



POP - UP

HS SERIES

SPRAYHEADS



AVAILABLE
WITH PRE-INSTALLED
CHECK VALVES

POP-UP

HS
SERIES

SPRAYHEADS

The new HS Series sprayheads offer a variety of features that ensure quality performance and reliability. With newly redesigned bodies and enhanced pop-up heights, including 3-, 4-, 6- and 12-inch models, these sprayheads deliver optimum water-efficient coverage.

The introduction of Variable Arc Nozzles to complement the full selection of Canopy™ MPR fixed-arc models adds a new dimension of flexibility to the HS Series. The new VANS feature matched precipitation rates, adjustable arc patterns, easy-turn settings, superior dirt tolerance and exceptional coverage uniformity.

HS Series models also offer industry-standard features such as pressure activated wiper seals, strong retract springs, and side inlets on the 6- and 12-inch models. In addition, the entire HS Series will be available with pre-installed check valves in Spring 2001.

The new HS Series sprayheads — performance, convenience and value.

Irritrol[®]
SYSTEMS



POP-UP—Light Commercial, Residential

HS SERIES

S P R A Y H E A D S

3", 4", 6" and 12" models

Features

- Newly redesigned bodies
- Matched precipitation rates across sets and patterns provide even coverage
- All pop up heights will be available with pre-installed check valves in Spring 2001
- Ratcheting riser permits easy arc adjustment in the field
- Side and bottom inlets (6- and 12-inch models) reduce installation time
- Pressure-activated seal cleans debris from stem, reduces flow-by during pop up, and prevents leaking between cap and body
- Heavy-duty, stainless steel retract spring ensures positive pop down
- One-piece molded body adds durability
- Clear "CV" marking on cap identifies check valve models

Specifications

- Recommended working pressure: 20-40 psi
- Precipitation rate: 1.34-2.15 inches per hour
- Spacing: 6'-15'
- Flow-by: 0 at 10 psi or greater; .1 GPM otherwise
- Inlet size: ½" female NPT threads
- Exposed diameter: 1 ¼"
- Check height: Up to 8 feet (for CV models)



HS300/
HS300-CV

HS400/
HS400-CV

HS600/
HS600-CV

HS1200/
HS1200-CV

AVAILABLE
WITH PRE-INSTALLED
CHECK VALVES



MPR Variable Arc Nozzles

The utmost in nozzle flexibility is now available with Irritrol Systems' new matched precipitation rate Variable Arc Nozzles. In addition to conveniently adjustable arc patterns, the nozzles also offer easy-turn settings that can be customized with an included radius adjustment screw.

And there's more. These nozzles offer superior dirt tolerance, as well as reliable performance that delivers exceptional uniformity.

Features

- Adjustable arc patterns
- Easy-turn settings
- Superior dirt tolerance
- Exceptional uniform coverage
- Color coded for easy identification



MPR Canopy™ Nozzles

Irritrol Systems' Canopy nozzles deliver uniform, water-efficient distribution that exceeds the performance of any other spray-head nozzles on the market. Protected by a heavy-duty plastic lid (or canopy), each unit's side-positioned spray outlets remain free of pattern-jeopardizing dirt and other debris.

Thanks to a unique internal flow path and reinforced exterior construction, water is distributed in a series of ultra-efficient quarter-arc segments that results in unmatched water control.

Features

- Uniform, water-efficient distribution with the industry's highest CUs (Coefficient of Uniformity) and lowest SCs (Scheduling Coefficient)
- Large, uniform water droplet size inhibits misting, providing excellent coverage in windy conditions
- Protected nozzle side openings safeguard pattern against interference from the above-ground dirt and other debris
- Even distribution throughout pattern makes coverage ideal for established turf, over-seeding and hydro-seeding applications
- Color-coded nozzles offer immediate radius identification
- Radius reduction screw permits up to 25% in-field reduction

Specifications

- Recommended working pressure: 20-40 psi
- Precipitation rate: 1.34-2.15 inches per hour
- Spacing: 6'-15'








































VARIABLE ARC NOZZLES

SPRAY HEADS

MPR Variable Arc Nozzles

HSN-7VAN				HSN-10VAN				HSN-12VAN				HSN-15VAN				HSN-17VAN			
Arc	Pressure psi	Radius ft.	Flow GPM	Arc	Pressure psi	Radius ft.	Flow GPM	Arc	Pressure psi	Radius ft.	Flow GPM	Arc	Pressure psi	Radius ft.	Flow GPM	Arc	Pressure psi	Radius ft.	Flow GPM
360° 	20	7	1.36	360° 	20	10	1.36	360° 	20	12	2.13	360° 	20	14	3.08	360° 	20	16	3.87
	25	7	1.56		25	10	1.56		25	12	2.24		25	15	3.50		25	17	4.50
	30	7	1.95		30	11	1.95		30	13	2.85		30	16	3.71		30	18	4.82
	35	8	2.04		35	11	2.04		35	14	3.05		35	16	4.12		35	18	5.01
	40	9	2.92		40	12	2.92		40	15	3.35		40	17	4.54		40	19	5.51
270° 	20	7	1.02	270° 	20	10	1.02	270° 	20	12	1.60	270° 	20	14	2.31	270° 	20	16	2.90
	25	7	1.17		25	10	1.17		25	12	1.68		25	15	2.63		25	17	3.38
	30	7	1.46		30	11	1.46		30	13	2.14		30	16	2.79		30	18	3.61
	35	8	1.53		35	11	1.53		35	14	2.29		35	16	3.09		35	18	3.76
	40	9	2.19		40	12	2.19		40	15	2.51		40	17	3.40		40	19	4.13
240° 	20	7	0.91	240° 	20	10	0.91	240° 	20	12	1.42	240° 	20	14	2.06	240° 	20	16	2.58
	25	7	1.04		25	10	1.04		25	12	1.50		25	15	2.34		25	17	3.00
	30	7	1.30		30	11	1.30		30	13	1.90		30	16	2.48		30	18	3.21
	35	8	1.36		35	11	1.36		35	14	2.03		35	16	2.75		35	18	3.34
	40	9	1.95		40	12	1.95		40	15	2.24		40	17	3.02		40	19	3.67
180° 	20	7	0.68	180° 	20	10	0.68	180° 	20	12	1.07	180° 	20	14	1.54	180° 	20	16	1.94
	25	7	0.78		25	10	0.78		25	12	1.12		25	15	1.75		25	17	2.25
	30	7	0.97		30	11	0.97		30	13	1.42		30	16	1.86		30	18	2.41
	35	8	1.02		35	11	1.02		35	14	1.52		35	16	2.06		35	18	2.50
	40	9	1.46		40	12	1.46		40	15	1.68		40	17	2.27		40	19	2.75
120° 	20	7	0.45	120° 	20	10	0.45	120° 	20	12	0.71	120° 	20	14	1.03	120° 	20	16	1.29
	25	7	0.52		25	10	0.52		25	12	0.75		25	15	1.17		25	17	1.50
	30	7	0.65		30	11	0.65		30	13	0.95		30	16	1.24		30	18	1.61
	35	8	0.68		35	11	0.68		35	14	1.02		35	16	1.37		35	18	1.67
	40	9	0.97		40	12	0.97		40	15	1.12		40	17	1.51		40	19	1.84
90° 	20	7	0.34	90° 	20	10	0.34	90° 	20	12	0.53	90° 	20	14	0.77	90° 	20	16	0.97
	25	7	0.39		25	10	0.39		25	12	0.56		25	15	0.88		25	17	1.13
	30	7	0.49		30	11	0.49		30	13	0.71		30	16	0.93		30	18	1.20
	35	8	0.51		35	11	0.51		35	14	0.76		35	16	1.03		35	18	1.25
	40	9	0.73		40	12	0.73		40	15	0.84		40	17	1.13		40	19	1.38
45° 	20	7	0.17	45° 	20	10	0.17	45° 	20	12	0.27	45° 	20	14	0.39	45° 	20	16	0.48
	25	7	0.19		25	10	0.19		25	12	0.28		25	15	0.44		25	17	0.56
	30	7	0.24		30	11	0.24		30	13	0.36		30	16	0.46		30	18	0.60
	35	8	0.26		35	11	0.26		35	14	0.38		35	16	0.52		35	18	0.63
	40	9	0.37		40	12	0.37		40	15	0.42		40	17	0.57		40	19	0.69

Data represent test results in zero wind. Adjust for local conditions. Radius may be reduced up to 25% with adjustment screw (this may alter the uniformity of the spray pattern).














































MATCHED PRECIPITATION RATE—Plastic Nozzles

CANOPY™ NOZZLES







SPRAYHEADS

MPR Canopy™ Nozzles

7 Series					9 Series					12 Series					15 Series											
Model	Pressure psi	Radius ft.	Flow GPM	Precip. in/h	Precip. in/h	Model	Pressure psi	Radius ft.	Flow GPM	Precip. in/h	Precip. in/h	Model	Pressure psi	Radius ft.	Flow GPM	Precip. in/h	Precip. in/h	Model	Pressure psi	Radius ft.	Flow GPM	Precip. in/h	Precip. in/h			
	20	6	0.61	1.63	1.88		20	8	1.09	1.64	1.89		20	10	1.90	1.83	2.11		20	13	3.05	1.74	2.01			
	25	6.5	0.78	1.78	2.05		25	8.5	1.21	1.61	1.86		25	11	2.15	1.71	1.98		25	14	3.37	1.66	1.91			
	30	7	0.81	1.59	1.84		30	9	1.33	1.58	1.83		30	12	2.37	1.58	1.83		30	15	3.70	1.58	1.83			
	35	7.5	0.88	1.51	1.74		35	9.5	1.45	1.55	1.79		35	13	2.60	1.48	1.71		35	16	4.01	1.51	1.74			
	40	8	0.96	1.44	1.67		40	10	1.58	1.52	1.76		40	14	2.80	1.38	1.59		40	17	4.35	1.45	1.67			
	20	6	0.50	1.78	2.06		20	8	0.83	1.67	1.92		20	10	1.45	1.86	2.15		20	13	2.30	1.75	2.02			
	25	6.5	0.55	1.67	1.93		25	8.5	0.91	1.62	1.87		25	11	1.61	1.71	1.97		25	14	2.53	1.66	1.91			
	30	7	0.61	1.59	1.84		30	9	1.00	1.58	1.83		30	12	1.78	1.58	1.83		30	15	2.78	1.58	1.83			
	35	7.5	0.66	1.51	1.74		35	9.5	1.09	1.55	1.79		35	13	1.93	1.47	1.69		35	16	2.98	1.49	1.73			
	40	8	0.72	1.44	1.67			40	10	1.18	1.52		1.75		40	14	2.10		1.38	1.59		40	17	3.25	1.44	1.67
	20	6	0.46	1.85	2.13			20	8	0.72	1.63		1.88		20	10	1.26		1.82	2.10		20	13	2.04	1.74	2.01
	25	6.5	0.50	1.71	1.97			25	8.5	0.80	1.60		1.85		25	11	1.42		1.70	1.96		25	14	2.26	1.67	1.92
30	7	0.54	1.59	1.84	30	9		0.89	1.58	1.83	30	12	1.58		1.58	1.83	30	15	2.47	1.58		1.83				
	35	7.5	0.58	1.49	1.72		35	9.5	0.94	1.50	1.74		35	13	1.66	1.42	1.64		35	16	2.68	1.51	1.75			
	40	8	0.62	1.40	1.62			40	10	1.00	1.44		1.67		40	14	1.82		1.34	1.55		40	17	2.88	1.44	1.66
	20	6	0.33	1.77	2.04			20	8	0.54	1.63		1.88		20	10	0.95		1.83	2.11		20	13	1.53	1.74	2.01
	25	6.5	0.37	1.69	1.95			25	8.5	0.61	1.63		1.88		25	11	1.08		1.72	1.99		25	14	1.68	1.65	1.91
30	7	0.41	1.61	1.86	30	9		0.67	1.58	1.83	30	12	1.19		1.58	1.83	30	15	1.85	1.58		1.83				
	35	7.5	0.45	1.54	1.78		35	9.5	0.79	1.69	1.95		35	13	1.28	1.46	1.68		35	16	1.99	1.50	1.73			
	40	8	0.49	1.47	1.70			40	10	0.80	1.54		1.78		40	14	1.36		1.34	1.54		40	17	2.17	1.45	1.67
	20	6	0.23	1.85	2.13			20	8	0.36	1.63		1.88		20	10	0.64		1.85	2.14		20	13	1.02	1.74	2.01
	25	6.5	0.25	1.71	1.97			25	8.5	0.40	1.60		1.85		25	11	0.72		1.72	1.99		25	14	1.13	1.67	1.92
30	7	0.27	1.59	1.84	30	9		0.44	1.58	1.83	30	12	0.79		1.58	1.83	30	15	1.23	1.58		1.83				
	35	7.5	0.29	1.49	1.72		35	9.5	0.47	1.50	1.74		35	13	0.86	1.47	1.70		35	16	1.33	1.50	1.73			
	40	8	0.31	1.40	1.62			40	10	0.50	1.44		1.67		40	14	0.93		1.37	1.58		40	17	1.45	1.45	1.67
	20	6	0.16	1.71	1.98			20	8	0.28	1.69		1.95		20	10	0.48		1.85	2.14		20	13	0.76	1.73	2.00
	25	6.5	0.18	1.64	1.90			25	8.5	0.30	1.60		1.85		25	11	0.52		1.66	1.91		25	14	0.84	1.65	1.91
30	7	0.20	1.59	1.84	30	9		0.33	1.58	1.83	30	12	0.59		1.58	1.83	30	15	0.93	1.58		1.83				
	35	7.5	0.22	1.51	1.74		35	9.5	0.36	1.54	1.77		35	13	0.64	1.46	1.68		35	16	1.00	1.50	1.74			
	40	8	0.24	1.44	1.67			40	10	0.39	1.50		1.73		40	14	0.70		1.38	1.59		40	17	1.08	1.44	1.66

• Square spacing based on 50% diameter of throw. • Triangle spacing based on 55% diameter of throw.

Specialty Arc Nozzles

9 Series				15 Series			
Model	Pressure psi	W x L ft.	Flow GPM	Model	Pressure psi	W x L ft.	Flow GPM
	20	3 x 8	0.41		20	3 x 14	0.52
	30	4 x 9	0.45		30	4 x 15	0.61
	40	5 x 10	0.48		40	5 x 17	0.70
	20	3 x 16	0.85		20	3 x 28	1.10
	30	4 x 18	0.90		30	4 x 30	1.21
	40	5 x 20	0.97		40	5 x 32	1.35
	20	3 x 16	0.85		20	3 x 28	1.10
	30	4 x 18	0.90		30	4 x 30	1.21
	40	5 x 20	0.97		40	5 x 32	1.35

See Irritrol Systems catalog for formula and method of calculation used for precipitation rates. The values given in these charts are representative of the throw for each nozzle at each pressure point (full-circle operation).

**HS** SERIES**SPRAYHEADS****Shrub Adapter****HS100****Features**

- Accepts all Irritrol Systems HS Series Canopy™ and VAN nozzles
- Threads directly onto riser
- UV treated for above-ground mount
- Manufactured of heavy-duty ABS

Specifications

- Inlet Size: ½" female NPT threads

**Swing Pipe****Super Blue Flex™ Pipe****Features**

- Highly flexible
- Easily unwinds from center of coil
- Durable, very low-density polyethylene
- Shrink-wrapped 100ft. coils

Fittings

- FFP-C barbed coupler
- FFP-T barbed tee
- FFP-50EM ½" male x barb elbow
- FFP-75EM ¾" male x barb elbow

Specifications

- Maximum working pressure: 80 psi at 100° F
- Inside diameter: .49"
- Outside diameter: .68"
- Wall thickness: .095"
- Nominal size: .50"
- Coil size: 100'

**MODELS HOW TO SPECIFY**

HS 300-CV			HSN-7 F		
Model	Pop-up Height	With Pre-installed Check Valve	Model	Series	Pattern
HS300	3"	no	HSN-7F*	7	Full
HS400	4"	no			
HS600	6"	no			
HS1200	12"	no			
HS300-CV	3"	yes			
HS400-CV	4"	yes			
HS600-CV	6"	yes			
HS1200-CV	12"	yes			

*See charts for additional models.

Non-potable Water Cover

Model
HS00-NP

Fits all new HS Pop-up models

MODELS HOW TO SPECIFY

Shrub Adapter
HS100
Model/Nozzle Series

HS100/Irritrol Systems HSN

Swing Pipe
EHD1295-010-D
Model
EHD1295-010-D
EHF1295-010-D**

**Shipped from Florida

Irritrol
SYSTEMS

BEYOND THE EXPECTED

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