

PORTABLE IRRIGATION WITH ROTATOR™ SPRINKLERS



R10 TURBO

.61 - 1.25 GPM
140 - 276 LPH



R2000

.67 - 3.54 GPM
150 - 792 LPH



R2000WF

1.64 - 5.4 GPM
366 - 1,222 LPH

A New Concept — Poly 2000

Poly 2000 is a portable irrigation system in which polyethylene pipe is substituted for aluminum or PVC. Its greatest strengths are lower cost, mechanized portability and a highly uniform low application rate made possible by the Nelson Rotators (the R10 Turbo, R2000 and R2000 WIND-FIGHTER.) The idea isn't new, but one that is certainly interesting for row crops, nursery crops, sod, and many situations where it is important to move the system easily and quickly.

How does the Poly 2000 work?

Simply lay the poly tubing lateral out and install the #9739 QC Barb (a component of our "FT5" Feedtube Assembly) Next snap in the #9740 QC LTO and mount a Rotator on the steel rod stake. When it is time to move the system, simply snap the LTO out of the barb, collect up the Rotator and stake, and then roll the poly tubing up for the next setting. It is quick, simple and a low cost alternative.

R2000WF Windfighter

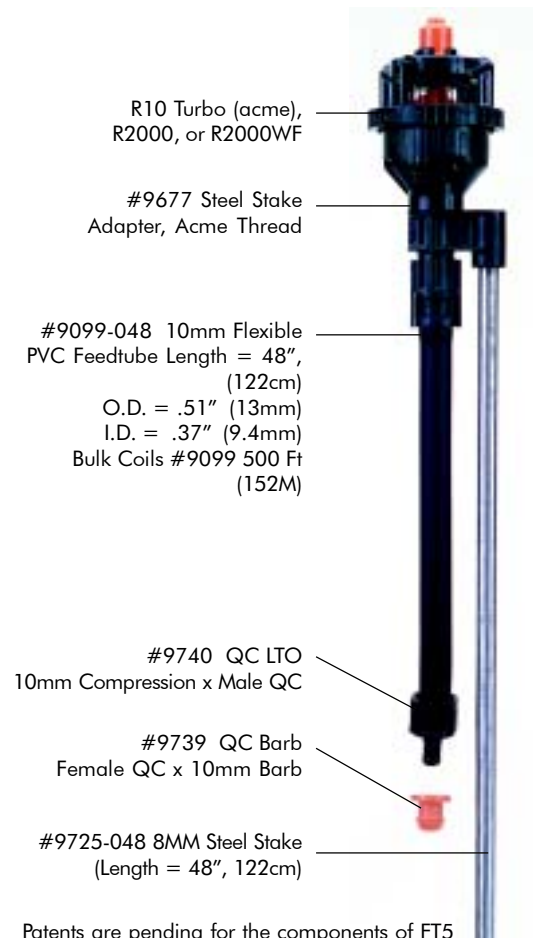
With its release in 1998 the R2000 WIND-FIGHTER will often be the sprinkler for poly 2000 systems. Its development was shaped by outdoor uniformity tests. Its uniformity is often better outdoors than indoors. It is the Rotator of choice for wider spacings and windy conditions. Because it can be used on wider spacings it will offer the lowest total system cost and a lower cost of installation.



Road Guard

The R10, R2000, and R2000WF can be converted into part-circle sprinklers with high-angle or low-angle Road Guards.

FT5 FEEDTUBE ASSEMBLY



Rotator	Spacing (Triangular)	Rate	Pressure	CU	DU	SC	% overlap	Maximum Poly Pipe Lateral Length			
								3/4"	1"	1.5"	2"
R10 Turbo #70 2TN Nozzle	26 x 30 ft. (7.9 x 9.1M)	.11 in/hr (2.8 mm/hr)	40 PSI (2.76 BAR)	91%	87%	1.2	90%	Ft. 290	440	950	1500
R2000 #13 2TN Nozzle	32 x 40 ft. (9.8 x 12.2M)	.13 in/hr (3.3 mm/hr)	45 PSI (3.1 BAR)	93%	90%	1.1	96%	Ft. 180	290	650	1000
R2000WF #14 2TN Nozzle	40 x 46 ft. (12.2 x 13.7M)	.13 in/hr (3.3 mm/hr)	50 PSI (3.44 BAR)	87%*	80%*	1.4*	91%*	Ft. -	-	600	960
								M. 38	134	290	457
								M. 55	88	198	305
								M. -	-	182	293

*To allow no more than a 5 PSI + or - pressure deviation due to friction loss, assumes no elevation change.

What about sprinkler spacings, pressures and uniformity?

The table above gives three typical sprinkler layouts for a poly 2000 system. The uniformity's are extremely good, the application rate is low and the system does not require high pressure. With the help of our new OVERLAP software, many other highly uniform configurations can be identified.

What about the polyethylene laterals?

For best results with FT5 use a polyethylene pipe with a pressure rating of 60 PSI. We have found with some lower rated polyethylene pipe the hole for the #9739 barb will elongate and can cause leaking at that point. A 60 PSI rated polyethylene is not so thick and stiff to cause handling and installation challenges, but strong enough to deter leakage problems. To speed up initial installation, have the #9739 barb installed when the poly pipe is manufactured.

Snaking due to expansion and contraction of the pipe can lead to several problems ... kinking can restrict flow in the pipe... it can stress the barb connection ... if severe enough, it can pull the stake out of the ground. The amount of snaking observed will vary with different blends of polyethylene. For further help in selecting a polyethylene pipe contact the Nelson Factory.

Submains, Couplers & Stakes

Submains can be buried PVC, portable aluminium, certa-lock pipe, or layflat discharge hose. If the laterals are the only portion of the system that needs to be portable, buried PVC is a very good way to go.

For polyethylene pipe insert couplers with worm clamps which are used for splicing. Cam lock fittings at the beginning and at the end of each lateral can reduce installation and removal time significantly.

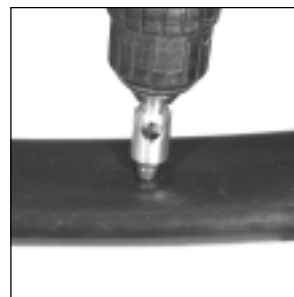
We are providing an 8mm steel stake with the FT5 and we find it to be very satisfactory. If you prefer a 3/4" PVC stake, it can be used with the addition of the #9195 collar to FT5.

Getting Started

If you're ready to give Poly 2000 a try contact your Nelson Dealer or give us a call at the factory. We would be happy to put you in touch with one of our qualified dealers.



Polyethylene pipe can be installed or retrieved from the field with the aid of a tractor driven reel as shown above.



Installation of the 9739 QC Barb is quick and simple. Tools required: Drill Punch Tool #9835-001, Drill Installation Tool #9845, and a portable drill.