

Hunter®

*Institutional
Spray*

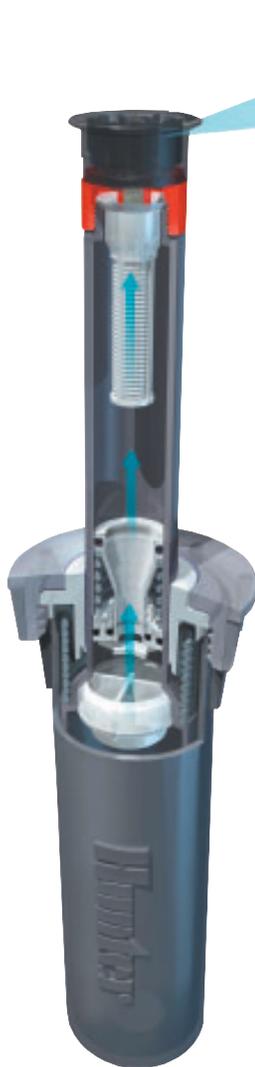
*Rugged,
Water-Saving
Sprinklers
Designed for
Commercial,
Institutional and
Public Area
Applications*



Now there is a Hunter sprinkler that delivers the ultimate in water savings, as well as the durability of a rugged body design. From top to bottom, the new Hunter Institutional Spray combines exceptional strength with a complete range of innovative features...just the need for high traffic area installations. Features like a positive-seal flush cap with an innovative pull-up design that keeps debris out. A high quality, multi-functional, pressure-activated wiper seal. True pressure regulation under a wide range of environmental and pressure conditions to reduce water waste. An in-stem regulator that acts as a flow control device if the nozzle is removed. A super heavy-duty check valve assembly that eliminates the leakage, puddling and potential liability issues of low head drainage. The most powerful retraction spring in its class. Sounds like a lot in a spray sprinkler? How about one more great feature – just like all other Hunter Institutional Series irrigation products, the new Institutional Spray carries a 5-year warranty. Hunter’s new Institutional Spray. Innovative solutions to the toughest design and installation problems.



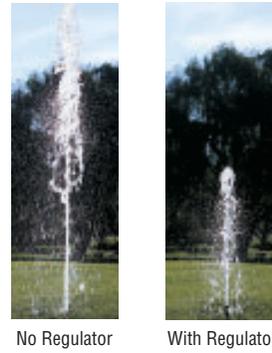
FEATURES & BENEFITS



- • **Built-in in-stem pressure regulation**
Maximum nozzle efficiency regardless of inlet pressure
- • **Heavy-duty body and cap construction**
Multi-thread buttress design withstands the harshest environments
- • **Pressure activated, multi-function, no flow-by wiper seal**
Easy to remove and clean; treated with UV inhibitors to ensure long life
- • **Compatible with all Female Threaded Nozzles**
Accepts adjustable, fixed and specialty nozzles from Hunter and all major brands
- • **Optional factory-installed drain check valve for up to 10 feet elevation change**
Eliminates landscape damage from flooding and erosion
- • **Ratcheting riser for quick arc alignment**
Make adjustments while sprinkler is operating
- • **Heavy-duty spring**
For positive retraction under any conditions
- • **Innovative pop-top flush plug design**
Allows limited flow permitting controlled directional flushing
- • **1/2" standard side inlet on 6" and 12" models**
Installation convenience for deep seated bodies

Pressure regulation that's built in (so it's always there)
 For long pipe runs with wide variations in available pressure, large elevation changes that make design difficult, or high and variable pressure situations that create nozzle performance problems, the Institutional Spray provides a comprehensive solution. Built-in pressure regulation to a true 30 psi. You'll get controlled, reliable pressure to Hunter's wide array of available nozzles, as well as the elimination of misting, fogging or unwanted variation. The pressure regulator is also dirt tolerant, handles extreme operating pressures up to 100 psi and will control flow rates by 70% if the nozzle is damaged or removed. Best of all, unlike pressure compensating discs, this regulator is built into the sprinkler, so it's ready from the get-go to handle the extremes your site dishes out.

Regulator Adds Vandal Resistance



Institutional Spray

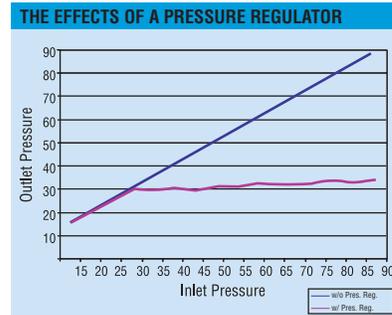
Rugged, Water-Saving Sprinklers Designed for Commercial, Institutional and Public Area Applications



Without Regulator
Mist gets carried away



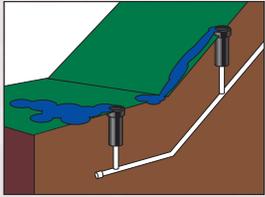
With Regulator
Large water droplets = No wasted water



Performance Charts – Adjustable-Arc and Fixed-Arc Nozzles

Spray Nozzles	Model 7 ft. fixed	Model 7 ft. adj.	Model 10 ft.	Model 12 ft.	Model 15 ft.	Model 17 ft.
	Fixed Arc (Q,H,F) Trajectory: 0° Brown ●	Adjustable (25° - 360°) Trajectory: 0° Brown ●	Adjustable (25° - 360°) or fixed arc (Q,H,F) Trajectory: 15° Red ●	Adjustable (25° - 360°) or fixed arc (Q,H,F) Trajectory: 28° Green ●	Adjustable (25° - 360°) or fixed arc (Q,H,F) Trajectory: 28° Black ●	Adjustable (25° - 360°) or fixed arc (Q) Trajectory: 28° Gray ●
	Radius	Radius	Radius	Radius	Radius	Radius
Arc	PSI	Model ft. GPM	Model ft. GPM	Model ft. GPM	Model ft. GPM	Model ft. GPM
45° ▶	20		7A 7' 0.17	10A 10' 0.17	12A 12' 0.27	17A 16' 0.48
	25		7A 7' 0.19	10A 10' 0.19	12A 12' 0.28	17A 17' 0.56
	30		7A 7' 0.24	10A 11' 0.24	12A 13' 0.36	17A 18' 0.60
90° ◐	20	7Q 7' 0.17	7A 7' 0.34	10A 10' 0.34	12A 12' 0.53	17A 16' 0.97
	25	7Q 7' 0.19	7A 7' 0.39	10A or 10' 0.39	12A or 12' 0.56	17A or 17' 1.13
	30	7Q 7' 0.24	7A 7' 0.49	10Q 11' 0.49	12Q 13' 0.71	17Q 18' 1.20
120° ◑	20		7A 7' 0.45	10A 10' 0.45	12A 12' 0.71	17A 16' 1.29
	25		7A 7' 0.52	10A 10' 0.52	12A 12' 0.75	17A 17' 1.50
	30		7A 7' 0.65	10A 11' 0.65	12A 13' 0.95	17A 18' 1.61
180° ◒	20	7H 7' 0.33	7A 7' 0.68	10A 10' 0.68	12A 12' 1.07	17A 16' 1.94
	25	7H 7' 0.38	7A 7' 0.78	10A or 10' 0.78	12A or 12' 1.12	17A 17' 2.25
	30	7H 7' 0.48	7A 7' 0.97	10H 11' 0.97	12H 13' 1.42	15H 16' 1.86
240° ◓	20		7A 7' 0.91	10A 10' 0.91	12A 12' 1.42	17A 16' 2.58
	25		7A 7' 1.04	10A 10' 1.04	12A 12' 1.50	17A 17' 3.00
	30		7A 7' 1.30	10A 11' 1.30	12A 13' 1.90	15A 16' 2.48
270° ◔	20		7A 7' 1.02	10A 10' 1.02	12A 12' 1.60	17A 16' 2.90
	25		7A 7' 1.17	10A 10' 1.17	12A 12' 1.68	15A 15' 2.63
	30		7A 7' 1.46	10A 11' 1.46	12A 13' 2.14	15A 16' 2.79
360° ●	20	7F 7' 0.67	7A 7' 1.36	10A 10' 1.36	12A 12' 2.13	17A 16' 3.87
	25	7F 7' 0.76	7A 7' 1.56	10A or 10' 1.56	12A or 12' 2.24	15A or 15' 3.50
	30	7F 7' 0.95	7A 7' 1.95	10F 11' 1.95	12F 13' 2.85	15F 16' 3.71





Without check valves, water leaks out at low points creating wasteful puddles and potential liability hazards.

Check Valves: No leaks, no puddles, no waste

The Institutional Spray check valve eliminates leaks and puddles at the lower heads, protecting landscapes from damage and erosion while reducing water waste. Choose from the convenience of factory-installed check valves or the flexibility of field installation.



PCN: Pop-up spray sprinkler bubbler nozzle

With our pressure compensating nozzle (PCN), there is now a solution for deep watering needs that provides all the benefits of drip irrigation, with none of the hassles...plus, the decided advantage of sitting atop a riser that retracts into the ground when not in use. More appealing to look at, less likely to be tampered with – in short, a product that specifiers will love.

PCN Bubbler Nozzles (flood pattern)

Model	Pressure PSI	Flow GPM
25	30	0.25
50	30	0.50
10	30	1.0
20	30	2.0



Micro-Spray: A pop-up within a pop-up

The unique pop-up design of the Hunter Micro-Spray Nozzle, coupled with the fact that it attaches directly to a pop-up sprinkler, makes this alternative to drip a winner. When not in use, both the nozzle and the spray head body retract, so nothing sticks up above the surface. And when it's in operation, the pop-up nozzle gives nearly an extra inch of clearance over plants and plants and shrubs.

Models

- INST-04 – 4" Pop-up (10 cm)
- INST-06 – 6" Pop-up (15 cm)
- INST-12 – 12" Pop-up (30 cm)

Dimensions

- Overall height:
 - INST-04 – 5 7/8" (15.5 cm)
 - INST-06 – 8 3/4" (22.5 cm)
 - INST-12 – 16 1/8" (41 cm)
- 1/2" female inlet NPT
- Exposed diameter: 2 1/4" (5.7 cm)

Operating Specifications

- Pressure range: 15 to 70 psi (1.0 to 4.8 bars; 103 to 482 kPa)

- Flow-by: 0 at 10 psi (.07 bars; 68 kPa) or greater; .1 gpm (0,02 m³/hr; 0.4 l/min) otherwise
- Precipitation rates: approximately 1.5" (38 mm) per hour

Options Available

- Factory-installed drain check valve for up to 10' (3 m) elevation change. "Check Valve" stamped on cap for easy identification.
- Field-installed reclaimed water identification cap. (Part number 469800)
- Field-installed rubber cover (Part number 469805)

Performance Charts – Specialty Nozzles

Strip Pattern Nozzles			
Color Code: Blue			
Nozzle Model	PSI	GPM	Width (ft.) x Length (ft.)
LCS-515 Left-Corner Strip	20	0.55	4' x 14'
	25	0.60	5' x 15'
	30	0.65	5' x 15'
RCS-515 Right-Corner Strip	20	0.55	4' x 14'
	25	0.60	5' x 15'
	30	0.65	5' x 15'
SS-530 Side-Strip	20	1.10	4' x 28'
	25	1.20	5' x 30'
	30	1.30	5' x 30'

Model ST-16A Stream Spray Nozzles			
Color Code: Blue			
Nozzle	PSI	Radius (ft.)	Flow (GPM)
90°	20	15'	.40
	25	16'	.46
	30	16'	.50
180°	20	15	.67
	25	16	.80
	30	16	.88
360°	20	15	1.19
	25	16	1.46
	30	16	1.66

Short Radius Nozzles											
Arc	PSI	Radius	GPM	PSI	Radius	GPM	PSI	Radius	GPM		
90°	20	2'	.09	4Q	20	4'	.20	6Q	20	6'	.47
	25	2'	.10		25	4'	.22		25	6'	.49
	30	2'	.11		30	4'	.22		30	6'	.51
180°	20	2'	.12	4H	20	4'	.41	6H	20	6'	.95
	25	2'	.14		25	4'	.43		25	6'	.97
	30	2'	.16		30	4'	.44		30	6'	.98

Micro-Spray Nozzles								
MS-Q (Quarter Circle – 90°)			MS-H (Half Circle – 180°)			MS-F (Full Circle – 360°)		
PSI	Radius	GPM	PSI	Radius	GPM	PSI	Radius	GPM
25	5'	0.12	25	5'	0.25	25	5'	0.50
30	5'	0.14	30	5'	0.28	30	5'	0.56

PRODUCT EXPLANATION

