



Full Circle



Adjustable Arc

With a radius up to 29 meters from a single sprinkler, the I-90 boasts a coverage area no other commercial sprinkler can deliver. Yet, its reduced-size diameter and cushioned rubber cover make it the perfect choice for parks and wide-open lawn areas, as well as perimeter watering of athletic fields and horse arenas. The rotor is also easy to service, with a “jar-top”

body cap that allows quick access to the filter screen and check valve with no extra pieces, parts, or tools required. The I-90 is offered in two models—a full-circle opposing-nozzle version or an adjustable arc model—each with color-coded nozzles that can be field-changed to match the specific needs of your site.

Features & Benefits



Extra-thick heavy-duty rubber cover

Helps keep playing surfaces safe

6 color-coded primary nozzles

Truly uniform coverage and fast identification

Jar-Top serviceability

Easy access to screen, gear drive, and valve assemblies

Closed case rotor

Absolute protection from dirt

Proven, heavy-duty gear drive

Enduring reliability

Water activated riser seal

Clean flushing action and positive retraction

Heavy-duty stainless steel spring

Assures positive retraction, time after time

Drain check valve to handle elevation change

Saves water, reduces liability

Models

I-90 36V – Full circle

I-90 ADV – Adjustable arc (40°–360°)

Dimensions

- Pop-up height: 7.6 cm
- Female inlet: 1½" NPT or BSP
- Exposed diameter: 8.9 cm
- Overall height: 28 cm

Operating Specifications

I-90 36V

- Discharge rate: 6.77 to 15.76 m³/hr, 113 to 263 l/min
- Radius: 21 to 29.3 m
- Recommended pressure range: 4.8 to 6.2 bars; 482 to 620 kPa
- Operating pressure range: 3.4 to 6.9 bars; 344 to 689 kPa

I-90 ADV

- Discharge rate: 6.97 to 15.85 m³/hr, 116 to 264 l/min
- Radius: 20.4 to 27.4 m
- Recommended pressure range: 4.8 to 6.2 bars; 482 to 620 kPa
- Operating pressure range: 3.4 to 6.9 bars; 344 to 689 kPa

Options Available

- Reclaimed water identification
- Factory-installed nozzles
- Turf Cup Kit (part # 467955)



Rubber cover keeps play areas safe.



The Ideal Choice for Parks and Large Spaces

If you're looking for the smallest number of sprinklers to cover the greatest amount of turf, the I-90 is the choice. For sports fields that feature a substantial amount of turf—such as those for soccer, football, or lacrosse—the I-90 gives you the ability to place just a few rotors in place and receive complete coverage from perimeter areas. After all, the I-90 is designed to effectively irrigate turf areas that require a sprinkler that distributes water well in excess of 30 meters. Plus, its small exposed surface and rubber cover make it the safe choice as well.

I-90-36V Nozzle Performance Data – Metric

Nozzle	Pressure Bars	kPa	Radius m	Flow m³/hr	l/min	Precip mm/hr	
						■	▲
33 Gray	4.1	413	21.6	6.77	112.8	14	17
	4.8	482	22.6	7.31	121.9	14	17
	5.5	551	23.2	7.81	130.2	15	17
	6.2	620	23.8	8.36	139.3	15	17
	6.9	689	24.4	8.77	146.1	15	17
38 Red	4.1	413	22.6	7.56	126.0	15	17
	4.8	482	23.5	8.20	136.6	15	17
	5.5	551	24.1	8.72	145.3	15	17
	6.2	620	24.4	9.29	154.8	16	18
	6.9	689	25.0	9.72	162.0	16	18
43 Dk. Brown	4.1	413	23.5	8.65	144.2	16	18
	4.8	482	24.1	9.29	154.8	16	19
	5.5	551	25.0	9.97	166.2	16	18
	6.2	620	25.3	10.56	176.0	17	19
	6.9	689	25.6	11.02	183.6	17	19
48 Dk. Green	4.8	482	25.0	10.52	175.2	17	19
	5.5	551	26.2	11.27	187.7	16	19
	6.2	620	27.1	11.92	198.7	16	19
	6.9	689	27.4	12.45	207.4	17	19
	53 Dk. Blue*	4.8	482	25.9	11.47	191.1	17
5.5		551	26.8	12.15	202.5	17	20
6.2		620	27.4	13.04	217.3	17	20
6.9		689	28.0	13.51	225.2	17	20
63 Black**		4.8	482	27.4	13.76	229.4	18
	5.5	551	28.0	14.35	239.2	18	21
	6.2	620	28.6	14.97	249.4	18	21
	6.9	689	29.3	15.76	262.7	18	21

Note: To ensure optimum nozzle performance, the rotor should be operated in the "Recommended pressure range". The sprinkler will work normally when used in the "Operating pressure range", but nozzle performance may be reduced.

Data represents test results in zero wind. Adjust for local conditions. Performance data are derived from tests that conform to ASAE Standard S398.1. See Hunter Irrigation Products Catalog for complete ASAE Certification Statement.

I-90-ADV Nozzle Performance Data – Metric

Nozzle	Pressure Bars	kPa	Radius m	Flow m³/hr	l/min	Precip mm/hr	
						■	▲
33 Gray	4.1	413	20.4	6.97	116.2	33	39
	4.8	482	20.4	7.52	125.3	36	42
	5.5	551	20.7	8.06	134.4	38	43
	6.2	620	21.0	8.56	142.7	39	45
	6.9	689	21.3	9.04	150.6	40	46
38 Red	4.1	413	21.0	7.72	128.7	35	40
	4.8	482	21.3	8.38	139.7	37	43
	5.5	551	21.9	9.04	150.6	38	43
	6.2	620	22.3	9.61	160.1	39	45
	6.9	689	22.9	10.02	167.0	38	44
43 Dk. Brown	4.1	413	21.3	8.79	146.5	39	45
	4.8	482	21.6	9.54	159.0	41	47
	5.5	551	21.9	10.11	168.4	42	48
	6.2	620	22.3	10.81	180.2	44	50
	6.9	689	22.3	10.97	182.8	44	51
48 Dk. Green	4.8	482	22.9	10.67	177.9	41	47
	5.5	551	23.5	11.40	190.0	41	48
	6.2	620	24.1	12.11	201.7	42	48
	6.9	689	24.7	12.72	212.0	42	48
	53 Dk. Blue*	4.8	482	24.1	11.02	183.6	38
5.5		551	24.7	12.13	202.1	40	46
6.2		620	25.9	12.95	215.7	39	45
6.9		689	26.2	13.51	225.2	39	45
63 Black**		4.8	482	25.6	13.83	230.5	42
	5.5	551	26.2	14.49	241.5	42	49
	6.2	620	26.8	15.10	251.7	42	48
	6.9	689	27.4	15.85	264.2	42	49

* Factory-installed nozzle

** Preliminary performance data

Note: All precipitation rates are calculated for 180-degree operation. For the precipitation rate for a 360-degree sprinkler, divide by 2.

SPECIFICATION GUIDE

EXAMPLE: **I-90 - 36V - B**

MODEL	FEATURES	OPTIONS
I-90 = 7.6 cm Pop-up	ADV, 36V, ARV, 3RV	XX = Complete Set of Nozzles 33 – 63 = Factory-Installed Nozzle Number B = BSP Thread

KEY TO FEATURES:

ADV = Adjustable with Check Valve

36V = Full-Circle with Check Valve

ARV = Adjustable, Reclaimed Water with Check Valve

3RV = Full-Circle, Reclaimed Water with Check Valve

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I-90 ADV & 36V Nozzle Installation

Caution! The riser assembly is under spring tension. Eye protection should be worn and proper procedures followed when servicing this product.

Tools needed: *Phillips-head screwdriver, needle-nose pliers.*

Preparation

Unscrew the body cap from the body, then withdraw the riser from the body. Compress riser spring and seal assembly by pressing downward to expose nozzles. Hold compressed assembly in this position firmly with one hand while servicing with the other hand.

Nozzle Removal and Replacement

Remove the logo cap, which is retained by a central Phillips screw. The nozzle is retained in the nozzle housing by a setscrew. To remove the nozzle, back out the setscrew using the hex key on the Hunter wrench so that the nozzle will clear. Grasp the nozzle with pliers and pull to remove.

Insert the replacement nozzle in the housing. Press firmly to fully seat the nozzle so that it will clear the retaining setscrew. Using the hex key on the Hunter wrench, turn the setscrew down to retain the nozzle.

Note: When changing from one nozzle number to another, check the stator for proper setting before returning the head to service.

Stator Ring Adjustment

Note: When installing nozzles you must also correctly set the stator to ensure proper speed of rotation. Failure to correctly set the stator may cause a non-rotation condition.

The stator is located in the base of the riser assembly. First remove the riser assembly from the body. Then remove the filter screen to access the stator.

The stator has a protruding tab that aligns with a pointer. Remove the stator by grasping this tab with pliers and pulling. Replace the stator so that its pointer is set to the number agreeing with the nozzle installed. Refer to the Nozzle / Stator Chart below for nozzle and stator settings.

Visually check for proper assembly of nozzles, setscrews and stator. Reverse the preparation procedure to reassemble the unit.

Precipitation Rate Adjustment

If you have excessively wet or dry areas, you can change the nozzle in the sprinkler to increase or decrease the precipitation rate. For dry areas, install a larger nozzle. For wet areas, install a smaller nozzle.

I-90 ADV Only – Arc Adjustment

Adjustable heads are preset to approximately 180°. Sprinklers may be adjusted with water on or off. It is recommended that initial adjustment be made before installation.

Rotate the nozzle turret clockwise to the right stop. This is the fixed side of the arc. The nozzle turret must be held in this position for arc adjustments. The right stop does not change.

To Increase Arc:

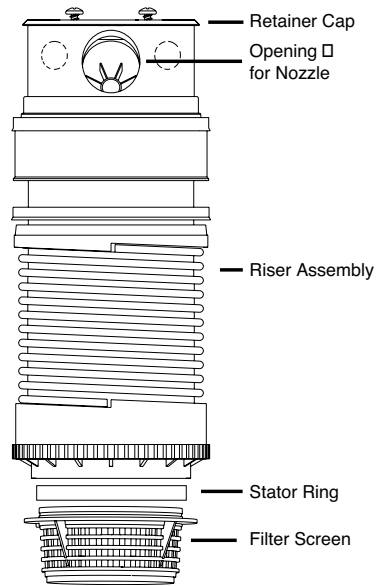
1. Insert the plastic key end of the Hunter wrench into the adjustment socket (Fig. 1 & 2).
2. While holding the nozzle turret at the right stop, turn the wrench clockwise. Each full 360° turn of the wrench increases the arc 45°.
3. Adjust to any arc between 40° and 360°. The wrench will stop turning, or there will be a ratcheting noise, when the maximum arc of 360° (full circle) has been reached.

To Decrease Arc:

1. Insert the key end of the Hunter wrench into the adjustment socket (Fig. 1 & 2).
2. While holding the nozzle turret at the right stop, turn the wrench counterclockwise. Each full 360° turn of the wrench will decrease the arc 45°.
3. Adjust to any arc between 40° and 360°. The wrench will stop turning, or there will be a ratcheting noise, when the minimum arc of 40° has been reached.

Note: It is not necessary to disassemble the sprinkler to make adjustments.

I-90 Riser Assembly



Nozzle / Stator Chart	
Nozzle Number	Stator Position
25	25
33	33
38	38
43	43
48	48
53	53
63	63
73	73

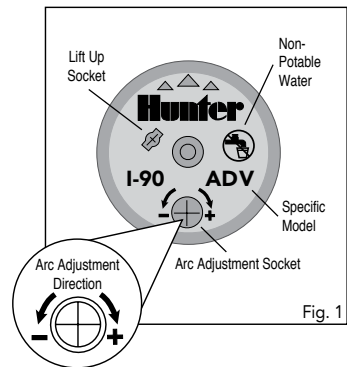


Fig. 1

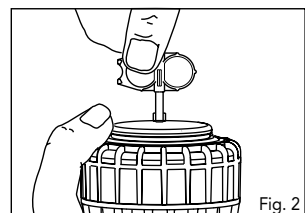


Fig. 2

