

# XR-Aluma-Pro™

## Gooseneck-Style Push-Pull Gun

**MIG Gun for Aluminum Welding** 

### Quick Specs

#### Heavy Industrial Applications

Emergency vehicles Shipbuilding  
Recreational vehicles Tool boxes  
Trucks and trailers Railcars  
Heat exchangers Fabrication  
Sign manufacturers

#### Processes

MIG (GMAW)  
Pulsed MIG (GMAW-P) with pulsing power source

#### Wire Types

Aluminum  
Stainless steel  
Cored (gas-shielded)

#### Rated Output at 100% Duty Cycle

Air-cooled: 300 A  
Water-cooled: 400 A

#### Net Weight (Gun Only)

Air-cooled: 2.5 lb. (1.1 kg)  
Water-cooled: 2.9 lb. (1.3 kg)

### The industry's most reliable line of push-pull welding guns.

**Fights fatigue.** New lighter XR-Aluma-Pro guns reduce fatigue, improve output and are rugged to withstand industrial environments.

**Balanced design.** XR-Aluma-Pro guns are balanced and have a natural feel, so welders have improved joint access and can maintain proper gun angles, stick out and travel speeds.

**Industrial-quality cable.** Gun cable failure is expensive, not only in creating downtime, but also in the cost of repairing the gun. XR-Aluma-Pro guns have a durable cable covering and strain relief to withstand industrial environments and resist damage, reducing downtime and costs.

**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.



The XR-Aluma-Pro gun is designed to be used with the **Millermatic® 350P Aluminum** power source or **XR-AlumaFeed® Suitcase®** feeder as part of a push-pull system.

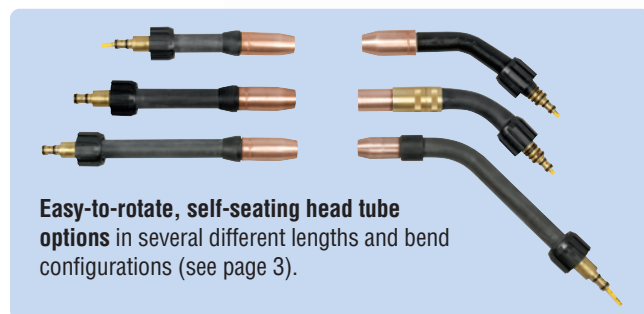
**Replaceable feed cable liner** is designed to provide consistent arc performance. It also reduces parts cost and service time by allowing a simple means of removing and replacing liner and not the complete feed cable.

**Serviceability.** This gun features a 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.

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.



**Easy-to-rotate, self-seating head tube options** in several different lengths and bend configurations (see page 3).



Guns are warrantied for one year, parts and labor.



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# Specifications (Subject to change without notice.)



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

## Standard Replacement Consumables

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

## Standard Consumables – FasTip™ Series

### 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** .035 in. (0.9 mm)

**209027** .045 in. (1.2 mm)

**209029** .052 in. (1.3 mm)

**206030** 1/16 in. (1.6 mm)

### 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 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

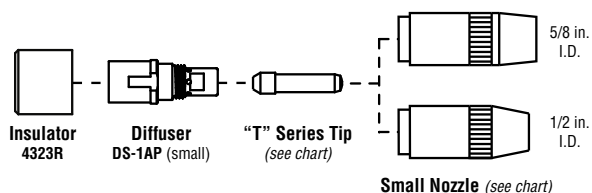
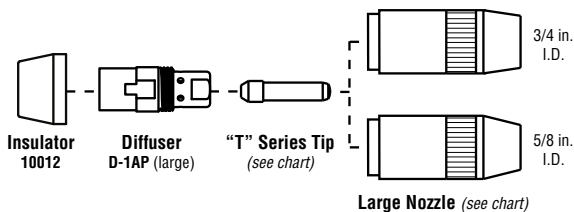
### Small Nozzles

**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



## 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  
 (standard on XR-Aluma-Pro™)  
**255038** Water-cooled



**60 Degree/6 Inch**  
**231518** Air-cooled  
**255 041** 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



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



**Flex Neck/10 Inch**  
**267517** Air-cooled  
 Ideal for hard-to-reach welds.



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

**60 Degree/6 Inch with Centerfire™**  
**246301** Air-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

## Liners for Optional Head Tube Assemblies

### Fastip™ Liners (4-inch assemblies)

**227161** .030–.040 in. (0.8–1.0 mm)

**230239** 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

### Cable Cover

**M1681** 15 ft. (4.6 m)

**M1682** 25 ft. (7.6 m)

**M1683** 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.



### 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.

*Note: .052- and 1/16-inch wires not recommended.*

### 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 Feeder and System Packages



### XR-AlumaFeed® Suitcase® Wire Feeder 301567

Push-pull wire feeder designed for high-volume, high-production aluminum MIG welding where quality and consistency is a high priority. Features impact-resistant flame-retardant suitcase-style case. See literature DC/34.0.



### AlumaFeed® MIGRunner™ Package 951833

Includes the same as 951834, plus MIGRunner cart and industrial MIG 4/0 kit with Dinse-style connector. Other system packages available. See literature DC/34.0.



### AlumaFeed® Welding System 951834

Includes XR-AlumaFeed® Suitcase® 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. See literature DC/34.0.



### Millermatic® 350P Aluminum/XR-Aluma-Pro™ System

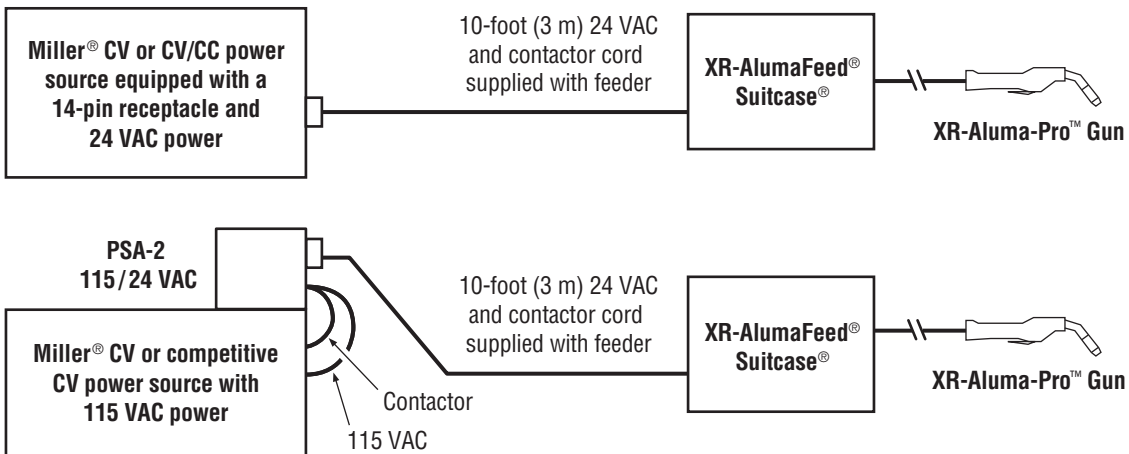
951452 200(208)/230/460 V

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.) See literature DC/12.56.



# 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

CV Power Supply	Control
Millermatic® 252, 255, 350P, 350P Aluminum Multimatic® 255	Direct Hook-Up
AlumaPower™ 350 MPa, 450 MPa Deltaweld® Series Invision™ Series XMT® Series (except VS model) Trailblazer® 325, 302 Air Pak™ Big Blue® Series (with 14-pin receptacle)	XR-AlumaFeed® Suitcase®

Note: XR-Aluma-Pro guns are not compatible with 74MPa Plus feeders.



# Ordering Information

## XR-Aluma-Pro guns require the following:

- **XR-AlumaFeed Suitcase**  
(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

AlumaPower™ MPa  
See literature DC/34.0  
(For synergic use with AlumaFeed®)

XMT® 350 Series  
See literature DC/18.93

XMT® 450 Series  
See literature DC/18.94

Invision™ MPa  
See literature DC/23.6

Trailblazer® Series  
See literature ED/4.75 and ED/4.8

Big Blue® 800 Series  
See literature ED/14.0

Note: Other power sources may be used.

Equipment	Stock No.	Description	Qty.	Price
<b>XR-Aluma-Pro™ Gun (Air-Cooled)</b>	<b>301568</b>	15 ft. (4.6 m) cable		
	<b>301569</b>	25 ft. (7.6 m) cable		
	<b>301570</b>	35 ft. (10.6 m) cable		
<b>XR-Aluma-Pro™ Gun (Water-Cooled)</b>	<b>301571</b>	15 ft. (4.6 m) cable		
	<b>301572</b>	25 ft. (7.6 m) cable		
	<b>301573</b>	35 ft. (10.6 m) cable		
XR-AlumaFeed® Suitcase® (See literature DC/34.0)	<b>301567</b>	Includes .035 and 3/64 in. drive rolls, and adds Profile Pulse™, synergic control, trigger schedule select, lock capabilities and flowmeter		
XR-AlumaFeed® Welding System (Air-Cooled) (See literature DC/34.0)	<b>951834</b>	Includes XR-AlumaFeed Suitcase feeder <b>301567</b> , AlumaPower™ 350 MPa power source, and 25 ft. air-cooled XR-Aluma-Pro gun		
XR-AlumaFeed® MIGRunner™ Package (Air-Cooled) (See literature DC/34.0)	<b>951833</b>	Includes the same as <b>951834</b> , plus MIGRunner cart and industrial MIG 4/0 kit with Dinse-style connector		
Millermatic® 350P Aluminum/ XR-Aluma-Pro System (Air-Cooled) (See literature DC/12.56)	<b>951452</b>	200(208)/230/460 V. True torque motor push-pull system. <i>Note: Millermatic 350P Aluminum is only compatible with push-pull guns — not standard MIG guns</i>		
<b>Consumables and Accessories</b>				
Consumables		See page 2		
Optional Head Tube Assemblies		See page 3		
Liners for Optional Head Tube Assemblies		See page 4		
Cable Cover	<b>M1681</b> <b>M1682</b> <b>M1683</b>	15 ft. (4.6 m) 25 ft. (7.6 m) 35 ft. (10.6 m)		
50-Degree Curved Nozzle Kit-A	<b>264064</b>			
Replacement Contact Tips for Curved Nozzle		See page 4		
50-Degree Curved Nozzle Insulator Kit	<b>264066</b>	For use with 50-Degree Curved Nozzle Kit-A		
1/16-Inch (1.6 mm) Wire Kit	<b>230708</b>	Required when running 1/16-inch wire		
Hardwire Liner Kit for Steel and Stainless	<b>198377</b>			
Phosphorous Bronze Liners		See page 4		
Coolant Systems		See literature AY/7.2		

Date:

Total Quoted Price:

Distributed by:

