



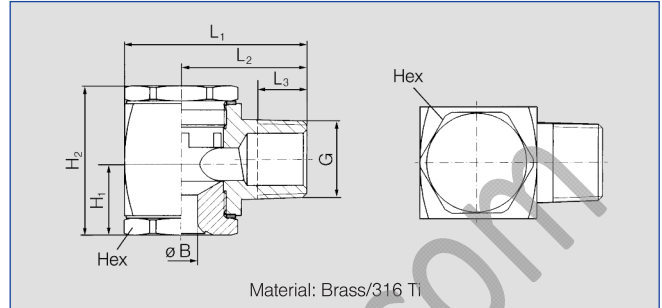
Tangential-flow full cone nozzles

Series 422

Tangentially arranged liquid supply. Without swirl inserts. Non-clogging. Stable spray angle. Uniform spray.

Applications:

Cleaning and washing process, cooling of gaseous fluids and solids, surface spraying, spraying onto mats in air washers, improving on chemical reactions, continuous casting, foam control.



G	Dimensions [mm]						Weight Brass
	L ₁	L ₂	L ₃	H ₁	H ₂	Hex	
1/4 BSPT	28.0	20.0	10.0	8.0	20.5	12.0	43 g
3/8 BSPT	36.0	25.0	10.0	11.0	26.5	19.0	105 g
1/2 BSPT	48.5	33.5	13.0	20.0	40.0	27.0	250 g
3/4 BSPT	58.0	38.0	14.5	23.5	57.0	36.0	660 g
1 BSPT	76.0	48.5	17.0	27.5	66.0	41.0	1.330 g

Spray angle	Ordering no.							B Ø [mm]	E Ø [mm]	V [l/min]						Spray diameter D at p=1-10 bar			
	Type	Mat.-no.		Code						p [bar]						H = 200 mm	H = 500 mm		
		30	17 ¹⁾	Brass	AISI 316Ti/AISI 316L	1/4 BSPT	3/8 BSPT			1/2 BSPT	3/4 BSPT	1 BSPT	0.5	1.0	2.0			[US gal./min] at 40 psi	3.0
60°	422.644	•	•	-	CE	-	-	-	3.00	3.00	2.00	2.83	4.00	1.24	4.90	6.32	8.94	225	510
	90°	422.406	•	•	CC	-	-	-	1.50	1.45	0.50	0.71	1.00	0.31	1.22	1.58	2.24	380	860
		422.486	-	•	CC	-	-	-	1.90	1.80	0.80	1.13	1.60	0.50	1.96	2.53	3.58	380	860
		422.566	•	•	CC	-	-	-	2.30	2.20	1.25	1.77	2.50	0.78	3.06	3.95	5.59	380	860
		422.606	•	•	-	CE	-	-	2.60	2.50	1.57	2.23	3.15	0.98	3.86	4.98	7.04	380	860
		422.646	•	•	-	CE	-	-	3.00	2.90	2.00	2.83	4.00	1.24	4.90	6.32	8.94	390	960
		422.726	•	-	-	CE	-	-	3.70	3.60	3.15	4.45	6.30	1.95	7.72	9.96	14.09	390	960
		422.766	-	•	-	CE	-	-	4.15	4.10	4.00	5.66	8.00	2.48	9.80	12.65	17.89	390	960
		422.806	•	•	-	CE	-	-	4.65	4.60	5.00	7.07	10.00	3.10	12.25	15.81	22.36	390	960
		422.846	•	•	-	CE	-	-	5.30	5.30	6.25	8.84	12.50	3.88	15.31	19.76	27.95	390	960
422.886	•	•	-	CE	-	-	5.80	6.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	390	960		
422.966	-	•	-	-	CG	-	-	8.00	8.00	12.50	17.68	25.00	7.75	30.62	39.53	55.90	390	960	
120°	422.488	•	•	CC	-	-	-	1.90	1.90	0.80	1.13	1.60	0.50	1.96	2.53	3.58	680	1220	
	422.568	•	•	CC	-	-	-	2.40	2.40	1.25	1.77	2.50	0.78	3.06	3.95	5.59	680	1220	
	422.608	-	•	-	CE	-	-	2.60	2.50	1.57	2.23	3.15	0.98	3.86	4.98	7.04	680	1600	
	422.728	•	•	-	CE	-	-	4.00	3.90	3.15	4.45	6.30	1.95	7.72	9.96	14.09	680	1600	
	422.808	-	•	-	CE	-	-	4.65	4.60	5.00	7.07	10.00	3.10	12.25	15.81	22.36	680	1600	
	422.848	•	•	-	CE	-	-	5.20	5.10	6.25	8.84	12.50	3.88	15.31	19.76	27.95	680	1600	
	422.888	•	•	-	CE	-	-	6.60	6.00	8.00	11.31	16.00	4.96	19.60	25.30	35.78	680	1600	
	422.928	-	•	-	-	CG	-	-	7.30	7.30	10.00	14.14	20.00	6.20	24.49	31.62	44.72	680	1600
	422.968	•	•	-	-	CG	-	-	8.00	8.00	12.50	17.68	25.00	7.75	30.62	39.53	55.90	680	1600
	423.008	-	•	-	-	CG	-	-	8.70	8.70	15.75	22.27	31.50	9.77	38.88	49.81	70.44	680	1600
	423.128	-	•	-	-	-	CK	-	12.70	12.30	31.50	44.55	63.00	19.54	77.16	99.61	140.87	680	1600
	423.208	-	•	-	-	-	CM	-	19.00	16.00	50.00	70.71	100.00	31.00	122.47	158.11	223.61	680	1600

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

Plastic version see next page.

Example Type + Material-no. + Code = Ordering no.
for ordering: 422.644 + 30 + CE = 422.644.30.CE

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«.

Conversion formula for the above series: $\dot{V}_2 = \dot{V}_1 \cdot \left(\frac{p_2}{p_1}\right)^{0,4}$
(≤ 10 bar)