



TORO[®]

FLAT EMITTER
DRIP LINE

Neptune

tune-in

-  **DURABLE**
-  **EASY TO INSTALL**
-  **RESISTANT
TO CLOGGING**
-  **AFFORDABLE**
-  **FLEXIBLE**





Designed and manufactured with quality and durability in mind, **Neptune** is the newest in Flat Emitter Drip Line technology by Toro.

Available in:

- 2 diameters 16 and 22 mm
- wall thickness from 6 to 24 mil

DURABLE

Neptune can outlast other drip lines because of its special grade virgin polymer.

EASY TO INSTALL

Neptune can be easily installed. Just make sure the blue stripe is up.

RESISTANT TO CLOGGING

Neptune can resist clogging due to its turbulent emitter design and wide cross section.

AFFORDABLE

Neptune can represent an affordable investment ensuring excellent quality and superior performance.

FLEXIBLE

Neptune can be installed above ground, underground or under black plastic film / mulch.



Performance

Don't over-water your row crops. **Neptune** puts water where you need it, at the plant's roots. **Neptune** is specifically intended for irrigation of row crops such as potatoes, tomatoes, strawberries, melons, onions and corn.

Diameter 16 mm (5/8")

Slope 0%

| Model | Individual Emitter Flow Rate | Dripper Spacing | Emission Uniformity | Maximum Lateral Lengths in meters | | | | |
|----------------|------------------------------|-----------------|---------------------|-----------------------------------|-----------|-----------|-----------|-----------|
| | | | | @ 0,7 bar | @ 0,8 bar | @ 0,9 bar | @ 1,0 bar | @ 1,5 bar |
| PTW16xx3006-yy | 0,67 l/h | 30 cm | 90% | 227 | 228 | 229 | 230 | 233 |
| PTW16xx4006-yy | 0,67 l/h | 40 cm | 90% | 276 | 277 | 278 | 279 | 283 |
| PTW16xx5006-yy | 0,67 l/h | 50 cm | 90% | 320 | 321 | 322 | 324 | 329 |
| PTW16xx6006-yy | 0,67 l/h | 60 cm | 90% | 361 | 363 | 364 | 366 | 371 |
| PTW16xx3011-yy | 1,08 l/h | 30 cm | 90% | 155 | 155 | 156 | 157 | 159 |
| PTW16xx4011-yy | 1,08 l/h | 40 cm | 90% | 188 | 189 | 190 | 190 | 193 |
| PTW16xx5011-yy | 1,08 l/h | 50 cm | 90% | 218 | 219 | 220 | 222 | 225 |
| PTW16xx6011-yy | 1,08 l/h | 60 cm | 90% | 246 | 248 | 248 | 249 | 254 |
| PTW16xx3014-yy | 1,34 l/h | 30 cm | 90% | 132 | 133 | 133 | 134 | 136 |
| PTW16xx4014-yy | 1,34 l/h | 40 cm | 90% | 161 | 162 | 162 | 163 | 165 |
| PTW16xx5014-yy | 1,34 l/h | 50 cm | 90% | 187 | 188 | 189 | 189 | 192 |
| PTW16xx6014-yy | 1,34 l/h | 60 cm | 90% | 211 | 212 | 213 | 214 | 217 |
| PTW16xx3020-yy | 1,99 l/h | 30 cm | 90% | 106 | 106 | 107 | 107 | 109 |
| PTW16xx4020-yy | 1,99 l/h | 40 cm | 90% | 129 | 130 | 130 | 131 | 132 |
| PTW16xx5020-yy | 1,99 l/h | 50 cm | 90% | 150 | 151 | 152 | 152 | 154 |
| PTW16xx6020-yy | 1,99 l/h | 60 cm | 90% | 170 | 171 | 171 | 172 | 175 |
| PTW16xx3032-yy | 3,16 l/h | 30 cm | 90% | 74 | 74 | 75 | 75 | 76 |
| PTW16xx4032-yy | 3,16 l/h | 40 cm | 90% | 90 | 90 | 90 | 92 | 93 |
| PTW16xx5032-yy | 3,16 l/h | 50 cm | 90% | 105 | 105 | 106 | 106 | 108 |
| PTW16xx6032-yy | 3,16 l/h | 60 cm | 90% | 119 | 119 | 120 | 120 | 122 |

Diameter 22 mm (7/8")

Slope 0%

| Model | Individual Emitter Flow Rate | Dripper Spacing | Emission Uniformity | Maximum Lateral Lengths in meters | | | | |
|----------------|------------------------------|-----------------|---------------------|-----------------------------------|-----------|-----------|-----------|-----------|
| | | | | @ 0,7 bar | @ 0,8 bar | @ 0,9 bar | @ 1,0 bar | @ 1,5 bar |
| PTW22xx3006-yy | 0,67 l/h | 30 cm | 90% | 408 | 409 | 411 | 412 | 418 |
| PTW22xx4006-yy | 0,67 l/h | 40 cm | 90% | 494 | 496 | 498 | 500 | 508 |
| PTW22xx5006-yy | 0,67 l/h | 50 cm | 90% | 572 | 575 | 577 | 579 | 588 |
| PTW22xx6006-yy | 0,67 l/h | 60 cm | 90% | 645 | 648 | 651 | 653 | 664 |
| PTW22xx3011-yy | 1,08 l/h | 30 cm | 90% | 278 | 280 | 281 | 282 | 286 |
| PTW22xx4011-yy | 1,08 l/h | 40 cm | 90% | 337 | 339 | 340 | 342 | 346 |
| PTW22xx5011-yy | 1,08 l/h | 50 cm | 90% | 391 | 393 | 395 | 396 | 402 |
| PTW22xx60116yy | 1,08 l/h | 60 cm | 90% | 441 | 443 | 445 | 447 | 453 |
| PTW22xx3014-yy | 1,34 l/h | 30 cm | 90% | 238 | 239 | 240 | 241 | 244 |
| PTW22xx4014-yy | 1,34 l/h | 40 cm | 90% | 289 | 290 | 291 | 293 | 297 |
| PTW22xx5014-yy | 1,34 l/h | 50 cm | 90% | 335 | 337 | 338 | 340 | 344 |
| PTW22xx6014-yy | 1,34 l/h | 60 cm | 90% | 378 | 380 | 382 | 383 | 389 |
| PTW22xx3020-yy | 1,99 l/h | 30 cm | 90% | 191 | 191 | 192 | 193 | 196 |
| PTW22xx4020-yy | 1,99 l/h | 40 cm | 90% | 232 | 233 | 234 | 235 | 238 |
| PTW22xx5020-yy | 1,99 l/h | 50 cm | 90% | 268 | 270 | 271 | 272 | 277 |
| PTW22xx6020-yy | 1,99 l/h | 60 cm | 90% | 303 | 305 | 306 | 307 | 312 |
| PTW22xx3032-yy | 3,16 l/h | 30 cm | 90% | 133 | 134 | 134 | 135 | 137 |
| PTW22xx4032-yy | 3,16 l/h | 40 cm | 90% | 162 | 162 | 163 | 164 | 166 |
| PTW22xx5032-yy | 3,16 l/h | 50 cm | 90% | 188 | 189 | 189 | 190 | 193 |
| PTW22xx6032-yy | 3,16 l/h | 60 cm | 90% | 212 | 213 | 214 | 214 | 217 |

For maximum pressure please refer to "characteristics" table

Characteristics

| Diameter | Thickness | Min. pressure | Max. pressure | Spacing | Reel Length | Reel Weight |
|--------------|-----------|---------------|---------------|---------|-------------|-------------|
| 16 mm (5/8") | 6 mil | 0,41 bar | 0,8 bar | 30 cm | 3200 m | 25,1 kg |
| | | | | 40 cm | 3200 m | 24,8 kg |
| | | | | 50 cm | 3200 m | 24,8 kg |
| | 8 mil | 0,41 bar | 1,0 bar | 30 cm | 2400 m | 24,9 kg |
| | | | | 40 cm | 2400 m | 24,7 kg |
| | | | | 50 cm | 2400 m | 24,7 kg |
| | 10 mil | 0,41 bar | 1,0 bar | 30 cm | 1900 m | 24,5 kg |
| | | | | 40 cm | 1900 m | 24,4 kg |
| | | | | 50 cm | 1900 m | 24,4 kg |
| | 12 mil | 0,41 bar | 1,0 bar | 30 cm | 1500 m | 23,3 kg |
| | | | | 40 cm | 1500 m | 23,2 kg |
| | | | | 50 cm | 1500 m | 23,2 kg |
| | 15 mil | 0,41 bar | 1,0 bar | 30 cm | 1300 m | 25,2 kg |
| | | | | 40 cm | 1300 m | 25,1 kg |
| | | | | 50 cm | 1300 m | 25,0 kg |
| | 16 mil | 0,41 bar | 1,5 bar | 30 cm | 1200 m | 23,3 kg |
| | | | | 40 cm | 1200 m | 23,2 kg |
| | | | | 50 cm | 1200 m | 23,1 kg |
| | 18 mil | 0,41 bar | 2,0 bar | 30 cm | 950 m | 22,2 kg |
| | | | | 40 cm | 950 m | 22,1 kg |
| | | | | 50 cm | 950 m | 22,1 kg |
| | 24 mil | 0,41 bar | 2,0 bar | 30 cm | 650 m | 20,4 kg |
| | | | | 40 cm | 650 m | 20,3 kg |
| | | | | 50 cm | 650 m | 20,3 kg |
| 22 mm (7/8") | 8 mil | 0,41 bar | 0,8 bar | 30 cm | 2100 m | 29,6 kg |
| | | | | 40 cm | 2100 m | 29,4 kg |
| | | | | 50 cm | 2100 m | 29,3 kg |
| | 10 mil | 0,41 bar | 1,0 bar | 30 cm | 1500 m | 26,4 kg |
| | | | | 40 cm | 1600 m | 28,0 kg |
| | | | | 50 cm | 1600 m | 27,9 kg |
| | 12 mil | 0,41 bar | 1,0 bar | 30 cm | 1300 m | 27,4 kg |
| | | | | 40 cm | 1300 m | 27,3 kg |
| | | | | 50 cm | 1300 m | 27,2 kg |
| | 15 mil | 0,41 bar | 1,3 bar | 30 cm | 850 m | 22,5 kg |
| | | | | 40 cm | 850 m | 22,4 kg |
| | | | | 50 cm | 900 m | 23,7 kg |

Reel Dimension (Ø x h) 55 cm x 28 cm

Flow rates

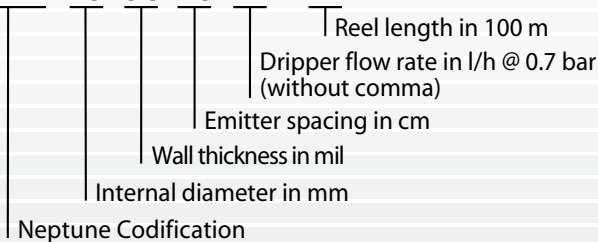
| Flow rate l/h @ 0.7 bar (*) | Flow rate l/h @ 1 bar (*) | Coefficient of variation (Cv) | Digits in codification | Filtration required (**) |
|--------------------------------|------------------------------|----------------------------------|---------------------------|-----------------------------|
| 0.67 | 0.8 | ≤ 3 % | 06 | 120 mesh |
| 1.08 | 1.3 | ≤ 3 % | 11 | 120 mesh |
| 1.34 | 1.6 | ≤ 3 % | 14 | 120 mesh |
| 1.99 | 2.4 | ≤ 3 % | 20 | 120 mesh |
| 3.16 | 3.8 | ≤ 3 % | 32 | 120 mesh |

(*) Flow rates valid from 6 to 18 mil

(**) For water rich in organic substances, we always recommend using sand filters with a grain size of 0.5 - 1.2 mm followed by screen or disc safety filters. In the case of well water, screen or disc filters with a filtering capacity related to the type of Neptune used may be sufficient. For more details on the mesh/micron, please contact our Technical Services.

Codification

PTW 16 08 40 11 - 24



Neptune

tune-in

FLAT EMITTER
DRIP LINE

Install Neptune on your row crops



**Ask your
area manager
for more
information,
now**

TORO®

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