



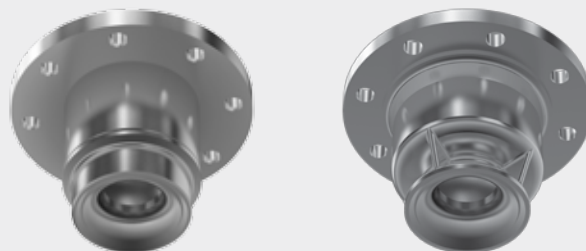
Axial-flow full cone nozzles Series 421



**Even full cone distribution,
high flow rates.**

Applications:

Scrubber, for even surface irrigation, cooling and cleaning of gases, water recooling, column irrigation and for improving chemical reactions via surface enlargement.



Other nozzle sizes and materials are available on request.

Spray angle* 	Ordering no.				B Ø [in]	E Ø [in]	Flow Rate (Gallons Per Minute)					
	Type	Mat. no.					4 psi	7 psi	14.5 psi	Liters per minute 2 bar	72 psi	145 psi
		05.84 GG	1Y.84 316L SS	53.00 PP								
60°	421.564	○	-	○	1.46	0.47	99	121	160	800	305	402
	421.604	○	-	○	1.54	0.55	124	152	200	1000	381	503
	421.624	○	○	○	1.61	0.51	155	190	250	1250	476	629
	421.644	○	○	○	1.93	0.63	198	243	320	1600	610	805
	421.664	○	○	○	2.20	0.63	247	304	400	2000	762	1006
	421.684	○	○	○	2.28	0.83	309	379	501	2500	953	1257
	421.704	○	○	○	2.56	0.94	390	478	631	3150	1201	1584
	421.724	-	○	○	2.83	1.18	495	607	801	4000	1525	2012
	421.744	-	○	○	3.19	1.34	618	759	1001	5000	1906	2514
	421.764	-	○	○	3.46	1.38	779	956	1261	6300	2401	3168
	421.784	-	○	○	3.90	1.54	990	1214	1602	8000	3049	4023
	421.804	-	○	-	4.41	1.65	1237	1517	2002	10000	3811	5029
	421.824	-	○	-	4.92	2.05	1546	1896	2503	12500	4764	6286
90°	421.566	○	-	○	1.46	0.59	99	121	160	800	305	402
	421.606	○	-	○	1.54	0.59	124	152	200	1000	381	503
	421.626	○	○	○	1.69	0.75	155	190	250	1250	476	629
	421.646	○	○	○	2.09	0.87	198	243	320	1600	610	805
	421.666	○	○	○	2.20	0.94	247	304	400	2000	762	1006
	421.686	○	○	○	2.32	1.10	309	379	501	2500	953	1257
	421.706	○	○	○	2.60	1.26	390	4790	631	3150	1201	1584
	421.726	-	○	○	2.83	1.38	495	607	801	4000	1525	2012
	421.746	-	○	○	3.19	1.57	618	759	1001	5000	1906	2514
	421.766	-	○	○	3.66	1.54	779	956	1261	6300	2401	3168
	421.786	-	○	○	3.90	1.73	990	1214	1602	8000	3049	4023
	421.806	-	○	○	4.84	2.09	1237	1517	2002	10000	3811	5029
	421.826	-	○	-	4.92	2.13	1543	1896	2502	12500	4764	6286
120°	421.568	○	○	○	1.42	0.59	99	121	160	800	305	402
	421.608	○	○	○	1.61	0.59	124	152	200	1000	381	503
	421.628	○	○	○	1.69	0.75	155	190	250	1250	476	629
	421.648	○	○	○	2.09	0.87	198	243	320	1600	610	805
	421.668	○	○	○	2.17	0.94	247	303	400	2000	762	1006
	421.688	○	○	○	2.32	1.10	309	379	501	2500	953	1257
	421.708	○	○	○	2.60	1.26	390	478	631	3150	1201	1584
	421.728	-	○	○	2.83	1.38	495	607	801	4000	1525	2012
	421.748	-	○	○	3.19	1.57	618	759	1001	5000	1906	2514
	421.768	-	○	○	3.46	1.54	779	956	1261	6300	2401	3168
	421.788	-	○	○	3.90	1.73	990	1214	1602	8000	3049	4023
	421.808	-	○	○	4.25	2.09	1237	1517	2002	10000	3811	5029
	421.828	-	○	○	4.76	2.13	1546	1896	253	12500	4764	6286

B = bore diameter · E = narrowest free cross section

* Spray angle at p = 30 psi



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Conversion formula for the above series: $\dot{V}_2 = \dot{V}_1 * \left(\frac{p_2}{p_1} \right)^{0.4}$



Axial-flow full cone nozzles Series 421

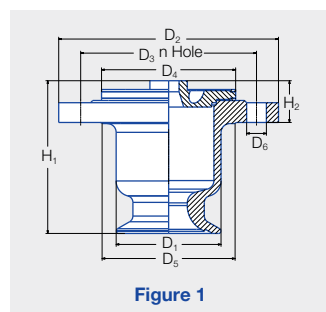


Figure 1

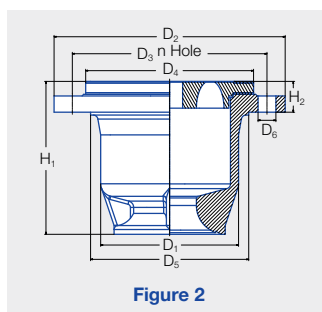


Figure 2

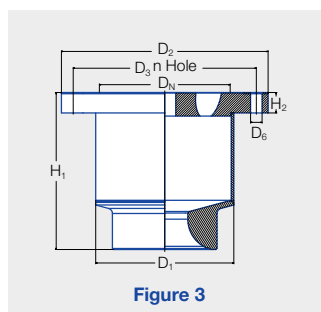


Figure 3

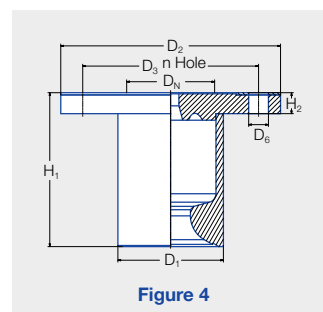


Figure 4

Spray angle 	Type	Mat. no.	Fig.	Dimensions [mm]								Flange hole	
				H ₁	H ₂	D ₁	D ₂	D ₃	D ₄	D ₅	D _N	Number	D ₆
60°-90°	421.56x/ 421.60x	05.84	1	134	39	96	200	160	122	121	80	8	18
120°		05.84	1	140	39	96	200	160	122	121	80	8	18
120°		1Y.84	3	140	19	96	200	160	-	-	80	8	18
60°-120°		53.00	4	131	44	99	200	160	-	-	80	8	18
60°-120°	421.62x	05.84	1	156	28	113	220	180	158	141	100	8	18
		1Y.84	3	156	20	108	220	180	-	-	100	8	18
		53.00	4	156	53	117	220	180	-	-	100	8	18
60°-90°	421.64x/ 421.66x	05.84	2	175	42	140	250	210	188	166	125	8	18
120°		05.84	2	175	29	140	250	210	188	166	125	8	18
60°-120°		1Y.84	3	175	19	135	250	210	-	-	125	8	18
60°-120°		53.00	4	175	57	141	250	210	-	-	125	8	18
60°-120°	421.68x/ 421.70x	05.84	2	186	38	170	285	240	207	195	150	8	22
		1Y.84	3	186	27	160	285	240	-	-	150	8	22
		53.00	4	186	51	171	285	240	-	-	150	8	23
60°-120°	421.72x/ 421.74x	1Y.84	3	250	33	214	340	295	-	-	200	8	22
		53.00	4	250	50	225	340	295	-	-	200	8	23
60°-120°	421.76x/ 421.78x	1Y.84	3	300	39	264	395	350	-	-	250	12	22
		53.00	4	300	53	280	395	350	-	-	250	12	23
60°-120°	421.80x/ 421.82x	1Y.84	3	367	49	315	445	400	-	-	300	12	22
		53.00	4	367	57	328	445	400	-	360	300	12	23

Example **Type** + **Material no.** = **Ordering no.**
for ordering: 421.564 + 05.84 = 421.564.05.84

Conversion formula for the above series: $\dot{V}_2 = \dot{V}_1 * \left(\frac{p_2}{p_1} \right)^{0.4}$

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