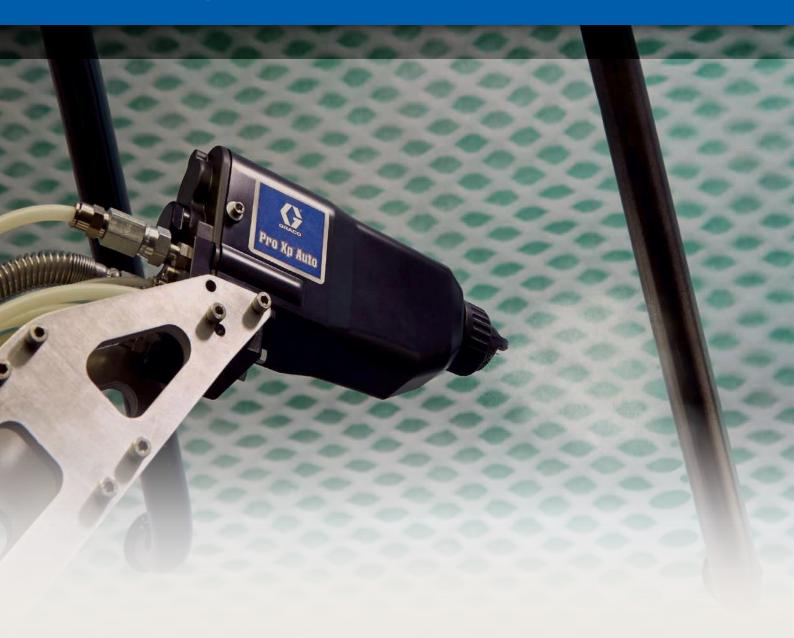


# **Pro Xp™ Auto**

**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.

# Maximize 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 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



### 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 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 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.

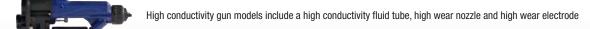
### **Air Spray Guns**

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



| Part<br>Number | kV | Nozzle Size       | Standard<br>Model | Smart<br>Model* | Standard<br>Coating | High<br>Conductivity/<br>High Wear | Bottom<br>Manifold | Rear<br>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 fiber optic cable. Order items separately.



# 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 | •        |        | •        |          |

 $<sup>\</sup>hbox{*Smart guns do not include a control module or fiber optic cable. Order items separately.}$ 



### Pro Xp Auto Waterborne Air-Assist

Use with isolation systems

| Part<br>Number | kV | Standard<br>Model | Smart<br>Model** | Rear<br>Manifold |
|----------------|----|-------------------|------------------|------------------|
| HA1M18         | 60 |                   | •                | •                |
| HA1T18         | 60 | •                 |                  | •                |



### Pro Xp Auto Waterborne Air Spray

Use with isolation systems

| Part<br>Number | kV | Nozzle Size       | Standard<br>Model | Smart<br>Model** | Rear<br>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 spraying without an isolation system. Ideal for circulation systems!

| Part<br>Number | Description                |
|----------------|----------------------------|
|                | Pro Xs External Charge Gun |

# **Technical Specifications**

|                              |   | Pro Xp Auto Air Spray Gun   | Pro Xp Auto Air Assist Spray Gun |
|------------------------------|---|-----------------------------|----------------------------------|
| Maximum Fluid Working P      | ressure                                     | 7 bar (0.7 MPa - 100 psi)   | 210 bar (21 MPa - 3000 psi)      |
| Maximum Working Air Pressure |   | 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 Sta  | andard                                      | 25 megohm/cm to infinity    | 3 megohm/cm to infinity          |
| Paint Resistivity Range Hig  | h Conductivity                              | 3 megohm/cm to infinity     |                                  |
| Short Circuit Current Outp   | ut  | 125 microamperes            | 125 microamperes                 |
| Gun Weight (approx. depe     | nding 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)                      |
|                              | 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                           |

<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 fiber optic cable. Order items separately.

# Accessories Pro Xp Auto Electrostatic Guns

### **Air Spray 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 (<br>fl I/min     | Output<br>(oz/min)      | Maximum Pattern Width at 305 mm (12 inches) mm (inches) |                  |                  |                   |                    |                    |                    |                    |
|---------------------------|-------------------------|-------------------------|---|------------------|------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Orifice Size<br>mm (inch) | at 41 bar<br>(4.1 MPa - | at 70 bar<br>(7.0 MPa - | 50-100<br>(2-4)   | 100-150<br>(4-6) | 150-200<br>(6-8) | 200-250<br>(8-10) | 250-300<br>(10-12) | 300-350<br>(12-14) | 350-400<br>(14-16) | 400-450<br>(16-18) |
|                           | 600 psi)                | 1000 psi)               |   |                  |                  | Spra              | у Тір              |                    |                    |                    |
| † 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.

† These tip sizes include a 150 mesh filter.

### **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 sheer thinning materials. Order desired tip, Part No. AEFxxx, where xxx = 3-digit number from the matrix below.

|                           | Fluid Output<br>fl I/min (oz/min) |                         | Maximum Pattern Width at 305 mm (12 inches)<br>mm (inches) |                   |                    |                    |                    |                    |  |
|---------------------------|-----------------------------------|-------------------------|--|-------------------|--------------------|--------------------|--------------------|--------------------|--|
| Orifice Size<br>mm (inch) | at 41 bar<br>(4.1 MPa -           | at 70 bar<br>(7.0 MPa - | 150-200 (6-8)  | 200-250<br>(8-10) | 250-300<br>(10-12) | 300-350<br>(12-14) | 350-400<br>(14-16) | 400-450<br>(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\*\*







### **Control module**

### **CONTROL MODULE**

Connects to the Smart Gun with a fiber 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      | 15m (50 ft) I/O cable    |
| 24W882      | 30.5m (100 ft) I/O cable |

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

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

### **Air Spray Guns**

### AIR CAP SELECTION CHART

| Part Number (colour)  | Pattern Shape | Length<br>cm (in) | Recommended Fluid Viscosity cp at 21°C (70°F)  | Recommended<br>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),<br>and high solids (360+cp)                                 | Up to 450 cc/min (15 oz/min)    |
| 24N376 (black), 24N276 (blue)<br>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.<br>Medium to heavy (70–260 cp), and<br>high solids (360+cp) | Up to 600 cc/min (20 oz/min)    |
| 24N453 (black)  | Round end     | 356-406 (14-16)   | Light to medium (20-70 cp)   | Up to 450 cc/min (15 oz/min)    |

<sup>•</sup> 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)             |
| 24N614      | Black  | 0.042 (1.0)              |
| 24N615      | Black  | 0.047 (1.2)              |
| 24N616      | Black  | 0.055 (1.5)              |
| 24N617      | Black  | 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)              |

### **Accessories**

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

| Length          | Air Flex™ | Air Flex<br>with QD | Standard | Waterborne*<br>(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                                 |

### **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 air cap.        |
| 24N319      | Round Spray Kit. To convert a standard air-assist spray gun to a round spray air cap. |
| 24N704      | Electrode Replacement Needle for abrasive materials. Blue.                            |
| 112534      | Air quick disconnect coupling   |

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

<sup>•</sup> Fan air: adjusted for maximum width

<sup>•</sup> 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.

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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.

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