

Millermatic® 252

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

Quick Specs

Industrial Applications

Metal fabrication
Maintenance and repair
Farm/home
Light industrial

Processes

MIG (GMAW)
Flux-cored (FCAW)

Input Power

200(208)/230 V, 1-phase, 60 Hz
230/460/575 V, 1-phase, 60 Hz

Amperage Range 30–300 A

Rated Output 200 A at 28 VDC, 60% duty cycle
250 A at 28 VDC, 40% duty cycle

Wire Feed Speed 50–700 ipm (1.3–17.8 m/min.)

Max. Open-Circuit Voltage 38 V

Net Weight 207 lb. (94 kg)

Highest output in its class (250 A at 28 VDC). Weld longer on high-end applications.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (stitch) timers. Independent timers for MIG and spool gun.

Line voltage compensation keeps power constant even if power input varies by ± 10 percent.

Active Arc Stabilizer™ minimizes weld cleanup, and provides excellent starts proven superior to the competition.

Auto Gun Detect™ allows operator to simply pull trigger on MIG gun, spool gun or push/pull gun. Automatically detects and recalls the voltage, wire feed speed and timer of the active gun. See page 3 for more information.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.



Comes complete with:

- 15 ft. (4.6 m), 250-amp M-25 MIG gun
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (with plug on 200/230 V model)
- Flow gauge regulator and gas hose for argon or AR/CO₂ mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips



EZ-Access™ consumable compartment and parameter chart. Set weld parameters right the first time with convenient flip-down compartment that provides fast access to parameter chart and consumables. See page 3 for more information.

Superior aluminum MIG welding with direct connection of optional push-pull guns and spool guns. Now directly connect your XR™ push-pull guns or Spoolmate™ 200 and Spoolmatic® spool guns. No extra module to buy or install.



Welder is warranted for three years, parts and labor.
Original main power rectified parts are warranted for five years.
Gun warranted for 90 days, parts and labor.



Miller Electric Mfg. Co.
An ITW Welding Company
1635 West Spencer Street
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FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com




Specifications (Subject to change without notice.)



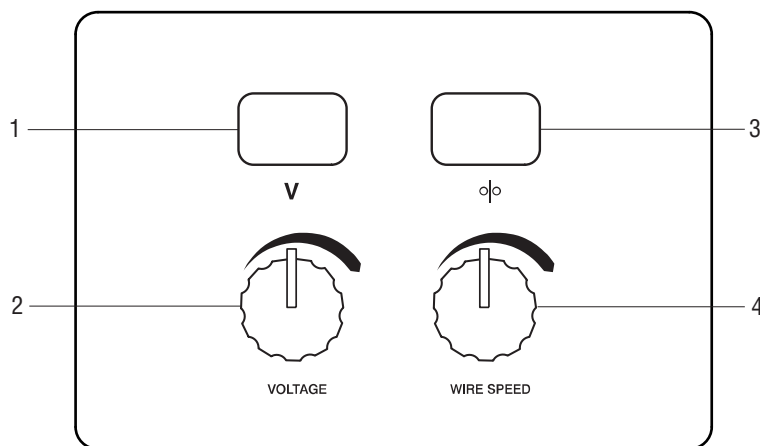
Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz						Wire Feed Speed	Wire Type and Diameter	Max. Spool Size	Max. Open-Circuit Voltage	Dimensions	Net Weight
		200(208) V	230 V	460 V	575 V	KVA	KW						
30–300 A	200 A at 28 VDC, 60% duty cycle 250 A at 28 VDC, 40% duty cycle	48 2.3*	42 2*	21 1*	17 0.8*	9.8 0.46*	7.5 0.13*	50–700 ipm (1.3–17.8 m/min.)	Solid/stainless steel: .023–.045 in. (0.6–1.2 mm) Flux-cored: .030–.045 in. (0.8–1.2 mm)	12 in. (305 mm)	38	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1,016 mm)	207 lb. (94 kg)

*While idling.

Note: Operating temperature range: -4° to +104°F (-20° to +40°C). Storage temperature range: -22° to +122°F (-30° to +50°C).

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

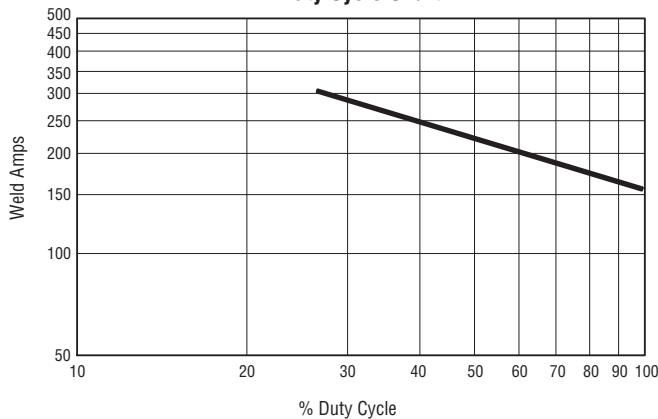
Control Panel



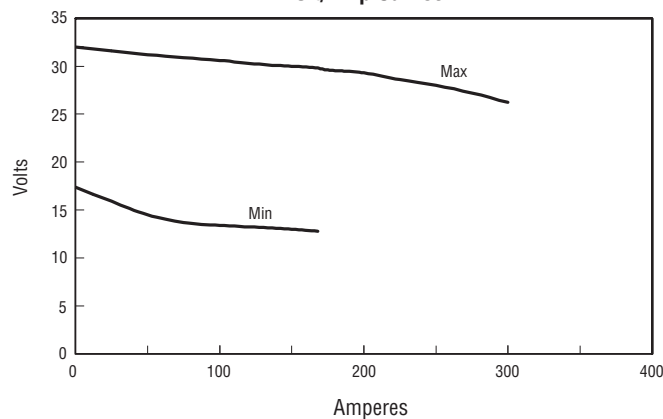
1. Voltmeter
2. Voltage Control
3. Wire Speed Meter
4. Wire Speed Control

Performance Data

Duty Cycle Chart



Volt/Amp Curves



Genuine Miller® Accessories

Push-Pull Guns

Direct connection for Miller push-pull guns.

- Able to utilize 12-inch rolls of aluminum wire inside the Millermatic 252 for extended aluminum welding time.
- Wire feed speed is adjustable at the gun and actual speed can be seen on the digital display on the Millermatic 252.
- Adjustable run-in control to fine tune arc starting.



XR-Aluma-Pro™ Lite Push-Pull Gun

300948 25 ft. (7.6 m)

Air-cooled gooseneck-style gun for .030–.047 in. (0.8–1.2 mm) aluminum. Rated at 175 amps at 60 percent duty cycle.



XR-Aluma-Pro™ Push-Pull Gun

300000 15 ft. (4.6 m)

300001 25 ft. (7.6 m)

Air-cooled gooseneck-style gun for .030–.047 in. (0.8–1.2 mm) aluminum. Rated at 200 amps at 100 percent duty cycle.



XR™ -Pistol Push-Pull Gun

198127 15 ft. (4.6 m) cable

198128 30 ft. (9 m) cable

Air-cooled pistol grip gun for .030–.047 in. (0.8–1.2 mm) aluminum. Rated at 200 amps at 100 percent duty cycle.

U-Grooved Aluminum Drive Roll and Accessory Kits for Push-Pull Guns

Note: XR-Aluma-Pro kits include Millermatic U-grooved drive rolls, nylon wire guides and contact tips.

XR-Pistol kits include Millermatic U-grooved drive rolls, nylon wire guides, gun drive rolls and contact tips.

For XR-Aluma-Pro (air-cooled)

195311 .035 in. (0.9 mm)

195312 .040 in. (1 mm)

195313 .047 in. (1.2 mm)

For XR Pistol (air-cooled)

195201 .035 in. (0.9 mm)

195273 .040 in. (1 mm)

195202 .047 in. (1.2 mm)

M-25 Replacement Gun

169594 10 ft. (3 m)

169596 12 ft. (3.7 m)

169598 15 ft. (4.6 m) standard Gun shipped to run .030–.035 inch (0.8–0.9 mm) wire.



Spoolmatic® 15A Spool Gun 195156

Spoolmatic® 30A Spool Gun 130831

Ideal for aluminum welding jobs. Air-cooled, one-pound spool gun with 15-foot (4.6 m) or 30-foot (9.1 m) cable assembly. Rated at 200 amps at 100 percent duty cycle. For detailed information, see Spoolmatic literature M/1.73.



Spoolmate™ 200 Spool Gun 300497

Reliable and economical spool gun perfect for hobbyists and light fabricators who weld aluminum. Handles .030–.035 inch (0.8–0.9 mm) aluminum wires and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 160 amps, 60 percent duty cycle with 20-foot cable assembly. For detailed information, see Spoolmate literature M/1.47.



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack 300337

Dual cylinder rack allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack 300335

For use with single cylinder rack. *(Included with dual EZ-Change low cylinder rack.)*



Protective Cover 195142

Features side pocket. *(Not for use with dual cylinder rack or elevated gun and cable rack.)*

Argon/Mixed Gas Regulator and Gas Hose 195050

(Order from Miller Service Parts.)

Millermatic® Drive Roll Kits

Note: Drive roll kits include two drive rolls and an inlet guide.

V-Grooved Drive Roll Kits (solid wire)

204579 .030 and .035 in.
(0.8 and 0.9 mm)
combination (reversible)

087131 .024 in. (0.6 mm)

079594 .030 in. (0.8 mm)

079595 .035 in. (0.9 mm)

079596 .045 in. (1.2 mm)

V-Knurled Drive Roll Kits

(flux-cored or difficult-to-feed wire)

079606 .035 in. (0.9 mm)

079607 .045 in. (1.2 mm)

U-Grooved Drive Roll Kits

(aluminum wire)

044749 .035 in. (0.9 mm)

079599 .047 in. (1.2 mm)



Nozzles

Note: Flush or stickout nozzles should be used for the short-circuit process. Recessed nozzles should be used for the spray arc process.

200258 (standard)

1/2-inch (13 mm) diameter orifice. Nozzle flush with contact tip.

169726

5/8-inch (16 mm) diameter orifice. Nozzle flush with contact tip.

169727

5/8-inch (16 mm) diameter orifice. Contact tip sticks out of nozzle 1/8 inch (3.2 mm).

169724

1/2-inch (13 mm) diameter orifice. Contact tip recessed 1/8 inch (3.2 mm) into nozzle.

169725

5/8-inch (16 mm) diameter orifice. Contact tip recessed 1/8 inch (3.2 mm) into nozzle.

Tapered Nozzles

Note: Tapered tips are recommended when using a tapered nozzle.

176243

3/8-inch (9.5 mm) diameter orifice.

178386

11/32-inch (8.7 mm) diameter orifice.

Nozzle Adapter 169729



M-Series Consumable Kits

234610 .030 in. (0.8 mm)

234611 .035 in. (0.9 mm)

234612 .045 in. (1.2 mm)

Contains ten contact tips, one nozzle, one contact tip adapter and one nozzle adapter.

For M-25 Gun



Contact Tips

087299 .024 in. (0.6 mm)

000067 .030 in. (0.8 mm)

000068 .035 in. (0.9 mm)

000069 .045 in. (1.2 mm)

187117 .035 in. (0.9 mm) heavy-duty tip

187118 .045 in. (1.2 mm) heavy-duty tip

Tapered Contact Tips

176797 .030 in. (0.8 mm)

176793 .035 in. (0.9 mm)

176794 .045 in. (1.2 mm)



Contact Tip Adapter 169728

Replacement Liners

194010 .024 in.

194011 .030–.035 in. (standard)

194012 .035–.045 in.

15-foot length — trim to size needed.