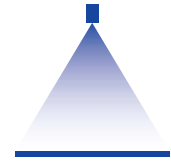
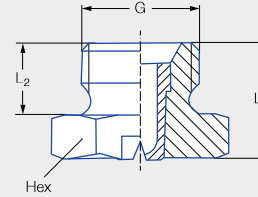


# Low pressure flat fan nozzles Series 612



### 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 612

G	Dimensions [mm]			Weight [g] Brass
	L <sub>1</sub>	L <sub>2</sub>	Hex	
1/4 BSPP	13.0	8.0	17	14.0

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	17'	30											
		Stainless steel 303	Stainless steel 316Ti/ Stainless steel 316L	Brass			0.5	1.0	2.0	3.0	5.0	7.0	10.0		
20°	612.301	●	●	●	0.70	0.60	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	85	160
	612.361	●	●	●	1.00	0.80	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	85	160
	612.441	●	●	●	1.30	1.10	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	85	160
	612.481	●	●	●	1.50	1.20	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	85	160
30°	612.302	●	●	●	0.60	0.50	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	120	220
	612.362	●	●	●	1.00	0.70	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	120	220
	612.402	●	●	●	1.20	0.90	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	120	230
	612.482	●	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	130	230
	612.562	●	●	●	2.00	1.50	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	130	240
	612.642	●	●	●	2.50	1.80	2.00	2.83	4.00	4.90	<b>6.33</b>	7.49	8.95	140	250
	612.722	●	●	●	3.00	2.40	3.15	4.45	6.30	7.71	<b>9.96</b>	11.78	14.09	140	260
	612.762	●	●	●	3.50	2.70	4.00	5.66	8.00	9.80	<b>12.65</b>	14.97	17.89	140	260
612.802	●	●	●	4.00	3.10	5.00	7.07	10.00	12.25	<b>15.81</b>	18.71	22.36	140	260	
45°	612.303	●	●	●	0.70	0.50	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	170	330
	612.363	●	●	●	1.00	0.60	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	190	350
	612.403	●	●	●	1.20	0.90	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	200	370
	612.483	●	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	200	390
	612.563	●	●	●	2.00	1.40	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	210	410
	612.643	●	●	●	2.50	1.80	2.00	2.83	4.00	4.90	<b>6.33</b>	7.49	8.95	220	410
	612.723	●	●	●	3.00	2.40	3.15	4.45	6.30	7.71	<b>9.96</b>	11.78	14.09	220	420
	612.763	●	●	●	3.50	2.60	4.00	5.66	8.00	9.80	<b>12.65</b>	14.97	17.89	220	420
612.803	●	●	●	4.00	3.00	5.00	7.07	10.00	12.25	<b>15.81</b>	18.71	22.36	220	420	



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	17 <sup>1</sup>	30			0.5	1.0	2.0	3.0	5.0	7.0	10.0		
		Stainless steel 303	Stainless steel 316Ti/ Stainless steel 316L	Brass											
60°	612.304	●	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	260	480
	612.334	●	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	260	490
	612.364	●	●	●	1.00	0.60	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	260	500
	612.404	●	●	●	1.20	0.80	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	260	510
	612.444	●	●	●	1.35	0.90	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	260	510
	612.484	●	●	●	1.50	1.00	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	260	520
	612.514	●	●	●	1.65	1.10	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	270	520
	612.564	●	●	●	2.00	1.30	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	270	530
	612.604	●	●	●	2.20	1.50	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	270	540
	612.644	●	●	●	2.50	1.60	2.00	2.83	4.00	4.90	<b>6.33</b>	7.49	8.95	270	540
	612.674	●	●	●	2.70	1.80	2.37	3.36	4.75	5.82	<b>7.51</b>	8.89	10.62	270	550
	612.724	●	●	●	3.00	2.10	3.15	4.45	6.30	7.71	<b>9.96</b>	11.78	14.09	280	560
	612.764	●	●	●	3.50	2.30	4.00	5.66	8.00	9.80	<b>12.65</b>	14.97	17.89	280	570
612.804	●	●	●	4.00	2.60	5.00	7.07	10.00	12.25	<b>15.81</b>	18.71	22.36	290	580	
612.884	●	●	●	5.00	3.40	8.00	11.31	16.00	19.60	<b>25.30</b>	29.94	35.78	290	580	
75°	612.145	●		●	0.20	0.12	–	0.04*	0.05	0.06	<b>0.08</b>	0.09	0.11	380	690
	612.165	●		●	0.20	0.14	–	0.05*	0.07	0.08	<b>0.10</b>	0.12	0.15	380	690
	612.185	●		●	0.20	0.16	–	0.06*	0.08	0.10	<b>0.13</b>	0.15	0.18	380	690
	612.215	●		●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	380	690
	612.245	●		●	0.50	0.30	–	0.12*	0.16	0.20	<b>0.26</b>	0.31	0.37	380	690
	612.275	●		●	0.60	0.30	0.11*	0.16	0.22	0.27	<b>0.35</b>	0.41	0.49	380	690
90°	612.216	●		●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	420	780
	612.276	●		●	0.60	0.30	0.11*	0.16*	0.22	0.27	<b>0.35</b>	0.41	0.49	430	790
	612.306	●	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	440	800
	612.336	●	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	440	820
	612.366	●	●	●	1.00	0.50	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	450	830
	612.406	●	●	●	1.20	0.70	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	450	840
	612.446	●	●	●	1.35	0.80	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	460	860
	612.486	●	●	●	1.50	0.80	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	470	870
	612.516	●	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	480	880
	612.566	●	●	●	2.00	1.10	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	490	900
	612.606	●	●	●	2.20	1.20	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	500	910
	612.646	●	●	●	2.50	1.30	2.00	2.83	4.00	4.90	<b>6.33</b>	7.49	8.95	510	930
	612.676	●	●	●	2.70	1.40	2.37	3.36	4.75	5.82	<b>7.51</b>	8.89	10.62	510	950
	612.726	●	●	●	3.00	1.70	3.15	4.45	6.30	7.71	<b>9.96</b>	11.78	14.09	520	980
	612.766	●	●	●	3.50	1.90	4.00	5.66	8.00	9.80	<b>12.65</b>	14.97	17.89	530	1,000
612.806	●	●	●	4.00	2.40	5.00	7.07	10.00	12.25	<b>15.81</b>	18.71	22.36	530	1,030	

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	17 <sup>1</sup>	30			0.5	1.0	2.0	3.0	5.0	7.0			10.0
		Stainless steel 303	Stainless steel 316Ti/ Stainless steel 316L	Brass											
120°	612.187	●		●	0.35	0.20	–	0.06*	0.08	0.10	<b>0.13</b>	0.15	0.18	630	1,060
	612.217	●		●	0.40	0.20	–	0.08*	0.11	0.14	<b>0.18</b>	0.21	0.25	650	1,080
	612.247	●		●	0.50	0.20	–	0.12*	0.16	0.20	<b>0.26</b>	0.31	0.37	660	1,100
	612.277	●		●	0.60	0.30	0.11*	0.16*	0.22	0.27	<b>0.35</b>	0.41	0.49	670	1,150
	612.307	●		●	0.70	0.30	0.16*	0.23*	0.32	0.40	<b>0.51</b>	0.60	0.72	710	1,240
	612.337	●	●	●	0.90	0.40	0.22*	0.32*	0.45	0.55	<b>0.71</b>	0.84	1.00	740	1,350
	612.367	●	●	●	1.00	0.40	0.32*	0.45*	0.63	0.77	<b>1.00</b>	1.18	1.41	800	1,430
	612.407	●	●	●	1.20	0.60	0.50*	0.71	1.00	1.22	<b>1.58</b>	1.87	2.23	830	1,480
	612.447	●	●	●	1.35	0.60	0.63*	0.89	1.25	1.53	<b>1.98</b>	2.34	2.80	840	1,520
	612.487	●	●	●	1.50	0.60	0.80*	1.13	1.60	1.96	<b>2.53</b>	2.99	3.58	850	1,540
	612.517	●	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	<b>3.00</b>	3.55	4.24	850	1,560
	612.567	●	●	●	2.00	0.90	1.25	1.77	2.50	3.06	<b>3.95</b>	4.67	5.59	870	1,590
	612.607	●	●	●	2.20	1.10	1.57	2.23	3.15	3.86	<b>4.98</b>	5.89	7.04	870	1,620
	612.647	●	●	●	2.50	1.30	2.00	2.83	4.00	4.90	<b>6.33</b>	7.49	8.95	880	1,640
	612.677	●	●	●	2.70	1.40	2.37	3.36	4.75	5.82	<b>7.51</b>	8.89	10.62	890	1,660
	612.727	●	●	●	3.00	1.60	3.15	4.45	6.30	7.71	<b>9.96</b>	11.78	14.09	890	1,680
612.767	●	●	●	3.50	1.70	4.00	5.66	8.00	9.80	<b>12.65</b>	14.97	17.89	900	1,700	
612.807	●		●	4.00	2.00	5.00	7.07	10.00	12.25	<b>15.81</b>	18.71	22.36	900	1,710	

\* Differing spray pattern.

<sup>1</sup> We reserve the right to supply material 316Ti or 316L under material no. 17.

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: 612.187 + 16 = 612.187.16



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