

# WT

HOLLOW CONE

## Right Angle/Hollow Cone

### DESIGN FEATURES

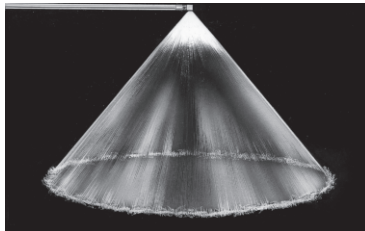
- Conventional design using tangential whirl method of atomization
- Durable
- Use where a circular pattern is required or in large area multiple installations where there is considerable overlapping of sprays
- Male and female connections
- Large free passage

### SPRAY CHARACTERISTICS

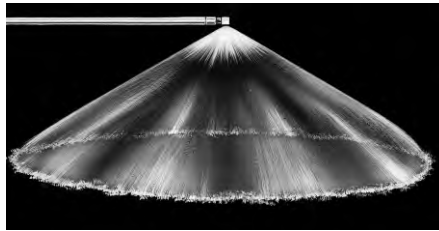
**Spray pattern:** Hollow Cone  
**Spray angles:** 70° to 120°  
**Flow rates:** 0.04 to 38.0 gpm



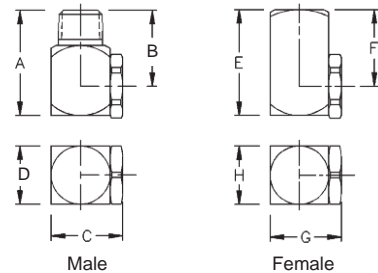
Male Metal



Hollow Cone 80°



Hollow Cone 120°



Male

Female

Dimensions are approximate. Check with BETE for critical dimension applications.

### WT Flow Rates and Dimensions

Hollow Cone, Medium and Extra Wide Spray Angles, 1/8" to 3/4" Pipe Sizes

Male or Female Pipe Size	Nozzle Number	Spray Angle	K Factor	GALLONS PER MINUTE @ PSI								Approx. (in.)		Dimensions for Metal Only (in.)								Wt. (oz.)	
				5 PSI	10 PSI	20 PSI	30 PSI	40 PSI	60 PSI	80 PSI	100 PSI	Inlet Dia.	Orifice Dia.	A	B	C	D	E	F	G	H	Metal	Plas.
1/8	WT10	70° 110°	0.0158	0.04	0.05	0.07	0.09	0.10	0.12	0.14	0.16	0.04	0.05	1.12	0.88	0.63	0.50	1.00	0.75	0.65	0.50	1.00	0.50
	WT20	70° 115°	0.0316	0.07	0.10	0.14	0.17	0.20	0.24	0.28	0.32	0.06	0.06										
	WT40	70°	0.0632	0.14	0.20	0.28	0.35	0.40	0.49	0.57	0.63	0.09	0.09										
	WT50	115°	0.0791	0.18	0.25	0.35	0.43	0.50	0.61	0.71	0.79	0.09	0.09										
	WT60	70° 115°	0.0949	0.21	0.30	0.42	0.52	0.60	0.73	0.85	0.95	0.10	0.11										
	WT70	115°	0.111	0.25	0.35	0.49	0.61	0.70	0.86	0.99	1.11	0.10	0.11										
	WT80	120°	0.126	0.28	0.40	0.57	0.69	0.80	0.98	1.13	1.26	0.11	0.12										
	WT100	70° 115°	0.158	0.35	0.50	0.71	0.87	1.00	1.22	1.41	1.58	0.13	0.13										
	WT130	120°	0.206	0.46	0.65	0.92	1.13	1.30	1.59	1.84	2.06	0.14	0.14										
	WT160	70°	0.253	0.57	0.80	1.13	1.39	1.60	1.96	2.26	2.53	0.15	0.16										
	WT180	120°	0.285	0.64	0.90	1.27	1.56	1.80	2.20	2.55	2.85	0.17	0.16										
	WT200	70°	0.316	0.71	1.00	1.41	1.73	2.00	2.45	2.83	3.16	0.17	0.19										
1/4	WT12	80°	0.0190	0.04	0.06	0.08	0.10	0.12	0.15	0.17	0.19	0.04	0.05	1.31	1.00	0.79	0.63	1.12	0.81	0.79	0.63	1.75	0.50
	WT18	80°	0.0285	0.06	0.09	0.13	0.16	0.18	0.22	0.25	0.28	0.06	0.06										
	WT20	70° 110°	0.0316	0.07	0.10	0.14	0.17	0.20	0.24	0.28	0.32	0.06	0.06										
	WT27	80°	0.0427	0.10	0.14	0.19	0.23	0.27	0.33	0.38	0.43	0.07	0.08										
	WT35	100°	0.0553	0.12	0.18	0.25	0.30	0.35	0.43	0.49	0.55	0.08	0.09										
	WT40	70° 80°	0.0632	0.14	0.20	0.28	0.35	0.40	0.49	0.57	0.63	0.08	0.09										
	WT42	120°	0.0664	0.15	0.21	0.30	0.36	0.42	0.51	0.59	0.66	0.08	0.09										
	WT48	105°	0.0759	0.17	0.24	0.34	0.42	0.48	0.59	0.68	0.76	0.09	0.11										

$$\text{Flow Rate (GPM)} = K \sqrt{\text{PSI}}$$

Standard Materials: Brass, 303 Stainless Steel, 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

TO ORDER: specify pipe size, connection type, nozzle number, spray angle, and material.

Dimensions are approximate. Check with BETE for critical dimension applications.



HOLLOW CONE

CALL 413-772-0846  
Call for the name of your nearest BETE representative.

**WT Flow Rates and Dimensions**  
Hollow Cone, Medium and Extra Wide Spray Angles, 1/8" to 3/4" Pipe Sizes

Male or Female Pipe Size	Nozzle Number	Spray Angle	K Factor	GALLONS PER MINUTE @ PSI								Approx. (in.)		Dimensions for Metal Only (in.)								Wt. (oz.)	
				5 PSI	10 PSI	20 PSI	30 PSI	40 PSI	60 PSI	80 PSI	100 PSI	Inlet Dia.	Orifice	A	B	C	D	E	F	G	H	Metal	Plas.
1/4	WT53	80°	0.084	0.19	0.27	0.37	0.46	0.53	0.65	0.75	0.84	0.09	0.11	1.31	1.00	0.79	0.63	1.12	0.81	0.79	0.63	1.75	0.50
	WT60	70°	0.095	0.21	0.30	0.42	0.52	0.60	0.73	0.85	0.95	0.10	0.11										
	WT68	120°	0.108	0.24	0.34	0.48	0.59	0.68	0.83	0.96	1.08	0.10	0.13										
	WT80	120°	0.126	0.28	0.40	0.57	0.69	0.80	0.98	1.13	1.26	0.13	0.13										
	WT100	70° 115°	0.158	0.35	0.50	0.71	0.87	1.00	1.22	1.41	1.58	0.13	0.14										
	WT130	120°	0.206	0.46	0.65	0.92	1.13	1.30	1.59	1.84	2.06	0.15	0.16										
	WT150	120°	0.237	0.53	0.75	1.06	1.30	1.50	1.84	2.12	2.37	0.16	0.17										
	WT160	70°	0.253	0.57	0.80	1.13	1.39	1.60	1.96	2.26	2.53	0.16	0.17										
	WT180	120°	0.285	0.64	0.90	1.27	1.56	1.80	2.20	2.55	2.85	0.18	0.18										
	WT200	70° 120°	0.316	0.71	1.00	1.41	1.73	2.00	2.45	2.83	3.16	0.18	0.19										
	WT220	120°	0.348	0.78	1.10	1.56	1.91	2.20	2.69	3.11	3.48	0.18	0.22										
	WT240	120°	0.379	0.85	1.20	1.70	2.08	2.40	2.94	3.39	3.79	0.20	0.20										
	WT260	80°	0.411	0.92	1.30	1.84	2.25	2.60	3.18	3.68	4.11	0.20	0.20										
	WT280	80°	0.443	0.99	1.40	1.98	2.42	2.80	3.43	3.96	4.43	0.20	0.22										
	WT300	70° 100°	0.474	1.06	1.50	2.12	2.60	3.00	3.67	4.24	4.74	0.20	0.22										
	WT340	80°	0.538	1.20	1.70	2.40	2.94	3.40	4.16	4.81	5.38	0.22	0.24										
	WT400	80°	0.632	1.41	2.00	2.83	3.46	4.00	4.90	5.66	6.32	0.25	0.28										
	WT480	80°	0.759	1.70	2.40	3.39	4.16	4.80	5.88	6.79	7.59	0.25	0.27										
WT580	80°	0.917	2.05	2.90	4.10	5.02	5.80	7.10	8.20	9.17	0.27	0.30											
WT640	80°	1.012	2.26	3.20	4.53	5.54	6.40	7.84	9.05	10.12	0.27	0.30											
WT680	80°	1.075	2.40	3.40	4.81	5.89	6.80	8.33	9.62	10.75	0.27	0.34											
WT800	80°	1.265	2.83	4.00	5.66	6.93	8.00	9.80	11.31	12.65	0.27	0.34											
3/8	WT100	70°	0.158	0.35	0.50	0.71	0.87	1.00	1.22	1.41	1.58	0.14	0.15	1.50	1.12	0.97	0.75	1.34	0.97	0.97	0.75	3.25	1.00
	WT130	120°	0.206	0.46	0.65	0.92	1.13	1.30	1.59	1.84	2.06	0.14	0.18										
	WT150	120°	0.237	0.53	0.75	1.06	1.30	1.50	1.84	2.12	2.37	0.17	0.18										
	WT160	70°	0.253	0.57	0.80	1.13	1.39	1.60	1.96	2.26	2.53	0.17	0.18										
	WT180	120°	0.285	0.64	0.90	1.27	1.56	1.80	2.20	2.55	2.85	0.17	0.19										
	WT200	70° 115°	0.316	0.71	1.00	1.41	1.73	2.00	2.45	2.83	3.16	0.19	0.20										
	WT220	120°	0.348	0.78	1.10	1.56	1.91	2.20	2.69	3.11	3.48	0.19	0.20										
	WT240	125°	0.379	0.85	1.20	1.70	2.08	2.40	2.94	3.39	3.79	0.19	0.20										
	WT260	120°	0.411	0.92	1.30	1.84	2.25	2.60	3.18	3.68	4.11	0.19	0.23										
	WT270	120°	0.427	0.95	1.35	1.91	2.34	2.70	3.31	3.82	4.27	0.20	0.23										
	WT300	70° 115°	0.474	1.06	1.50	2.12	2.60	3.00	3.67	4.24	4.74	0.20	0.23										
	WT350	115°	0.553	1.24	1.75	2.47	3.03	3.50	4.29	4.95	5.53	0.22	0.25										
	WT400	70° 105°	0.632	1.41	2.00	2.83	3.46	4.00	4.90	5.66	6.32	0.22	0.27										
	WT440	105°	0.696	1.56	2.20	3.11	3.81	4.40	5.39	6.22	6.96	0.26	0.30										
WT500	70° 105°	0.791	1.77	2.50	3.54	4.33	5.00	6.12	7.07	7.91	0.26	0.28											
WT560	105°	0.885	1.98	2.80	3.96	4.85	5.60	6.86	7.92	8.85	0.26	0.31											
WT600	70°	0.949	2.12	3.00	4.24	5.20	6.00	7.35	8.49	9.49	0.31	0.31											
WT1000	70°	1.581	3.54	5.00	7.07	8.66	10.0	12.3	14.1	15.8	0.34	0.38											
1/2	WT500	70°	0.791	1.77	2.50	3.54	4.33	5.00	6.12	7.07	7.91	0.30	0.30	1.87	1.37	1.25	1.00	1.81	1.31	1.25	1.00	6.50	2.25
	WT600	70°	0.949	2.12	3.00	4.24	5.20	6.00	7.35	8.49	9.49	0.33	0.31										
	WT800	70°	1.265	2.83	4.00	5.66	6.93	8.00	9.80	11.3	12.7	0.36	0.36										
	WT1000	70° 110°	1.581	3.54	5.00	7.07	8.66	10.0	12.3	14.1	15.8	0.36	0.44										
	WT1200	70°	1.897	4.24	6.00	8.49	10.4	12.0	14.7	17.0	19.0	0.40	0.48										
3/4	WT800	70°	1.265	2.83	4.00	5.66	6.93	8.00	9.80	11.3	12.7	0.36	0.38	2.25	1.62	1.50	1.25	2.19	1.56	1.50	1.25	12.00	3.00
	WT1000	70°	1.581	3.54	5.00	7.07	8.66	10.0	12.3	14.1	15.8	0.40	0.44										
	WT1200	70°	1.897	4.24	6.00	8.49	10.4	12.0	14.7	17.0	19.0	0.44	0.44										
	WT1400	80°	2.214	4.95	7.00	9.90	12.1	14.0	17.2	19.8	22.1	0.47	0.48										
	WT1600	80° 115°	2.530	5.66	8.00	11.3	13.9	16.0	19.6	22.6	25.3	0.48	0.51										
	WT1800	80°	2.846	6.36	9.00	12.7	15.6	18.0	22.1	25.5	28.5	0.50	0.56										
	WT2000	90°	3.162	7.07	10.0	14.1	17.3	20.0	24.5	28.3	31.6	0.52	0.59										
	WT2200	90°	3.479	7.78	11.0	15.6	19.1	22.0	26.9	31.1	34.8	0.53	0.63										
WT2400	90°	3.795	8.49	12.0	17.0	20.8	24.0	29.4	33.9	38.0	0.55	0.69											

$Flow Rate (GPM) = K \sqrt{PSI}$

Standard Materials: Brass, 303 Stainless Steel, 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.