

**R2000**

  
**ROTATOR®**

**R2000-12 TEMP**  
U.S. UNITS/14



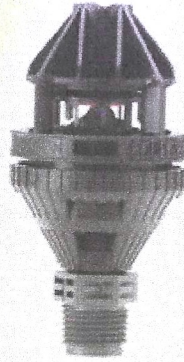
**R5**  
9 - 29 GPM  
34 - 110 LPH



**R10**  
0.3 - 0.7 GPM  
61 - 164 LPH



**R10 TURBO**  
0.6 - 2.1 GPM  
140 - 469 LPH



**R2000**  
0.7 - 3.5 GPM  
150 - 792 LPH



**R2000LP/WF**  
0.9 - 5.7 GPM  
191 - 1295 LPH

The R2000 is part of the Nelson Rotator® family of sprinklers.

 **NELSON IRRIGATION CORPORATION**





## No other agricultural

### Maximize Radius and Uniformity

Now there's a sprinkler you can count on to give you both — distance of throw and uniformity. Plus the proven reliability Nelson Rotators® are known for the world over. The Nelson R2000 Rotator® uses the same unique, patented drive principle and simplicity of design as our other Rotator® models. But we've given it a diffuser device which "fills in" the sprinkler pattern for greater uniformity and allows for a long distance of throw comparable to an impact sprinkler!



Diffused stream for high uniformity

## sprinkler matches the value,

### Quick Snap-Apart Design

By "squeezing" on the releasing points (the words "squeeze"), the cap easily twists off of the body for changing or cleaning the nozzle.



The right combination of radius and uniformity makes the R2000 the ideal sprinkler for a variety of tree and field crop applications.

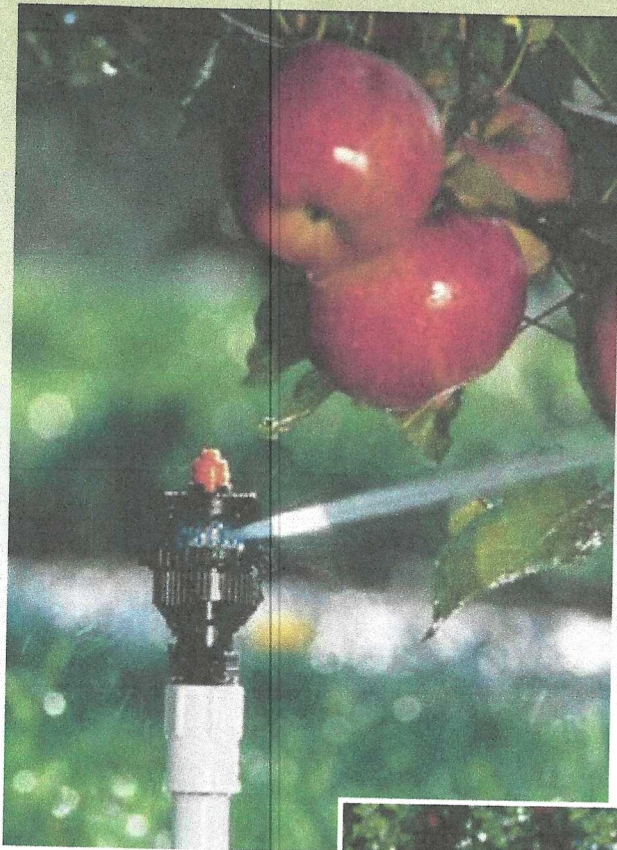


- High Uniformity
- Proven Reliability
- Long Throw Distance
- Low Cost, Less Maintenance
- Low Application Rate
- No Riser Vibration
- No Splash Down



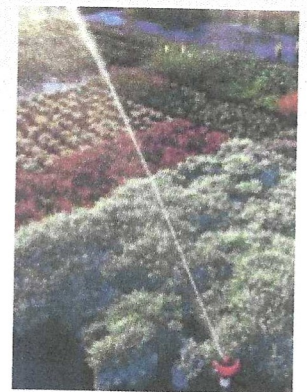
reliability, and uniformity of the R2000.

## CROP APPLICATIONS



Under canopy irrigation  
of tree crops.

High uniformity of the R2000 is a  
big plus in high density crops, such  
as nursery crops.



Overhead cooling and irrigation of  
tree and field crops.

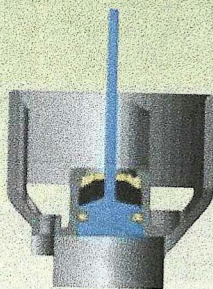


The R2000 used as part of a portable  
irrigation system that utilizes polyethylene  
pipe for laterals in combination with the  
Nelson FT5 feedtube assembly.

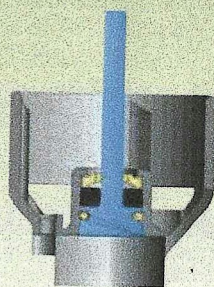


# FLOW REGULATING OPTIONS

## Nelson 2000FC Flow Control Nozzle



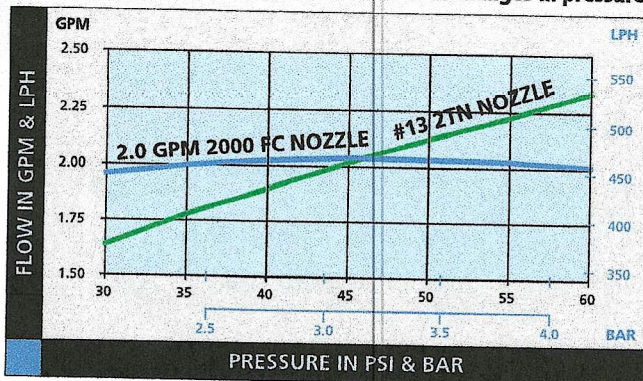
2000FC  
with high pressure



2000FC  
with low pressure

The 2000FC nozzles illustrated above are operating at the same flow. As pressure increases, the flexible flow washers reduce the orifice opening size giving a constant flow over a wide range of pressure.

### 2000FC nozzle and 2TN nozzle flow rates with changes in pressure



### Why use Flow Control Nozzles?

- Constant flow over a range of pressure
- Increases field uniformity
- Low cost, high value



Flow control nozzles (2000FC) are an excellent low cost option when system pressure ranges between 30-60 PSI (2.0-4.0 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, 50 or 60 PSI (2.0, 2.4, 2.8, 3.1, 3.4 or 4.0 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.

All models have a Male Acme Outlet and 1/2" FNPT or Female Acme Inlet for direct connection to PVC or threaded adapters.

PLATE	CAP ASSEMBLY W/ PLATE	NOZZLE	NOZZLE & BODY ASSY	COMPLETE ASSY LESS ADPTR
K1 6	10519-1106	33	10533-008	11991-0108
		FC	9223-085	11992-0108
K2 8	10519-1206	9	10533-009	11991-0209
		10	10533-010	11991-0210
		FC	9223-100	11992-0210
		33	10533-008	11991-0308
		9	10533-009	11991-0309
		10	10533-010	11991-0310
		FC	9223-085	11992-0308
		FC	9223-100	11992-0310
		33	10533-008	11991-0408
		9	10533-009	11991-0409
		10	10533-010	11991-0410
		FC	9223-085	11992-0408
		FC	9223-100	11992-0410
		11	10533-011	11991-0511
		12	10533-012	11991-0512
		FC	9223-125	11992-0512
		FC	9223-150	11992-0515
		11	10533-011	11991-0611
		12	10533-012	11991-0612
		FC	9223-125	11992-0612
		FC	9223-150	11992-0615
		11	10533-011	11991-0711
		12	10533-012	11991-0712
		FC	9223-125	11992-0712
		FC	9223-150	11992-0715
		13	10533-013	11991-0813
		14	10533-014	11991-0814
		FC	9223-150	11992-0815
		FC	9223-200	11992-0820
		13	10533-013	11991-0913
		14	10533-014	11991-0914
		FC	9223-150	11992-0915
		FC	9223-200	11992-0920
		13	10533-013	11991-1013
		14	10533-014	11991-1014
		FC	9223-150	11992-1015
		FC	9223-200	11992-1020
		13	10533-013	11991-1113
		14	10533-014	11991-1114
		FC	9223-150	11992-1115
		FC	9223-200	11992-1120
		13	10533-013	11991-1213
		14	10533-014	11991-1214
		FC	9223-150	11992-1215
		FC	9223-200	11992-1220
		15	10533-015	11991-1315
		16	10533-016	11991-1316
		FC	9223-250	11992-1325
		15	10533-015	11991-1415
		16	10533-016	11991-1416
		FC	9223-250	11992-1425
		15	10533-015	11991-1515
		16	10533-016	11991-1516
		FC	9223-250	11992-1525



MR















































MRDC



MDC



# Plate/Nozzle Options and Flow Performance in GPM and LPH

Plate Series	Plate Options	Recommended Nozzles	PSI							BAR				
			30	35	40	45	50	55	60	2.0	2.5	3.0	3.5	4.0
K1	 <b>K1 6° Cream</b> Radius: 21-25' (6.4-7.6 m) Stream Ht.: 15-25" (38-64 cm)	 Gray #8.3  .85 2000FC	.67	.72	.77	.82	.86	.90	.94	150	166	183	197	210
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the .85 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of .85 GPM (193 LPH).											
K2	 <b>K2 6° Light Blue</b> Radius: 22-26' (6.7-7.9 m) Stream Ht.: 15-32" (38-81 cm)	 White #9  Dark Blue #10  1.0 2000FC	.77	.83	.89	.94	1.00	1.05	1.10	172	192	210	229	245
			.97	1.05	1.12	1.19	1.25	1.31	1.37	217	242	266	286	306
	 <b>K2 9° Green</b> Radius: 23-27' (7.0-8.2 m) Stream Ht.: 18-37" (46-94cm)	 Gray #8.3  White #9  Dark Blue #10  .85 2000FC 1.0 2000FC	.67	.72	.77	.82	.86	.90	.94	150	166	183	197	210
			.77	.83	.89	.94	1.00	1.05	1.10	172	192	210	229	245
K3	 <b>K2 15° Yellow</b> Radius: 27-30' (8.2-9.1 m) Stream Ht.: 31-55" (79-140 cm)	 Gray #8.3 .85 2000FC 1.0 2000FC	.97	1.05	1.12	1.19	1.25	1.31	1.37	217	242	266	286	306
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the .85 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of .85 GPM (193 LPH).											
	 <b>K3 9° Brown</b> Radius: 25-28' (7.6-8.5 m) Stream Ht.: 19-33" (48-84 cm)	 Orange #11  Purple #12  1.25 2000FC 1.5 2000FC	1.17	1.27	1.36	1.45	1.53	1.61	1.68	261	294	323	350	375
			1.39	1.50	1.61	1.70	1.80	1.89	1.98	311	347	380	412	442
K4	 <b>K3 15° Red</b> Radius: 27-31' (8.2-9.4 m) Stream Ht.: 38-63" (97-160 cm)	 Orange #11  Purple #12  1.25 2000FC 1.5 2000FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.25 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.25 GPM (284 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
	 <b>K3 24° Gray</b> Radius: 29-35' (8.8-10.7 m) Stream Ht.: 68-103" (173-262 cm)	 Orange #11  Purple #12  1.25 2000FC 1.5 2000FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
	 <b>K4 6° Turquoise</b> Radius: 21-25' (6.1-7.6 m) Stream Ht.: 10-24" (25-61 cm)	 Yellow #13  Green #14  1.5 2000 FC 2.0 2000 FC	1.64	1.78	1.90	2.02	2.13	2.23	2.34	366	411	451	487	521
			1.85	2.00	2.15	2.28	2.40	2.53	2.64	413	463	509	550	590
K5	 <b>K4 9° Purple</b> Radius: 26-32' (7.9-9.4 m) Stream Ht.: 28-42" (71-107 cm)	 Yellow #13  Green #14  1.5 2000 FC 2.0 2000 FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.0 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.0 GPM (454 LPH).											
	 <b>K4 12° Wine</b> Radius: 27-31' (8.2-9.4 m) Stream Ht.: 32-51" (81-130 cm)	 Yellow #13  Green #14  1.5 2000 FC 2.0 2000 FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.0 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.0 GPM (454 LPH).											
	 <b>K4 15° Gold</b> Radius: 27-33' (8.2-10.1 m) Stream Ht.: 40-60" (102-152 cm)	 Yellow #13  Green #14  1.5 2000 FC 2.0 2000 FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.0 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.0 GPM (454 LPH).											
K5	 <b>K4 24° Black</b> Radius: 28-36' (8.5-11.0 m) Stream Ht.: 65-100" (165-254 cm)	 Yellow #13  Green #14  1.5 2000 FC 2.0 2000 FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 1.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 1.5 GPM (341 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.0 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.0 GPM (454 LPH).											
	 <b>K5 9° Orange</b> Radius: 27-31' (8.2-9.4 m) Stream Ht.: 25-42" (54-107 cm)	 Tan #15  Dark Red #16  2.5 2000FC	2.17	2.35	2.53	2.67	2.82	2.97	3.11	485	544	597	647	695
			2.50	2.70	2.89	3.07	3.23	3.40	3.54	559	624	685	739	792
K5	 <b>K5 15° Tan</b> Radius: 31-36' (9.4-11.0 m) Stream Ht.: 36-49" (91-124 cm)	 Tan #15  Dark Red #16  2.5 2000FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.5 GPM (568 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.5 GPM (568 LPH).											
K5	 <b>K5 24° Blue</b> Radius: 32-37' (9.8-11.3 m) Stream Ht.: 76-104" (193-264 cm)	 Tan #15  Dark Red #16  2.5 2000FC	Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.5 GPM (568 LPH).											
			Within the recommended pressure range of 30-60 PSI (2.0-4.0 BAR), the 2.5 2000 FC flow control nozzle is flow regulating within a flow range of no more than 3.5% greater and 8% less than the nominal flow of 2.5 GPM (568 LPH).											

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 color of the diffuser should match the color band on the R2000 plate (i.e. K1 and K2 plates require a white diffuser, K3 and K4 plates require a black diffuser and K5 plates require a gray diffuser). The absence of flow data on the above chart indicates the pressure is outside the recommended range.

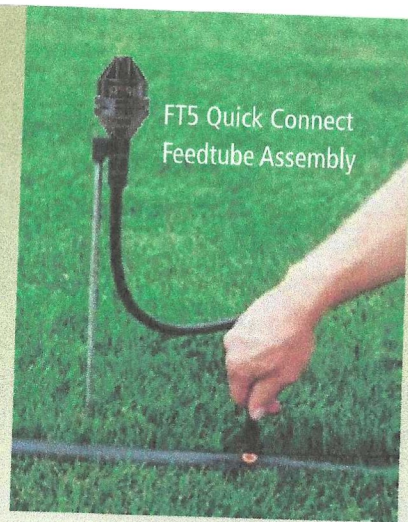


# R2000 MOUNTING OPTIONS

## 10 mm Feedtube Assemblies

The 3/4 PVC-10, FT4 and FT5 Feedtube Assemblies all utilize 10 mm feedtube and connect R2000 Rotators to polyethylene laterals. The 3/4 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. See the Nelson Rotator® Feedtube Assemblies brochure for details.



FT5 Quick Connect Feedtube Assembly

### 3/4 PVC-10 mm Feedtube

Part #11452-12136  
(assembled - exit hole  
10" from top)

R2000, Acme Base  
#11429 PVC Stake  
Adapter (Black) 10mm

3/4" PVC Stake

#9099-036  
10 mm Flexible  
PVC Feedtube  
& #9774 LTO  
Length = 36" (91 cm)  
O.D. = .505" (13 mm)  
I.D. = .355" (9.4 mm)



### FT4 Feedtube

Part #9752-036 (assembled,  
does not include stake)

R2000, Acme Base  
#9677 Steel Stake  
Adapter, Acme Thread

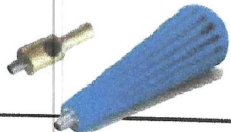
#9099-036 10 mm  
Flexible PVC Feedtube  
Length = 36" (91 cm)  
O.D. = .505" (13 mm)  
I.D. = .355" (9.4 mm)  
Bulk Coils #9099  
500 ft. (152 m)

#9725-024 8 mm Steel  
Stake 24" (61 cm) or  
#10160 8 mm Fiber-  
glass Stake 24" (61 cm)

#9774 LTO 10mm  
Compression x 7mm Barb



For 3/4 PVC-10 and FT4 use  
Punch Tool #9810 or Drill Tool  
#9835-002.



### FT5 Feedtube

Part #9737-048 (assembled,  
does not include stake)

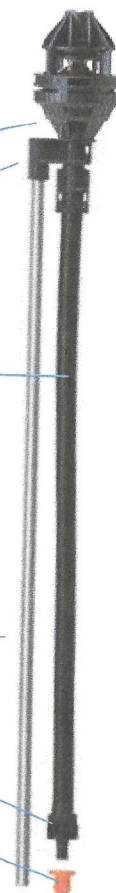
R2000, Acme Base

#9677 Steel Stake  
Adapter, Acme Thread

#9099-048 10 mm  
Flexible PVC Feedtube  
Length = 48" (122 cm)  
O.D. = .505" (13 mm)  
I.D. = .355" (9.4 mm)  
Bulk Coils #9099  
500 ft. (152 m)

#9725-048 8 mm Steel  
Stake 48" (122 cm)

#9740 QC LTO  
10 mm Compression  
x Male QC  
#9739 QC Barb  
Female QC x 10 mm Barb



For FT5 use Punch Tool #9776  
or Drill Tool #9835-001.



Use Stake Installation Tool  
#10287 for 6.3mm Steel  
Stake and #10288 for  
8mm Steel Stake



One of the most common  
methods of mounting  
an R2000 is on a PVC  
riser connected to an  
underground lateral line.



# R2000 OPTIONS AND ACCESSORIES

2000 SERIES 2TN NOZZLE REMOVAL TOOL	R2000(WF) PLATE REMOVAL TOOL	R2000(WF) CAP REMOVAL TOOL	NEW-STYLE R2000 STREAM SPLITTER	LEGACY R2000 STREAM SPLITTER
				

## #12260

Removes the nozzle from the R2000(WF).

## #9620

Removes the plate from the R2000(WF).

## #10689






Easily removes the cap assembly on the R2000(WF).

## #12056

Protect adjacent tree trunks by creating a small wedge shape in the wetted pattern.

## #12057

Use on Legacy Style R2000 to protect adjacent tree trunks.

R2000(WF) FLUSH TOOL	NEW STYLE R2000(WF) MOTOR REMOVAL TOOL	COMPRESSION ADAPTER	R2000(WF) HIGH-ANGLE ROAD GUARD	PC-R2000WF & PC-R2000LP
				

## #9210

Disconnect and reconnect sprinkler for nozzle cleaning while under pressure.

## #12215

Removes the motor from the R2000(WF).




## #10623

1/2" Spigot x Compression Barb connects 10mm tubing to PVC.

## #12213-001

Snap on new style R2000(WF) to convert to part-circle operation (190°).

#10242-1xxx (i.e. PC-R2000WF WF12 #11 is #10242-1211) #11296-xxxx (PC-R2000LP). Road Guard unassembled

THREADED CAP FOR ACME ADAPTER	FEMALE ACME X 1/2" PVC SPIGOT	PRESSURE GAUGE TAP ASSEMBLY
		

## #10615

Connects to Acme thread and acts as a shutoff cap.

## #10352

Enables easy attachment to a 1/2" PVC riser.

#10367 Female Acme x Male Acme Gauges:  
0-60 PSI, #8968-002  
0-100 PSI, #8968-003  
0-160 PSI, #8968-004



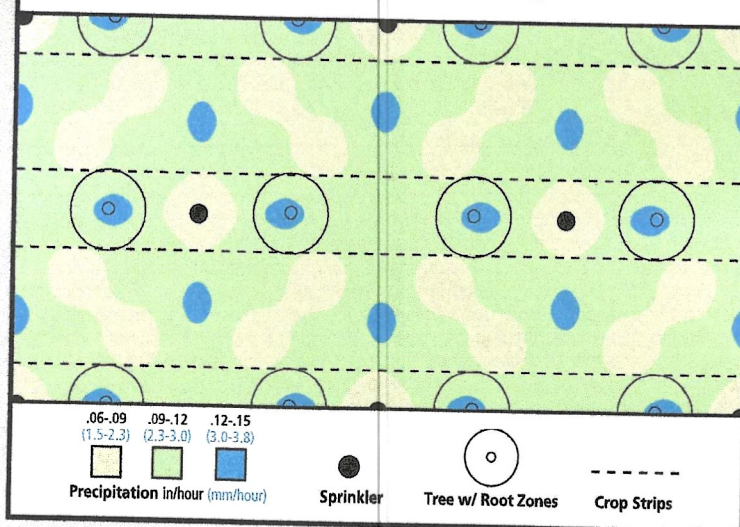
# NELSON OVERLAP SOFTWARE

## Overlap Color Contour Output (details of this typical example)

Product: R2000, K2 15° Yellow Plate, #10 2TN Nozzle  
 Spacing: 48 x 24' (14.6 x 7.3 m) triangular, Trees 24 x 24' (7.3 x 7.3 m)  
 % Overlap: 85% Precipitation Rate: .10 in./hour (2.5 mm/hour)  
 Pressure: 50 PSI (3.4 BAR) Test#: 859-CA

	CU	DU	SC
Field <sup>1</sup>	89%	84%	1.2
Strips <sup>1</sup>	90%	83%	1.3
Trees <sup>1</sup>	93%	89%	1.1

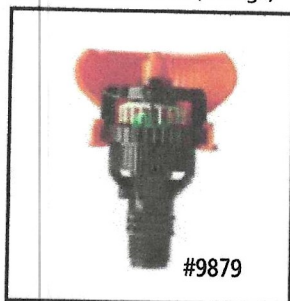
<sup>1</sup>Uniformity is calculated for specific areas defined as Field, Strips, and Trees. Field includes everything, Strips are bands (for this example 10' (3 m) wide) that encompass the trees, and trees are circles (10' (3 m) in diameter for this example) that represent theoretical root zones.



## Legacy Low Angle Road Guard (Red)



## Legacy High Angle Road Guard (Orange)



# Overlap

**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 R2000 (including radius, stream height, and Overlap color contours with CU, DU, SC and % overlap) is available from your Nelson dealer or the Nelson factory.



Road guards easily snap on to convert the R2000 to part-circle operation (irrigates 200°). Cutting guides are provided at 10° increments to increase the amount of arc irrigated.

### WARRANTY AND DISCLAIMER

Nelson R2000 Rotators®, Feedtube Assemblies, and accessories are warranted for one year from the date of original sale to be free of defective material and workmanship when used within the working specifications for which the products were designed and under normal use and service. The manufacturer assumes no responsibility for installation, removal or unauthorized repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from any defects or breach of warranty. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF MANUFACTURER. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of this warranty nor to make any representations or warranty not contained herein.

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innovation in irrigation™  
**NELSON**

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