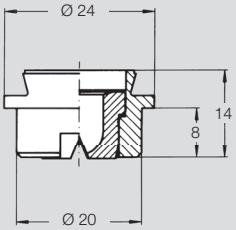
Flat fan dovetail nozzles

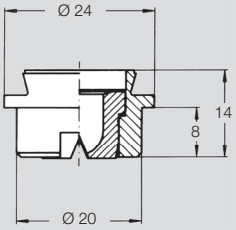
Series 664 / 665

Assembly with retaining nut. Automatic jet alignment due to dovetail guide. Stable spray angle. Parabolic distribution of liquid. Spray pipes with these nozzles show an extremely uniform total liquid distribution.
Applications:
Cleaning, pickling, coating, rinsing.

Mat. no. 17



Mat. no. 5E



Spray angle	Ordering no. Type	Mat. no. 17[1] AISI 316Ti/ AISI 316L	Mat. no. 5E PVDF	Mat. no. 53 PP	A Ø [mm]	E Ø [mm]	V̇ [l/min] p [bar] 0.5	1.0	2.0	3.0	5.0	7.0	10.0	Spray width B at p=2 bar H = 250 mm	H = 500 mm
45°	**664.723**	○	○	○	3.00	2.40	3.15	4.45	6.30	7.72	9.96	11.79	14.09	205	400
	664.763	○	○	○	3.50	2.60	4.00	5.66	8.00	9.80	12.65	14.97	17.89	205	400
	664.803	○	○	○	4.00	3.00	5.00	7.07	10.00	12.25	15.81	18.71	22.36	205	400
	664.843	○	○	○	4.50	3.40	6.25	8.84	12.50	15.31	19.67	23.39	27.95	205	400
	664.883	○	○	○	5.00	3.80	8.00	11.31	16.00	19.60	25.30	29.93	35.78	205	400
	664.923	○	○	○	5.50	4.20	10.00	14.14	20.00	24.49	31.62	37.42	44.72	205	400
	664.943	○	○	○	5.70	4.30	11.20	15.84	22.40	27.44	35.42	41.91	50.09	205	400
	664.963	○	○	○	6.00	4.40	12.50	17.68	25.00	30.62	39.53	46.77	55.90	205	400
	664.983	○	○	○	6.30	4.70	14.00	19.80	28.00	34.29	44.27	52.38	62.61	205	400
	665.003	○	○	○	6.60	5.20	15.75	22.27	31.50	38.57	49.80	58.92	70.43	205	400
	665.013	○	○	○	6.80	5.20	16.75	23.69	33.50	41.03	52.97	62.67	74.91	205	400
	665.043	○	○	○	8.00	5.90	20.00	28.28	40.00	48.99	63.25	74.83	89.44	205	400
	665.063	○	○	○	8.70	6.20	22.50	31.84	45.00	55.15	71.20	84.24	100.69	205	400
	665.083	○	○	○	9.00	6.60	25.00	35.36	50.00	61.24	79.06	93.54	111.80	205	400
	665.123	○	○	○	10.00	7.40	31.50	44.55	63.00	77.16	99.61	117.86	140.87	205	400
	665.163	○	○	○	10.80	8.40	40.00	56.57	80.00	97.99	126.50	149.68	178.90	205	400
	665.183	○	○	○	11.30	9.20	45.00	63.54	90.00	110.23	142.30	168.37	201.24	205	400
	665.203	○	○	○	12.00	9.80	50.00	70.71	100.00	127.47	158.11	167.08	223.61	205	400
60°	**664.724**	○	○	○	3.00	2.10	3.15	4.45	6.30	7.72	9.96	11.79	14.09	300	560
	664.764	○	○	○	3.50	2.30	4.00	5.66	8.00	9.80	12.65	14.97	17.89	300	565
	664.804	○	○	○	4.00	2.60	5.00	7.07	10.00	12.25	15.81	18.71	22.36	300	565
	664.844	○	○	○	4.50	3.00	6.25	8.84	12.50	15.31	19.67	23.39	27.95	300	570
	664.884	○	○	○	5.00	3.40	8.00	11.31	16.00	19.60	25.30	29.93	35.78	305	570
	664.924	○	○	○	5.50	4.10	10.00	14.14	20.00	24.49	31.62	37.42	44.72	305	575
	664.944	○	○	○	5.70	4.20	11.20	15.84	22.40	27.44	35.42	41.91	50.09	305	575
	664.964	○	○	○	6.00	4.20	12.50	17.68	25.00	30.62	39.53	46.77	55.90	310	580
	664.984	○	○	○	6.30	4.50	14.00	19.80	28.00	34.29	44.27	52.38	62.61	315	585

[1]We reserve the right to deliver AISI 316Ti or AISI 316L under the material no. 17.
E = Narrowest free cross section · A = Equivalent bore diameter

Continued on next page.

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

Flat fan dovetail nozzles

Series 664 / 665

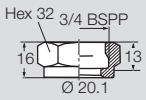
Spray angle	Ordering no.				A Ø [mm]	E Ø [mm]	V̇ [l/min]							Spray width B at p=2 bar	
	Type	Mat. no.					p [bar]								
		17[1] AISI 316Ti/ AISI 316L	5E PVDF	53 PP			0.5	1.0	2.0	3.0	5.0	7.0	10.0	H = 250 mm	H = 500 mm
60°	**665.004**	○	○	○	6.60	4.80	15.75	22.27	31.50	38.57	49.80	58.92	70.43	310	580
	665.014	○	○	○	6.80	4.90	16.75	23.69	33.50	41.03	52.97	62.67	74.91	310	580
	665.044	○	○	○	8.00	5.50	20.00	28.28	40.00	48.99	63.25	74.83	89.44	315	585
	665.064	○	○	○	8.70	5.80	22.50	31.84	45.00	55.15	71.20	84.24	100.69	315	585
	665.084	○	○	○	9.00	6.20	25.00	35.36	50.00	61.24	79.06	93.54	111.80	320	590
	665.124	○	○	○	10.00	7.40	31.50	44.55	63.00	77.16	99.61	117.86	140.87	325	600
	665.164	○	○	○	10.80	8.30	40.00	56.57	80.00	97.99	126.50	149.68	178.90	325	600
	665.184	○	○	○	11.30	8.90	45.00	63.54	90.00	110.23	142.30	168.37	201.24	325	600
	665.204	○	○	○	12.00	9.50	50.00	70.71	100.00	127.47	158.11	167.08	223.61	325	600
75°	**664.725**	○	○	○	3.00	1.90	3.15	4.45	6.30	7.72	9.96	11.79	14.09	345	645
	664.765	○	○	○	3.50	2.10	4.00	5.66	8.00	9.80	12.65	14.97	17.89	345	645
	664.805	○	○	○	4.00	2.60	5.00	7.07	10.00	12.25	15.81	18.71	22.36	345	645
	664.845	○	○	○	4.50	3.00	6.25	8.84	12.50	15.31	19.67	23.39	27.95	345	645
	664.885	○	○	○	5.00	3.30	8.00	11.31	16.00	19.60	25.30	29.93	35.78	345	645
	664.925	○	○	○	5.50	3.80	10.00	14.14	20.00	24.49	31.62	37.42	44.72	345	645
	664.965	○	○	○	6.00	4.10	12.50	17.68	25.00	30.62	39.53	46.77	55.90	345	645
	665.005	○	○	○	6.60	4.30	15.75	22.27	31.50	38.57	49.80	58.92	70.43	345	645
	665.015	○	○	○	6.80	4.60	16.75	23.69	33.50	41.03	52.97	62.67	74.91	345	645
	665.045	○	○	○	8.00	5.30	20.00	28.28	40.00	48.99	63.25	74.83	89.44	345	645
	665.085	○	○	○	9.00	6.10	25.00	35.36	50.00	61.24	79.06	93.54	111.80	345	645
	665.125	○	○	○	10.00	6.80	31.50	44.55	63.00	77.16	99.61	117.86	140.87	345	645
90°	**664.726**	○	○	○	3.00	1.70	3.15	4.45	6.30	7.72	9.96	11.79	14.09	420	800
	664.766	○	○	○	3.50	1.90	4.00	5.66	8.00	9.80	12.65	14.97	17.89	420	800
	664.806	○	○	○	4.00	2.40	5.00	7.07	10.00	12.25	15.81	18.71	22.36	420	800
	664.846	○	○	○	4.50	2.40	6.25	8.84	12.50	15.31	19.67	23.39	27.95	420	800
	664.886	○	○	○	5.00	3.10	8.00	11.31	16.00	19.60	25.30	29.93	35.78	420	800
	664.926	○	○	○	5.50	3.60	10.00	14.14	20.00	24.49	31.62	37.42	44.72	420	800
	664.966	○	○	○	6.00	3.90	12.50	17.68	25.00	30.62	39.53	46.77	55.90	420	800
	665.046	○	○	○	8.00	4.90	20.00	28.28	40.00	48.99	63.25	74.83	89.44	420	800
	665.126	○	○	○	10.00	6.40	31.50	44.55	63.00	77.16	99.61	117.86	140.87	420	800
120°	**664.727**	○	○	○	3.00	1.60	3.15	4.45	6.30	7.72	9.96	11.79	14.09	1240	2150
	664.767	○	○	○	3.50	1.70	4.00	5.66	8.00	9.80	12.65	14.97	17.89	1240	2150
	664.807	○	○	○	4.00	2.00	5.00	7.07	10.00	12.25	15.81	18.71	22.36	1240	2150
	664.847	○	○	○	4.50	2.30	6.25	8.84	12.50	15.31	19.67	23.39	27.95	1240	2150
	664.887	○	○	○	5.00	2.60	8.00	11.31	16.00	19.60	25.30	29.93	35.78	1240	2150
	664.927	○	○	○	5.50	2.90	10.00	14.14	20.00	24.49	31.62	37.42	44.72	1240	2150
	664.967	○	○	○	6.00	3.20	12.50	17.68	25.00	30.62	39.53	46.77	55.90	1240	2150
	665.047	○	○	○	8.00	4.40	20.00	28.28	40.00	48.99	63.25	74.83	89.44	1240	2150
	665.127	○	○	○	10.00	5.70	31.50	44.55	63.00	77.16	99.61	117.86	140.87	1240	2150

[1] We reserve the right to deliver AISI 316Ti or AISI 316L under the material no. 17.
E = Narrowest free cross section · A = Equivalent bore diameter

Example of ordering:	Type	+	Material no.	=	Ordering no.
	665.004	+	**17**	=	**665.004.17**

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

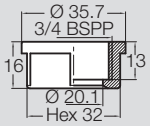
Flat fan dovetail nozzles
Accessories
Series 664 / 665



Mat. no. 17

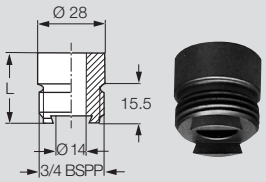
Retaining nut:

065.600.17[1]
(AISI 316Ti/AISI 316L)



Mat. no. 5E

065.600.5E (PVDF)



Welding nipple:

066.410.17[1]
(AISI 316Ti/AISI 316L):
L= 27 mm

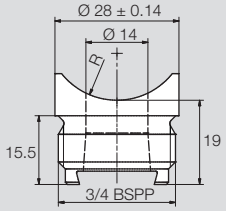
066.410.5E (PVDF):
L= 27 mm

066.411.17[1]
(AISI 316Ti/AISI 316L):
L= 60 mm

066.411.17[1]**.04**
(AISI 316Ti/AISI 316L):
L= 110 mm

Other lengths on request.

Nipple with radius

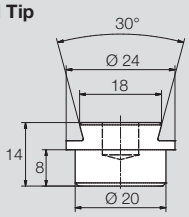


Welding nipple: **066.412.17**[1]
(AISI 316Ti/AISI 316L)

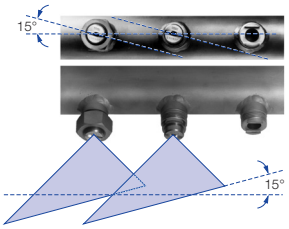
Standard radiuses for welding nipples (others on request)

Ordering no.	Radius
066.412.17.10	10
066.412.17.13	12.5
066.412.17.16	16
066.412.17.20	20
066.412.17.25	25
066.412.17.31	31

Blind Tip



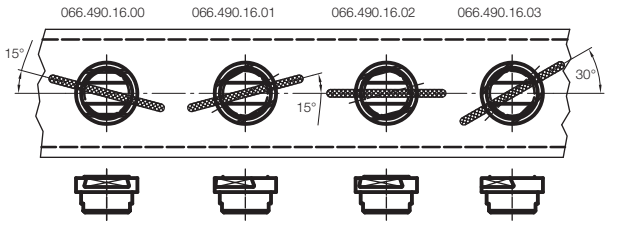
Blind Tip: **006.642.17**[1]
(AISI 316Ti/AISI 316L)
006.642.5E (PVDF)

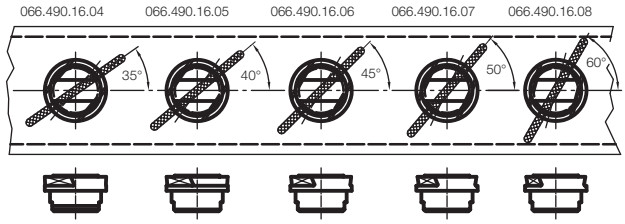


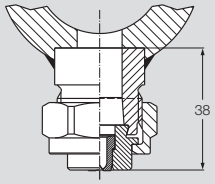
Other offset angles
are available on request

Alignment Tips

Material AISI 303

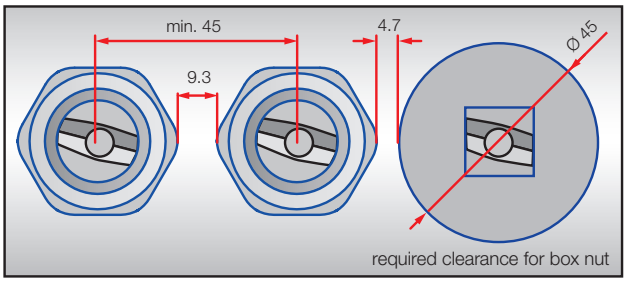


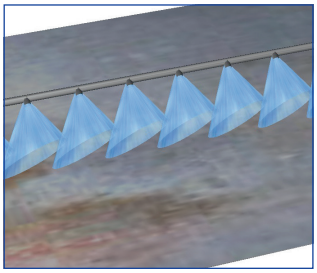




Welding nipple (L = 27 mm)
with nozzle and cap nut

Minimum pitch for series 664/665





Spray header for pickling line with nozzles series 664/665

[1]We reserve the right to deliver AISI 316Ti or AISI 316L under the material no. 17.