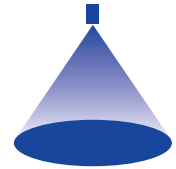


# ➤ Axial-flow full cone nozzles

## Series 419 FreeFlow



### Features:

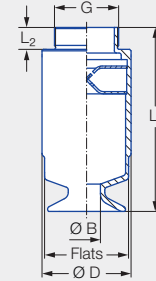
- Non clogging due to very large free cross sections
- Very stable spray angle
- Uniform liquid distribution

### Applications:


- Cleaning and washing processes
- Dust control
- Absorption
- Distillation



Series 419




Type	Code	G	Dimensions [mm]				Weight [kg]
			L <sub>1</sub>	L <sub>2</sub>	Ø D	Flats	
419.3xx	AV	2 BSPP	133.0	24.0	70.0	65	1.8
419.4xx	AV	2 BSPP	177.0	24.0	80.0	75	2.3
419.51x	AV	2 BSPP	217.0	27.0	102.0	95	4.0
419.51x	AY	2 1/2 BSPP	220.0	27.0	102.0	95	4.4
419.54x	AY	2 1/2 BSPP	220.0	27.0	102.0	95	4.3
419.57x	AY	2 1/2 BSPP	256.0	27.0	115.0	105	6.0
419.57x	LA	3 BSPP	259.0	30.0	115.0	105	6.4
419.608	LA	3 BSPP	266.0	30.0	122.0	115	6.1
419.6xx	LA	3 BSPP	276.0	30.0	122.0	115	6.3

Spray angle <sup>1</sup>	Ordering no.					Bore diameter B [mm]	Narrowest free cross sections Ø [mm]	V̇ water [l/min]					Spray diameter D [mm] (at p = 1 bar)	
	Type	Mat. no.	Code					p [bar]					 H = 500 [mm]    H = 1,000 [mm]	
		H1	2 BSPP	2 1/2 BSPP	3 BSPP			0.3	0.5	1.0	2.0	5.0		
90°	419.366	●	AV			18.40	18.40	117	143	189	249	360	1,200	2,200
	419.396	●	AV			21.00	20.75	140	172	227	300	432	1,200	2,200
	419.446	●	AV			23.10	23.10	187	230	303	400	577	1,200	2,200
	419.486	●	AV			27.00	26.40	234	287	379	500	721	1,200	2,200
	419.516	●	AV	AY		26.70	26.70	281	345	455	600	866	1,200	2,200
	419.546	●		AY		31.20	31.20	332	408	538	710	1,024	1,200	2,200
	419.576	●		AY	LA	33.50	33.50	398	488	644	850	1,226	1,200	2,200
	419.606	●			LA	37.10	37.10	468	574	758	1,000	1,443	1,200	2,200
419.626	●			LA	41.30	41.30	585	718	947	1,250	1,803	1,200	2,200	
120°	419.368	●	AV			18.50	18.50	117	143	189	249	360	1,660	2,900
	419.398	●	AV			22.00	20.75	140	172	227	300	432	1,660	2,900
	419.448	●	AV			23.80	23.80	187	230	303	400	577	1,660	2,900
	419.488	●	AV			27.00	26.40	234	287	379	500	721	1,660	2,900
	419.518	●	AV	AY		28.50	28.50	281	345	455	600	866	1,660	2,900
	419.548	●		AY		32.20	32.00	332	408	538	710	1,024	1,660	2,900
	419.578	●		AY	LA	34.90	34.90	398	488	644	850	1,226	1,660	2,900
	419.608	●			LA	37.10	37.10	468	574	758	1,000	1,443	1,660	2,900
419.628	●			LA	45.00	41.50	585	718	947	1,250	1,803	1,660	2,900	

<sup>1</sup> Spray angle at 1 bar.

Conversion formula for this series:  $\dot{V}_2 = \dot{V}_1 \cdot \left(\frac{p_2}{p_1}\right)^{0.4}$   
(≤ 10 bar)

Ordering Type + Material no. + Code = Ordering no.  
example: 419.366 + H1 + AV = 419.366.H1.AV

 Assembly accessories can be found in Chapter 9 "Accessories".