



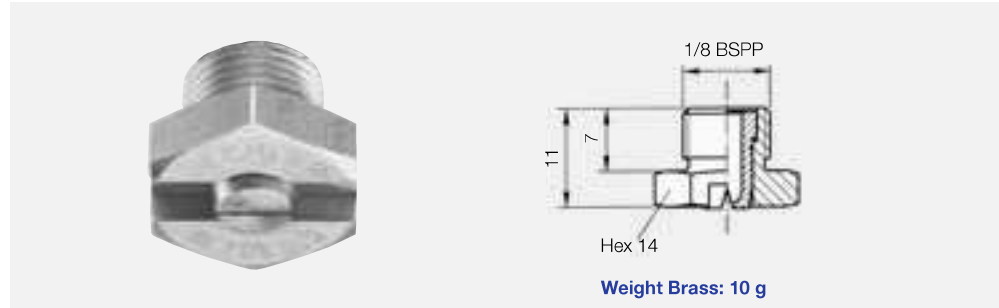
Flat fan nozzles Series 610





Compact design, suitable for narrow installation conditions. Stable spray angle. Uniform, parabolic distribution of liquid.

Applications:

Cleaning installations, cooling headers, spray pipes.



Spray angle 	Ordering no.			A Ø [mm]	E Ø [mm]	V̇ [l/min]							Spray width B at p=2 bar 	
	Type	Mat. no.				p [bar]							H = 250 mm	H = 500 mm
		16	30			0.5	1.0	2.0	[US gal./ min] at 40 psi	3.0	5.0	10.0		
20°	610.301	○	○	0.70	0.60	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	65	125
	610.361	○	○	1.00	0.80	0.31*	0.44*	0.63	0.20	0.77	1.00	1.40	65	125
	610.441	○	○	1.35	1.10	0.62*	0.88	1.25	0.39	1.53	1.98	2.80	65	125
	610.481	○	○	1.50	1.20	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	65	125
30°	610.302	○	○	0.70	0.50	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	115	230
	610.362	○	○	1.00	0.70	0.31*	0.44*	0.63	0.20	0.77	1.00	1.40	115	230
	610.402	○	○	1.20	0.90	0.50*	0.71	1.00	0.31	1.23	1.58	2.24	115	230
	610.482	○	○	1.50	1.10	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	115	230
	610.562	○	○	2.00	1.50	1.25	1.77	2.50	0.78	3.06	3.95	5.59	115	230
45°	610.303	○	○	0.70	0.50	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	185	340
	610.363	○	○	1.00	0.60	0.31*	0.44*	0.63	0.20	0.77	1.00	1.40	185	340
	610.403	○	○	1.20	0.90	0.50*	0.71	1.00	0.31	1.23	1.58	2.24	185	340
	610.483	○	○	1.50	1.10	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	185	340
	610.563	○	○	2.00	1.40	1.25	1.77	2.50	0.78	3.06	3.95	5.59	185	340
610.643	○	○	2.50	1.80	2.00	2.83	4.00	1.24	4.90	6.33	8.94	185	340	
60°	610.304	○	○	0.70	0.40	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	275	525
	610.334	○	○	0.90	0.50	0.22*	0.32*	0.45	0.14	0.55	0.71	1.01	275	525
	610.364	○	○	1.00	0.60	0.31*	0.44*	0.63	0.20	0.77	1.00	1.40	275	525
	610.404	○	○	1.20	0.80	0.50*	0.71	1.00	0.31	1.23	1.58	2.24	275	525
	610.444	○	○	1.35	0.90	0.62*	0.88	1.25	0.39	1.53	1.98	2.80	280	530
	610.484	○	○	1.50	1.00	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	280	530
	610.514	○	○	1.65	1.10	0.95*	1.34	1.90	0.59	2.33	3.00	4.25	280	530
	610.564	○	○	2.00	1.30	1.25	1.77	2.50	0.78	3.06	3.95	5.59	280	530
610.604	○	○	2.20	1.50	1.58	2.23	3.15	0.98	3.86	4.98	7.04	280	530	
75°	610.145	○	○	0.20	0.12	-	0.04*	0.05	0.02	0.06	0.08	0.11	285	550
	610.165	○	○	0.20	0.14	-	0.05*	0.07	0.02	0.08	0.10	0.15	285	555
	610.185	○	○	0.20	0.16	-	0.06*	0.08	0.11	0.10	0.13	0.18	290	560
	610.215	○	○	0.40	0.20	-	0.08*	0.11	0.03	0.14	0.18	0.25	290	560
	610.245	○	○	0.50	0.30	-	0.12*	0.16	0.05	0.20	0.26	0.36	290	560
	610.275	○	○	0.60	0.30	0.11*	0.16*	0.22	0.07	0.27	0.35	0.49	290	560

A = equivalent bore diameter · E = narrowest free cross section

* Differing spray pattern

Subject to technical modifications.

Continued on next page.



The folded page at the end of the catalogue will give you a survey on the various assembly possibilities. For complete assembly accessories, please refer to "Accessories".

Example	Type	+	Material-no.	=	Ordering no.
for ordering:	610.301	+	16	=	610.301.16



Flat fan nozzles Series 610



Spray angle 	Ordering no.			A Ø [mm]	E Ø [mm]	V̇ [l/min]							Spray width B at p=2 bar 	
	Type	Mat. no.				p [bar]							H = 250 mm	H = 500 mm
		16	30			0.5	1.0	2.0	[US gal./min] at 40 psi	3.0	5.0	10.0		
90°	610.216	○	○	0.40	0.20	-	0.08*	0.11	0.03	0.14	0.18	0.25	380	670
	610.276	○	○	0.60	0.30	0.11*	0.16*	0.22	0.07	0.27	0.35	0.49	450	795
	610.306	○	○	0.70	0.40	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	450	795
	610.336	○	○	0.90	0.50	0.22*	0.32*	0.45	0.14	0.55	0.71	1.01	450	795
	610.366	○	○	1.00	0.50	0.31*	0.44*	0.63	0.20	0.77	1.00	1.41	450	795
	610.406	○	○	1.20	0.70	0.50*	0.71	1.00	0.31	1.23	1.58	2.24	450	800
	610.446	○	○	1.35	0.80	0.62*	0.88	1.25	0.39	1.53	1.98	2.80	450	800
	610.486	○	○	1.50	0.80	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	450	800
	610.516	○	○	1.65	0.90	0.95*	1.34	1.90	0.59	2.33	3.00	4.25	450	800
	610.566	○	○	2.00	1.10	1.25	1.77	2.50	0.78	3.06	3.95	5.59	450	805
610.606	○	○	2.20	1.20	1.58	2.23	3.15	0.98	3.86	4.98	7.04	450	805	
120°	610.187	○	○	0.35	0.20	-	0.06*	0.08	0.02	0.10	0.13	0.18	640	1,220
	610.217	○	○	0.40	0.20	-	0.08*	0.11	0.03	0.14	0.18	0.25	650	1,230
	610.247	○	○	0.50	0.20	-	0.12*	0.16	0.05	0.20	0.26	0.36	655	1,245
	610.277	○	○	0.60	0.30	-	0.16*	0.22	0.07	0.27	0.35	0.49	655	1,250
	610.307	○	○	0.70	0.30	0.16*	0.23*	0.32	0.10	0.39	0.51	0.72	660	1,260
	610.337	○	○	0.90	0.40	0.22*	0.32*	0.45	0.14	0.55	0.71	1.01	660	1,260
	610.367	○	○	1.00	0.50	0.31*	0.44*	0.63	0.20	0.77	1.00	1.41	660	1,265
	610.407	○	○	1.20	0.60	0.50*	0.71	1.00	0.31	1.23	1.58	2.24	660	1,270
	610.447	○	○	1.35	0.60	0.62*	0.88	1.25	0.39	1.53	1.98	2.80	665	1,270
	610.487	○	○	1.50	0.60	0.80*	1.13	1.60	0.50	1.96	2.53	3.58	665	1,270
	610.517	○	○	1.65	0.90	0.95*	1.34	1.90	0.59	2.33	3.00	4.25	670	1,275
	610.567	○	○	2.00	0.90	1.25	1.77	2.50	0.78	3.06	3.95	5.59	670	1,280
	610.607	○	○	2.20	1.10	1.58	2.23	3.15	0.98	3.86	4.98	7.04	675	1,285

A = equivalent bore diameter · E = narrowest free cross section
 * Differing spray pattern
 Subject to technical modifications.

The folded page at the end of the catalogue will give you a survey on the various assembly possibilities. For complete assembly accessories, please refer to "Accessories".

Example for ordering:	Type	+	Material-no.	=	Ordering no.
	610.216	+	16	=	610.216.16

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