

**TORO****Count on it.**

# Precision™ Series Spray Nozzles with PCD

**NEW**

**Toro's new Precision™ Series PC Spray Nozzles are the most complete and efficient spray nozzle line available to help irrigation professionals manage water use, minimise misting, eliminate run-off and reduce customer water bills.**

The Precision Spray Nozzles' 25mm/hr precipitation rate ensures that water is applied more slowly and evenly without sacrificing landscape health. The Pressure Compensating Device further enhances this best-in-class water efficient nozzle.

Available in a wide selection of arcs and radii, as well as male and female threads, Precision Spray Nozzles are ideal for large scale installations and retrofits.



*25mm/hour Standard Precipitation Rate!*

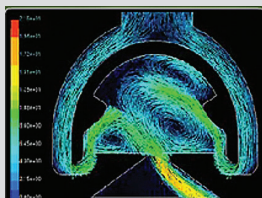
## Features & Benefits

### MAXIMISE IRRIGATION EFFICIENCY

Precision PC Spray Nozzles deliver an industry leading 25mm/hr precipitation rate. The unique method of projecting water significantly reduces the amount of water required to reach each radius and better matches soil infiltration rates. Compared with other leading brands, the lower precipitation rate and high distribution uniformity makes the PSN PC the most efficient nozzle from 1.5 – 4.6m.

### H<sub>2</sub>O CHIP TECHNOLOGY

Using patented technology and no moving parts, water expands and collapses inside the H<sub>2</sub>O chip creating high-frequency oscillating streams to achieve the desired arc and radius. Invisible to the naked eye, these oscillating streams can be detected with a strobe light.



### PRESSURE COMPENSATING DEVICE

The elastomeric PCD disk opens and closes in response to changes in inlet pressure to maintain optimal performance, at pressures above 276 kPa.



### LESS SENSITIVITY TO HIGH PRESSURES

The H<sub>2</sub>O chip creates a very uniform droplet size across the irrigation arc by exerting exactly the same amount of pressure on each individual stream of water as it is created in the chamber. This increases irrigation uniformity and wind resistance, minimising unintentional watering of hardscapes and run-off.

### DURABLE CONSTRUCTION

The Precision PC nozzle housing is a single moulded piece. Unlike sonic welded competitor units, there is no possibility of the top half of the nozzle separating from the bottom, therefore no wasted water, no water starved section of landscape and no moving parts to wear out.

### DESIGN AND RETROFIT EFFECTIVENESS

The lower flow rate of Precision PC nozzles maximises design efficiency and saves on overall material costs by using fewer valves and less controller stations. Existing systems with low pressure can be fixed with a simple retrofit of the existing high-flow nozzles.

### MALE AND FEMALE THREADED MODELS

Available in 5 radii between 1.5m and 4.6m, six different arcs between 90° and 360°, 3 specialty arcs – right corner, left corner and centre strip.

## Performance Data

| 1.5m "O" Nozzle |     |            |            |                      |                      | 2.4m "O" Nozzle |     |            |            |                      |                      | 3.0m "O" Nozzle |     |            |            |                      |                      |
|-----------------|-----|------------|------------|----------------------|----------------------|-----------------|-----|------------|------------|----------------------|----------------------|-----------------|-----|------------|------------|----------------------|----------------------|
| Arc             | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) | Arc             | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) | Arc             | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) |
| 5Q              | 275 | 1.4        | 0.24       | 30.0                 | 34.6                 | 8Q              | 275 | 2.1        | 0.52       | 28.1                 | 32.4                 | 10Q             | 275 | 2.9        | 0.99       | 28.4                 | 32.7                 |
|                 | 350 | 1.6        | 0.31       | 29.5                 | 34.0                 |                 | 350 | 2.3        | 0.64       | 28.8                 | 33.3                 |                 | 350 | 3.0        | 1.06       | 28.3                 | 32.7                 |
|                 | 450 | 1.8        | 0.41       | 30.3                 | 35.0                 |                 | 450 | 2.7        | 0.80       | 26.2                 | 30.2                 |                 | 450 | 3.3        | 1.15       | 25.4                 | 29.3                 |
| 5T              | 275 | 1.3        | 0.26       | 28.1                 | 32.4                 | 8T              | 275 | 2.3        | 0.77       | 26.1                 | 30.1                 | 10T             | 275 | 2.9        | 1.16       | 24.8                 | 28.6                 |
|                 | 350 | 1.5        | 0.43       | 34.3                 | 39.6                 |                 | 350 | 2.4        | 0.92       | 28.6                 | 33.0                 |                 | 350 | 3.0        | 1.36       | 27.2                 | 31.4                 |
|                 | 450 | 1.7        | 0.65       | 40.4                 | 46.6                 |                 | 450 | 2.6        | 1.12       | 29.7                 | 34.3                 |                 | 450 | 3.3        | 1.63       | 27.0                 | 31.1                 |
| 5H              | 275 | 1.3        | 0.38       | 26.8                 | 30.9                 | 8H              | 275 | 2.1        | 0.98       | 26.6                 | 30.7                 | 10H             | 275 | 3.0        | 1.81       | 24.2                 | 27.9                 |
|                 | 350 | 1.5        | 0.50       | 26.5                 | 30.6                 |                 | 350 | 2.3        | 1.25       | 28.3                 | 32.7                 |                 | 350 | 3.1        | 2.00       | 25.0                 | 28.8                 |
|                 | 450 | 1.7        | 0.66       | 27.6                 | 31.8                 |                 | 450 | 2.6        | 1.61       | 28.6                 | 33.0                 |                 | 450 | 3.2        | 2.25       | 26.4                 | 30.4                 |
| 5TT             | 275 | 1.3        | 0.54       | 28.6                 | 33.1                 | 8TT             | 275 | 2.1        | 1.27       | 26.0                 | 29.9                 | 10TT            | 275 | 2.9        | 2.37       | 25.4                 | 29.3                 |
|                 | 350 | 1.5        | 0.77       | 30.8                 | 35.6                 |                 | 350 | 2.4        | 1.64       | 25.6                 | 29.6                 |                 | 350 | 3.0        | 2.66       | 26.6                 | 30.7                 |
|                 | 450 | 1.7        | 1.08       | 33.6                 | 38.8                 |                 | 450 | 2.7        | 2.13       | 26.3                 | 30.3                 |                 | 450 | 3.1        | 3.04       | 28.4                 | 32.8                 |
| 5TQ             | 275 | 1.3        | 0.58       | 27.3                 | 31.5                 | 8TQ             | 275 | 2.2        | 1.54       | 25.4                 | 29.3                 | 10TQ            | 275 | 2.9        | 2.70       | 25.7                 | 29.6                 |
|                 | 350 | 1.5        | 0.81       | 28.7                 | 33.2                 |                 | 350 | 2.4        | 1.82       | 25.3                 | 29.2                 |                 | 350 | 3.0        | 2.93       | 26.1                 | 30.1                 |
|                 | 450 | 1.8        | 1.12       | 27.6                 | 31.9                 |                 | 450 | 2.7        | 2.20       | 24.2                 | 27.9                 |                 | 450 | 3.2        | 3.24       | 25.3                 | 29.2                 |
| 5F              | 275 | 1.2        | 0.63       | 26.2                 | 30.2                 | 8F              | 275 | 2.1        | 2.09       | 28.4                 | 32.8                 | 10F             | 275 | 2.9        | 3.59       | 25.6                 | 29.6                 |
|                 | 350 | 1.5        | 0.91       | 24.3                 | 28.1                 |                 | 350 | 2.3        | 2.49       | 28.2                 | 32.6                 |                 | 350 | 3.0        | 4.03       | 26.8                 | 31.0                 |
|                 | 450 | 1.8        | 1.29       | 23.9                 | 27.6                 |                 | 450 | 2.5        | 3.02       | 29.0                 | 33.4                 |                 | 450 | 3.2        | 4.61       | 27.0                 | 31.2                 |

| 3.6m "O" Nozzle |     |            |            |                      |                      | 4.6m "O" Nozzle |     |            |            |                      |                      | Special Patterns |     |            |            |                      |                      |
|-----------------|-----|------------|------------|----------------------|----------------------|-----------------|-----|------------|------------|----------------------|----------------------|------------------|-----|------------|------------|----------------------|----------------------|
| Arc             | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) | Arc             | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) | Arc              | kPa | Radius (m) | Flow (lpm) | Precip.Rate (mm/hr.) | Precip.Rate (mm/hr.) |
| 12Q             | 275 | 3.7        | 1.28       | 22.5                 | 25.9                 | 15Q             | 275 | 4.3        | 2.0        | 26.2                 | 30.2                 | 4X30 SST         | 275 | 1.2 x 9.1  | 2.34       | 25.8                 | 29.7                 |
|                 | 350 | 3.7        | 1.47       | 25.8                 | 29.7                 |                 | 350 | 4.4        | 2.2        | 27.9                 | 32.2                 |                  | 350 | 1.2 x 9.1  | 2.45       | 26.9                 | 31.1                 |
|                 | 450 | 3.8        | 1.72       | 28.6                 | 33.0                 |                 | 450 | 4.5        | 2.6        | 30.3                 | 35.0                 |                  | 450 | 1.2 x 9.1  | 2.59       | 28.5                 | 32.8                 |
| 12T             | 275 | 3.5        | 1.74       | 25.6                 | 29.5                 | 15T             | 275 | 4.4        | 2.7        | 25.2                 | 29.1                 | 4X15 LCS         | 275 | 1.2 x 4.5  | 1.20       | 26.6                 | 30.7                 |
|                 | 350 | 3.6        | 1.91       | 26.5                 | 30.6                 |                 | 350 | 4.5        | 2.9        | 25.9                 | 29.9                 |                  | 350 | 1.2 x 4.5  | 1.24       | 27.5                 | 31.7                 |
|                 | 450 | 3.7        | 2.13       | 28.0                 | 32.3                 |                 | 450 | 4.7        | 3.2        | 26.0                 | 30.0                 |                  | 450 | 1.2 x 4.5  | 1.29       | 28.6                 | 33.0                 |
| 12H             | 275 | 3.5        | 2.64       | 25.8                 | 29.8                 | 15H             | 275 | 4.4        | 4.2        | 25.9                 | 29.9                 | 4X15 RCS         | 275 | 1.2 x 5.4  | 1.35       | 25.0                 | 28.9                 |
|                 | 350 | 3.6        | 2.84       | 26.3                 | 30.3                 |                 | 350 | 4.4        | 4.6        | 28.3                 | 32.7                 |                  | 350 | 1.2 x 5.4  | 1.39       | 25.7                 | 29.7                 |
|                 | 450 | 3.7        | 3.11       | 27.3                 | 31.5                 |                 | 450 | 4.3        | 5.1        | 33.1                 | 38.2                 |                  | 450 | 1.2 x 5.4  | 1.44       | 26.6                 | 30.7                 |
| 12TT            | 275 | 3.5        | 3.39       | 24.9                 | 28.8                 | 15TT            | 275 | 4.4        | 5.5        | 25.6                 | 29.5                 | 4X18 SST         | 275 | 1.2 x 5.4  | 1.35       | 25.0                 | 28.9                 |
|                 | 350 | 3.5        | 3.93       | 28.8                 | 33.3                 |                 | 350 | 4.5        | 6.0        | 26.6                 | 30.7                 |                  | 350 | 1.2 x 5.4  | 1.39       | 25.7                 | 29.7                 |
|                 | 450 | 3.5        | 4.64       | 34.1                 | 39.3                 |                 | 450 | 4.6        | 6.6        | 28.2                 | 32.5                 |                  | 450 | 1.2 x 5.4  | 1.44       | 26.6                 | 30.7                 |
| 12TQ            | 275 | 3.5        | 3.96       | 25.9                 | 29.9                 | 15TQ            | 275 | 4.3        | 6.1        | 26.2                 | 30.3                 | 4X9 LCS          | 275 | 1.2 x 2.7  | 0.67       | 24.7                 | 28.6                 |
|                 | 350 | 3.6        | 4.33       | 26.7                 | 30.8                 |                 | 350 | 4.4        | 6.5        | 26.7                 | 30.9                 |                  | 350 | 1.2 x 2.7  | 0.71       | 26.1                 | 30.2                 |
|                 | 450 | 3.7        | 4.82       | 28.2                 | 32.5                 |                 | 450 | 4.5        | 7.0        | 27.7                 | 32.0                 |                  | 450 | 1.2 x 2.7  | 0.76       | 28.0                 | 32.3                 |
| 12F             | 275 | 3.5        | 5.11       | 25.0                 | 28.9                 | 15F             | 275 | 4.4        | 8.3        | 25.8                 | 29.8                 | 4X9 RCS          | 275 | 1.2 x 2.7  | 0.71       | 26.1                 | 30.2                 |
|                 | 350 | 3.6        | 5.69       | 26.3                 | 30.4                 |                 | 350 | 4.5        | 9.0        | 26.6                 | 30.7                 |                  | 350 | 1.2 x 2.7  | 0.76       | 28.0                 | 32.3                 |
|                 | 450 | 3.7        | 6.46       | 28.3                 | 32.7                 |                 | 450 | 4.6        | 9.9        | 28.0                 | 32.3                 |                  | 450 | 1.2 x 2.7  | 0.76       | 28.0                 | 32.3                 |

## Specifications

- Radius 1.5 – 4.6m
- Radius reduction: 25% maximum
- Operating pressure range: 275 – 500 kPa
- Recommended Pressure: 350 kPa
- Flow Rate: 0.2 – 9.9 Lpm
- Nozzle trajectory: 1.5m: 5° 2.4m: 10° 3.0m: 15° 3.6m: 20° 4.6m: 27°
- Corner and side strips: 20°
- 2 Year Warranty

## Model List

| 1.5m "O" Nozzle (Red)   |          |             | 2.4m "O" Nozzle (Green) |          |             | 3.0m "O" Nozzle (Blue) |             |              |
|-------------------------|----------|-------------|-------------------------|----------|-------------|------------------------|-------------|--------------|
| Male                    | Female   | Description | Male                    | Female   | Description | Male                   | Female      | Description  |
| O-T-5-QP                | O-5-QP   | 90° Arc     | O-T-8-QP                | O-8-QP   | 90° Arc     | O-T-10-QP              | O-10-QP     | 90° Arc      |
| O-T-5-TP                | O-5-TP   | 120° Arc    | O-T-8-TP                | O-8-T-P  | 120° Arc    | O-T-10-TP              | O-10-TP     | 120° Arc     |
| O-T-5-HP                | O-5-HP   | 180° Arc    | O-T-8-HP                | O-8-HP   | 180° Arc    | O-T-10-HP              | O-10-HP     | 180° Arc     |
| O-T-5-TTP               | O-5-TTP  | 240° Arc    | O-T-8-TTP               | O-8-TTP  | 240° Arc    | O-T-10-TTP             | O-10-TTP    | 240° Arc     |
| O-T-5-TQP               | O-5-TQP  | 270° Arc    | O-T-8-TQP               | O-8-TQP  | 270° Arc    | O-T-10-TQP             | O-10-TQP    | 270° Arc     |
| O-T-5-FP                | O-5-FP   | 360° Arc    | O-T-8-FP                | O-8-FP   | 360° Arc    | O-T-10-FP              | O-10-FP     | 360° Arc     |
| 3.6m "O" Nozzle (Brown) |          |             | 4.6m "O" Nozzle (Black) |          |             | Special Patterns       |             |              |
| Male                    | Female   | Description | Male                    | Female   | Description | Male                   | Female      | Description  |
| O-T-12-QP               | O-12-QP  | 90° Arc     | O-T-15-QP               | O-15-QP  | 90° Arc     | O-T-4X9-RCSP           | O-4X9-RCSP  | Right Corner |
| O-T-12-TP               | O-12-TP  | 120° Arc    | O-T-15-TP               | O-15-TP  | 120° Arc    | O-T-4X9-LCSP           | O-4X9-LCSP  | Left Corner  |
| O-T-12-HP               | O-12-HP  | 180° Arc    | O-T-15-HP               | O-15-HP  | 180° Arc    | O-T-4X18-SSTP          | O-4X18-SSTP | Side Strip   |
| O-T-12-TTP              | O-12-TTP | 240° Arc    | O-T-15-TTP              | O-15-TTP | 240° Arc    | O-T-4X15-RCSP          | O-4X15-RCSP | Right Corner |
| O-T-12-TQP              | O-12-TQP | 270° Arc    | O-T-15-TQP              | O-15-TQP | 270° Arc    | O-T-4X15-LCSP          | O-4X15-LCSP | Left Corner  |
| O-T-12-FP               | O-12-FP  | 360° Arc    | O-T-15-FP               | O-15-FP  | 360° Arc    | O-T-4X30-SSTP          | O-4X30-SSTP | Side Strip   |

For more information, phone  
1300 130 898 or visit [www.toro.com.au](http://www.toro.com.au)



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