



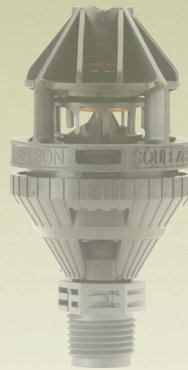
R5
9 - 29 GPH
34 - 110 LPH



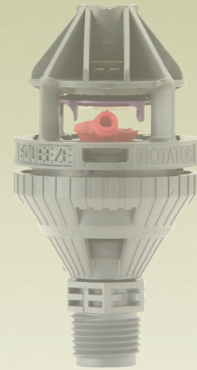
R10LP/R10
0.3 - 1.34 GPM
61 - 311 LPH



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 R10LP/R10 and R10 Turbo are part of the Nelson Rotator® family of sprinklers.

 **NELSON IRRIGATION CORPORATION**



No other

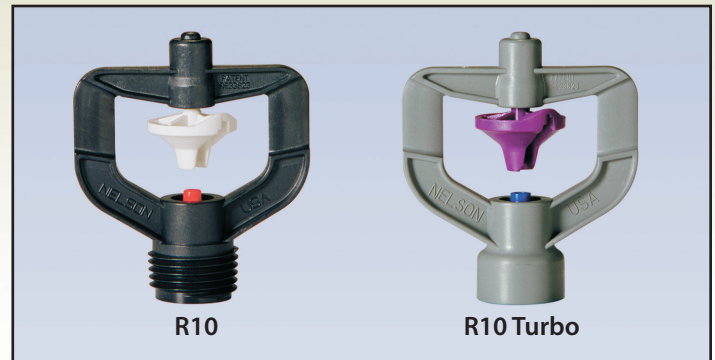
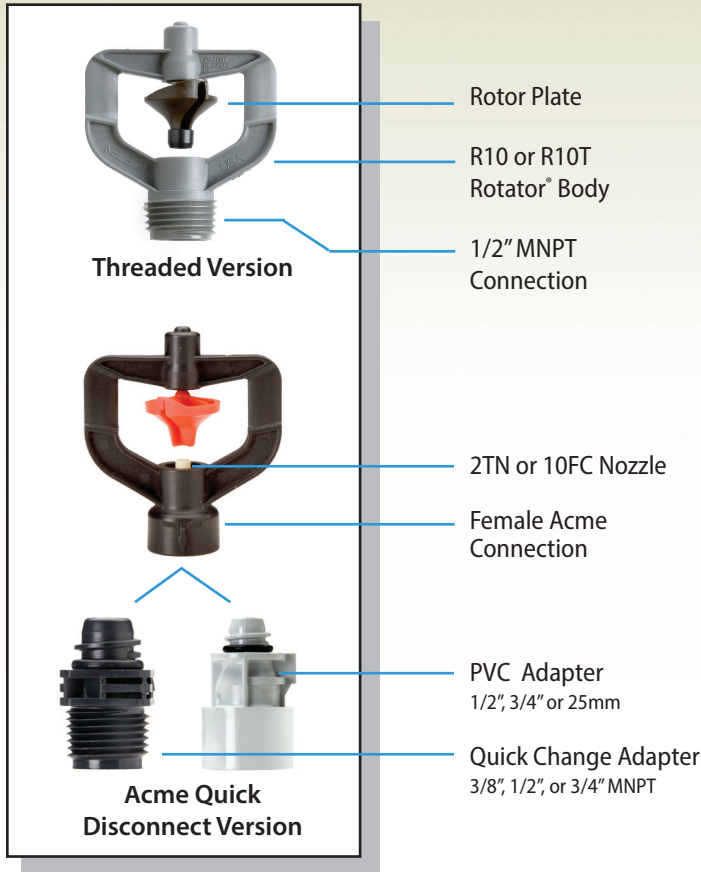


agricultural sprinkler matches the dependability

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. A new low pressure version, the R10LP with the Green Plate, became available in the spring of 2024.

R10 & R10 Turbo Components



A special motor (brake) design in the R10 Turbo Rotators has more resistance to maximize radius, reliability, and uniformity.

Nelson 2TN Nozzle

- long wear and high accuracy
- color-coded for easy identification
- easy change snap in or out design

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



and durability of the R10 and R10 Turbo.

APPLICATIONS



Under canopy irrigation for tree crops.



Overhead cooling for tree crops.

Nelson Low Angle Road Guard (Red)



#9590-030

Nelson High Angle Road Guard (Orange)



#9879

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.



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.



Nelson R10 Stream Splitters



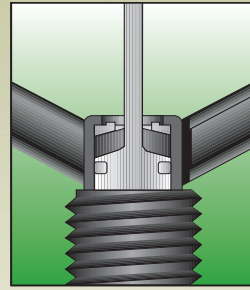
#11285



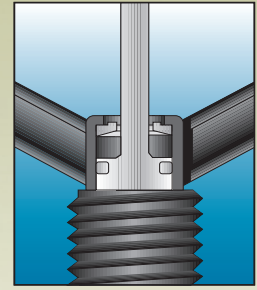
#1127

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.

R 10 NOZZLE OPTIONS AND FLOW REGULATION



10FC with high pressure



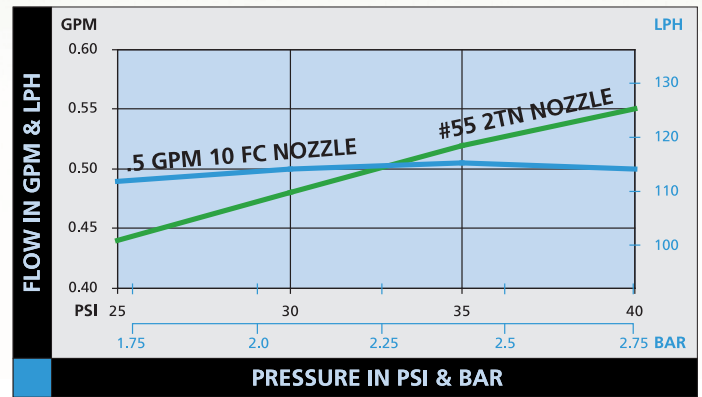
10FC with low pressure

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












10FC nozzle and 2TN nozzle flow rates with changes in pressure

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. See page 8.













NEW! Low Pressure R10LP Plate/Nozzle Options and Flow Performance in GPM and LPH

Plate Series	Plate Options	Recommended Nozzles	PSI										BAR					
			20		22		25		28		30		1.5		1.75		2	
			Flow	Rad. (ft)	Flow	Rad. (ft)	Flow	Rad. (ft)	Flow	Rad. (ft)	Flow	Rad. (ft)	Flow	Rad. (m)	Flow	Rad. (m)	Flow	Rad. (m)
P6	P6 15° Green Rad. 22-25' (6.7-7.6 m) Stream Ht. 30-45" (76-114 cm)	Dk. Blue #78	—	—	0.83	23	0.88	23	0.93	24	0.97	25	187	7.0	201	7.0	217	7.6
		Orange #86	0.95	23	1.00	23	1.07	24	1.13	24	1.17	25	225	7.0	245	7.3	261	7.6
		Purple #94	1.14	22	1.19	23	1.27	24	1.34	24	—	—	269	6.7	290	7.3	311	7.3

R10 Plate/Nozzle Options and Flow Performance in GPM and LPH

Plate Series	Plate Options	Recommended Nozzles	PSI						BAR						
			25	30	35	40	45	50	1.75	2	2.25	2.5	2.75	3	3.25
P2	P2 9° Red Radius 18-20' (5.5-6.1 m) Stream Ht. 14-23" (36-58 cm) 	 Lt. Blue #40	—	—	.28	.30	.32	.34	—	—	61.4	64.7	68.0	71.3	74.6
		 Lt. Purple #45	.29	.32	.35	.37	.39	.42	66.4	71.3	76.3	80.6	83.9	87.2	91.5
		 Dk. Green #50	.36	.39	.43	.46	.48	.51	82.3	87.2	93.4	99.4	104	108	112
		.35 10FC (79 LPH) .43 10FC (98 LPH)	Within the recommended pressure range of 25-50 PSI (1.75-3.25 BAR), the .35 10 FC flow control nozzle is flow regulating within a flow range of no more than 0% greater and 10% less than the nominal flow of .35 GPM (79.5 LPH).												
P4	P4 9° White Radius 18-22' (5.5-6.7 m) Stream Ht. 14-24" (36-61 cm)  P4 15° Orange Radius: 23-25' (7.0-7.6 m) Stream Ht. 40-50" (102-127 cm) 	 Dk. Green #50	—	—	.43	.46	.48	.51	—	—	93.4	99.4	104	108	112
		 Lt. Yellow #55	.44	.48	.52	.55	.59	.62	101	107	114	120	125	131	137
		 Lt. Red #60	.51	.56	.61	.65	.69	.73	117	125	133	141	147	154	161
		.50 10FC (114 LPH)	Within the recommended pressure range of pressure range of 25-50 PSI (1.75-3.25 BAR), the .5 10 FC flow control nozzle is flow regulating within a flow range of no more than 0% greater and 10% less than the nominal flow of .5 GPM (114 LPH).												

R10 Turbo Plate/Nozzle Options and Flow Performance in GPM and LPH

Plate Series	Plate Options	Recommended Nozzles	PSI						BAR						
			25	30	35	40	45	50	1.75	2	2.25	2.5	2.75	3	3.5
P6	P6 9° Blue R.20-22' (6.1-6.7 m) Stream Ht. 17-30" (43-76 cm)  P6 15° Purple R. 25-26' (7.6-7.9 m) Stream Ht. 33-49" (84-124 cm) 	 Gray #65	.61	.67	.72	.77	.82	.86	140	150	158	166	175	183	197
		 White #70	.70	.77	.83	.89	.94	1.00	160	172	182	192	202	210	229
		 Dk. Blue #78	.88	.97	1.05	1.12	1.19	1.25	201	217	230	242	254	266	286
		.75 10FC (170 LPH)	Within the recommended pressure range of 25 to 50 PSI (1.75-3.5 BAR), the .75 10 FC flow control nozzle is flow regulating within a flow range of no more than 0% greater and 10% less than the nominal flow of .75 GPM (170 LPH).												
P8	P8 15° Gold R. 26-30' (7.9-9.1 m) Stream Ht. 38-58" (97-147 cm)  P8 24° Brown R. 27-33' (8.2-10.1 m) Stream Ht. 64-99" (163-251 cm) 	 Orange #86	1.07	1.17	1.27	1.36	1.45	1.53	245	261	278	294	308	323	350
		 Purple #94	1.27	1.39	1.50	1.61	1.70	1.80	290	311	329	347	365	380	412
		 Yellow #102	1.50	1.64	1.78	1.90	2.02	2.13	343	366	389	411	431	451	487
		1.25 10FC (284 LPH)	Within the recommended pressure range of 30 to 50 PSI (2-3.5 BAR), the 1.25 10 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).												
P8	P8 24° Brown R. 27-33' (8.2-10.1 m) Stream Ht. 64-99" (163-251 cm) 	1.5 10 FC (341 LPH)	Within the recommended pressure range of 30 to 50 PSI (2-3.5 BAR), the 1.5 10 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).												
		 Dk. Blue #78 for use with P8 24° plate only	—	.97	1.05	1.12	1.19	1.25	—	217	230	242	254	266	286
		1.0 10FC (227 LPH) for use with P8 24° plate only	Within the recommended pressure range of 30 to 50 PSI (2-3.5 BAR), the 1.0 10 FC flow control nozzle is flow regulating within a flow range of no more than 0% greater and 10% less than the nominal flow of 1.0 GPM (227 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 absence of flow data on the above chart indicates the pressure is outside the recommended range.

UA-5 (5mm) UNIVERSAL MOUNTING CONFIGURATIONS


SELECT (UA-5 CONFIGURED ASSEMBLIES) OR (PARTS) + (ROD STAKE ADAPTER & STAKE) OR (PVC STAKE)



OPTION 1: UA-5 ROD STAKE CONFIGURATION



13608 Rod Stake Adapter



Stake




Shown Assembled

(shown below)


Rod Stake Option requires Universal Rod Stake Adapter (13608) and Steel or Fiberglass Stake. Use Universal Steel Stake Install Tool (14000) to protect assembly while pounding stake into ground.

Page 31






OPTION 2: UA-5 PVC STAKE CONFIGURATION



(5 mm) UA-5, Adapter & LTO Assembly 13693-0xx




11259-216 or 11259-222 PVC Stake

Choose from 16" or 22" PVC stake.

#13099 Adapter UA-5, 5mm Tube x 1/2" Acme

Tube & LTO Assemblies
#11283-030 5 mm X 30" (76 cm)
or
#11283-048 5 mm X 48" (122 cm)




UA-5 configurations include a UA-5 Adapter and Tube & LTO Assembly

#13693-030 5 mm X 30" (76 cm) Tube
or
#13693-048 5 mm X 48" (122 cm) Tube

See Rod Stake Adapter above


#9726-024 Stake Steel, 1/4" (6.3mm) x 24" (61 cm)

#10040-024 Stake Fiberglass, 1/4" (6.3 mm) x 24" (61 cm)



#11259-216 Stake, PVC with hole, 1/2" x 16" (40 cm)

#11259-222 Stake, PVC with hole, 1/2" x 22" (56 cm)



For 5 mm options use Punch Tool #9349 or Drill Tool #9835-003.



Pressure Gauge Tap Assembly #10367 (order gauge separately)



FT3 (5mm)

R10, Acme Base

5mm Tubing Options*

#12598
17" FT3 Stake & Adapter Assembly

#13154-030 Complete
16" FT3 Stake & 30" Tubing Assembly

#13154-048 Complete
16" FT3 Stake & 48" Tubing Assembly



10 mm Feedtube Assemblies

The 3/4 PVC-10, FT4 and FT5 Feedtube Assemblies all utilize 10 mm feedtube and connect R10 & R10 Turbo 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. With the addition of collar #9195 to FT4 or FT5, they can be converted to mount on a 3/4" PVC stake.

FT4 (10mm)

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)

#9774 LTO 10mm Compression x 7mm Barb

#9752-036 36" Tubing Assy Less Stake

3/4 PVC-10 (10mm)

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

#9774 LTO 10mm Compression x 7mm Barb

3/4" PVC Stake

FT5 (10mm)

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 10mm Compression x Male QC

#9739 QC Barb Female QC x 10 mm Barb

#9737-048 48" Tubing Assembly Less Stake

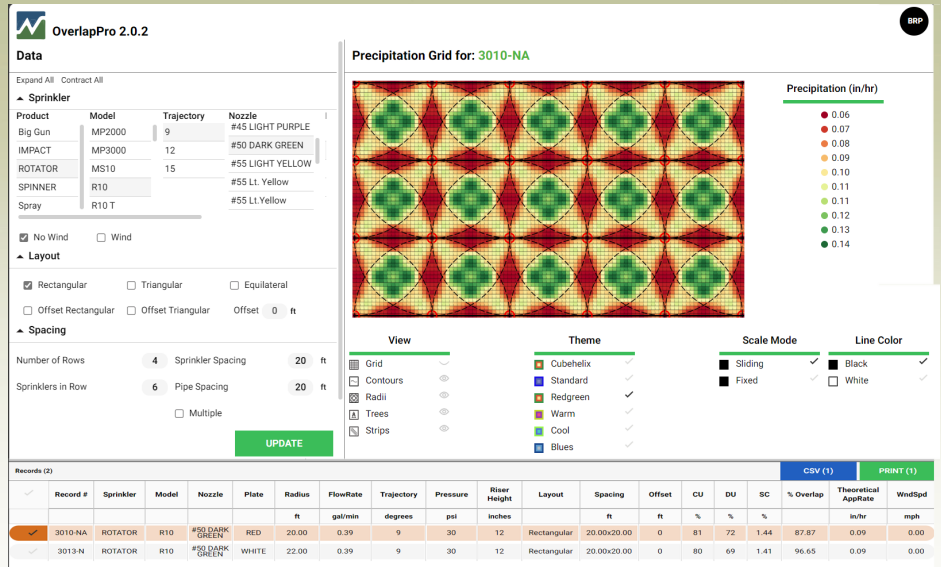
For FT5 use White Punch Tool #9776 or Drill Tool #9835-001.

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

OverlapPro®

OverlapPro is an online software program (www.overlappro.com) capable of analyzing the theoretical uniformity of permanent or solid set sprinkler spacing. Select a specific sprinkler model configuration and spacing criteria, and the software will calculate the following:

- Precipitation Rate
- Christiansen's Coefficient of Uniformity (CU)
- Distribution Uniformity (DU)
- Scheduling Coefficient (SC)



OverlapPro allows you to graphically depict and chart theoretical performance for comparative purposes.



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 25, 30, 35, 40, 45, or 50 PSI (1.7, 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.

MR, MRDC & MDC Connection Options	
Inlet	Outlet
Female Acme, 1/2" MNPT, 1/2" FNPT	Male Acme, 1/2" MNPT



848 Airport Road, Walla Walla, Washington 99362 U.S.A.
 Tel: +1 509.525.7660 / Fax: +1 509.525.7907
info@nelsonirrigation.com / nelsonirrigation.com

WARRANTY AND DISCLAIMER Nelson Irrigation Products and Accessories are warranted for one year from date of original sale to be free of defective materials 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. The manufacturer's liability under this warranty is limited solely to replacement or repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from 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.

Rotator and OverlapPro are registered trademarks of Nelson Irrigation Corporation. Copyright © 2024 Nelson Irrigation Corporation.
www.nicpat.com