

Miller[®] 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.



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MillerWelds.com




Specifications (Subject to change without notice.)



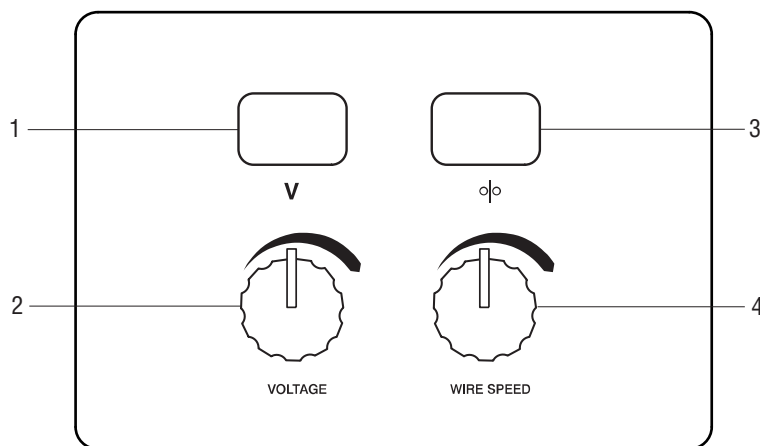
Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz						Wire Feed Speed	Wire Type and Diameter	Max. Spool Size	Max. Open-Circuit Voltage	Dimensions	Net Weight
		200(208) V	230 V	460 V	575 V	KVA	KW						
30–300 A	200 A at 28 VDC, 60% duty cycle 250 A at 28 VDC, 40% duty cycle	48 2.3*	42 2*	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.

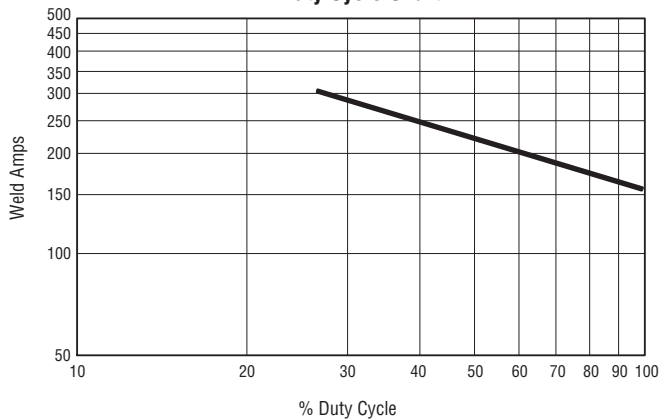
Control Panel



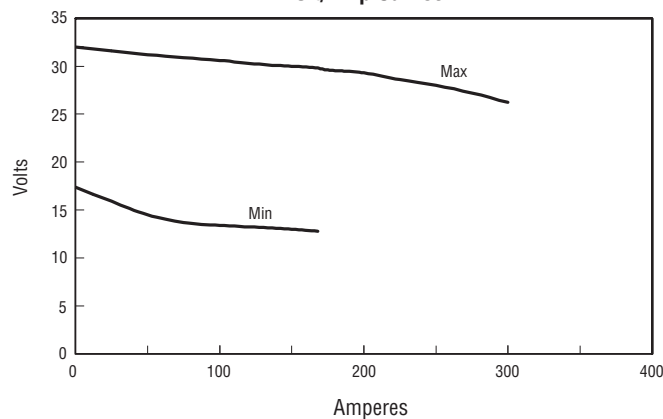
1. Voltmeter
2. Voltage Control
3. Wire Speed Meter
4. Wire Speed Control

Performance Data

Duty Cycle Chart



Volt/Amp Curves



Standard Fully Loaded Features

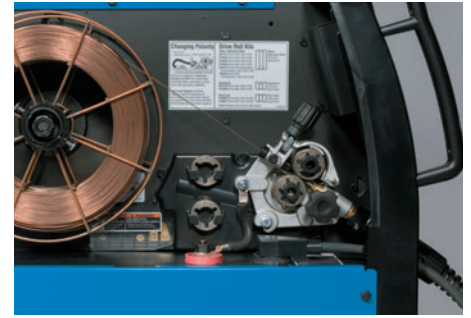
EZ-Change™ low cylinder rack

- Operators no longer need to lift cylinders. Cylinders now easily roll on and off our EZ-Change™ low cylinder rack.



Angled wire drive

- Angled industrial aluminum dual-gear drive system significantly improves wire feeding and runs large spools of wire.
- Allows quick change of drive rolls without tools.
- Drive roll storage — no more lost drive rolls, extra drive rolls are conveniently stored next to drive motor.
- Operators no longer bump into and bend MIG gun and gun liner.



Dual front handles

- Split handle with rubber grips designed to move machine easily and allow work lead and MIG gun to be stored independently.
- Handles provide protection for front panel and MIG gun during transportation.



EZ-Access™ consumable compartment and parameter chart

- Convenient flip-down compartment holds parameter chart and storage for consumables.



Auto-Gun Detect™

- Simply pull the trigger for either the MIG, spool gun or any Miller® push-pull gun. The Millermatic 252 automatically recalls voltage, wire feed speed and timer of the active gun.
- Reduces setup time!



Optional Fully Loaded Features

Elevated gun and cable rack

300335

- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.
- No more running over spool gun cables or cables dragging on the floor.
- Elevated gun and cable rack can be used with either a single or dual cylinder rack. (Elevated gun and cable rack is included with the dual EZ-Change™ low cylinder rack.)



Dual EZ-Change™ low cylinder rack with elevated gun and cable rack

300337

- Dual cylinder rack allows for easy storage of two cylinders.
- EZ-Change™ low cylinder rack eliminates the need to lift cylinders on and off cylinder rack.
- No more running over spool gun cables or cables dragging on the floor.
- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.



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.



Ordering Information

Steel Configuration	Stock No.	Description	Qty.	Price
Millermatic® 252	907321	200(208)/230 V, 60 Hz		
	907322	230/460/575 V, 60 Hz		
Millermatic V-Grooved Drive Roll Kits (solid wire)	087131	.024 in. (0.6 mm)		
	079594	.030 in. (0.8 mm)		
	079595	.035 in. (0.9 mm)		
	079596	.045 in. (1.2 mm)		
Millermatic V-Knurl Drive Roll Kits (flux-cored)	079606	.035 in. (0.9 mm)		
	079607	.045 in. (1.2 mm)		
Contact Tips (10 per package)	087299	.024 in. (0.6 mm)		
	000067	.030 in. (0.8 mm)		
	000068	.035 in. (0.9 mm)		
	000069	.045 in. (1.2 mm)		
Nozzles	200258	1/2 in. (13 mm) diameter, flush <i>(included with standard configuration)</i>		
	169726	5/8 in. (16 mm) diameter, flush		
	169727	5/8 in. (16 mm) diameter, 1/8 in. (3.2 mm) exposed		
	169724	1/2 in. (13 mm) diameter, 1/8 in. (3.2 mm) recessed		
	169725	5/8 in. (16 mm) diameter, 1/8 in. (3.2 mm) recessed		
M-Series Gun Consumable Kits (for M-25)	234610	.030 in. (0.8 mm)		
	234611	.035 in. (0.9 mm)		
	234612	.045 in. (1.2 mm)		

Aluminum Configuration (Spool Gun) For M-25 gun consumables and non-aluminum Millermatic 252 drive rolls, see steel configuration chart above.

Millermatic® 252 Spool Gun Packages (includes standard M-25 MIG gun)	951066	200(208)/230 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
	951065	230/460/575 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
Spoolmatic Contact Tips (10 per package)	206187	.035 in. (0.9 mm)		
	206188	.040 in. (1.0 mm)		
	206189	.047 in. (1.2 mm)		
Spoolmatic Nozzles	198855	5/8 in. (16 mm) diameter		
	199618	5/8 in. (16 mm) diameter, HD		
	199616	3/4 in. (19 mm) diameter		
	199617	3/4 in. (19 mm) diameter, HD		

Aluminum Configuration (Push-Pull Gun) For M-25 gun consumables and non-aluminum Millermatic 252 drive rolls, see steel configuration chart above.

Millermatic® 252 (includes standard M-25 MIG gun)	907321	200(208)/230 V, 60 Hz		
	907322	230/460/575 V, 60 Hz		
XR-Aluma-Pro™ Lite Gun (air-cooled)	300948	25 ft. (7.6 m)		
XR-Aluma-Pro™ Gun (air-cooled)	300000	15 ft. (4.6 m)		
	300001	25 ft. (7.6 m)		
XR™-Pistol (air-cooled)	198127	15 ft. (4.6 m)		
	198128	30 ft. (9.1 m)		
Millermatic U-Grooved Drive Roll Kits (aluminum)	044749	.035 in. (0.9 mm)		
	079599	.047 in. (1.2 mm)		
XR-Aluma-Pro U-Grooved Drive Roll Kits (required, includes Millermatic U-Grooved Drive Roll Kit)	195311	.035 in. (0.9 mm)		
	195312	.040 in. (1.0 mm)		
	195313	.047 in. (1.2 mm)		
XR-Pistol U-Grooved Drive Roll Kits (required, includes Millermatic U-Grooved Drive Roll Kit)	195201	.035 in. (0.9 mm)		
	195273	.040 in. (1.0 mm)		
	195202	.047 in. (1.2 mm)		
XR-Aluma-Pro Lite Contact Tips (10 per package)	T-035AL	.035 in. (0.9 mm)		
	T-047AL	.047 in. (1.2 mm)		
XR-Aluma-Pro and XR-Pistol Contact Tips (10 per package)	206187	.035 in. (0.9 mm)		
	206188	.040 in. (1.0 mm)		
	206189	.047 in. (1.2 mm)		
Nozzles	198855	5/8 in. (16 mm) diameter		
	199618	5/8 in. (16 mm) diameter, HD		
	199616	3/4 in. (19 mm) diameter		
	199617	3/4 in. (19 mm) diameter, HD		

Date:

Total Quoted Price:

Ordering Information

Accessories

	Stock No.	Description	Qty.	Price
XR-Aluma-Pro™ Lite Gun (air-cooled)	300948	25 ft. (7.6 m)		
XR-Aluma-Pro™ Gun (air-cooled)	300000	15 ft. (4.6 m)		
	300001	25 ft. (7.6 m)		
XR™-Pistol Gun (air-cooled)	198127	15 ft. (4.6 m)		
	198128	30 ft. (9 m)		
M-25 Gun	169594	10 ft. (3 m), .023–.035 in. (0.6–0.9 mm)		
	169596	12 ft. (3.7 m), .023–.035 in. (0.6–0.9 mm)		
	169598	15 ft. (4.6 m), .023–.035 in. (0.6–0.9 mm)		
Spoolmatic® 15A	195156	15 ft. (4.6 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum		
Spoolmatic® 30A	130831	30 ft. (9 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum		
Spoolmate™ 200	300497	20 ft. (6 m), 160 A, .030–.035 in. (0.8–0.9 mm) for aluminum, .023–.035 in. (0.6–0.9 mm) for steel/stainless steel wires		
Optional Spoolmate 200 Barrel Assemblies	300591	45-degree barrel		
	300592	9 in. extension barrel		
	300593	Heavy-duty barrel		
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	300337			
Elevated Gun and Cable Rack	300335	For use with single cylinder rack <i>(included with dual EZ-Change low cylinder rack)</i>		
Protective Cover	195142	Features side pocket		
Argon/Mixed Gas Regulator and Gas Hose	195050			

Date:

Total Quoted Price:

Note: See page 7 for ordering information on the Millermatic 252 — available packages, steel and aluminum configurations, and drive roll kits/consumables.

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