



# Flat fan nozzles with dove-tail guide

## Series 664 / 665



**Assembly with retaining nut. Automatic jet alignment due to dove-tail guide. Stable spray angle. Uniform, parabolic distribution of liquid. Spray pipes with these nozzles show an extremely uniform total liquid distribution.**

### Applications:



Cleaning installations, cooling headers, spray pipes, roll cooling, cooling of rolled stock.



↘ 20°-60°

↘ 90°-120°

Weight Brass: 35 g

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	
		16 303 SS	17 <sup>1</sup> 316Ti SS/ 316L SS	30 Brass			0.5	1.0	2.0	[US gal./ min] at 40 psi	3.0	5.0			10.0
20°	664.721	○	○	○	3.00	2.50	3.15	4.45	6.30	1.95	7.72	9.96	14.09	110	205
	664.801	○	○	○	4.00	3.20	5.00	7.07	10.00	3.10	12.25	15.81	22.36	110	205
	664.881	○	○	○	5.00	4.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	110	205
	664.921	○	○	○	5.50	4.40	10.00	14.14	20.00	6.20	24.49	31.62	44.72	110	205
	664.961	○	○	○	6.00	5.10	12.50	17.68	25.00	7.75	30.62	39.53	55.90	100	205
30°	664.722	○	○	○	3.00	2.40	3.15	4.45	6.30	1.95	7.72	9.96	14.09	150	280
	664.762	○	○	○	3.50	2.70	4.00	5.66	8.00	2.48	9.80	12.65	17.89	150	280
	664.802	○	○	○	4.00	3.10	5.00	7.07	10.00	3.10	12.25	15.81	22.36	150	280
	664.882	○	○	○	5.00	4.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	150	280
	664.922	○	○	○	5.50	4.40	10.00	14.14	20.00	6.20	24.49	31.62	44.72	150	280
	664.962	○	○	○	6.00	5.00	12.50	17.68	25.00	7.75	30.62	39.53	55.90	150	280
	665.042	○	-	○	8.00	6.40	20.00	28.28	40.00	12.41	48.99	63.25	89.44	150	280
	665.122	-	-	○	10.00	8.20	31.50	44.55	63.00	19.54	77.16	99.61	140.87	150	280
45°	664.723	○	○	○	3.00	2.40	3.15	4.45	6.30	1.95	7.72	9.96	14.09	260	490
	664.763	○	○	○	3.50	2.60	4.00	5.66	8.00	2.48	9.80	12.65	17.89	260	490
	664.803	○	○	○	4.00	3.00	5.00	7.07	10.00	3.10	12.25	15.81	22.36	265	495
	664.843	○	○	○	4.50	3.40	6.25	8.84	12.50	3.88	15.31	19.76	27.95	265	495
	664.883	○	○	○	5.00	3.80	8.00	11.31	16.00	4.96	19.60	25.30	35.78	265	500
	664.923	○	○	○	5.50	4.20	10.00	14.14	20.00	6.20	24.49	31.62	44.72	270	505
	664.963	○	○	○	6.00	4.40	12.50	17.68	25.00	7.75	30.62	39.53	55.90	270	510
	665.043	-	-	○	8.00	5.90	20.00	28.28	40.00	12.41	48.99	63.25	89.44	275	520
60°	664.724	○	○	○	3.00	2.10	3.15	4.45	6.30	1.95	7.72	9.96	14.09	300	560
	664.764	○	○	○	3.50	2.30	4.00	5.66	8.00	2.48	9.80	12.65	17.89	300	565
	664.804	○	○	○	4.00	2.60	5.00	7.07	10.00	3.10	12.25	15.81	22.36	300	565
	664.844	○	○	○	4.50	3.00	6.25	8.84	12.50	3.88	15.31	19.76	27.95	300	570
	664.884	○	○	○	5.00	3.40	8.00	11.31	16.00	4.96	19.60	25.30	35.78	305	570
	664.924	○	○	○	5.50	4.10	10.00	14.14	20.00	6.20	24.49	31.62	44.72	305	575
	664.964	○	○	○	6.00	4.20	12.50	17.68	25.00	7.75	30.62	39.53	55.90	310	580
	665.044	○	○	○	8.00	5.50	20.00	28.28	40.00	12.41	48.99	63.25	89.44	315	585
	665.084	-	○	○	9.00	6.20	25.00	35.36	50.00	15.51	61.24	79.06	111.80	320	590
	665.124	-	-	○	10.00	7.40	31.50	44.55	63.00	19.54	77.16	99.61	140.87	325	600

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

A = Equivalent bore diameter · E = narrowest free cross section  
Subject to technical modifications.


Continued on next page.



# Flat fan nozzles with dove-tail guide

## Series 664 / 665



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	17 <sup>1</sup>	30			0.5	1.0	2.0	[US gal./min] at 40 psi	3.0	5.0			10.0
90°	664.726	○	○	○	3.00	1.70	3.15	4.45	6.30	1.95	7.72	9.96	14.09	420	800
	664.766	○	○	○	3.50	1.90	4.00	5.66	8.00	2.48	9.80	12.65	17.89	420	800
	664.806	○	○	○	4.00	2.40	5.00	7.07	10.00	3.10	12.25	15.81	22.36	420	800
	664.846	○	○	○	4.50	2.40	6.25	8.84	12.50	3.88	15.31	19.76	27.95	420	800
	664.886	○	○	○	5.00	3.10	8.00	11.31	16.00	4.96	19.60	25.30	35.78	420	800
	664.926	○	○	○	5.50	3.60	10.00	14.14	20.00	6.20	24.49	31.62	44.72	420	800
	664.966	○	○	○	6.00	3.90	12.50	17.68	25.00	7.75	30.62	39.53	55.90	420	800
	665.046	-	-	○	8.00	4.90	20.00	28.28	40.00	12.41	48.99	63.25	89.44	420	800
665.126	-	-	○	10.00	6.40	31.50	44.55	63.00	19.54	77.16	99.61	140.87	420	800	
120°	664.727	○	○	○	3.00	1.60	3.15	4.45	6.30	1.95	7.72	9.96	14.09	1240	2150
	664.767	○	○	○	3.50	1.70	4.00	5.66	8.00	2.48	9.80	12.65	17.89	1240	2150
	664.807	○	○	○	4.00	2.00	5.00	7.07	10.00	3.10	12.25	15.81	22.36	1240	2150
	664.887	○	○	○	5.00	2.60	8.00	11.31	16.00	4.96	19.60	25.30	35.78	1240	2150
	664.927	○	○	○	5.50	2.90	10.00	14.14	20.00	6.20	24.49	31.62	44.72	1240	2150
	664.967	-	-	○	6.00	3.20	12.50	17.68	25.00	7.75	30.62	39.53	55.90	1240	2150
	665.047	-	-	○	8.00	4.40	20.00	28.28	40.00	12.41	48.99	63.25	89.44	1240	2150

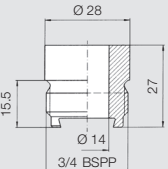
<sup>1</sup>We reserve the right to deliver 316Ti SS or 316L SS under the material no. 17.  
 A = Equivalent bore diameter · E = narrowest free cross section  
 Subject to technical modifications.

<b>Example for ordering:</b>	<b>Type</b>	<b>+</b>	<b>Material-no.</b>	<b>=</b>	<b>Ordering no.</b>
	664.726	+	16	=	664.726.16

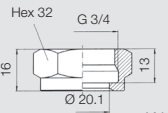


Pretreatment in a pickling line

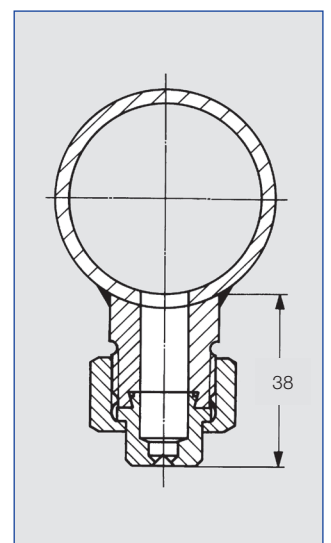
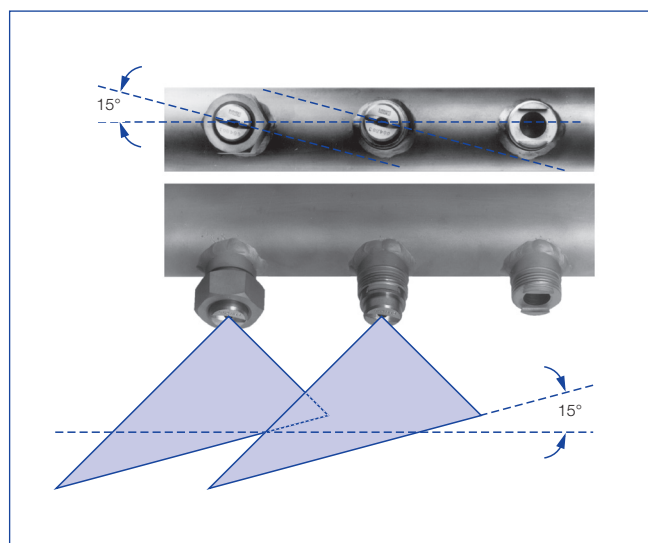
### Accessories



Weight: 65 g  
Nipple, **066.410.17** (316Ti SS)



Weight Brass: 60 g  
Retaining nut, **065.600.16** (303 SS)  
**065.600.17** (316Ti SS)  
**065.600.30** (Brass)



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