

Millermatic® 252

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**MIG Arc Welding
Power Source** 

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
230/460/575 V

Rated Output 200 Amps at 28 VDC, 60% Duty Cycle
250 Amps at 28 VDC, 40% Duty Cycle

Max. Open-Circuit Voltage 38

Amperage Range 30–300 A

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

Weight 207 lb (94 kg)

The Power of Blue.®

Highest output in its class (250 A at 28 VDC).

Weld longer on high end applications.

Large, digital front panel with built-in digital timers menu enables operator to preset voltage and wire feed speed. Standard run-in, pre/postflow, burnback, spot/delay (stitch) timer menu.

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.



Push-Pull Gun Direct Connect — now directly connects your push-pull gun, no extra module required.

Angled, dual-gear driven, cast aluminum drive system features no-tool, quick-change reversible drive rolls and an easy-to-set, scaled tension knob. **See page 3 for more information.**

Patent-pending EZ-Change™ Low Cylinder Rack allows operators to easily roll cylinders on and off of rack — no need to lift cylinders. **See page 3 for more information.**



Comes Complete With:

- 10 ft (3 m) power cord and plug (200/230 V model only)
- 15 ft (4.6 m), 250 amp M-25 MIG gun for .030/.035 in wire
- 10 ft (3 m) work cable and clamp
- Argon mix regulator/flow gauge and hose
- Extra contact tips
- Factory-installed running gear with EZ-Change™ Low Cylinder Rack
- .030/.035 in reversible drive rolls
- Set-up and operation interactive CD



EZ-Access™ Consumable Compartment and Parameter Chart — set weld parameters right the first time with convenient new flip-down compartment that provides fast access to parameter chart and consumables. **See page 3 for more information.**

Larger work area — now with longer 15-ft M-25 gun.

Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and contaminants drawn into the machine.

Less weld cleanup with Active Arc Stabilizer™ — patented Miller design provides excellent starts proven superior to the competition.

Line voltage compensation keeps power constant even if power input varies by $\pm 10\%$.



Welder 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.

MADE IN USA
APPLETON, WI 



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

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Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com



Specifications (Subject to change without notice.)



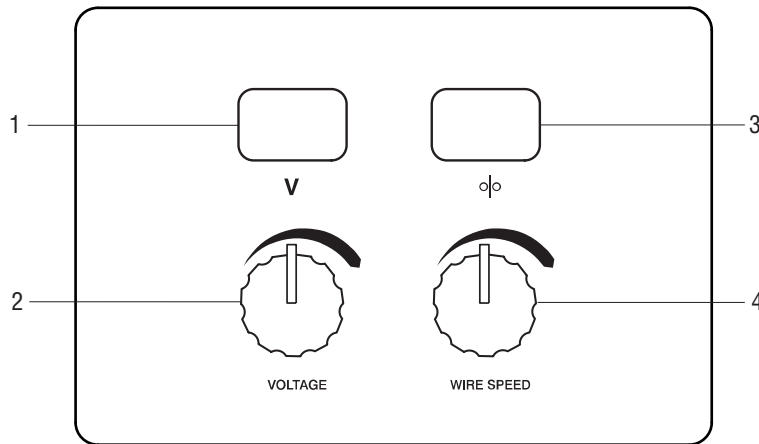
Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz						Wire Type and Diameter	Wire Feed Speed	Max. Spool Size	Dimensions	Net Weight
			200(208) V	230 V	460 V	575 V	KVA	KW					
200 A, 28 VDC at 60% Duty Cycle	30–300 A	38	48	42	21	17	9.8	7.5	Solid/Stainless Steel: .023 – .045 in (0.6 – 1.2 mm)	50–700 IPM (1.3–17.8 m/min)	12 in (305 mm)	H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)	207 lb (94 kg)
250 A, 28 VDC at 40% Duty Cycle			2.3*	2*	1*	0.8*	0.46*	0.13*					

*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 to both the Canadian and U.S. Standards for welding equipment.

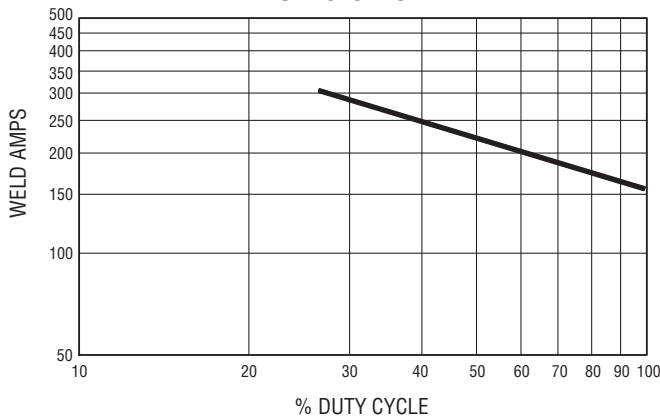
Control Panel



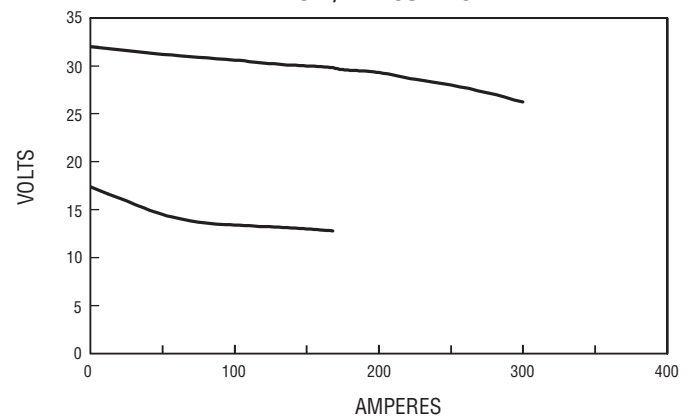
1. Voltmeter
2. Voltage Control
3. Wire Speed Meter
4. Wire Speed Control

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



Standard Fully Loaded Features

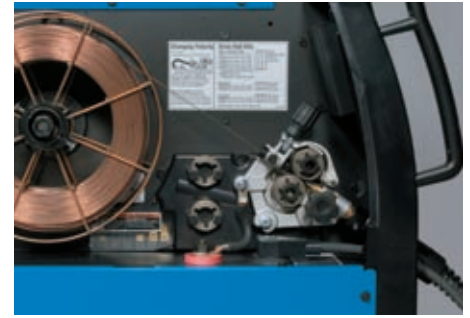
EZ-Change™ Low Cylinder Rack

- Patent-pending design — 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 wirefeeding 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

- Exclusive 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

#300 335

- 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™ Cylinder Rack with Elevated Gun and Cable Rack

#300 337

- Dual cylinder rack allows for easy storage for 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

Direct connection for all Miller push-pull guns.

- Able to utilize 12 in 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-A Aluma-Pro Gun
#300 000 15 ft (4.6 m) Cable
#300 001 25 ft (7.6 m) Cable
 300 amps at 100% duty cycle.



XR-A Pistol Gun
#198 127 15 ft (4.6 m) Cable
#198 128 30 ft (9 m) Cable
 200 amps at 100% duty cycle.

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 Python/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)
#195 273 .040 in (1 mm)
#195 202 .047 in (1.2 mm)
For XR-A Python/Aluma-Pro
#195 311 .035 in (0.9 mm)
#195 312 .040 in (1 mm)
#195 313 .047 in (1.2 mm)

M-25 Replacement Gun
#169 594 10 ft (3 m)
#169 596 12 ft (3.7 m)
#169 598 15 ft (4.6 m) standard
 Gun shipped to run .030–.035 in (0.8–0.9 mm) wire.



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 ft or (4.6 m) 30 ft (9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.2.



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337
 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 #300 335
 For use with single cylinder rack. (Included with Dual EZ-Change Low Cylinder Rack.)



Protective Cover with Helmet Bag #195 142
 Features side pocket and helmet bag. (Not for use with Dual Cylinder Rack or Elevated Gun and Cable Rack.)

Argon/Mixed Gas Regulator and Gas Hose #195 050
 (Order from Miller Service Parts.)

CO₂ Regulator/Flow Gauge #237 702
 Required if using 100% CO₂ gas. (Order from Miller Service Parts.)

For M-25 Gun



Contact Tips

- #087 299 .023/.025 in (0.6 mm)
- #000 067 .030 in (0.8 mm)
- #000 068 .035 in (0.9 mm)
- #000 069 .045 in (1.2 mm)
- #187 117 .035 in (0.9 mm) heavy-duty tip
- #187 118 .045 in (1.2 mm) heavy-duty tip

Tapered Contact Tips

- #176 797 .030 in (0.8 mm)
- #176 793 .035 in (0.9 mm)
- #176 794 .045 in (1.2 mm)



Contact Tip Adapter #169 728



Replacement Liners

- #194 010 .023/.025 in
- #194 011 .030–.035 in (standard)
- #194 012 .035–.045 in



Nozzles

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

#200 258 Standard

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

#169 726

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

#169 727

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

#169 724

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

#169 725

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

Spot Nozzles

- #176 238 Flat
- #176 240 Inside corner
- #176 242 Outside corner

Tapered Nozzles

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

- #176 243 3/8 in (9.5 mm) diameter orifice
- #178 386 11/32 in (8.7 mm) diameter orifice



Consumable Kits

- #234 610 .030 in (0.8 mm)
 - #234 611 .035 in (0.9 mm)
 - #234 612 .045 in (1.2 mm)
- Contains 10 contact tips, 1 nozzle, 1 contact tip adapter, and 1 nozzle adapter.

Drive Rolls

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

V-Grooved Drive Roll Kits (solid wire)

- #204 579 .030 & .035 in (0.8 & 0.9 mm) Combination (Reversible)
- #087 131 .023/.025 in (0.6 mm)
- #079 594 .030 in (0.8 mm)
- #079 595 .035 in (0.9 mm)
- #079 596 .045 in (1.2 mm)

V-Knurled Drive Roll Kits

- (Flux Cored or difficult-to-feed wire)
- #079 606 .035 in (0.9 mm)
 - #079 607 .045 in (1.2 mm)

Ordering Information

Steel Configuration

	Stock No.	Description	Qty.	Price
Millermatic® 252	#907 321	200(208)/230 V, 60 Hz		
	#907 322	230/460/575 V, 60 Hz		
V-Groove Drive Roll Kits (solid wire)	#087 131	.023/.025 (0.6 mm)		
	#079 594	.030 (0.8 mm)		
	#079 595	.035 (0.9 mm)		
	#079 596	.045 (1.2 mm)		
V-Knurled Drive Roll Kits (flux cored)	#079 606	.035 (0.9 mm)		
	#079 607	.045 (1.2 mm)		
Contact Tips (10 per package)	#087 299	.023/.025 (0.6 mm)		
	#000 067	.030 (0.8 mm)		
	#000 068	.035 (0.9 mm)		
	#000 069	.045 (1.2 mm)		
Nozzles	#169 724	1/2 in (13 mm) diameter, 1/8 in (3.2 mm) recessed		
	#169 725	5/8 in (16 mm) diameter, 1/8 in (3.2 mm) recessed		
	#200 258	1/2 in (13 mm) diameter, flush. <i>Included with standard configuration</i>		
	#169 726	5/8 in (16 mm) diameter, flush		
	#169 727	5/8 in (16 mm) diameter, 1/8 in (3.2 mm) exposed		

Aluminum Configuration (Spool Gun)

Millermatic® 252 Spool Gun Packages (Also includes standard M-25 MIG gun)	#951 066	200(208)/230 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
	#951 065	230/460/575 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
Spool Gun Contact Tips (10 per package)	#206 187	.035 (0.9 mm)		
	#206 188	.040 (1.0 mm)		
	#206 189	.047 (1.2 mm)		
Spool Gun Nozzles	#198 855	5/8 in (16 mm) diameter		
	#199 618	5/8 in (16 mm) diameter, HD		
	#199 616	3/4 in (19 mm) diameter		
	#199 617	3/4 in (19 mm) diameter, HD		

For M-25 gun consumables and Millermatic 252 drive rolls see steel configuration chart above.

Aluminum Configuration (Push-Pull Guns)

Millermatic® 252 (Includes standard M-25 MIG gun)	#907 321	200(208)/230 V, 60 Hz		
	#907 322	230/460/575 V, 60 Hz		
XR™-A Aluma-Pro Gun	#300 000	15 ft (4.6 m)		
	#300 001	25 ft (7.6 m)		
XR™-A Pistol	#198 127	15 ft (4.6 m)		
	#198 128	30 ft (9.1 m)		
XR™-A Pistol U-Groove Drive Roll Kits (required)	#195 201	.035 (0.9 mm)		
	#195 273	.040 (1.0 mm)		
	#195 202	.047 (1.2 mm)		
XR™-A Aluma-Pro U-Groove Drive Roll Kits (required)	#195 311	.035 (0.9 mm)		
	#195 312	.040 (1.0 mm)		
	#195 313	.047 (1.2 mm)		
Contact Tips (10 per package)	#206 187	.035 (0.9 mm)		
	#206 188	.040 (1.0 mm)		
	#206 189	.047 (1.2 mm)		
Nozzles	#198 855	5/8 in (16 mm) diameter		
	#199 618	5/8 in (16 mm) diameter, HD		
	#199 616	3/4 in (19 mm) diameter		
	#199 617	3/4 in (19 mm) diameter, HD		
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	#300 337			
Elevated Gun and Cable Rack	#300 335	For use with single cylinder rack. <i>(Included with Dual EZ-Change Low Cylinder Rack.)</i>		

For M-25 gun consumables and Millermatic 252 drive rolls see steel configuration chart above.

Date:

Total Quoted Price:

Ordering Information

Accessories

Gun Convenience Kit for Steel	#193 975	<i>(Order from Miller Service Parts.)</i>		
XR™-A Aluma-Pro™	#300 000	15 ft (4.6 m)		
	#300 001	25 ft (7.6 m)		
XR™-A Pistol Gun	#198 127	15 ft (4.6 m)		
	#198 128	30 ft (9 m)		
M-25 Gun	#169 594	10 ft (3 m), .023–.035 in (0.6–0.9 mm)		
	#169 596	12 ft (3.7 m), .023–.035 in (0.6–0.9 mm)		
	#169 598	15 ft (4.6 m), .023–.035 in (0.6–0.9 mm)		
Spoolmatic® 15A	#195 156	Spool gun for aluminum		
Spoolmatic® 30A	#130 831	Spool gun for aluminum		
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	#300 337			
Elevated Gun and Cable Rack	#300 335	For use with single cylinder rack. <i>(Included with Dual EZ-Change Low Cylinder Rack.)</i>		
Protective Cover with Helmet Bag	#195 142	Features side pocket and helmet bag		
Argon/Mixed Gas Regulator and Gas Hose	#195 050	<i>(Order from Miller Service Parts.)</i>		
CO ₂ Regulator/Flow Gauge	#237 702	Required if using 100% CO ₂ gas. <i>(Order from Miller Service Parts.)</i>		

Date:

Total Quoted Price:

Note: See page 7 for ordering information on Millermatic 252, available packages, and steel and aluminum configurations.



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