



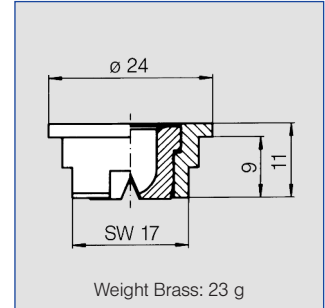
Flat fan nozzles for retaining nut Series 656 / 657



**Assembly with retaining nut.
Easy nozzle changing, simple
jet alignment. Uniform, para-
bolic distribution of liquid.
Increased non-clogging
features, more jet power, less
fog.**

Applications:

Cleaning installations, gravel
washing, cooling headers,
spray pipes, roll cooling, cool-
ing of rolled stock.



Spray angle	Ordering no.				A ∅ [mm]	E ∅ [mm]	ṽ [l/min]							Spray width B at p = 2 bar	
	Type	Material-no.					p [bar]							 H = 250 mm H = 500 mm	
		16	17 ¹⁾	30			0.5	1.0	2.0	[US gal./ min] at 40 psi	3.0	5.0	10.0		
		AISI 303	AISI 316Ti/AISI 316L	Brass											
20°	656. 721	○	○	○	3.00	2.50	3.15	4.45	6.30	1.95	7.72	9.96	14.09	110	205
	656. 801	○	○	○	4.00	3.20	5.00	7.07	10.00	3.10	12.25	15.81	22.36	110	205
	656. 881	○	○	○	5.00	4.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	110	205
	656. 921	○	○	○	5.50	4.40	10.00	14.14	20.00	6.20	24.49	31.62	44.72	110	205
	656.961	○	○	○	6.00	5.30	12.50	17.68	25.00	7.75	30.62	39.53	55.90	110	205
30°	656. 722	○	○	○	3.00	2.40	3.15	4.45	6.30	1.95	7.72	9.96	14.09	150	280
	656. 762	○	○	○	3.50	2.70	4.00	5.66	8.00	2.48	9.80	12.65	17.89	150	280
	656. 802	○	○	○	4.00	3.10	5.00	7.07	10.00	3.10	12.25	15.81	22.36	150	280
	656. 882	○	○	○	5.00	4.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	150	280
	656. 922	○	○	○	5.50	4.40	10.00	14.14	20.00	6.20	24.49	31.62	44.72	150	280
	656. 962	○	○	○	6.00	5.00	12.50	17.68	25.00	7.75	30.62	39.53	55.90	150	280
45°	656. 723	○	○	○	3.00	2.40	3.15	4.45	6.30	1.95	7.72	9.96	14.09	280	520
	656. 763	○	○	○	3.50	2.60	4.00	5.66	8.00	2.48	9.80	12.65	17.89	280	520
	656. 803	○	○	○	4.00	3.00	5.00	7.07	10.00	3.10	12.25	15.81	22.36	280	520
	656. 843	○	○	○	4.50	3.40	6.25	8.84	12.50	3.88	15.31	19.76	27.95	280	520
	656. 883	○	○	○	5.00	3.80	8.00	11.31	16.00	4.96	19.60	25.30	35.78	280	520
	656. 923	○	○	○	5.50	4.20	10.00	14.14	20.00	6.20	24.49	31.62	44.72	280	520
	656. 963	○	○	○	6.00	4.40	12.50	17.68	25.00	7.75	30.62	39.53	55.90	280	520
60°	656. 724	○	○	○	3.00	2.10	3.15	4.45	6.30	1.95	7.72	9.96	14.09	320	595
	656. 764	○	○	○	3.50	2.30	4.00	5.66	8.00	2.48	9.80	12.65	17.89	320	595
	656. 804	○	○	○	4.00	2.60	5.00	7.07	10.00	3.10	12.25	15.81	22.36	320	595
	656. 844	○	○	○	4.50	3.00	6.25	8.84	12.50	3.88	15.31	19.76	27.95	320	595
	656. 884	○	○	○	5.00	3.40	8.00	11.31	16.00	4.96	19.60	25.30	35.78	320	595
	656. 924	○	○	○	5.50	4.10	10.00	14.14	20.00	6.20	24.49	31.62	44.72	320	595
	656. 964	○	○	○	6.00	4.20	12.50	17.68	25.00	7.75	30.62	39.53	55.90	320	595
	657. 044	-	○	○	8.00	5.50	20.00	28.28	40.00	12.41	48.99	63.25	89.44	320	595
90°	656. 726	○	○	○	3.00	1.70	3.15	4.45	6.30	1.95	7.72	9.96	14.09	420	800
	656. 766	○	○	○	3.50	1.90	4.00	5.66	8.00	2.48	9.80	12.65	17.89	420	800
	656. 806	○	○	○	4.00	2.40	5.00	7.07	10.00	3.10	12.25	15.81	22.36	420	800
	656. 846	○	○	○	4.50	2.40	6.25	8.84	12.50	3.88	15.31	19.76	27.95	420	800
	656. 886	○	○	○	5.00	3.10	8.00	11.31	16.00	4.96	19.60	25.30	35.78	420	800
	656. 926	○	○	○	5.50	3.60	10.00	14.14	20.00	6.20	24.49	31.62	44.72	420	800
	656. 966	○	○	○	6.00	3.90	12.50	17.68	25.00	7.75	30.62	39.53	55.90	420	800
	657. 046	-	-	○	8.00	4.90	20.00	28.28	40.00	12.41	48.99	63.25	89.44	420	800

¹⁾ We reserve the right to deliver AISI 316Ti or AISI 316L under the material no. 17.
A = Equivalent bore diameter · E = narrowest free cross section
Subject to technical modifications.

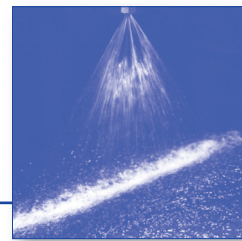
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Conversion formula for the above series: $\dot{V}_2 = \dot{V}_1 * \sqrt{\frac{p_2}{p_1}}$





Flat fan nozzles for retaining nut Series 656 / 657



Spray angle	Ordering no.				A ∅ [mm]	E ∅ [mm]	V̇ [l/min]							Spray width B at p = 2 bar	
	Type	Material-no.					p [bar]							 H = 250 mm H = 500 mm	
		16	17 ¹⁾	30			0.5	1.0	2.0	[US gal./ min] at 40 psi	3.0	5.0	10.0		
		AISI 303	AISI 316Ti/AISI 316L	Brass											
120°	656. 727	○	○	○	3.00	1.60	3.15	4.45	6.30	1.95	7.72	9.96	14.09	1240	2150
	656. 767	○	○	○	3.50	1.70	4.00	5.66	8.00	2.48	9.80	12.65	17.89	1240	2150
	656. 807	○	○	○	4.00	2.00	5.00	7.07	10.00	3.10	12.25	15.81	22.36	1240	2150
	656. 887	○	○	○	5.00	2.60	8.00	11.31	16.00	4.96	19.60	25.30	35.78	1240	2150
	656. 927	○	○	○	5.50	2.90	10.00	14.14	20.00	6.20	24.49	31.62	44.72	1240	2150

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

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«.

