

Millermatic® 190

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



Quick Specs

Light Industrial Applications

Light fabrication
Maintenance and repair
Auto body
Farm/home

Processes

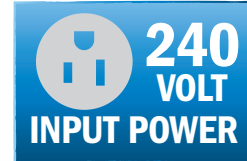
MIG (GMAW)
Flux-cored (FCAW)

Weld Thickness

24 ga.–5/16 in. steel and 18 ga.–1/4 in. aluminum

Input Power 240 V, 21.7 A, 60 Hz, single-phase

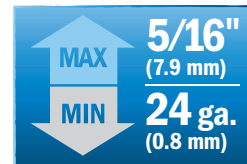
Rated Output 140 A at 21 VDC, 40% duty cycle



Uses 240-volt power



Portable



Weld capacity



Quick and easy setup

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters.

- Set the wire diameter, a blue light shows Auto-Set is activated
- Dial in the thickness of what you're welding
- Start welding with the exact parameters you need!

Miller inverter technology combines best-in-class arc characteristics with the portability of a 35-pound machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup for up to 15-foot MIG guns.

Quick Select™ drive roll makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

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

Smooth-Start™ provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 4- or 8-inch (102 or 203 mm) spools and can be set up to weld with .024–.035 inch (0.6–0.9 mm) solid wire and .030–.045 inch (0.8–1.2 mm) flux-cored wire.

Comes complete with:

- Power source
- 6.5 ft. (2 m) power cord with plug
- 10 ft. (3 m), M-100 MIG gun and cable assembly
- 10 ft. (3 m) work cable with clamp
- Argon and AR/CO₂ mix flow gauge regulator with gas hose
- Hobart® spool of .030 in. (0.8 mm) solid wire
- Two contact tips for .030 in. (0.8 mm) wire
- Quick Select™ drive rolls for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Material thickness gauge ▶ 229895
- Hook-and-loop cord wraps

Note: Shielding gas and safety equipment not included.



Welder is warranted for three years, parts and labor.
Gun warranted for 90 days, parts and labor.



Miller Electric Mfg. Co.
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

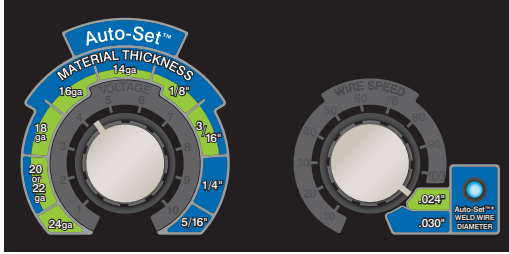
Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com



Operation Modes

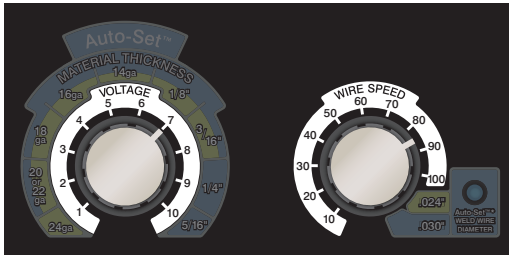
Auto-Set™ Mode



Auto-Set eliminates guesswork and saves you time on setup. Turn wire speed control fully clockwise to select Auto-Set mode, and set the wire diameter to either .024 or .030 in. The Auto-Set light indicates mode is activated. Then select material thickness using the Auto-Set control.

Use Auto-Set when you want the speed, convenience and confidence of pre-set controls. Auto-Set automatically sets your welder to the proper parameters. It's available for welding 24-gauge through 5/16-inch mild steel, and only works with .024 and .030 solid wires and C25 shielding gas (75% argon, 25% CO₂).

Manual Mode



When welding outside of Auto-Set's capabilities, or if you prefer custom parameters, use manual mode. The parameter chart on the inside of the access door is an easy-to-use guide for determining your voltage and wire feed speed settings. Reference the white areas on the controls when welding in manual mode.



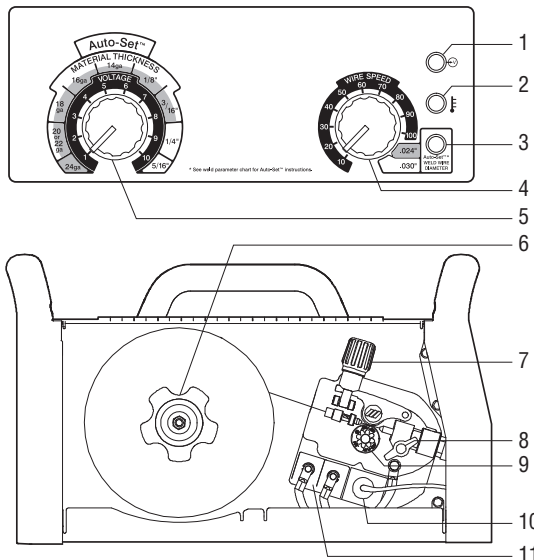
Specifications (Subject to change without notice.)



Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz			Wire Feed Speed	Wire Type and Diameter	Max. Open-Circuit Voltage	Dimensions	Net Weight
		240 V	KVA	KW					
30–190 A	140 A at 21 VDC, 40% duty cycle	21	5.0	3.8	60–600 ipm (1.5–15.2 m/min.)	Solid: .024–.035 in. (0.6–0.9 mm) Stainless: .024–.035 in. (0.6–0.9 mm) Flux-cored: .030–.035 in. (0.8–0.9 mm)	45	H: 12.5 in. (318 mm) W: 11.25 in. (286 mm) D: 20.5 in. (521 mm)	35 lb. (15.9 kg)

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

Control Panel

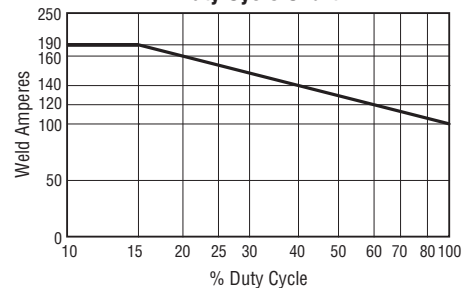


1. Power On Light
2. Over Temperature Light
3. Auto-Set Light
4. Wire Speed/Wire Diameter Control
5. Voltage/Material Thickness Control
6. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
7. Calibrated Tension Knob
8. T-Knob (secures torch)
9. Drive Roll
10. Trigger Control Connector
11. Polarity Changeover Terminals

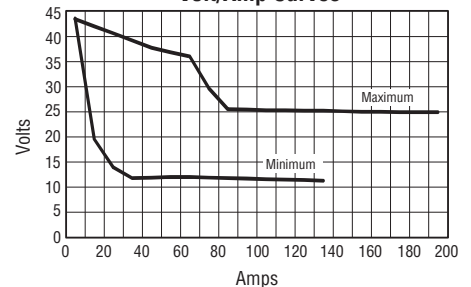
Note: Power switch and gas solenoid are on machine back panel.

Performance Data

Duty Cycle Chart



Volt/Amp Curves



Genuine Miller® Accessories



Spoolmate™ 100 Spool Gun 300371

Direct-connect spool gun for all Millermatic 140, 141, 180, 190, 211 and Multimatic 200 models. Handles

.030–.035 inch (0.8–0.9 mm) aluminum (4043 only) and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 135 amps, 30-percent duty cycle. Includes 12-foot (3.7 m) cable assembly and custom carrying case.

Replacement/Optional MIG Gun

M-100 (Standard)
248282 10 ft. (3 m)

M-150 (Optional)
249040 12 ft. (3.7 m)

249041 15 ft. (4.5 m)
All ship with liner 194011.



Millermatic Protective Cover 301262



Running Gear/Cylinder Rack 301239

Heavy-duty construction with 8-inch rubber rear wheels. Convenient front handles, cable holders and plastic consumable box. For

gas cylinders no greater than 7 inches (178 mm) in diameter or 65 pounds (29.5 kg) in weight.

Purchase the Millermatic 190 package (951602) and receive the Millermatic 190 and running gear/cylinder rack (301239) packaged together!

Consumables (Order from Miller Service Parts.)

For M-100/M-150 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)



Contact Tip Adapter 169716



Replacement Liners

194010 .024 in.
194011 .030–.035 in. (standard)
194012 .035–.045 in.
15-foot length — trim to size needed.



Nozzle 169715

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



Gasless Flux-Cored Nozzle #226 190

For M-100 gun only.

For use with self-shielding flux-cored wires. Improves visibility, eases access in tight corners, protects tip adapter/gas diffuser from spatter and from shorting to the workpiece.



Drive Rolls

Quick Select™ 261157

For .024-inch (0.6 mm) or .030/.035-inch (0.8/0.9 mm) solid wire, and .030/.035-inch (0.8/0.9 mm) flux-cored wire.

Dual Groove, V-Knurled 202926

For .030/.035-inch (0.8/0.9 mm) or .045-inch (1.2 mm) flux-cored wire.

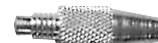


M-Series Gun Consumable Kits

234607 .024 in. (0.6 mm)
234608 .030 in. (0.8 mm)
234609 .035 in. (0.9 mm)

Each kit contains ten contact tips, one nozzle, and one contact tip adapter.

For Spoolmate™ 100 Spool Gun



Contact Tips (5 per package)

199730 .024 in. (0.6 mm)
186419 .030 in. (0.8 mm)
186406 .035 in. (0.9 mm)



Nozzle 186405



Drive Roll (1) 186413

For .030/.035-inch (0.8/0.9 mm) wire.



Push Roll (1) 186414

For .030/.035-inch (0.8/0.9 mm) wire.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Millermatic® 190	907613	240 V, 60 Hz		
Millermatic® 190 with Running Gear/Cyl Rack	951602	Power source packaged with 301239 running gear/cylinder rack		
Guns				
Spoolmate™ 100 Spool Gun	300371	12 ft. (3.7 m). Includes custom carrying case		
M-100 Gun (Standard)	248282	10 ft. (3 m), .030–.035 in. (0.8–0.9 mm)		
M-150 Gun (Optional)	249040	12 ft. (3.7 m), .030–.035 in. (0.8–0.9 mm)		
	249041	15 ft. (4.5 m), .030–.035 in. (0.8–0.9 mm)		
Accessories				
Protective Cover	301262			
Running Gear/Cylinder Rack	301239			
Material Thickness Gauge	229895			
Flux-Cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
Available Through Miller Service Parts				
Argon and AR/CO ₂ Mix Flow Gauge Regulator	268546	Replacement standard regulator		
CO ₂ Flow Gauge Regulator	212492	Required if using 100-percent CO ₂ gas		
Contact Tips		See page 3		
Contact Tip Adapter		See page 3		
Replacement Liners		See page 3		
Nozzles		See page 3		
Gasless Flux-Cored Nozzle	226190			
Drive Rolls		See page 3		
M-Series Gun Consumable Kits	234607	.024 in. (0.6 mm)		
	234608	.030 in. (0.8 mm)		
	234609	.035 in. (0.9 mm)		

Date:

Total Quoted Price:

Distributed by:

