

FIXED PATTERN NOZZLES

Female Thread, Male Thread and Special Pattern Nozzles



Providing matched precipitation for even water distribution.

Models

FN8	8' (2,4 M) Female Nozzle, Green
FN10	10' (3 M) Female Nozzle, Blue
FN12	12' (3,7 M) Female Nozzle, Brown
FN15	15' (4,6 M) Female Nozzle, Black
P12	12' (3,7 M) Male Nozzle, Brown
P15	15' (4,6 M) Male Nozzle, Black
15CS	Center Strip, Male Nozzle
FN15CS	Center Strip, Female Nozzle
15ES	End Strip, Male Nozzle
FN15ES	End Strip, Female Nozzle
15SS	Side Strip, Male Nozzle
FN15SS	Side Strip, Female Nozzle
15HL	High Low, Male Nozzle
FN15HL	High Low, Female Nozzle



Available in four distances plus eight fixed patterns, providing an array of system configurations. Color-coded for easy identification.



K-Rain Manufacturing Corp.
1640 Australian Avenue
Riviera Beach, FL 33404 USA
561.844.1002
FAX: 561.842.9493
1.800.735.7246 | www.krain.com

Performance Data

Female Threaded Nozzles

FN-8 8' (2,4 M) FEMALE THREADED NOZZLE (GREEN)

NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
FN8Q 90°	20	1.4	6	1.8	0.21	0.8	0.05	2.25	2.59	57	66
	25	1.7	7	2.1	0.24	0.9	0.05	1.89	2.18	48	55
	30	2.1	8	2.4	0.26	1.0	0.06	1.56	1.81	40	46
FN8H 180°	20	1.4	6	1.8	0.42	1.6	0.10	2.25	2.59	57	66
	25	1.7	7	2.1	0.47	1.8	0.11	1.85	2.13	47	54
	30	2.1	8	2.4	0.52	2.0	0.12	1.56	1.81	40	46
FN8TQ 270°	20	1.4	6	1.8	0.63	2.4	0.14	2.25	2.59	57	66
	25	1.7	7	2.1	0.71	2.7	0.16	1.86	2.15	47	54
	30	2.1	8	2.4	0.78	3.0	0.18	1.56	1.81	40	46
FN8F 360°	20	1.4	6	1.8	0.86	3.3	0.20	2.30	2.66	58	67
	25	1.7	7	2.1	0.96	3.6	0.22	1.89	2.18	48	55
	30	2.1	8	2.4	1.05	4.0	0.24	1.58	1.82	40	46

Female Threaded Nozzles

FN-10 10' (3 M) FEMALE THREADED NOZZLE (BLUE)

NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
FN10Q 90°	20	1.4	8	2.4	0.33	1.2	0.07	1.99	2.29	50	58
	25	1.7	9	2.7	0.36	1.4	0.08	1.71	1.98	43	50
	30	2.1	10	3.1	0.39	1.5	0.09	1.50	1.73	38	44
FN10H 180°	20	1.4	8	2.4	0.65	2.5	0.15	1.96	2.26	50	57
	25	1.7	9	2.7	0.72	2.7	0.16	1.71	1.98	43	50
	30	2.1	10	3.1	0.79	3.0	0.18	1.52	1.76	39	45
FN10TQ 270°	20	1.4	8	2.4	0.98	3.7	0.22	1.97	2.27	50	58
	25	1.7	9	2.7	1.08	4.1	0.25	1.71	1.98	43	50
	30	2.1	10	3.1	1.18	4.5	0.27	1.51	1.75	38	44
FN10F 360°	20	1.4	8	2.4	1.03	3.9	0.23	1.55	1.79	39	45
	25	1.7	9	2.7	1.44	5.5	0.33	1.71	1.98	43	50
	30	2.1	10	3.1	1.58	6.0	0.36	1.52	1.76	39	45

Female Threaded Nozzles

FN-12 12' (3,7 M) FEMALE THREADED NOZZLE (BROWN)

NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
FN12Q 90°	20	1.4	10	3.1	0.53	2.0	0.12	2.04	2.36	52	60
	25	1.7	11	3.4	0.60	2.3	0.14	1.91	2.20	48	56
	30	2.1	12	3.7	0.65	2.5	0.15	1.74	2.01	44	51
FN12H 180°	20	1.4	10	3.1	1.05	4.0	0.24	2.02	2.33	51	59
	25	1.7	11	3.4	1.20	4.5	0.27	1.91	2.20	48	56
	30	2.1	12	3.7	1.30	4.9	0.30	1.74	2.01	44	51
FN12TQ 270°	20	1.4	10	3.1	1.58	6.0	0.36	2.03	2.34	51	59
	25	1.7	11	3.4	1.80	6.8	0.41	1.91	2.20	48	56
	30	2.1	12	3.7	1.95	7.4	0.44	1.74	2.01	44	51
FN12F 360°	20	1.4	10	3.1	2.10	7.9	0.48	2.02	2.33	51	59
	25	1.7	11	3.4	2.40	9.1	0.55	1.91	2.20	48	56
	30	2.1	12	3.7	2.60	9.8	0.59	1.74	2.01	44	51

Female Threaded Nozzles

FN-15 15' (4,6 M) FEMALE THREADED NOZZLE (BLACK)

NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
FN15Q 90°	20	1.4	12	3.7	0.75	2.8	0.17	2.01	2.32	51	59
	25	1.7	14	4.3	0.82	3.1	0.19	1.61	1.86	41	47
	30	2.1	15	4.6	0.92	3.5	0.21	1.57	1.82	40	46
FN15H 180°	20	1.4	12	3.7	1.50	5.7	0.34	2.01	2.32	51	59
	25	1.7	14	4.3	1.65	6.2	0.37	1.62	1.87	41	47
	30	2.1	15	4.6	1.85	7.0	0.42	1.58	1.83	40	46
FN15TQ 270°	20	1.4	12	3.7	2.25	8.5	0.51	2.01	2.32	51	59
	25	1.7	14	4.3	2.48	9.4	0.56	1.62	1.88	41	48
	30	2.1	15	4.6	2.78	10.5	0.63	1.59	1.83	40	46
FN15F 360°	20	1.4	12	3.7	3.00	11.4	0.68	2.01	2.32	51	59
	25	1.7	14	4.3	3.30	12.5	0.75	1.62	1.87	41	47
	30	2.1	15	4.6	3.70	14.0	0.84	1.58	1.83	40	46

Performance Data

Male Threaded Nozzles

P-12 12' (3,7 M) MALE THREADED NOZZLE (BROWN)




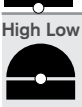
NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
P12Q 90°	20	1.4	11	3.4	0.40	1.51	0.09	1.27	1.47	32	37
	25	1.7	12	3.7	0.45	1.70	0.10	1.20	1.39	30	35
	40	2.8	13	4.0	0.60	2.27	0.14	1.18	1.36	30	35
	50	3.4	14	4.3	0.70	2.65	0.16	1.20	1.38	30	35
P12H 180°	20	1.4	11	3.4	0.60	2.27	0.14	0.95	1.10	24	28
	25	1.7	12	3.7	0.80	3.03	0.18	1.07	1.23	27	31
	40	2.8	13	4.0	1.00	3.79	0.23	0.98	1.13	25	29
P12TQ 270°	20	1.4	11	3.4	0.95	3.60	0.22	1.01	1.16	26	29
	25	1.7	12	3.7	1.00	3.79	0.23	0.89	1.03	23	26
	40	2.8	13	4.0	1.30	4.92	0.30	0.85	0.98	22	25
P12F 360°	20	1.4	11	3.4	1.60	6.06	0.37	1.27	1.47	32	37
	25	1.7	12	3.7	1.80	6.81	0.41	1.20	1.39	30	35
	40	2.8	13	4.0	2.10	7.95	0.48	1.18	1.36	30	35
50	3.4	14	4.3	2.80	10.6	0.64	1.20	1.38	30	35	

Male Threaded Nozzles

P-15 15' (4,6 M) FEMALE THREADED NOZZLE (BLACK)

NOZZLE/ PATTERN	PRESSURE		RADIUS		FLOW RATE			PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	M ³ /H	■	▲	■	▲
P15Q 90°	20	1.4	11	3.4	0.50	1.89	0.11	1.59	1.84	40	47
	25	1.7	12	3.7	0.70	2.65	0.16	1.87	2.16	47	55
	40	2.8	13	4.0	0.80	3.03	0.18	1.82	2.10	46	53
	50	3.4	14	4.3	0.90	3.41	0.20	1.77	2.04	45	52
P15H 180°	20	1.4	11	3.4	1.20	4.54	0.27	1.27	1.47	32	37
	25	1.7	12	3.7	1.40	5.30	0.32	1.25	1.44	32	37
	40	2.8	13	4.0	1.70	6.44	0.39	1.29	1.49	33	38
P15TQ 270°	20	1.4	11	3.4	2.00	7.57	0.45	1.31	1.51	33	38
	25	1.7	12	3.7	2.00	7.57	0.45	1.27	1.47	32	37
	40	2.8	13	4.0	2.40	8.61	0.51	1.25	1.44	32	37
P15F 360°	20	1.4	11	3.4	2.00	7.57	0.45	1.31	1.51	33	38
	25	1.7	12	3.7	2.00	7.57	0.45	1.27	1.47	32	37
	40	2.8	13	4.0	2.10	7.95	0.48	1.20	1.38	30	35
50	3.4	14	4.3	2.40	9.08	0.55	1.18	1.36	30	35	

Female Threaded Nozzles Special Patterns

PATTERN	NOZZLE		PRESSURE		RADIUS		FLOW RATE	
	Male#	Female#	PSI	Bars	Ft.	M.	GPM	L/M
	15CS	FN15CS	20	1.5	4' x 24'	1,2 x 7,3	0.8	3.0
			30	2.0	4' x 30'	1,2 x 9,1	1.0	3.8
	15ES	FN15ES	20	1.5	4' x 12'	1,2 x 3,7	0.4	1.5
			30	2.0	4' x 15'	1,2 x 4,6	0.5	1.9
	15SS	FN15SS	20	1.5	4' x 28'	1,2 x 8,5	1.1	4.2
			30	2.0	5' x 32'	1,5 x 9,8	1.3	4.9
	15HL	FN15HL	20	1.5	H14' x	4.3 x	2.5	9.5
					L4' x 28'	1.2 x 8.5		
					H15' x	4.6 x		
30	2.0	L5' x 32'	1.5 x 9.8	3.0	11.4			

*Data represents test results in zero wind. Adjust for local conditions.
Radius may be reduced with the nozzle retention screw.