



Pro Xp™ Auto

Electrostatic Spray Guns That Deliver Expert Performance



PROVEN QUALITY. LEADING TECHNOLOGY.



Built-in Dependability

Stay Running Longer

Durable components give you extra peace of mind knowing that you'll spend less time fixing and more time spraying.

Lower Cost of Ownership

3-Year Warranty, ease of repair and durable components reduce ownership cost.



Made in the USA



Maximize Your Profits

Save Money

Higher transfer efficiency equals less waste – saving you money on material.

Save on Energy Costs

New aircaps use less air and help lower your energy bill.

Product Versatility

More Flexibility

Versatile product line gives you more models to choose from and greater spraying flexibility with air spray, air assist and waterborne guns.

Faster Setup

You'll be spraying parts faster with the easy modular installation. Choice of manifold style allows for system flexibility.

Excellent Finish Quality And Performance

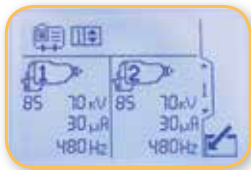
Get the spray performance and transfer efficiency of our manual Pro Xp guns in an automatic version. They're smaller, lighter and designed to maximize your profits. Every automatic Pro Xp gun is tested and delivered with a certificate indicating it meets all of Graco's requirements for spray pattern, mechanical performance and electrical performance so you know you're getting a quality product.

Control Module

The Pro Xp Auto smart gun models connect right to the control module so you can see exactly how your gun is performing 24/7. With our control module, you can easily change the kV setting to optimize spray parameters for less touch up and a better finish quality on your parts.

System flexibility

One control module can be connected to one or two smart guns via a fiber optic cable



Displays spray performance

Know how your gun is performing with one screen that shows kV, current and alternator speed



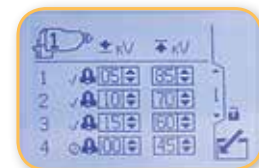
Eliminate maintenance guesswork

Set reminders for servicing key spray components including aircap, alternator and tip or nozzle



Adapt to your voltage needs

Select between 4 profiles to spray at the best kV for your production process



Communicate with your system

I/O connection allows for monitoring the alarm for low kV and changing profiles through a PLC or Switchbox

Versatile product line with an 85 kV power supply and internal power so there's no electrical cord to worry about damaging or replacing. Standard gun models always run at 85 kV power and include an alternator speed indicator to display electrostatic performance. Smart gun models connect to a control module for kV control and displaying gun performance.



Air Spray Guns

Ideal for low pressure, high quality spraying. High Conductivity is also available for spraying lower resistivity materials.

Part Number	kV	Nozzle Size	Standard Model	Smart Model*	Standard Coating	High Conductivity/ High Wear	Bottom Manifold	Rear Manifold
LA1M10	85	1.5 mm (0.055 in)		•	•			•
LA1M16	85	1.5 mm (0.055 in)		•		•		•
LA1T10	85	1.5 mm (0.055 in)	•		•			•
LA1T16	85	1.5 mm (0.055 in)	•			•		•
LA2M10	85	1.5 mm (0.055 in)		•	•		•	
LA2M16	85	1.5 mm (0.055 in)		•		•	•	
LA2T10	85	1.5 mm (0.055 in)	•		•		•	
LA2T16	85	1.5 mm (0.055 in)	•			•	•	

*Smart guns do not include a control module or fiber optic cable. Order items separately.



High Conductivity gun models include a high conductivity fluid tube, high wear nozzle and high wear electrode



Air-Assist Guns

For high pressure spraying designed to improve transfer efficiency and deliver a high quality finish. All gun models include AEM or AEF tip of choice.

Part Number	kV	Standard Model	Smart Model*	Bottom Manifold	Rear Manifold
HA1M10	85		•		•
HA1T10	85	•			•
HA2M10	85		•	•	
HA2T10	85	•		•	

*Smart guns do not include a control module or fiber optic cable. Order items separately.



Waterborne Guns

60 kV guns available in air spray and air assist technologies.*



Pro Xp Auto Waterborne Air-Assist

Use with isolation systems

Part Number	kV	Standard Model	Smart Model**	Rear Manifold
HA1M18	60		•	•
HA1T18	60	•		•

Pro Xp Auto Waterborne Air Spray

Use with isolation systems

Part Number	kV	Nozzle Size	Standard Model	Smart Model**	Rear Manifold
LA1M18	60	1.5 mm (0.055 in)		•	•
LA1T18	60	1.5 mm (0.055 in)	•		•



Pro Xs Auto Waterborne Air Spray

External charge waterborne gun allows for spraying without an isolation system. Ideal for circulation systems!

Part Number	Description
24A206	Pro Xs External Charge Gun

*25 ft and 50 ft fluid hose sold separately.

**Smart guns do not include a control module or fiber optic cable. Order items separately.

Manifolds

Manifold styles fit almost any system requirement

All hoses and fiber optic cables are connected through a manifold. Gun can be easily removed without disconnecting the hoses from the manifold. Makes gun maintenance easy!

Back manifold

Ideal for stationary and reciprocator systems.

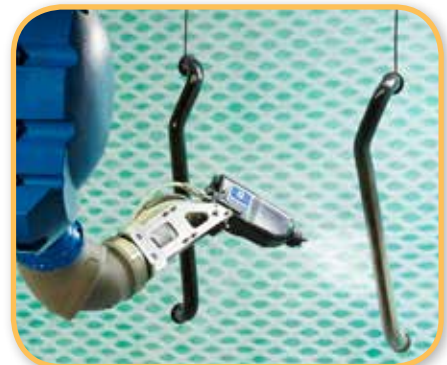


Can also be mounted directly on a 1/2 inch (13 mm) rod.



Bottom manifold

Ideal for robot mounting



Accessories

Pro Xp Auto Electrostatic Guns

Air-Assist Guns

AEM Spray Tips

Recommended for high finish quality applications at low and medium pressures.

Order desired tip, Part No. AEMxxx, where xxx = 3-digit number from the matrix below.

Orifice Size inch (mm)	Fluid Output fl oz/min (l/min)		Maximum Pattern Width at 12 inches (305 mm) inches (mm)							
	at 600 psi (41 bar, 4.1 MPa)	at 1000 psi (70 bar, 7.0 MPa)	2-4 (50-100)	4-6 (100-150)	6-8 (150-200)	8-10 (200-250)	10-12 (250-300)	12-14 (300-350)	14-16 (350-400)	16-18 (400-450)
			Spray Tip							
0.007 (0.178)	4.0 (0.1)	5.2 (0.15)	107	207	307	–	–	–	–	–
0.009 (0.229)	7.0 (0.2)	9.1 (0.27)	–	209	309	409	509	609	–	–
0.011 (0.279)	10.0 (0.3)	13.0 (0.4)	–	211	311	411	511	611	711	–
0.013 (0.330)	13.0 (0.4)	16.9 (0.5)	–	213	313	413	513	613	713	813
0.015 (0.381)	17.0 (0.5)	22.0 (0.7)	–	215	315	415	515	615	715	815
0.017 (0.432)	22.0 (0.7)	28.5 (0.85)	–	217	317	417	517	617	717	–
0.019 (0.483)	28.0 (0.8)	36.3 (1.09)	–	–	319	419	519	619	719	–
0.021 (0.533)	35.0 (1.0)	45.4 (1.36)	–	–	–	421	521	621	721	821
0.023 (0.584)	40.0 (1.2)	51.9 (1.56)	–	–	–	423	523	623	723	823
0.025 (0.635)	50.0 (1.5)	64.8 (1.94)	–	–	–	425	525	625	725	825
0.029 (0.736)	68.0 (1.9)	88.2 (2.65)	–	–	–	–	–	–	–	829
0.031 (0.787)	78.0 (2.2)	101.1 (3.03)	–	–	–	431	–	631	–	831
0.033 (0.838)	88.0 (2.5)	114.1 (3.42)	–	–	–	–	–	–	–	833
0.037 (0.939)	108.0 (3.1)	140.0 (4.20)	–	–	–	–	–	–	737	–
0.039 (0.990)	118.0 (3.4)	153.0 (4.59)	–	–	–	–	539	–	–	–

* Tips are tested in water.

Fluid output (Q) at other pressures (P) can be calculated by this formula: $Q = (0.041) (QT) \sqrt{P}$ where QT = fluid output (fl oz/min) at 600 psi from the above table for the selected orifice size.

AEF Fine Finish Pre-Orifice Spray Tips

Recommended for high finish quality applications at low and medium pressures. AEF tips have a pre-orifice that assists in atomizing shear thinning materials.

Order desired tip, Part No. AEFxxx, where xxx = 3-digit number from the matrix below.

Orifice Size inch (mm)	Fluid Output fl oz/min (l/min)		Maximum Pattern Width at 12 inches (305 mm) inches (mm)					
	at 600 psi (41 bar, 4.1 MPa)	at 1000 psi (70 bar, 7.0 MPa)	6-8 (150-200)	8-10 (200-250)	10-12 (250-300)	12-14 (300-350)	14-16 (350-400)	16-18 (400-450)
			Spray Tip					
0.008 (0.203)	8.5 (0.25)	11.0 (0.32)	–	–	–	608	–	–
0.010 (0.254)	9.5 (0.28)	12.5 (0.37)	310	410	510	610	710	–
0.012 (0.305)	12.0 (0.35)	16.0 (0.47)	312	412	512	612	712	812
0.014 (0.356)	16.0 (0.47)	21.0 (0.62)	314	414	514	614	714	814
0.016 (0.406)	20.0 (0.59)	26.5 (0.78)	–	416	516	616	716	–

* Tips are tested in water.

Fluid output (Q) at other pressures (P) can be calculated by this formula: $Q = (0.041) (QT) \sqrt{P}$ where QT = fluid output (fl oz/min) at 600 psi from the above table for the selected orifice size.

Approvals for Pro Xp Guns**



EEx 0.24 mJ T6
FM14ATEX0081
EN 50050
Ta 0°C-50°C

**Patent pending

Control Module

Control Module

Connects to the Smart Gun with a fiber optic cable.

Part Number	Description
24W035	Control module includes a power supply and hardware wall mount. Not for use in hazardous locations

I/O Cables

Connects control module to a PLC or switchbox.

Part Number	Description
24W881	50 ft. (15m) I/O cable
24W882	100 ft. (30.5m) I/O cable

Fiber Optic Cables

Connects Smart Gun to the control module.

Part Number	Description
Gun Models with Rear Manifolds (Model numbers LA1xxx or HA1xxx)	
24X003	25 ft (7.6 m) Fiber Optic Cable
24X004	50 ft (15 m) Fiber Optic Cable
24X005	100 ft (30.5 m) Fiber Optic Cable
Gun Models with Bottom Manifolds (Model numbers LA2xxx or HA2xxx)	
24X006	25 ft (7.6 m) Fiber Optic Cable
24X007	50 ft (15 m) Fiber Optic Cable
24X008	100 ft (30.5 m) Fiber Optic Cable
Fiber Optic Cable Repair Kit*	
24W875	Kit to repair damaged ends on one cable assembly

*For additional fiber optic cable kits, see control module manual form #332989

Air Spray Guns

Aircap Selection Chart

Part Number (color)	Pattern Shape	Length in (cm)	Recommended Fluid Viscosity cp at 70°F (21°C)	Recommended Production Rates
24N477 (black)	Round end	15-17 (381-432)	Light to medium (20–70 cp)	Up to 15 oz/min (450 cc/min)
24N438 (black)	Round end	15-17 (381-432)	Light to medium (20–70 cp)	Up to 15 oz/min (450 cc/min)
24N279 (black)	Round end	14-16 (356-406)	Medium to heavy (70–260 cp), and high solids (360+cp)	Up to 15 oz/min (450 cc/min)
24N376 (black), 24N276 (blue) 24N277 (red), 24N278 (green)	Tapered end	17-19 (432- 483)	Light to medium (20–70 cp)	Up to 15 oz/min (450 cc/min)
24N274 (black)	Tapered end	12-14 (305-356)	Light to medium (20–70 cp)	Up to 15 oz/min (450 cc/min)
24N275 (black)	Tapered end	14-16 (356-406)	Light to medium (20–70 cp), and high solids (360+cp), aerospace coatings	Up to 25 oz/min (750 cc/min)
24N439 (black)	Tapered end	11–13 (279–330)	For use with 2.0 mm nozzles. Medium to heavy (70–260 cp), and high solids (360+cp)	Up to 20 oz/min (600 cc/min)
24N453 (black)	Round end	14-16 (356-406)	Light to medium (20-70 cp)	Up to 15 oz/min (450 cc/min)

- Distance to target: 10 in (254 mm)
- Inlet air pressure: 50 psi (3.4 bar, 34 kPa)
- Fan air: adjusted for maximum width
- Fluid flow rate: 10 oz/min (300 cc/min)

Nozzle Selection Chart

Fluid Nozzle for Standard Materials

Part Number	Color	Orifice Size - mm (inch)
24N619	Black	0.55 (0.022)
24N613	Black	0.75 (0.029)
24N614	Black	1.0 (0.042)
24N615	Black	1.2 (0.047)
24N616	Black	1.5 (0.055)
24N617	Black	1.8 (0.070)
24N618	Black	2.0 (0.080)

High Wear Fluid Nozzle for Abrasive Materials

Part Number	Color	Orifice Size - mm (inch)
24N620	Blue	0.75 (0.029)
24N621	Blue	1.0 (0.042)
24N622	Blue	1.2 (0.047)
24N623	Blue	1.5 (0.055)
24N624	Blue	1.8 (0.070)
24N625	Blue	2.0 (0.080)

Accessories

Grounded Air Hoses (required for use)

Length	Air Flex™	Air Flex with QD	Standard	Waterborne* (for isolation systems)
6 ft (1.8 m)	244963	–	223068	235068
15 ft (4.6 m)	244964	–	223069	235069
25 ft (7.6 m)	244965	24N736	223070	235070
36 ft (11 m)	244966	24N737	223071	235071
50 ft (15 m)	244967	24N738	223072	235072
75 ft (23 m)	244968	–	223073	235073
100 ft (30.5 m)	244969	–	223074	235074

Air Flex: EPDM rubber core and cover for extra flexibility

Air Flex with QD: Hose includes Quick Disconnect coupling, part number 112534

Standard: Modified semi-conductive polyamide core, urethane cover for added durability

*Waterborne: Conductive SST wire braid for grounding. Polyurethane tube and cover.

Gun Accessories

Part Number	Description
24V929	Gun Covers. Box of 10.
24N318	Round Spray Kit. To convert a standard air spray gun to a round spray aircap.
24N319	Round Spray Kit. To convert a standard air-assist spray gun to a round spray aircap.
24N704	Electrode Replacement Needle for abrasive materials. Blue.
112534	Air quick disconnect coupling

Technical Specifications

by Gun Model

	Pro Xp Auto Air Spray Gun	Pro Xp Auto Air Assist Spray Gun
Maximum Fluid Working Pressure	100 psi (7 bar, 0.7 MPa)	3000 psi (210 bar, 21 MPa)
Maximum Working Air Pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum Fluid Operating Temperature	120°F (48°C)	120°F (48°C)
Paint Resistivity Range Standard	25 megohm/cm to infinity	3 megohm/cm to infinity
Paint Resistivity Range High Conductivity	3 megohm/cm to infinity	
Short Circuit Current Output	125 microamperes	125 microamperes
Gun Weight (approx. depending on gun model)	2.6 lb (1.2 kg)	2.7 lb (1.2 kg)
Gun Length	10.6 in (27 cm)	11.0 in (28 cm)
Voltage Output		
Standard Models	85 kV	85 kV
Smart Models	40-85 kV	40-85 kV
Waterborne Standard Models	60 kV	60 kV
Waterborne Smart Models	30-60 kV	30-60 kV
Inlet/Outlet Sizes		
Turbine Air Inlet Fitting, Left-Hand Thread	1/4 npsm(m)	1/4 npsm(m)
Atomizing Air Inlet Fitting	5/16 in OD nylon tube (8mm)	5/16 in OD nylon tube (8mm)
Fan Air Inlet Fitting	5/16 in OD nylon tube (8mm)	5/16 in OD nylon tube (8mm)
Cylinder Air Inlet Fitting	5/32 in OD nylon tube (4mm)	5/32 in OD nylon tube (4mm)
Fluid Inlet Fitting	1/4-18 npsm(m)	1/4-18 npsm(m)
Instruction Manuals		
Standard	333010	333011
Waterborne	333012	333013
Control Module	332989	332989

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Call today for product information or to request a demonstration.
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