FERTILIZER

WIDE ANGLE DRIFT REDUCING

HYPRO®

SIX STREAM



ESI Six Stream

Ideal for applying liquid fertilizer into soil seeded crops



Hi-Flow

Featured nozzle for pre-plant fertilizer

or other high flow applications-PWM

system compatible





Ideal for pre-emerge application of fertilizers.



Large droplets reduce the risk of drift during fertilizer or PWM systemic herbicide applications.





Six stream pattern in a compact design to replace stream bars.



Advanced fertilizer nozzle capable of both pre-and post-emerge fertilizer applications.



Stream integrity reduces unwanted small droplets that cause unintentional plant damage.

HERBICIDE

DRIFT REDUCING, DUAL AIR INDUCTION

Ultra Lo-Drift

Ideal for systemic herbicide applications

where drift control is crucial - approved

on new auxin herbicide labels

Wide, three dimensional pattern creates

multiple angles for the spray to cover the target.

Ideal for pre-and post-emerge

application of systemic herbicides.

Designed to eliminate driftable droplets,





GuardianAIR

Ideal for contact herbicide applications due to exceptional coverage through air induction





Speed optimized inclined pattern provides superior droplet deposition and retention on targets



Ideal for high-coverage application of contact herbicides.



Industry leading coverage among air-inducted spray nozzles.

POST-EMERGE PLANT HEALTH

INCLINED ENHANCED COVERAGE

TWIN ENHANCED COVERAGE, AIR INDUCTION



3D

Alternating incline, all-purpose nozzle (co-developed with Syngenta) for optimum spray coverage - PWM system compatible





Optimized spray angle and incline for coverage and uniformity across the



Ideal for post-emerge plant health protectants. Also good for high coverage herbicide applications.



Droplet spectrum optimized for coverage, fewer droplets bounce off or drift away.



GuardianAIR Twin

Capable of balancing speed and efficiency, with twin patterns to cover front and back of targets





Air induced, twin pattern provides more uniform coverage over a wide operating range.



 Ideal for high-coverage application of post-emerge plant health protectants.



Provides better coverage with more drops per gallon compared to other air-induced twin sprays.



Select by Chemical - Choose from 500+ chemicals

Select by Application - Help sizing your nozzle based on your application

Search by Part Number or Name - Easily find information on a specific spray nozzle

Where to Buy Listings - Quickly find a nozzle distributor near you or buy online









SPRAY APPLICATION CHART

Spray	Uses	Pressure	Dout Namehou	Droplet Size (PSI)								
Nozzle	USES	Range (PSI)	Part Number	30	40	50	60	70	80			
ESI-Six Stream			FC-ESI-110015	S	S	S	S	S	S			
			FC-ESI-11002	S	S	S	S	S	S			
			FC-ESI-110025	S	S	S	S	S	S			
			FC-ESI-11003	S	S	S	S	S	S			
	P P	15-60	FC-ESI-11004	S	S	S	S	S	S			
Six	®	13-00	FC-ESI-11005	S	S	S	S	S	S			
ESI-{			FC-ESI-11006	S	S	S	S	S	S			
			FC-ESI-11008	S	S	S	S	S	S			
			FC-ESI-11010	S	S	S	S	S	S			
			FC-ESI-11015	S	S	S	S	S	S			
			HF140-08	UC	UC	UC	XC	XC	XC			
			HF140-10	UC	UC	UC	XC	XC	XC			
>			HF140-15	UC	UC	UC	XC	XC	XC			
<u>10</u>	9	20-80	HF140-20	UC	UC	UC	XC	XC	XC			
Hi-Flow	⊗		HF140-30	UC	UC	UC	XC	XC	XC			
			HF140-40	UC	UC	UC	XC	XC	XC			
			HF140-50	UC	UC	UC	XC	XC	XC			
			HF140-60	UC	UC	UC	XC	XC	XC			
	% *** 6 **	20-115	FC-ULD120-015	XC	VC	VC	С	С	С			
Ultra Lo-Drift			FC-ULD120-02	XC	С	С	С	М	М			
			FC-ULD120-025	XC	С	С	С	М	М			
			FC-ULD120-03	XC	C	С	С	М	М			
			FC-ULD120-04	UC	UC	XC	XC	XC	VC			
			FC-ULD120-05	UC	XC	XC	XC	VC	VC			
			FC-ULD120-06	UC	XC	XC	VC	С	С			
			FC-ULD120-08	XC	VC	VC	С	С	С			
		10-90	FC-3D100-015	F	F	F	F	F	F			
			FC-3D100-02	М	F	F	F	F	F			
a)			FC-3D100-025	М	М	F	F	F	F			
3D Nozzle			FC-3D100-03	М	М	М	F	F	F			
No			FC-3D100-035	М	М	М	М	М	F			
3D			FC-3D100-04	М	М	М	М	М	М			
			FC-3D100-05	С	М	М	М	М	М			
			FC-3D100-06	С	C	М	М	М	М			
			FC-3D100-08	С	С	М	М	М	М			
	(S)		FC-GA110-015	XC	С	С	М	М	М			
HH.	CA		FC-GA110-02	VC	М	М	М	М	М			
anA	. ኧ _		FC-GA110-025	VC	С	М	М	М	М			
GuardianAIR	# 8	20-115	FC-GA110-03	XC	VC	С	С	М	М			
gua			FC-GA110-035	VC	С	М	М	М	М			
			FC-GA110-04	VC	C	C	М	М	М			
			FC-GA110-05	XC	С	С	С	М	М			
	வ இ∯ Ø		GAT110-02	C	М	М	М	М	М			
GuardianAIR Twin			GAT110-025	UC	VC	С	М	М	М			
			GAT110-03	VC	C	М	М	М	М			
		30-115	GAT110-035	XC	С	С	М	М	М			
			GAT110-04	VC	C	C	М	М	М			
nar	0		GAT110-05	VC	C	C	М	М	М			
gn	黄		GAT110-06	XC	C	C	C	М	М			
	4 8		GAT110-08	VC	C	C	C	М	M			

Spray Pressure Nozzle (PSI)		Flow Speed (MPH) - 20 Inch Spacing													
		Rate	2 5	Gallons per Acre									30	22 E	
	45	(GPM)	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5		32.5
015	15	0.09	10.9	5.5	3.6	2.7	2.2	1.8	1.6	1.4	1.2	1.1	1.0	0.9	0.8
	30	0.11	12.6 15.4	6.3 7.7	4.2 5.1	3.2	2.5 3.1	2.1	1.8	1.6	1.4	1.3	1.1	1.1	1.0
	40	0.15	17.8	8.9	5.9	4.5	3.6	3.0	2.5	2.2	2.0	1.8	1.6	1.5	1.4
	50	0.17	19.9	10.0	6.6	5.0	4.0	3.3	2.8	2.5	2.2	2.0	1.8	1.7	1.5
	60	0.18	21.8	10.9	7.3	5.5	4.4	3.6	3.1	2.7	2.4	2.2	2.0	1.8	1.7
	70	0.20	23.6	11.8	7.9	5.9	4.7	3.9	3.4	2.9	2.6	2.4	2.1	2.0	1.8
	80	0.21	25.2	12.6	8.4	6.3	5.0	4.2	3.6	3.2	2.8	2.5	2.3	2.1	1.9
	90	0.23	26.7	13.4	8.9	6.7	5.3	4.5	3.8	3.3	3.0	2.7	2.4	2.2	2.1
	100	0.24	28.2	14.1	9.4	7.0	5.6	4.7	4.0	3.5	3.1	2.8	2.6	2.3	2.2
	115	0.25	-	15.1	10.1	7.6	6.0	5.0	4.3	3.8	3.4	3.0	2.7	2.5	2.3
	15	0.12	14.5	7.3	4.8	3.6	2.9	2.4	2.1	1.8	1.6	1.5	1.3	1.2	1.1
	20	0.14	16.8	8.4	5.6	4.2	3.4	2.8	2.4	2.1	1.9	1.7	1.5	1.4	1.3
	30	0.17	20.6	10.3	6.9	5.1	4.1	3.4	2.9	2.6	2.3	2.1	1.9	1.7	1.6
	40	0.20	23.8	11.9	7.9	5.9	4.8	4.0	3.4	3.0	2.6	2.4	2.2	2.0	1.8
	50	0.22	26.6	13.3	8.9	6.6	5.3	4.4	3.8	3.3	3.0	2.7	2.4	2.2	2.0
02	60	0.24	29.1	14.5	9.7	7.3	5.8	4.8	4.2	3.6	3.2	2.9	2.6	2.4	2.2
	70	0.26	-	15.7	10.5	7.9	6.3	5.2	4.5	3.9	3.5	3.1	2.9	2.6	2.4
	80	0.28	-	16.8	11.2	8.4	6.7	5.6	4.8	4.2	3.7	3.4	3.1	2.8	2.6
	90	0.30	-	17.8	11.9	8.9	7.1	5.9	5.1	4.5	4.0	3.6	3.2	3.0	2.7
	100	0.32	-	18.8	12.5	9.4	7.5	6.3	5.4	4.7	4.2	3.8	3.4	3.1	2.9
	115 15	0.34	18.2	9.1	13.4	10.1 4.5	3.6	6.7 3.0	5.8	5.0	4.5 2.0	1.8	3.7 1.7	3.4 1.5	3.1
	20	0.15	21.0	10.5	7.0	5.3	4.2	3.5	3.0	2.6	2.0	2.1	1.7	1.8	1.4
	30	0.10	25.7	12.9	8.6	6.4	5.1	4.3	3.7	3.2	2.9	2.6	2.3	2.1	2.0
	40	0.25	29.7	14.9	9.9	7.4	5.9	5.0	4.2	3.7	3.3	3.0	2.7	2.5	2.3
	50	0.28	-	16.6	11.1	8.3	6.6	5.5	4.7	4.2	3.7	3.3	3.0	2.8	2.6
025	60	0.31	-	18.2	12.1	9.1	7.3	6.1	5.2	4.5	4.0	3.6	3.3	3.0	2.8
	70	0.33	-	19.6	13.1	9.8	7.9	6.5	5.6	4.9	4.4	3.9	3.6	3.3	3.0
	80	0.35	-	21.0	14.0	10.5	8.4	7.0	6.0	5.3	4.7	4.2	3.8	3.5	3.2
	90	0.38	-	22.3	14.9	11.1	8.9	7.4	6.4	5.6	5.0	4.5	4.1	3.7	3.4
	100	0.40	-	23.5	15.7	11.7	9.4	7.8	6.7	5.9	5.2	4.7	4.3	3.9	3.6
	115	0.42	-	25.2	16.8	12.6	10.1	8.4	7.2	6.3	5.6	5.0	4.6	4.2	3.9
	15	0.18	21.8	10.9	7.3	5.5	4.4	3.6	3.1	2.7	2.4	2.2	2.0	1.8	1.7
	20	0.21	25.2	12.6	8.4	6.3	5.0	4.2	3.6	3.2	2.8	2.5	2.3	2.1	1.9
	30	0.26	-	15.4	10.3	7.7	6.2	5.1	4.4	3.9	3.4	3.1	2.8	2.6	2.4
	40	0.30	-	17.8	11.9	8.9	7.1	5.9	5.1	4.5	4.0	3.6	3.2	3.0	2.7
	50	0.34	-	19.9	13.3	10.0	8.0	6.6	5.7	5.0	4.4	4.0	3.6	3.3	3.1
03	60	0.37	-	21.8	14.5	10.9	8.7	7.3	6.2	5.5	4.8	4.4	4.0	3.6	3.4
	70	0.40	-	23.6	15.7	11.8	9.4	7.9	6.7	5.9	5.2	4.7	4.3	3.9	3.6
	90	0.42	-	25.2	16.8	12.6	10.1	8.4	7.2	6.3	5.6	5.0	4.6	4.2	3.9
	100	0.45	-	26.7	17.8	13.4	10.7	9.4	7.6 8.1	7.0	5.9 6.3	5.3	4.9 5.1	4.5	4.1
	115	0.51	_	-	20.1	15.1	12.1	10.1	8.6	7.6	6.7	6.0	5.5	5.0	4.6
	15	0.24	29.1	14.5	9.7	7.3	5.8	4.8	4.2	3.6	3.2	2.9	2.6	2.4	2.2
04	20	0.28	-	16.8	11.2	8.4	6.7	5.6	4.8	4.2	3.7	3.4	3.1	2.8	2.6
	30	0.35	-	20.6	13.7	10.3	8.2	6.9	5.9	5.1	4.6	4.1	3.7	3.4	3.2
	40	0.40	-	23.8	15.8	11.9	9.5	7.9	6.8	5.9	5.3	4.8	4.3	4.0	3.7
	50	0.45	-	26.6	17.7	13.3	10.6	8.9	7.6	6.6	5.9	5.3	4.8	4.4	4.1
	60	0.49	-	29.1	19.4	14.5	11.6	9.7	8.3	7.3	6.5	5.8	5.3	4.8	4.5
	70	0.53	-	-	21.0	15.7	12.6	10.5	9.0	7.9	7.0	6.3	5.7	5.2	4.8
	80	0.57	-	-	22.4	16.8	13.4	11.2	9.6	8.4	7.5	6.7	6.1	5.6	5.2
	90	0.60	-	-	23.8	17.8	14.3	11.9	10.2	8.9	7.9	7.1	6.5	5.9	5.5
	100	0.63	-	-	25.0	18.8	15.0	12.5	10.7	9.4	8.3	7.5	6.8	6.3	5.8
	115	0.68	-	-	26.9	20.1	16.1	13.4	11.5	10.1	9.0	8.1	7.3	6.7	6.2

HYPRO.PENTAIR.COM 800-445-8360

Spray	Pressure	Flow Speed (MPH) - 20 Inch Spacing Rate Gallons per Acre													
Nozzle	(PSI)	Rate (GPM)	2.5	5	7.5	10	12.5	15	17.5	20	e 22.5	25	27.5	30	32.5
	15	0.31		18.2	12.1	9.1	7.3	6.1	5.2	4.5	4.0	3.6	3.3	3.0	2.8
05	20	0.35	_	21.0	14.0	10.5	8.4	7.0	6.0	5.3	4.7	4.2	3.8	3.5	3.2
	30	0.43	-	25.7	17.1	12.9	10.3	8.6	7.3	6.4	5.7	5.1	4.7	4.3	4.0
	40	0.50	-	29.7	19.8	14.9	11.9	9.9	8.5	7.4	6.6	5.9	5.4	5.0	4.6
	50	0.56	-	-	22.1	16.6	13.3	11.1	9.5	8.3	7.4	6.6	6.0	5.5	5.1
	60	0.61	-	-	24.2	18.2	14.5	12.1	10.4	9.1	8.1	7.3	6.6	6.1	5.6
	70	0.66	-	-	26.2	19.6	15.7	13.1	11.2	9.8	8.7	7.9	7.1	6.5	6.0
	80	0.71	-	-	28.0	21.0	16.8	14.0	12.0	10.5	9.3	8.4	7.6	7.0	6.5
	90	0.75	-	-	29.7	22.3	17.8	14.9	12.7	11.1	9.9	8.9	8.1	7.4	6.9
	100	0.79	-	-	-	23.5	18.8	15.7	13.4	11.7	10.4	9.4	8.5	7.8	7.2
	115	0.85	-	-	-	25.2	20.1	16.8	14.4	12.6	11.2	10.1	9.2	8.4	7.7
-	15	0.37	-	21.8	14.5	10.9	8.7	7.3	6.2	5.5	4.8	4.4	4.0	3.6	3.4
-	20	0.42	-	25.2	16.8	12.6	10.1	8.4	7.2	6.3	5.6	5.0	4.6	4.2	3.9
-	30 40	0.52			20.6	15.4 17.8	12.3	10.3	8.8	7.7 8.9	6.9 7.9	6.2 7.1	5.6	5.1	4.7
	50	0.60	-	-	26.6	17.8	15.9	13.3	11.4	10.0	8.9	8.0	7.2	6.6	5.5 6.1
06	60	0.73		-	29.1	21.8	17.5	14.5	12.5	10.9	9.7	8.7	7.9	7.3	6.7
-	70	0.79	_	_	-	23.6	18.9	15.7	13.5	11.8	10.5	9.4	8.6	7.9	7.3
	80	0.85	_	-	-	25.2	20.2	16.8	14.4	12.6	11.2	10.1	9.2	8.4	7.8
	90	0.90	-	-	-	26.7	21.4	17.8	15.3	13.4	11.9	10.7	9.7	8.9	8.2
	100	0.95	-	-	-	28.2	22.5	18.8	16.1	14.1	12.5	11.3	10.2	9.4	8.7
	115	1.02	-	-	-	-	24.2	20.1	17.3	15.1	13.4	12.1	11.0	10.1	9.3
	15	0.49	-	29.1	19.4	14.5	11.6	9.7	8.3	7.3	6.5	5.8	5.3	4.8	4.5
	20	0.57	-	-	22.4	16.8	13.4	11.2	9.6	8.4	7.5	6.7	6.1	5.6	5.2
	30	0.69	-	-	27.4	20.6	16.5	13.7	11.8	10.3	9.1	8.2	7.5	6.9	6.3
	40	0.80	-	-	-	23.8	19.0	15.8	13.6	11.9	10.6	9.5	8.6	7.9	7.3
	50	0.89	-	-	-	26.6	21.3	17.7	15.2	13.3	11.8	10.6	9.7	8.9	8.2
08	60	0.98	-	-	-	29.1	23.3	19.4	16.6	14.5	12.9	11.6	10.6	9.7	9.0
	70	1.06	-	-	-	-	25.1	21.0	18.0	15.7	14.0	12.6	11.4	10.5	9.7
	90 90	1.13	-	-	-	-	26.9	22.4	19.2	16.8 17.8	14.9 15.8	13.4	12.2	11.2	10.3
-	100	1.26	-	-	-	-	- 20.3	25.0	21.5	18.8	16.7	15.0	13.7	12.5	11.6
	115	1.36	_	_	_	_	_	26.9	23.0	20.1	17.9	16.1	14.6	13.4	12.4
	15	0.61	_	-	24.2	18.2	14.5	12.1	10.4	9.1	8.1	7.3	6.6	6.1	5.6
	20	0.71	_	-	28.0	21.0	16.8	14.0	12.0	10.5	9.3	8.4	7.6	7.0	v6.5
	30	0.87	-	-	-	25.7	20.6	17.1	14.7	12.9	11.4	10.3	9.4	8.6	7.9
	40	1.00	-	-	-	29.7	23.8	19.8	17.0	14.9	13.2	11.9	10.8	9.9	9.1
	50	1.12	-	-	-	-	26.6	22.1	19.0	16.6	14.8	13.3	12.1	11.1	10.2
10	60	1.22	-	-	-	-	29.1	24.2	20.8	18.2	16.2	14.5	13.2	12.1	11.2
	70	1.32	-	-	-	-	-	26.2	22.5	19.6	17.5	15.7	14.3	13.1	12.1
	80	1.41	-	-	-	-	-	28.0	24.0	21.0	18.7	16.8	15.3	14.0	12.9
	90	1.50	-	-	-	-	-	29.7	25.5	22.3	19.8	17.8	16.2	14.9	13.7
	100	1.58	-	-	-	-	-	-	26.8	23.5	20.9	18.8	17.1	15.7	14.4
	115	1.70	-	-	-	-	-	-	28.8	25.2	22.4	20.1	18.3	16.8	15.5
15	15	0.92	-	-	-	27.3	21.8	18.2	15.6	13.6	12.1	10.9	9.9	9.1	8.4
	20 30	1.06	-	-	-	-	25.2	21.0	18.0	15.8 19.3	14.0	12.6 15.4	11.5	10.5	9.7
	40	1.50	_	-	-	-	-	29.7	25.5	22.3	19.8	17.8	16.2	14.9	13.7
	50	1.68	-	-	-	-	-	-	28.5	24.9	22.1	19.9	18.1	16.6	15.3
	60	1.84	-	-	-	-	-	-	-	27.3	24.2	21.8	19.8	18.2	16.8
	70	1.98	-	-	-	-	-	-	-	29.5	26.2	23.6	21.4	19.6	18.1
	80	2.12	-	-	-	-	-	-	-	-	28.0	25.2	22.9	21.0	19.4
	90	2.25	-	-	-	-	-	-	-	-	29.7	26.7	24.3	22.3	20.6
	100	2.37	-	-	-	-	-	-	-	-	-	28.2	25.6	23.5	21.7
	115	2.54	-	-	-	-	-	-	-	-	-	-	27.5	25.2	23.2



SPRAY NOZZLE GUIDE



A GUIDE TO BETTER **UNDERSTAND NOZZLES** AND WHEN TO USE THEM.



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