GRACO

First choice when quality counts.™

AA Plus™

High Pressure Air-Assisted Airless Spray Gun

- **New Reverse-A-Clean tip and air cap for difficult coatings**
- **Ideal for a wide variety of coatings including high solids and high viscosity protective coatings**
- **Fine finish quality at higher atomizing pressures (up to 4000 psi)**

238-851
AA Plus with RAC Tip

High pressure air-assisted airless with RAC Tips to atomize the toughest coatings at industry production speeds

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The AA Plus has been designed to atomize high solids coatings at higher pressures while providing an excellent finish for air-assisted airless applications. The AA Plus is readily adaptable to your existing airless or air-assisted airless finishing line without major changes to your operation. When changing from competitive air-assisted or airless guns, the painters will appreciate the light trigger pull and comfort of the AA Plus.

The AA Plus is also available with a new Reverse-A-Clean tip, air cap and housing for those difficult applications that require the benefits of air-assisted airless. The AA Plus delivers less bounceback, lower overspray, better film control and higher transfer efficiency than conventional airless spray guns.

The AA Plus features improved air caps and tips which provide better atomization and consistency for your production needs. Also featured in the AA Plus is an improved trigger design, requiring minimal force to activate the gun. If you are using high solids coatings in your finishing operation and need to improve finish and transfer efficiency, consider the proven choice in air-assisted airless spray — Graco's AA Plus with the new Reverse-A-Clean design or the standard air cap and tip.

Typical Fluids Handled

- High solids lacquers and topcoats
- High solids primers
- Plural component primers and topcoats

Typical Applications

- Wood furniture and fixture finishing
- Aircraft finishing and maintenance
- Farm and construction equipment finishing
- Railcar finishing
- Fabricated metal finishing

Standard Spray Tip Selection Chart For use with Air Cap (238-628)

Note: Fluid needle (238-755) and diffuser-seat (224-855) must be used with tips larger than 0.025 in. (0.635 mm).

Orifice Size *Inches (mm)*	Fan Width at 12 in. (300 mm) *Inches (mm)*	Viscosity Light to Medium* *Fl. oz./min. (l/min)*	Viscosity Heavy *Fl. oz./min. (l/min)*	Part No.
0.007 (0.178)	2-4 (50-100)	4.0 (0.1)		GG4-107
	4-6 (100-150)			GG4-207
	6-8 (150-200)			GG4-307
0.009 (0.229)	2-4 (50-100)	7.0 (0.2)		GG4-109
	4-6 (100-150)			GG4-209
	6-8 (150-200)			GG4-309
	8-10 (200-250)			GG4-409
	10-12 (250-300)			GG4-509
0.011 (0.279)	2-4 (50-100)	10.0 (0.3)		GG4-111
	4-6 (100-150)			GG4-211
	6-8 (150-200)			GG4-311
	8-10 (200-250)			GG4-411
	10-12 (250-300)			GG4-511
	12-14 (300-350)			GG4-611
0.013 (0.330)	2-4 (50-100)	13.0 (0.4)		GG4-213
	6-8 (150-200)			GG4-313
	8-10 (200-250)			GG4-413
	10-12 (250-300)			GG4-513
	12-14 (300-350)			GG4-613
	14-16 (350-400)			GG4-713
0.015 (0.381)	4-6 (100-150)	17.0 (0.5)		GG4-215
	6-8 (150-200)			GG4-315
	8-10 (200-250)			GG4-415
	10-12 (250-300)			GG4-515
	12-14 (300-350)			GG4-615
	14-16 (350-400)			GG4-715
	16-18 (400-460)			GG4-815
0.017 (0.432)	4-6 (100-150)	22.0 (0.7)	17.0 (0.5)	GG4-217
	6-8 (150-200)			GG4-317
	8-10 (200-250)			GG4-417
	10-12 (250-300)			GG4-517
	12-14 (300-350)			GG4-617
	14-16 (350-400)			GG4-717
	16-18 (400-460)			GG4-817
	18-20 (457-508)			GG4-917
0.019 (0.483)	4-6 (100-150)	28.0 (0.8)	21.0 (0.6)	GG4-219
	6-8 (150-200)			GG4-319
	8-10 (200-250)			GG4-419
	10-12 (250-300)			GG4-519
	12-14 (300-350)			GG4-619
	14-16 (350-400)			GG4-719
	16-18 (400-460)			GG4-819
	18-20 (457-508)			GG4-919
0.021 (0.533)	6-8 (150-200)	35.0 (1.0)	27.0 (0.8)	GG4-321
	8-10 (200-250)			GG4-421
	10-12 (250-300)			GG4-521
	12-14 (300-350)			GG4-621
	14-16 (350-400)			GG4-721
	16-18 (400-460)			GG4-821
	18-20 (457-508)			GG4-921
0.023 (0.584)	8-10 (200-250)	40.0 (1.2)	34.0 (0.97)	GG4-423
	10-12 (250-300)			GG4-523
	12-14 (300-350)			GG4-623
	14-16 (350-400)			GG4-723
	16-18 (400-460			GG4-823
	18-20 (457-508)			GG4-923
0.025 (0.635)	8-10 (200-250)	50.0 (1.5)	42.0 (1.2)	GG4-425
	10-12 (250-300)			GG4-525
	12-14 (300-350)			GG4-625
	14-16 (350-400)			GG4-725
	16-18 (400-460			GG4-825
0.027 (0.686)	6-8 (150-200)	58.5 (1.7)	50.0 (1.4)	GG4-327
	8-10 (200-250)			GG4-427
	10-12 (250-300)			GG4-527
	12-14 (300-350)			GG4-627
	16-18 (400-460)			GG4-827
0.029 (0.737)	8-10 (200-250)	68.0 (1.9)	59.0 (1.7)	GG4-429
	12-14 (300-350)			GG4-629
0.031 (0.787)	8-10 (200-250)	78.0 (2.2)	69.0 (2.0)	GG4-431
	12-14 (300-350)			GG4-631
	18-20 (457-508)			GG4-931
0.033 (0.838)	12-14 (300-350)	88.0 (2.5)	79.0 (2.3)	GG4-633
	16-18 (400-460)			GG4-833
	18-20 (457-508)			GG4-933
0.035 (0.889)	8-10 (200-250)	98.0 (2.8)	89.0 (2.5)	GG4-435
	10-12 (250-300)			GG4-535
	12-14 (300-350)			GG4-635
	16-18 (400-460)			GG4-835
	18-20 (457-508)			GG4-935
0.037 (0.940)	14-16 (350-400)	108.0 (3.1)	99.0 (2.8)	GG4-737
0.039 (0.991)	8-10 (200-250)	118.0 (3.4)	109.0 (3.1)	GG4-439
	10-12 (250-300)			GG4-539
	12-14 (300-350)			GG4-639
	16-18 (400-460)			GG4-839

* Fluid output at 600 psi (41 bar, 4.1 MPa).

Fluid output (Q) at other pressures (P) can be calculated by this formula:

$$Q = (0.041)\ (QT)\ (v-).$$

Where QT = fluid output (fl. oz./min.) from the above table for the selected orifice size.

Note: other tips are available on special work order. Allow 4 to 6 weeks for delivery.

AA Reverse-A-Clean (AA RAC™) Spray Tip Selection Chart

Orifice Size *Inches (mm)*	Fan Width at 12 in. (300 mm) *Inches (mm)*	Viscosity Light to Medium* *Fl. oz./min. (l/min)*	Viscosity Heavy *Fl. oz./min. (l/min)*	Part No.
0.011 (0.279)	6-8 (150-200)	10.0 (0.3)	–	AAR-311
	8-10 (200-250)			AAR-411
	10-12 (250-300)			AAR-511
	12-14 (300-350)			AAR-611
0.013 (0.330)	6-8 (150-200)	13.0 (0.4)	–	AAR-313
	8-10 (200-250)			AAR-413
	10-12 (250-300)			AAR-513
	12-14 (300-350)			AAR-613
0.015 (0.381)	6-8 (150-200)	17.0 (0.5)	–	AAR-315
	8-10 (200-250)			AAR-415
	10-12 (250-300)			AAR-515
	12-14 (300-350)			AAR-615
0.017 (0.432)	6-8 (150-200)	22.0 (0.7)	17.0 (0.5)	AAR-317
	8-10 (200-250)			AAR-417
	10-12 (250-300)			AAR-517
	12-14 (300-350)			AAR-617
0.019 (0.483)	6-8 (150-200)	28.0 (0.8)	21.0 (0.6)	AAR-319
	8-10 (200-250)			AAR-419
	10-12 (250-300)			AAR-519
	12-14 (300-350)			AAR-619
0.021 (0.533)	8-10 (200-250)	35.0 (1.0)	27.0 (0.8)	AAR-421
	10-12 (250-300)			AAR-521
	12-14 (300-350)			AAR-621
0.023 (0.584)	8-10 (200-250)	40.0 (1.2)	34.0 (0.97)	AAR-423
	10-12 (250-300)			AAR-523
	12-14 (300-350)			AAR-623
0.025 (0.635)	8-10 (200-250)	50.0 (1.5)	42.0 (1.2)	AAR-425
	10-12 (250-300)			AAR-525
	12-14 (300-350)			AAR-625
0.027 (0.686)	8-10 (200-250)	58.5 (1.7)	50.0 (1.4)	AAR-427
	10-12 (250-300)			AAR-527
	12-14 (300-350)			AAR-627
0.029 (0.737)	8-10 (200-250)	68.0 (1.9)	59.0 (1.7)	AAR-429
	10-12 (250-300)			AAR-529
	12-14 (300-350)			AAR-629
0.031 (0.787)	8-10 (200-250)	78.0 (2.2)	69.0 (2.0)	AAR-431
	10-12 (250-300)			AAR-531
	12-14 (300-350)			AAR-631
0.033 (0.838)	8-10 (200-250)	88.0 (2.5)	79.0 (2.3)	AAR-433
	10-12 (250-300)			AAR-533
	12-14 (300-350)			AAR-633
0.035 (0.889)	8-10 (200-250)	98.0 (2.8)	89.0 (2.5)	AAR-435
	10-12 (250-300)			AAR-535
	12-14 (300-350)			AAR-635
0.037 (0.940)	8-10 (200-250)	108.0 (3.1)	99.0 (2.8)	AAR-437
	10-12 (250-300)			AAR-537
	12-14 (300-350)			AAR-637
0.039 (0.991)	8-10 (200-250)	118.0 (3.4)	109.0 (3.1)	AAR-439
	10-12 (250-300)			AAR-539
	12-14 (300-350)			AAR-639

* Fluid output at 600 psi (41 bar, 4.1 MPa).

Standard Sealer Tips Tip Selection Chart

For use with Air Cap (238-628)

Orifice Size *Inches (mm)*	Viscosity Light to Medium* *Fl. oz./min. (l/min)*	Viscosity Heavy *Fl. oz./min. (l/min)*	Part No.
0.025 (0.635)	50.0 (1.5)	42.0 (1.2)	GG4-025
0.029 (0.737)	50.0 (1.5)	42.0 (1.2)	GG4-029
0.031 (0.787)	50.0 (1.5)	42.0 (1.2)	GG4-031
0.035 (0.889)	50.0 (1.5)	42.0 (1.2)	GG4-035

* Fluid output at 600 psi (41 bar, 4.1 MPa).

Note: Part No. 238-755 fluid needle must be used with tips larger than 0.025 in. (0.635 mm).

Note for AA RAC Spray Tips:

- AA RAC spray tips include a metal cylinder seat and two plastic gaskets (one is supplied as a spare part).
- For AA RAC use, you must also order Part No. 238-701 RAC air cap assembly and Part No. 191-362 RAC housing, and use Part No. 238-427 diffuser.
- The air separator must be removed when using the AA RAC.
- Fluid needle (238-755) and diffuser-seat (224-855) must be used with tips larger than 0.025 in. (0.635 mm).

Technical Specifications

Max. working fluid pressure . 4000 psi (280 bar, 28.0 MPa)
Max. working air pressure . . . . . 100 psi (7 bar, 700 kPa)
Max. working fluid temperature . . . . . 120°F (49°C)
Weight (less filter) . . . . . 1.33 lb (0.59 kg)
Fluid inlet . . . 1/4 – 18 npsm (R14-19) compound male thread
Air inlet
238-402, 238-851, 239-001, 238-883 . . . . . 1/4 – 18 npsm (R14-19) compound male thread
238-852 . . . . . 1/4 – 18 npsm quick-disconnect fitting
Wetted parts . . . . . stainless steel, carbide, UHMWPE, CV75®, Teflon®, Delrin®
Instruction manual 308-640

Teflon® and Delrin® are registered trademarks of Du Pont.
CV75® is a registered trademark of International Seal Co., Inc.

Ordering Information

Spray tips not included. Order separately. See inside pages of this data sheet for your convenient Tip Selection Charts.

238-402 **AA Plus Spray Gun**
Spray gun with standard spray tip, air cap, tip guard, and 1/4–18 npsm (R1/4–19) air line fitting.

238-851 **AA Plus Spray Gun with RAC Tip**
Spray gun with AA Reverse-A-Clean assembly and 1/4–18 npsm (R1/4–19) air line fitting.

238-852 **AA Plus Spray Gun with Quick-Disconnect and Swivel**
Spray gun with standard spray tip, air cap, tip guard, quick-disconnect, and integral swivel air fitting.

238-883 **AA Plus Hi-Flow Spray Gun**
Spray gun with the hi-flow fluid needle and diffuser-seat, standard spray tip, air cap, tip guard, and 1/4–18 npsm (R1/4–19) air line fitting.

239-001 **AA Plus Hi-Flow Spray Gun with AA RAC**
Spray gun with the hi-flow fluid needle and diffuser-seat, AA RAC tip, air cap, tip guard, and 1/4–18 npsm (R1/4–19) air line fitting. Use with AA RAC tip sizes 0.027 in. (0.686 mm) or larger.

Accessories

To convert an existing AA200hs gun to a RAC tip, a customer will need:

239-174 Conversion Kit
To convert to a standard 238-851.

239-175 Conversion Kit
To convert to a Hi-Flow 239-001.

238-739 **Hi-Flow Gun Standard Repair Kit**
For tip orifices 0.027 in. (0.686 mm) or larger

239-177 **Hi-Flow RAC Gun Repair Kit**

224-949 **Standard Gun Repair Kit**

239-176 **Standard RAC Gun Repair Kit**

238-766 **Ruby Ball-Tipped Fluid Needle**
For use with acid-catalyzed finishes.

Air Whip Hose

238-759 3 ft. (0.92 m)
236-873 6 ft. (1.83 m)

189-018 **Gun Fluid Hose Swivel**
To ease movement of the gun and hose. 1/4–18 npsm.

113-367 **Air Line Quick-Disconnect with Integral Swivel**
Includes:
113-410 Coupling, female, quick-disconnect
113-368 Coupling, male, quick-disconnect

210-500 **In-line Fluid Filter**
Max. working pressure: 5000 psi (350 bar). 100 mesh. Fits with 210-501 filter housing. 1/4–18 npsm.