



# 03030 ORBITOR

THE ONLY SPRINKLER  
IN THE WORLD THAT  
ELIMINATES DROOL





# ORBITOR



THE ONE-OF-A-KIND STRUTLESS DESIGN OF THE ORBITOR SPRINKLER **ELIMINATES DROOL**. THIS MAINTAINS SOIL SURFACE STRUCTURE IN DIFFICULT SOILS AND IMPROVES GERMINATION AND PLANT POPULATION OF SMALL SEEDED CROPS.

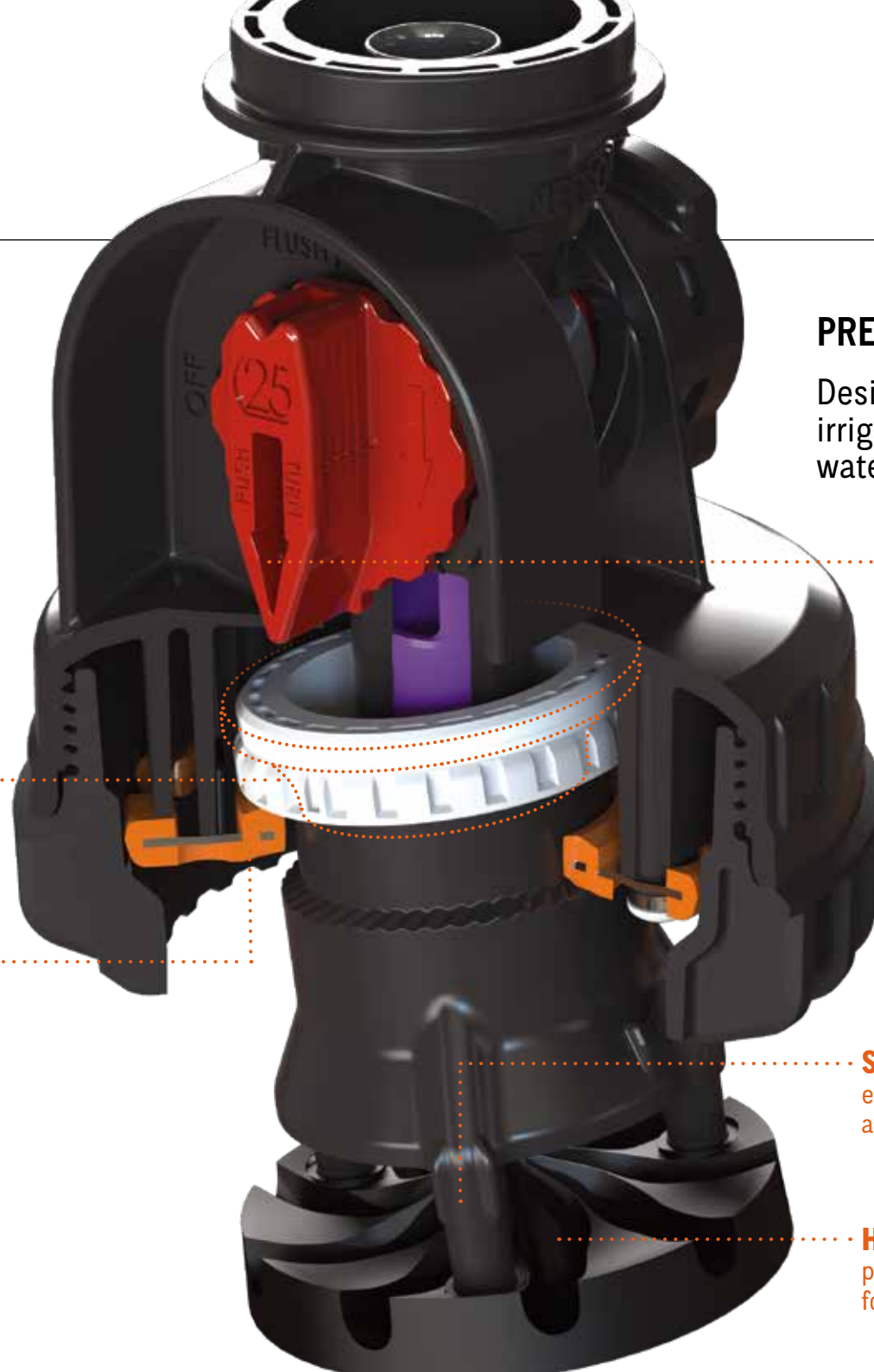
# ORBITOR

## EXCEPTIONAL WEAR-LIFE

The 03030 Orbitor is the only off-axis pivot sprinkler whose wear parts are protected from water conditions and debris.

## PRECISION ENGINEERED

Designed to make the irrigator's job easier and the water application better.



**NELSON'S EXCLUSIVE 3NV NOZZLE** provides the easiest way to flush, line flush, shutoff — all without removing the nozzle

**INTEGRAL SPOOL** protected from water and debris

**"HEART OF GOLD"** spool runs on a race over-molded onto a stainless steel backbone

**STRUTLESS DESIGN** eliminates drift and drool and passes trash effortlessly

**HIGHLY ENGINEERED PLATE** provides the ideal droplet pattern for germination and irrigation

Orbitor Assembly





# ORBITOR

MAXIMIZE RUN TIME, MINIMIZE MAINTENANCE TIME

## 3NV NOZZLE SYSTEM

- » Built-in on/off manual control at each sprinkler
- » Do not need to remove nozzle to flush it or the line
- » Dual nozzle clip provides quick access to nozzle changes

This nozzle system is proven the best and easiest to use. It's the only nozzle with built-in nozzle and line flush functions. Spend more time irrigating and less time cleaning!



# ORBITOR

WHEN YOU NEED TO BRING YOUR A GAME

## STREAMLINED DESIGN ONE OF A KIND

Designed with an innovative, bracket-less assembly, debris hang up and water pattern misting common to conventional sprinklers are mitigated. Irrigators can expect long wear life, reliable operation, and durability, even in the toughest water conditions. The Orbitor is streamlined for excellent movement through canopy and over field obstacles.

## OUTSTANDING UNIFORMITY AT LOW PRESSURE

Designed specifically for use on mechanical move irrigation systems — center pivots and linear/lateral machines — the Orbitor delivers a uniform water application pattern.

## GREAT RETROFIT FOR POLY WEIGHT SYSTEMS

The Orbitor is also available without the integrated weight for systems with existing weights. This plastic-cover version is a great retrofit option for systems that already have poly weights. It requires 3/4" NPT threaded weights only. Do not use any other slip weights. Pressure regulate to 0.7 bar.

**IMPORTANT!** The Orbitor requires a minimum of 0.6 m of reinforced flexible hose in the mounting assembly

## GEOCROPICAL® SOLUTIONS

The 03030 with the black plate is a great fit for a number of important crops including corn, wheat, hay & forage, soybean and more. It's especially effective in dirty water compared to other products.



**ORBITOR 03030** | BLACK, STANDARD-ANGLE PLATE PROVIDES 11-18.3 M THROW DIAM. @ 0.4-1 BAR

# ORBITOR

NELSON PRODUCTS ARE DEVELOPED TOGETHER TO ENHANCE THE TOTAL SYSTEM



## 03030 ORBITOR

Featuring technology that eliminates the struts of a sprinkler body, Nelson's pivot orbitor provides outstanding uniformity and optimal droplets at low pressures.

BLACK, STANDARD-ANGLE  
PLATE PROVIDES  
11-18.3 M THROW DIAM.  
@ 0.4-1 BAR

\*See performance data on next page



## ALL-FLO AND UNI-FLO REGULATORS

Achieve maximum flow capacity, accuracy, and plug resistance with the award-winning All-Flo Regulator. Also available the field-proven single strut Uni-Flo option.

ALL-FLO RANGE 0.1-4.5 M<sup>3</sup>/H  
& UNI-FLO 0.11-2.72 M<sup>3</sup>/H



## COIL WEIGHT

Save the cost of a fitting with integrated Hose Barb x 3/4" MNPT connection. The plastic cover secures over coil and prevents theft by hiding any shiny metal.

### IMPORTANT MOUNTING INFORMATION:

1. The Orbitor requires a minimum of 0.6 m of reinforced flexible hose in the mounting assembly.
2. When using the Orbitor with the weighted cover, do not use any other conventional weight styles instead of, or in addition to, the Orbitor weight.
3. When using the Orbitor with the plastic cover, an in-line weight is required. Use Nelson Slim Weights or 3/4" NPT threaded weights. Slip weights require the Nelson Clamp Saver.
4. Always be sure that the Orbitor Weight, Slim Weight, or threaded weight is securely tightened.
5. Always be sure that all components in the mounting assembly and the Orbitor are securely tightened. Use new\* Nelson pressure regulators and fittings.
6. If 3/4" ball valves are used, use metal nipples or Nelson P/N-12291 plastic nipples.

\*New, patented single-strut seat manufactured after 2007.

**USE CLAMP SAVER WHEN INSTALLING ORBITORS ON A PIVOT WITH EXISTING POLY SLIP WEIGHTS.** This simple device placed over clamps on drop hose beneath poly slip weights protects the clamp from the "action" or natural vibration on Orbitor systems. This is a great solution when an irrigator is retrofitting a pivot that already has slip weights with the Orbitor sprinkler. Only the plastic cover version (0.4-0.7 bar) can be used with poly slip weights.

# ORBITOR PERFORMANCE DATA



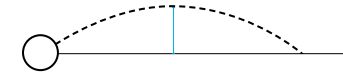
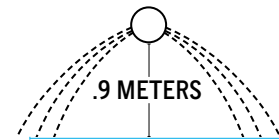
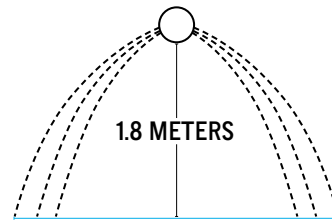
## PARAMETERS (M)

NOZZLE*	MIN	MAX	SPACING LIMIT
11	0.7	1.7	6.1
12	0.7	1.7	6.1
13	0.7	1.7	6.1
14	0.6	1.7	6.1
15	0.6	1.7	6.1
16	0.6	1.7	6.1
17	0.6	1.7	6.1
18	0.6	1.7	6.1
19	0.6	1.7	6.1
20	0.6	1.7	6.1
21	0.6	1.7	6.1
22	0.6	1.7	6.1
23	0.6	1.7	6.1
24	0.6	1.7	6.1
25	0.6	1.7	6.1
26	0.6	1.7	6.1
27	0.6	1.7	6.1
28	0.6	1.7	6.1
29	0.6	1.7	6.1
30	0.6	1.4	6.1
31	0.6	1.4	6.1
32	0.6	1.4	6.1
33	0.6	1.4	6.1
34	0.6	1.4	6.1
35	0.6	1.4	6.1
36	0.6	1.4	4.4
37	0.6	1.4	4.4
38	0.6	1.4	4.4
39	0.6	1.4	4.4
40	0.3	0.6	3.4
41	0.3	0.6	3.4
42	0.3	0.6	3.4
43	0.3	0.6	3.4
44	0.3	0.6	3.4
45	0.3	0.6	3.4
46	0.3	0.6	3.4
47	0.3	0.6	3.4
48	0.3	0.6	3.4
49	0.3	0.6	3.4
50	0.3	0.6	3.4

**BLACK PLATE**  
FOR DROP TUBE APPLICATIONS /  
STANDARD ANGLE

PRESSURE RANGE (BAR)  
0.4-1.4

3NV NOZZLE RANGE (METERS)  
11-50  
MINIMUM #16 NOZZLE  
AT 0.4 BAR



## COVERAGE DIAMETERS (M)

NOZZLE*	PRESSURE (bar)			
	0.4	0.7	1.0	1.4
11	11.0	11.0	13.7	14.0
16	11.6	12.5	14.8	15.8
18	12.2	13.1	15.2	16.5
24	12.2	14.6	16.5	17.1
28	13.1	14.9	16.5	17.1
32	14.0	15.2	17.1	17.7
36	14.0	15.8	17.7	17.7
42	14.6	15.8	17.7	18.3
50	14.0	15.5	17.1	18.0

NOZZLE*	PRESSURE (bar)		
	0.7	1.0	1.4
11	9.8	11.6	12.2
16	11.5	13.8	14.4
18	12.2	14.6	15.2
24	13.4	15.2	15.8
28	14.0	15.8	16.5
32	14.0	15.8	16.5
36	14.0	15.8	16.5
42	14.6	15.8	16.5
50	14.6	15.8	16.5

## STREAM HEIGHTS (MM)

NOZZLE*	PRESSURE (bar)			
	0.4	0.7	1.0	1.4
11	508.0	736.6	863.6	1041.4
16	508.0	812.8	939.8	1143.0
18	584.2	838.2	965.2	1193.8
24	609.6	889.0	1143.0	1320.8
28	660.4	1066.8	1295.4	2159.0
32	762.0	1193.8	1422.4	1600.0
36	762.0	1397.0	1651.0	2235.2
42	812.8	1320.8	1498.6	1803.4
50	736.6	1346.2	1879.6	1854.2



Nelson Irrigation has a full range of products for center pivot irrigation.  
Compare your options here.

**WARRANTY AND DISCLAIMER:** Nelson Pivot Orbitor Sprinklers & Pressure Regulators 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.





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NELSON IRRIGATION CORPORATION (NIC), HEADQUARTERED IN WALLA WALLA, WASHINGTON U.S.A., PLANS, DESIGNS, MANUFACTURES AND SELLS PROPRIETARY PRODUCTS FOR THE IRRIGATION EQUIPMENT MARKET. THE MISSION STATEMENT HAS REMAINED THE SAME FOR 50+ YEARS - SAVE WATER, SAVE ENERGY AND DO A BETTER JOB OF IRRIGATING. 2011 MARKED 100 YEARS OF MANUFACTURING IRRIGATION EQUIPMENT FOR THE NELSON FAMILY - WITH L.R. NELSON'S INTRODUCTION OF THE "CLINCHER" HOSE COUPLER IN 1911.