

FLAT SPRAY NOZZLES

■ PERFORMANCE DATA: STANDARD ANGLE SPRAY

Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)					Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	NPHV		NPHVL					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	1/8	1/4																	
110°	•	•	•	•		01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	94	110	121	124	
	•	•	•			015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	97	110	121	124	
	•	•	•			02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	98	110	120	123	
	•	•	•			03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	99	110	120	123	
	•	•	•	•		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	100	110	119	122	
	•	•	•			05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	100	110	118	122	
	•	•	•	•		06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	101	110	117	122	
	•	•	•			08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	102	110	117	121	
	•	•	•	•		10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	103	110	117	119	
	•	•	•			15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	104	110	117	118	
95°	•		•			0050	.018	—	—	.035	.050	.07	.08	.11	.14	.18	81	95	105	113	
	•	•	•			01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	81	95	105	113	
		•	•			015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	82	95	105	113	
	•	•	•	•		02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	82	95	105	113	
	•	•	•			03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	83	95	104	111	
	•	•	•	•		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	84	95	103	108	
	•	•	•	•		05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	84	95	102	107	
	•	•	•	•		06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	86	95	101	106	
				•		065	.064	.23	.33	.46	.65	.92	1.0	1.5	1.8	2.3	86	95	101	106	
	•	•	•	•		08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	87	95	100	105	
80°	•	•	•	•		0050	.018	—	—	.035	.050	.07	.08	.11	.14	.18	61	80	95	101	
	•	•	•	•		0067	.021	—	.033	.05	.067	.09	.11	.15	.18	.24	67	80	94	99	
	•	•	•	•		01	.026	—	.05	.07	.10	.14	.16	.22	.27	.35	68	80	89	92	
	•	•	•			015	.032	—	.08	.11	.15	.21	.24	.34	.41	.53	68	80	89	92	
	•	•	•	•		02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	69	80	88	91	
	•	•	•	•		03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	70	80	87	90	
	•	•	•	•		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	71	80	86	89	
	•	•	•	•		05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	71	80	86	89	
	•	•	•	•		06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	72	80	85	88	
				•		07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	72	80	85	88	
	•	•	•	•		08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	72	80	84	87	
	•		•	•		09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	73	80	84	87	

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Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)					Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	NPHV		NPHVL																		
	1/8	1/4	1/8	1/4				5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
73°	•	•	•	•		0077	.023	–	.039	.055	.077	.11	.12	.17	.21	.27	53	73	86	92	
	•	•	•	•		0154	.032	.054	.077	.11	.15	.22	.24	.34	.42	.54	55	73	84	88	
		•		•		0231	.038	.082	.12	.16	.23	.33	.37	.52	.63	.82	56	73	83	87	
	•	•	•	•		0308	.044	.11	.15	.22	.31	.44	.49	.69	.84	1.1	58	73	82	86	
		•		•		0462	.054	.16	.23	.33	.46	.65	.73	1.0	1.3	1.6	60	73	80	84	
	•		•			0770	.069	.27	.39	.54	.77	1.1	1.2	1.7	2.1	2.7	64	73	77	82	
65°	•		•			0017	.011	–	–	.012	.017	.024	.027	.038	.047	.06	44	65	77	86	
	•		•			0033	.015	–	–	.023	.033	.047	.052	.07	.09	.12	47	65	76	83	
	•	•	•	•		0067	.021	–	.033	.05	.067	.09	.11	.15	.18	.24	50	65	75	81	
	•	•	•	•		01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	51	65	74	80	
	•	•	•	•		015	.032	–	.08	.11	.15	.21	.24	.34	.41	.53	51	65	74	80	
	•	•	•	•		02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	52	65	73	79	
	•		•			025	.039	.09	.13	.18	.25	.35	.40	.56	.68	.88	52	65	73	79	
	•	•	•	•		03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	53	65	72	78	
	•	•	•	•		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	53	65	72	76	
	•	•	•	•		05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	53	65	72	76	
		•				055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	53	65	72	76	
	•	•		•		06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	54	65	72	75	
		•				07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	54	65	71	75	
	•	•	•	•		08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	55	65	71	74	
	•					09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	55	65	71	74	
50°	•	•	•	•		01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	37	50	59	65	
	•	•	•	•		02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	39	50	57	63	
	•	•	•	•		03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	40	50	56	62	
	•	•	•	•		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	42	50	56	61	
	•	•	•	•		05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	44	50	56	61	
	•					055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	44	50	56	61	
	•	•	•	•		06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	45	50	56	60	
	•	•				07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	45	50	56	60	
	•	•	•	•		08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	45	50	55	60	
	•				09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	45	50	55	59		
40°	•	•	•	•		01	.026	–	–	.07	.10	.14	.16	.22	.27	.35	26	40	52	59	
	•	•	•	•		015	.032	–	–	.11	.15	.21	.24	.34	.41	.53	27	40	52	59	
	•	•	•	•		02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	29	40	51	58	
	•	•	•	•		03	.043	–	.15	.21	.30	.42	.47	.67	.82	1.1	30	40	50	57	
	•	•	•	•		04	.050	–	.20	.28	.40	.57	.63	.89	1.1	1.4	30	40	50	56	

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Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)					Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	NPHV		NPHVL																		
	1/8	1/4	1/8	1/4				5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
40°	•	•	•	•		05	.056	—	.25	.35	.50	.71	.79	1.1	1.4	1.8	31	40	49	55	
	•	•				055	.059	—	.28	.39	.55	.78	.87	1.2	1.5	1.9	31	40	49	55	
	•	•	•	•		06	.061	—	.30	.42	.60	.85	.95	1.3	1.6	2.1	31	40	49	55	
	•	•				065	.064	—	.33	.46	.65	.92	1.0	1.5	1.8	2.3	31	40	48	54	
	•	•				07	.066	—	.35	.49	.70	.99	1.1	1.6	1.9	2.5	31	40	48	54	
	•	•	•	•		08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	31	40	47	53	
	•					085	.073	.30	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	32	40	46	50	
	•	•				09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	32	40	46	50	
25°	•	•	•	•		01	.026	—	—	.07	.10	.14	.16	.22	.27	.35	14	25	34	42	
	•	•	•	•		02	.035	—	—	.14	.20	.28	.32	.45	.55	.71	15	25	33	40	
	•	•	•	•		03	.043	—	—	.21	.30	.42	.47	.67	.82	1.1	15	25	33	40	
	•	•	•	•		04	.050	—	.20	.28	.40	.57	.63	.89	1.1	1.4	16	25	32	39	
				•		045	.053	—	.23	.32	.45	.64	.71	1.0	1.2	1.6	16	25	32	39	
	•	•	•	•		05	.056	—	.25	.35	.50	.71	.79	1.1	1.4	1.8	16	25	32	39	
	•	•				055	.059	—	.28	.39	.55	.78	.87	1.2	1.5	1.9	16	25	31	38	
	•	•	•	•		06	.061	—	.30	.42	.60	.85	.95	1.3	1.6	2.1	17	25	31	38	
	•	•				065	.064	—	.33	.46	.65	.92	1.0	1.5	1.8	2.3	17	25	31	38	
	•	•	•			07	.066	—	.35	.49	.70	.99	1.1	1.6	1.9	2.5	17	25	31	38	
	•	•				075	.068	—	.38	.53	.75	1.1	1.2	1.7	2.1	2.7	17	25	31	38	
	•	•	•	•		08	.071	—	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	17	25	31	38	
	•					085	.073	—	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	18	25	31	37	
	•	•				09	.075	—	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	17	25	31	37	
						15	.094	—	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	18	25	31	37	
15°	•	•		•		01	.026	—	—	—	.10	.14	.16	.22	.27	.35	—	15	24	28	
	•		•			02	.035	—	—	.14	.20	.28	.32	.45	.55	.71	6	15	22	27	
	•	•	•	•		03	.043	—	—	.21	.30	.42	.47	.67	.82	1.1	6	15	22	27	
	•	•	•	•		04	.050	—	—	.28	.40	.57	.63	.89	1.1	1.4	7	15	21	26	
	•	•	•	•		05	.056	—	—	.35	.50	.71	.79	1.1	1.4	1.8	7	15	21	26	
	•	•				055	.059	—	.28	.39	.55	.78	.87	1.2	1.5	1.9	7	15	21	26	
	•	•	•	•		06	.061	—	.30	.42	.60	.85	.95	1.3	1.6	2.1	8	15	21	26	
	•	•				065	.064	—	.33	.46	.65	.92	1.0	1.5	1.8	2.3	8	15	20	25	
		•				07	.066	—	.35	.49	.70	.99	1.1	1.6	1.9	2.5	8	15	20	25	
	•	•	•	•		08	.071	—	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	9	15	20	25	
	•	•				085	.073	—	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	9	15	19	24	
	•	•				09	.075	—	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	9	15	19	24	

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Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)								Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)												Spray Angle (°)				
	NPHU						NPU																				
	1/8	1/4	3/8	1/2	3/4		1	1-1/4			2	5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi			
110°	•								20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	105	110	117	118				
95°	•	•		•					10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	89	95	100	105				
	•	•		•					15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	90	95	100	105				
	•	•	•						20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	90	95	100	105				
	•	•		•					30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	91	95	101	105				
		•	•	•					40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	92	95	100	105				
		•		•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	93	95	99	103				
		•		•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	93	95	99	103				
		•	•	•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	93	95	99	103				
				•					80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	93	95	99	102				
					•				100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	93	95	99	102				
					•				150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	93	95	99	102				
						•			400	.472	14.1	20	28	40	57	63	89	110	141	93	95	99	102				
80°	•	•	•	•					10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	73	80	84	87				
	•	•		•					15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	74	80	83	86				
	•	•	•	•					20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	74	80	83	86				
	•	•	•	•					30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	74	80	83	86				
	•	•	•	•					40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	74	80	83	86				
		•	•	•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	74	80	83	85				
		•	•	•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	75	80	83	85				
		•	•	•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	75	80	83	86				
			•	•					100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	75	80	83	86				
				•	•				150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	73	80	84	86				
					•	•			200	.343	7.1	10.0	14.1	20	28	32	45	55	71	74	80	82	85				
						•			400	.472	14.1	20	28	40	57	63	89	110	141	78	80	81	83				
65°								•	500	.528	17.7	25	35	50	71	79	112	137	177	78	80	81	83				
								•	580	.569	21	29	41	58	82	92	130	159	205	78	80	81	83				
	•	•	•						10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	56	65	71	74				
	•	•							12	.084	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	56	65	71	73				
	•	•	•	•					15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	56	65	70	73				
	•	•		•					20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	57	65	70	73				
	•								25	.121	.88	1.3	1.8	2.5	3.5	4.0	5.6	6.8	8.8	57	65	69	73				
	•	•	•						30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	58	65	69	72				
	•	•	•						40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	59	65	68	72				
	•	•	•	•				50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	60	65	68	71					
		•	•	•				60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	60	65	68	71					

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Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)											Spray Angle (°)							
	NPHU								NPU																		
	1/8	1/4	3/8	1/2	3/4				1	1-1/4	2		5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi		
65°		•	•	•			70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	60	65	68	71						
			•	•			100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	58	65	69	70						
			•	•			150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	59	65	68	70						
				•	•		200	.343	7.1	10.0	14.1	20	28	32	45	55	71	60	65	67	69						
					•		250	.373	8.8	12.5	17.7	25	35	40	56	68	88	60	65	67	69						
					•		300	.409	10.6	15.0	21	30	42	47	67	82	106	60	65	67	69						
						•	400	.472	14.1	20	28	40	57	63	89	110	141	60	65	67	69						
							•	500	.528	17.7	25	35	50	71	79	112	137	177	60	65	66	68					
							•	580	.569	21	29	41	58	82	92	130	159	205	61	65	66	68					
50°							02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	39	50	57	63						
							03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	40	50	56	62						
							04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	42	50	56	61						
							05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	44	50	56	61						
							055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	44	50	56	61						
							06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	45	50	56	60						
							07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	45	50	56	60						
							08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	45	50	55	60						
		•	•	•			10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	45	50	55	59						
			•	•	•		15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	45	50	55	59						
		•	•	•	•		20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	45	50	55	59						
		•	•	•	•		30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	45	50	55	59						
		•	•	•			40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	46	50	54	59						
		•	•	•			50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	46	50	54	59						
			•	•			60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	46	50	54	59						
			•	•	•		70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	46	50	54	59						
			•	•			80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	45	50	53	58						
				•			85	.224	3.0	4.3	6.0	8.5	12.0	13.4	19.0	23	30	45	50	53	57						
			•				90	.230	3.2	4.5	6.4	9.0	12.7	14.2	20	25	32	45	50	53	56						
				•	•		100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	44	50	52	54						
				•			110	.255	3.9	5.5	7.8	11.0	15.6	17.4	25	30	39	45	50	53	54						
				•			120	.266	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42	44	50	53	55						
				•			135	.282	4.8	6.8	9.5	13.5	19.1	21	30	37	48	45	50	52	55						
				•	•		150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	45	50	52	55						
					•		200	.343	7.1	10.0	14.1	20	28	32	45	55	71	46	50	52	55						
					•		250	.384	8.8	12.5	17.7	25	35	40	56	68	88	46	50	52	55						
					•	400	.472	14.1	20	28	40	57	63	89	110	141	46	50	52	55							

FLAT SPRAY NOZZLES

■ PERFORMANCE DATA: STANDARD ANGLE SPRAY

Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)					
	NPHU								NPU			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
	1/8	1/4	3/8	1/2	3/4				1	1-1/4	2													
50°							•	•	500	.528	17.7	25	35	50	71	79	112	137	177	49	50	51	54	
							•		580	.569	21	29	41	58	82	92	130	159	205	49	50	51	53	
							•		750	.647	27	38	53	75	106	119	168	205	265	49	50	51	53	
							•		1000	.747	35	50	71	100	141	158	224	274	354	49	50	51	53	
							•		1500	.915	53	75	106	150	212	237	335	411	530	49	50	51	52	
							•		2000	1.056	71	100	141	200	283	316	447	548	707	49	50	51	52	
40°	•	•	•						10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	32	40	45	48	
	•	•	•	•					15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	32	40	45	48	
	•	•	•	•					20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	32	40	45	48	
	•	•	•						30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	33	40	45	48	
	•	•	•						40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	34	40	45	48	
		•	•	•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	35	40	45	48	
	•	•	•						60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	35	40	45	48	
		•	•	•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	35	40	45	48	
		•							80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	35	40	44	47	
			•	•					100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	34	40	43	46	
			•	•					150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	35	40	43	44	
				•					200	.343	7.1	10.0	14.1	20	28	32	45	55	71	36	40	42	44	
							•		500	.528	17.7	25	35	50	71	79	112	137	177	38	40	41	45	
25°	•	•							10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	18	25	31	37	
	•	•	•						15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	18	25	31	37	
	•	•	•						20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	19	25	31	37	
	•	•	•						30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	20	25	30	36	
		•	•						40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	21	25	29	35	
		•	•						50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	21	25	29	35	
		•	•						60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	22	25	29	35	
		•	•	•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	22	25	29	35	
			•	•					100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	23	25	28	32	
			•	•					150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	24	25	28	30	
				•					200	.343	7.1	10.0	14.1	20	28	32	45	55	71	24	25	26	29	
							•	•	500	.528	17.7	25	35	50	71	79	112	137	177	24	25	26	29	
15°								•	750	.647	27	38	53	75	106	119	168	205	265	24	25	26	28	
								•	1000	.747	35	50	71	100	141	158	224	274	354	24	25	26	28	
	•	•							10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	10	15	19	24	
15°	•	•	•						15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	10	15	19	24	
	•	•	•						20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	10	15	19	23	

FLAT SPRAY NOZZLES

■ PERFORMANCE DATA: STANDARD ANGLE SPRAY

Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)											Spray Angle (°)					
	NPHU								NPU																
	1/8	1/4	3/8	1/2	3/4				1	1-1/4	2	5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
15°	•	•	•					30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	10	15	19	21			
	•	•	•					40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	10	15	18	21			
		•	•	•				50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	11	15	18	21			
		•	•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	11	15	18	21			
		•	•	•				70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	11	15	18	21			
			•	•				100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	13	15	17	18			
				•				120	.266	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42	13	15	17	18			
					•			150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	14	15	17	18			
						•		200	.343	7.1	10.0	14.1	20	28	32	45	55	71	14	15	17	18			
							•	500	.528	17.7	25	35	50	71	79	112	137	177	14	15	16	17			
							•	1000	.747	35	50	71	100	141	158	224	274	354	14	15	16	17			
0°	•	•						03	.041	.11	.15	.21	.30	.42	.47	.67	.82	1.1	0 Solid Stream						
	•	•						04	.047	.14	.20	.28	.40	.57	.63	.89	1.1	1.4							
	•	•						05	.053	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8							
	•	•						055	.055	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9							
	•	•						06	.058	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1							
	•	•						065	.060	.23	.33	.46	.65	.92	1.0	1.5	1.8	2.3							
		•						07	.062	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5							
	•	•						08	.067	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8							
	•							085	.069	.30	.43	.60	.85	1.2	1.3	1.9	2.3	3.0							
	•	•						09	.071	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2							
	•	•						10	.075	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5							
		•						12	.082	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2							
	•	•						15	.091	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3							
	•	•	•					20	.106	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1							
	•	•						30	.129	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6							
	•	•						40	.149	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1							
		•						50	.167	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7							
			•					60	.183	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21							
		•	•					70	.198	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25							
		•	•					80	.211	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28							
			•					100	.236	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35							
				•				120	.259	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42							
		•		•				150	.289	5.3	7.5	10.6	15.0	21	24	34	41	53							
				•				165	.303	5.8	8.3	11.7	16.5	23	26	37	45	58							
					•			200	.334	7.1	10.0	14.1	20	28	32	45	55	71							

FLAT SPRAY NOZZLES

■ PERFORMANCE DATA: STANDARD ANGLE SPRAY

Spray Angle at 40 psi	Nozzle Type/Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)					
	NPHU					NPU																		
	1/8	1/4	3/8	1/2	3/4				1	1-1/4	2	5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
0°			•	•					250	.373	8.8	12.5	17.7	25	35	40	56	68	88					
					•				350	.437	12.4	17.5	25	35	49	55	78	96	124					
							•	•	570	.558	20	29	40	57	81	90	127	156	202					
					•				700	.618	25	35	49	70	99	111	157	192	247					
							•		1000	.739	35	50	71	100	141	158	224	274	354					
							•		1100	.775	39	55	78	110	156	174	246	301	389					
								•	1400	.875	49	70	99	140	198	221	313	383	495					
								•	1800	.992	64	90	127	180	255	285	402	493	636					
								•	2000	1.045	71	100	141	200	283	316	447	548	707					
								•	3500	1.383	124	175	247	350	495	553	783	959	1237					

■ ORDERING INFO

Unit Formula Complete Nozzle					
NPHU	-	110	20	-	1/4
Nozzle		Spray	Capacity		Inlet
Type		Angle			Connection
					SS
					Material

Available materials: Brass (leave blank), 303/304 Stainless (SS), 316L Stainless (316)

■ DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D (Dia.) (in.)	Net Weight (oz.)
	NPH-U (M)	1/8	1.000	9/16	—	0.5
		1/4	1.000	9/16	—	0.8
		3/8	1.250	11/16	—	1.5
		1/2	1.500	7/8	—	2.3
		3/4	2.000	1-1/16	—	5
	NPH-VV (M)	1/8	0.875	1/2	—	0.5
		1/4	0.906	9/16	—	0.8

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D (Dia.) (in.)	Net Weight (oz.)
	NPH-VVL (M)	1/8	1.531	1/2	—	0.8
		1/4	1.250	9/16	—	1
	NPU (M)	1	2.313	—	1.313	9
		1-1/4	3.750	—	1.688	20
		2	5.375	—	2.375	68

Based on the largest/heaviest version of each type.