

## Full cone spray nozzles

## CCS Series



### SPRAY CHARACTERISTICS:

Full cone spray pattern with a distribution that is heavier in the middle. Spray angle remains nearly constant at pressures between 1 and 6 bar.

### TYPICAL APPLICATIONS:

Suitable for temperature control applications, where the volume of sprayed coolant can be adjusted without significantly affecting spray coverage. This enables the user to maximize heat transfer efficiency while avoiding loss of coverage area. CCS nozzles feature an internal insert which will not come loose in environments which are subject to thermal cycling.

- Continuous Casting and Billet Casting
- Rinsing and Cooling
- Heat Exchanger Cooling
- Chemical Processing

### CONSTRUCTION:

CCS nozzles are machined from bar, and consist of a one piece body, plus a non-removable insert. Standard material is brass.

### DIMENSIONS

THREAD SIZE (BSPT)	Dim. A (mm)	Dim. L (mm)
1/4CCS	14 HEX	24
3/8CCS	17 HEX	30

SPRAY ANGLE @ 3 bar	MODEL NUMBER	PIPE SIZE BSPT	MAXIMUM FREE PASSAGE (mm)	CAPACITY (L/min) AT VARIOUS PRESSURES (bar)										
				1 bar	1.5 bar	2 bar	2.5 bar	3 bar	3.5 bar	4 bar	4.5 bar	5 bar	6 bar	7 bar
49°	1/4CCS4917	1/4	2.31	3.9	4.7	5.5	6.1	6.7	7.2	7.7	8.2	8.7	9.5	10.2
	3/8CCS4917	3/8	2.31	3.9	4.7	5.5	6.1	6.7	7.2	7.7	8.2	8.7	9.5	10.2
	3/8CCS4922	3/8	2.31	5.0	6.1	7.1	7.9	8.7	9.4	10.0	10.6	11.2	12.3	13.3
	3/8CCS4927	3/8	2.59	6.2	7.5	8.7	9.7	10.7	11.5	12.3	13.1	13.8	15.1	16.3
	3/8CCS4931	3/8	2.90	7.1	8.7	10.0	11.2	12.2	13.2	14.1	15.0	15.8	17.3	18.7
57°	1/4CCS5710	1/4	1.63	2.28	2.79	3.2	3.6	3.9	4.3	4.6	4.8	5.1	5.6	6.0
	1/4CCS5713	1/4	2.06	2.96	3.6	4.2	4.7	5.1	5.5	5.9	6.3	6.6	7.3	7.8
	1/4CCS5715	1/4	2.31	3.4	4.2	4.8	5.4	5.9	6.4	6.8	7.3	7.6	8.4	9.0
	1/4CCS5718	1/4	2.31	4.1	5.0	5.8	6.5	7.1	7.7	8.2	8.7	9.2	10.0	10.9
	3/8CCS5718	3/8	2.31	4.1	5.0	5.8	6.5	7.1	7.7	8.2	8.7	9.2	10.0	10.9
	3/8CCS5726	3/8	2.31	5.9	7.3	8.4	9.4	10.3	11.1	11.9	12.6	13.2	14.5	15.7
	3/8CCS5731	3/8	2.59	7.1	8.7	10.0	11.2	12.2	13.2	14.1	15.0	15.8	17.3	18.7
	3/8CCS5744	3/8	2.90	10.0	12.3	14.2	15.9	17.4	18.8	20.1	21.3	22.4	24.6	26.5
66°	1/4CCS6614	1/4	1.63	3.2	3.9	4.5	5.0	5.5	6.0	6.4	6.8	7.1	7.8	8.4
	1/4CCS6624	1/4	2.31	5.5	6.7	7.7	8.6	9.5	10.2	10.9	11.6	12.2	13.4	14.5
	1/4CCS6629	1/4	2.31	6.6	8.1	9.3	10.4	11.4	12.4	13.2	14.0	14.8	16.2	17.5
	3/8CCS6629	3/8	2.31	6.6	8.1	9.3	10.4	11.4	12.4	13.2	14.0	14.8	16.2	17.5
	3/8CCS6633	3/8	2.31	7.5	9.2	10.6	11.9	13.0	14.1	15.0	16.0	16.8	18.4	19.9
	3/8CCS6648	3/8	2.90	10.9	13.4	15.5	17.3	18.9	20.5	21.9	23.2	24.5	26.8	28.9
	3/8CCS6648	3/8	2.90	10.9	13.4	15.5	17.3	18.9	20.5	21.9	23.2	24.5	26.8	28.9
76°	1/4CCS7622	1/4	2.31	5.0	6.1	7.1	7.9	8.7	9.4	10.0	10.6	11.2	12.3	13.3
	1/4CCS7632	1/4	2.31	7.3	8.9	10.3	11.5	12.7	13.6	14.6	15.4	16.3	17.8	19.3
	3/8CCS7632	3/8	2.31	7.3	8.9	10.3	11.5	12.7	13.6	14.6	15.4	16.3	17.8	19.3
	3/8CCS7638	3/8	2.31	8.7	10.6	12.2	13.7	15.0	16.2	17.3	18.4	19.4	21.2	22.9
	3/8CCS7664	3/8	2.90	14.6	17.9	20.6	23.1	25.3	27.3	29.2	30.9	33	36	39
86°	1/4CCS8618	1/4	2.31	4.1	5.0	5.8	6.5	7.1	7.7	8.2	8.7	9.2	10.0	10.9
	1/4CCS8633	1/4	2.31	7.5	9.2	10.6	11.9	13.0	14.1	15.0	16.0	16.8	18.4	19.9
	3/8CCS8633	3/8	2.31	7.5	9.2	10.6	11.9	13.0	14.1	15.0	16.0	16.8	18.4	19.9
	3/8CCS8642	3/8	2.31	9.6	11.7	13.5	15.1	16.6	17.9	19.1	20.3	21.4	23.4	25.3
	3/8CCS8649	3/8	2.59	11.2	13.7	15.8	17.7	19.3	20.9	22.3	23.7	25.0	27.4	29.5
	3/8CCS8667	3/8	2.90	15.3	18.7	21.6	24.1	26.4	28.6	30.5	32	34	37	40