The R10 and R10 Turbo are part of the Nelson Rotator® family of sprinklers.

<table>
<thead>
<tr>
<th>Model</th>
<th>Gallons Per Hour</th>
<th>Liters Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5</td>
<td>9 - 29 GPH</td>
<td>34 - 110 LPH</td>
</tr>
<tr>
<td>R10</td>
<td>0.3 - 0.7 GPM</td>
<td>61 - 164 LPH</td>
</tr>
<tr>
<td>R10 Turbo</td>
<td>0.6 - 2.1 GPM</td>
<td>140 - 469 LPH</td>
</tr>
<tr>
<td>R2000</td>
<td>0.7 - 3.5 GPM</td>
<td>150 - 792 LPH</td>
</tr>
<tr>
<td>R2000LP/WF</td>
<td>0.9 - 5.7 GPM</td>
<td>191 - 1295 LPH</td>
</tr>
</tbody>
</table>
Ultra Reliable Low-Volume Sprinklers

Filling the need for small, low-volume sprinklers that perform reliably in the mid-range between micro and a regular size sprinkler, Nelson R10 and R10 Turbo (R10T) Rotators are right on target. Incorporating the same proven, patented drive principle and advanced sprinkler technology used in other Nelson Rotators, the R10 and R10T are making their mark in a wide variety of orchard and field irrigation applications.

No other agricultural sprinkler matches the dependability and durability of the R10 and R10 Turbo.

For durability, dependability and doing a better job of uniform water application, the choice is simple. Nelson R10 and R10 Turbo.
CROP APPLICATIONS

Overhead cooling for tree crops.

Under canopy irrigation for tree crops.

For irrigation of field crops. The R10T Rotator® is used as part of a portable irrigation system that utilizes polyethylene pipe for laterals in combination with the Nelson FT5 feedtube assembly.
R 10 NOZZLE OPTIONS
AND FLOW REGULATION

Nelson 10FC Flow Control Nozzle
The 10FC nozzles illustrated above are operating at the same flow. As pressure increases, the flexible flow washers reduce the orifice opening size and emit a constant flow over a wide range of pressure. They assure uniform application of water throughout your crop.

Why use Flow Control Nozzles?
- constant flow over a range of pressure
- increases field uniformity
- low cost, high value

Flow control nozzles (10FC) are an excellent low cost option when system pressure ranges between 25-50 PSI (1.7-3.4 BAR). When system pressure differences are more extreme the Nelson Mini Regulator or Mini Regulator Drain Check are ideal products.

Mini Regulator (MR), Mini Regulator Drain Check (MRDC) and Mini Drain Check (MDC)
The Mini Regulator and Mini Regulator Drain Check increase the potential to conserve water when the pressure is maintained at or above the nominal rating of the regulator. Every sprinkler in a system delivers exactly the same flow, droplet size, and distribution uniformity. The MR and MRDC are available in 30, 35, 40, 45, or 50 PSI (2.0, 2.4, 2.8, 3.1 or 3.4 BAR) nominal pressures.

The Drain Check feature (available in the MRDC and MDC) eliminates sprinkler drizzle during shut down and start up. The Mini Drain Check is available in 20 and 35 PSI (1.4-2.4 BAR) options.

<table>
<thead>
<tr>
<th>Inlet</th>
<th>Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Acme, ½” MNPT, ½” FNPT</td>
<td>Male Acme, ½” MNPT</td>
</tr>
</tbody>
</table>
### R10 Plate/Nozzle Options and Flow Performance in GPM and LPH

<table>
<thead>
<tr>
<th>Plate Series</th>
<th>Plate Options</th>
<th>Recommended Nozzles</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2 9° Red</td>
<td>Radius 18-20'</td>
<td>Lt. Blue #40</td>
<td>25</td>
<td>1.75</td>
</tr>
<tr>
<td></td>
<td>Stream Ht.14-23'' (36-58 cm)</td>
<td>Lt. Purple #45</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dk. Green #50</td>
<td>40</td>
<td>2.25</td>
</tr>
<tr>
<td>P2 9° Red</td>
<td>Radius 18-20'</td>
<td>.35 10FC</td>
<td>.43 10FC</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Stream Ht.14-23'' (36-58 cm)</td>
<td>Lt. Purple #45</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>P2 9° Red</td>
<td>Radius 18-20'</td>
<td>Lt. Yellow #55</td>
<td>40</td>
<td>2.25</td>
</tr>
<tr>
<td>P2 9° Red</td>
<td>Radius 18-20'</td>
<td>Lt. Red #60</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Stream Ht.14-23'' (36-58 cm)</td>
<td>Dk. Green #50</td>
<td>1.75</td>
<td>1.75</td>
</tr>
<tr>
<td>P6 9° Blue</td>
<td>R.20-22'' (6.1-6.7 m)</td>
<td>Gray #65</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>P6 9° Blue</td>
<td>R.20-22'' (6.1-6.7 m)</td>
<td>White #70</td>
<td>40</td>
<td>2.25</td>
</tr>
<tr>
<td>P6 9° Blue</td>
<td>R.20-22'' (6.1-6.7 m)</td>
<td>Dk. Blue #78</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>P6 15° Purple</td>
<td>R. 25-26'' (7.6-7.9 m)</td>
<td>.75 10FC</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>P6 15° Purple</td>
<td>R. 25-26'' (7.6-7.9 m)</td>
<td>1.0 10FC</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>P6 15° Purple</td>
<td>R. 25-26'' (7.6-7.9 m)</td>
<td>Dk. Blue #78</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>P8 15° Gold</td>
<td>R. 26-30'' (7-9.1 m)</td>
<td>Orange #86</td>
<td>1.07</td>
<td>1.00</td>
</tr>
<tr>
<td>P8 15° Gold</td>
<td>R. 26-30'' (7-9.1 m)</td>
<td>Purple #94</td>
<td>1.27</td>
<td>1.00</td>
</tr>
<tr>
<td>P8 15° Gold</td>
<td>R. 26-30'' (7-9.1 m)</td>
<td>Yellow #102</td>
<td>1.50</td>
<td>1.00</td>
</tr>
<tr>
<td>P8 24° Brown</td>
<td>R. 27-33'' (8.2-10.1 m)</td>
<td>1.0 FC</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>P8 24° Brown</td>
<td>R. 27-33'' (8.2-10.1 m)</td>
<td>1.5 10 FC</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Stream Ht. 43-58'' (110-147 cm)</td>
<td>Dk. Blue #78</td>
<td>1.0 10FC</td>
<td>—</td>
</tr>
</tbody>
</table>

The performance data in this section has been recorded under ideal test conditions and may be adversely affected by poor hydraulic entrance conditions, slope, riser tilt, temperature, wind or other factors. **Always be sure to use the nozzle size that is recommended for the plate.** The operating pressure should be within the recommended range. Only the nozzle and plate combinations grouped together in the above chart are recommended. The absence of flow data on the above chart indicates the pressure is outside the recommended range.
R 10 and R10 TURBO MOUNTING OPTIONS and ACCESSORIES

Nelson Rotator® Feedtube Assemblies
These versatile stake mounting options feature durable, UV and kink resistant flexible PVC tubing. Fast, simple installation. Easy nozzle cleaning — kink the tubing to stop the flow. Low cost, high value. 5 mm and 10 mm tubing options are available. See the Nelson Rotator® Feedtube Assemblies brochure for further details.

**½ PVC-5 mm Feedtube**

<table>
<thead>
<tr>
<th>FT2 Feedtube</th>
</tr>
</thead>
<tbody>
<tr>
<td>#9726-024 6 mm Steel Stake 24” (61 cm) or #10040-018 6 mm Fiberglass Stake 18” (45 cm) or #10040-024 6 mm Fiberglass Stake 24” (61 cm)</td>
</tr>
<tr>
<td>#9741-030 30” (76 cm) Tubing Assy Less Stake</td>
</tr>
<tr>
<td>#9741-042 42” (107 cm) Tubing Assy Less Stake</td>
</tr>
<tr>
<td>#9741-072 72” (183 cm) Tubing Assy Less Stake</td>
</tr>
<tr>
<td>#9741-096 96” (244 cm) Tubing Assy Less Stake</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FT3 Feedtube</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10, Acme Base</td>
</tr>
<tr>
<td>5mm Tubing Options*</td>
</tr>
<tr>
<td>#12598 17” FT3 Stake &amp; Adapter Assembly</td>
</tr>
<tr>
<td>#12600-030 Complete 17” FT3 Stake &amp; 30” Tubing Assembly</td>
</tr>
<tr>
<td>#12600-042 Complete 17” FT3 Stake &amp; 42” Tubing Assembly</td>
</tr>
</tbody>
</table>

**5 mm Tubing**
O.D. = .30” (7.6 mm) I.D. = .19” (4.8 mm)

<table>
<thead>
<tr>
<th>5mm LTO &amp; Tubing Assemblies</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>30” (76 cm)</td>
<td>11283-030</td>
</tr>
<tr>
<td>42” (107 cm)</td>
<td>11283-042</td>
</tr>
<tr>
<td>48” (122 cm)</td>
<td>11283-048</td>
</tr>
<tr>
<td>72” (183 cm)</td>
<td>11283-072</td>
</tr>
<tr>
<td>96” (244 cm)</td>
<td>11283-096</td>
</tr>
<tr>
<td>5mm tubing 1000’ (305 m)</td>
<td>9284</td>
</tr>
<tr>
<td>5mm LTO or Barb</td>
<td>12023</td>
</tr>
</tbody>
</table>

**1/2 PVC-5 mm Stake and Tube Assembly Options**

<table>
<thead>
<tr>
<th>Assembly #</th>
<th>Stake Length</th>
<th>5 mm Tubing Length</th>
<th>Hole Distance from Top</th>
</tr>
</thead>
<tbody>
<tr>
<td>11284-21630</td>
<td>16” (40 cm)</td>
<td>30” (76 cm)</td>
<td>5.5” (14 cm)</td>
</tr>
<tr>
<td>11284-22230</td>
<td>22” (55 cm)</td>
<td>30” (76 cm)</td>
<td>11.3” (29 cm)</td>
</tr>
<tr>
<td>11284-22242</td>
<td>22” (55 cm)</td>
<td>42” (107 cm)</td>
<td>11.3” (29 cm)</td>
</tr>
<tr>
<td>11284-32230</td>
<td>22” (55 cm)</td>
<td>30” (76 cm)</td>
<td>1.5” (4 cm)</td>
</tr>
</tbody>
</table>

For FT2, FT3, ½ PVC-5 and ¾ PVC-5 use Punch Tool #9349 or Drill Tool #9835-003.

**¾ PVC-5 mm Feedtube**

<table>
<thead>
<tr>
<th>¾ PVC-5 mm Feedtube</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10, Acme Base</td>
</tr>
<tr>
<td>#11429 PVC Stake Adapter (Black) 5mm Compression x Acme</td>
</tr>
<tr>
<td>3/4” PVC Stake</td>
</tr>
<tr>
<td>5mm Tubing Options*</td>
</tr>
<tr>
<td>#11455-12230 Complete 22” (55cm) Stake &amp; 30” (76cm) Tubing Assy w/ Hole 11.3” (29cm) from top</td>
</tr>
</tbody>
</table>
10 mm Feedtube Assemblies
The ¾ PVC-10, FT4 and FT5 Feedtube Assemblies all utilize 10 mm feedtube and connect R10 & R10 Turbo Rotators to polyethylene laterals. The ¾ PVC-10 is a heavy-duty option that prevents damage caused by equipment, workers and animals chewing on tubing. The FT4 is for permanent connection while the FT5 has a quick connect and disconnect feature for portable lateral systems. Both assemblies are mounted with steel stakes. With the addition of collar #9195 to FT4 or FT5, they can be converted to mount on a 3/4” PVC stake.

### ¾ PVC-10 mm Feedtube
- **R10T, Acme Base**
  - #11429 PVC Stake Adapter (Black) 10mm
  - #9099-036 10 mm Flexible PVC Feedtube Length = 36” (91 cm)
  - O.D. = .505” (13 mm)
  - I.D. = .355” (9.4 mm)
  - Bulk Coils #9099 500’ (152 m)
- #11452-12236 Complete 22” (55cm) Stake & 36” (91 cm) Tubing Assy w/ Hole 11.3” (29cm) from top

### FT4 Feedtube
- **R10T, Acme Base**
  - #9677 Steel Stake Adapter, Acme Thread
  - #9725-024 8 mm Steel Stake 24” (61 cm) or #10160 8 mm Fiberglass Stake 24” (61 cm)
  - #9099-036 10 mm Flexible PVC Feedtube Length = 36” (91 cm)
  - O.D. = .505” (13 mm)
  - I.D. = .355” (9.4 mm)
  - Bulk Coils #9099 500’ (152 m)
- #9752-036 36” Tubing Assy Less Stake

### FT5 Feedtube
- **R10T, Acme Base**
  - #9677 Steel Stake Adapter, Acme Thread
  - #9725-048 8 mm Steel Stake 48” (122 cm)
  - #9099-036 10 mm Flexible PVC Feedtube Length = 36” (91 cm)
  - O.D. = .505” (13 mm)
  - I.D. = .355” (9.4 mm)
  - Bulk Coils #9099 500’ (152 m)
- #9740 QC LTO 10 mm Compression x Male QC
- #9739 QC Barb Female QC x 10 mm Barb

The image on the right depicts a male-threaded R10 on a female-threaded PVC adapter. The image on the left depicts the new ½ PVC-5 Feedtube Assembly with Nelson’s PVC Stake Adapter. This fits directly onto a PVC Stake with Flexible PVC Feedtube running inside the pipe, connecting below to poly-tubing.

**Nelson R10 Stream Splitters**
Choose from the Red, One-Sided Stream Splitter or the Blue, Two-Sided Stream Splitter depending on tree proximity. Simply snap on to the R10 Rotator and protect adjacent tree trunks by creating a small wedge shape in the wetted pattern. This helps keep tree trunks dry and reduces disease problems.
Uniformity is calculated for specific areas defined as Field, Strips, and Trees. Field includes everything, Strips are bands (for this example 6' (1.8 m) wide) that encompass the trees, and trees are circles (6' (1.8 m) in diameter for this example) that represent theoretical root zones.

Product: R10, P2 9° Red Plate, #50 2TN Nozzle
Spacing: 28 x 16' (8.5 x 4.9 m) triangular, Trees 7 x 16' (2.1 x 4.9 m)  
% Overlap: 91%  
Precipitation Rate: .10 in./hour (2.5 mm/hour)  
Pressure: 40 PSI (2.8 BAR)  
Test#: 3012-NA

Overlap Color Contour Output (details of this typical example)

<table>
<thead>
<tr>
<th>Field</th>
<th>Strips</th>
<th>Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU</td>
<td>DU</td>
<td>SC</td>
</tr>
<tr>
<td>88%</td>
<td>81%</td>
<td>1.3</td>
</tr>
<tr>
<td>88%</td>
<td>84%</td>
<td>1.2</td>
</tr>
<tr>
<td>88%</td>
<td>85%</td>
<td>1.2</td>
</tr>
</tbody>
</table>

1Uniformity is calculated for specific areas defined as Field, Strips, and Trees. Field includes everything, Strips are bands (for this example 6' (1.8 m) wide) that encompass the trees, and trees are circles (6' (1.8 m) in diameter for this example) that represent theoretical root zones.

Nelson Overlap Computer Software Package (#3001) determines the nozzle size, pressure, and optimum sprinkler spacing for your irrigation system to achieve the highest possible uniformity. Complete performance information for the R10 and R10 Turbo (including radius, stream height, and Overlap color contours with CU, DU, SC and % overlap) is available from your Nelson dealer or the Nelson factory.

Nelson Low Angle Road Guard (Red)  
Nelson High Angle Road Guard (Orange)

Road guards easily snap on to convert the R10 and R10 Turbo Rotators to part-circle operation (irrigates 200°). Cutting guides are provided at 10° increments to increase the amount of arc irrigated.

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