Electrostatic Waterborne Solutions
Proven Reliability and Ease of Use for Spraying Waterborne Material
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**Electrostatic Waterborne Solutions**

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- HydroShield®
- WB100 & WB3000

**Applicators**

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- Pro Xp WBx External Charge Waterborne Air Spray Gun

*Proven reliability and ease of use for spraying waterborne material*
Superior transfer efficiency, reduced manufacturing costs and positive environmental impact

Graco offers three solutions for spraying waterborne coatings with electrostatic applicators.

**HydroShield Waterborne Systems**
Operator friendly isolation systems allow flexibility and control of the spraying process.

**WB100 and WB3000 Isolation Systems**
Durable low and high pressure isolation cabinets contain five gallons (19 L) of charged material.

**Pro Xp WBx Electrostatic Guns**
High performing guns externally charge material — no additional equipment required.
Reliable components and system control make HydroShield an operator friendly solution. Improve transfer efficiency and safety, while easily spraying waterborne material with Pro Xp WB manual electrostatic air spray and air-assist guns.

**Refill without shutting system down**
Higher productivity is achieved by not needing to shut down the system to refill. The internal isolation pump automatically refills when the gun trigger is released.

**Unique operator control**
The controller interface allows the operator to set system parameters and spray settings for precise process control.

**Market proven components**
Comprised of Pro Xp WB guns, isolation pump, controller interface and other parts used in the marketplace for years, HydroShield brings together Graco durability into one system.

**Built-in safety**
In addition to safety grounding components to protect the operator, the automatic refill feature reduces the need to open the isolation cabinet. Reduced operator interaction means a safer workplace.

**System configuration flexibility**
HydroShield is available in a variety of configurations.

- Low pressure systems spray with Pro Xp WB air spray guns.
- High pressure systems include a Merkur pump for air assisted airless spraying.
- Options for gun hoses and gun flush box ready systems are also available.
Ease of painting without operator interaction with the supply system

**Low Pressure Feed System**
Feed with a low pressure paint supply, including Triton, pressure pot or circulation system.

**Controller Interface**
Operate easily with system functions in one location and simple screens.

**Isolation Cabinet**
Constructed with durable materials and components for extended life.

**Isolation Valve**
Designed to allow the system to fill without concern of electrostatic breakdown.

**Cleansing Solution**
Ensures the isolation valve is cleaned of residual waterborne material.

**Light Tower**
Indicates the fluid level in the internal pump:
- **Green**: 50% full or more
- **Yellow**: Below 50% full, but more than 10% full
- **Red**: Below 10% full

**Ground Rod**
Protects the operator when opening the cabinet.

**Isolation Pump**
Contains 1150cc (39 oz) of material which refills for continuous spraying.

**Air Assist Systems**
Merkur 15:1 or 30:1 pump inside the cabinet boosts fluid pressure to the high pressure gun.

**Service Components**
Easy access and few parts make downtime minimal and maintenance simple.

**Air Spray Systems**
Low pressure configurations deliver a high finish quality with the Pro Xp WB gun.

**Pro Xp Waterborne Gun**
When the trigger is released the system is activated to fill (see page 9 for more information on waterborne guns).

**Gun Flush Box Ready**
Configurations are available to connect and control gun flush box operation.
Spray settings in one location on simple screens making it easy to operate

**Home Screen**
Information about the system status and operation of spray modes

**System status** indicates pump fill level, inlet air, ground status and kV output.

**Do not fill mode** reduces material waste.

**Pump Fill Screen**
Customize maximum volume and level of pump depletion before refill based on production needs

**Maintenance Screens**
Keep your system running smoothly with calibration capability and maintenance schedules

**Operation modes** show:
- standby
- prime
- purge
- spray

**Delay Settings Screen**
Customize fill delay and ground rod delay for painter spray techniques

**Preset status** indicates preset setting and activity

**Preset Screen**
Configure as many as 99 presets for different gun air and fluid pressure needs
### Technical Specifications

#### Air Spray
- **Maximum Fluid Working Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Maximum Fluid Inlet Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Maximum Air Working Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Minimum System Inlet Air Pressure**: 70 psi (0.48 MPa, 4.8 bar)
- **Maximum System Inlet Air Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Isolation System Air Inlet Fitting**: 1/2 npt(m)
- **Isolation System Fluid Inlet Fitting**: 1/4 npsm(m)
- **Maximum Fluid Hose Length**: 100 ft (30.5 m)
- **Maximum Fluid Operating Temperature**: 100-240°F (48°C)
- **External Power Requirements**: 100-240VAC, 50-60Hz
- **Weight**: 250 lb (113 kg)
- **Approvals**: FM US, FMC, CE
- **Manual**: 3A7312

#### Air Assist
- **Maximum Fluid Working Pressure**
  - Merkur 15:1 System: 1500 psi (10.4 MPa, 100 bar)
  - Merkur 30:1 System: 3000 psi (20.7 MPa, 200 bar)
- **Maximum Fluid Inlet Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Maximum Air Working Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Minimum System Inlet Air Pressure**: 70 psi (0.48 MPa, 4.8 bar)
- **Maximum System Inlet Air Pressure**: 100 psi (0.7 MPa, 7.0 bar)
- **Isolation System Air Inlet Fitting**: 1/2 npt(m)
- **Isolation System Fluid Inlet Fitting**: 1/4 npsm(m)
- **Maximum Fluid Operating Temperature**: 120°F (48°C)
- **External Power Requirements**: 100-240VAC, 50-60Hz
- **Weight**: 300 lb (136 kg)
- **Approvals**: FM US, FMC, CE
- **Manual**: 3A7370

### Ordering Information

#### Part Number	Gun Included	Gun Flush Box Equipped*| 25 ft air and fluid hose | 50 ft air and fluid hose
---|---|---|---|---
WMBL00 | No | | | |
WMBL01 | No | | x | |
WMBL20 | Air Spray | | | |
WMBL40 | Air Spray | | | |
WMBL41 | Air Spray | | x | |
WMBL60 | Mold Release | | x | |
WMBL80 | Mold Release | | | |

*Gun flush box must be purchased separately

#### Part Number	Pump Included	Air Assist Gun Included	Gun Flush Box Equipped*| 25 ft air and fluid hose | 50 ft air and fluid hose
---|---|---|---|---
WMBH00 | Merkur 30:1 | | | |
WMBH01 | Merkur 30:1 | | x | |
WMBH04 | Merkur 15:1 | | | |
WMBH05 | Merkur 15:1 | | x | |
WMBH20 | Merkur 30:1 | | | |
WMBH40 | Merkur 30:1 | | | |
WMBH41 | Merkur 30:1 | | x | x | x | x | x
WMBH44 | Merkur 15:1 | | x | |
WMBH45 | Merkur 15:1 | | x | x | x

*Gun flush box must be purchased separately

#### Part Number	Grounded Air Hose with stainless steel braid ground path (Red)| 25 ft air and fluid hose | 50 ft air and fluid hose
---|---|---|---|---
235068 | 6 foot (1.8 m) | 25R012 | 25 foot (7.6 m) | 25R002 | 25 foot (7.6 m)
235069 | 15 foot (4.6 m) | 25R013 | 36 foot (11 m) | 25R003 | 36 foot (11 m)
235070 | 25 foot (7.6 m) | 25R014 | 50 foot (15 m) | 25R004 | 50 foot (15 m)
235071 | 36 foot (11 m) | 25R015 | 75 foot (23 m) | 25R005 | 75 foot (23 m)
235072 | 50 foot (15 m) | 25R016 | 100 foot (30.5 m) | 25R006 | 100 foot (30.5 m)
235073 | 75 foot (23 m) | 25R017 | | | | |
235074 | 100 foot (30.5 m) | 25R018 | | | | |

#### Part Number	HydrosHield Cleansing Solution
---|---
25R200 | 1 gallon bottle
WB100™ & WB3000™ Isolation Systems

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

WB100 with Triton™ 1:1 Pump
Use for low pressure spraying with waterborne electrostatic air spray gun

Material Supply Container
Easily remove and refill 5 gallon (19 liter) container

Portable Cabinet
Move to various applications

Standard Voltage Display
Easily monitor voltage for overall performance

WB3000 with a Merkur® ES 30:1 Air-Assist Pump
Use for high pressure spraying with waterborne electrostatic air-assist gun

Pro Xp WB Electrostatic Gun
Standard and smart models provide excellent material savings, outstanding ergonomics and superior finish quality.
Reliably isolate and spray waterborne coatings at 100 or 3000 psi

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB100</td>
<td></td>
</tr>
<tr>
<td>24N580</td>
<td>Waterborne isolation enclosure with standard electrostatic air spray gun L60T18, grounded air hose 235070 and waterborne fluid hose 24M732.</td>
</tr>
<tr>
<td>24P629</td>
<td>Waterborne isolation enclosure with smart electrostatic air spray gun L60M18, grounded air hose 235070 and waterborne fluid hose 24M732.</td>
</tr>
<tr>
<td>24P734</td>
<td>Waterborne isolation enclosure with mold release smart electrostatic gun L60M19, grounded air hose 235070 and waterborne fluid hose 24M732.</td>
</tr>
<tr>
<td>WB3000</td>
<td></td>
</tr>
<tr>
<td>24N551</td>
<td>Waterborne isolation enclosure with standard electrostatic air-assist gun H60T18, grounded air hose 235070 and waterborne fluid hose 24M508.</td>
</tr>
<tr>
<td>24P632</td>
<td>Waterborne isolation enclosure with smart electrostatic air spray gun H60M18, grounded air hose 235070 and waterborne fluid hose 24M508.</td>
</tr>
</tbody>
</table>

### Technical Specifications

**WB100**

- **Maximum Fluid Working Pressure:** 100 psi (0.7 MPa, 7.0 bar)
- **Maximum Air Working Pressure:** 100 psi (0.7 MPa, 7.0 bar)
- **Minimum Air Pressure at Gun Inlet:** 45 psi (0.32 MPa, 3.2 bar)
- **Maximum System Inlet Air Pressure:** 100 psi (0.7 MPa, 7.0 bar)
- **WB System Air Consumption:** 15–20 scfm (425–565 l/min)
- **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
- **WB100 Manual:** 3A2496

**WB3000**

- **Maximum Fluid Working Pressure:** 3000 psi (21 MPa, 210 bar)
- **Maximum Air Working Pressure:** 100 psi (0.7 MPa, 7.0 bar)
- **Minimum Air Pressure at Gun Inlet:** 45 psi (0.32 MPa, 3.2 bar)
- **Maximum System Inlet Air Pressure:** 100 psi (0.7 MPa, 7.0 bar)
- **WB System Air Consumption:** 7.5–14 scfm (220–400 l/min)
- **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
- **WB3000 Manual:** 3A2497
Pro Xp Waterborne (WB) Guns

Electrostatically spray waterborne materials with isolation systems

- **Internal Power Supply**: Improve operator mobility with no heavy cords to slow down spraying.
- **Light Trigger Pull**: Reduces muscle strain and operator fatigue.
- **Alternator Speed Indicator**: Changes color 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.
- **Smart Controls**: Available for all waterborne models
  - kV, current and hertz
  - Easy, low kV setting
  - Digital diagnostic mode for troubleshooting

High transfer efficiency for low or high pressure applications

**Air Spray Gun**
- For low pressure spraying
- Delivers high quality finish
- Sprays with various aircaps and nozzles

**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

Pro Xp WB models for HydroShield and WB isolation systems
Ordering Information

Pro Xp WB Air Spray Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L60T18</td>
<td>Pro Xp60 WB</td>
<td>Standard electrostatic air spray gun for waterborne coatings.</td>
</tr>
<tr>
<td>L60M18</td>
<td>Pro Xp60 WB</td>
<td>Smart electrostatic air spray gun for waterborne coatings.</td>
</tr>
<tr>
<td>L60M19</td>
<td>Pro Xp60 MR</td>
<td>Smart electrostatic air spray gun for waterborne mold release coating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>applications. Requires an AEM or AEF spray tip for operation.</td>
</tr>
</tbody>
</table>

Technical Specifications

**Pro Xp60**

- **Maximum Voltage Output**: 60 kV
- **Maximum Working Fluid Pressure**: 3000 psi (210 bar, 21 MPa)
- **Maximum Working Air Pressure**: 100 psi (7 bar, 0.7 MPa)
- **Gun Weight (without hose)**: 21 oz (600 g)
- **Gun Length**: 9.5 in (24 cm)
- **Recommended paint resistivity range**: ≤ 1 MΩ/cm
- **Fluid Inlet**: 0.36 npsm (1/4-18 npsm)
- **Air Inlet**: 0.36 npsm
- **Instruction Manual**: 3A2496

**Pro Xp60 AA**

- **Maximum Voltage Output**: 60 kV
- **Maximum Working Fluid Pressure**: 8000 psi (550 bar, 5.5 MPa)
- **Maximum Working Air Pressure**: 100 psi (7 bar, 0.7 MPa)
- **Gun Weight (without hose)**: 24 oz (680 g)
- **Gun Length**: 9.7 in (24.5 cm)
- **Recommended paint resistivity range**: ≤ 1 MΩ/cm
- **Fluid Inlet**: 1.5 npsm
- **Air Inlet**: 1.5 npsm
- **Instruction Manual**: 3A2497

Fluid Inlet (inches): 0.36 npsm

**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.

**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.
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.

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

Ordering Information

Pro Xp 40 kV WBx Gun Models

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>L40M28</td>
<td>Smart 40 kV air spray gun</td>
</tr>
<tr>
<td>L40T28</td>
<td>Standard 40 kV spray gun</td>
</tr>
</tbody>
</table>

Probe Kit Ordering Information

<table>
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<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25E639</td>
<td>Long probe kit includes 2 probes</td>
</tr>
<tr>
<td>25E664</td>
<td>Short probe kit includes 2 probes</td>
</tr>
</tbody>
</table>

Technical Specifications

- Maximum Voltage Output: 40 kV
- Maximum Working Fluid Pressure: 100 psi (7 bar, 0.7 MPa)
- Maximum Working Air Pressure: 100 psi (7 bar, 0.7 MPa)
- Gun Weight (without hose)*: 19.8 oz (560 g)
- Gun Length: 8.7 in (22 cm)
- Recommended paint resistivity range: ≤ 1 MΩ/cm
- Fluid Inlet: 3/8 npsm(m)
- Air Inlet: 1/4 npsm(m) left handed thread

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

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

Contact Us

Call 877-84GRACO
(1-877-844-7226)

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