



## Tangential-flow hollow cone nozzles

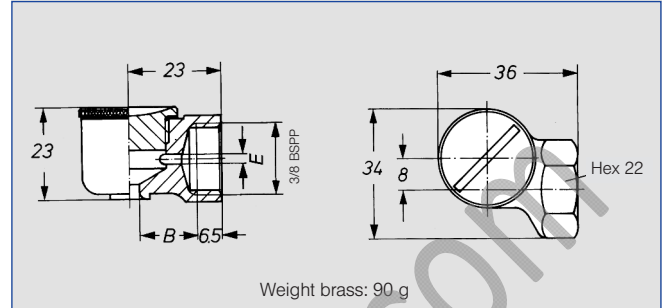
### Brass versions

### Series 302 / 308

**Uniform hollow cone spray.**  
**Non-clogging nozzle, without swirl insert.**

Applications:

Humidification of air in air washers, dust control, spraying onto filters, foam control, cooling.



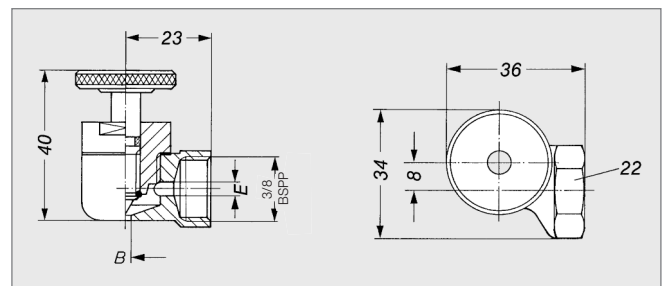
Spray angle	Ordering no.		B ∅ [mm]	E ∅ [mm]	$\dot{V}$ [l/min]								Spray diameter D at p=2 bar	
	Type	Mat. no.			p [bar]								H =	
					30	1Y	0.5	1.0	2.0	3.0	5.0	7.0	10.0	250 mm
60°	302. 364	○	-	1.50	1.50	0.31	0.45	0.63	0.77	1.00	1.18	1.41	200	350
	302. 464	○	○	2.00	2.00	0.70	0.99	1.40	1.71	2.21	2.62	3.13	300	560
80°	302. 545	○	○	4.90	2.30	1.12	1.58	2.24	2.74	3.54	4.19	5.01	400	700
90°	302. 606	○	○	4.60	4.00	1.57	2.23	3.15	3.86	4.98	5.89	7.04	450	750
130°	302. 368	○	○	3.00	1.00	0.31	0.45	0.63	0.77	1.00	1.18	1.41	800	1500
	302. 468	○	○	5.00	1.70	0.70	0.99	1.40	1.71	2.21	2.62	3.13	800	1500
	302. 548	○	-	5.00	2.50	1.12	1.58	2.24	2.74	3.54	4.19	5.01	800	1500
	302. 608	○	○	5.00	3.50	1.57	2.23	3.15	3.86	4.98	5.89	7.04	1000	1800
	302. 668	○	-	7.50	3.60	2.25	3.18	4.50	5.51	7.12	8.42	10.06	1200	2000
	302. 748	○	-	7.50	4.80	3.55	5.02	7.10	8.70	11.23	13.28	15.88	1200	2000

B = bore diameter · E = narrowest free cross section

**Flow rate adjustable.**  
**Decrease in flow rate causes narrower spray angle.**

Applications:

Dust control, foam control.



Spray angle	Ordering no.		B ∅ [mm]	E ∅ [mm]	$\dot{V}_{max}$ [l/min]						Spray diameter D at p=2 bar	
	Type	Mat.-Nr.			p [bar]						H =	
					30	Brass					250 mm	500 mm
90°	308. 466	○	2.0	2.0	0.54	0.70	1.00	1.40	2.21	3.13	400	880
	308. 606	○	4.0	4.0	1.22	1.58	2.23	3.15	4.98	7.04	450	950

B = bore diameter · E = narrowest free cross section

Example for ordering	Type	+	Material no.	=	Ordering no.
	308. 466	+	30	=	308. 466. 30

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