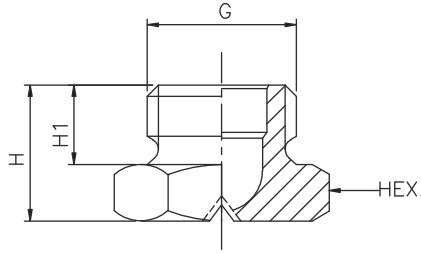


# CB Series Flat Spray Nozzles

CB



Uniform, Parabolic distribution of liquid. Compact design, suitable for confined installation conditions.

**Application :**

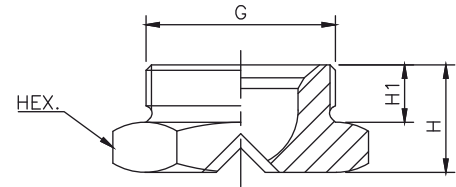
Cleaning plants, spray headers, cooling pipes. Small flow rates upon request.

15° SPRAY ANGLE	CONNECTION END	ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"		PRESSURE [BAR]										
MODEL NO.	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0	CONN.	H	H1	HEX
CB11.050	●	0.8	0.25	0.35	0.50	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB11.075	●	1.0	0.37	0.53	0.75	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB11.100	●	1.2	0.50	0.71	1.00	1.22	1.58	1.87	2.24				
CB11.150	●	1.5	0.75	1.06	1.50	1.84	2.37	2.81	3.35				
CB11.175	●	1.6	0.87	1.24	1.75	2.14	2.77	3.27	3.91				
CB11.200	●	1.7	1.00	1.41	2.00	2.45	3.16	3.74	4.47				
CB11.250	●	1.9	1.25	1.77	2.50	3.06	3.95	4.68	5.59				
CB11.300	●	2.1	1.5	2.12	3.00	3.67	4.74	5.61	6.71				
CB11.350	●	2.3	1.75	2.47	3.50	4.29	5.53	6.55	7.83				
CB11.400	●	2.4	2.00	2.83	4.00	4.90	6.32	7.48	8.94				
CB11.475	●	2.7	2.37	3.36	4.75	5.82	7.51	8.89	10.62				
CB11.650	●	3.1	3.25	4.60	6.50	7.96	10.28	12.16	14.53				
CB11.800	●	3.5	4.00	5.66	8.00	9.80	12.65	14.97	17.89				
CB21.100	●	3.9	5.00	7.07	10.00	12.25	15.81	18.71	22.36				
CB21.125	●	4.3	6.25	8.84	12.50	15.31	19.76	23.39	27.95				
CB21.160	●	4.9	8.00	11.31	16.00	19.60	25.30	29.93	35.78				
CB21.180	●	5.2	9.00	12.73	18.00	22.05	28.46	33.67	40.25				
CB21.200	●	5.5	10.00	14.14	20.00	24.49	31.62	37.42	44.72				

30° SPRAY ANGLE	CONNECTION END	ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"		PRESSURE [BAR]										
MODEL NO.	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0	CONN.	H	H1	HEX
CB12.050	●	0.8	0.25	0.35	0.50	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB12.075	●	1.0	0.37	0.53	0.75	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB12.100	●	1.2	0.50	0.71	1.00	1.22	1.58	1.87	2.24				
CB12.150	●	1.5	0.75	1.06	1.50	1.84	2.37	2.81	3.35				
CB12.175	●	1.6	0.87	1.24	1.75	2.14	2.77	3.27	3.91				
CB12.200	●	1.7	1.00	1.41	2.00	2.45	3.16	3.74	4.47				
CB12.250	●	1.9	1.25	1.77	2.50	3.06	3.95	4.68	5.59				
CB12.300	●	2.1	1.50	2.12	3.00	3.67	4.74	5.61	6.71				
CB12.350	●	2.3	1.75	2.47	3.50	4.29	5.53	6.55	7.83				
CB12.400	●	2.4	2.00	2.83	4.00	4.90	6.32	7.48	8.94				
CB12.475	●	2.7	2.37	3.36	4.75	5.82	7.51	8.89	10.62				
CB12.650	●	3.1	3.25	4.60	6.50	7.96	10.28	12.16	14.53				
CB12.800	●	3.5	4.00	5.66	8.00	9.80	12.65	14.97	17.89				
CB22.100	●	3.9	5.00	7.07	10.00	12.25	15.81	18.71	22.36				
CB22.125	●	4.3	6.25	8.84	12.50	15.31	19.76	23.39	27.95				
CB22.160	●	4.9	8.00	11.31	16.00	19.60	25.30	29.93	35.78				
CB22.180	●	5.2	9.00	12.73	18.00	22.05	28.05	33.67	40.25				
CB22.200	●	5.5	10.00	14.14	20.00	24.49	31.62	37.42	44.72				

# CB Series Flat Spray Nozzles

CB type nozzles deliver a flat spray with parabolic distribution pattern, which allows for obtaining an even distribution when several nozzles are assembled in a row on to a manifold. Their short body design makes it possible to use nozzle spray pipes in such machines or systems where the available space is very limited. CB nozzles are manufactured in two different capacity ranges, out of brass or 303 stainless steel and on request from a choice of additional metallic and plastic materials. Because of their limited length these nozzles can only be produced with a straight BSP thread and require some extra care when being assembled to get the proper flat alignment also note the different dimensions given in the table below

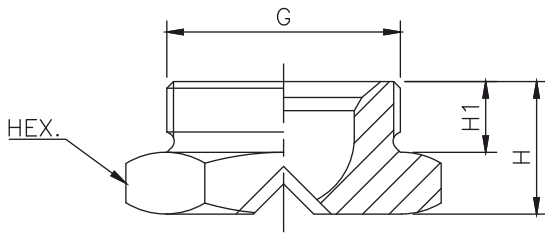


## Application :

- Cooling of Roll Stock
- Water Treatment
- Cleaning Plants

45° SPRAY ANGLE	CONNECTION END					ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"	3/4"	1"	1 1/4"	2"		PRESSURE [BAR]							CONN.	H	H1	HEX
MODEL NO.	BSP	BSP	BSP	BSP	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0				
CB13.050	●					0.8	0.25	0.35	<b>0.50</b>	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB13.075	●					1.0	0.37	0.53	<b>0.75</b>	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB13.100	●					1.2	0.50	0.71	<b>1.00</b>	1.22	1.58	1.87	2.24	3/4"	15	9	32
CB13.150	●					1.5	0.75	1.06	<b>1.50</b>	1.84	2.37	2.81	3.35	3/4" Weight (Metals) = 53 gms. Approx			
CB13.175	●					1.6	0.87	1.24	<b>1.75</b>	2.14	2.77	3.27	3.91	1"	20	12	36
CB13.200	●					1.7	1.00	1.41	<b>2.00</b>	2.45	3.16	3.74	4.47	1" Weight (Metals) = 107 gms. Approx			
CB13.250	●					1.9	1.25	1.77	<b>2.50</b>	3.06	3.95	4.68	5.59	1 1/4"	22	14	50
CB13.300	●					2.1	1.50	2.12	<b>3.00</b>	3.67	4.74	5.61	6.71	1 1/4" Weight (Metals) = xxx gms. Approx			
CB13.350	●					2.3	1.75	2.47	<b>3.50</b>	4.29	5.53	6.55	7.83	2"	32	20	70
CB13.400	●					2.4	2.00	2.83	<b>4.00</b>	4.90	6.32	7.48	8.94	2" Weight (Metals) = XXX gms. Approx			
CB13.475	●					2.7	2.37	3.36	<b>4.75</b>	5.82	7.51	8.89	10.62				
CB13.650	●					3.1	3.25	4.60	<b>6.50</b>	7.96	10.28	12.16	14.53				
CB13.800	●					3.5	4.00	5.66	<b>8.00</b>	9.80	12.65	14.97	17.89				
CB23.100	●					3.9	5.00	7.07	<b>10.00</b>	12.25	15.81	18.71	22.36				
CB23.125	●					4.3	6.25	8.84	<b>12.50</b>	15.31	19.76	23.39	27.95				
CB23.160	●					4.9	8.00	11.31	<b>16.00</b>	19.60	25.30	29.93	35.78				
CB23.180	●					5.2	9.00	12.73	<b>18.00</b>	22.05	28.46	33.67	40.25				
CB23.200	●					5.5	10.00	14.14	<b>20.00</b>	24.49	31.62	37.42	44.72				
CB23.225	●					5.8	11.25	15.91	<b>22.50</b>	27.56	35.58	42.09	50.31				
CB23.250		●				6.1	12.50	17.68	<b>25.00</b>	30.62	39.53	46.77	55.90				
CB23.320		●				6.4	16.00	22.63	<b>32.00</b>	39.19	50.60	59.87	71.55				
CB23.400		●				7.8	20.00	28.28	<b>40.00</b>	48.99	63.25	74.83	89.44				
CB23.520		●	●			8.9	26.00	36.77	<b>52.00</b>	63.69	82.22	97.28	116.28				
CB23.650		●	●	●		9.9	32.50	45.96	<b>65.00</b>	79.61	102.77	121.60	145.34				
CB23.800		●	●	●		11.0	40.00	56.57	<b>80.00</b>	97.98	126.49	149.67	178.89				
CB33.100		●	●	●		11.3	50.00	70.71	<b>100.0</b>	122.4	158.1	187.0	223.6				
CB33.140				●		12.6	70.00	89.09	<b>140.0</b>	171.46	221.36	261.92	313.92				
CB33.160				●	●	14.3	80.00	113.14	<b>160.0</b>	195.96	252.98	299.33	357.77				
CB33.175				●		14.9	87.50	123.74	<b>175.0</b>	214.33	276.70	327.40	391.31				
CB33.200				●		16.0	100.0	141.42	<b>200.0</b>	244.95	316.23	374.17	447.21				
CB33.250				●		17.8	125.0	176.78	<b>250.0</b>	306.19	395.28	467.71	559.02				
CB33.325				●		20.3	162.5	229.81	<b>325.0</b>	398.04	513.87	608.02	726.72				
CB33.430				●		23.4	215.0	304.06	<b>430.0</b>	526.64	679.89	804.46	961.51				

# CB Series Flat Spray Nozzles



## Characteristic

Increased, Non-clogging features. mor jet energy, Low share of fog. Headers, Equipped with these nozzles, Shows a highly uniform total distribution of liquids, Even at different installation heights and centers.

## Application :

Cleaning plants spray headers, cooling pipes roll cooling of rolled products.

60° SPRAY ANGLE	CONNECTION END					ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"	3/4"	1"	1 1/4"	2"		PRESSURE [BAR]										
MODEL NO.	BSP	BSP	BSP	BSP	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0	CONN.	H	H1	HEX
CB14.050	●					0.8	0.25	0.35	<b>0.50</b>	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB14.075	●					1.0	0.37	0.53	<b>0.75</b>	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB14.100	●					1.2	0.50	0.71	<b>1.00</b>	1.22	1.58	1.87	2.24	3/4"	15	9	32
CB14.150	●					1.5	0.75	1.06	<b>1.50</b>	1.84	2.37	2.81	3.35	3/4" Weight (Metals) = 53 gms. Approx			
CB14.175	●					1.6	0.87	1.24	<b>1.75</b>	2.14	2.77	3.27	3.91	1"	20	12	36
CB14.200	●					1.7	1.00	1.41	<b>2.00</b>	2.45	3.16	3.74	4.47	1" Weight (Metals) = 107 gms. Approx			
CB14.250	●					1.9	1.25	1.77	<b>2.50</b>	3.06	3.95	4.68	5.59	1 1/4"	22	14	50
CB14.300	●					2.1	1.50	2.12	<b>3.00</b>	3.67	4.74	5.61	6.71	1 1/4" Weight (Metals) = XX gms. Approx			
CB14.350	●					2.3	1.75	2.47	<b>3.50</b>	4.29	5.53	6.55	7.83	2"	32	20	70
CB14.400	●					2.4	2.00	2.83	<b>4.00</b>	4.90	6.32	7.48	8.94	2" Weight (Metals) = XXX gms. Approx			
CB14.475	●					2.7	2.37	3.36	<b>4.75</b>	5.82	7.51	8.89	10.62				
CB14.650	●					3.1	3.25	4.60	<b>6.50</b>	7.96	10.28	12.16	14.53				
CB14.800	●					3.5	4.00	5.66	<b>8.00</b>	9.80	12.65	14.97	17.89				
CB24.100	●					3.9	5.00	7.07	<b>10.00</b>	12.25	15.81	18.71	22.36				
CB24.125	●					4.3	6.25	8.84	<b>12.50</b>	15.31	19.76	23.39	27.95				
CB24.160	●					4.9	8.00	11.31	<b>16.00</b>	19.60	25.30	29.93	35.78				
CB24.180	●					5.2	9.00	12.73	<b>18.00</b>	22.05	28.46	33.67	40.25				
CB24.200	●					5.5	10.00	14.14	<b>20.00</b>	24.49	31.62	37.42	44.72				
CB24.225	●					5.8	11.25	15.91	<b>22.50</b>	27.56	35.58	42.09	50.31				
CB24.250	●					6.1	12.50	17.68	<b>25.00</b>	30.62	39.53	46.77	55.90				
CB24.320		●				6.4	16.00	22.63	<b>32.00</b>	39.19	50.60	59.87	71.55				
CB24.400		●				7.8	20.00	28.28	<b>40.00</b>	48.99	63.25	74.83	89.44				
CB24.520		●	●			8.9	26.00	36.77	<b>52.00</b>	63.69	82.22	97.28	116.28				
CB24.650		●	●	●		9.9	32.50	45.96	<b>65.00</b>	79.61	102.77	121.60	145.34				
CB24.800		●	●	●		11.0	40.00	56.57	<b>80.00</b>	97.98	126.49	149.67	178.89				
CB34.100		●	●	●		11.3	50.00	70.71	<b>100.0</b>	122.4	158.1	187.0	223.6				
CB34.140			●	●		12.6	70.00	89.09	<b>140.0</b>	171.46	221.36	261.92	313.92				
CB34.160				●	●	14.3	80.00	113.14	<b>160.0</b>	195.96	252.98	299.33	357.77				
CB34.175					●	14.9	87.50	123.74	<b>175.0</b>	214.33	276.70	327.40	391.31				
CB34.200					●	16.0	100.0	141.42	<b>200.0</b>	244.95	316.23	374.17	447.21				
CB34.250					●	17.8	125.0	176.78	<b>250.0</b>	306.19	395.28	467.71	559.02				
CB34.325					●	20.3	162.5	229.81	<b>325.0</b>	398.04	513.87	608.02	726.72				
CB34.430					●	23.4	215.0	304.06	<b>430.0</b>	526.64	679.89	804.46	961.51				

# CB Series Flat Spray Nozzles

Increased, non-clogging features, more jet energy, low share of fog. Headers, equipped with these nozzles, show a highly uniform total distribution of liquids, even at different installation heights and centers. These types of nozzles provide uniform parabolic distribution of liquid.

## Application:

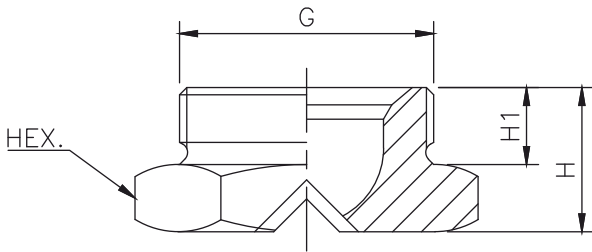
Cleaning plants, spray headers, cooling pipes, roll cooling, cooling of rolled products.

90° SPRAY ANGLE	CONNECTION END					ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"	3/4"	1"	1 1/4"	2"		PRESSURE [BAR]										
MODEL NO.	BSP	BSP	BSP	BSP	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0	CONN.	H	H1	HEX
CB16.050	●					0.8	0.25	0.35	<b>0.50</b>	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB16.075	●					1.0	0.37	0.53	<b>0.75</b>	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB16.100	●					1.2	0.50	0.71	<b>1.00</b>	1.22	1.58	1.87	2.24	3/4"	15	9	32
CB16.150	●					1.5	0.75	1.06	<b>1.50</b>	1.84	2.37	2.81	3.35	3/4" Weight (Metals) = 53 gms. Approx			
CB16.175	●					1.6	0.87	1.24	<b>1.75</b>	2.14	2.77	3.27	3.91	1"	20	12	36
CB16.200	●					1.7	1.00	1.41	<b>2.00</b>	2.45	3.16	3.74	4.47	1" Weight (Metals) = 107 gms. Approx			
CB16.250	●					1.9	1.25	1.77	<b>2.50</b>	3.06	3.95	4.68	5.59	1 1/4"	22	14	50
CB16.300	●					2.1	1.50	2.12	<b>3.00</b>	3.67	4.74	5.61	6.71	1 1/4" Weight (Metals) = XX gms. Approx			
CB16.350	●					2.3	1.75	2.47	<b>3.50</b>	4.29	5.53	6.55	7.83	2"	32	20	70
CB16.400	●					2.4	2.00	2.83	<b>4.00</b>	4.90	6.32	7.48	8.94	2" Weight (Metals) = XXX gms. Approx			
CB16.475	●					2.7	2.37	3.36	<b>4.75</b>	5.82	7.51	8.89	10.62				
CB16.650	●					3.1	3.25	4.60	<b>6.50</b>	7.96	10.28	12.16	14.53				
CB16.800	●					3.5	4.00	5.66	<b>8.00</b>	9.80	12.65	14.97	17.89				
CB26.100	●					3.9	5.00	7.07	<b>10.00</b>	12.25	15.81	18.71	22.36				
CB26.125	●					4.3	6.25	8.84	<b>12.50</b>	15.31	19.76	23.39	27.95				
CB26.160	●					4.9	8.00	11.31	<b>16.00</b>	19.60	25.30	29.93	35.78				
CB26.180	●					5.2	9.00	12.73	<b>18.00</b>	22.05	28.46	33.67	40.25				
CB26.200	●					5.5	10.00	14.14	<b>20.00</b>	24.49	31.62	37.42	44.72				
CB26.225	●					5.8	11.25	15.91	<b>22.50</b>	27.56	35.58	42.09	50.31				
CB26.250	●	●				6.1	12.50	17.68	<b>25.00</b>	30.62	39.53	46.77	55.90				
CB26.320		●				6.4	16.00	22.63	<b>32.00</b>	39.19	50.60	59.87	71.55				
CB26.400		●	●			7.8	20.00	28.28	<b>40.00</b>	48.99	63.25	74.83	89.44				
CB26.520		●	●	●		8.9	26.00	36.77	<b>52.00</b>	63.69	82.22	97.28	116.28				
CB26.650		●	●	●		9.9	32.50	45.96	<b>65.00</b>	79.61	102.77	121.60	145.34				
CB26.800		●	●	●		11.0	40.00	56.57	<b>80.00</b>	97.98	126.49	149.67	178.89				
CB36.100		●	●	●		11.3	50.00	70.71	<b>100.0</b>	122.4	158.1	187.0	223.6				
CB36.140			●	●		12.6	70.00	89.09	<b>140.0</b>	171.46	221.36	261.92	313.92				
CB36.160				●	●	14.3	80.00	113.14	<b>160.0</b>	195.96	252.98	299.33	357.77				
CB36.175					●	14.9	87.50	123.74	<b>175.0</b>	214.33	276.70	327.40	391.31				
CB36.200					●	16.0	100.0	141.42	<b>200.0</b>	244.95	316.23	374.17	447.21				
CB36.250					●	17.8	125.0	176.78	<b>250.0</b>	306.19	395.28	467.71	559.02				
CB36.325					●	20.3	162.5	229.81	<b>325.0</b>	398.04	513.87	608.02	726.72				
CB36.430					●	23.4	215.0	304.06	<b>430.0</b>	526.64	679.89	804.46	961.51				

# CB Series Flat Spray Nozzles



CB nozzles are manufactured in two different capacity ranges out of Brass or 303 stainless steel and in request from a choice of additional metallic and plastic material. Because of their limited length these nozzles can only be produced with a straight BSP thread also note the different dimension given in the table below.



120° SPRAY ANGLE	CONNECTION END					ORIFICE SIZE (mm)	FLOW CAPACITY IN LPM AT DIFFERENT PRESSURE							G/A DIMENSION. MM			
	1/4"	3/4"	1"	1 1/4"	2"		PRESSURE [BAR]										
MODEL NO.	BSP	BSP	BSP	BSP	BSP		0.5	1.0	2.0	3.0	5.0	7.0	10.0	CONN.	H	H1	HEX
CB18.050	●					0.8	0.25	0.35	0.50	0.61	0.79	0.94	1.12	1/4"	13	8	17
CB18.075	●					1.0	0.37	0.53	0.75	0.92	1.19	1.40	1.68	1/4" Weight (Metals) = 12 gms. Approx			
CB18.100	●					1.2	0.50	0.71	1.00	1.22	1.58	1.87	2.24	3/4"	15	9	32
CB18.150	●					1.5	0.75	1.06	1.50	1.84	2.37	2.81	3.35	3/4" Weight (Metals) = 53 gms. Approx			
CB18.175	●					1.6	0.87	1.24	1.75	2.14	2.77	3.27	3.91	1"	20	12	36
CB18.200	●					1.7	1.00	1.41	2.00	2.45	3.16	3.74	4.47	1" Weight (Metals) = 107 gms. Approx			
CB18.250	●					1.9	1.25	1.77	2.50	3.06	3.95	4.68	5.59	1 1/4"	22	14	50
CB18.300	●					2.1	1.50	2.12	3.00	3.67	4.74	5.61	6.71	1 1/4" Weight (Metals) = XX gms. Approx			
CB18.350	●					2.3	1.75	2.47	3.50	4.29	5.53	6.55	7.83	2"	32	20	70
CB18.400	●					2.4	2.00	2.83	4.00	4.90	6.32	7.48	8.94	2" Weight (Metals) = XXX gms. Approx			
CB18.475	●					2.7	2.37	3.36	4.75	5.82	7.51	8.89	10.62				
CB18.650	●					3.1	3.25	4.60	6.50	7.96	10.28	12.16	14.53				
CB18.800	●					3.5	4.00	5.66	8.00	9.80	12.65	14.97	17.89				
CB28.100	●					3.9	5.00	7.07	10.00	12.25	15.81	18.71	22.36				
CB28.125	●					4.3	6.25	8.84	12.50	15.31	19.76	23.39	27.95				
CB28.160	●					4.9	8.00	11.31	16.00	19.60	25.30	29.93	35.78				
CB28.180		●				5.2	9.00	12.73	18.00	22.05	28.46	33.67	40.25				
CB28.200		●				5.5	10.00	14.14	20.00	24.49	31.62	37.42	44.72				
CB28.225		●				5.8	11.25	15.91	22.50	27.56	35.58	42.09	50.31				
CB28.250		●				6.1	12.50	17.68	25.00	30.62	39.53	46.77	55.90				
CB28.320		●				6.4	16.00	22.63	32.00	39.19	50.60	59.87	71.55				
CB28.400		●				7.8	20.00	28.28	40.00	48.99	63.25	74.83	89.44				
CB28.520		●	●	●		8.9	26.00	36.77	52.00	63.69	82.22	97.28	116.28				
CB28.650		●	●	●		9.9	32.50	45.96	65.00	79.61	102.77	121.60	145.34				
CB28.800		●	●	●		11.0	40.00	56.57	80.00	97.98	126.49	149.67	178.89				
CB38.100		●	●	●		11.3	50.00	70.71	100.0	122.4	158.1	187.0	223.6				
CB38.140				●		12.6	70.00	89.09	140.0	171.46	221.36	261.92	313.92				
CB38.160				●	●	14.3	80.00	113.14	160.0	195.96	252.98	299.33	357.77				
CB38.175					●	14.9	87.50	123.74	175.0	214.33	276.70	327.40	391.31				
CB38.200					●	16.0	100.0	141.42	200.0	244.95	316.23	374.17	447.21				
CB38.250					●	17.8	125.0	176.78	250.0	306.19	395.28	467.71	559.02				
CB38.325					●	20.3	162.5	229.81	325.0	398.04	513.87	608.02	726.72				
CB38.430					●	23.4	215.0	304.06	430.0	526.64	679.89	804.46	961.51				