



WATER APPLICATION SOLUTIONS FOR THE NURSERY MARKET



# MS10 ROTATOR®

15-40 PSI  
14-27' RAD.

NOZZLE  
**13827-XXXX (Assembled)**

1/2" MNPT CONNECTION  
Also available in Acme Connection.

THREAD  
1/2" MNPT = 1  
1/2" Female Acme = 2

PLATE  
Black 24°, High Angle = 2  
Green 9°, Low Angle = 1

EXAMPLE:  
MS10 Rotator with 1/2" MNPT (1),  
Black Plate (2) and Turquoise #17  
Nozzle (17) = #13827-1216

THE MS10 IS A HIGH-VOLUME, MULTI-STREAM, FAST-TURNING ROTATOR® FOR UNIFORM IRRIGATION OF CONTAINER GROWN PLANTS. IT CAN BE USED IN BOTH AN UPRIGHT AND INVERTED POSITION.

## MS10 PRELIMINARY FLOW PERFORMANCE & RADIUS

Black Plate Radius is measured with a 24" (61 cm) UPRIGHT sprinkler riser.

24° HIGH ANGLE BLACK PLATE	2TN Nozzle	PRESSURE (PSI)											
		15		20		25		30		35		40	
		GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.
	#12 Purple	0.99	14	1.14	14	1.27	15	1.39	15	1.50	16	1.61	16
	#13 Yellow	1.16	15	1.34	16	1.50	17	1.64	17	1.78	17	1.90	17
	#14 Green	1.32	17	1.52	18	1.70	20	1.85	20	2.00	20	2.15	20
	#15 Tan	1.53	18	1.77	20	1.98	22	2.17	22	2.35	22	2.53	22
	#16 Red	1.77	20	2.04	22	2.28	24	2.50	24	2.70	25	2.89	25
	#18 Gold	2.26	23	2.61	24	2.92	26	3.20	26	3.44	26	3.68	26
	#20 Brown	2.75	24	3.18	25	3.56	26	3.90	26	4.18	26	4.48	26
	Radius in Feet, GPM = Flow in gallons per minute												

PRESSURE (BAR)																	
1		1.25		1.5		1.75		2		2.25		2.5		2.75			
LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.		
220	4.5	247	4.5	269	4.6	291	4.7	310	4.7	329	4.7	348	4.8	365	4.9		
259	4.8	290	4.9	318	5.0	343	5.2	366	5.2	390	5.2	411	5.2	431	5.2		
294	5.4	329	5.6	360	5.8	389	6.1	413	6.1	439	6.1	465	6.1	488	6.1		
342	5.8	383	5.8	420	5.9	453	7.0	485	7.0	515	6.9	547	6.9	574	6.9		
395	6.4	441	6.7	483	7.1	522	7.6	558	7.6	592	7.6	625	7.6	655	7.6		
505	7.4	564	7.6	619	7.8	668	8.0	715	8.0	754	8.0	796	8.0	835	8.0		
615	7.7	688	7.8	754	7.9	815	8.0	871	8.0	917	8.0	969	8.0	1016	8.0		
Radius in Meters, LPH = Flow in liters per hour																	

Green Plate Radius is measured with a 60" (152 cm) INVERTED sprinkler riser.

9° LOW ANGLE GREEN PLATE	2TN Nozzle	PRESSURE (PSI)											
		15		20		25		30		35		40	
		GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.	GPM	RAD.
	#12 Purple	0.99	13	1.14	13	1.27	14	1.39	14	1.50	14	1.61	14
	#13 Yellow	1.16	13	1.34	13	1.50	14	1.64	14	1.78	14	1.90	14
	#14 Green	1.32	13	1.52	13	1.70	14	1.85	14	2.00	14	2.15	15
	#15 Tan	1.53	13	1.77	14	1.98	15	2.17	15	2.35	15	2.53	15
	#16 Red	1.77	13	2.04	14	2.28	15	2.50	15	2.70	16	2.89	16
	#18 Gold	2.26	13	2.61	14	2.92	15	3.20	15	3.44	16	3.68	16
	#20 Brown	2.75	13	3.18	14	3.56	15	3.90	15	4.18	16	4.48	16
	Radius in Feet, GPM = Flow in gallons per minute												

PRESSURE (BAR)																	
1		1.25		1.5		1.75		2		2.25		2.5		2.75			
LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.	LPH	RAD.		
220	4.2	247	4.2	269	4.3	291	4.4	310	4.4	329	4.3	348	4.2	365	4.2		
259	4.2	290	4.2	318	4.3	343	4.4	366	4.4	390	4.3	411	4.2	431	4.2		
294	4.2	329	4.2	360	4.3	389	4.4	413	4.4	439	4.4	465	4.5	488	4.5		
342	4.2	383	4.3	420	4.5	453	4.7	485	4.6	515	4.6	547	4.5	574	4.5		
395	4.2	441	4.3	483	4.5	522	4.7	558	4.7	592	4.7	625	4.8	655	4.8		
505	4.2	564	4.3	619	4.5	668	4.7	715	4.7	754	4.7	796	4.8	835	4.8		
615	4.2	688	4.3	754	4.5	815	4.7	871	4.7	917	4.7	969	4.8	1016	4.8		
Radius in Meters, LPH = Flow in liters per hour																	

WARRANTY AND DISCLAIMER: Nelson MS10 sprinklers 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.

## ADVANTAGES OF NELSON'S UNIQUE ACME THREAD

1. Quick removal for cleaning plugged nozzles
2. Direct connection to Stake/Tube assemblies
3. Easy to add a regulator or a check valve
4. Quickly cap a riser using Acme Cap #10615
5. Multiple adapters available: (3/8", 1/2", 3/4" MNPT) and (1/2", 3/4", 25mm socket)
6. Quick **DETACHABLE** riser extensions use the Acme thread



1/2" Male Acme X  
PVC Socket Adapter

3/4" - 10060-002  
or 1/2" - 10060-001

Fits on PVC Pipe.



1/2" Male Acme X  
MNPT Adapter

3/4" - 9466  
or 1/2" - 9316-002

## ACCESSORIES



HIGH ANGLE ROAD GUARD  
#9879 converts MS10 to  
part-circle operation (200°).



1/2" ACME CAP #10615  
connects to Acme  
thread and acts as a  
shutoff cap.

## ALSO USE WITH 1/2" MINI REGULATOR/DRAIN CHECKS

MINI REGULATOR DRAIN CHECK	MINI REGULATOR	MINI DRAIN CHECK	
Pressures (-0xx) 20 PSI (-020) 30 PSI (-030) 35 PSI (-035) 40 PSI (-040) 45 PSI (-045) 50 PSI (-050) 60 PSI (-060)		Pressures (-0xx) 20 PSI (-020) 35 PSI (-035)	
CONNECTION (INLET X OUTLET)	MRDC	MR	MDC
1/2" FNPT Inlet x Acme Outlet	*10406-0xx	*10020-0xx	*11140-0xx
Acme Inlet x Acme Outlet	*10407-0xx	*10099-0xx	*11139-0xx
1/2" FNPT Inlet x 1/2" MNPT Outlet	*11150-0xx	*11146-0xx	*11154-0xx

**MINI REGULATOR DRAIN CHECK:** Regulates pressure AND opens 2-5 PSI below nominal pressure (reduces effect of drain down).\*

**MINI REGULATOR:** Regulates pressure only.\*

**MINI DRAIN CHECK:** Opens 2-5 PSI below nominal pressure (reduces effect of drain down).

Maximum flow is 5 GPM.

\*Note: MR require 5 PSI above nominal pressure for correct operation.

Application notes: R10/R2000 directly connect.

## HIGHLY-VERSATILE **DETACHABLE** RISER CONFIGURATION

Detachable risers are used to temporarily raise the mounting height of the ms10 when needed. Glue the Nelson #10352 1/2" Female Acme x 1/2" PVC spigot into a 1/2" PVC Coupler on the bottom and the Nelson #10060-001 1/2" Male Acme X 1/2" PVC Socket with a piece of 1/2" schedule 40 pvc in between to construct the riser extension.



Detachable  
Riser  
Extension

FEMALE ACME X  
1/2" PVC SPIGOT  
#10352  
Enables easy  
attachment  
to a 1/2" PVC riser.

Riser Extension

## UPRIGHT 9737-048

FT5, Adapter & LTO  
Assembly, 10mm X  
48" (122 cm) Tube



9677  
Adapter, FT5,  
& 10mm Tube X  
1/2" Acme

9099-048  
Tube, 10mm x  
48" (122 cm)  
(other lengths  
available)

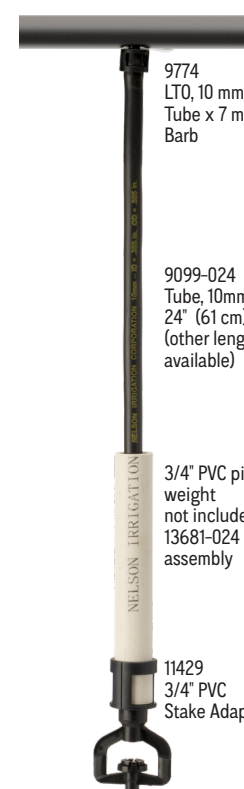
9725-048  
Stake Steel,  
5/16" (8 mm) x  
48" (122 cm)  
(Stake not  
included in FT5  
Assembly)

9740  
QC LTO, 10 mm  
Compression x  
Male QC

9739  
QC Barb,  
Female QC x  
10 mm Barb

## INVERTED 13861-024

3/4" PVC-10,  
Adapter & LTO Assembly



9774  
LTO, 10 mm  
Tube x 7 mm  
Barb

9099-024  
Tube, 10mm x  
24" (61 cm)  
(other lengths  
available)

3/4" PVC pipe  
weight  
not included in  
13681-024  
assembly

11429  
3/4" PVC  
Stake Adapter