Millermatic® 350P

MIG 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, 1- or 3-phase input power, 60 Hz

Amperage Range
25 – 400 A

Wire Feed Speed
50 – 700 ipm (1.3 – 17.8 m/min.) with MIG gun
50 – 800 ipm (1.3 – 20 m/min.) with spool gun/push-pull gun

Net Weight
181 lb. (82 kg)

Built-in pulsed MIG programs
• .035 and .045 inch (0.9 and 1.2 mm) for mild or stainless steel
• .035 and .047 inch (0.9 and 1.2 mm) for 4000 and 5000 series aluminum
• .045 inch (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.

Single- or three-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.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

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

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

Welds materials from 22 gauge up to 1/2-inch (12.7 mm) thick.

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

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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.

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Specifications

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Amperage Range</th>
<th>Rated Output</th>
<th>Amps Input at Rated Output, 60 Hz</th>
<th>Wire Feed Speed</th>
<th>Wire Type and Diameter</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-phase</td>
<td>25–400 A</td>
<td>300 A at 32 VDC, 60% duty cycle</td>
<td>34 30 15 11.6 11.5</td>
<td>MIG gun 50–700 ipm (1.3–17.8 m/min.) Optional spool gun and push-pull gun 50–800 ipm (1.3–20 m/min.)</td>
<td>Solid steel .023–.045 in. (0.6–1.2 mm) Stainless .030–.045 in. (0.8–1.2 mm) Aluminum .035–.047 in. (0.9–1.3 mm) Metal-cored .035–.052 in. (0.9–1.3 mm) Flux-cored .030–.052 in. (0.8–1.3 mm)</td>
<td>H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1,041 mm)</td>
<td>181 lb. (82 kg)</td>
</tr>
<tr>
<td>1-phase</td>
<td></td>
<td></td>
<td>69 61 30 13.1 11.2</td>
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</table>

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 Curve
Genuine Miller® Accessories

Guns

Bernard® BTB Replacement MIG Gun
Q3015AB8VMC 15 ft. (4.6 m)
Industrial 300-amp MIG gun for .035/.045 in. (0.9/1.2 mm) wire.

Bernard® Q200 Aluminum MIG Gun — Contact Bernard Sales
12-foot (3.7 m) 200-amp gun with plastic liner and 30-degree head tube with phosphorous bronze head tube liner. Handles .047-inch (1.2 mm) aluminum wire. Includes T-047AL Centerfire™ contact tips.

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 m) cable assembly.Rated at 200 amps at 100 percent duty cycle.
For detailed information, see Spoolmatic literature M/1.73.

XR-Aluma-Pro™ Push-Pull Gun
301568 15 ft. (4.6 m)
301569 25 ft. (7.6 m)
301570 35 ft. (10.6 m)
Air-cooled gooseneck-style gun for .030—.047 inch (0.8–1.2 mm) aluminum. Rated at 300 amps at 100 percent duty cycle.

XR-Aluma-Pro™ Lite Push-Pull Gun
300948 25 ft. (7.6 m)
Air-cooled pistol grip gun for .030—.047 inch (0.8–1.2 mm) aluminum. Rated at 175 amps at 60 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 inch (0.8–1.2 mm) aluminum. Rated at 200 amps at 100 percent duty cycle.

U-Grooved Aluminum Drive Roll and Accessory Kits for XR-Aluma-Pro 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-groove drive rolls, nylon wire guides, gun drive rolls and contact tips.

For XR-Aluma-Pro (air-cooled)
195311 .035 in. (0.9 mm)
195313 .047 in. (1.2 mm)
For XR-Pistol (air-cooled)
195201 .035 in. (0.9 mm)
195202 .047 in. (1.2 mm)

Dual Cylinder Rack 195299
Replaces single cylinder rack.

Consumables

For Bernard® MIG Guns

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 cored
T-045 .045 in. (1.2 mm)
T-047AL .047 in. (1.2 mm) aluminum wire only
T-052 .052 in. (1.3 mm) steel and for .047 in. (1.2 mm) aluminum or stainless wires or metal cored

Nozzle N-5800C
Screw-on copper, 5/8 in. 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 Std., .035–.045 in. (0.9–1.2 mm)
415-25 Phosphorous bronze liner for .047 in. (1.2 mm) aluminum wire

Replacement Liners
43015 .023–.030 in. (0.6–0.8 mm)
44115 Std., .035–.045 in. (0.9–1.2 mm)
415-45-03 Plastic liner for .047 in. (1.2 mm) aluminum wire

For Millermatic® 350P

Note: Machine drive roll kits include four drive rolls, an intermediate guide, and an inlet guide.

V-Grooved Drive Roll Kits (solid wire)
087132 .023/.025 in. (0.6 mm)
046780 .030 in. (0.8 mm)
046781 .035 in. (0.9 mm)
046782 .045 in. (1.2 mm)
227061 .035/.045 in. (0.9/1.2 mm)
046783 .052 in. (1.3 mm)
046784 1/16 in. (1.6 mm)

U-Grooved Drive Roll Kits (aluminum wire)
044750 .035 in. (0.9 mm)
046785 .047 in. (1.2 mm)
046786 .052 in. (1.3 mm)
046787 1/16 in. (1.6 mm)

V-Knurled Drive Roll Kits (flux-cored or difficult-to-feed wire)
046792 .035 in. (0.9 mm)
046793 .045 in. (1.2 mm)
046794 .052 in. (1.3 mm)
046795 1/16 in. (1.6 mm)
<table>
<thead>
<tr>
<th>Power Source</th>
<th>Stock No.</th>
<th>Description</th>
<th>Qty</th>
<th>Price</th>
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<tbody>
<tr>
<td><strong>Millermatic® 350P</strong></td>
<td>907300</td>
<td>200/230/460 V, MIG/pulsed MIG unit</td>
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<tr>
<td><strong>Guns</strong></td>
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<tr>
<td>Bernard® BTB Replacement MIG Gun</td>
<td>Q301SAB8VMC</td>
<td>15 ft. (4.6 m), 300 A, .035/.045 in. (0.9/1.2 mm)</td>
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<tr>
<td>Bernard® Q200 Aluminum MIG Gun</td>
<td>195156</td>
<td>15 ft. (4.6 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum</td>
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<tr>
<td>Spoolmatic® 15A Spool Gun</td>
<td>130831</td>
<td>30 ft. (9 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum</td>
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<tr>
<td>Spoolmatic® 30A Spool Gun</td>
<td>301568</td>
<td>15 ft. (4.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum</td>
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<tr>
<td>XR-Aluma-Pro™ Push-Pull Gun (air-cooled)</td>
<td>301569</td>
<td>25 ft. (7.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum</td>
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<td>XR-Aluma-Pro™ Lite Push-Pull Gun (air-cooled)</td>
<td>301570</td>
<td>35 ft. (10.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum</td>
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<tr>
<td>XR™-Pistol Push-Pull Gun (air-cooled)</td>
<td>198127</td>
<td>15 ft. (4.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum</td>
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<td>XR™-Pistol U-Groove Aluminum Drive Roll Kits</td>
<td>195201</td>
<td>.035 in. (0.9 mm)</td>
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<td>XR™-Pistol U-Groove Aluminum Drive Roll Kits</td>
<td>195202</td>
<td>.047 in. (1.2 mm)</td>
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<td>XR-Aluma-Pro™ U-Groove Aluminum Drive Roll Kits</td>
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<td>.035 in. (0.9 mm)</td>
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<td>XR-Aluma-Pro™ U-Groove Aluminum Drive Roll Kits</td>
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<td>.047 in. (1.2 mm)</td>
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<td><strong>Accessories</strong></td>
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<tr>
<td>Dual Cylinder Rack</td>
<td>195299</td>
<td>Field installed, replaces single cylinder rack</td>
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<tr>
<td>Protective Cover</td>
<td>195142</td>
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<tr>
<td>CO2 Regulator/Flow Gauge</td>
<td>212492</td>
<td>Required if using 100% CO2 gas</td>
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<td>Power Cord Plug</td>
<td>213380</td>
<td>For 200/230 V, single-phase. NEMA-style 6-50P</td>
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<td><strong>Consumables</strong></td>
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<td>Contact Tips</td>
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<td>Tapered Contact Tips</td>
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