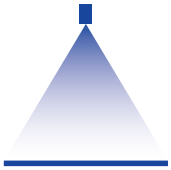
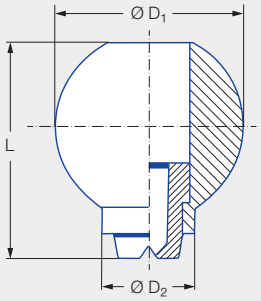
Low pressure flat fan nozzles with ball joint
Series 676



Features:
- Swivelling nozzle
- Precise spray alignment according to requirements
- Assembly with retaining nut, threaded socket, threaded nipple, welded nipple

Applications:
- Cleaning
- Cooling
- Lubrication

Series 676



Dimensions [mm]			Weight [g] Brass	p_{max} [bar]
L	Ø D_1	Ø D_2		
25.0	22.0	11.0	45.0	30.0

Spray angle	Ordering no. Type	Mat. no. 16 Stainless steel 303	Mat. no. 30 Brass	Equivalent bore diameter A [mm]	Narrowest free cross section Ø [mm]	V̇ water [l/min] p [bar] 0.5	1.0	2.0	3.0	**5.0**	10.0	Spray width B [mm] (at p = 5 bar) H = 250 [mm]	H = 500 [mm]
20°	**676.301**	●	●	0.70	0.60	0.16*	0.23*	0.32	0.40	**0.51**	0.72	85	160
	676.361	●	●	1.00	0.80	0.32*	0.45*	0.63	0.77	**1.00**	1.41	85	160
	676.441	●	●	1.35	1.10	0.63*	0.89	1.25	1.53	**1.98**	2.80	85	160
	676.481	●	●	1.50	1.30	0.80*	1.13	1.60	1.96	**2.53**	3.58	85	160
30°	**676.302**	●	●	0.70	0.50	0.16*	0.23*	0.32	0.40	**0.51**	0.72	120	220
	676.362	●	●	1.00	0.80	0.32*	0.45*	0.63	0.77	**1.00**	1.41	120	220
	676.402	●	●	1.20	1.00	0.50*	0.71	1.00	1.22	**1.58**	2.23	120	230
	676.482	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	**2.53**	3.58	130	230
	676.562	●	●	2.00	1.50	1.25	1.77	2.50	3.06	**3.95**	5.59	130	240
	676.642	●	●	2.50	1.80	2.00	2.83	4.00	4.90	**6.33**	8.95	140	250
	676.722	●	●	3.00	2.40	3.15	4.45	6.30	7.71	**9.96**	14.09	140	260
	676.762	●	●	3.50	2.70	4.00	5.66	8.00	9.80	**12.65**	17.89	140	260
	676.802	●	●	4.00	3.10	5.00	7.07	10.00	12.25	**15.81**	22.36	140	260
45°	**676.303**	●	●	0.70	0.50	0.16*	0.23*	0.32	0.40	**0.51**	0.72	170	330
	676.363	●	●	1.00	0.70	0.32*	0.45*	0.63	0.77	**1.00**	1.41	190	350
	676.403	●	●	1.20	0.90	0.50*	0.71	1.00	1.22	**1.58**	2.23	200	370
	676.483	●	●	1.50	1.10	0.80*	1.13	1.60	1.96	**2.53**	3.58	200	390
	676.563	●	●	2.00	1.40	1.25	1.77	2.50	3.06	**3.95**	5.59	210	410
	676.643	●	●	2.50	1.80	2.00	2.83	4.00	4.90	**6.33**	8.95	220	410
	676.723	●	●	3.00	2.40	3.15	4.45	6.30	7.71	**9.96**	14.09	220	420
	676.763	●	●	3.50	2.70	4.00	5.66	8.00	9.80	**12.65**	17.89	220	420
	676.803	●	●	4.00	3.00	5.00	7.07	10.00	12.25	**15.81**	22.36	220	420
60°	**676.304**	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	**0.51**	0.72	260	480
	676.334	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	**0.71**	1.00	260	490
	676.364	●	●	1.00	0.60	0.32*	0.45*	0.63	0.77	**1.00**	1.41	260	500
	676.404	●	●	1.20	0.80	0.50*	0.71	1.00	1.22	**1.58**	2.23	260	510
	676.444	●	●	1.35	1.00	0.63*	0.89	1.25	1.53	**1.98**	2.80	260	510
	676.484	●	●	1.50	1.00	0.80*	1.13	1.60	1.96	**2.53**	3.58	260	520

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. 16 Stainless steel 303	Mat. no. 30 Brass			p [bar] 0.5	1.0	2.0	3.0	**5.0**	10.0	H = 250 [mm]	H = 500 [mm]
60°	**676.514**	●	●	1.65	1.10	0.95*	1.34	1.90	2.32	**3.00**	4.24	270	520
	676.564	●	●	2.00	1.30	1.25	1.77	2.50	3.06	**3.95**	5.59	270	530
	676.604	●	●	2.20	1.50	1.57	2.23	3.15	3.86	**4.98**	7.04	270	540
	676.644	●	●	2.50	1.60	2.00	2.83	4.00	4.90	**6.33**	8.95	270	540
	676.674	●	●	2.70	1.80	2.37	3.36	4.75	5.82	**7.51**	10.62	270	550
	676.724	●	●	3.00	2.10	3.15	4.45	6.30	7.71	**9.96**	14.09	280	560
	676.764	●	●	3.50	2.30	4.00	5.66	8.00	9.80	**12.65**	17.89	280	570
75°	**676.145**	●	●	0.20	0.12	–	0.04*	0.05	0.06	**0.08**	0.11	380	690
	676.165	●	●	0.20	0.08	–	0.05*	0.06	0.08	**0.10**	0.14	380	690
	676.185	●	●	0.20	0.15	–	0.06*	0.08	0.09	**0.12**	0.17	380	690
	676.215	●	●	0.40	0.20	–	0.08*	0.11	0.14	**0.18**	0.25	380	690
	676.245	●	●	0.50	0.30	–	0.12*	0.16	0.20	**0.26**	0.37	380	690
	676.275	●	●	0.60	0.30	0.11*	0.16*	0.22	0.27	**0.35**	0.49	380	690
90°	**676.216**	●	●	0.40	0.20	–	0.08*	0.11	0.14	**0.18**	0.25	420	780
	676.276	●	●	0.60	0.30	0.11*	0.16*	0.22	0.27	**0.35**	0.49	430	790
	676.306	●	●	0.70	0.40	0.16*	0.23*	0.32	0.40	**0.51**	0.72	440	800
	676.336	●	●	0.90	0.50	0.22*	0.32*	0.45	0.55	**0.71**	1.00	440	820
	676.366	●	●	1.00	0.50	0.32*	0.45*	0.63	0.77	**1.00**	1.41	450	830
	676.406	●	●	1.20	0.70	0.50*	0.71	1.00	1.22	**1.58**	2.23	450	840
	676.446	●	●	1.35	0.80	0.63*	0.89	1.25	1.53	**1.98**	2.80	460	860
	676.486	●	●	1.50	0.80	0.80*	1.13	1.60	1.96	**2.53**	3.58	470	870
	676.516	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	**3.00**	4.24	480	880
	676.566	●	●	2.00	1.10	1.25	1.77	2.50	3.06	**3.95**	5.59	490	900
	676.606	●	●	2.20	1.20	1.57	2.23	3.15	3.86	**4.98**	7.04	500	910
	676.646	●	●	2.50	1.30	2.00	2.83	4.00	4.90	**6.33**	8.95	510	930
	676.676	●	●	2.70	1.40	2.37	3.36	4.75	5.82	**7.51**	10.62	510	950
	676.726	●	●	3.00	1.70	3.15	4.45	6.30	7.71	**9.96**	14.09	520	980
120°	**676.187**	●	●	0.35	0.20	–	0.06*	0.08	0.10	**0.13**	0.18	630	1,060
	676.217	●	●	0.40	0.20	–	0.08*	0.11	0.14	**0.18**	0.25	650	1,080
	676.247	●	●	0.50	0.20	–	0.12*	0.16	0.20	**0.26**	0.37	660	1,100
	676.277	●	●	0.60	0.30	–	0.16*	0.22	0.27	**0.35**	0.49	670	1,150
	676.307	●	●	0.70	0.30	0.16*	0.23*	0.32	0.40	**0.51**	0.72	710	1,240
	676.337	●	●	0.90	0.40	0.22*	0.32*	0.45	0.55	**0.71**	1.00	740	1,350
	676.367	●	●	1.00	0.50	0.32*	0.45*	0.63	0.77	**1.00**	1.41	800	1,430
	676.407	●	●	1.20	0.60	0.50*	0.71	1.00	1.22	**1.58**	2.23	830	1,480
	676.447	●	●	1.35	0.70	0.63*	0.89	1.25	1.53	**1.98**	2.80	840	1,520
	676.487	●	●	1.50	0.60	0.80*	1.13	1.60	1.96	**2.53**	3.58	850	1,540
	676.517	●	●	1.65	0.90	0.95*	1.34	1.90	2.32	**3.00**	4.24	850	1,560
	676.567	●	●	2.00	0.90	1.25	1.77	2.50	3.06	**3.95**	5.59	870	1,590
	676.607	●	●	2.20	1.10	1.57	2.23	3.15	3.86	**4.98**	7.04	870	1,620
	676.647	●	●	2.50	1.30	2.00	2.83	4.00	4.90	**6.33**	8.95	880	1,640
	676.677	●	●	2.70	1.40	2.37	3.36	4.75	5.82	**7.51**	10.62	890	1,660
	676.727	●	●	3.00	1.60	3.15	4.45	6.30	7.71	**9.96**	14.09	890	1,680
	676.767	●	●	3.50	1.70	4.00	5.66	8.00	9.80	**12.65**	17.89	900	1,700

* Differing spray pattern.

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

Ordering example:	Type	+	Material no.	=	Ordering no.
	676.514	+	**16**	=	**676.514.16**

Assembly accessories can be found in Chapter 9 “Accessories”.