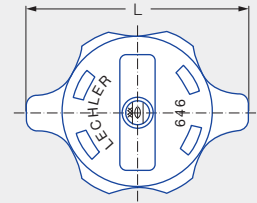
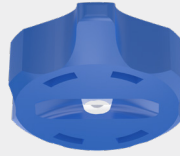


# Low pressure flat fan nozzles Series 646



## Features:

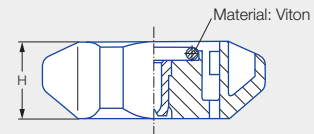
- Uniform, parabolic liquid distribution
- Adjusted spray direction
- Simple, fast manual assembly due to bayonet quick-release system



## Applications:

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

Series 646



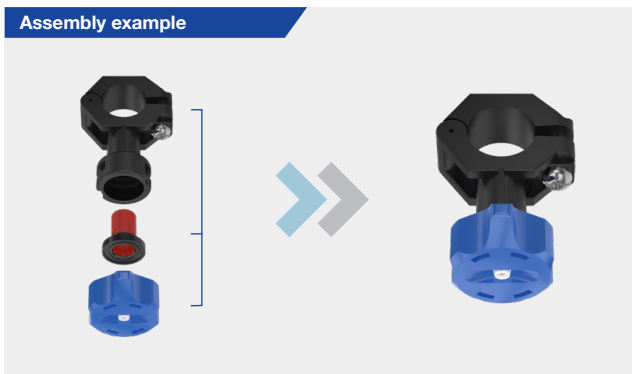
Dimensions [mm]		Weight [g]
H	L	
15.0	44.0	12.0

Spray angle	Ordering no.		Equivalent bore diameter A [mm]	Narrowest free cross section Ø [mm]	V̇ water [l/min]						Spray width B [mm] (at p = 5 bar)	
	Type	Mat. no.			p [bar]							
		5E										
		PVDF			0.5	1.0	2.0	3.0	5.0	10.0	H = 250 [mm]	H = 500 [mm]
20°	646.301	●	0.70	0.60	0.16*	0.23*	0.32	0.39	<b>0.51</b>	0.72	85	160
	646.361	●	1.00	0.80	0.31*	0.44*	0.63	0.77	<b>1.00</b>	1.41	85	160
	646.441	●	1.35	1.10	0.63*	0.88	1.25	1.53	<b>1.98</b>	2.80	85	160
	646.481	●	1.50	1.20	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	85	160
30°	646.302	●	0.70	0.50	0.16*	0.23*	0.32	0.39	<b>0.51</b>	0.72	120	220
	646.362	●	1.00	0.70	0.31*	0.44*	0.63	0.77	<b>1.00</b>	1.40	120	220
	646.402	●	1.20	0.90	0.50*	0.71	1.00	1.22	<b>1.58</b>	2.24	120	230
	646.482	●	1.50	1.10	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	130	230
	646.562	●	2.00	1.50	1.25	1.77	2.50	3.06	<b>3.95</b>	5.59	130	240
45°	646.363	●	1.00	0.60	0.31*	0.44*	0.63	0.77	<b>1.00</b>	1.40	190	350
	646.403	●	1.20	0.90	0.50*	0.71	1.00	1.23	<b>1.58</b>	2.24	200	370
	646.483	●	1.50	1.10	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	200	390
	646.563	●	2.00	1.40	1.20	1.77	2.50	3.06	<b>3.95</b>	5.59	210	410
	646.643	●	2.50	1.80	2.00	2.83	4.00	4.90	<b>6.32</b>	8.94	210	410
60°	646.304	●	0.70	0.40	0.16*	0.23*	0.32	0.39	<b>0.51</b>	0.72	260	480
	646.334	●	0.90	0.50	0.23*	0.32*	0.45	0.55	<b>0.71</b>	1.01	260	490
	646.364	●	1.00	0.60	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.41	260	500
	646.404	●	1.20	0.80	0.50*	0.71	1.00	1.22	<b>1.58</b>	2.24	260	510
	646.444	●	1.35	0.90	0.63*	0.88	1.25	1.53	<b>1.98</b>	2.80	260	510
	646.484	●	1.50	1.00	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	260	520
	646.514	●	1.65	1.10	0.95*	1.34	1.90	2.33	<b>3.00</b>	4.25	270	520
	646.564	●	2.00	1.30	1.25	1.77	2.50	3.06	<b>3.95</b>	5.59	270	530
646.604	●	2.20	1.50	1.58	2.23	3.15	3.86	<b>4.98</b>	7.04	270	540	




Spray angle	Ordering no.		Equivalent bore diameter A [mm]	Narrowest free cross section Ø [mm]	V̇ water [l/min]						Spray width B [mm] (at p = 5 bar)	
	Type	Mat. no.			p [bar]							
		5E										
		PVDF			0.5	1.0	2.0	3.0	5.0	10.0		
90°	646.306	●	0.70	0.40	0.16*	0.23*	0.32	0.39	<b>0.51</b>	0.72	440	800
	646.336	●	0.90	0.50	0.23*	0.32*	0.45	0.55	<b>0.71</b>	1.01	440	820
	646.366	●	1.00	0.50	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.41	450	830
	646.406	●	1.20	0.70	0.50*	0.71	1.00	1.22	<b>1.58</b>	2.24	450	840
	646.446	●	1.35	0.80	0.63*	0.88	1.25	1.53	<b>1.98</b>	2.80	460	860
	646.486	●	1.50	0.80	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	470	870
	646.516	●	1.65	0.90	0.95*	1.34	1.90	2.33	<b>3.00</b>	4.25	480	880
	646.566	●	2.00	1.10	1.25	1.77	2.50	3.06	<b>3.95</b>	5.59	490	900
646.606	●	2.20	1.20	1.58	2.23	3.15	3.86	<b>4.98</b>	7.04	500	910	
120°	646.307	●	0.70	0.30	0.16*	0.23*	0.32	0.39	<b>0.51</b>	0.72	710	1,240
	646.337	●	0.90	0.40	0.23*	0.32*	0.45	0.55	<b>0.71</b>	1.01	740	1,310
	646.367	●	1.00	0.50	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.41	800	1,350
	646.407	●	1.20	0.60	0.50*	0.71	1.00	1.22	<b>1.58</b>	2.24	830	1,390
	646.447	●	1.35	0.60	0.63*	0.88	1.25	1.53	<b>1.98</b>	2.80	840	1,410
	646.487	●	1.50	0.60	0.80*	1.13	1.60	1.96	<b>2.53</b>	3.58	850	1,420
	646.517	●	1.65	0.90	0.95*	1.34	1.90	2.33	<b>3.00</b>	4.25	850	1,430
	646.567	●	2.00	0.90	1.25	1.77	2.50	3.06	<b>3.95</b>	5.59	870	1,440
646.607	●	2.20	1.10	1.58	2.23	3.15	3.86	<b>4.98</b>	7.04	870	1,450	

\* Differing spray pattern.



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 9 "Accessories".