

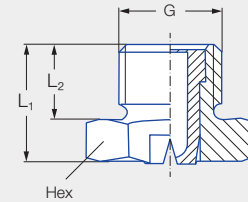
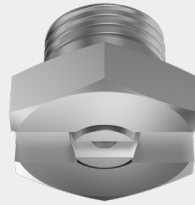
# Low pressure flat fan nozzles

## Series 610



### Features:

- Uniform, parabolic liquid distribution
- Stable spray angle
- Compact design for narrow installation conditions



### Applications:

- Spray cleaning
- Surface cleaning
- Strainer insert cleaning
- Coating processes
- Belt cleaning
- Lubrication processes

Series 610

G	Dimensions [mm]			Weight [g] Brass
	L <sub>1</sub>	L <sub>2</sub>	Hex	
1/8 BSPP	11.0	7.0	14	10.0

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]							H = 250 [mm]	H = 500 [mm]	
		16			30	0.5	1.0	2.0	3.0	5.0	7.0			10.0
20°	610.301	●	●	0.70	0.60	0.16*	0.23*	0.32	0.40	0.51	0.60	0.72	85	160
	610.361	●	●	1.00	0.80	0.32*	0.45*	0.63	0.77	1.00	1.18	1.41	85	160
	610.441	●	●	1.35	1.10	0.63*	0.89	1.25	1.53	1.98	2.34	2.80	85	160
	610.481	●	●	1.50	1.20	0.80*	1.13	1.60	1.96	2.53	2.99	3.58	85	160
30°	610.302	●	●	0.70	0.50	0.16*	0.23*	0.32	0.40	0.51	0.60	0.72	120	220
	610.362	●	●	1.00	0.70	0.32*	0.45*	0.63	0.77	1.00	1.18	1.41	120	220
	610.402	●	●	1.20	0.90	0.50*	0.71	1.00	1.22	1.58	1.87	2.23	120	230
	610.482	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	2.53	2.99	3.58	130	230
	610.562	●	●	2.00	1.50	1.25	1.77	2.50	3.06	3.95	4.67	5.59	130	240
45°	610.303	●	●	0.70	0.50	0.16*	0.23*	0.32	0.40	0.51	0.60	0.72	170	330
	610.363	●	●	1.00	0.60	0.32*	0.45*	0.63	0.77	1.00	1.18	1.41	190	350
	610.403	●	●	1.20	0.90	0.50*	0.71	1.00	1.22	1.58	1.87	2.23	200	370
	610.483	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	2.53	2.99	3.58	200	390
	610.563	●	●	2.00	1.40	1.25	1.77	2.50	3.06	3.95	4.67	5.59	210	410
	610.643	●	●	2.20	1.80	2.00	2.83	4.00	4.90	6.33	7.49	8.95	220	410





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]							H = 250 [mm]	H = 500 [mm]
		16	30											
		Stainless steel 303	Brass			0.5	1.0	2.0	3.0	5.0	7.0	10.0		
60°	610.304	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	260	480
	610.334	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	260	490
	610.364	●	●	1.00	0.60	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	260	500
	610.404	●	●	1.20	0.80	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	260	510
	610.444	●	●	1.35	0.90	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	260	510
	610.484	●	●	1.50	1.00	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	260	520
	610.514	●	●	1.65	1.10	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	270	520
	610.564	●	●	2.00	1.30	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	270	530
610.604	●	●	2.20	1.50	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	270	540	
75°	610.145	●	●	0.20	0.12	–	0.04*	0.05	0.06	<b>0.08</b>	0.09	0.11	380	690
	610.165	●	●	0.20	0.14	–	0.05*	0.06	0.08	<b>0.10</b>	0.12	0.14	380	690
	610.185	●	●	0.20	0.16	–	0.06*	0.08	0.10	<b>0.13</b>	0.15	0.18	380	690
	610.215	●	●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	380	690
	610.245	●	●	0.50	0.30	–	0.12*	0.16	0.20	<b>0.26</b>	0.31	0.37	380	690
	610.275	●	●	0.60	0.30	0.11*	0.16*	0.22	0.27	<b>0.35</b>	0.41	0.49	380	690
90°	610.216	●	●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	420	780
	610.276	●	●	0.60	0.30	0.11*	0.16*	0.22	0.27	<b>0.35</b>	0.41	0.49	430	790
	610.306	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	440	800
	610.336	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	440	820
	610.366	●	●	1.00	0.50	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	450	830
	610.406	●	●	1.20	0.70	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	450	840
	610.446	●	●	1.35	0.80	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	460	860
	610.486	●	●	1.50	0.80	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	470	870
	610.516	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	480	880
	610.566	●	●	2.00	1.10	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	490	900
610.606	●	●	2.20	1.20	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	500	910	
120°	610.187	●	●	0.35	0.20	–	0.06*	0.08	0.10	<b>0.13</b>	0.15	0.18	630	1,060
	610.217	●	●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	650	1,080
	610.247	●	●	0.50	0.20	–	0.12*	0.16	0.20	<b>0.26</b>	0.31	0.37	660	1,100
	610.277	●	●	0.60	0.30	–	0.16*	0.22	0.27	<b>0.35</b>	0.41	0.49	670	1,150
	610.307	●	●	0.70	0.30	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	710	1,240
	610.337	●	●	0.90	0.40	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	740	1,350
	610.367	●	●	1.00	0.50	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	800	1,430
	610.407	●	●	1.20	0.60	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	830	1,480
	610.447	●	●	1.35	0.60	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	840	1,520
	610.487	●	●	1.50	0.60	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	850	1,540
	610.517	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	850	1,560
	610.567	●	●	2.00	0.90	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	870	1,590
610.607	●	●	2.20	1.10	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	870	1,620	

\* 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: 610.304 + 16 = 610.304.16



Assembly accessories can be found in Chapter 9 "Accessories".