

Automatic Spray Gun

AutoJet® VAU 1/8

DESIGN FEATURES

The VAU variable spray AutoJet nozzles provide uniform spray distribution, even when spraying viscous liquids. Independent control of liquid, atomizing air, and fan air pressures is possible for fine-tuning of flow rate, drop size, spray distribution, and coverage. They can be set and re-set in seconds, simplifying application changes.

An independent air atomizing line can be adjusted to vary spray drop size without affecting liquid flow rates. An additional inlet/outlet port allows for liquid recirculation that effectively maintains the flow of viscous liquids.

VAU



1/8" NPT or BSPT

VAU

Model VAU offers automatic operation. A built-in shut-off/clean-out needle is activated during each cycle to eliminate plugging.

Flow rates range for the VAU AutoJet nozzles from 0.74 to 47 gph (2.8 to 179 l/h). Seven external mix spray set-ups are available. With the fan air in operation, a flat spray pattern is

produced. A round spray pattern is produced when the fan air is off. The low to high pressure range is 10 to 90 psi (0.7 to 6.2 bar), with a minimum of 35 psi (2.4 bar) air pressure required to operate the air cylinder.

ORDERING INFO

COMPLETE NOZZLE ASSEMBLY				
NOZZLE BODY*			SPRAY SET-UP	
1/8 VAU - SS +			SUV128 - SS	
Inlet Conn.	Nozzle Body Assembly Type	Material Code	Spray Set-up No.	Material Code

* Includes retainer and gasket.

To order fluid cap only, use fluid cap number (shown in performance data charts) and material code: VF1650-SS

To order air cap only, use air cap number (shown in performance data charts) and material code: VA67255-60-SS

To order spray nozzle without set-up, use inlet connection, nozzle body, and material code: 1/8VAA-SS

Order mounting kits separately: 28945-001-316SS

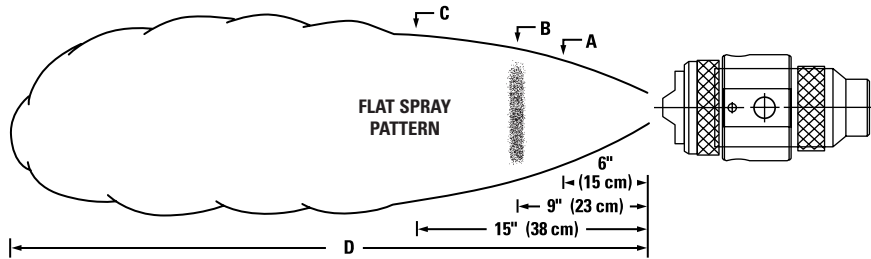
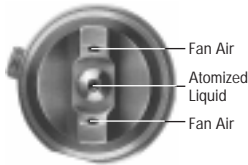
SPRAY SET-UP ONLY	
SPRAY SET-UP	
SUV128 - SS	
Spray Set-up No.	Material Code

To order spray set-up only, use spray set-up number and material code: SUV128-SS

AutoJet® Air Atomizing Nozzles • Variable Spray Series

External Mix

AIR CAPS



External mix with fan air:
flat spray pattern

Note: The No. 28207-101-SS Cap Ring and No. 29154-001-BUC must be ordered separately from the spray set-up, but are included in the standard nozzle assembly. Please contact your sales engineer.

Without fan air:
round spray pattern

DESIGN FEATURES

The dimensions "A", "B", and "C" of the flat spray pattern are controlled by the combination of fan air pressure and atomization

air pressure. The liquid flow rate is constant and not affected by the air pressure.

PERFORMANCE DATA

Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Air Capacity*			Liquid Capacity*		Spray Coverage (centimeters) at Indicated Distance from Nozzle														
		Pressure bar	Atomizing Air l/min	Fan Air l/min	Pressure bar	Capacity l/h	Atom. Air Press. bar	Water Press. bar	Fan Air Pressure												
									0** bar			0.3 bar			0.7 bar			1.5 bar			
									A	B	C	A	B	C	A	B	C	A	B	C	
SUV67B 0,42 mm	Fluid Cap VF1650 + Air Cap VA67255-60	.69	12.5	61	.21	2.8	1.5	.20	5.1	7.6	11.4	10.2	12.7	15.2	15.2	17.8	20	17.8	23	28	
		1.0	15.0	76	.21	2.8			.70	5.1	6.4	10.2	12.7	17.8	25	17.8	22	30	20	25	36
		1.4	17.6	93	.34	3.6			1.5	5.1	7.6	10.2	15.2	20	30	20	28	36	25	30	43
		2.1	23	125	.34	3.6	2	.20	5.1	7.6	11.4	7.6	10.2	12.7	15.2	17.8	17.8	23	29		
		2.8	29	156	.69	5.1			.70	5.1	6.4	11.4	10.2	11.4	15.2	15.2	19.1	25	19.1	25	36
		3.4	36	187	.69	5.1	3	.20	6.4	8.9	15.2	8.9	11.4	17.8	12.7	15.2	20	17.8	23	28	
		4.1	42	215	1.0	6.3			.70	5.1	7.6	12.7	10.2	12.7	19.1	15.2	17.8	25	19.1	23	23
		4.8	48	244	1.0	6.3			1.5	5.1	7.6	11.4	10.2	14.0	20	15.2	20	30	23	28	36
		5.5	55	272	1.4	7.3	6	.20	5.1	7.6	12.7	7.6	10.2	14.0	10.2	12.7	15.2	15.2	17.8	23	
		6.2	61	301	1.4	7.3			.70	6.4	7.6	12.7	7.6	10.2	15.2	10.2	12.7	17.8	15.2	20	28
									1.5	5.1	7.6	11.4	7.6	11.4	16.5	10.2	15.2	20	17.8	23	30

* Since the pressures of the air and liquid lines are independently controlled, any combination of these air and liquid pressures can be used. The total air capacity is the sum of the atomizing air l/min and the fan air l/min. For instance, for atomizing air at 1 bar and fan air at 2.1 bar, the total is equal to 15 l/min + 125 l/min for a total of 140 l/min.

** At 0 bar fan air pressure the spray forms a round spray pattern. Request Data Sheet 37459M-V67B.

Note: Spray set-ups are interchangeable, but each set-up uses a different needle size.

AutoJet® Air Atomizing Nozzles • Variable Spray Series

External Mix

PERFORMANCE DATA

Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Air Capacity*			Liquid Capacity*		Spray Coverage (centimeters) at Indicated Distance from Nozzle													
		Pressure bar	Atomizing Air l/min	Fan Air l/min	Pressure bar	Capacity l/h	Atom. Air Press. bar	Water Press. bar	Fan Air Pressure											
									0** bar			0.3 bar			0.7 bar			1.5 bar		
									A	B	C	A	B	C	A	B	C	A	B	C
SUV67A 0,52 mm	Fluid Cap VF2050 + Air Cap VA67255-60	.69	12.5	61	.21	4.2	1.5	.20	5.1	7.6	11.4	12.7	15.2	19.1	15.2	17.8	20	19.1	24	30
		1.0	15.0	76	.21	4.2		.70	5.1	7.6	11.4	12.7	17.8	25	20	25	36	23	30	41
		1.4	17.6	93	.34	5.5		1.5	5.1	7.6	10.2	15.2	20	30	23	28	38	25	33	43
		2	2.1	23	125	.34	5.5	.20	5.1	7.6	11.4	10.2	12.7	16.5	14.0	17.8	20	16.5	22	27
			2.8	29	156	.69	7.8	.70	5.1	7.6	12.7	10.2	15.2	20	17.8	23	30	23	30	41
			3.4	36	187	.69	7.8	1.5	5.1	7.6	10.2	12.7	15.2	23	17.8	25	33	25	33	46
		3	4.1	42	215	1.0	9.5	.20	6.4	8.9	14.0	8.9	12.7	17.8	12.7	16.5	23	19.1	23	28
			4.8	48	244	1.0	9.5	.70	5.1	7.6	12.7	10.2	14.0	20	16.5	19.1	16.5	20	25	38
			5.5	55	272	1.4	11.1	1.5	5.1	7.6	11.4	10.2	15.2	22	16.5	22	32	24	30	39
		6	6.2	61	301	1.4	11.1	.20	6.4	8.9	12.7	7.6	11.4	15.2	10.2	14.0	16.5	17.8	23	30
						.70	6.4	8.9	12.7	8.9	11.4	16.5	11.4	15.2	20	20	25	36		
						1.5	5.1	7.6	11.4	8.9	11.4	16.5	11.4	16.5	22	20	28	36		
SUV67 0,72 mm	Fluid Cap VF2850 + Air Cap VA67255-60	.69	12.5	61	.21	8.1	1.5	.20	6.4	7.6	11.4	15.2	17.8	23	19.1	23	28	20	25	33
		1.0	15.0	76	.21	8.1		.70	5.1	7.6	12.7	15.2	20	28	23	28	38	30	38	48
		1.4	17.6	93	.34	10.5		1.5	5.1	6.4	10.2	17.8	23	30	25	30	43	33	43	51
		2	2.1	23	125	.34	10.5	.20	6.4	7.6	11.4	12.7	15.2	20	15.2	20	23	20	25	33
			2.8	29	156	.69	15.0	.70	5.1	7.6	12.7	12.7	17.8	25	20	28	38	28	36	48
			3.4	36	187	.69	15.0	1.5	5.1	6.4	10.2	12.7	17.8	25	20	28	36	28	36	48
		3	4.1	42	215	1.0	18.4	.20	6.4	8.9	12.7	10.2	12.7	19.1	12.7	17.8	25	20	23	28
			4.8	48	244	1.0	18.4	.70	5.1	7.6	12.7	11.4	14.0	20	17.8	20	28	23	30	41
			5.5	55	272	1.4	21	1.5	5.1	7.6	12.7	11.4	15.2	23	17.8	23	34	25	33	43
		6	6.2	61	301	1.4	21	.20	6.4	8.9	12.7	8.9	12.7	15.2	11.4	15.2	17.8	15.2	20	28
						.70	6.4	8.9	12.7	10.2	14.0	17.8	12.7	17.8	23	17.8	23	33		
						1.5	6.4	7.6	11.4	8.9	12.7	16.5	12.7	17.8	23	17.8	25	36		
SUV113A 0,90 mm	Fluid Cap VF3578 + Air Cap VA113293-60	.69	44	100	.21	13.6	1.5	.20	6.4	7.6	12.7	8.9	11.4	15.2	15.2	17.8	23	25	33	41
		1.0	55	126	.21	13.6		.70	6.4	8.9	12.7	8.9	11.4	17.8	15.2	23	30	28	38	51
		1.4	67	151	.34	17.6		1.5	5.1	7.6	12.7	8.9	11.4	20	15.2	20	28	28	38	53
		2	2.1	90	203	.34	17.6	.20	6.4	7.6	12.7	7.6	10.2	14.0	10.2	12.7	17.8	17.8	23	30
			2.8	113	253	.69	25	.70	6.4	8.9	12.7	8.9	11.4	15.2	12.7	17.8	23	20	28	38
			3.4	134	300	.69	25	1.5	6.4	8.9	14.0	7.6	12.7	17.8	10.2	15.2	23	20	30	41
		3	4.1	156	348	1.0	30	.20	6.4	7.6	12.7	7.6	10.2	15.2	8.9	11.4	16.5	15.2	20	25
			4.8	179	396	1.0	30	.70	6.4	8.9	12.7	8.9	10.2	15.2	10.2	12.7	16.5	15.2	23	30
			5.5	198	439	1.4	35	1.5	6.4	8.9	12.7	8.9	11.4	16.5	10.2	14.0	20	17.8	25	36
		6	6.2	219	487	1.4	35	.20	6.4	8.9	12.7	6.4	8.9	12.7	6.4	8.9	12.7	10.2	12.7	15.2
						.70	6.4	8.9	12.7	6.4	10.2	14.0	7.6	10.2	15.2	10.2	15.2	20		
						1.5	6.4	8.9	12.7	7.6	10.2	15.2	7.6	10.2	16.5	11.4	15.2	23		

* Since the pressures of the air and liquid lines are independently controlled, any combination of these air and liquid pressures can be used. The total air capacity is the sum of the atomizing air l/min and the fan air l/min. For instance, for atomizing air at 1 bar and fan air at 2.1 bar, the total is equal to 15 l/min + 125 l/min for a total of 140 l/min.

** At 0 bar fan air pressure the spray forms a round spray pattern. Request Data Sheets 37459M-V67A, 37459M-V67, and 37459M-V113A.

Note: Spray set-ups are interchangeable, but each set-up uses a different needle size.

AutoJet® Air Atomizing Nozzles • Variable Spray Series

External Mix

PERFORMANCE DATA

Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Air Capacity*			Liquid Capacity*		Spray Coverage (centimeters) at Indicated Distance from Nozzle																	
		Pressure bar	Atomizing Air l/min	Fan Air l/min	Pressure bar	Capacity l/h	Atom. Air Press. bar	Water Press. bar	Fan Air Pressure															
									0** bar			0.3 bar			0.7 bar			1.5 bar						
									A	B	C	A	B	C	A	B	C	A	B	C				
SUV113 1,03 mm	Fluid Cap VF4078 + Air Cap VA113293-60	.69	44	100	.21	18.4	1.5	.20	6.4	8.9	15.2	7.6	11.4	15.2	15.2	20	25	25	36	46				
		1.0	55	126	.21	18.4			.70	6.4	8.9	12.7	10.2	12.7	17.8	17.8	23	30	28	38	53			
		1.4	67	151	.34	24			1.5	5.1	7.6	12.7	8.9	11.4	16.5	15.2	23	30	28	38	48			
		2.1	90	203	.34	24			2	.20	6.4	8.9	15.2	7.6	10.2	15.2	10.2	15.2	20	20	28	36		
		2.8	113	253	.69	34				.70	6.4	8.9	12.7	7.6	10.2	15.2	11.4	15.2	20	23	28	43		
		3.4	134	300	.69	34				1.5	5.1	7.6	12.7	7.6	11.4	15.2	11.4	15.2	23	23	30	43		
		4.1	156	348	1.0	42			3	.20	6.4	8.9	15.2	7.6	10.2	16.5	8.9	12.7	17.8	16.5	23	28		
		4.8	179	396	1.0	42				.70	6.4	8.9	14.0	7.6	11.4	17.8	10.2	15.2	20	17.8	25	33		
		5.5	198	439	1.4	48				1.5	6.4	8.9	14.0	7.6	10.2	17.8	8.9	12.7	20	17.8	25	33		
		6.2	219	487	1.4	48			6	.20	6.4	8.9	15.2	6.4	8.9	15.2	6.4	10.2	15.2	10.2	12.7	19.1		
										.70	5.1	7.6	12.7	6.4	7.6	14.0	6.4	8.9	14.0	10.2	15.2	20		
										1.5	5.1	7.6	15.2	6.4	8.9	15.2	7.6	10.2	15.2	11.4	15.2	19.1		
		SUV128 1,52 mm	Fluid Cap VF60100 + Air Cap VA1282125-60	.69	46	110			.21	38	1.5	.20	7.6	10.2	12.7	7.6	10.2	15.2	12.7	17.8	23	23	30	41
				1.0	56	139			.21	38			.70	—	—	—	7.6	12.7	15.2	12.7	17.8	25	20	30
1.4	67			168	.34	49	1.5	—	—	—			—	—	—	—	—	—	—	—	—			
2.1	88			229	.34	49	2	.20	7.6	10.2			12.7	8.9	11.4	16.5	10.2	15.2	20	15.2	20	28		
2.8	110			289	.69	70		.70	6.4	8.9			12.7	7.6	10.2	14.0	10.2	15.2	22	17.8	23	38		
3.4	132			348	.69	70		1.5	—	—			—	—	—	—	—	—	—	—	—	—		
4.1	153			405	1.0	86	3	.20	7.6	10.2			14.0	7.6	11.4	15.2	8.9	12.7	17.8	15.2	20	28		
4.8	176			462	1.0	86		.70	6.4	8.9			12.7	8.9	11.4	15.2	10.2	12.7	17.8	15.2	20	27		
5.5	198			515	1.4	99		1.5	6.4	8.9			12.7	7.6	10.2	16.5	7.6	12.7	20	15.2	20	28		
6.2	221			566	1.4	99	6	.20	7.6	10.2			15.2	7.6	10.2	15.2	7.6	10.2	15.2	10.2	12.7	17.8		
								.70	7.6	10.2			15.2	7.6	10.2	15.2	7.6	10.2	15.2	10.2	15.2	20		
								1.5	7.6	10.2			14.0	7.6	10.2	15.2	7.6	10.2	15.2	10.2	15.2	20		
SUV152 2,03 mm	Fluid Cap VF80125 + Air Cap VA152215-60			.69	50	109	.21	69	1.5	.20			7.6	10.2	12.7	11.4	15.2	22	15.2	20	28	25	30	43
				1.0	62	136	.21	69					.70	—	—	—	—	—	—	—	—	—	25	36
		1.4	75	165	.34	89	1.5	—			—	—	—	—	—	—	—	—	—	—	—			
		2.1	101	221	.34	89	2	.20			7.6	10.2	12.7	8.9	12.7	17.8	12.7	16.5	23	20	28	38		
		2.8	125	277	.69	126		.70			—	—	—	—	—	—	12.7	17.8	23	20	28	38		
		3.4	150	331	.69	126		1.5			—	—	—	—	—	—	—	—	—	—	—	—		
		4.1	174	385	1.0	155	3	.20			7.6	10.2	14.0	10.2	12.7	17.8	12.7	15.2	23	17.8	23	30		
		4.8	198	436	1.0	155		.70			7.6	8.9	12.7	8.9	11.4	15.2	11.4	14.0	19.1	15.2	23	30		
		5.5	221	487	1.4	179		1.5			—	—	—	—	—	—	—	—	—	—	—	—		
		6.2	244	532	1.4	179	6	.20			7.6	10.2	15.2	8.9	11.4	16.5	10.2	12.7	17.8	12.7	15.2	23		
								.70			8.9	10.2	14.0	8.9	11.4	16.5	8.9	12.7	19.1	12.7	15.2	23		
								1.5			6.4	8.9	11.4	7.6	10.2	15.2	8.9	11.4	17.8	10.2	15.2	20		

* Since the pressures of the air and liquid lines are independently controlled, any combination of these air and liquid pressures can be used. The total air capacity is the sum of the atomizing air l/min and the fan air l/min. For instance, for atomizing air at 1 bar and fan air at 2.1 bar, the total is equal to 15 l/min + 125 l/min for a total of 140 l/min.

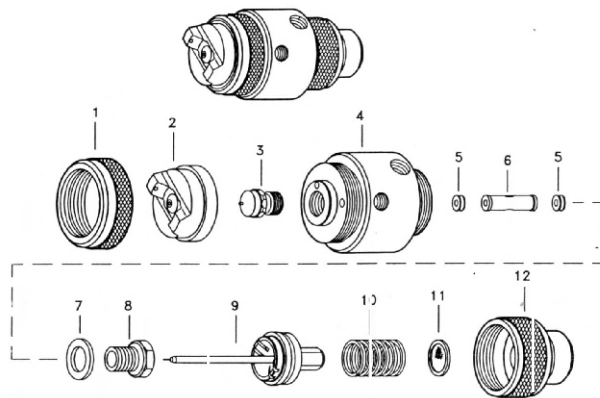
** At 0 bar fan air pressure the spray forms a round spray pattern. Request Data Sheets 37459M-V113, 37459M-V128, and 37459M-V152.

Note: Spray set-ups are interchangeable, but each set-up uses a different needle size.

AutoJet® Air Atomizing Nozzles • Variable Spray Series

External Mix

Item	Part No.	Description
1	CP28207-101-SS	CAP RING, STAINLESS STEEL
2	VA-*-SS	AIR CAP, STAINLESS STEEL
3	VF-**-SS	FLUID CAP SUB-ASSEMBLY, STAIN, STEEL (WITH O'RING & SLEEVE)
4	CP28210-102-SS	BODY, STAINLESS STEEL (FOR 1/8 VAU-SS)
	CPB28210-103-SS	BODY, STAINLESS STEEL (FOR 1/8 VAU-SS)
5	CP29578-001-VITEF	QUAD RING, VITON-TEFLON COATED (2 REQ'D)
6	CP20221EC-TEF	QUAD RING RETAINER, TEFLON
7	CP28218-12-NY	WASHER, NYLON
8	CP29655-001-SS	PACKING SCREW, STAINLESS STEEL
9	28222-***-SS	NEEDLE ASSEMBLY, STAINLESS STEEL
10	CP30449-001-SS	SPRING, STAINLESS STEEL
11	7630EC-100	DISC STRAINER, STAINLESS STEEL (100 MESH)
12	CP28211-101-SS	END CAP, STAINLESS STEEL



Item	Spray Set-up No.						
Air Cap N°	SUV67A-SS 0.52 mm	SUV67B-SS 0.41 mm	SUV67-SS 0.73 mm	SUV113A-SS 0.90 mm	SUV113-SS 1.03 mm	SUV128-SS 1.52 mm	SUV152-SS 2.035 mm
Fluid Cap N°	VA67255-60-SS VF2050-SS	VA67255-60-SS VF1650-SS	VA67255-60-SS VF2850-SS	VA113293-60-SS VF3578-SS	VA113293-60-SS VF4078-SS	VA1282125-60-SS VF60100-SS	VA1522125-60-SS VF80125-SS

Needle Assembly No. for Spray Set-Ups

SPRAY SET-UP NO.	NEEDLE ASSEMBLY No.
SUV67A-SS	28222-001-SS
SUV67B-SS	28222-002-SS
SUV67-SS	28222-003-SS
SUV113A-SS	28222-004-SS
SUV113-SS	28222-005-SS
SUV128-SS	28222-006-SS
SUV152-SS	28222-007-SS