | 613 | 678 |
| | 2.0 | 161 | 238 | 312 | 386 | 457 | 528 | 598 | 667 | 736 |
| | 2.5 | 176 | 258 | 338 | 416 | 492 | 567 | 641 | 713 | 785 |
| | 3.0 | 188 | 276 | 360 | 443 | 523 | 601 | 678 | 753 | 828 |
| | 3.5 | 199 | 292 | 380 | 466 | 550 | 631 | 711 | 789 | 867 |
| 4.0 | 209 | 306 | 398 | 488 | 574 | 659 | 742 | 823 | 902 | |

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. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 17012 • ID 14.6 MM • KD 1.1 • FLOW RATE 1.0 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 73 | 99 | 120 | 138 | 152 | 164 | 174 | 183 | 190 |
| | 1.5 | 97 | 134 | 166 | 194 | 218 | 240 | 260 | 277 | 293 |
| | 2.0 | 113 | 158 | 198 | 233 | 264 | 293 | 318 | 342 | 364 |
| | 2.5 | 126 | 177 | 222 | 263 | 300 | 334 | 365 | 393 | 420 |
| | 3.0 | 136 | 193 | 243 | 289 | 330 | 368 | 403 | 437 | 467 |
| | 3.5 | 146 | 206 | 261 | 311 | 356 | 398 | 437 | 473 | 507 |
| | 4.0 | 154 | 219 | 277 | 330 | 379 | 424 | 466 | 506 | 543 |
| FLAT TERRAIN | 1.0 | 82 | 118 | 150 | 181 | 209 | 237 | 263 | 288 | 312 |
| | 1.5 | 104 | 149 | 191 | 230 | 267 | 302 | 335 | 367 | 398 |
| | 2.0 | 119 | 171 | 219 | 265 | 307 | 348 | 386 | 424 | 459 |
| | 2.5 | 132 | 189 | 242 | 293 | 340 | 384 | 427 | 469 | 508 |
| | 3.0 | 142 | 204 | 262 | 316 | 367 | 416 | 462 | 507 | 550 |
| | 3.5 | 151 | 217 | 279 | 337 | 391 | 443 | 493 | 540 | 586 |
| DOWNHILL 2% | 1.0 | 91 | 137 | 181 | 226 | 271 | 315 | 359 | 403 | 448 |
| | 1.5 | 111 | 164 | 216 | 267 | 316 | 365 | 414 | 463 | 510 |
| | 2.0 | 126 | 185 | 242 | 297 | 351 | 404 | 456 | 508 | 559 |
| | 2.5 | 137 | 201 | 262 | 322 | 380 | 436 | 491 | 546 | 599 |
| | 3.0 | 147 | 215 | 280 | 344 | 404 | 464 | 522 | 579 | 635 |
| | 3.5 | 156 | 228 | 296 | 363 | 427 | 489 | 550 | 608 | 667 |
| 4.0 | 164 | 239 | 311 | 380 | 446 | 511 | 574 | 635 | 696 | |

Minimum considered pressure 0.5 bar

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 17012 • ID 14.6 MM • KD 1.1 • FLOW RATE 1.6 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 55 | 76 | 94 | 109 | 122 | 134 | 144 | 153 | 161 |
| | 1.5 | 72 | 101 | 127 | 150 | 170 | 189 | 206 | 221 | 235 |
| | 2.0 | 84 | 119 | 150 | 178 | 203 | 226 | 248 | 268 | 287 |
| | 2.5 | 93 | 132 | 167 | 200 | 229 | 256 | 281 | 304 | 327 |
| | 3.0 | 101 | 144 | 182 | 218 | 250 | 281 | 309 | 335 | 360 |
| | 3.5 | 108 | 154 | 195 | 234 | 269 | 302 | 333 | 362 | 389 |
| | 4.0 | 114 | 163 | 207 | 248 | 286 | 321 | 354 | 385 | 415 |
| FLAT TERRAIN | 1.0 | 60 | 86 | 110 | 133 | 155 | 175 | 194 | 212 | 231 |
| | 1.5 | 76 | 110 | 140 | 170 | 197 | 223 | 247 | 271 | 294 |
| | 2.0 | 88 | 126 | 161 | 195 | 226 | 256 | 285 | 312 | 339 |
| | 2.5 | 97 | 139 | 178 | 215 | 250 | 284 | 315 | 346 | 375 |
| | 3.0 | 104 | 150 | 192 | 233 | 270 | 307 | 341 | 374 | 406 |
| | 3.5 | 111 | 160 | 205 | 248 | 288 | 326 | 363 | 399 | 432 |
| DOWNHILL 2% | 1.0 | 65 | 97 | 127 | 158 | 188 | 217 | 246 | 276 | 305 |
| | 1.5 | 80 | 118 | 154 | 189 | 223 | 257 | 290 | 323 | 355 |
| | 2.0 | 91 | 133 | 173 | 213 | 250 | 287 | 323 | 358 | 393 |
| | 2.5 | 100 | 146 | 189 | 231 | 272 | 312 | 350 | 388 | 425 |
| | 3.0 | 107 | 156 | 203 | 248 | 290 | 333 | 374 | 413 | 452 |
| | 3.5 | 114 | 165 | 214 | 262 | 307 | 351 | 394 | 436 | 476 |
| 4.0 | 119 | 174 | 225 | 275 | 322 | 368 | 413 | 456 | 498 | |

Minimum considered pressure 0.5 bar

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 17012 • ID 14.6 MM • KD 1.1 • FLOW RATE 2.3 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 44 | 62 | 77 | 90 | 102 | 113 | 122 | 131 | 138 |
| | 1.5 | 58 | 81 | 102 | 122 | 139 | 155 | 170 | 183 | 196 |
| | 2.0 | 67 | 95 | 120 | 143 | 164 | 183 | 202 | 219 | 235 |
| | 2.5 | 74 | 105 | 134 | 160 | 184 | 207 | 228 | 248 | 266 |
| | 3.0 | 80 | 114 | 146 | 174 | 201 | 226 | 250 | 271 | 292 |
| | 3.5 | 86 | 122 | 156 | 187 | 215 | 242 | 268 | 292 | 315 |
| | 4.0 | 90 | 129 | 165 | 198 | 229 | 258 | 285 | 311 | 335 |
| FLAT TERRAIN | 1.0 | 47 | 68 | 87 | 105 | 122 | 138 | 154 | 168 | 183 |
| | 1.5 | 60 | 86 | 111 | 134 | 155 | 176 | 196 | 214 | 233 |
| | 2.0 | 69 | 99 | 127 | 154 | 179 | 202 | 226 | 248 | 268 |
| | 2.5 | 76 | 110 | 140 | 170 | 197 | 224 | 249 | 274 | 297 |
| | 3.0 | 82 | 118 | 152 | 184 | 214 | 242 | 270 | 295 | 321 |
| | 3.5 | 87 | 126 | 162 | 196 | 227 | 258 | 287 | 315 | 342 |
| DOWNHILL 2% | 1.0 | 51 | 74 | 98 | 121 | 143 | 165 | 186 | 208 | 229 |
| | 1.5 | 63 | 92 | 119 | 146 | 172 | 197 | 222 | 247 | 271 |
| | 2.0 | 71 | 104 | 135 | 165 | 194 | 222 | 249 | 275 | 302 |
| | 2.5 | 78 | 113 | 147 | 180 | 211 | 242 | 271 | 300 | 328 |
| | 3.0 | 84 | 122 | 158 | 193 | 226 | 258 | 290 | 320 | 350 |
| | 3.5 | 89 | 129 | 168 | 204 | 239 | 273 | 306 | 338 | 369 |
| 4.0 | 94 | 136 | 176 | 215 | 251 | 287 | 321 | 355 | 387 | |

Minimum considered pressure 0.5 bar

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 17012 • ID 14.6 MM • KD 1.1 • FLOW RATE 3.5 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 34 | 48 | 60 | 72 | 81 | 90 | 98 | 106 | 113 |
| | 1.5 | 44 | 63 | 79 | 95 | 109 | 122 | 134 | 145 | 156 |
| | 2.0 | 51 | 73 | 92 | 111 | 128 | 144 | 158 | 172 | 185 |
| | 2.5 | 57 | 81 | 103 | 124 | 143 | 160 | 178 | 194 | 208 |
| | 3.0 | 61 | 88 | 112 | 134 | 155 | 175 | 194 | 212 | 228 |
| | 3.5 | 65 | 93 | 119 | 144 | 166 | 188 | 207 | 227 | 245 |
| | 4.0 | 69 | 99 | 126 | 152 | 176 | 199 | 220 | 240 | 260 |
| FLAT TERRAIN | 1.0 | 36 | 52 | 66 | 80 | 93 | 106 | 117 | 129 | 139 |
| | 1.5 | 46 | 66 | 84 | 102 | 118 | 134 | 149 | 164 | 177 |
| | 2.0 | 52 | 75 | 97 | 117 | 136 | 154 | 172 | 188 | 205 |
| | 2.5 | 58 | 83 | 107 | 129 | 151 | 171 | 190 | 208 | 226 |
| | 3.0 | 62 | 90 | 115 | 140 | 163 | 184 | 205 | 225 | 245 |
| | 3.5 | 66 | 95 | 123 | 149 | 173 | 196 | 218 | 240 | 261 |
| DOWNHILL 2% | 1.0 | 38 | 56 | 72 | 89 | 105 | 121 | 136 | 151 | 166 |
| | 1.5 | 47 | 68 | 89 | 109 | 128 | 146 | 165 | 183 | 200 |
| | 2.0 | 54 | 78 | 101 | 124 | 145 | 165 | 186 | 205 | 224 |
| | 2.5 | 59 | 86 | 111 | 135 | 158 | 181 | 202 | 223 | 244 |
| | 3.0 | 63 | 92 | 119 | 145 | 170 | 194 | 217 | 239 | 261 |
| | 3.5 | 67 | 98 | 126 | 154 | 180 | 205 | 230 | 254 | 277 |
| 4.0 | 71 | 103 | 133 | 162 | 189 | 216 | 242 | 266 | 290 | |

Minimum considered pressure 0.5 bar

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 20010/20012 • ID 17.5 MM • KD 0.4 • FLOW RATE 0.7 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|------|------|------|------|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 130 | 162 | 184 | 199 | 209 | 217 | 223 | 228 | 231 |
| | 1.5 | 182 | 238 | 280 | 313 | 340 | 361 | 378 | 393 | 406 |
| | 2.0 | 218 | 289 | 346 | 393 | 432 | 466 | 494 | 518 | 539 |
| | 2.5 | 246 | 329 | 398 | 456 | 505 | 548 | 586 | 618 | 648 |
| | 3.0 | 269 | 363 | 442 | 509 | 566 | 617 | 662 | 703 | 739 |
| | 3.5 | 289 | 392 | 479 | 554 | 620 | 678 | 730 | 777 | 819 |
| | 4.0 | 307 | 419 | 513 | 595 | 667 | 732 | 790 | 842 | 890 |
| FLAT TERRAIN | 1.0 | 168 | 233 | 292 | 347 | 397 | 445 | 489 | 532 | 573 |
| | 1.5 | 213 | 297 | 373 | 443 | 507 | 568 | 626 | 681 | 734 |
| | 2.0 | 245 | 343 | 430 | 511 | 586 | 656 | 722 | 787 | 848 |
| | 2.5 | 271 | 379 | 476 | 565 | 648 | 727 | 801 | 871 | 939 |
| | 3.0 | 293 | 409 | 514 | 611 | 701 | 786 | 866 | 943 | 1017 |
| | 3.5 | 312 | 436 | 548 | 652 | 748 | 839 | 925 | 1006 | 1085 |
| | 4.0 | 329 | 460 | 579 | 688 | 790 | 886 | 977 | 1063 | 1146 |
| DOWNHILL 2% | 1.0 | 207 | 309 | 412 | 514 | 616 | 718 | 817 | 905 | 990 |
| | 1.5 | 245 | 359 | 471 | 581 | 689 | 796 | 900 | 995 | 1087 |
| | 2.0 | 273 | 397 | 517 | 634 | 748 | 860 | 969 | 1068 | 1166 |
| | 2.5 | 296 | 429 | 556 | 678 | 797 | 914 | 1027 | 1132 | 1235 |
| | 3.0 | 316 | 456 | 589 | 717 | 841 | 962 | 1079 | 1189 | 1295 |
| | 3.5 | 334 | 480 | 619 | 752 | 880 | 1005 | 1126 | 1239 | 1350 |
| | 4.0 | 350 | 503 | 646 | 784 | 916 | 1045 | 1170 | 1287 | 1400 |

Minimum considered pressure 0.5 bar Max. working pressure according the dripperline wall thickness definition
Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 20010/20012 • ID 17.5 MM • KD 0.4 • FLOW RATE 1.0 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 109 | 140 | 162 | 178 | 190 | 200 | 208 | 214 | 219 |
| | 1.5 | 149 | 198 | 236 | 268 | 295 | 316 | 335 | 352 | 366 |
| | 2.0 | 177 | 238 | 288 | 331 | 367 | 398 | 426 | 451 | 473 |
| | 2.5 | 199 | 269 | 328 | 380 | 424 | 463 | 498 | 530 | 558 |
| | 3.0 | 217 | 296 | 362 | 420 | 472 | 517 | 558 | 596 | 630 |
| | 3.5 | 233 | 318 | 392 | 456 | 512 | 564 | 610 | 653 | 692 |
| | 4.0 | 247 | 338 | 418 | 487 | 549 | 606 | 657 | 704 | 748 |
| FLAT TERRAIN | 1.0 | 133 | 185 | 232 | 276 | 316 | 353 | 389 | 423 | 456 |
| | 1.5 | 169 | 236 | 296 | 352 | 403 | 452 | 498 | 542 | 583 |
| | 2.0 | 194 | 272 | 341 | 406 | 465 | 522 | 574 | 626 | 674 |
| | 2.5 | 215 | 300 | 378 | 449 | 515 | 577 | 636 | 693 | 747 |
| | 3.0 | 232 | 325 | 408 | 485 | 557 | 624 | 689 | 750 | 809 |
| | 3.5 | 247 | 346 | 435 | 518 | 594 | 666 | 734 | 800 | 863 |
| | 4.0 | 260 | 365 | 459 | 546 | 627 | 704 | 776 | 845 | 911 |
| DOWNHILL 2% | 1.0 | 157 | 233 | 308 | 382 | 455 | 528 | 601 | 673 | 745 |
| | 1.5 | 189 | 275 | 358 | 439 | 518 | 596 | 674 | 750 | 826 |
| | 2.0 | 212 | 306 | 396 | 483 | 568 | 650 | 731 | 812 | 891 |
| | 2.5 | 230 | 332 | 428 | 520 | 609 | 696 | 781 | 864 | 947 |
| | 3.0 | 247 | 354 | 455 | 552 | 645 | 736 | 824 | 911 | 996 |
| | 3.5 | 261 | 374 | 480 | 581 | 677 | 771 | 863 | 953 | 1041 |
| | 4.0 | 274 | 392 | 502 | 607 | 707 | 804 | 898 | 991 | 1082 |

Minimum considered pressure 0.5 bar Max. working pressure according the dripperline wall thickness definition
Due to lateral filling time and flushing effectiveness it is not recommended to exceed 800 meters lateral length

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 20010/20012 • ID 17.5 MM • KD 0.4 • FLOW RATE 1.6 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 85 | 111 | 132 | 148 | 161 | 173 | 182 | 190 | 196 |
| | 1.5 | 114 | 153 | 186 | 214 | 237 | 258 | 277 | 293 | 308 |
| | 2.0 | 134 | 182 | 222 | 258 | 289 | 317 | 342 | 365 | 386 |
| | 2.5 | 149 | 204 | 252 | 293 | 330 | 363 | 394 | 421 | 447 |
| | 3.0 | 162 | 223 | 276 | 323 | 364 | 402 | 437 | 469 | 499 |
| | 3.5 | 174 | 240 | 297 | 348 | 394 | 436 | 474 | 510 | 544 |
| | 4.0 | 184 | 254 | 316 | 371 | 420 | 466 | 508 | 547 | 583 |
| FLAT TERRAIN | 1.0 | 98 | 137 | 171 | 203 | 233 | 261 | 287 | 313 | 337 |
| | 1.5 | 124 | 174 | 218 | 260 | 298 | 333 | 368 | 401 | 431 |
| | 2.0 | 143 | 200 | 252 | 299 | 343 | 385 | 425 | 463 | 498 |
| | 2.5 | 158 | 221 | 278 | 331 | 380 | 426 | 470 | 512 | 552 |
| | 3.0 | 170 | 239 | 301 | 358 | 411 | 461 | 509 | 554 | 598 |
| | 3.5 | 181 | 255 | 321 | 382 | 439 | 492 | 542 | 591 | 638 |
| DOWNHILL 2% | 1.0 | 111 | 163 | 212 | 262 | 310 | 357 | 404 | 451 | 498 |
| | 1.5 | 135 | 195 | 252 | 307 | 361 | 412 | 464 | 515 | 564 |
| | 2.0 | 152 | 219 | 281 | 341 | 399 | 455 | 510 | 564 | 617 |
| | 2.5 | 166 | 238 | 306 | 370 | 431 | 491 | 549 | 606 | 661 |
| | 3.0 | 178 | 255 | 326 | 394 | 459 | 522 | 582 | 642 | 700 |
| | 3.5 | 189 | 270 | 345 | 416 | 484 | 550 | 613 | 674 | 735 |
| 4.0 | 199 | 283 | 362 | 436 | 506 | 574 | 640 | 704 | 767 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 20010/20012 • ID 17.5 MM • KD 0.4 • FLOW RATE 2.3 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 69 | 92 | 110 | 126 | 139 | 150 | 159 | 167 | 175 |
| | 1.5 | 91 | 124 | 152 | 176 | 197 | 216 | 233 | 248 | 263 |
| | 2.0 | 107 | 146 | 181 | 211 | 238 | 262 | 284 | 304 | 323 |
| | 2.5 | 119 | 164 | 203 | 238 | 269 | 298 | 324 | 348 | 371 |
| | 3.0 | 129 | 179 | 222 | 261 | 296 | 328 | 358 | 385 | 411 |
| | 3.5 | 138 | 192 | 238 | 281 | 319 | 354 | 386 | 417 | 446 |
| | 4.0 | 146 | 203 | 253 | 299 | 340 | 377 | 413 | 446 | 477 |
| FLAT TERRAIN | 1.0 | 77 | 108 | 136 | 161 | 184 | 207 | 228 | 248 | 267 |
| | 1.5 | 98 | 137 | 173 | 205 | 235 | 264 | 291 | 317 | 342 |
| | 2.0 | 113 | 158 | 199 | 237 | 272 | 305 | 336 | 366 | 395 |
| | 2.5 | 124 | 175 | 220 | 262 | 301 | 337 | 372 | 405 | 437 |
| | 3.0 | 134 | 189 | 238 | 283 | 325 | 365 | 402 | 439 | 473 |
| | 3.5 | 143 | 201 | 254 | 302 | 347 | 389 | 430 | 468 | 505 |
| DOWNHILL 2% | 1.0 | 85 | 124 | 161 | 197 | 232 | 267 | 302 | 335 | 369 |
| | 1.5 | 105 | 150 | 194 | 235 | 275 | 314 | 351 | 389 | 425 |
| | 2.0 | 119 | 170 | 217 | 263 | 307 | 349 | 390 | 430 | 469 |
| | 2.5 | 130 | 185 | 237 | 286 | 332 | 378 | 422 | 464 | 506 |
| | 3.0 | 139 | 199 | 254 | 306 | 355 | 403 | 449 | 494 | 537 |
| | 3.5 | 148 | 210 | 268 | 323 | 375 | 425 | 474 | 520 | 566 |
| 4.0 | 155 | 221 | 282 | 339 | 393 | 445 | 495 | 545 | 592 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 20010/20012 • ID 17.5 MM • KD 0.4 • FLOW RATE 3.5 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 54 | 73 | 89 | 102 | 114 | 124 | 133 | 141 | 149 |
| | 1.5 | 71 | 97 | 120 | 140 | 157 | 174 | 188 | 202 | 214 |
| | 2.0 | 82 | 114 | 141 | 166 | 187 | 207 | 226 | 243 | 259 |
| | 2.5 | 92 | 127 | 158 | 186 | 211 | 235 | 256 | 276 | 295 |
| | 3.0 | 99 | 138 | 172 | 203 | 231 | 257 | 281 | 303 | 325 |
| | 3.5 | 106 | 148 | 184 | 218 | 248 | 277 | 302 | 328 | 351 |
| | 4.0 | 112 | 156 | 196 | 231 | 263 | 294 | 322 | 349 | 374 |

| | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FLAT TERRAIN | 1.0 | 59 | 82 | 103 | 123 | 141 | 158 | 174 | 189 | 204 |
| | 1.5 | 75 | 104 | 132 | 157 | 179 | 202 | 222 | 242 | 261 |
| | 2.0 | 86 | 120 | 152 | 181 | 207 | 232 | 257 | 280 | 302 |
| | 2.5 | 95 | 133 | 168 | 200 | 229 | 258 | 284 | 310 | 334 |
| | 3.0 | 102 | 144 | 181 | 216 | 248 | 279 | 307 | 335 | 361 |
| | 3.5 | 109 | 153 | 193 | 230 | 265 | 297 | 328 | 357 | 386 |
| 4.0 | 115 | 161 | 204 | 243 | 279 | 314 | 346 | 377 | 407 | |

| | | | | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DOWNHILL 2% | 1.0 | 63 | 92 | 118 | 144 | 169 | 193 | 217 | 240 | 264 |
| | 1.5 | 78 | 112 | 144 | 174 | 202 | 230 | 258 | 284 | 310 |
| | 2.0 | 89 | 127 | 162 | 196 | 227 | 258 | 288 | 317 | 345 |
| | 2.5 | 98 | 139 | 177 | 214 | 248 | 281 | 313 | 344 | 374 |
| | 3.0 | 105 | 149 | 190 | 229 | 265 | 300 | 334 | 367 | 399 |
| | 3.5 | 111 | 158 | 202 | 243 | 281 | 318 | 354 | 388 | 421 |
| 4.0 | 117 | 167 | 212 | 255 | 295 | 333 | 370 | 406 | 441 | |

Minimum considered pressure 0.5 bar

Max. working pressure according the dripperline wall thickness definition

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 23010 • ID 20.8 MM • KD 0.3 • FLOW RATE 0.7 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|--------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 161 | 191 | 210 | 221 | 228 | 233 | 237 | 239 | 241 |
| | 1.5 | 234 | 296 | 340 | 372 | 395 | 414 | 427 | 438 | 447 |
| | 2.0 | 284 | 369 | 433 | 483 | 521 | 553 | 579 | 600 | 618 |
| | 2.5 | 324 | 426 | 506 | 570 | 623 | 667 | 704 | 735 | 762 |
| | 3.0 | 357 | 473 | 567 | 644 | 709 | 763 | 810 | 851 | 887 |

| | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|------|------|------|------|
| FLAT TERRAIN | 1.0 | 229 | 318 | 398 | 471 | 538 | 602 | 662 | 720 | 775 |
| | 1.5 | 292 | 406 | 508 | 602 | 688 | 770 | 848 | 922 | 993 |
| | 2.0 | 336 | 467 | 586 | 694 | 795 | 890 | 979 | 1066 | 1148 |
| | 2.5 | 371 | 517 | 648 | 768 | 880 | 985 | 1085 | 1180 | 1272 |
| | 3.0 | 400 | 559 | 700 | 831 | 952 | 1066 | 1174 | 1278 | 1377 |

| | | | | | | | | | | |
|----------------|-----|-----|-----|-----|------|------|------|------|------|------|
| DOWNHILL 2% | 1.0 | 302 | 458 | 616 | 775 | 914 | 1049 | 1180 | 1310 | 1437 |
| | 1.5 | 351 | 520 | 688 | 855 | 1005 | 1149 | 1290 | 1428 | 1564 |
| | 2.0 | 388 | 569 | 746 | 921 | 1079 | 1231 | 1380 | 1526 | 1668 |
| | 2.5 | 418 | 610 | 796 | 977 | 1143 | 1303 | 1458 | 1609 | 1758 |
| | 3.0 | 445 | 646 | 839 | 1027 | 1199 | 1366 | 1526 | 1684 | 1838 |

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. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 23010 • ID 20.8 MM • KD 0.3 • FLOW RATE 1.0 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|------|------|------|------|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 138 | 170 | 191 | 205 | 215 | 222 | 227 | 231 | 234 |
| | 1.5 | 195 | 252 | 295 | 328 | 354 | 375 | 392 | 406 | 417 |
| | 2.0 | 234 | 308 | 367 | 415 | 454 | 487 | 515 | 539 | 560 |
| | 2.5 | 264 | 352 | 424 | 483 | 534 | 577 | 614 | 648 | 677 |
| | 3.0 | 290 | 389 | 471 | 541 | 600 | 652 | 698 | 739 | 775 |
| FLAT TERRAIN | 1.0 | 182 | 252 | 316 | 374 | 428 | 479 | 527 | 572 | 617 |
| | 1.5 | 231 | 322 | 403 | 478 | 547 | 613 | 674 | 734 | 790 |
| | 2.0 | 266 | 371 | 465 | 551 | 631 | 707 | 778 | 847 | 913 |
| | 2.5 | 294 | 410 | 514 | 610 | 699 | 783 | 862 | 939 | 1011 |
| | 3.0 | 317 | 443 | 556 | 660 | 757 | 848 | 934 | 1016 | 1095 |
| DOWNHILL 2% | 1.0 | 227 | 341 | 454 | 568 | 682 | 795 | 894 | 989 | 1084 |
| | 1.5 | 268 | 394 | 517 | 639 | 758 | 877 | 982 | 1085 | 1187 |
| | 2.0 | 299 | 435 | 566 | 694 | 820 | 944 | 1056 | 1165 | 1272 |
| | 2.5 | 324 | 468 | 607 | 742 | 872 | 1001 | 1118 | 1233 | 1345 |
| | 3.0 | 345 | 498 | 643 | 783 | 919 | 1052 | 1174 | 1293 | 1410 |

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. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 23010 • ID 20.8 MM • KD 0.3 • FLOW RATE 1.6 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 110 | 140 | 162 | 178 | 191 | 200 | 208 | 214 | 219 |
| | 1.5 | 150 | 199 | 237 | 269 | 295 | 317 | 336 | 352 | 366 |
| | 2.0 | 178 | 239 | 289 | 331 | 368 | 399 | 427 | 452 | 473 |
| | 2.5 | 200 | 270 | 330 | 380 | 425 | 464 | 499 | 530 | 559 |
| | 3.0 | 218 | 297 | 363 | 421 | 472 | 518 | 559 | 597 | 631 |
| FLAT TERRAIN | 1.0 | 134 | 186 | 233 | 276 | 316 | 354 | 390 | 424 | 456 |
| | 1.5 | 170 | 237 | 297 | 353 | 404 | 452 | 498 | 542 | 584 |
| | 2.0 | 196 | 273 | 343 | 407 | 466 | 522 | 575 | 626 | 675 |
| | 2.5 | 216 | 302 | 379 | 450 | 516 | 578 | 638 | 694 | 748 |
| | 3.0 | 233 | 326 | 410 | 487 | 559 | 626 | 690 | 751 | 810 |
| DOWNHILL 2% | 1.0 | 158 | 234 | 309 | 383 | 457 | 529 | 602 | 674 | 747 |
| | 1.5 | 190 | 276 | 359 | 441 | 520 | 598 | 674 | 752 | 827 |
| | 2.0 | 213 | 308 | 398 | 485 | 569 | 652 | 733 | 813 | 892 |
| | 2.5 | 232 | 334 | 430 | 522 | 611 | 697 | 782 | 866 | 948 |
| | 3.0 | 248 | 356 | 457 | 554 | 647 | 738 | 826 | 913 | 997 |

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. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 23010 • ID 20.8 MM • KD 0.3 • FLOW RATE 2.3 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 90 | 118 | 139 | 156 | 169 | 179 | 188 | 195 | 202 |
| | 1.5 | 122 | 163 | 197 | 226 | 250 | 272 | 290 | 307 | 321 |
| | 2.0 | 143 | 194 | 237 | 274 | 307 | 335 | 361 | 384 | 405 |
| | 2.5 | 160 | 219 | 268 | 312 | 350 | 385 | 417 | 446 | 472 |
| | 3.0 | 175 | 239 | 295 | 344 | 388 | 427 | 463 | 497 | 528 |
| FLAT TERRAIN | 1.0 | 106 | 147 | 184 | 219 | 250 | 280 | 309 | 336 | 361 |
| | 1.5 | 134 | 187 | 235 | 279 | 320 | 358 | 394 | 429 | 463 |
| | 2.0 | 154 | 216 | 271 | 322 | 369 | 414 | 456 | 496 | 535 |
| | 2.5 | 170 | 238 | 300 | 356 | 409 | 458 | 505 | 549 | 592 |
| | 3.0 | 184 | 258 | 324 | 385 | 442 | 496 | 546 | 595 | 641 |
| DOWNHILL 2% | 1.0 | 121 | 177 | 232 | 286 | 338 | 391 | 443 | 494 | 546 |
| | 1.5 | 147 | 212 | 274 | 334 | 392 | 449 | 506 | 561 | 616 |
| | 2.0 | 165 | 237 | 305 | 371 | 433 | 494 | 554 | 613 | 671 |
| | 2.5 | 180 | 258 | 331 | 401 | 467 | 532 | 595 | 657 | 718 |
| | 3.0 | 193 | 276 | 354 | 427 | 497 | 565 | 631 | 696 | 759 |

Minimum considered pressure 0.5 bar

MAX. LATERAL LENGTH (METER) AT DIFFERENT INLET PRESSURE AND DIFFERENT SLOPES

UNIRAM™ RC 23010 • ID 20.8 MM • KD 0.3 • FLOW RATE 3.5 L/H

| | DISTANCE BETWEEN DRIPPERS (METER) | | | | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | INLET PRESSURE (BAR) | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| UPHILL 2% | 1.0 | 71 | 95 | 114 | 129 | 142 | 153 | 162 | 171 | 178 |
| | 1.5 | 95 | 128 | 157 | 182 | 203 | 222 | 239 | 255 | 269 |
| | 2.0 | 111 | 152 | 187 | 218 | 245 | 270 | 292 | 312 | 332 |
| | 2.5 | 124 | 170 | 210 | 246 | 278 | 307 | 334 | 358 | 381 |
| | 3.0 | 134 | 185 | 230 | 270 | 305 | 338 | 368 | 397 | 423 |
| FLAT TERRAIN | 1.0 | 80 | 112 | 140 | 167 | 191 | 214 | 235 | 257 | 276 |
| | 1.5 | 102 | 143 | 179 | 213 | 244 | 273 | 302 | 328 | 353 |
| | 2.0 | 117 | 164 | 206 | 245 | 281 | 316 | 348 | 379 | 408 |
| | 2.5 | 129 | 182 | 228 | 272 | 311 | 349 | 385 | 419 | 452 |
| | 3.0 | 140 | 196 | 247 | 294 | 337 | 378 | 417 | 454 | 490 |
| DOWNHILL 2% | 1.0 | 89 | 129 | 168 | 206 | 242 | 279 | 314 | 349 | 385 |
| | 1.5 | 109 | 157 | 202 | 245 | 286 | 326 | 366 | 405 | 443 |
| | 2.0 | 124 | 177 | 226 | 274 | 319 | 363 | 406 | 447 | 488 |
| | 2.5 | 135 | 193 | 246 | 297 | 346 | 393 | 438 | 482 | 525 |
| | 3.0 | 145 | 207 | 264 | 318 | 369 | 419 | 466 | 513 | 558 |

Minimum considered pressure 0.5 bar