

# Millermatic® 350P

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**MIG Arc Welding Power Source,  
Wire Feeder and Gun Package** 

## Quick Specs

### Industrial Applications

Fabrication  
Maintenance and Repair  
Farm  
Manufacturing  
Industrial

### Processes

MIG (GMAW)  
Pulsed MIG (GMAW-P)  
Flux Cored (FCAW)

**Rated Output** 300 A at 32 VDC, 60% Duty Cycle, 60 Hz, 1- or 3-Phase Input Power

**Amperage Range** 25–400 A

**Wire Feed Speed** 50–700 IPM (1.3–18 m/min) MIG Gun  
50–800 IPM (1.3–20 m/min) Spool Gun/Push-Pull Gun

**Weight** 181 lb (82 kg)

## The Power of Blue.®

### Built-in Pulsed MIG programs

- .035 and .045 in (0.9 and 1.2 mm) for mild or stainless steel.
- .035 and .047 in (0.9 and 1.2 mm) for 4000 and 5000 series aluminum.
- .045 in (1.2 mm) for metal core.

All programmed information is stored for MIG, push-pull and spool guns, and is restored after each power up.

**1- or 3-phase** input power with **line voltage compensation** for constant output even with fluctuations to the input power.

### Aluminum Pulse Hot Start™

automatically provides more arc power to eliminate a “cold start” that is inherent with aluminum starts.

### Superior aluminum performance .

Direct connection for optional XR™ push-pull guns or Spoolmatic® spool gun. With **Gun-On-Demand**, simply pull the trigger for the gun to be used and you're ready to weld.

**Fan-On-Demand** cooling only operates when needed, reducing power consumption and contaminants inside the unit.

**Industrial, 4-roll wire drive system** features two easy-to-set, scaled, tension adjustments and quick-change reversible drive rolls for .035 and .045 in (0.9 and 1.2 mm) wire.



**Welds materials 22 gauge up to 1/2 in (12.7 mm) thick.**



Power source is warranted for 3 years, parts and labor.  
Original main power rectified parts are warranted for 5 years.  
Gun warranted for 90 days, parts and labor.

### Standard MIG System Comes Complete with:

- Bernard® Q300 15 ft (4.6 m) MIG gun with extra Centerfire™ contact tips
- 10 ft (3 m) Industrial power cord (without plug) for single- or three-phase
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid
- Argon mix regulator/flow meter
- Factory-installed, low-mounted running gear/cylinder rack
- .035/.045 in (0.9/1.2 mm) reversible V-groove drive rolls (order U-groove drive roll kits for aluminum welding)
- Set-up and operation CD

### Special features

- Run-in adjustment for MIG, push-pull and spool guns.
- Built-in 2-minute spot timer.
- Pre-flow and post-flow adjustment.
- View actual welding amperage/voltage during welding, and 5 seconds after arc has shutoff.
- SharpArc™ controls welding arc cone width in pulsed MIG welding mode.
- Inductance control customizes weld output characteristics in MIG welding mode.

### Internal timers

- **Adjustable crater** feature optimizes crater size for steel, stainless, aluminum and metal-core applications.
- **Crater time delay** allows deactivation of crater feature for tack or small welds.

**Compatible with the Millermatic® Reach Wire Feeder.** MIG Gun sold separately. (See pg. 3 for more information.)



### Miller Electric Mfg. Co.

An Illinois Tool Works Company  
1635 West Spencer Street  
Appleton, WI 54914 USA

### Equipment Sales US and Canada

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FAX: 800-637-2315  
International Phone: 920-735-4554  
International FAX: 920-735-4125

### Web Site

www.MillerWelds.com

MADE IN USA  
APPLETON, WI USA



# Specifications (Subject to change without notice.)

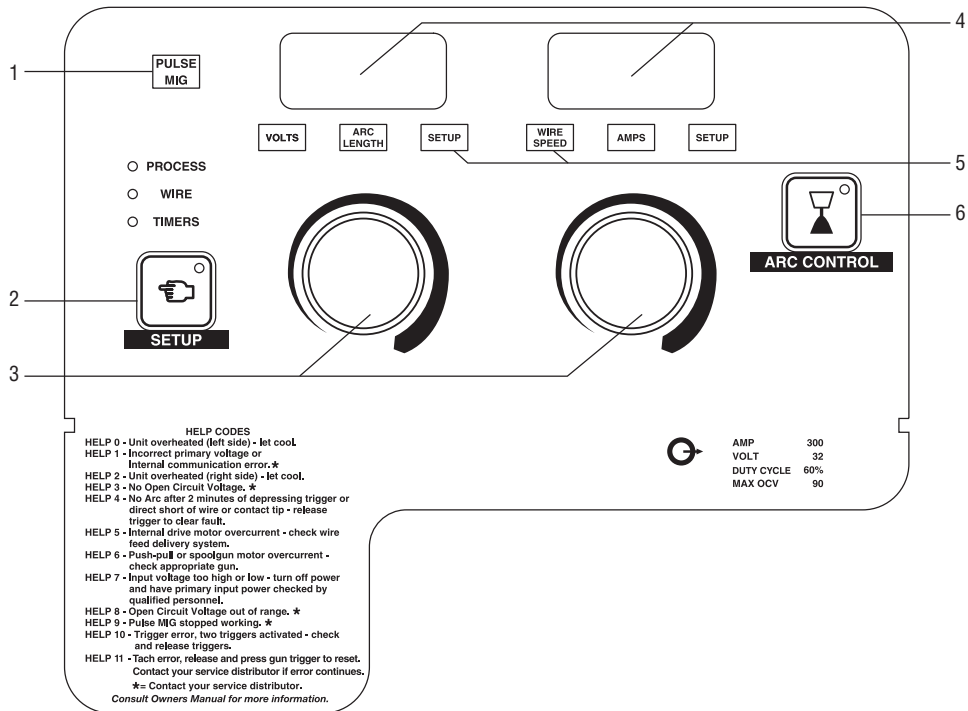


Rated Output	Amperage Range	Amps Input at Rated Output, 60 Hz					Wire Type and Diameter	Wire Feed Speed	Dimensions	Net Weight
		200 V	230 V	460 V	KVA	KW				
Three-phase 300 A at 32 V 60% Duty Cycle	25-400 A	34	30	15	11.6	11.5	<b>Solid Steel:</b> .023-.045 in (0.6-1.2 mm) <b>Aluminum:</b> .035-.047 in (0.9-1.2 mm) <b>Flux Core:</b> .030-.045 in (0.8-1.2 mm) <b>Metal Core:</b> .035-.052 in (0.9-1.3 mm)	<b>MIG Gun:</b> 50-700 IPM (1.3-18 m/min) <b>Spool Gun and Push-Pull Gun:</b> 50-800 IPM (1.3-20 m/min)	H: 34 in (863 mm) W: 19 in (483 mm) D: 41 in (1041 mm)	181 lb (82 kg)
Single-phase 300 A at 32 V 60% Duty Cycle		69	61	30	13.1	11.2				

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

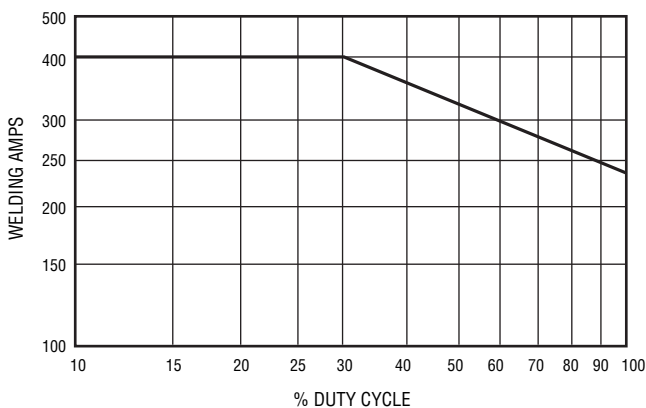
## Control Panel

1. Weld Mode Indicator Lights
2. Menu Set-Up Button
3. Adjustment Knobs
4. Weld Parameter Displays
5. Weld Function Indicator Lights
6. Arc Control Button

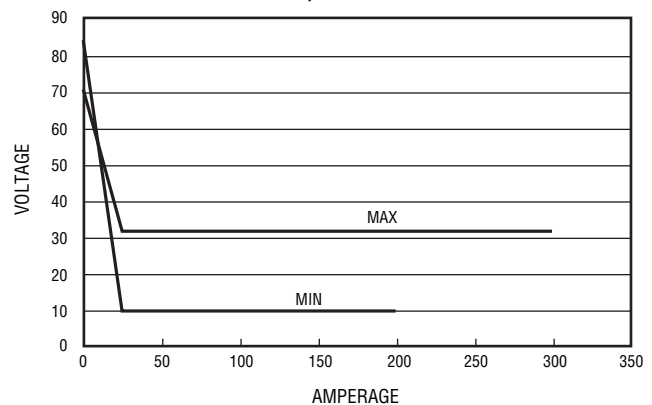


## Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



## Aluminum Welding System



### Millermatic 350P/XR-Aluma-Pro™ Push-Pull Gun Aluminum System #907 379 200/230/460 V

The ideal aluminum welding package. Includes Millermatic 350P, 25 ft XR-Aluma-Pro™ push-pull gun, .035 and .047 (3/64) FasTip™ contact tips, and .035/.047 (3/64) reversible U-groove drive rolls. (*Q300 MIG gun not included.*)

## Genuine Miller Accessories

\*Order from Miller Service Parts.

### Wire Feeder



**Millermatic Reach**  
#907 438 25 ft (7.6 m)  
Extend your Millermatic work envelope up to 40 feet! No more moving the machine and pulling primary power cables around the shop. Or use as a dual feeder option! No more downtime changing spools and drive rolls. For use with Millermatic 212 Auto-Set, 251, 252 and 350P. (*MIG Gun sold separately.*)

### Guns

**Bernard® Q300 MIG Gun** #229 560  
15 ft (4.6 m), 300 amp gun handles standard wire size .035–.045 in (0.9–1.2 mm). Includes Centerfire™ contact tips.



**Spoolmatic® 15A Spool Gun** #195 156  
**Spoolmatic® 30A Spool Gun** #130 831  
Ideal for aluminum welding jobs. 200 amp, 100% duty cycle, air-cooled, 1 lb spool gun with your choice of 15 or 30 ft (4.6 m or 9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.5.

### XR-A Aluma-Pro Push-Pull Gun

#300 000 15 ft (4.6 m)  
#300 001 25 ft (7.6 m)  
#300 264 35 ft (10.7 m)

### XR-A Pistol Push-Pull Gun

#198 127 15 ft (4.6 m)  
#198 128 30 ft (9 m)

### U-Groove Aluminum Drive Roll and Accessory Kits

*Note: XR-A Pistol kits include U-groove machine drive rolls, nylon wire guides, gun drive rolls and contact tips. XR-A Aluma-Pro kits include U-groove machine drive rolls, nylon wire guides and contact tips.*

### For XR-A Pistol

#195 201 .035 in (0.9 mm)  
#195 202 .047 in (1.2 mm)

### For XR-A Aluma-Pro

#195 311 .035 in (0.9 mm)  
#195 313 .047 in (1.2 mm)

### Dual Cylinder Rack #195 299

Replaces single cylinder rack.

### Millermatic® Protective Cover #195 142

### CO<sub>2</sub> Regulator/Flow Gauge #212 492\*

Required if using 100% CO<sub>2</sub> gas.

### Power Cord Plug #213 380\*

For 200 or 230 V, single-phase application. Rated at 250 VAC/50 A NEMA-style 6-50P.

## Consumables (Order from Miller Service Parts.)

### For Bernard Q300 MIG Gun

#### Centerfire Contact Tips (10 per package)

#T-023 .023 in (0.6 mm)  
#T-030 .030 in (0.8 mm)  
#T-035 .035 in (0.9 mm)  
#T-039 .039 in (1.0 mm) steel and for .035 in (0.9 mm) aluminum or stainless wires or metal core  
#T-045 .045 in (1.2 mm)  
#T-052 .052 in (1.3 mm) steel and for .047 in (1.2 mm) aluminum or stainless wires or metal core

#### Nozzle #N-5800C

Screw-type copper, 5/8 in (15.9 mm) orifice flush

#### Nozzle Insulator Cap #10012

#### Diffuser #D-1

Large Centerfire gas diffuser

#### Replacement Jump Liners

#QJL-2330 .023–.030 in. (0.6–0.8 mm)  
#QJL-3545 Standard .035–.045 in. (0.9–1.2 mm)

#### Replacement Liners

#43015 .023–.030 in (0.6–0.8 mm)  
#44115 Standard .035–.045 in. (0.9–1.2 mm)

### Drive Roll Kits

*Note: Drive roll kits include 4 drive rolls, an intermediate guide, and an inlet guide.*

#### V-Grooved Drive Roll Kits

#087 132 .023/.025 in (0.6 mm)  
#046 780 .030 in (0.8 mm)  
#046 781 .035 in (0.9 mm)  
#046 782 .045 in (1.2 mm)  
#227 061 .035/.045 in (0.9/1.2 mm)  
#046 783 .052 in (1.3 mm)  
#046 784 1/16 in (1.6 mm)

#### U-Grooved Drive Roll Kits

#044 750 .035 in (0.9 mm)  
#046 785 .047 in (1.2 mm)  
#046 786 .052 in (1.3 mm)  
#046 787 1/16 in (1.6 mm)

#### V-Knurled Drive Roll Kits

#046 792 .035 in (0.9 mm)  
#046 793 .045 in (1.2 mm)  
#046 794 .052 in (1.3 mm)  
#046 795 1/16 in (1.6 mm)



# Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Miller <sup>®</sup> 350P	#907 300	200/230/460 V, MIG/Pulsed MIG unit		
Miller <sup>®</sup> 350P/XR-Aluma-Pro™ Push-Pull Gun Aluminum Welding System	#907 379	200/230/460 V. Includes Miller <sup>®</sup> 350P, 25 ft XR-Aluma-Pro™ push-pull gun, .035 and .047 (3/64) FasTip™ contact tips, and .035/.047 (3/64) reversible U-groove drive rolls. (MIG gun not included.)		
<b>Feeders and Guns</b>				
Miller <sup>®</sup> Reach Wire Feeder	#907 438	25 ft (7.6 m) cable assembly. (MIG Gun sold separately.)		
Bernard <sup>®</sup> Q300 MIG Gun	#229 560	15 ft (4.6 m), 300 A, .035–.045 in (0.9–1.2 mm)		
Spoolmatic <sup>®</sup> 15A Spool Gun	#195 156	15 ft (4.6 m), 200 A, .023–1/16 in (0.6–1.6 mm) for aluminum		
Spoolmatic <sup>®</sup> 30A Spool Gun	#130 831	30 ft (9 m), 200 A, .023–1/16 in (0.6–1.6 mm) for aluminum		
XR™-A Aluma-Pro Push-Pull Gun	#300 000	15 ft (4.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#300 001	25 ft (7.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#300 264	35 ft (10.7 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
XR™-A Pistol Push-Pull Gun	#198 127	15 ft (4.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#198 128	30 ft (9 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
U-Groove Aluminum Drive Roll and Accessory Kit	#195 201	For XR-A Pistol Gun, .035 in (0.9 mm)		
	#195 202	For XR-A Pistol Gun, .047 in (1.2 mm)		
	#195 311	For XR-A Python/Aluma-Pro Gun, .035 in (0.9 mm)		
	#195 313	For XR-A Python/Aluma-Pro Gun, .047 in (1.2 mm)		
<b>Accessories</b>				
Dual Cylinder Rack	#195 299	Field installed, replaces single cylinder rack		
Protective Cover	#195 142			
CO <sub>2</sub> Regulator/Flow Gauge	#212 492	Required if using 100% CO <sub>2</sub> gas (Order from Miller Service Parts.)		
Power Cord Plug	#213 380	For 200/230 V, single-phase. NEMA-style 6-50P (Order from Miller Service Parts.)		
Electrode Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
<b>Consumables</b> (Order from Miller Service Parts.)				
Centerfire™ Consumables		See page 3		
Contact Tips				
Tapered Contact Tips				
Contact Tip Adapter				
Replacement Liners				
Nozzles				
Tapered Nozzles				
Drive Rolls				

Date:

Total Quoted Price:



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