



Tangential-flow full cone nozzles

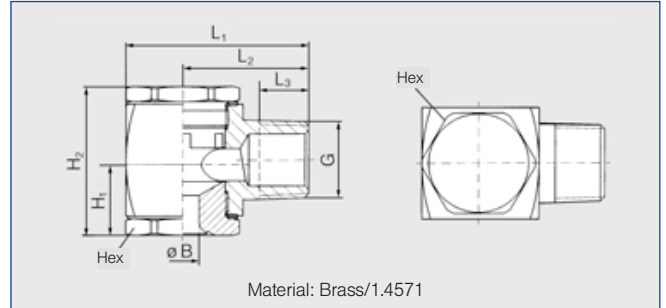
Series 422



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.



Material: Brass/1.4571

Dimensions [mm]							Weight Brass
G	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	38,5	27,0	250 g

Spray angle	Ordering no.						B Ø [mm]	E Ø [mm]	V̇ [l/min]							Spray diameter D at p=1-10 bar	
	Type	Mat.-no.		Code		p [bar]							H				
		30	17	1/4 BSPT	3/8 BSPT	1/2 BSPT			0,5	1,0	2,0	3,0	5,0	10,0	H = 200 mm	H = 500 mm	
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
	422.686	○	-	-	CE	-	3,30	3,20	2,50	3,54	5,00	1,55	6,12	7,91	11,18	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	-	5,20	5,10	6,25	8,84	12,50	3,88	15,31	19,76	27,95	390	960
422.886	○	-	-	CE	-	5,80	5,70	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	1,80	0,80	1,13	1,60	0,50	1,96	2,53	3,58	680	1220
	422.568	○	-	CC	-	-	2,30	2,20	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	-	3,70	3,60	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	-	5,80	5,70	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

B = bore diameter · E = narrowest free cross section

Plastic version see next page.

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





Tangential-flow full cone nozzles

Plastic version

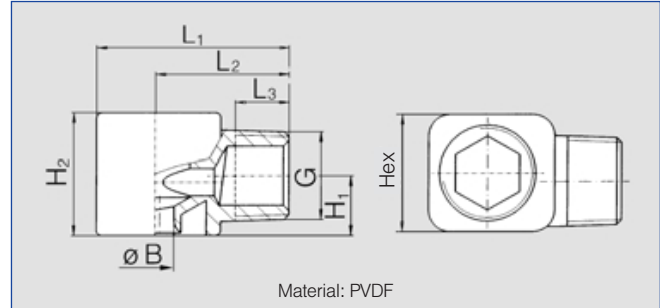
Series 422/423



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, foam control.



Material: PVDF

G	Dimensions [mm]						Weight PVDF
	L ₁	L ₂	L ₃	H ₁	H ₂	Hex	
1/4 BSPT	28,0	20,0	9,8	8,0	16,0	16,0	7 g
3/8 BSPT	36,0	25,0	10,1	11,2	23,0	22,0	16 g
1/2 BSPT	49,5	33,5	13,2	19,2	38,0	32,0	40 g
3/4 BSPT	58,5	38,5	18,5	24,5	50,0	41,0	50 g

Spray angle	Ordering no.						B Ø [mm]	E Ø [mm]	V̇ [l/min]							Spray diameter D at p=1-10 bar	
	Type	Mat.-no.	Code						p [bar]							H = 200 mm	H = 500 mm
			5E	1/4 BSPT	3/8 BSPT	1/2 BSPT			3/4 BSPT	0,5	1,0	2,0	[US gal/min] at 40 psi	3,0	5,0		
60°	422. 724	○	-	CE	-	-	3,60	3,60	3,15	4,45	6,30	1,95	7,72	9,96	14,09	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. 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. 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	-	-	5,20	5,10	6,25	8,84	12,50	3,88	15,31	19,76	27,95	390	960
	422. 886	○	-	CE	-	-	5,80	5,70	8,00	11,31	16,00	4,96	19,60	25,30	35,78	390	960
	422. 926	○	-	-	CG	-	7,30	7,30	10,00	14,14	20,00	6,20	24,49	31,62	44,72	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
423. 006	○	-	-	CG	-	8,70	8,70	15,75	22,27	31,50	9,77	38,58	49,81	70,44	390	960	
423. 126	○	-	-	-	CK	12,00	12,00	31,50	44,55	63,00	19,54	77,16	99,61	140,87	390	960	
120°	422. 408	○	CC	-	-	-	1,50	1,45	0,50	0,71	1,00	0,31	1,22	1,58	2,24	680	1220
	422. 448	○	CC	-	-	-	1,65	1,60	0,62	0,88	1,25	0,39	1,53	1,98	2,80	680	1220
	422. 488	○	CC	-	-	-	1,90	1,80	0,80	1,13	1,60	0,50	1,96	2,53	3,58	680	1220
	422. 568	○	CC	-	-	-	2,30	2,20	1,25	1,77	2,50	0,78	3,06	3,95	5,59	680	1220
	422. 728	○	-	CE	-	-	3,70	3,60	3,15	4,45	6,30	1,95	7,72	9,96	14,09	680	1600
	422. 888	○	-	CE	-	-	5,80	5,70	8,00	11,31	16,00	4,96	19,60	25,30	35,78	680	1600
	423. 008	○	-	-	CG	-	8,70	8,70	15,75	22,27	31,50	9,77	38,58	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

B = bore diameter · E = narrowest free cross section

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“.

Example for ordering: Type 422. 724 + Material no. 5E + Code CC = Ordering no. 422. 724. 5E. CC

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





Tangential-flow full cone nozzles

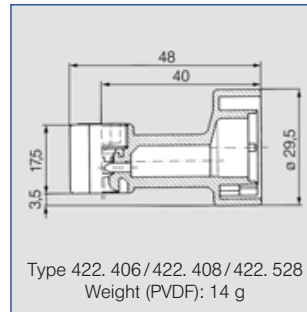
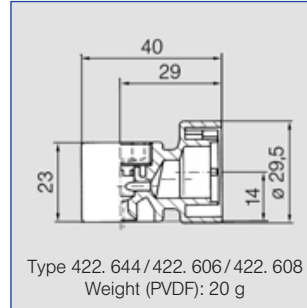
Bayonet quick-release system

Series 422



Quick and safe assembly, without tool. Space-saving installation. Non-clogging and maintenance-free. High resistance to temperatures and chemicals.

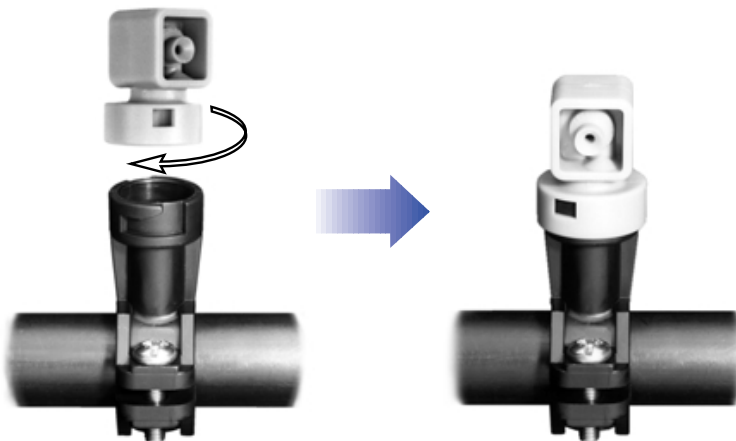
Applications:
Cleaning problems, cooling process, foam control.



Spray angle	Ordering no.				B ∅ [mm]	E ∅ [mm]	V̇ [l/min]							Spray diameter D at p=1-10 bar	
	Type	Mat.-no.		Code			p [bar]							 H = 200 mm H = 500 mm	
		5E	53												
		PVDF	PP	Bayonet quick-release			0,5	1,0	2,0	[US gal/min] at 40 psi	3,0	5,0	10,0		
60°	422. 644	-	○	KB	2,90	2,90	2,00	2,83	4,00	1,24	4,90	6,32	8,94	225	510
	422. 406	○	-	KB	1,50	1,45	0,50	0,71	1,00	0,31	1,22	1,58	2,24	380	860
90°	422. 606	○	-	KB	2,60	2,50	1,57	2,23	3,15	0,98	3,86	4,98	7,04	380	860
	422. 408	○	-	KB	1,50	1,45	0,50	0,71	1,00	0,31	1,22	1,58	2,24	680	1220
120°	422. 528	○	-	KB	2,10	2,00	1,00	1,41	2,00	0,62	2,45	3,16	4,47	680	1220
	422. 608	○	-	KB	2,60	2,50	1,57	2,23	3,15	0,98	3,86	4,98	7,04	680	1600

Simple assembly – just with a twist

Nozzle set assembled on pipe



B = bore diameter ·
E = narrowest free cross section

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“.