



ELECTROSTATIC WATERBORNE SOLUTIONS

Proven Reliability and Ease of Use for
Spraying Waterborne Material



PROVEN QUALITY. LEADING TECHNOLOGY.

GRACO OFFERS SOLUTIONS

Graco offers solutions for spraying waterborne coatings with electrostatic applicators. Superior transfer efficiency, reduced manufacturing costs and positive environmental impact.



WB100™ & WB3000™ ISOLATION SYSTEMS

The dependable way to isolate waterborne coatings.
Ideal for electrostatic spray booths.



Reliably isolate and spray waterborne coatings at 7 or 210 bar (100 or 3000 psi).



WB3000 with a Merkur® ES 30:1 Air Assist Pump

Use for high pressure spraying with waterborne electrostatic air-assist gun

N°	TITEL	DESCRIPTION
1	Standard Voltage Display	Easily monitor voltage for overall performance
2	WB100 with Triton™ 1:1 Pump	Use for low pressure spraying with waterborne electrostatic air spray gun
3	Material Supply Container	Easily remove and refill 19 liter (5 gallon) container
4	Portable Cabinet	Move to various applications
5	Pro Xp WB Electrostatic Gun	Standard and smart models provide excellent material savings, outstanding ergonomics and superior finish quality.

TECHNICAL SPECIFICATIONS

WB100	
Maximum Fluid Working Pressure	7.0 bar (0.7 MPa, 100 psi)
Maximum Air Working Pressure	7.0 bar (0.7 MPa, 100 psi)
Minimum Air Pressure at Gun Inlet	3.2 bar (0.32 MPa, 45 psi)
Maximum System Inlet Air Pressure	7.0 bar (0.7 MPa, 100 psi)
WB System Air Consumption	425-565 l/min (15-20 scfm)
Short Circuit Current Output	125 microamperes
Voltage Output	0.35 J with fluid hose 24M733 installed with Pro Xp WB gun 60 kV
Isolation Enclosure Air Inlet Fitting	1/4 npt
Triton Pump	Manual 309303
Manual	3A2496

WB3000	
Maximum Fluid Working Pressure	210 bar (21 MPa, 3000 psi)
Maximum Air Working Pressure	7.0 bar (0.7 MPa, 100 psi)
Minimum Air Pressure at Gun Inlet	3.2 bar (0.32 MPa, 45 psi)
Maximum System Inlet Air Pressure	7.0 bar (0.7 MPa, 100 psi)
WB System Air Consumption	220–400 l/min (7.5–14 scfm)
Short Circuit Current Output	125 microamperes
Voltage Output	0.35 J with fluid hose 24M733 installed with Pro Xp WB gun 60 kV
Isolation Enclosure Air Inlet Fitting	1/4 npt
Merkur Pump	Manual 3A0732
Manual	3A2497

ORDERING INFORMATION

WB100	
Part Number	Description
24N580	Waterborne isolation enclosure with standard electrostatic air spray gun L60T18, grounded air hose 235070 and waterborne fluid hose 24M732.
24P629	Waterborne isolation enclosure with smart electrostatic air spray gun L60M18, grounded air hose 235070 and waterborne fluid hose 24M732.
24P734	Waterborne isolation enclosure with mold release smart electrostatic gun L60M19, grounded air hose 235070 and waterborne fluid hose 24M732.

WB3000	
Part Number	Description
24N551	Waterborne isolation enclosure with standard electrostatic air-assist gun H60T18, grounded air hose 235070 and waterborne fluid hose 24M508.
24P632	Waterborne isolation enclosure with smart electrostatic air spray gun H60M18, grounded air hose 235070 and waterborne fluid hose 24M508.

PRO XP™ WATERBORNE (WB) GUNS

Electrostatically spray waterborne materials with isolation systems

Alternator Speed Indicator

Changes colour with electrostatic performance

Control Knobs

Access and adjust easily

Atomizing Air Control

Adjust from full to minimal to fit spraying needs

Ergonomic Handle

Fits nicely in your hand for comfortable spraying



Internal Power Supply

Improve operator mobility with no heavy cords to slow down spraying

Light Trigger Pull

Reduces muscle strain and operator fatigue

Smart Controls



Available for all waterborne models

- > kV, current and hertz
- > Easy, low kV setting
- > Digital diagnostic mode for troubleshooting

TECHNICAL SPECIFICATIONS

	Pro Xp60	Pro Xp60 AA
Maximum Voltage Output	60 kV	60 kV
Maximum Working Fluid Pressure	7.0 bar (0.7 MPa, 100 psi)	210 bar (21 MPa, 3000 psi)
Maximum Working Air Pressure	7.0 bar (0.7 MPa, 100 psi)	7.0 bar (0.7 MPa, 100 psi)
Gun Weight (without hose)*	600 g (21 oz)	660 g (23 oz)
Gun Length	24 cm (9.5 in)	24,5 cm (9.7 in)
Recommended paint resistivity range	≤ 1 MΩ/cm	≤ 1 MΩ/cm
Fluid Inlet	3/8 npsm(m)	1/4-18 npsm(m)
Air Inlet	1/4 npsm(m) left hand thread	1/4 npsm(m) left hand thread
Manual	3A2496	3A2497

*Standard gun model. For other models reference the instruction manual.

High transfer efficiency for low or high pressure applications

PRO XP WB MODELS FOR HYDROSHIELD AND WB ISOLATION SYSTEMS

Air Spray Gun



- For low pressure spraying
- > Delivers high quality finish
- > Sprays with various aircaps and nozzle

Air-Assist Gun



- For high pressure spraying
- > Delivers a fine finish
- > Sprays with AEF or AEM tip

Mold Release Gun



- For low pressure spraying with an air assist spray tip
- > Delivers fine atomized particles needed for mold release applications
- > Sprays with an AEM or AEF spray tip

ORDERING INFORMATION



Pro Xp WB Air Spray

Part Number	Item	Description
L60T18	Pro Xp60 WB	Standard electrostatic air spray gun for waterborne coatings.
L60M18	Pro Xp60 WB	Smart electrostatic air spray gun for waterborne coatings.
L60M19	Pro Xp60 MR	Smart electrostatic air spray gun for waterborne mold release coating applications. Requires an AEM or AEF spray tip for operation.

Aircap Selection Chart

Part Number (color)	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)
24W279 (green)	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)
24N376 (black), 24N276 (blue) 24N277 (red), 24N278 (green)	Tapered end	17-19 (432- 483)	Light to medium (20-70 cp)	Up to 450 cc/min (15 oz/min)
24N274 (black)	Tapered end	12-14 (305-356)	Light to medium (20-70 cp)	Up to 450 cc/min (15 oz/min)

- > Distance to target: 254 mm (10 in)
- > 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)

Nozzles Selection Chart

Color Coded Fluid Nozzle for Standard Materials

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

Precision high wear nozzles (PHW) for Abrasive Materials

hardened SST seat and damage resistant SST tip; for standard coatings, abrasives, and metallics

Part Number	Color	Orifice Size - mm (inch)
25N831	Green	1.0 (0.042)
25N832	Gray	1.2 (0.047)
25N833	Black	1.5 (0.055)
25N834	Brown	1.8 (0.070)

For a complete list of parts and accessories, refer to the Pro Xp Waterborne Manual 3A2496.



Pro Xp WB Air Assist

Part Number	Item	Description
H60T18	Pro Xp60 AA WB	Standard electrostatic air-assist gun for waterborne coatings.
H60M18	Pro Xp60 AA WB	Smart electrostatic air-assist gun for waterborne coatings.

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.

Orifice Size mm (inch)	Fluid Output – l/min (fl oz/min)		Maximum Pattern Width at 305 mm (12 inches) – mm (inch)					
	at 41 bar (4.1 MPa, 600 psi)	at 70 bar (7.0 MPa, 1000 psi)	150-200 (6-8)	200-250 (8-10)	250-300 (10-12)	300-350 (12-14)	350-400 (14-16)	400-450 (16-18)
0.203 (0.008)	0.25 (8.5)	0.32 (11.0)	Spray Tip 608					
0.254 (0.010)	0.28 (9.5)	0.37 (12.5)	310	410	510	610	710	810
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	-

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 mm (inch)	Fluid Output – l/min (fl oz/min)		Maximum Pattern Width at 305 mm (12 inches) – mm (inch)							
	at 41 bar (4.1 MPa, 600 psi)	at 70 bar (7.0 MPa, 1000 psi)	50-100 (2-4)	100-150 (4-6)	150-200 (6-8)	200-250 (8-10)	250-300 (10-12)	300-350 (12-14)	350-400 (14-16)	400-450 (16-18)
0.178 (0.007)	4.0 (0.1)	5.2 (0.15)	107	207	307	-	-	-	-	-
0.229 (0.009)	7.0 (0.2)	9.1 (0.27)	-	209	309	409	509	609	-	-
0.279 (0.011)	10.0 (0.3)	13.0 (0.4)	-	211	311	411	511	611	711	-
0.330 (0.013)	13.0 (0.4)	16.9 (0.5)	-	213	313	413	513	613	173	813
0.381 (0.015)	17.0 (0.5)	22.0 (0.7)	-	215	315	415	515	615	715	815
0.432 (0.017)	22.0 (0.7)	28.5 (0.85)	-	217	317	417	517	617	717	-
0.483 (0.019)	28.0 (0.8)	36.3 (1.09)	-	-	319	419	519	619	719	-
0.533 (0.021)	35.0 (1.0)	45.4 (1.36)	-	-	-	421	521	621	721	821
0.584 (0.023)	40.0 (1.2)	51.9 (1.56)	-	-	-	423	523	623	723	823
0.635 (0.025)	50.0 (1.5)	64.8 (1.94)	-	-	-	425	525	625	725	825
0.736 (0.029)	68.0 (1.9)	88.2 (2.65)	-	-	-	-	-	-	-	829
0.787 (0.031)	78.0 (2.2)	101.1 (3.03)	-	-	-	431	-	631	-	831
0.838 (0.033)	88.0 (2.5)	114.1 (3.42)	-	-	-	-	-	-	-	833812
0.939 (0.037)	108.0 (3.1)	140.0 (4.20)	-	-	-	-	-	-	737	-
0.990 (0.039)	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.

PRO XP™ WBX EXTERNAL CHARGE WATERBORNE AIR SPRAY GUN

Reduce material and environmental costs without extra equipment. Waterborne material stays grounded and is charged at tip of the gun with a probe, delivering a consistent, high quality finish.

NO TOOL PROBE REMOVAL
Turn 180° to remove



External Charging Probes
Designed for quick release and easy cleaning



Two Probe Options for Different Needs

- > Long probe provides the best transfer efficiency and wrap
- > Short probe provides electrostatic charging in tight spaces

Increased Operator Comfort

- > Lightweight, compact design with ergonomic handle makes all-day spraying comfortable

Optimized for Waterborne Paints

- > Superior finish quality
- > Designed so air caps stay clean longer

Improved Operator Control

- > Smart gun eliminates guesswork
- > Control knobs make spraying adjustments easy

TECHNICAL SPECIFICATIONS & ORDER INFORMATION

Technical Specifications	Pro Xp 40 kV WBx Gun Models
Maximum Voltage Output	40 kV
Maximum Working Fluid Pressure	7.0 bar (0.7 MPa, 100 psi)
Maximum Working Air Pressure	7.0 bar (0.7 MPa, 100 psi)
Gun Weight (without hose)*	560 g (19.8 oz)
Gun Length	22 cm (8.7 in)
Recommended paint resistivity range	≤ 1 MΩ/cm
Fluid Inlet	3/8 npsm(m)
Air Inlet	1/4 npsm(m) left handed thread
Manual	3A4795

*Standard gun model. For other models reference the instruction manual.

Ordering Information – Pro Xp 40 kV WBx Gun Models

Part Number	Description
L40M28	Smart 40 kV air spray gun
L40T28	Standard 40 kV spray gun

Ordering Information – Probe Kit

Part Number	Description
25E639	Long probe kit includes 2 probes
25E664	Short probe kit includes 2 probes

For a complete list of parts and accessories, refer to the Pro Xp WBx Waterborne Manual 3A4795.

PRO XP™ AUTO WATERBORNE GUNS

Get the spray performance and transfer efficiency of our manual Pro Xp guns in an automatic version. 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.



Dependability

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

Maximize Your Profits

- > Higher transfer efficiency equals less waste – saving you money on material
- > New aircaps use less air and help lower your energy bill

TECHNICAL SPECIFICATIONS & ORDER INFORMATION

Technical Specifications	Pro Xp Auto Gun Models
Maximum Working Fluid Pressure	7.0 bar (0.7 MPa, 100 psi)
Maximum Working Air Pressure	7.0 bar (0.7 MPa, 100 psi)
Maximum Fluid Operating Temperature	48°C (120°F)
Paint Resistivity Range Solventborne Gun	3 megohm/cm to infinity
Paint Resistivity Range Waterborne Gun	≤3 megohm/cm
Short Circuit Current Output	125 microamperes
Gun Weight (approx. depending on gun model)	1.2 kg (2.6 lb)
Gun Length	27 cm (10.6 in)
Waterborne Models	60 kV
Atomizing Air Inlet Fitting	8 mm (5/16 in) OD nylon tube
Fan Air Inlet Fitting	8 mm (5/16 in) OD nylon tube
Cylinder Air Inlet Fitting	4 mm (5/32 in) OD nylon tube
Fluid Inlet Fitting	1/4 -18 npsm(m)

Ordering Information

Part Number	Description
LA1T28	60 kV, rear manifold mount, external charge, air spray
LA2T28	60 kV, bottom manifold mount, external charge, air spray
LA1M28	60 kV, rear manifold mount, external charge, air spray
LA2M28	60 kV, bottom manifold mount, external charge, air spray
LA1M18	60 kV, rear manifold mount, air spray
LA1T18	60 kV, rear manifold mount, air spray
HA1M18	60 kV, rear manifold mount, air assist
HA1T18	60 kV, rear manifold mount, air assist

For a complete list of parts and accessories, refer to the Pro Xp Auto Manual 333012 or brochure 345066.

PRO XPC™ AUTO

The Pro Xpc Auto electrostatic spray gun offers excellent finish quality, leading class transfer efficiency. It's safe, durable, designed for efficient system integration and comes with a serialized certificate of performance — so you can rest easy that your Pro Xpc Auto won't let you down.



Compact & Lightweight

- > Spray in tight spaces and corners with compact design
- > Weight makes it ideal for robots and fixtures with lower payloads (0.91 kg/2 lb)

Finish Quality

- > Superior finish quality and leading class transfer efficiency with Pro Xp atomization
- > Air Spray gun designed to spray a variety of materials including solventborne, high conductive and waterborne

TECHNICAL SPECIFICATIONS & ORDER INFORMATION

Technical Specifications	Pro Xpc Auto Gun Models
Maximum Working Fluid Pressure	7.0 bar (0.7 MPa, 100 psi)
Maximum Working Air Pressure	7.0 bar (0.7 MPa, 100 psi)
Minimum Cylinder Actuating Pressure	3.4 bar (0.34 MPa, 50 psi)
Maximum Fluid Operating Temperature	48°C (120°F)
Paint Resistivity Range Solventborne Gun	3 megohm/cm to infinity
Paint Resistivity Range Waterborne Gun	≤3 megohm/cm
Short Circuit Current Output	150 microamperes
Gun Weight (approx. depending on gun model)	0.9 kg (2.0 lb)
Gun Length	14.5 cm (5.7 in)
Solventborne Models	0-100 kV
Waterborne Models	0-60 kV
Atomizing Air Inlet Fitting	8 mm (5/16 in) OD nylon tube
Fan Air Inlet Fitting	8 mm (5/16 in) OD nylon tube
Cylinder Air Inlet Fitting	6 mm (1/4 in) OD nylon tube
Fluid Inlet Fitting	6 mm (1/4 in) PFE tube

Ordering Information

Part Number	Description
LC1028	Rear manifold gun for waterborne material
LC2028	Bottom manifold gun for waterborne material

For a complete list of parts and accessories, refer to the Pro Xpc Auto Manual 332992 or brochure 345084.

PROBELL® ROTARY ATOMIZER

Each ProBell rotary bell atomizer delivers superior quality, precision spraying with uniform atomization and an easily adjustable spray pattern for the most demanding finishing applications.



Durable

- > Stainless steel air cap cover protects bell cup and air cap
- > Air bearing has no parts to wear out
- > Turbine assembly is a proven design

Safe

- > Cable connection improves safety while reducing system complexity
- > Arc detection shuts off electrostatics, ensuring a safe environment conductive and waterborne

TECHNICAL SPECIFICATIONS & ORDER INFORMATION

Technical Specifications	ProBell Rotary Atomizer Models
Maximum Working Fluid Pressure	10.3 bar (1.0 MPa, 150 psi)
Maximum Working Air Pressure	7.0 bar (0.7 MPa, 100 psi)
Bearing air – minimum required	5.5 bar (0.55 MPa, 80 psi)
Turbine speed – maximum operating	60,000 rpm
Viscosity range	30-150 centistokes
Maximum flow rate, 50 mm cup	500 cc/min
Maximum flow rate, 30 mm cup	400 cc/min
Maximum flow rate, 15 mm cup	100 cc/min
Maximum voltage output	100 kV for solventborne systems, 60 kV for waterborne systems
Maximum current draw	150 micro-amperes
Applicator weight	Hollow Wrist Model 6 kg (13.5 lbs), Standard Model 4 kg (9 lbs)
Paint resistivity range	1 megohm/cm to infinity

Ordering Information Hollow Wrist Robot Applicator Models			Standard Bell Applicator Models		
Part Number	Bell Cup Size	Nozzle Size	Part Number	Bell Cup Size	Nozzle Size
R5A248	50 mm	1.0 mm	R5A148	50 mm	1.0 mm
R5A258	50 mm	1.25 mm	R5A158	50 mm	1.25 mm
R5A268	50 mm	1.5 mm	R5A168	50 mm	1.5 mm
R3A238	30 mm	0.75 mm	R3A138	30 mm	0.75 mm
R3A248	30 mm	1.0 mm	R3A148	30 mm	1.0 mm
R3A258	30 mm	1.25 mm	R3A158	30 mm	1.25 mm
R3A268	30 mm	1.5 mm	R3A168	30 mm	1.5 mm
R1A238	15 mm	0.75 mm	R1A138	15 mm	0.75 mm
R1A248	15 mm	1.0 mm	R1A148	15 mm	1.0 mm
R1A258	15 mm	1.25 mm	R1A158	15 mm	1.25 mm

For a complete list of parts and accessories, refer to the Pro Bell Rotary Atomizer Manuals 334452 and 334626 or brochure 345100.



OUR BRAND PROMISE TO YOU

Since 1926, **innovation**, **quality** and **A+ Service** have been at the centre of Graco.

Experience Innovation

Our focus on innovation results in products and equipment that lead the industry with technologically-advanced features, pioneering design, high performance and unparalleled reliability. In short, innovation is how you get better products!

Building Quality

You're investing in high-quality products built to last for years of reliable service. Moreover, we partner with our customers to better understand how you're deploying our products in the field, then use your experiences to improve performance and durability.



A+ service, every time

You'll see A+ Service in action when you contact any of our support services options no matter where you are in the world. We'll listen to your situation and work methodically to resolve it as quickly as we can. We are guided by a mindset of integrity and a customer service view centred on collaboration and relationships, not transactions.



We're here to answer questions and help address your needs:

www.graco.com/contact

Graco is certified ISO 9001.

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