Flat fan nozzle with dovetail alignment
Series 664 / 665

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Assembly with retaining nut. Self aligning jet with dovetail design secures correct spray position for optimal strand surface quality and easy maintenance. Standard version with parabolic liquid distribution.

Applications:
Multi and single nozzle arrangements in segments for water only secondary cooling.
- Standard offset angle 15° built into the nozzle
- 0° offset angle available on request 664.xxx.xx.74 or 665.xxx.xx.74

Available also with rectangular liquid distribution for single nozzle arrangement (per roller gap) or wide pitches 664.xxx.xx.90 or 665.xxx.xx.90
Available also with rectangular liquid distribution combined with 0°offset angle for single nozzle arrangement (per roller gap) or wide pitches 664.xxx.xx.96 665.xxx.xx.96 in narrow roller gaps.

Special nozzle types:

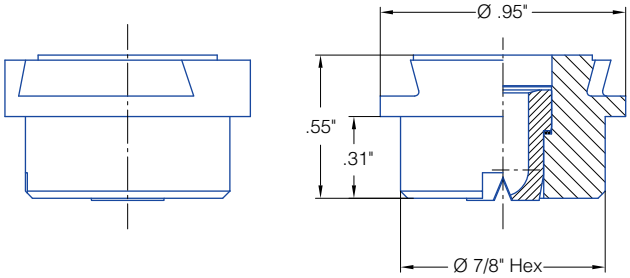
Type + Material No. + Special No

Special No:
00= standard nozzle

74 = flat jet parallel to dovetail

90 = rectangular liquid distributionl

96 = flat jet parallel to dovetail + rectangular liquid distribution



Flat jet 15° offset against dovetail

Spray angle	Ordering no. Type	Material no. 303 SS 16	316 SS 17 1)	Brass 30	Equivalent Orifice diam. (in.)	Free passage (in.)	Flow Rate (Gallons Per Minute) 10 psi	20 psi	liters per minute 2 bar	40 psi	60 psi	80 psi	100 psi	Spray Coverage @ 30 psi H=10"	H=20"
20°	**664. 721**	○	○	○	.118	.099	.98	1.4	6.3	2.0	2.4	2.8	3.1	4	8
	664. 801	○	○	○	.158	.126	1.6	2.2	10.0	3.1	3.8	4.4	4.9	4	8
	664. 881	○	○	○	.197	.158	2.5	3.5	16.0	5.0	6.1	7.0	7.8	4	8
	664. 921	○	○	○	.217	.173	3.1	4.4	20.0	6.2	7.6	8.8	9.8	4	8
	664. 961	○	○	○	.236	.201	3.9	5.5	25.0	7.8	9.5	11.0	12.3	4	8
30°	**664. 722**	○	○	○	.118	.095	.98	1.4	6.3	2.0	2.4	2.8	3.1	6	11
	664. 762	○	○	○	.138	.106	1.2	1.8	8.0	2.5	3.0	3.5	3.9	6	11
	664. 802	○	○	○	.158	.122	1.6	2.2	10.0	3.1	3.8	4.4	4.9	6	11
	664. 882	○	○	○	.197	.158	2.5	3.5	16.0	5.0	6.1	7.0	7.8	6	11
	664. 922	○	○	○	.217	.173	3.1	4.4	20.0	6.2	7.6	8.8	9.8	6	11
	664. 962	○	○	○	.236	.197	3.9	5.5	25.0	7.8	9.5	11.0	12.3	6	11
	665. 042	○	-	○	.315	.252	6.2	8.8	40.0	12.4	15.2	17.6	19.6	6	11
	665. 122	-	-	○	.394	.323	9.8	13.8	63.0	19.5	23.9	27.6	30.9	6	11

1) We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 17.

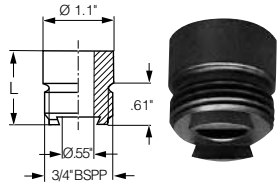
Continued on next page.

Spray angle	Ordering no. Type	Material no. 303 SS 16	316 SS 17[1]	Brass 30	Equivalent Orifice diam. (in.)	Free passage (in.)	Flow Rate (Gallons Per Minute) 10 psi	20 psi	liters per minute 2 bar	40 psi	60 psi	80 psi	100 psi	Spray Coverage @ 30 psi H=10"	H=20"
45°	**664. 723**	○	○	○	.118	.095	.98	1.4	6.3	2.0	2.4	2.8	3.1	10	19
	664. 763	○	○	○	.138	.102	1.2	1.8	8.0	2.5	3.0	3.5	3.9	10	19
	664. 803	○	○	○	.158	.118	1.6	2.2	10.0	3.1	3.8	4.4	4.9	10	19
	664. 843	○	○	○	.177	.134	1.9	2.7	12.5	3.9	4.8	5.5	6.1	10	19
	664. 883	○	○	○	.197	.150	2.5	3.5	16.0	5.0	6.1	7.0	7.8	10	20
	664. 923	○	○	○	.217	.165	3.1	4.4	20.0	6.2	7.6	8.8	9.8	11	20
	664. 963	○	○	○	.236	.043	3.9	5.5	25.0	7.8	9.5	11.0	12.3	11	20
	665. 043	-	-	○	.315	.232	6.2	8.8	40.0	12.4	15.2	17.6	19.6	11	20
60°	**664. 724**	○	○	○	.118	.083	.98	1.4	6.3	2.0	2.4	2.8	3.1	12	22
	664. 764	○	○	○	.138	.091	1.2	1.8	8.0	2.5	3.0	3.5	3.9	12	22
	664. 804	○	○	○	.158	.102	1.6	2.2	10.0	3.1	3.8	4.4	4.9	12	22
	664. 844	○	○	○	.177	.118	1.9	2.7	12.5	3.9	4.8	5.5	6.1	12	22
	664. 884	○	○	○	.197	.134	2.5	3.5	16.0	5.0	6.1	7.0	7.8	12	22
	664. 924	○	○	○	.217	.162	3.1	4.4	20.0	6.2	7.6	8.8	9.8	12	23
	664. 964	○	○	○	.236	.165	3.9	5.5	25.0	7.8	9.5	11.0	12.3	12	23
	665. 044	○	○	○	.315	.217	6.2	8.8	40.0	12.4	15.2	17.6	19.6	12	23
	665. 084	○	○	○	.355	.244	7.8	11.0	50.0	15.5	19.0	21.9	24.5	13	23
	665. 124	-	-	○	.394	.292	9.8	13.8	63.0	19.5	23.9	27.6	30.9	13	24
90°	**664. 726**	○	○	○	.118	.200	.98	1.4	6.3	2.0	2.4	2.8	3.1	17	31
	664. 766	○	○	○	.138	.300	1.2	1.8	8.0	2.5	3.0	3.5	3.9	17	31
	664. 806	○	○	○	.158	.095	1.6	2.2	10.0	3.1	3.8	4.4	4.9	17	31
	664. 846	○	○	○	.177	.095	1.9	2.7	12.5	3.9	4.8	5.5	6.1	17	31
	664. 886	○	○	○	.197	.122	2.5	3.5	16.0	5.0	6.1	7.0	7.8	17	31
	664. 926	○	○	○	.217	.142	3.1	4.4	20.0	6.2	7.6	8.8	9.8	17	31
	664. 966	○	○	○	.236	.154	3.9	5.5	25.0	7.8	9.5	11.0	12.3	17	31
	665. 046	-	-	○	.315	.193	6.2	8.8	40.0	12.4	15.2	17.6	19.6	17	31
	665. 126	-	-	○	.394	.252	9.8	13.8	63.0	19.5	23.9	27.6	30.9	17	31
120°	**664. 727**	○	○	○	.118	.063	.98	1.4	6.3	2.0	2.4	2.8	3.1	49	85
	664. 767	○	○	○	.138	.067	1.2	1.8	8.0	2.5	3.0	3.5	3.9	49	85
	664. 807	○	○	○	.158	.079	1.6	2.2	10.0	3.1	3.8	4.4	4.9	49	85
	664. 887	○	○	○	.197	.102	2.5	3.5	16.0	5.0	6.1	7.0	7.8	49	85
	664. 927	○	○	○	.217	.114	3.1	4.4	20.0	6.2	7.6	8.8	9.8	49	85
	664. 967	-	-	○	.236	.126	3.9	5.5	25.0	7.8	9.5	11.0	12.3	49	85
	665 .047	-	-	○	.315	.173	6.2	8.8	40.0	12.4	15.2	17.6	19.6	49	85

Example for ordering:	Type	+	Material no.	=	Ordering no.
	664. 727	+	**16**	=	**664. 727. 16**

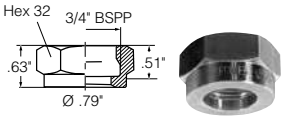
1) We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 17.

Accessories



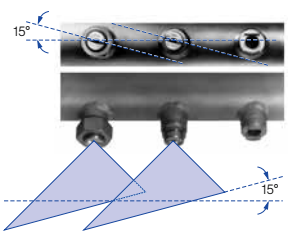
Weight: .14 lb.

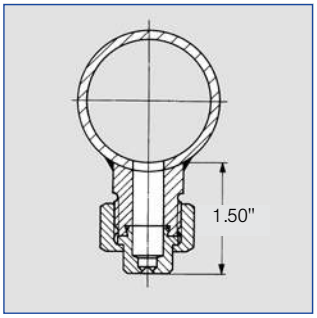
Nipple, **066. 410. 17** (AISI 316Ti)



Weight brass .13 lb.

Retaining nut: **065. 600. 16** (AISI 303)
065. 600. 17 (AISI 316Ti)
065. 600. 30 (Brass)





Conversion formula for the above series: $V_2 = V_1 \sqrt{\frac{P_2}{P_1}}$