

WT

WHIRL

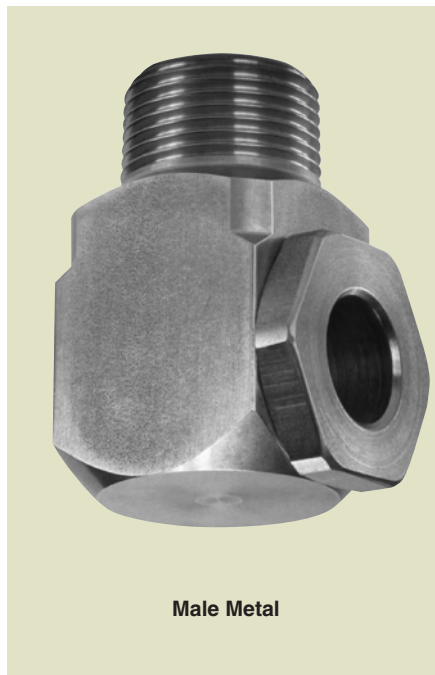
Right Angle/Hollow Cone

DESIGN FEATURES

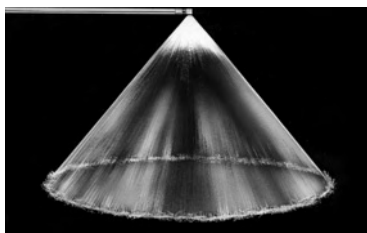
- Conventional design using tangential whirl method of atomization
- Durable
- Use where a circular pattern is required or in large area multiple installations where there is considerable overlapping of sprays
- Male and female connections
- Large free passage

SPRAY CHARACTERISTICS

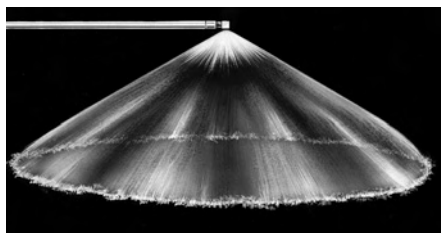
Spray pattern: Hollow Cone
Spray angles: 70° to 120°
Flow rates: 0.04 to 38.0 gpm



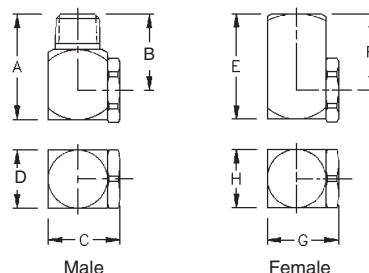
Male Metal



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												
	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	1.12	0.88	0.63	0.50	1.00	0.75	0.65	0.50	1.00	0.50		
	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												
	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	1.31	1.00	0.79	0.63	1.12	0.81	0.79	0.63	1.75	0.50		
	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.

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.							
1/4	WT53	80°	0.084	0.19	0.27	0.37	0.46	0.53	0.65	0.75	0.84	0.09	0.11																	
	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																	
	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	0.24	0.25																	
	WT400	70° 105°	0.632	1.41	2.00	2.83	3.46	4.00	4.90	5.66	6.32	0.24	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																	
	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																	
	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.																						