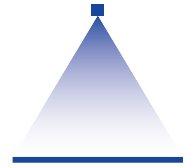


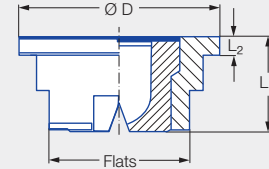
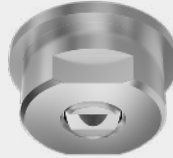
Low pressure flat fan nozzles for retaining nut

Series 656/657



Features:

- Uniform, parabolic liquid distribution
- Stable spray angle
- High spray energy
- Assembly with retaining nut
- Non-clogging



Series 656/657

Applications:

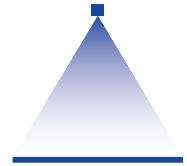
- Cleaning installations
- Gravel washing
- Roll cooling
- Cooling of rolled stock
- Cooling pipes

Connection	Dimensions [in]				Weight [lb] Brass
	L ₁	L ₂	Ø D	Flats (mm)	
Assembly with retaining nut 3/4 BSPP	.43	.08	.94	17	.05

Spray angle	Ordering number				Equivalent bore diameter A [in]	Narrowest free cross section Ø [in]	V̇ water [gal/min]								Spray width B [mm] (at p = 75 psi)	
	Type	Material number					p [psi]									
		16	17 ¹	30												
		Stainless steel 303	Stainless steel 316Ti / Stainless steel 316L	Brass			7	15	30	45	75	liters per minute 5 bar	100	145	H = 10 [in]	H = 20 [in]
20°	656.721	●	●	●	0.12	0.10	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	4	7
	656.801	●	●	●	0.16	0.13	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	4	7
	656.881	●	●	●	0.20	0.16	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	4	7
	656.921	●	●	●	0.22	0.17	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	4	7
	656.961	●	●	●	0.24	0.21	3.24	4.75	6.72	8.23	10.62	39.53	12.26	14.77	4	7
30°	656.722	●	●	●	0.12	0.09	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	6	10
	656.762	●	●	●	0.14	0.11	1.04	1.52	2.15	2.63	3.40	12.65	3.92	4.73	6	10
	656.802	●	●	●	0.16	0.12	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	6	10
	656.882	●	●	●	0.20	0.16	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	6	11
	656.922	●	●	●	0.22	0.17	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	6	11
	656.962	●	●	●	0.24	0.20	3.24	4.75	6.72	8.23	10.62	39.53	12.26	14.77	6	11
45°	656.723	●	●	●	0.12	0.09	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	9	17
	656.763	●	●	●	0.14	0.10	1.04	1.52	2.15	2.63	3.40	12.65	3.92	4.73	9	17
	656.803	●	●	●	0.16	0.12	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	9	17
	656.843	●	●	●	0.18	0.13	1.62	2.37	3.36	4.11	5.31	19.76	6.13	7.38	9	17
	656.883	●	●	●	0.20	0.15	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	9	17
	656.923	●	●	●	0.22	0.165	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	9	17
	656.963	●	●	●	0.24	0.17	3.24	4.75	6.72	8.23	10.62	39.53	12.26	14.77	9	17

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

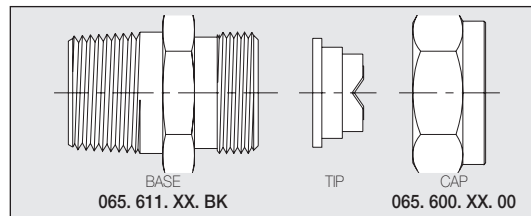




Spray angle	Ordering number				Equivalent bore diameter A [in]	Narrowest free cross section Ø [in]	V̇ water [gal/min]								Spray width B [mm] (at p = 75 psi)	
	Material number						p [psi]									
	16	17 ¹	30													
	Type	Stainless steel 303	Stainless steel 316Ti/ Stainless steel 316L	Brass			7	15	30	45	75	liters per minute	100	145	H = 10 [in]	H = 20 [in]
60°	656.724	●	●	●	0.12	0.08	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	11	22
	656.764	●	●	●	0.14	0.09	1.04	1.52	2.15	2.63	3.40	12.65	3.92	4.73	11	22
	656.804	●	●	●	0.16	0.10	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	11	23
	656.844	●	●	●	0.18	0.12	1.62	2.37	3.36	4.11	5.31	19.76	6.13	7.38	11	23
	656.884	●	●	●	0.20	0.13	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	11	23
	656.924	●	●	●	0.22	0.16	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	11	23
	656.964	●	●	●	0.24	0.17	3.24	4.75	6.72	8.23	10.62	39.53	12.26	14.77	11	23
	657.044		●	●	0.31	0.22	5.19	7.60	10.75	13.16	16.99	63.25	19.62	23.63	11	23
90°	656.726	●	●	●	0.12	0.067	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	20	39
	656.766	●	●	●	0.14	0.075	1.04	1.52	2.15	2.63	3.40	12.65	3.92	4.73	21	39
	656.806	●	●	●	0.16	0.09	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	21	41
	656.846	●	●	●	0.18	0.09	1.62	2.37	3.36	4.11	5.31	19.76	6.13	7.38	21	41
	656.886	●	●	●	0.20	0.12	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	21	42
	656.926	●	●	●	0.22	0.14	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	21	42
	656.966	●	●	●	0.24	0.15	3.24	4.75	6.72	8.23	10.62	39.53	12.26	14.77	21	42
	657.046			●	0.31	0.19	5.19	7.60	10.75	13.16	16.99	63.25	19.62	23.63	21	42
120°	656.727	●	●	●	0.12	0.06	0.82	1.20	1.69	2.07	2.68	9.96	3.09	3.72	35	66
	656.767	●	●	●	0.14	0.07	1.04	1.52	2.15	2.63	3.40	12.65	3.92	4.73	35	67
	656.807	●	●	●	0.16	0.08	1.30	1.90	2.69	3.29	4.25	15.81	4.90	5.91	35	67
	656.887	●	●	●	0.20	0.10	2.08	3.04	4.30	5.26	6.80	25.30	7.85	9.45	11	67
	656.927	●	●	●	0.22	0.11	2.60	3.80	5.37	6.58	8.49	31.62	9.81	11.81	11	67

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

Inlet Male NPT	Outlet Male	Part No.	Standard Materials: 17 316 SS 30 Brass
3/4"	3/4" BSPP	065. 611. XX. BK	
Cap			Other materials available. See Accessories beginning on page 127.
To fit 3/4" BSPP		065. 600. XX. 00	



Example Type + Material no. = Ordering no.
for ordering: 656. 727 + 16 = 656. 727. 16

1) We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 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: 656.724 + 16 = 656.724.16

Assembly accessories can be found in Chapter 12 "Accessories".