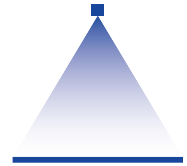


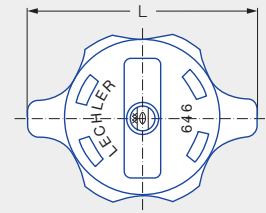
# Low pressure flat fan nozzles

## Series 646



### Features:

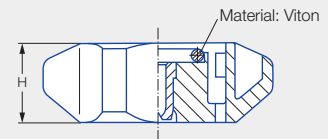
- Uniform, parabolic liquid distribution
- Adjusted spray direction
- Simple, fast manual assembly due to bayonet quick-release system



### Applications:

- Belt cleaning
- Surface treatment
- Spray cleaning
- Coating processes

Series 646

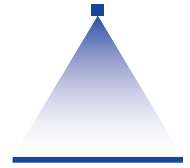


Dimensions [in]		Weight [lb]
H	L	
0.59	1.73	.03

Spray angle	Ordering number		Equivalent bore diameter A [in]	Narrowest free cross section Ø [in]	V̇ water [gal/min]							Spray width B [in] (at p = 75 psi)				
	Type	Mat. No.			p [psi]										H = 10 [in]	H = 20 [in]
		5E								liters per minute						
					PVDF	7	15	30	45	75	5 bar	145				
20°	646.301	●	0.03	0.02	0.04*	0.06*	0.09	0.11	0.14	0.51	0.19	3	6			
	646.361	●	0.04	0.03	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	3	6			
	646.441	●	0.05	0.04	0.16*	0.24	0.34	0.41	0.53	1.98	0.74	3	6			
	646.481	●	0.06	0.05	0.21*	0.30	0.43	0.53	0.68	2.53	0.95	3	6			
30°	646.302	●	0.03	0.02	0.04*	0.06*	0.09	0.11	0.14	0.51	0.19	5	9			
	646.362	●	0.04	0.03	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	5	9			
	646.402	●	0.05	0.035	0.13*	0.19	0.27	0.33	0.42	1.58	0.59	5	9			
	646.482	●	0.06	0.04	0.21*	0.30	0.42	0.53	0.68	2.53	0.95	5	9			
	646.562	●	0.08	0.06	0.32	0.47	0.67	0.82	1.06	3.95	1.48	5	9			
45°	646.363	●	0.04	0.02	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	7	14			
	646.403	●	0.05	0.035	0.13*	0.19	0.27	0.33	0.42	1.58	0.59	8	15			
	646.483	●	0.06	0.04	0.21*	0.30	0.42	0.53	0.68	2.53	0.95	8	15			
	646.563	●	0.08	0.06	0.32	0.47	0.67	0.82	1.06	3.95	1.48	8	16			
	646.643	●	0.10	0.07	0.52	0.76	1.07	1.32	1.70	6.32	2.36	8	16			
60°	646.304	●	0.03	0.016	0.04*	0.06*	0.09	0.11	0.14	0.51	0.19	10	19			
	646.334	●	0.035	0.02	0.06*	0.08*	0.12	0.15	0.19	0.71	0.27	10	19			
	646.364	●	0.04	0.024	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	10	20			
	646.404	●	0.047	0.03	0.13*	0.19	0.27	0.33	0.42	1.58	0.59	10	20			
	646.444	●	0.05	0.035	0.17*	0.24	0.34	0.41	0.53	1.98	0.74	10	20			
	646.484	●	0.06	0.04	0.21*	0.30	0.43	0.53	0.68	2.53	0.95	10	20			
	646.514	●	0.065	0.043	0.25*	0.36	0.51	0.62	0.81	3.00	1.12	11	20			
	646.564	●	0.08	0.05	0.32	0.47	0.67	0.82	1.06	3.95	1.48	11	21			
	646.604	●	0.09	0.06	0.41	0.60	0.85	1.04	1.34	4.98	1.86	11	21			

\* Differing spray pattern.

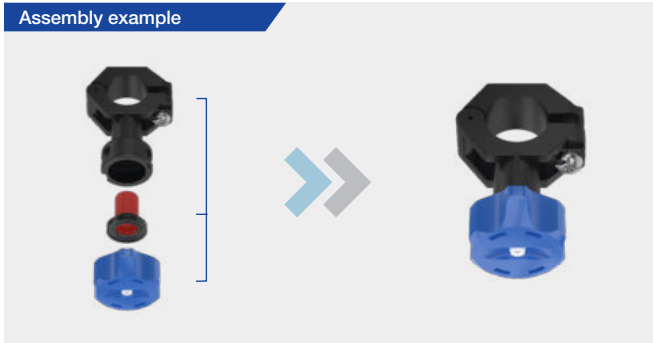




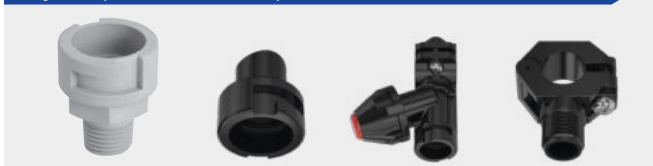
Spray angle	Ordering number		Equivalent bore diameter A [in]	Narrowest free cross section Ø [in]	V̇ water [gal/min]							Spray width B [in] (at p = 75 psi)	
	Type	Mat. No.			p [psi]							H = 10 [in]	H = 20 [in]
		5E			7	15	30	45	75	liters per minute 5 bar	145		
90°	646.306	●	0.03	0.016	0.04*	0.06*	0.09	0.11	0.14	0.51	0.19	17	31
	646.336	●	0.035	0.02	0.06*	0.09*	0.12	0.15	0.19	0.71	0.27	17	32
	646.366	●	0.04	0.02	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	18	33
	646.406	●	0.047	0.028	0.13*	0.19	0.27	0.33	0.42	1.58	0.59	18	33
	646.446	●	0.05	0.03	0.17*	0.24	0.34	0.41	0.53	1.98	0.74	18	34
	646.486	●	0.06	0.03	0.21*	0.30	0.43	0.53	0.68	2.53	0.95	19	34
	646.516	●	0.065	0.035	0.25*	0.36	0.51	0.62	0.81	3.00	1.12	19	35
	646.566	●	0.08	0.04	0.32	0.47	0.67	0.82	1.06	3.95	1.48	19	35
646.606	●	0.09	0.05	0.41	0.60	0.85	1.04	1.34	4.98	1.86	20	36	
120°	646.307	●	0.03	0.01	0.04*	0.06*	0.09	0.11	0.14	0.51	0.19	28	49
	646.337	●	0.035	0.016	0.06*	0.09*	0.12	0.15	0.19	0.71	0.27	29	52
	646.367	●	0.04	0.02	0.08*	0.12*	0.17	0.21	0.27	1.00	0.37	31	53
	646.407	●	0.047	0.024	0.13*	0.19	0.27	0.33	0.42	1.58	0.59	33	55
	646.447	●	0.05	0.024	0.17*	0.24	0.34	0.41	0.53	1.98	0.74	33	56
	646.487	●	0.06	0.024	0.21*	0.30	0.43	0.53	0.68	2.53	0.95	33	56
	646.517	●	0.065	0.035	0.25*	0.36	0.51	0.62	0.81	3.00	1.12	33	56
	646.567	●	0.08	0.035	0.32	0.47	0.67	0.82	1.06	3.95	1.48	34	57
646.607	●	0.09	0.04	0.42	0.59	0.85	1.04	1.34	4.98	1.86	34	57	

\* Differing spray pattern.

Assembly example



Bayonet quick-release base options for use with Series 646 nozzle



Conversion formula for this series:  $\dot{V}_2 = \dot{V}_1 \cdot \sqrt{\frac{p_2}{p_1}}$

Ordering Type + Material no. = Ordering no.  
example: 646.306 + 5E = 646.306\*



Assembly accessories can be found in Chapter 12 "Accessories".