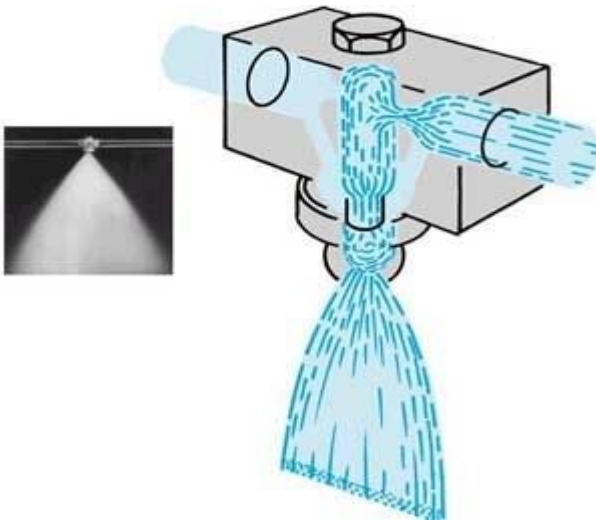


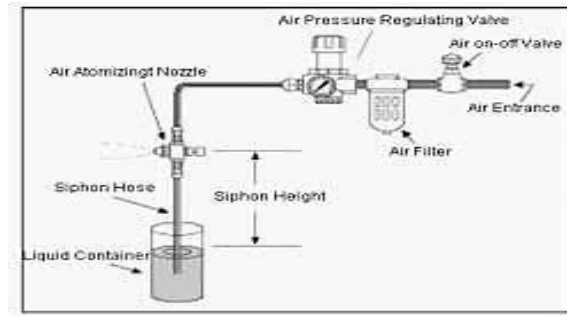
AIR ATOMIZING NOZZLE



APPLICATION

- ❖ ATOMIZING OF VISCOUS LIQUIDS
- ❖ COOLING
- ❖ GAS COOLING
- ❖ HUMIDIFICATION OF AIR
- ❖ HUMIDIFICATION OF GOODS
- ❖ LUBRICATION
- ❖ WEB DAMPENING

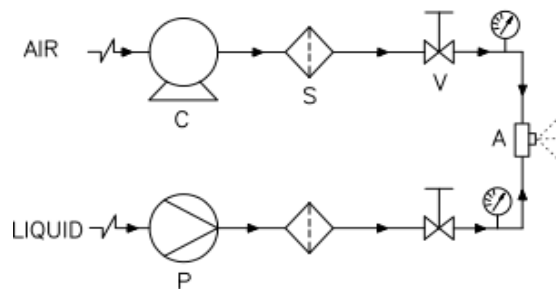




PRESSURE PRINCIPLE:

LIQUID IS SUPPLIED UNDER PRESSURISED FROM WITH THE HELP OF PUMP OF PRESSURISED CONTAINER SEPARATE COMPRESSED AIR IS NEEDED

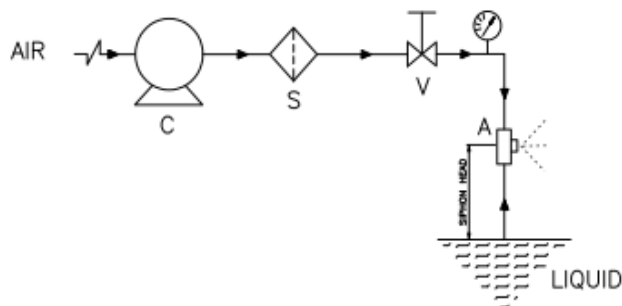
Pressure Principle

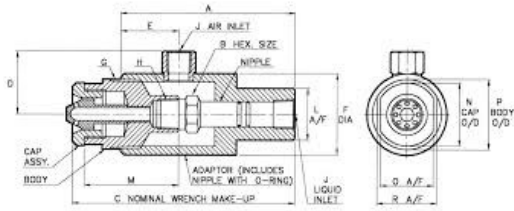


SIPHON PRINCIPLE:

SIPHON PRINCIPLE IS UTILISED TO LIFT LIQUID FROM CERTAIN HEIGHT FROM SPRAY NOZZLE, SUITABLE WHERE PUMP OR PRESSURISED CONTAINER OF LIQUID IS NOT AVAILABLE

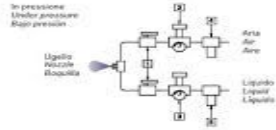
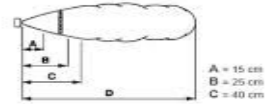
SIPHON Principle



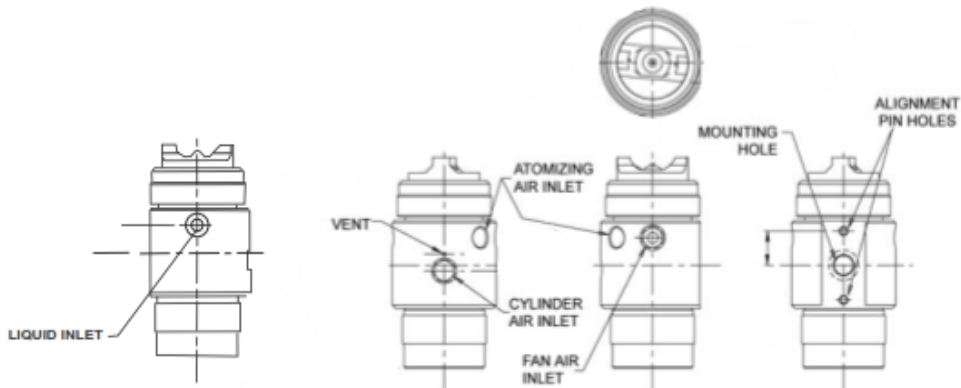


PRESSURE FED INTERNAL MIX FLAT SPRAY PATTERN

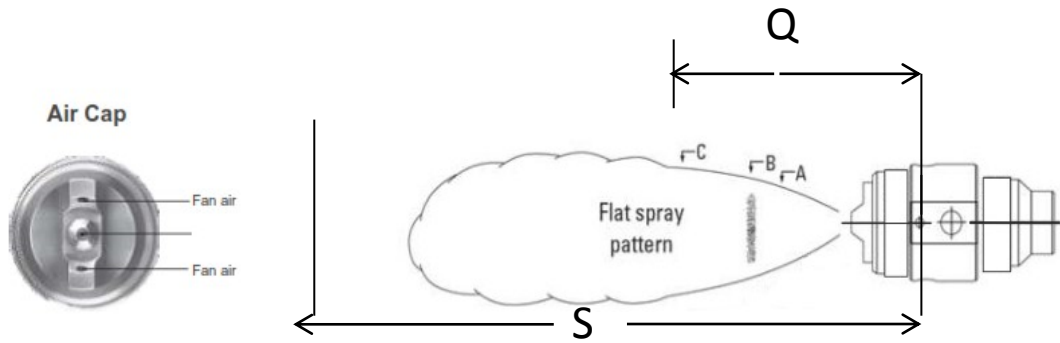
PIPE SIZE	MODEL NO	0.7 BAR LIQUID			1.5 BAR LIQUID			2 BAR LIQUID			3 BAR LIQUID			4 BAR LIQUID			SPRAT DIMISION		
		AIR(BAR)	1/H	Nm ³ /H	AIR(BAR)	1/H	Nm ³ /H	AIR(BAR)	1/H	Nm ³ /H	AIR(BAR)	1/H	Nm ³ /H	AIR(BAR)	1/H	Nm ³ /H	C ¹ EFFECTIVE SPRAY LENGTH(mm)	D ¹ MAX EFFECTIVE SPRAY LENGTH(mm)	
1/8	AP-EX-050	0.7	5.5	1.44	1.3	9.81	1.86	2	8.6	2.52	2.7	11.2	3.12	3.9	12	4.14			
		0.9	4.7	1.62	1.5	7.7	2.16	2.2	7.5	2.82	3.2	10.1	3.36	4.6	9.75	4.86			
		1.1	4.1	1.86	1.8	6.5	2.52	2.5	6.2	3.12	3.5	9.1	3.72	5.9	7	5.58	460	2.6	
		OR	1.2	3.5	2.04	2.1	5.4	2.82	2.8	5.2	3.42	3.7	8.1	3.96	6	5.3	6.24	660	3
		1/4	1.3	3	2.22	2.4	4.3	3.12	3.2	4.2	3.78	4.2	5.4	4.76	6.3	4.3	6.6	760	3.2
			1.4	2.5	2.4	2.7	3.3	3.42	3.2	3.7	3.9	4.6	4.2	5.1	6.7	3.3	6.96	860	3.8
		1.5	2	2.64	2.8	2.8	3.6	3.4	3.2	4.08	4.9	3.1	5.46	7	3.4	7.32	940	4	
1/8	AP-EX-100	1.3	3.9	1.8	2.1	7.4	2.4	3	6.1	3.12	3.9	9.4	3.6	5.3	10.2	4.68			
		1.4	3	1.98	2.4	5.3	2.7	3.1	5.3	3.24	4.2	7.2	4.02	5.6	8.3	5.04	460	1.8	
		OR	1.5	2.3	2.1	2.5	4.4	2.82	3.2	4.5	3.42	3.6	5.3	4.38	6	6.6	5.34	640	2
		1/4	1.7	1.8	2.28	2.7	3.7	3	3.4	3.8	3.54	3.9	3.8	4.8	6.3	5.1	5.88	740	2
			2.8	1.3	2.46	2.8	3.1	3.12	3.5	3.2	3.72							940	2.1
			2	1	2.64	3	2.6	3.3	3.9	1.8	4.08							970	2.3
1/8	AP-EX-150				3.1	2.1	3.42												
		OR	0.9	8.2	1.2	1.4	14.4	1.62	2.1	13.5	2.16	2.7	19.1	2.52	4.6	16.1	4.14		
		1/4	1	6.8	1.38	1.7	11.6	1.92	2.4	11.4	2.52	3	17.1	2.76	4.9	13.8	4.56	710	2.1
			1.1	5.5	1.62	2	9.5	2.22	2.7	9.7	2.82	3.2	15.1	3.12	5.3	11.5	4.98	810	2.4
		OR	1.3	4.1	1.8	2.1	8.3	2.4	3	7.2	3.18	3.5	13.1	3.42	5.6	9.3	5.4	890	2.6
		1/4	1.4	2.9	2.04	2.2	7.1	2.58	3.2	5	3.54	4.2	8.1	4.32	6	7.3	5.82	970	2.7
1/8	AP-EX-200				2.4	6.1	2.76	3.4	4	3.78	4.6	5.9	4.74	6.3	5.6	6.24	970	3.2	
		OR				2.5	5.1	2.94	3.5	3.3	3.96	4.9	4	5.16	6.7	4.3	6.72		
		1/4	1	9	1.5	2	10.4	2.46	2.5	11.6	2.88	3.1	15.6	33.6	4.2	17.1	4.38		
			1.1	7.8	1.8	2.1	9.3	2.7	2.4	10.4	3.06	3.2	14.6	3.54	4.6	15	4.8	170	3
		OR	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	12.08	5.22	200	3.7
		1/4	1.4	5.2	2.16	2.5	6.1	3.3	2	7.3	3.66	3.8	10.8	4.26	5.3	11	5.64	220	4
1/8	AP-EX-250	1.7	3.1	2.84	2.8	4.3	3.72	3.2	5.5	4.08	4.2	8.5	4.92	5.6	9.4	6.18	280	4.2	
		OR	2.2	2	3	3.1	3	4.14	3.5	4.1	4.5	4.9	5.2	5.88	6.3	7.2	7.14	330	4.8
		1/4	2.2	1.1	3.36	3.4	2	4.5	3.8	2.9	4.86	6	2.3	7.2	7	6.1	8.04		
			1.1	11.2	3.24	2.1	18	4.47	2.7	19.6	5.58	3.5	27	6.72	4.6	33	8.22		
		OR	1.3	8.5	3.6	2.2	15.8	5.04	2.8	17.3	5.88	3.7	25	6.96	4.9	28	8.94	200	3
		1/4	1.4	6.5	3.9	2.4	13.6	5.34	3	15.2	6.18	3.8	23	7.26	5.3	24	9.66	330	3.2
1/8	AP-EX-300	OR	1.5	5	4.26	2.5	11.6	5.7	3.1	13.2	6.54	3.9	21	7.56	5.6	19.7	10.4	400	3.4
		1/4	1.7	3.8	4.62				3.2	11.4	6.84	4.1	18.9	7.92	6	15.7	11.2	460	3.5
												4.2	17	8.22	6.3	12.4	12	480	4
		OR	0.9	27	1.98	21.8	38	3.3	2.4	39	4.02	3.2	58	4.56	4.6	59	6.3		
		1/4	1	20	1.28	2.1	38	3.96	2.7	30	4.62	3.5	47	5.22	5.3	40	7.92	300	3.4
		OR	1.1	15.9	2.7	2.2	24	4.26	3	24	5.22	3.8	38	5.82	5.6	32	8.7	410	3.5
1/8	AP-EX-350	OR	1.3	12.5	2.88	2.4	21	4.56	3.2	17.8	5.88	3.9	34	6.18	6	26	9.48	430	3.7
		1/4	1.4	10.2	3.36	2.5	17.8	4.92	3.4	15.1	6.18	4.2	27	6.78	6.3	20	10.3	480	3.8
			1.5	7	3.72	2.7	15.1	5.22	3.5	12.9	6.54	4.6	20	7.56	6.7	15.9	11.1	510	4.4
		OR							3.7	10.6	6.84	4.9	14.8	8.4	7	12.7	11.9		
		1/4	1	17	1.38	2	24	2.64	2.2	28	3.06	3.4	38	4.32	3.9	65	4.5		
		OR	1.1	11	1.62	2.1	18.9	3	2.5	23	3.54	3.5	33	4.8	4.2	53	5.34	175	2.4
1/8	AP-EX-400	OR	1.3	7.6	1.98	2.2	14.4	3.64	2.7	18.9	3.96	3.7	28	5.34	4.6	40	6.48	170	3
		1/4	1.4	3.2	2.4	2.4	10.6	3.78	2.8	15.1	4.44	3.8	25	5.82	4.9	30	7.62	220	3.4
						2.5	7.2	4.26	3	11.7	4.74	3.8	19.7	6.3	5.6	21	8.94	280	3.6
		OR										4.2	13.1	7.2	5.3	13.8	10.4	350	4
		1/4	1	29	5.4	1.8	56	7.02	2.1	100	7.14	3	126	8.4	4.1	140	10.9		
		OR	1.1	18.9	6.48	2	40	7.98	2.2	79	7.98	3.1	110	9.06	4.2	120	11.6	250	3.4
1/8	AP-EX-400	OR							2.4	62	8.82	3.2	95	9.78	4.6	89	13.9	430	3.8
		1/4							2.5	48	9.76	34	78	11	4.9	58	15.9	460	4.3
									2.7	36	10.6	3.5	62	11.6	5.3	34	18.3	530	4.6
		OR										3.7	48	12.6	5.6	16.7	20.4	580	5.2
		1/4										3.8	37	13.5					



DETAILS OF INLET CONNECTION



- ❖ THE DIMENSION OF THE THAT SPRAY PATTERN ARE CONTROLLED BY THE COMBINATION OF FAN AIR PRESSURE AND ATOMIZING AIR PRESSURE
- ❖ THE LIQUID FLOW RATE IS CONSTANT AND NOT AFFECTED BY THE AIR PRESSURE



PRESSURE FED INTERNAL MIX FLAT SPRAY PATTERN

PIPE SIZE	SPRAY SET-UP NUMBER	ATOMIZING AIR		LIQUID CAPACITY IN 1/H (liter per hour)								SPRAY DIMENSION AT 200mm siphon height	
				GRAVITY HEAD			SIPHON HEAD						
		AIR (BAR)	Nm ³ /H	450mm	300mm	150mm	100mm	200mm	300mm	600mm	900mm	Q EFFECTIVE SPRAY LENGTH mm	S MAX. SPRAY LENGTH mm
1/8 OR 1/4	AP-EX-050	0.7	0.66	1.5	1.1	1.1	0.9	0.7	0.5			280	1.8
		1.5	1.02	1.8	1.7	1.5	1.3	1.2	1.1	0.6		280	1.9
		3	1.68	2.1	1.9	1.7	1.5	1.4	1.3	1.1	0.8	300	2.3
		4	2.16	2.2	2	1.8	1.6	1.5	1.4	1.2	0.9	360	2.6
1/8 OR 1/4	AP-EX-150	0.7	0.78	2.4	2.1	1.7	1.5	1.2	0.8			300	2.1
		1.5	1.2	2.8	2.6	2.4	2.1	1.9	1.6	0.9		330	2.3
		3	1.92	3.4	3.1	2.9	2.8	2.6	2.4	1.7	1.1	430	2.6
		4	2.46	3.7	3.4	3.3	3.1	2.9	2.9	2.1	1.5	480	3
1/8 OR 1/4	AP-EX-200	0.7	1.38	2.5	2.3	2	1.6	1.4	1.1			300	2.4
		1.5	2.16	2.9	2.8	2.5	2.2	2	1.7	0.9		330	2.7
		3	3.48	3.4	3.3	3.2	2.9	2.8	2.5	1.9		430	3.4
		4	4.44	3.7	3.6	3.5	3.4	3.3	3	2.5		480	4
1/8 OR 1/4	AP-EX-250	0.7	1.14	4.5	4	3.4	2.1	1.8	1.4			380	3
		1.5	1.86	5.3	4.9	4.4	3.5	2.9	2.7	1.8		410	3.4
		3	3	6	5.6	5	4.4	4	3.4	2.4	1.2	460	4
		4	3.9	5.7	5.4	5	4.2	3.9	3.5	2.8	1.9	510	4.6
1/8 OR 1/4	AP-EX-400	1.5	3.48	22	19.9	16.3	12.3	10.5	8.3	2.8		460	3.7
		3	5.28	25	23	19.5	16.7	14.2	11.5	6.4	2.8	510	4.3
		4	6.66	26	24	21	18.4	15.7	12.9	7.9	4.5	530	4.9
		5.6	8.82	26	24	22	19.7	17	14.6	9.8	6.1	580	5.5
1/8 OR 1/4	AP-EX-450	2	8.64				27	22	16.8			510	6.7
		3	11.4				30	26	21			530	7
		4	14.4		43	40	31	28	23	11		580	7.6
		5.6	18.9	44	42	49	31	28	24	16.7	8.3	630	8.2