**XR-Aluma-Pro™**

**Gooseneck-Style Push-Pull Gun**

**Quick Specs**

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<th>Heavy Industrial Applications</th>
<th>Processes</th>
<th>Wire Types</th>
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<th>Net Weight (Gun Only)</th>
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<td>Aluminum</td>
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<td>Stainless steel</td>
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<td>Trucks and trailers</td>
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<td>Cored (gas-shielded)</td>
<td></td>
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<tr>
<td>Heat exchangers</td>
<td></td>
<td></td>
<td>Air-cooled: 2.5 lb. (1.1 kg) Water-cooled: 2.9 lb. (1.3 kg)</td>
<td></td>
</tr>
<tr>
<td>Sign manufacturers</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The XR-Aluma-Pro gun is available in air- or water-cooled versions with 15-, 25- or 35-foot (4.6, 7.6 or 10.6 m) cable lengths.

The XR-Aluma-Pro air-cooled gun offers 300 amps—more amperage than the competition can handle.

**Aluminum-series-specific tension settings** ensure smooth wire feeding performance with 4000 or 5000 series aluminum wires.

At 900 inches per minute, this gun will feed wire faster than any of its predecessors. (Dependent on feeder used.)

**3-3/4 turn potentiometer** provides better resolution when selecting the right wire speed for the job. The recessed WFS (wire feed speed) control offers durability yet is easy to use while wearing welding gloves.

**Replaceable feed cable liner** is designed to provide consistent arc performance. It also reduces parts cost and service time by allowing a simple means of removing and replacing liner and not the complete feed cable.

**Serviceability.** This gun features a leather cable cover with full-length hook-and-loop closure and integrated strain reliefs for easy cable maintenance and protection. The gun also features quick connectors between the control cable and electrical components (trigger, motor, and potentiometer).

**Isolated, common, knurled drive roll** helps reduce wear, reducing downtime and cost. Gun feeds .030–3/64 inch right out of the box without need for separate drive rolls. Kit 230708 is required to run 1/16-inch (1.6 mm) wire.

**Easy access to drive assembly and removable head tube** reduces service time. Pressure release lever allows drive rolls to be held open for wire changeover.

**Guns are warranted for one year, parts and labor.**

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**MillerWelds.com**

Equipment Sales US and Canada

Phone: 866-931-9730

FAX: 800-637-2315

International Phone: 920-735-4554

International FAX: 920-735-4125
## Specifications (Subject to change without notice.)

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<th>Model</th>
<th>Welding Current Rating</th>
<th>Wire Feed Speed</th>
<th>Wire Diameter Capacity</th>
<th>Dimensions</th>
<th>Net Weight (Gun only)</th>
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<tr>
<td>XR-Aluma-Pro™ (air-cooled)</td>
<td>300 A at 100% duty cycle</td>
<td>70–900 ipm (1.8–23 m/min.) dependent on control box or Millermatic® used</td>
<td>.030–1/16 in. (0.8–1.6 mm) aluminum wire Wire kit 230708 required to run 1/16 in. (1.6 mm) wire</td>
<td>H: 5 in. (127 mm) W: 2.5 in. (64 mm) D: 17 in. (432 mm)</td>
<td>2.5 lb. (1.1 kg)</td>
</tr>
<tr>
<td>XR-Aluma-Pro™ (water-cooled)</td>
<td>400 A at 100% duty cycle</td>
<td></td>
<td></td>
<td></td>
<td>2.9 lb. (1.3 kg)</td>
</tr>
</tbody>
</table>

## Parts Breakdowns

### Air-Cooled XR-Aluma-Pro

1. Air-Cooled Assembly Short Head Tube, 4 in. 231519
   Long Head Tube, 6 in. 231518 *
2. Head Tube Liner (See page 3 chart)
3. Head Tube O-Rings 230969
4. Lock Nut 227168
5. Insulator Ring Rear 227416
6. Outer Insulating Jacket Short 227159
   Long 229673
7. Gas Diffuser 229670
8. FasTip™ Contact Tip (See page 3 chart)
9. Nozzle 198855
*Optional

### Water-Cooled XR-Aluma-Pro

1. Water-Cooled Assembly Long Head Tube, 6 in. 231517
2. Head Tube Liner (See page 3 chart)
3. Head Tube O-Rings 230970
4. Lock Nut 229889
5. Insulator Ring Rear 227416
6. Outer Insulating Jacket 230420
7. Gas Diffuser 229670
8. FasTip™ Contact Tip (See page 3 chart)
9. Nozzle 199618
Standard Replacement Consumables

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<tr>
<th>Aluminum Wire Size</th>
<th>FasTip Contact Tip (Qty. 25)</th>
<th>Drive Rolls</th>
<th>Idler Rolls</th>
<th>Inlet Guides</th>
<th>Liner for Short Air-Cooled Head Tube 4 in. (102 mm)</th>
<th>Liner for Long Air- or Water-Cooled Head Tube 6 in. (152 mm)</th>
<th>Cable Liners</th>
</tr>
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<tbody>
<tr>
<td>.030 in. (0.8 mm)</td>
<td>206186 .041 in. ID</td>
<td>227434</td>
<td>227439</td>
<td>227408</td>
<td>227161</td>
<td>229674</td>
<td>229887 15 ft. (4.6 m)</td>
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<tr>
<td>.035 in. (0.9 mm)</td>
<td>206187 .047 in. ID</td>
<td>227434</td>
<td>227439</td>
<td>227408</td>
<td>227161</td>
<td>229674</td>
<td>229891 25 ft. (7.6 m)</td>
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<tr>
<td>.040 in. (1.0 mm)</td>
<td>206188 .053 in. ID</td>
<td>227434</td>
<td>227439</td>
<td>227408</td>
<td>227161</td>
<td>229674</td>
<td>232321 35 ft. (10.6 m)</td>
</tr>
<tr>
<td>3/64 in. (1.2 mm)</td>
<td>206189 .061 in. ID</td>
<td>227434</td>
<td>227439</td>
<td>227408</td>
<td>230239</td>
<td>229431</td>
<td></td>
</tr>
<tr>
<td>1/16 in. (1.6 mm)</td>
<td>206191 .071 in. ID</td>
<td>227434</td>
<td>230710</td>
<td>230711</td>
<td>230239</td>
<td>229431</td>
<td></td>
</tr>
</tbody>
</table>

Gas Diffusers

229670  1/8 in. tip recess (Standard)
For heavy-duty FasTip contact tips.

230678  1/4 in. tip recess
For heavy-duty FasTip contact tips.

230679  Flush tip
For heavy-duty FasTip contact tips.

FasTip Contact Tips (25 per package)

Heavy-Duty (Aluminum Wire)
206186 .030 in. (0.8 mm)
206187 .035 in. (0.9 mm)
206188 .040 in. (1.0 mm)
206189 3/64 in. (1.2 mm)
206191 1/16 in. (1.6 mm)

Tapered (Aluminum Wire)
209026 .030 in. (0.8 mm)
209027 .035 in. (0.9 mm)
209029 3/64 in. (1.2 mm)
206030 1/16 in. (1.6 mm)

Optional Consumables – Centerfire™ Series

Insulator 10012 4323R
diffuser D-1AP (large) DS-1AP (small)

XR-Aluma-Pro™ Diffuser Conversion Kits for .035–1/16 inch aluminum
230669 For D-1AP diffuser
230670 For DS-1AP diffuser
Diffuser kits must be used to convert to Centerfire™ Series consumables. Kit includes diffuser and head tube liners.

Aluminum-Specific T Series Contact Tips
T-035AL .035 in. (0.9 mm)
T-047AL .047 in. (1.2 mm)
T-062AL 1/16 in. (1.6 mm)

Large Nozzles
N-3414C Copper, 3/4 in. I.D., 1/4 in. tip recess
N-3418B Brass, 3/4 in. I.D., 1/8 in. tip recess
N-3414B Brass, 3/4 in. I.D., 1/4 in. tip recess
N-5814C Copper, 5/8 in. I.D., 1/4 in. tip recess
N-5818B Brass, 5/8 in. I.D., 1/8 in. tip recess
N-5814B Brass, 5/8 in. I.D., 1/4 in. tip recess

Small Nozzles
NS-5818B Brass, 5/8 in. I.D., 1/8 in. tip recess
NS-1218B Brass, 1/2 in. I.D., 1/8 in. tip recess
NS-1200B Brass, 1/2 in. I.D., flush tip
NST-3818B Brass, 3/8 in. I.D., 1/8 in. tip recess

Standard Consumables – FasTip™ Series

Nozzles
Screw-On Brass
199610 1/2 in. orifice, tapered
199611 3/4 in. orifice, straight
199612 3/4 in. orifice, straight HD
199613 5/8 in. orifice, tapered
199614 5/8 in. orifice, tapered HD
Screw-On Copper
199615 1/2 in. orifice, tapered
199616 3/4 in. orifice, straight
199617 3/4 in. orifice, straight HD
198855 5/8 in. orifice, tapered
199618 5/8 in. orifice, tapered HD
207313 5/8 in. orifice, tapered 15/16 O.D.
209035 3/8 in. orifice, tapered
209036 1/2 in. orifice, tapered
Optional Head Tube Assemblies

45 Degree/4 Inch
255037 Air-cooled
255338 Water-cooled

45 Degree/6 Inch
255040 Air-cooled
231517 Water-cooled (standard on XR-Aluma-Pro™)

60 Degree/4 Inch
231519 Air-cooled
255038 Water-cooled (standard on XR-Aluma-Pro™)

60 Degree/6 Inch
231518 Air-cooled
255041 Water-cooled

180 Degree/4 Inch (standard on XR™-Pistol Pro)
255716 Air-cooled
255717 Water-cooled

180 Degree/6 Inch
258476 Air-cooled
258477 Water-cooled

180 Degree/8 Inch
255042 Air-cooled
255043 Water-cooled

180 Degree/10 Inch
258295 Air-cooled
For hard-to-reach welds where a smaller nozzle and longer reach is needed.

45 Degree/10 Inch Tight Access
258295 Air-cooled
259535 Water-cooled

45 Degree/6 Inch with Centerfire™
246205 Water-cooled
(standard on XR-Aluma-Pro™ Plus)

60 Degree/6 Inch with Centerfire™
258474 Air-cooled
258475 Water-cooled

180 Degree/4 Inch with Centerfire™ (standard on XR™-Pistol Plus)
258474 Air-cooled
258475 Water-cooled

Heavy-Duty Head Tube Assemblies
For high-duty-cycle applications.

45 Degree/6 Inch Heavy-Duty
262206 Air-cooled
258293 Water-cooled

60 Degree/6 Inch Heavy-Duty
262207 Air-cooled
258294 Water-cooled

180 Degree/6 Inch Heavy-Duty
262208 Air-cooled
259535 Water-cooled

Flex Neck/10 Inch
267517 Air-cooled
Ideal for hard-to-reach welds.
**Liners for Optional Head Tube Assemblies**

- **Fastip™ Liners (4-inch assemblies)**
  - 227161 .030–.040 in. (0.8–1.0 mm)
  - 239239 3/64 and 1/16 in. (1.2 and 1.6 mm)

- **Fastip Liners (6-inch assemblies)**
  - 229674 .030–.040 in. (0.8–1.0 mm)
  - 229431 3/64 and 1/16 in. (1.2 and 1.6 mm)

- **Fastip Liners (8-inch assemblies)**
  - M1434 .030–.040 in. (0.8–1.0 mm)
  - M1435 3/64 and 1/16 in. (1.2 and 1.6 mm)

- **Bernard® Quik Tip™ Tight-Access Liners (10-inch assemblies)**
  - M1428 .030–.040 in. (0.8–1.0 mm)
  - M1429 3/64 and 1/16 in. (1.2 and 1.6 mm)

- **Fastip Liners (6-inch heavy-duty water-cooled assemblies)**
  - M1425 .030–.040 in. (0.8–1.0 mm)
  - M1426 3/64 and 1/16 in. (1.2 and 1.6 mm)

- **Phosphorous Bronze Liners (6-inch heavy-duty water-cooled assemblies)**
  - M1436 .030–1/16 in. (0.8–1.6 mm)

- **Universal Teflon® Liner Kit**
  - 262707 .030–.040 in. (0.8–1.0 mm)
    - black liners
  - 262705 3/64 and 1/16 in. (1.2 and 1.6 mm)
    - yellow liners

  Includes five 14-inch liners and cutter. Liners can be cut to correct length for any pistol or gooseneck-style gun. Cutter provides a straight, clean cut to reduce shaving and feeding problems.

- **Teflon® Liner Cutter**  258863

- **Genuine Miller® Accessories**

  **Leather Cable Cover**
  - 234109 15 ft. (4.6 m)
  - 234110 25 ft. (7.6 m)
  - 234111 35 ft. (10.6 m)

  Protects gun hose and cable assembly from wear and abrasion. Features full-length hook-and-loop closure for ease of maintenance or replacement.

  **Short Leather Gun Cover**  234416

  Cover is 17 inches (432 mm).

  **50-Degree Curved Nozzle Kit-A**  264064

  Directly attaches to XR-Aluma-Pro™ or XR™-Pistol-Pro for access to confined weld joint areas. Used with .030–1/16 inch (0.8–1.6 mm) wire. Kit includes two of each size contact tip to accommodate all wire sizes, nozzle adapter kit and curved nozzle. Uses standard straight head tube liner.

  **Replacement Contact Tips for 50-Degree Curved Nozzle**
  - 148155 .030 and .035 in. (0.8 and 0.9 mm) wire
  - 148154 .047 in. (1.2 mm) wire
  - 148156 1/16 in. (1.6 mm) wire

  **50-Degree Curved Nozzle Insulator Kit**  264066

  Sleeve goes over center of curved nozzle to protect operator from heat. For use with 50-Degree Curved Nozzle Kit-A above.

- **1/16-inch (1.6 mm) Wire Kit**  230708

  Specially designed for 1/16-inch wire. Includes idler roll, head tube liner and inlet guide. Required when running 1/16-inch wires. Not included with standard XR-Aluma-Pro gun.

  **Hardwire Liner Kit for Steel and Stainless**  198377

  For 15, 25, or 35 ft. (4.6, 7.6 or 10.6 m) guns. Kit consists of gun head tube liner 233998 listed below and feed cable liner. Recommend using .030—.045 inch mild steel or stainless steel electrode wire.

  **Replacement Contact Tips for 50-Degree Curved Nozzle**
  - 148155 .095 and .120 in. (2.4 and 3.0 mm) wire
  - 148154 .145 in. (3.7 mm) wire

  **50-Degree Curved Nozzle Insulator Kit**  264066

  Sleeve goes over center of curved nozzle to protect operator from heat. For use with 50-Degree Curved Nozzle Kit-A above.

  **Phosphorous Bronze Liner**
  - 233999 Long head tube (air or water)
  - 233998 Short head tube (air only)

  For use with hardwire liner kit 198377 above when used in XR-Aluma-Pro gun.
Wire Feeders and System Packages

XR-AlumaFeed® Wire Feeder 300509
Advanced push-pull wire feeder designed for high-volume, high-production aluminum MIG welding where quality and consistency is a high priority. See literature DC/34.0.

AlumaFeed® Synergic Aluminum Welding System 951147
Includes XR-AlumaFeed push-pull wire feeder with drive rolls, AlumaPower® 350 MPa synergic power source, and 25-foot (7.6 m) air-cooled XR-Aluma-Pro™ push-pull gun with contact tips, drive rolls and liners. Other system packages available.

AlumaFeed® MIGRunner™ Package 951151
Includes the same as 951147, plus MIGRunner cart and industrial MIG 4/0 kit with Dinse-style connector. Other system packages available.

XR-S Control 300601
The XR-S Control offers unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. Model includes .035-inch and factory-installed 3/64-inch drive rolls. See literature M/1.7.

AlumaFeed® Synergic Aluminum Welding System 951147
Includes XR-AlumaFeed push-pull wire feeder with drive rolls, AlumaPower® 350 MPa synergic power source, and 25-foot (7.6 m) air-cooled XR-Aluma-Pro™ push-pull gun with contact tips, drive rolls and liners. Other system packages available.

Millermatic® 350P Aluminum/XR™-Aluma-Pro System 951452 200(208)/230/460 V
Includes Millermatic 350P Aluminum, 25-foot (7.6 m) XR-Aluma-Pro™ air-cooled push-pull gun, .035- and 3/64-inch FasTip™ contact tips, and .035- and 3/64-inch reversible U-groove drive rolls. (Standard MIG gun not included.)
Typical Installations

Note: Cords and cables are supplied unless noted otherwise on drawings below. Refer to Owner’s Manual for complete installation instructions.

**XR-Aluma-Pro™ Gun Hook-Up Recommendations**

<table>
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<tr>
<th>CV Power Supply</th>
<th>Control</th>
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<tr>
<td>Millermatic® 252, 255, 350P, 350P Aluminum Multimatic® 255</td>
<td>Direct Hook-Up</td>
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<tr>
<td>AlumaPower™ 350 MPa, 450 MPa</td>
<td>XR™-S Control or XR-AlumaFeed®</td>
</tr>
<tr>
<td>Deltaweld® Series</td>
<td></td>
</tr>
<tr>
<td>Dimension™ Series</td>
<td></td>
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<tr>
<td>Invision™ Series</td>
<td></td>
</tr>
<tr>
<td>XMT® Series (except VS model)</td>
<td></td>
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<tr>
<td>Trailblazer® 325, 302 Air Pak™</td>
<td></td>
</tr>
<tr>
<td>Big Blue® Series (with 14-pin receptacle)</td>
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*Note: XR-Aluma-Pro guns are not compatible with 74MPa Plus feeders.*
## Ordering Information

### XR-Aluma-Pro guns require the following:
- XR-S Control or XR-AlumaFeed (See at right.)
- Recommended Miller® 14-pin power source (See list below.) OR
- Millermatic 252, 255, 350P, 350P Aluminum, or Multimatic 255 (See literature DC/12.49, DC/12.8, DC/12.51, DC/12.56, or DC/12.9.)

### Important notes:
XR-Aluma-Pro guns are not compatible with 74MPa Plus feeders.
XR-Control must be serial number KK309906 or higher to be used with products and descriptions mentioned in this literature. To confirm a product’s compatibility with older equipment, please contact the factory at 1-920-735-4505.

### Recommended Power Sources

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<tr>
<th>Power Source</th>
<th>See Literature</th>
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<tr>
<td>AlumaPower™ MPa</td>
<td>DC/34.0 (For synergic use with AlumaFeed®)</td>
</tr>
<tr>
<td>Deltaweld® Series</td>
<td>DC/16.2</td>
</tr>
<tr>
<td>XMT® 350 Series</td>
<td>DC/18.93</td>
</tr>
<tr>
<td>XMT® 450 Series</td>
<td>DC/18.94</td>
</tr>
<tr>
<td>Invision™ MPa</td>
<td>DC/23.6</td>
</tr>
<tr>
<td>Trailblazer® Series</td>
<td>ED/4.75</td>
</tr>
<tr>
<td>Big Blue® 800 Series</td>
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*Note: Other power sources may be used.*

## Consumables and Accessories

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<td>Liners for Optional Head Tube Assemblies</td>
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<tr>
<td>Leather Cable Cover</td>
<td>15 ft. (4.6 m)</td>
</tr>
<tr>
<td>Short Leather Gun Cover</td>
<td>17 in. (432 mm)</td>
</tr>
<tr>
<td>50-Degree Curved Nozzle Kit-A</td>
<td>264064</td>
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<tr>
<td>Replacement Contact Tips for Curved Nozzle</td>
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<tr>
<td>50-Degree Curved Nozzle Insulator Kit</td>
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<td>1/16-Inch (1.6 mm) Wire Kit</td>
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<tr>
<td>Hardwire Liner Kit for Steel and Stainless</td>
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<td>Phosphorous Bronze Liners</td>
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<tr>
<td>Coolant Systems</td>
<td>See Literature AY/7.2</td>
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## Date: Total Quoted Price: