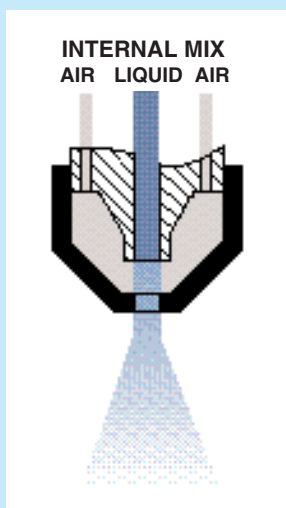


AIR ATOMISER NOZZLES

For applications where very fine droplets and low flow rates are required, the air atomiser range from Lurmark, including the VAPRO jet and ULTRA nozzles are the ideal choice.

Air atomisers use a second fluid, usually compressed air to atomise a spray liquid into very fine droplets. In addition, when fitted with the appropriate hardware, they offer very precise control of the liquid flow.



Vapro Series

Very fine droplets are produced by a simple shearing action when liquid and air streams meet, internally or externally to the VAPRO nozzle. A wide range of spray patterns are available to suit your application.

TYPICAL APPLICATIONS

- * Odour control
- * Application of additives
- * Air and steam processing
- * Coating
- * Tablet coating
- * Fire protection
- * Humidification
- * Dry scrubbing
- * Lubricating products

SPRAY CHARACTERISTICS

- * Low impact spray of very fine droplets (typically less than 100µm diameter)
- * Flat fan, full cone fog patterns available.
- * Spray droplets are generated internal or external to the nozzle:

Internal Mix: Liquid and air mix together and are expelled through one nozzle orifice. After mixing, the air and liquid are combined making precise metering of the liquid difficult i.e. changes in airflow will affect the liquid flow. Fine droplets are produced from this set-up than from the external mix.

External mix: Liquid and air are expelled independently and are mixed externally to the nozzle. Hence, air and liquid flow rates can be controlled independently. External mixes are ideal for applications where abrasive suspensions or liquids with viscosities over 200 centipoises.

CONSTRUCTION

- * The VAPRO assembly consists of a body, air and liquid nozzle combination and screw cap. Additional hard



ware can provide automated shut-off and clean-out facilities.

Body: Available as standard, non-automatic, square body (code: VP) or complete with a built-in pneumatic cylinder with single (code: VPX) or dual air inlets (code: VPL). Shut-off and clean-out options available on all models on request.

OPTIONS

Automatic shut-off. Built-in pneumatic cylinder is connected to a needle, which opens and closes the liquid orifice on command. This option offers positive shut-off with no dripping. When used in systems, it is important to remember that VAPRO nozzles require a minimum operating pressure of 2 bar.

Clean-out needle. Applied pressure to the spring-loaded plunger forces a small diameter rod through the liquid orifice to remove any obstructions.

Thin and thick-walled adaptors. Available for mounting nozzles on duct-work and bulkheads of varying thickness available on request.

Air and Liquid nozzles. A complete spray set-up consists of an air nozzle and a liquid nozzle. To create the desired flow rate and spray pattern, the fully interchangeable air and liquid caps should be selected according

to the flow tables (Pages 25-30).

Screw cap. Comes with complete assembly.

NOZZLE FEEDING

VAPRO nozzles can be used in systems where the liquid is either fed to the nozzle from a pump under pressure or obtained under siphon seal.

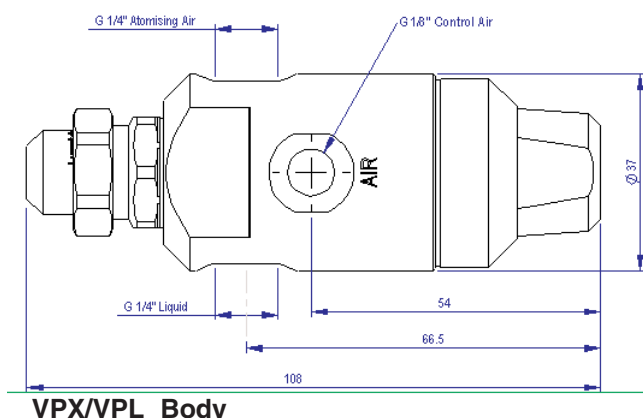
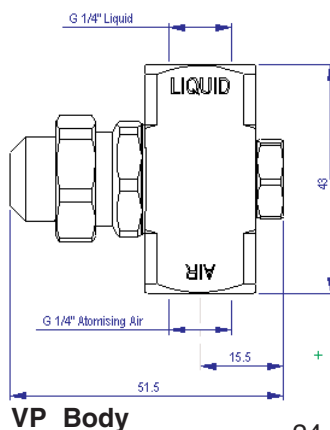
Pressure configuration. Ideal for use in most applications with a variety of spray patterns and flow rates. At a known liquid pressure, air pressure can be adjusted until the optimum flow rate and droplet-sizes are achieved. For the internal mix increasing the air pressure will reduce liquid flow and so produce more fine droplets.

Siphon configuration. This configuration allows for simple system development to deliver low flow rates. The same air pressure adjustments as for pressure configurations can be made; moreover, the liquid flow rate can be adjusted based on the height of the liquid container.

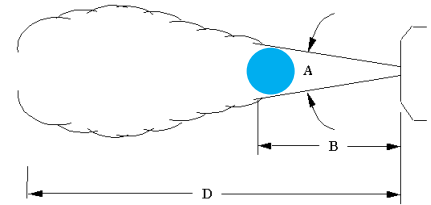
MATERIALS

- * Standard material for complete assembly is 316 stainless steel.
- * Standard materials for seals are Teflon and Viton.
- * Please contact our technical experts for more information regarding materials.

Refer to pages 25-30 for flow rate charts.



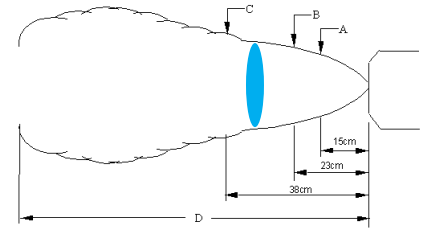
VAPRO PRESSURE CONE



		Combinations C01 to C06 Flow Rates and Dimensions Pressure Fed, Internal Mix, Narrow Angle Round Spray Pattern.																			
Spray Set Up Number	Fluid and Air Nozzle Numbers	0.7 bar Liquid Pressure			1.5 bar Liquid Pressure			2.0 bar Liquid Pressure			3.0 bar Liquid Pressure			4.0 bar Liquid Pressure			Spray Dimensions				
		Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	bar air	bar liquid	A (deg)	B (mm)	D (m)
C01	Q3348D & Q3342A	0.7	2.5	0.96	1.1	6.4	0.72	1.4	6.4	0.84	2.7	6.2	1.38	3.5	7.8	1.68	0.9	0.7	13	300	2.7
		0.9	1.8	1.14	1.4	5.0	0.90	1.7	5.5	1.02	2.8	5.7	1.50	3.7	7.3	1.74	1.7	1.5	13	330	3.0
		1.0	1.4	1.32	1.7	4.1	1.14	2.0	4.5	1.20	3.0	5.2	1.62	3.9	6.4	1.98	2.5	2.0	13	360	3.4
					1.8	3.4	1.20	2.2	3.4	1.44	3.1	4.7	1.74	4.2	5.5	2.28	3.1	3.0	14	390	3.8
					2.0	3.0	1.38	2.4	3.0	1.56	3.2	4.3	1.86	4.5	4.5	2.58	4.5	4.0	15	440	4.4
					2.1	2.6	1.50	2.5	2.5	1.68	3.4	3.9	1.98	4.6	4.1	2.70					
			2.2	2.0	1.62	2.7	2.3	1.86	3.7	3.0	2.28	4.8	3.7	2.82							
C02	Q3348D & Q3342B	0.7	2.5	1.14	1.4	5.7	1.62	1.7	6.7	1.74	2.2	9.2	2.04	2.8	11.9	2.34	0.9	0.7	12	430	3.7
		0.9	2.0	1.32	1.5	5.2	1.74	1.8	6.4	1.86	2.5	8.2	2.34	3.1	11.0	2.58	1.5	1.5	13	460	4.0
		1.0	1.6	1.56	1.7	4.8	1.92	2.0	5.9	2.04	2.8	7.2	2.64	3.4	10.1	2.82	2.4	2.0	13	480	4.3
					1.8	4.3	2.10	2.1	5.2	2.22	3.0	6.7	2.82	3.7	9.2	3.12	3.0	3.0	13	510	4.6
					2.0	3.9	2.22	2.2	4.8	2.40	3.1	6.3	2.94	3.9	8.4	3.48	3.9	4.0	15	560	5.2
					2.1	3.4	2.40	2.4	4.3	2.58	3.2	5.9	3.12	4.2	7.6	3.72					
						2.7	3.6	2.88	3.4	5.5	3.30	4.5	6.8	4.08							
C03	Q3348C & Q3342B	0.9	4.8	1.26	1.7	8.4	1.86	2.0	10.7	1.98	2.7	16.5	2.22	3.4	20.0	2.58	1.5	0.7	12	480	4.0
		1.1	4.1	1.62	1.8	7.5	2.10	2.1	9.8	2.22	2.8	15.4	2.28	3.7	18.4	2.82	2.5	1.5	13	510	4.3
		1.4	3.4	1.98	2.0	7.0	2.22	2.4	8.2	2.52	3.1	13.6	2.58	3.9	16.8	3.00	3.0	2.0	13	530	4.6
		1.5	3.1	2.10	2.2	5.7	2.64	2.7	6.8	2.88	3.4	11.8	2.94	4.2	15.2	3.30	3.4	3.0	14	560	4.9
		1.7	3.0	2.34	2.5	4.8	2.94	3.0	5.9	3.30	3.7	10.4	3.30	4.5	13.8	3.60	4.2	4.0	15	600	5.3
		1.8	2.9	2.46	2.8	4.1	3.24	3.2	5.0	3.54	3.9	9.1	3.66	4.8	12.4	3.90					
	2.8	2.64	3.1	3.6	3.54	3.5	4.1	3.90	4.2	7.9	3.90	4.9	11.8	4.08							
C04	Q3348B & Q3342C	1.1	13	4.56	2.2	17.8	6.96	2.8	20	8.16	3.4	32	8.94	4.6	37	11.6	1.7	0.70	18	660	4.9
		1.4	8.9	5.46	2.5	13.1	7.80	3.1	16.3	8.94	3.9	25	10.2	5.3	29.0	13.2	2.8	1.5	20	760	6.1
		1.5	7.2	5.88	2.8	9.5	8.58	3.4	11.9	9.8	4.6	15.9	12.3	5.6	25.0	14.1	3.9	2.0	20	810	6.7
		1.7	5.8	6.30	3.1	7	9.42	3.9	7.0	11.2	5.3	9.1	14.4	6.0	21.0	15.0	5.3	3.0	21	910	7.9
		1.8	4.7	6.72	3.4	4.9	10.3	4.2	4.7	12.3	5.6	6.8	15.3	6.3	17.4	16.2	6	4.0	21	970	9.1
		2.0	3.6	7.14	3.5	4.2	10.7	4.6	3.0	13.2	6.0	5.0	16.5	6.7	14.0	17.4					
	2.7	7.62								6.3	3.6	17.4	7.0	11.0	18.3						
C05	Q3348A & Q3342C	0.9	31.0	3.42	1.4	61.0	4.14	2.1	53.0	5.76	2.7	80.0	6.18	3.8	88.0	8.10	1.0	0.7	17.0	610	4.9
		1.0	25.0	3.96	1.5	54.0	4.56	2.4	41.0	6.72	3.0	69.0	7.02	4.2	73.0	9.36	1.8	1.5	18.0	690	5.8
		1.1	18.5	4.50	1.7	48.0	5.10	2.7	31.0	7.62	3.2	59.0	7.80	4.6	61.0	10.6	2.8	2.0	20.0	760	6.7
		1.3	12.9	5.10	1.8	41.0	5.58	2.8	26.0	8.16	3.5	49.0	8.76	4.9	48.0	11.8	3.5	3.0	20.0	790	7.0
					2.0	35.0	6.12	3.0	22.0	8.64	3.7	44.0	9.24	5.3	39.0	12.9	4.9	4.0	21.0	910	8.5
					2.1	30.0	6.60				3.8	37.0	9.66	5.6	31.0	14.4					
			2.2	25.0	7.14				3.9	35.0	10.2	6.0	23.0	15.6							
C06	Q3348E & Q3342D	1.0	44.0	5.16	1.4	125	4.74	2.0	123	6.48	2.2	199	5.28	3.0	250	5.94	1.0	0.7	19.0	890	6.1
		1.1	32.0	6.12	1.5	106	5.46	2.1	108	7.14	2.5	174	6.60	3.2	225	7.20	1.7	1.5	20.0	990	7.0
					1.7	87.0	6.30	2.2	95.0	7.80	2.8	146	7.98	3.5	205	8.46	2.4	2.0	21.0	1040	7.6
					1.8	70.0	7.08	2.4	79.0	8.58	3.1	121	9.24	3.8	182	9.78	3.1	3.0	21.0	1070	7.9
					2.0	55.0	7.80	2.5	64.0	9.30	3.2	108	10.0	4.1	159	11.0	3.8	4.0	22.0	1170	9.1
								2.7	52.0	10.0	3.4	95.0	10.6	4.6	121	13.5					
						2.8	42.0	10.7	3.5	84.0	11.2	4.9	93.0	15.3							

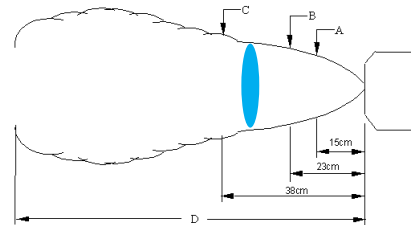
Items shown against white background available from stock.

VAPRO PRESSURE FAN



Combinations C20 to C27 Flow Rates and Dimensions Pressure Fed, Internal Mix, Narrow Angle Round Spray Pattern.																				
Spray Set Up Number	Fluid and Air Nozzle Numbers	0.7 bar Liquid Pressure			1.5 bar Liquid Pressure			2.0 bar Liquid Pressure			3.0 bar Liquid Pressure			4.0 bar Liquid Pressure			Spray Dimensions			
		Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	bar air	bar liquid	C (mm)	D (m)
C20	Q3348D & Q3343A	0.7	5.5	1.44	1.3	9.1	1.86	2.0	8.6	2.52	2.7	11.2	3.12	3.9	12.0	4.14	1.1	0.7	460	2.6
		0.9	4.7	1.62	1.5	7.7	2.16	2.2	7.5	2.82	3.0	10.1	3.36	4.6	9.7	4.86	2.1	1.5	660	3.0
		1.0	4.1	1.86	1.8	6.5	2.52	2.5	6.2	3.12	3.2	9.1	3.72	5.3	7.5	5.58	2.8	2.0	760	3.2
		1.1	3.5	2.04	2.1	5.4	2.82	2.8	5.2	3.42	3.5	8.1	3.96	6.0	5.3	6.24	3.5	3.0	860	3.4
		1.3	3.0	2.22	2.4	4.3	3.12	3.1	4.2	3.78	4.2	5.4	4.74	6.3	4.3	6.60	6.0	4.0	940	4.0
		1.4	2.5	2.40	2.7	3.3	3.42	3.2	3.7	3.90	4.6	4.2	5.10	6.7	3.3	6.96				
C21	Q3348C & Q3343C	1.5	2.0	2.64	2.8	2.8	3.60	3.4	3.2	4.08	4.9	3.1	5.46	7.0	2.4	7.32				
		1.3	3.9	1.80	2.1	7.4	2.40	3.0	6.1	3.12	3.9	9.4	3.60	5.3	10.2	4.68	1.5	0.7	460	1.8
		1.4	3.0	1.98	2.4	5.3	2.70	3.1	5.3	3.24	4.2	7.2	4.02	5.6	8.3	5.04	2.7	1.5	690	2.0
		1.5	2.3	2.10	2.5	4.4	2.82	3.2	4.5	3.42	4.6	5.3	4.38	6.0	6.6	5.34	3.2	2.0	910	2.0
		1.7	1.8	2.28	2.7	3.7	3.00	3.4	3.8	3.54	4.9	3.8	4.80	6.3	5.1	5.88	4.2	3.0	940	2.1
		1.8	1.3	2.46	2.8	3.1	3.12	3.5	3.2	3.70							5.6	4.0	970	2.3
C22	Q3348C & Q3343A	2.0	1.0	2.64	3.0	2.6	3.30	3.9	1.8	4.08										
					3.1	2.1	3.42													
		0.9	8.2	1.20	1.4	14.4	1.62	2.1	13.5	2.16	2.7	19.1	2.52	4.6	16.1	4.14	1.1	0.7	710	2.1
		1.0	6.8	1.38	1.7	11.9	1.92	2.4	11.4	2.52	3.0	17.1	2.76	4.9	13.8	4.56	2.1	1.5	810	2.4
		1.1	5.5	1.62	2.0	9.5	2.22	2.7	9.2	2.82	3.2	15.1	3.12	5.3	11.5	4.96	3.0	2.0	890	2.6
		1.3	4.1	1.80	2.1	8.3	2.40	3.0	7.1	3.18	3.5	13.1	3.42	5.6	9.3	5.40	3.5	3.0	970	2.7
C23	Q3348C & Q3343B	1.4	2.9	2.40	2.2	7.1	2.58	3.2	5.0	3.54	4.2	8.1	4.32	6.0	7.3	5.82	5.6	4.0	970	3.2
					2.4	6.1	2.76	3.4	4.0	3.78	4.6	5.9	4.74	6.3	5.6	6.24				
					2.5	5.1	2.94	3.5	3.3	3.96	4.9	4.0	5.16	6.7	4.3	6.72				
		1.0	9.0	1.50	2.0	10.4	2.46	2.4	11.6	2.88	3.1	15.6	3.36	4.2	17.1	4.30	1.4	0.70	170	3.0
		1.1	7.8	1.80	2.1	9.3	2.70	2.5	10.4	3.06	3.2	14.6	3.54	4.6	15.0	4.80	2.5	1.5	200	3.7
		1.3	6.6	1.92	2.2	8.2	2.88	2.7	9.4	3.24	3.4	13.7	3.72	4.9	12.8	5.22	3.2	2.0	220	4.0
C24	Q3348B & Q3343D	1.4	5.2	2.16	2.5	6.1	3.30	3.0	7.3	3.66	3.8	10.8	4.26	5.3	11.0	5.64	3.8	3.0	280	4.2
		1.7	3.1	2.64	2.9	4.3	3.72	3.2	5.5	4.08	4.2	8.5	4.92	5.6	9.4	6.18	5.3	4.0	330	4.8
		2.0	2.0	3.00	3.1	3.0	4.14	3.5	4.1	4.50	4.9	5.2	5.88	6.3	7.2	7.14				
		2.2	1.1	3.36	3.4	2.0	4.50	3.8	2.9	4.86	6.0	2.3	7.20	7.0	6.1	8.04				
		1.1	11.2	3.24	2.1	18.0	4.74	2.7	19.6	5.58	3.5	27.0	6.72	4.6	33.0	8.22	1.1	0.70	200	3.0
		1.3	8.5	3.60	2.2	15.8	5.04	2.8	17.3	5.88	3.7	25.0	6.96	4.9	28.0	8.94	2.4	1.5	330	3.2
C25	Q3348A & Q3343D	1.4	6.5	3.90	2.4	13.6	5.34	3.0	15.2	6.18	3.8	23.0	7.26	5.3	24.0	9.66	3	2.0	460	3.4
		1.5	5.0	4.26	2.5	11.6	5.70	3.1	13.2	6.54	3.9	21.0	7.56	5.6	19.7	10.4	3.7	3.0	460	3.5
		1.7	3.8	4.62				3.2	11.4	6.84	4.1	18.9	7.92	6.0	15.7	11.2	5.3	4.0	480	4.0
											4.2	17.0	8.22	6.3	12.4	12.0				
		0.9	27.0	1.98	1.8	38.0	3.30	2.4	39	4.02	3.2	58.0	4.56	4.6	59.0	6.36	1.4	0.70	300	3.4
		1.0	20.0	2.28	2.1	28.0	3.96	2.7	30	4.62	3.5	47.0	5.22	5.3	40.0	7.92	2.4	1.5	410	3.5
C26	Q3348A & Q3343E	1.1	15.9	2.70	2.2	24.0	4.26	3.0	24	5.22	3.8	38.0	5.82	5.6	32.0	8.70	3.2	2.0	430	3.7
		1.3	12.5	2.88	2.4	21.0	4.56	3.2	17.8	5.88	3.9	34.0	6.18	6.0	26.0	9.48	3.9	3.0	480	3.8
		1.4	10.2	3.36	2.5	17.8	4.92	3.4	15.1	6.18	4.2	27.0	6.78	6.3	20.0	10.3	6	4.0	510	4.4
		1.5	7.6	3.72	2.7	15.1	5.22	3.5	12.9	6.54	4.6	20.0	7.56	6.7	15.9	11.1				
								3.7	10.6	6.84	4.9	14.8	8.40	7.0	12.7	11.9				
											4.6	7.2	8.28	6.3	3.2	13.5				
C27	Q3348E & Q3343F	1.0	17.0	1.38	2.0	24.0	2.64	2.4	28	3.06	3.4	38.0	4.32	3.9	65.0	4.50	1.1	0.70	150	2.4
		1.1	11.0	1.62	2.1	18.9	3.00	2.5	23	3.54	3.5	33.0	4.80	4.2	53.0	5.34	2.1	1.5	170	3.0
		1.3	7.6	1.98	2.2	14.4	3.36	2.7	18.9	3.96	3.7	28.0	5.34	4.6	40.0	6.48	2.8	2.0	220	3.4
		1.4	3.2	2.40	2.4	10.6	3.78	2.8	15.1	4.44	3.8	23.0	5.82	4.9	30.0	7.62	3.7	3.0	280	3.6
					2.5	7.2	4.26	3.0	11.7	4.74	3.9	19.7	6.30	5.3	21.0	8.94	4.9	4.0	350	4.0
											4.2	13.1	7.20	5.6	13.8	10.4				
C27	Q3348E & Q3343F										4.6	7.2	8.28	6.3	3.2	13.5				
		1.0	29.0	5.40	1.8	56.0	7.02	2.1	100	7.14	3.0	125	8.40	4.1	140	10.9	1	0.70	250	3.4
		1.1	18.9	6.48	2.0	40.0	7.98	2.2	79	7.96	3.1	110	9.06	4.2	125	11.6	1.8	1.5	430	3.8
								2.4	62	8.82	3.2	95.0	9.78	4.6	89.0	13.5	2.4	2.0	460	4.3
								2.5	48	9.72	3.4	78.0	11.0	4.9	58.0	15.9	3.4	3.0	530	4.6
								2.7	36	10.60	3.5	62.0	11.6	5.3	34.0	18.3	4.9	4.0	580	5.2
C27	Q3348E & Q3343F										3.7	48.0	12.6	5.6	16.7	20.4				
											3.8	37.0	13.5							

VAPRO EXTERNAL FAN



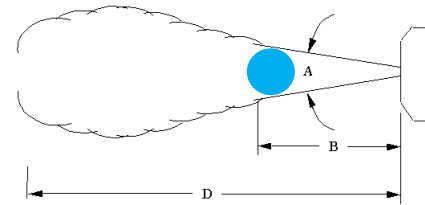
		Combinations C50 to C55 Flow Rates and Dimensions Pressure Fed, Internal Mix, Narrow Angle Round Spray Pattern.																			
Spray Set Up Number	Fluid and Air Nozzle Numbers	0.3 bar Liquid Pressure			0.3 bar Liquid Pressure			0.7 bar Liquid Pressure			1.5 bar Liquid Pressure			3.0 bar Liquid Pressure			Spray Dimensions				
		Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	bar air	bar liquid	c (mm)	a (mm)	D (m)
C50	Q3348G & Q3345A	0.35		1.32	0.4		1.32	0.4		1.50	0.6		1.68	0.7		2.04	0.2	0.2	230	900	150
		0.4		1.50	0.4		1.50	0.6		1.68	0.7		2.04	1.1		2.70	1.05	0.2	230	1200	150
			2.8			3.5			5.3			7.8			11		1.4	1.4	250	1500	180
		0.5		1.62	0.6		1.68	0.7		2.04	1.1		2.70	1.8		3.72	1.75	0.7	240	1500	150
		0.6		1.68	0.7		2.04	0.9		2.40	1.4		3.24	2.5		4.74	2.8	1.4	280	1800	180
C51	Q3348G & Q3345C																4.9	2.8	240	2400	180
		0.2		1.51	0.4		1.58	0.7		1.87	1.4		2.72	2.8		4.38	0.4	0.3	330	1200	280
		0.4		1.58	0.7		1.87	1.1		2.38	1.8		3.23	3.5		5.10	0.6	0.7	400	1800	300
		0.7		1.87	1.1		2.38	1.4		2.72	2.1		3.57	4.2		6.12	0.6	1.5	460	1800	350
		1.1	2.8	2.38	1.4	3.5	2.72	1.8	5.3	3.23	2.8	7.8	4.42	4.9	11	7.14	1.1	1.5	430	2400	330
		1.4		2.72	1.8		3.23	2.1		3.56	3.5		5.10	5.3		7.65	1.4	1.5	41	2700	300
		1.8		3.23	2.1		3.56	2.8		4.42	4.2		6.12	5.6		8.34	1.1	2.0	480	2600	350
C52	Q3348D & Q3345A	2.1		3.56	2.8		4.42	3.5		5.10	5.6		8.34	6.3		9.54	1.4	3.0	510	2700	380
																	0.35	0.2	220	1000	140
		0.4		1.32	0.4		1.32	0.6		1.68	0.7		2.04	1.1		2.70	1.4	0.2	220	1700	150
		0.6		1.68	0.7		2.40	0.7		2.04	1.4		3.24	1.4		3.24	1.75	0.35	230	1800	165
			4.5			5.5			8.3			12.2			17		1.75	1.4	290	2100	190
		0.7		2.04	1.1		2.70	1.4		3.24	2.1		4.26	2.1		4.26	2.1	0.7	250	1800	180
C53	Q3348D & Q3345C	1.1		2.70	1.4		3.24	2.1		4.26	2.5		4.74	2.5		4.74	3.5	1.4	300	2400	220
																	5.3	2.8	250	3000	190
		0.4		1.58	0.7		1.87	1.1		2.38	1.8		3.23	3.2		4.92	0.7	0.3	400	1500	330
		0.7		1.87	1.1		2.38	1.4		2.72	2.1		3.56	3.5		5.10	1.1	0.7	480	2100	380
		1.1		2.38	1.4		2.72	1.8		3.23	2.8		4.42	4.2		6.12	0.7	1.5	580	1800	460
		1.4	4.5	2.72	1.8	5.5	3.23	2.1	8.3	3.56	3.5	12.2	5.10	4.9	17	7.14	1.4	1.5	560	2400	430
		1.8		3.23	2.1		3.56	2.8		4.42	4.2		6.12	5.3		7.62	2.5	1.5	510	3000	400
C54	Q3348C & Q3345A	2.1		3.56	2.8		4.42	3.5		5.10	4.9		7.14	6.3		9.54	1.8	2.0	580	2700	460
		2.8		4.42	3.5		5.10	4.2		6.12	6.3		9.54	6.7		9.84	1.8	3.0	660	2900	480
																	0.7	0.2	250	1200	165
		0.4		1.50	0.4		1.50	0.4		1.50	0.7		2.04	1.4		3.24	1.75	0.2	250	1800	165
		0.5		1.65	0.6		1.68	0.6		1.60	0.9		2.40	1.8		3.72	2.1	0.35	240	1800	180
			8.5			10.4			15.9			23			33		2.5	1.4	320	1800	200
C55	Q3348C & Q3345C	0.6		1.68	0.7		1.86	0.7		2.04	1.1		2.70	2.1		4.26	2.8	0.7	300	2300	190
		0.7		2.04	0.7		2.04	0.9		2.40	1.4		3.24	2.5		4.74	4.2	1.4	360	3000	200
																	5.3	2.8	300	4000	200
		0.7		1.87	1.1		2.38	1.4		2.72	2.5		4.08	3.5		5.10	0.6	0.3	610	1800	480
		1.1		2.38	1.4		2.72	1.8		3.23	2.8		4.42	4.2		6.12	0.6	0.7	630	1500	480
		1.4		2.72	1.8		3.23	2.1		3.56	3.5		5.10	4.9		7.14	0.7	1.5	630	1800	480
		1.8	8.5	3.23	2.1	10.4	3.56	2.8	15.9	4.42	4.2	23	6.12	5.3	33	7.62	1.1	1.5	660	2100	510
		2.1		3.56	2.8		4.42	3.5		5.10	4.9		7.14	5.6		8.34	1.4	1.5	660	2400	530
		2.8		4.42	3.5		5.10	4.2		6.12	5.6		8.34	6.3		9.54	1.8	2.0	690	2700	510
		3.5		5.10	4.2		6.12	4.9		7.14	6.3		9.54	7.0		10.56	2.1	3.0	690	2900	510

Items shown against white background available from

VAPRO MIX FLAT

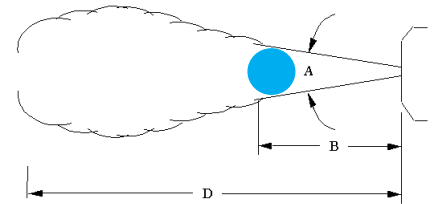
		Combinations C50 to C55 Flow Rates and Dimensions Pressure Fed, Internal Mix, Narrow Angle Round Spray Pattern.																				
Spray Set Up Number	Fluid and Air Nozzle Numbers	0.3 bar Liquid Pressure			0.3 bar Liquid Pressure			0.7 bar Liquid Pressure			1.5 bar Liquid Pressure			3.0 bar Liquid Pressure			Spray Dimensions					
		Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	bar air	bar liquid	c (mm)	a (mm)	D (m)	
C56	Q3348F & Q3345B		13.4		16.4		25		37		52							0.7	0.2	250	1700	190
		0.6		5.46		0.7		6.12		1.4		9.36	2.1	12.6	3.2	17.1	1.8	0.2	250	2700	190	
		0.7		6.12		1.1		7.80		2.1		9.12	2.8	15.6	4.2	21.6	2.1	0.35	280	3000	190	
																	2.5	0.7	280	3500	220	
		1.1		7.80		1.8		11.0		2.5		14.1	3.5	18.6	5.3	25.8	2.5	1.4	360	3700	230	
		1.4		9.36		2.1		12.6		2.8		15.6	4.2	21.6	5.6	27.3	4.2	1.4	370	4300	230	
																4.9	2.8	320	4900	220		
C57	Q3348F & Q3345D	0.7	13.4	5.10	1.0	16.4	6.12	1.4	25	6.96	2.5	37	10.7	3.2	52	12.7	1.4	0.3	480	3800	380	
		1.0		6.12	1.4		6.96	1.8		8.34	2.8		11.7	3.5		13.9	2.1	0.7	560	4300	400	
		1.4		6.96	1.8		8.34	2.1		9.36	3.5		13.6	3.9		15.3	2.1	1.5	580	4000	460	
		1.8		8.34	2.1		9.36	2.5		10.7	4.2		16.0	4.2		16.5	3.2	1.5	660	4600	480	
		2.1		9.36	2.8		11.7	2.8		11.7	4.9		18.7	4.9		18.8	4.2	1.5	640	5200	480	
		2.8		11.7	3.5		13.6	3.5		13.6	5.6		21.6	5.6		21.6	3.9	2.0	690	4600	510	
3.5	13.6	4.2	16.0	4.2	16.0	6.3	24.7	6.3	24.7	4.2	3.0	710	4900	510								
C58	Q3348B & Q3345B		17.6		22		33		48		68							0.7	0.35	270	2100	190
		0.6		5.46		0.7		6.12		1.1		7.80	2.5	14.1	3.5	18.6	1.8	0.7	270	3000	190	
		1.1		7.80		1.4		9.36		1.8		11.0	3.2	17.1	4.6	22.8	2.5	1.4	330	3400	220	
																	2.8	1.4	360	3800	220	
		1.4		9.36		1.8		11.0		2.5		14.1	3.9	19.8	6.0	28.5	2.8	1.4	370	4000	250	
		1.8		11.0		2.1		12.6		2.8		15.6	4.2	21.6	6.7	31.5	4.2	2.1	370	4900	250	
																5.3	2.8	360	5800	230		
C59	Q3348B & Q3345D	0.7	18	5.10	1.4	22	6.96	1.8	33	8.34	2.8	48	11.7	3.5	68	13.9	1.1	0.2	510	3500	380	
		1.0		6.12	1.8		8.34	2.1		9.36	3.2		12.7	4.2		16.5	1.8	0.7	640	3000	480	
		1.4		6.96	2.1		9.36	2.5		10.7	3.5		13.6	4.9		18.8	2.5	1.5	640	3800	460	
		1.8		8.34	2.5		10.7	2.8		11.7	4.2		16.0	5.3		20.4	3.2	1.5	610	4300	430	
		2.1		9.36	2.8		11.7	3.5		13.6	4.9		18.7	5.6		21.6	4.2	1.5	580	4900	430	
		2.8		11.7	3.5		13.6	4.2		16.0	5.6		21.6	6.3		24.7	4.2	2.0	610	5200	430	
3.5	13.6	4.2	16.0	4.9	18.7	6.3	24.7	6.6	25.7	4.9	3.0	610	4000	430								
C60	Q3348A & Q3345B		36		45		68		100		141							1.0	0.2	150	2700	200
		0.7		6.12		1.1		7.80		1.8		11.0	3.2	17.1		2.1	0.2	150	3000	220		
		1.1		7.80		1.4		9.36		2.1		12.6	3.5	18.6		2.8	0.35	180	3500	240		
																	3.2	1.4	200	3700	280	
		1.4		9.36		2.1		12.6		2.8		15.6	4.9	24.3			3.5	0.7	190	4000	270	
		1.8		11.0		2.5		14.1		3.2		17.1	5.9	27.3			4.2	1.4	200	4800	280	
																5.6	2.8	180	5900	240		
C61	Q3348A & Q3345D	1.0	36	6.12	1.8	45	8.34	2.5	68	10.7	3.2	100	12.7	3.9	141	15.3	1.8	0.2	150	3000	200	
		1.4		6.96	2.1		9.36	2.8		11.7	3.5		13.6	4.2		16.5	2.8	0.2	150	3400	200	
		1.8		8.34	2.5		10.7	3.2		12.7	3.9		14.8	4.6		17.8	2.8	0.3	150	4000	200	
		2.1		9.36	2.8		11.7	3.5		13.6	4.2		16.0	4.9		18.8	3.5	0.7	170	4300	220	
		2.5		10.7	3.2		12.7	4.2		16.0	4.9		18.7	5.6		21.6	3.9	1.5	170	4600	220	
		2.8		11.7	3.5		13.6	4.9		18.7	5.6		21.6	6.3		24.7	4.2	1.0	170	4700	230	
3.5	13.6	4.2	16.0	5.6	21.6	6.3	24.7	7.0	27.2	4.9	0.5	170	5500	230								
C62	Q3348H & Q3345E	1.8	36	14.1	1.8	45	14.1	2.5	68	18.0	3.9	100	24.6		141		2.1	0.3	760	3000	560	
		2.1		15.6	2.1		15.6	2.8		19.8	4.2		26.7			2.8	0.7	810	4000	580		
		2.5		18.0	2.5		18.0	3.2		21.3	4.6		28.8			3.2	1.5	790	4300	580		
		2.8		19.8	2.8		19.8	3.5		22.8	4.9		31.2			4.6	1.5	760	4900	530		
		3.2		21.3	3.2		21.3	3.9		24.6	5.3		33.9			5.6	1.5	660	5800	510		
		3.5		22.8	3.5		22.8	4.2		26.7	5.6		36.0			3.9	2.0	840	4300	640		
4.2	26.7	4.2	26.7	4.9	31.2	6.3	41.1		6.3	3.0	790	5800	560									
C63	Q3348I & Q3345E	2.1	64	15.6	2.8	78	19.8	3.9	119	24.6	4.9	175	31.2		280		2.1	0.2	170	3500	240	
		2.5		18.0	3.2		21.3	4.2		26.7	5.3		33.9			3.2	0.2	180	4300	240		
		2.8		19.8	3.5		22.8	4.6		28.8	5.6		36.0			3.9	0.3	180	4900	250		
		3.2		21.3	3.9		24.6	4.9		31.2	6.0		38.4			4.9	0.7	180	5500	250		
		3.5		22.8	4.2		26.7	5.3		33.9	6.3		41.1			4.9	1.5	200	5500	250		
		4.2		26.7	4.9		31.2	5.6		36.0						5.3	1.0	180	5800	250		
4.9	31.2	5.6	36.0	6.3	41.1				5.6	1.5	200	6100	250									
C64	Q3348E & Q3345E	2.8	102	19.8	3.5	125	22.8	4.6	192	28.8	5.6	280	36.0		411		2.8	0.2	190	4600	250	
		3.2		21.3	3.9		24.6	4.9		31.2	6.0		38.4			3.9	0.2	200	4900	250		
		3.5		22.8	4.2		26.7	5.3		33.9	6.3		41.1			4.6	0.3	200	5200	250		
		3.9		24.6	4.6		28.8	5.6		36.0						5.3	0.7	220	5500	270		
		4.2		26.7	4.9		31.2	6.0		38.4						5.6	1.0	220	5500	270		
		4.6		28.8	5.3		33.9	6.3		41.1						5.6	1.5	220	5800	270		
4.9	31.2	5.6	36.0						6.0	1.5	220	6100	270									

VAPRO PRESSURE CONE



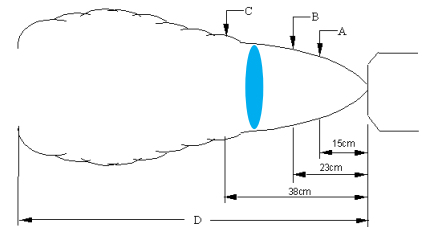
Combinations C10 to C15 Flow Rates and Dimensions Pressure Fed, Internal Mix, Narrow Angle Round Spray Pattern.																				
Spray Set Up Number	Fluid and Air Nozzle Numbers	0.7 bar Liquid Pressure			1.5 bar Liquid Pressure			2.0 bar Liquid Pressure			3.0 bar Liquid Pressure			4.0 bar Liquid Pressure			Spray Dimensions			
		Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	Air (bar)	L/h	Nm³/h	bar air	bar liquid	C (mm)	D (m)
C10	Q3348D & Q3344A	0.6	5.3	0.60	1.1	8.1	0.78	1.5	8.1	0.96	2.4	8.9	1.32	3.1	10.5	1.44	0.7	0.7	230	1.5
		0.7	4.3	0.72	1.3	7.0	0.96	1.8	6.6	1.26	2.7	8.1	1.56	3.4	9.7	1.68	1.4	1.5	240	1.8
		0.9	3.0	0.84	1.4	6.4	1.02	2.1	4.9	1.50	3.0	6.4	1.80	3.9	7.8	2.16	1.8	2.0	250	2.1
		1.0	1.7	1.02	1.5	5.5	1.14	2.4	3.2	1.74	3.2	4.9	2.04	4.2	6.1	2.52	3.0	3.0	260	2.7
					1.7	4.5	1.32				3.4	4.2	2.22	4.6	4.4	2.82	3.9	4.0	300	4.0
C11	Q3348B & Q3344C				1.8	3.5	1.44				3.5	3.4	2.40	4.9	2.8	3.24				
		0.9	7.0	3.00	1.7	13.2	4.08	2.0	18.5	4.08	2.8	25.0	5.04	3.7	31.0	5.76	0.9	0.7	310	1.8
		1.0	2.1	3.72	1.8	9.8	4.74	2.1	15.1	4.56	3.0	22.0	5.52	3.8	28.0	6.30	1.7	1.5	330	2.4
								2.2	11.7	5.10	3.1	18.5	6.06	3.9	26.0	6.78	2.1	2.0	330	3.2
											3.2	15.1	6.54	4.1	23.0	7.32	3.2	3.0	340	4.1
C12	Q3348B & Q3344B										3.4	12.1	7.14	4.2	20.0	7.80	4.1	4.0	370	5.9
											3.5	9.1	7.80	4.6	13.6	9.18				
											3.7	6.1	8.52	4.9	6.8	11.00				
		1.1	12.3	2.40	2.2	16.3	3.72	2.7	21.0	4.14	4.2	19.3	6.00	5.6	22.0	7.80	1.5	0.7	230	2.7
		1.3	9.9	2.70	2.5	12.1	4.26	3.0	16.3	4.68	4.6	14.6	6.78	6.0	17.6	8.52	3.0	1.5	240	4.6
C13	Q3348A & Q3344C	1.4	7.9	3.00	2.8	8.9	4.74	3.2	12.3	5.16	4.9	10.8	7.44	6.3	14.0	9.12	3.4	2.0	240	5.5
		1.5	6.1	3.24	3.0	7.6	4.98	3.4	10.7	5.46	5.3	8.1	8.10	6.7	11.4	9.78	5.3	3.0	250	7.3
		1.7	4.9	3.48	3.1	6.4	5.22	3.5	9.3	5.64	5.6	6.2	8.76	7.0	9.1	10.4	6.3	4.0	300	9.4
		1.8	3.9	3.72	3.2	5.5	5.46	3.9	6.4	6.30	6.0	4.9	9.42							
		2.0	3.1	4.02	3.4	4.7	5.70	4.2	4.7	6.90	6.3	4.0	10.0							
C14	Q3348A & Q3344D	0.7	24.0	1.92	1.4	43.0	2.22	2.1	33.0	3.96	2.8	52.0	3.90	3.7	63.0	4.08	0.9	0.7	360	2.1
		0.9	13.6	2.64	1.5	35.0	2.94	2.2	26.0	4.68	3.0	46.0	4.56	3.8	58.0	4.74	1.5	1.5	370	3.2
		1.0	7.6	3.42	1.7	28.0	3.66	2.4	18.9	5.34	3.1	39.0	5.22	4.0	52.0	6.06	2.4	2.0	370	4.1
					1.8	21.0	4.26	2.5	11.7	6.00	3.2	33.0	5.94	4.2	41.0	6.66	3.2	3.0	380	5.0
											3.4	26.0	6.60	4.6	27.0	8.28	3.9	4.0	390	6.8
C15	Q3348E & Q3344E										3.5	19.5	7.32	4.9	15.9	9.96				
											3.7	13.2	7.98							
		1.3	36.0	5.10	2.1	57.0	6.96	3.1	53.0	9.36	4.2	64.0	11.8	5.6	74.0	14.7	2.0	0.7	330	5.5
		1.5	29.0	6.12	2.4	51.0	7.80	3.2	50.0	9.78	4.9	51.0	13.8	6.0	68.0	15.6	3.0	1.5	340	6.4
		1.8	23.0	7.02	2.7	45.0	8.58	3.4	47.0	10.2	5.6	40.0	15.9	6.3	62.0	16.8	3.9	2.0	370	8.2
C15	Q3348E & Q3344E	2.0	19.7	7.50	3.0	39.0	9.42	3.5	45.0	10.6	6.0	34.0	17.1	6.7	56.0	17.7	6.0	3.0	380	9.1
		2.1	16.7	7.98	3.2	33.0	10.20	3.9	38.0	11.6	6.3	28.0	18.0	7.0	51.0	18.9	6.3	4.0	400	10.4
		2.3	14.0	8.52	3.5	28.0	11.10	4.6	25.0	13.8	6.7	22.0	19.2							
		2.4	11	8.94	4.2	13.6	13.20	4.9	19	14.7	7.0	17.8	20.1							
		1.7	25	9.36	3.0	39.0	13.8	3.4	50.0	15.0	4.6	62.0	19.2	6.0	93.0	23.7	2.0	0.7	460	5.5
C15	Q3348E & Q3344E	1.8	20	10.0	3.1	33.0	14.4	3.5	43.0	15.6	4.9	47.0	20.7	6.3	77.0	25.5	3.2	1.5	470	6.4
		2.0	15	10.7	3.2	27.0	15.3	3.7	41.0	16.5	5.3	36.0	22.5	6.7	62.0	27.6	3.9	2.0	510	7.3
		2.1	11	11.6	3.4	23.0	15.9	3.9	27.0	18.0	5.6	26.0	24.3	7.0	52.0	29.7	5.3	3.0	530	7.9
		2.3	7.6	12.3	3.5	18.5	16.8	4.1	23.0	18.6	6.0	18.9	26.1				6.3	4.0	580	9.8
					3.7	14.8	17.4	4.2	18.9	19.2	6.3	13.6	27.6							
C15	Q3348E & Q3344E							4.4	15.9	20.1										

VAPRO SIPHON CONE



	COMBINATION C30 TO C35 Flow Rates and Dimensions Siphon Fed, Internal Mix, Round Spray Pattern.														
Spray Set Up Number	Fluid & Air Nozzle Numbers	Atomising Air		Liquid Capacity in L/h								Spray Dimensions at 200mm height			
				Gravity Head			Siphon Head								
		Air (bar)	Air Capacity Nm³/h	450mm	300mm	150mm	100mm	200mm	300mm	600mm	900mm	Air (bar)	Spray Angle A (deg)	B (mm)	D (m)
C30	Q3348G & Q3341A	0.7	0.66	1.5	1.3	1.1	0.9	0.7	0.5			0.7	18	280	1.8
		1.5	1.02	1.8	1.7	1.5	1.3	1.2	1.1	0.6		1.5	18	280	1.9
		3.0	1.68	2.1	1.9	1.7	1.5	1.4	1.3	1.1	0.8	3.0	18	300	2.3
		4.0	2.16	2.2	2.0	1.8	1.6	1.5	1.4	1.2	0.9	4.0	18	360	2.6
C31	Q3348D & Q3341A	0.7	0.78	2.4	2.1	1.7	1.5	1.2	0.8			0.7	18	300	2.1
		1.5	1.20	2.8	2.6	2.4	2.1	1.9	1.6	0.9		1.5	18	330	2.3
		3.0	1.92	3.4	3.1	2.9	2.8	2.6	2.4	1.7	1.1	3.0	18	380	2.6
		4.0	2.46	3.7	3.4	3.3	3.1	2.9	2.7	2.1	1.5	4.0	19	430	3.0
C32	Q3348D & Q3341B	0.7	1.38	2.5	2.3	2.0	1.6	1.4	1.1			0.7	18	300	2.4
		1.5	2.16	2.9	2.8	2.5	2.2	2.0	1.7	0.9		1.5	18	330	2.7
		3.0	3.48	3.4	3.3	3.2	2.9	2.8	2.5	1.9	1.2	3.0	19	380	3.4
		4.0	4.44	3.7	3.6	3.5	3.4	3.3	3.0	2.5	2.0	4.0	20	430	4.0
C33	Q3348C & Q3341B	0.7	1.14	4.5	4	3.4	2.1	1.6	1.4			0.7	21	380	3.0
		1.5	1.86	5.3	4.9	4.4	3.5	2.9	2.7	1.8		1.5	21	410	3.4
		3.0	3.00	6.0	5.6	5.0	4.4	4.0	3.4	2.4	1.2	3.0	21	460	4.0
		4.0	3.90	5.7	5.4	5.0	4.2	3.9	3.5	2.8	1.9	4.0	22	510	4.6
C34	Q3348A & Q3341D	1.5	3.48	22	19.9	16.3	12.3	10.5	8.3	2.8		1.5	17	460	3.7
		3.0	5.28	25	23	19.5	16.7	14.2	11.5	6.4	2.8	3.0	18	510	4.3
		4.0	6.66	26	24	21	18.4	15.7	12.9	7.9	4.5	4.0	18	530	4.9
		5.6	8.82	26	24	22	19.7	17	14.6	9.8	6.1	5.6	19	580	5.5
C35	Q3348E & Q3341E	2.0	8.64				27	22	16.8			2.0	20	510	6.7
		3.0	11.4				30	26	21			3.0	20	530	7.0
		4.0	14.4		43	40	31	28	23	11.0		4.0	21	580	7.6

VAPRO SIPHON FAN



	COMBINATION C40 TO C43 Flow Rates and Dimensions Siphon Fed, Internal Mix, Flat Fan Spray Pattern.													
Spray Set Up Number	Fluid & Air Nozzle Numbers	Atomising Air		Liquid Capacity in L/h								Spray Dimensions at 200mm height		
				Gravity Head			Siphon Head							
		Air (bar)	Air Capacity Nm³/h	450mm	300mm	150mm	100mm	200mm	300mm	600mm	900mm	Air (bar)	C (mm)	B (mm)
C40	Q3348C & Q3340A	0.7	1.68	1.3	1.2	1.1	1.0	1.0	0.8	0.6	0.5	0.7	380	2.1
		1.5	2.58	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.5	1.5	380	2.1
		2.0	3.00	0.8	0.8	0.7	0.6	0.5				2.0	380	1.8
C41	Q3348F & Q3340B	1.5	3.36	3.7	3.5	3.3	2.9	2.8	2.5	2.3	2.1	1.5	380	2.7
		2.0	3.90	3.4	3.3	3.1	2.8	2.7	2.6	2.4	2.2	2.0	420	2.7
		3.0	5.22	2.8	2.7	2.5	2.4	2.2	2.1	1.9	1.7	3.0	460	3.0
		4.0	6.60	1.9	1.8	1.6	1.5	1.3	1.2			4.0	480	2.7
C42	Q3348B & Q3340C	1.5	4.08	5.1	4.8	4.5	3.8	3.7	3.5	3.0	2.4	1.5	270	3.4
		2.0	4.68	4.9	4.7	4.4	3.6	3.4	3.2	2.9	2.3	2.0	280	3.4
		3.0	6.18	3.4	3.2	3.0	2.2	2.0	1.7			3.0	300	3.0
		3.5	7.02	2.2	2.0	1.7								
C43	Q3348B & Q3340D	1.5	3.78	7.6	7.2	6.6	5.7	5.4	5.1	4.6	3.7	1.5	270	3.4
		2.0	4.38	7.6	7.3	6.8	5.9	5.7	5.5	5.0	4.2	2.0	290	3.4
		3.0	5.76	6.4	6.1	5.7	5.0	4.5	4.1	3.3		3.0	330	3.4
			3.5	6.60	4.2	3.7	3.2	2.6						