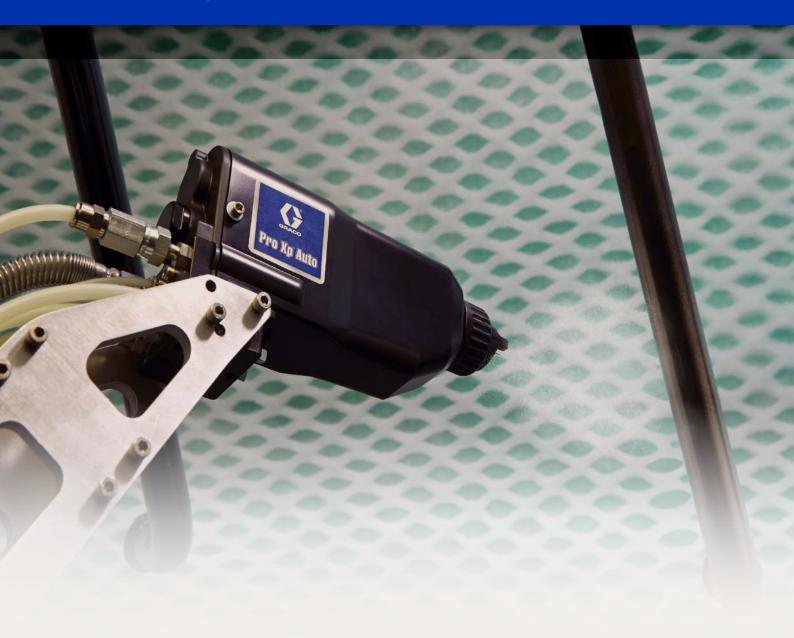


# **Pro Xp™ Auto**

**Electrostatic Spray Guns That Deliver Expert Performance** 



# Choose Pro Xp



## 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**

Ease of repair and durable components reduce ownership cost.

## Maximise Your Profits

#### **Save Money**

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

#### **Save on Energy Costs**

New air caps 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 Set-up**

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

## Stand Out Above the Rest

#### **Excellent Finish Quality & 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 maximise 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 fibre optic cable



#### Eliminate maintenance guesswork

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



#### Communicate with your system

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

#### Displays spray performance

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



#### Adapt to your voltage needs

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

## **Manifolds**

#### Manifold styles fit almost any system requirement

All hoses and fibre 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 13 mm (1/2 inch) rod.



#### **Bottom manifold**

Ideal for robot mounting





## Pro Xp Auto Electrostatic Guns

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)	•			•	•	

<sup>\*</sup>Smart guns do not include a control module or fibre 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		Standard	Smart	Bottom	Rear
Number	kV	Model	Model*	Manifold	Manifold
HA1M10	85		•		•
HA1T10	85	•			•
HA2M10	85		•	•	
HA2T10	85	•		•	

 $<sup>{}^{\</sup>star}\text{Smart guns do not include a control module or fibre optic cable. Order items separately.}$ 



#### 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 Xp Auto Waterborne Air Spray

External charge waterborne gun allows for spraying without an isolation system. Ideal for circulation systems! All models have a 1.5mm nozzle.

Part Number	kV	Display	Manifold Mount
LA1T28	60	Standard	Rear
LA2T28	60	Standard	Bottom
LA1M28	60	Smart	Rear
LA2M28	60	Smart	Bottom

# **Technical Specifications**

		Pro Xp Auto Air Spray Gun	Pro Xp Auto Air Assist Spray Gun
Maximum Fluid Working Pressure		7 bar (0.7 MPa - 100 psi)	210 bar (21 MPa - 3000 psi)
Maximum Working Air Pre	essure	7 bar (0.7 MPa - 100 psi)	7 bar (0.7 MPa - 100 psi)
Maximum Fluid Operating	Temperature	48°C (120°F)	48°C (120°F)
Paint Resistivity Range St	andard	25 megohm/cm to infinity	3 megohm/cm to infinity
Paint Resistivity Range Hi	gh Conductivity	3 megohm/cm to infinity	
Short Circuit Current Outp	ut	125 microamperes	125 microamperes
Gun Weight (approx. depe	ending on gun model)	1.2 kg (2.6 lb)	1.2 kg (2.6 lb)
Gun Length		27 cm (10.6 in)	28 cm (11.0 in)
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)
	Atomising 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

<sup>\* 7.5</sup> m (25 ft) and 15 m (50 ft) fluid hose sold separately.
\*\* Smart guns do not include a control module or fibre optic cable. Order items separately.

## 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.

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

<sup>\*</sup> 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 41 bar (4.1 MPa - 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 atomising sheer thinning materials. Order desired tip, Part No. AEFxxx, where xxx = 3-digit number from the matrix below.

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

<sup>\*</sup> 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 41 bar (4.1 MPa - 600 psi) from the above table for the selected orifice size.

† These tip sizes include a 150 mesh filter.

#### APPROVALS FOR PRO XP GUNS\*\*







<sup>†</sup> These tip sizes include a 150 mesh filter.

#### **Control module**

#### **CONTROL MODULE**

Connects to the Smart Gun with a fibre optic cable.

Part Number	Description
	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	15 M (50 ft) I/O cable
24W882	30 M (100 ft) I/O cable

#### **FIBRE OPTIC CABLES**

Connects Smart Gun to the control module.

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

<sup>\*</sup>For additional fibre optic cable kits, see control module manual form #332989

#### **Air Spray Guns**

#### AIR CAP SELECTION CHART

Part Number (colour)	Pattern Shape	Length cm (in)	Recommended Fluid Viscosity cp at 21°C (70°F)	Recommended Production Rates
24N477 (black)	Round end	381-432 (15-17)	Light to medium (20–70 cp)	Up to 450 cc/min (15 oz/min)
24N438 (black)	Round end	381-432 (15-17)	Light to medium (20–70 cp)	Up to 450 cc/min (15 oz/min)
24N279 (black)	Round end	356-406 (14-16)	Medium to heavy (70–260 cp), and high solids (360+cp)	Up to 450 cc/min (15 oz/min)
24N376 (black), 24N276 (blue) 24N277 (red), 24N278 (green)	Tapered end	432- 483 (17-19)	Light to medium (20–70 cp)	Up to 450 cc/min (15 oz/min)
24N274 (black)	Tapered end	305-356 (12-14)	Light to medium (20–70 cp)	Up to 450 cc/min (15 oz/min)
24N275 (black)	Tapered end	356-406 (14-16)	Light to medium (20–70 cp), and high solids (360+cp), aerospace coatings	Up to 750 cc/min (25 oz/min)
24N439 (black)	Tapered end	279–330 (11–13)	For use with 2.0 mm nozzles. Medium to heavy (70–260 cp), and high solids (360+cp)	Up to 600 cc/min (20 oz/min)
25E670 (black), soft spray	Round end	11-13 (279-330)	Light to medium (20-70 cp)	Up to 8 oz/min (237 cc/min)
25E671 (black), HVLP	Round end	11-13 (279-330)	Light to medium (20-70 cp)	Up to 15 oz/min (450 cc/min)

Distance to target: 254 mm (10 in)

#### **NOZZLE SELECTION CHART**

#### Fluid Nozzle for Standard Materials

Part Number	Colour	Orifice Size - mm (inch)
24N619	Black	0.022 (0.55)
24N613	Black	0.029 (0.75)
25N895	Green	0.042 (1.0)
25N896	Gray	0.047 (1.2)
24N616	Black	0.055 (1.5)
25N897	Brown	0.070 (1.8)
24N618	Black	0.080 (2.0)

#### High Wear Fluid Nozzle for Abrasive Materials

Part Number	Colour	Orifice Size - mm (inch)
24N620	Blue	0.029 (0.75)
24N621	Blue	0.042 (1.0)
24N622	Blue	0.047 (1.2)
24N623	Blue	0.055 (1.5)
24N624	Blue	0.070 (1.8)
24N625	Blue	0.080 (2.0)
24N831	Green	0.042 (1.0)
24N832	Gray	0.047 (1.2)
24N833	Black	0.055 (1.5)
24N834	Brown	0.070 (1.8)

#### **Accessories**

#### **GROUNDED AIR HOSES (REQUIRED FOR USE)**

Length	Air Flex™	Air Flex with QD	Standard	Waterborne* (for isolation systems)
1.8 m (6 ft)	244963	-	223068	235068
4.6 m (15 ft)	244964	-	223069	235069
7.6 m (25 ft)	244965	24N736	223070	235070
11 m (36 ft)	244966	24N737	223071	235071
15 m (50 ft)	244967	24N738	223072	235072
23 m (75 ft)	244968	-	223073	235073
30.5 m (100 ft)	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.
24N319	Round Spray Kit. To convert a standard air-assist spray gun to a round spray air cap.
24X794	Large Pattern round spray kit. To convert a standard air spray gun to a round spray aircap.
25N837	Medium Pattern round spray kit. To convert a standard air spray gun to a round spray aircap.
25N836	Small Pattern round spray kit. To convert a standard air spray gun to a round spray aircap.
24N704	Electrode Replacement Needle for abrasive materials. Blue.
25N857	Tungsten Electrode replacement needle. Brown
112534	Air quick disconnect coupling

<sup>•</sup> Inlet air pressure: 3.4 bar (34 kPa, 50 psi)

Fan air: adjusted for maximum width

Fluid flow rate: 300 cc/min (10 oz/min)



#### **ABOUT GRACO**

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

#### **GRACO LOCATIONS**

MAILING ADDRESS
P.O. Box 1441
Minneapolis, MN 55440-1441
Tel: 612-623-6000
Fax: 612-623-6777

#### **AMERICAS**

MINNESOTA
Worldwide Headquarters
Graco Inc.
88-11th Avenue N.E.
Minneapolis, MN 55413

#### **EUROPE**

**BELGIUM** 

European Headquarters Graco Distribution BVBA Industrieterrein-Oude Bunders Slakweidestraat 31 3630 Maasmechelen Belgium

Tel: 32 89 770 700 Fax: 32 89 770 777

#### **ASIA PACIFIC**

**AUSTRALIA** 

Graco Australia Pty Ltd. Suite 17, 2 Enterprise Drive Bundoora, Victoria 3083 Australia Tel: 61 3 9468 8500 Fax: 61 3 9468 8599

**CHINA** 

Graco Hong Kong Ltd.
Shanghai Representative Office
Building 7
1029 Zhongshan Road South
Huangpu District
Shanghai 200011
The People's Republic of China
Tel: 86 21 649 50088
Fax: 86 21 649 50077

INDIA

Graco Hong Kong Ltd.
India Liaison Office
Room 432, Augusta Point
Regus Business Centre 53
Golf Course Road
Gurgaon, Haryana
India 122001
Tel: 91 124 435 4208
Fax: 91 124 435 4001

*JAPAN* Gra<u>co K.K.</u>

1-27-12 Hayabuchi Tsuzuki-ku Yokohama City, Japan 2240025 Tel: 81 45 593 7300 Fax: 81 45 593 7301

KOREA

Graco Korea Inc.
38, Samsung 1-ro 1-gil
Hwaseong-si, Gyeonggi-do,
18449
Republic of Korea
Tel: 82 31 8015 0961
Fax: 82 31 613 9801

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Europe +32 89 770 700 FAX +32 89 770 777 WWW.GRACO.COM