Spoolmatic Pro

MIG Welding **Spool Gun**

Air-Cooled Pistol-Grip Spool Gun

Quick Specs

Heavy Industrial Applications

The Spoolmatic Pro spool gun is available in 15- or 30-foot (4.6 or 9 m)

Emergency Vehicles Recreational Vehicles Trucks and Trailers Boat/Yacht Building Sign Manufacturers

Shipbuilding **Tool Boxes** Railcars Fabrication Repair

Processes

MIG (GMAW) Pulsed MIG (GMAW-P) with pulsing power source

Wire Types

Aluminum Steel

Rated Output

200 A at 100% Duty Cycle

Net Weight

Gun only: 3.1 lb. (1.4 kg)

15-ft. Gun with Cable: 10.4 lb. (4.7 kg) **30-ft. Gun with Cable:** 15.7 lb. (7.1 kg)



The industry's most reliable line of aluminum welding guns.

A complete system consists of the following:

- Spoolmatic Pro spool qun (Includes .035-1/16 in. knurled drive roll and two FasTip[™] contact tips — .035 in. and 3/64 in.)
- WC-24 or WC-115 weld control (Required unless using a machine that allows direct hookup.)
- Recommended Miller 14-pin power source OR select Millermatics (See page 6.)





Aluminum-series-specific tension settings ensure smooth wire feeding performance with 4000 or 5000 series aluminum wires.





Direct-connect (no adapters needed), easy-to-rotate, self-seating head tube options in several different lengths and bend configurations (see page 4).



Guns are warranted for 1 year, parts and labor.



Improved motor and drive design for better

feedability and arc consistency while helping

reduce downtime and maintenance costs

associated with complex drive systems.

Miller Electric Mfg. Co.







Specifications (Subject to change without notice.)





Welding Current Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Gun Dimensions	Net Weight
200 A at 100% duty cycle	70 – 900 IPM (1.8 – 23 m/min.) dependent on control box or Millermatic used	Aluminum*: .030-1/16 in. (0.8-1.6 mm) Hard Wire: .030045 in. (0.8-1.1 mm)		H: 10.75 in. (273 mm) W: 2.5 in. (64 mm) L: 15.375 in. (390 mm)	Gun only: 3.1 lb. (1.4 kg) 15-ft. gun with cable: 10.4 lb. (4.7 kg) 30-ft. gun with cable: 15.7 lb. (7.1 kg)

^{*}Wire kit #230 708 required to run 1/16-inch (1.6 mm) wire.

Standard Replacement Consumables (Order from Miller Service Parts.)

Aluminum Wire Size	FasTip Contact Tip (Qty. 25)	Drive Rolls	Idler Rolls	Head Tube Liner 4 in. (102 mm)
.030 in. (0.8 mm)	#206 186 .041-in. ID	#227 434	#227 439	M1272
.035 in. (0.9 mm)	#206 187 .047-in. ID	#227 434	#227 439	M1272
.040 in. (1.0 mm)	#206 188 .053-in. ID	#227 434	#227 439	M1272
3/64 in. (1.2 mm)	#206 189 .061-in. ID	#227 434	#227 439	M1273
1/16 in. (1.6 mm)	#206 191 .071-in. ID	#227 434	#230 710	M1273

Standard Consumables – FasTip™ Series (Order from Miller Service Parts.)

Gas Diffusers



#229 670 Standard

1/8-inch tip recess for heavy-duty FasTip contact tips.

#230 678

1/4-inch tip recess for heavy-duty FasTip contact tips.

#230 679

Flush tip for heavy-duty FasTip contact tips.

FasTip Contact Tips

(25 per package)



Heavy-Duty (Aluminum Wire)

#206 186 .030 in. (0.8 mm) **#206 187** .035 in. (0.9 mm) **#206 188** .040 in. (1.0 mm) **#206 189** 3/64 in. (1.2 mm) **#206 191** 1/16 in. (1.6 mm)

Tapered (Aluminum Wire)

#209 026 .030 in. (0.8 mm) #209 027 .035 in. (0.9 mm) #209 029 3/64 in. (1.2 mm) #209 030 1/16 in. (1.6 mm)

Nozzles

Screw-On Brass

#199 610 1/2-in. orifice, tapered #199 611 3/4-in. orifice, straight #199 612 3/4-in. orifice, straight HD #199 613 5/8-in. orifice, tapered #199 614 5/8-in. orifice, tapered HD Screw-On Copper

#199 616 3/4-in. orifice, straight
#199 617 3/4-in. orifice, straight HD
#198 855 5/8-in. orifice, tapered
#199 618 5/8-in. orifice, tapered HD
#207 313 5/8-in. orifice, tapered 15/16 OD
#209 035 3/8-in. orifice, tapered

#209 036 1/2-in. orifice, tapered

#199 615 1/2-in. orifice, tapered



Optional Consumables - Centerfire™ Series (Order from Miller Service Parts.)

Insulator 10012

4323R

Diffuser D-1AP (large)

DS-1AP (small)

XR[™]-Pistol-Pro Diffuser Conversion Kits

for .035-1/16 in aluminum #230 669 For D-1AP diffuser

#230 670 For DS-1AP diffuser Diffuser kits must be used to convert to Centerfire™ Series consumables. Kit includes diffuser and head tube liners.

Aluminum-Specific T Series Contact Tips

T-035AL .035 in. (0.9 mm) **T-047AL** .047 in. (1.2 mm)

T-062AL 1/16 in. (1.6 mm)

Large Nozzles

N-3414C Copper, 3/4-in. I.D.,

1/4-in. tip recess

N-3418B Brass, 3/4-in. I.D.,

1/8-in. tip recess

N-3414B Brass, 3/4-in. I.D.,

1/4-in. tip recess

N-5814C Copper, 5/8-in. I.D.,

1/4-in. tip recess

N-5818B Brass, 5/8-in. I.D.,

1/8-in. tip recess

N-5814B Brass, 5/8-in. I.D.,

1/4-in. tip recess

Small Nozzles

NS-5818B Brass, 5/8-in. I.D.,

1/8-in. tip recess

NS-1218B Brass, 1/2-in. I.D.,

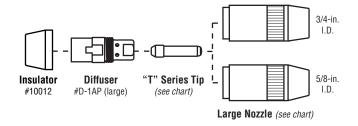
1/8-in. tip recess

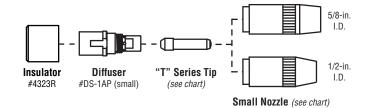
NS-1200B Brass, 1/2-in. I.D.,

flush tip

NST-3818B Brass, 3/8-in. I.D.,

1/8-in. tip recess





Optional Head Tube Assemblies (Order from Miller Service Parts.)











180 Degree/4 Inch (standard on Spoolmatic® Pro) **#255 716** Air-Cooled



180 Degree/6 Inch #258 476 Air-Cooled



180 Degree/8 Inch #255 042 Air-Cooled







180 Degree/4 Inch with Centerfire™ #258 474 Air-Cooled

Heavy-Duty Head Tube Assemblies

For high-duty-cycle applications.



60 Degree/6 Inch Heavy-Duty #262 207 Air-Cooled



180 Degree/6 Inch Heavy-Duty #262 208 Air-Cooled



Flex Neck/10 Inch #267 517 Air-Cooled Ideal for hard-to-reach welds.



Liners for Optional Head Tube Assemblies (Order from Miller Service Parts.)

Fastip™ Liners for Spoolmatic® Pro and XR™-Pistol-Pro

(4-inch assemblies)

M1272 .030 – .040 in. (0.8 – 1.0 mm)

M1273 3/64 and 1/16 in. (1.2 and 1.6 mm)

(6-inch assemblies)

M1430 .030 – .040 in. (0.8 – 1.0 mm)

M1365 3/64 and 1/16 in. (1.2 and 1.6 mm)

(8-inch assemblies)

M1337 .030 – .040 in. (0.8 – 1.0 mm)

M1338 3/64 and 1/16 in. (1.2 and 1.6 mm)

Bernard™ Quik Tip™ Tight-Access Liners for Spoolmatic® Pro and XR™-Pistol-Pro

(10-inch assemblies)

M1427 .030 – .040 in. (0.8 – 1.0 mm)

M1421 3/64 and 1/16 in. (1.2 and 1.6 mm)



Universal Teflon® Liner Kit

#262 707 .030 – .040 in. (0.8 – 1.0 mm) black liners

#262 705 3/64 and 1/16 in. (1.2 and 1.6 mm) yellow liners

Includes five 14-inch liners and cutter. Liners can be cut to correct length for any pistol or gooseneck-style gun. Cutter provides a straight, clean cut to reduce shaving and feeding problems.

Teflon® Liner Cutter #258 863

Genuine Miller® Accessories

Hose and Cable Extension Kits

#132 228 25 ft. (7.6 m)

#132 229 50 ft. (15 m)

Extends Spoolmatic Pro away from the control box. Convenient plug-in connections. Includes gas hose, control cord, and weld power cable with International-style insulated connector.

Leather Cable Cover

#241 159 15 ft. (4.6 m)

#241 160 30 ft. (9 m)

Protects gun hose and cable assembly from wear and abrasion. Features full-length hook-and-loop closure for ease of maintenance or replacement.



One-Pound (0.5 kg) Spool Canister #132 230

Ideal for use with XR guns if a small job arises requiring a different wire size and/or wire type that does not justify a 12-inch (305 mm) spool of wire. The XR feed cable is removed if the spool canister is being used. Canister accommodates 4-inch (102 mm) spools of wire.



50-Degree Curved Nozzle Kit-A #264 064

(Order from Miller Service Parts.)
Directly attaches to Spoolmatic Pro,
XR-Aluma-Pro or XR-Pistol-Pro for access
to confined weld joint areas. Used with
.030–1/16 inch (0.8–1.6 mm) wire. Kit
includes two of each size contact tip to
accommodate all wire sizes, nozzle adapter
kit and curved nozzle. Uses standard
straight head tube liner.

Replacement Contact Tips for 50-Degree Curved Nozzle

(Order from Miller Service Parts.)

#148 155 .030- and .035-in.

(0.8 and 0.9 mm) wire **#148 154** .047-in. (1.2 mm) wire

#148 156 1/16-in. (1.6 mm) wire

50-Degree Curved Nozzle Insulator Kit #264 066

(Order from Miller Service Parts.)
Sleeve goes over center of curved nozzle to protect operator from heat. For use with 50-Degree Curved Nozzle Kit-A.

1/16-Inch (1.6 mm) Wire Kit #230 708 Specially designed for 1/16-inch wire.

Includes idler roll, head tube liner and inlet guide. Required when running 1/16-inch wires. Not included with standard Spoolmatic Pro gun.



Spoolmatic Pro[®] Spool Gun Controls

Spoolmatic Pro Hook-Up Recommendations

CV Power Supply	Spoolmatic Pro
Millermatic® Vintage*	Need Module #043 084
Millermatic® DVI™*, DVI2™*, 210*, 212*	Need Adapter Cable #195 287 (WFS controlled at machine)
Millermatic® 212 Auto-Set™, 250X*, 251*, 252, 300 w/meters*, Shopmate™ 300 DX	Direct Hook-Up
AlumaPower™ MPa, CP Series, Deltaweld® Series, Dimension™ Series, Invision™ MPa, Regency® 250*, Shopmaster™*, XMT® Series, PipePro® 304*, Trailblazer® 275, 275 DC*, 302*, 302 Air Pak™, 325	Need WC-24 #137 549
Bobcat [™] Series, Miller Legend [®] 302*	Need WC-115A #137 546-01-1

^{*}Discontinued product.



WC-115A Weld Control
#137 546 Without contactor
#137 546-01-1 With contactor
This control operates on 115 VAC,
and is designed primarily for CC DC
power sources. It can also be used
with CV power sources or DC
engine drives supplying 115 VAC.
When used with a CC source, the

control circuit functions in a voltage-sensing mode. When used with a CV source, it functions as a constant-speed circuit.

Standard features include a wire run-in control and a drive motor acceleration control which ensure optimum arc starting performance, regardless of the type of power source being used. The WC-115A comes with a 10-foot (3 m), wall-type plug power cord.



WC-24 Weld Control #137 549

Packaged in a compact, lightweight, non-metallic enclosure, the WC-24 easily mounts directly on the power source. It's designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. The control includes a board-mounted potentiometer which can alter the drive motor acceleration rate to optimize arc starting performance.

Typical Installations

Note: Cords and cables are supplied unless noted otherwise on drawings below. Refer to Owner's Manual for complete installation instructions.

To connect the Spoolmatic Pro gun and WC-24 control to older-style Miller or competitive CV power sources that **do not** have a 24 VAC supply, the PSA-2 control **#141 604** is required.

To connect Spoolmatic Pro gun and WC-24 control to Millermatic® 200 power source that has a 4-pin receptacle, order adapter cord #042 236.

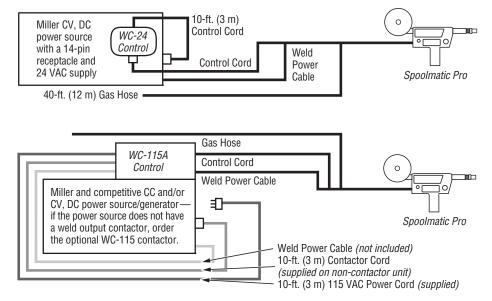
To connect the WC-115A control to older-style Miller power sources having Hubbell or 5-pin contactor control receptacles, the appropriate connector must be ordered **separately**:

To connect to older-style Miller CC power sources having a two-socket Hubbell connector, order plug #039 618.

If power source has a Miller 5-pin receptacle, order #039 273 and #039 685.

To connect to older-style Miller CV power sources having a two-prong Hubbell connector, order plug **#039 635**.

Note: These connectors are to replace the 14-pin connector on the 10-foot interconnect contactor cord. Internal wiring changes may be necessary.





Notes



Ordering Information

Important notes:

Spoolmatic Pro guns require a WC-24 or WC-115 weld control, unless used on a machine that allows direct hookup. Refer to chart on page 6.

Recommended Power Sources

AlumaPower™ MPa
See literature no. DC/34
(For synergic use with AlumaFeed™)
Millermatic® 212 Auto-Set™
See literature no. DC/12.46
Millermatic® 252
See literature no. DC/12.49
(Not compatible with Millermatic 350P)
Deltaweld® Series
See literature no. DC/16.2
XMT® 350/450
See literature no. DC/18.83
Invision™ MPa
See literature no. DC/23.5

Trailblazer® 275/325 See literature no. ED/4.75 Big Blue® 800 Duo Air Pak™ See literature no. ED/13.0

Note: Other power sources may be used.

Equipment	Stock No.	Description	Qty.	Price
Spoolmatic® Pro Spool Gun	#301 147 #301 148	15-ft. (4.6 m) cable 30-ft. (9 m) cable		
WC-24 Weld Control	#137 549			
WC-115A Weld Control	#137 546 #137 546-01-1	Without contactor With contactor		
Consumables and Accessories				
Consumables		See pages 2-3		
Optional Head Tube Assemblies		See page 4		
Liners for Opt. Head Tube Assemblies		See page 5		
Hose and Cable Extension Kits	#132 228 #132 229	25 ft. (7.6 m) 50 ft. (15 m)		
Leather Cable Cover	#241 159 #241 160	15 ft. (4.6 m) 30 ft. (9 m)		
One-Pound Spool Canister	#132 230			
50-Degree Curved Nozzle Kit-A	#264 064			
Replacement Contact Tips for 50-Degree Curved Nozzle		See page 5		
50-Degree Curved Nozzle Insulator Kit	#264 066	For use with 50-Degree Curved Nozzle Kit-A		
1/16-Inch (1.6 mm) Wire Kit	#230 708	Required when running 1/16-inch wire		

Date: Total Quoted Price:

Distributed by:

