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Spool Guns and Controls

Spoolmate[®] 3035, Spoolmate[®] 3545, and Spoolmatic[®] 15A/30A

Quick **Specs**

Light and Heavy Industrial Applications

Aluminum Fabrication Sign Manufacturing **Trailer Fabrication** Auto and Marine Repair

Processes

MIG (GMAW) with aluminum and other wires

Weight Spoolmate 3035: 9 lb (4.1 kg) with cable assembly Spoolmate 3545: 10 lb (4.5 kg) with cable assembly Spoolmate 15A: 9 lb (4.1 kg) with cable assembly Spoolmatic 30A: 14 lb (6.4 kg) with cable assembly

The Power of Blue®



These reliable yet economical Spoolmate spool guns provide 20 ft cable reach and accessibility, with smooth feeding of aluminum wire.





Industrial, well-balanced Spoolmatic 15A/30A spool gun features a built-in gas valve, rotatable canister, all-wire dual groove drive roll and 15 ft (15A) or 30 ft (30A) cable reach.

Selecting a Spool Gun

What wire sizes are you running?	What welding output?	Recommended gun
.023 – .035 in	150 A at 60% duty cycle— light industrial applications	Spoolmate 3035
.030 – .047 in	200 A at 60% duty cycle— light industrial applications	Spoolmate 3545
.030 – 1/16 in	200 A at 100% duty cycle— light and heavy industrial applications	Spoolmatic 15A/30A



Spoolmate guns warranted for 90 days, parts and labor. Spoolmatic guns warranted for 1 year, parts and labor.



Miller Electric Mfg. Co.

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International Headquarters

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www.MillerWelds.com









Spool Gun Specifications

Model	Welding Output Rating	Electrode Wire Diameter Capacity	Wire Speed	Maximum Spool Size Capacity	Dimensions	Net Weight with Cable Assembly
Spoolmate 3035	150 A at 60% Duty Cycle	.023–.035 in (0.6–0.9 mm) aluminum, steel and stainless steel	115-715 IPM	4 in (102 mm)	H: 11-1/2 in (291 mm) W: 2-1/4 in (57 mm)	9 lb (4.1 kg)
Spoolmate 3545	200 A at 60% Duty Cycle	.030047 in (0.8-1.2 mm) aluminum, steel and stainless steel	200-1200 IPM		L: 8 in (203 mm)	10 lb (4.5 kg)
Spoolmatic 15A	200 A at 100% Duty Cycle	.030-1/16 in (0.6-1.6 mm) aluminum and hard wires up to .045 in (1.1 mm)	70-875 IPM		H: 10-1/4 in (260 mm) W: 2-1/2 in (64 mm)	9 lb (4.1 kg)
Spoolmatic 30A					L: 15-1/8 in (384 mm)	14 lb (6.4 kg)

Spool Gun Control Specifications

Usage	Model	Input Power	Dimensions	Net Weight
For Spoolmate	SGA 100	115 VAC, 50/60 Hz	H: 4-1/4 in (108 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	9 lb (4.1 kg)
3035 and 3545	SGA 100C	115 VAC, 50/60 Hz	H: 8-1/4 in (210 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	12 lb (5.4 kg)
For Spoolmatic	WC-24	24 VAC, 50/60 Hz	H: 7 in (178 mm) W: 5-1/2 in (140 mm) L: 2 in (51 mm)	2 lb (0.9 kg)
15A/30A	WC-115A	115 VAC, 50/60 or 100 Hz	H: 10 in (254 mm) W: 9-1/2 in (241 mm) L: 13 in (330 mm)	20 lb (9 kg)

Spool Gun Hook-Up Recommendations

Power Source	Effective Serial Number	Spoolmate 3035 #195 016 150 A, 60% Duty Cycle	Spoolmate 3545 #195 015 200 A, 60% Duty Cycle	Spoolmatic 15A #195 156/ Spoolmatic 30A #130 831 200 A, 100% Duty Cycle
Millermatic® 130 XP, 135	All	Limited to 14 gauge–1/8 in material SGA 100 required #043 856	Not recommended	Not recommended
Millermatic [®] Challenger 172, 175	All	SGA 100 required #043 856	Not recommended	Not recommended
Millermatic® 185	Prior to #KH376829	Retrofit Kit required #186 871 and #207 642	Retrofit Kit required #186 871	Not recommended
	After #KH376829	Direct hook-up using toggle switch field kit #207 642	Direct hook-up using toggle switch field kit #207 642	Not recommended
Millermatic® 210	All	Direct hook-up, Gun-On-Demand™	Not recommended	Not recommended
Millermatic® Vintage, 250	All	Not recommended	SGA 100 required #043 856	Module required #043 084
Millermatic® 250X, 251	All	Not recommended	Not recommended	Direct hook-up



Spoolmate 3035 and 3545 Spool Gun Controls



SGA 100 #043 856

Required to connect Spoolmate spool gun to the Millermatic 135 or 175. Allows you to connect a Spoolmate gun to virtually any similar MIG welder—Miller or other brands.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

Note: For CV engine drives like Miller Bobcat™, use the SGA 100C with contactor (#043 857).



SGA 100C #043 857

SGA with contactor required to connect Spoolmate spool gun to CV engine drives like Miller's Bobcat™.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

Genuine Miller Spoolmate Consumables and Accessories (Order Consumables from Miller Service Parts.)

Accessories

25 ft Extension Cable #194 996

Note: Spoolmate 3035 Gun shipped with 3-.030 in and 3-.035 in contact tips. Spoolmate 3545 Gun shipped with 3-.035 in and 3-.047 in contact tips.

Consumables For Spoolmate 3035



Contact Tips (5 per package)

#199 730 For .023 in (0.6 mm) wire. **#186 419** For .030 in (0.8 mm) wire. **#186 406** For .035 in (0.9 mm) wire.



Nozzle #186 405



Drive Roll (1) #199 731 For .023 in (0.6 mm) wire. #186 413 For .030/.035 in (0.8/0.9 mm) wire.



Push Roll (1) #199 732 For .023 in (0.6 mm) wire. **#186 414** For .030/.035 in (0.8/0.9 mm) wire.

Consumables For Spoolmate 3545



Contact Tips (5 per package)

#199 387 For .030 in (0.8 mm) wire. **#199 388** For .035 in (0.9 mm) wire. **#199 389** For .047 in (1.2 mm) wire.



Nozzle #199 386



Drive Roll (1) #186 413 For .030/.035 in (0.8/0.9 mm) wire. **#199 396** For .047 in (1.2 mm) wire.



Push Roll (1) #186 414 For .030/.035 in (0.8/0.9 mm) wire. **#199 397** For .047 in (1.2 mm) wire.



Spoolmatic 30A Spool Gun Controls



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.



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 ft (3 m), wall-type plug power cord.

WC-115 Contactor Kit #137 548 Field Recommended when using the Spoolmatic gun and WC-115A control with power sources that do not have a weld output contactor. (This is installed in the WC-115A.)

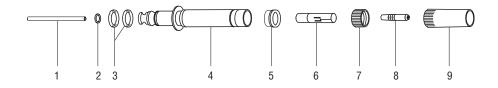
Contactor Rating:

400 amps at 30% duty cycle 330 amps at 60% duty cycle 250 amps at 100% duty cycle

Genuine Miller Spoolmatic 30A Consumables (Order from Miller Service Parts.)

Wire Size	FasTip Contact Tip	Spoolmatic Drive Rolls	Spoolmatic All-Wire Dual Groove Drive Rolls
.030 in (0.8 mm)	.041 in ID #206 177	#183 357	#136 135
.035 in (0.9 mm)	.047 in ID #206 178	#183 357	#136 135
.040 in (1.0 mm)	.053 in ID #206 179	#183 357	#136 135
.047 in (1.2 mm)	.061 in ID #206 180	#183 358	#136 135
.062 in (1.6 mm)	.071 in ID #206 181	#183 358	#136 135

Each gun is shipped with .035 in and .047 in standard tips.



- 1. Head Tube Liner #212 156
 2. O-Ring .176 ID #134 800
 3. O-Ring .614 ID #164 485
 4. Head Tube (Air-cooled) #1210 511
 5. Insulator #185 097
 6. Gas Diffuser #209 875
- 7. Jam Nut (Air-cooled) #185 102 8. Contact Tip (See chart above) 9. Nozzle (See below)

Standard Nozzles (Order from Miller Service Parts.)



#197 728 5/8 in (16 mm) orifice (Standard)



#193 790 1/2 in (13 mm) orifice



#009 925
Spot outside
corner
Note: Nozzle adapter

kit #193 794 required.



#000 443Spot inside
corner
Note: Nozzle adapter
kit #193 794 required.



#000 442
Spot flat 15/16 in (24 mm) orifice
Note: Nozzle adapter

kit #193 794 required.



#004 466 Spot flat 1-3/8 in (35 mm) orifice Note: Nozzle adapter kit #193 794 required.



Genuine Miller Spoolmatic 30A Accessories



50 Degree Curved Barrel-A

#195 229 6 in (152 mm) Used with .030-1/16 in (0.8-1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.



10 in Flex Head-A #195 228

For .030-1/16 in (0.8-1.6 mm) wire. Used in place of the standard straight barrel. Flexible head tube bends 60 degrees in any direction for easier joint access and improved operator comfort. Supplied with liners. Uses FasTip™ contact tips.



10 in Head Tube-A #195 227

Ideal when a longer reach is required.

Replacement Liners for Air-Cooled Barrels

(Order from Miller Service Parts.)

For 50 Degree Curved Barrel #212 411 .030 thru 1/16 in

(0.8 thru 1.6 mm) wire

For Flex Head or 10 in Head Tube #212 401 .030 thru 1/16 in

(0.8 thru 1.6 mm) wire

50 Degree Curved Nozzle Kit-A #147 174

Attaches to standard gun barrel assembly for access to confined weld joint areas. Used with .030-1/16 in (0.8-1.6 mm) wire. Kit includes two of each size contact tips to accommodate all wire sizes, Nozzle Adapter Kit (#193 794) and curved nozzle. Uses standard straight barrel head tube liner.

Replacement Contact Tips for 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

Cable Cover #118 678

Protects gun hose and cable assembly from wear and abrasion. Features a full-length zipper.



Spare Spool Canister #132 230

Canister accommodates 4 in (102 mm) spools of wire. Can be loaded with other popular wires to save time in changeover.

Hose and Cable Extension Kits

#132 228 25 ft (7.6 m)

#132 229 50 ft (15 m)

Extends Spoolmatic 30A away from the control box. Convenient plug-in connections. Includes gas hose, control cord, and weld power cable with International-style insulated connector.



Typical Installations

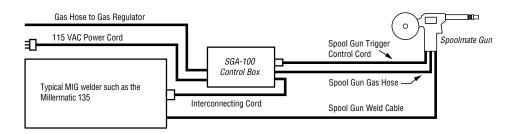
Spoolmate Gun to Welder Requiring a SGA Spool Gun Adapter

Note: Refer to SGA Owner's Manual for complete installation instructions.

For Millermatic 135, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/8 in aluminum.

For Millermatic 175, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/4 in aluminum.

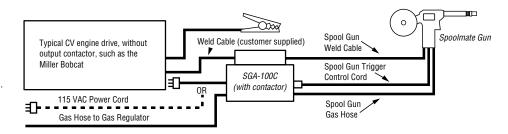
To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.



The SGA 100C is necessary when connecting Spoolmate spool guns to CV engine drive units. Thickness will depend on engine drive.

For Miller's Bobcat 225NT, combine Spoolmate 3545 with SGA 100C to weld 14 gauge to 3/16 in aluminum.

To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.

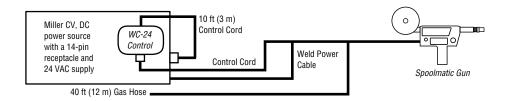


Spoolmatic 15A/30A

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 15A/30A 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 15A/30A gun and WC-24 control to Millermatic® 200 and Spoolmate™ 200 power sources that have a 4-pin receptacle, order adapter cord #042 236.



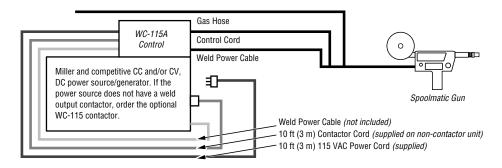
To connect the WC-115A control to older-style Miller power sources having Hubbell or 5-pin contactor control receptacles, the appropriate connector must be ordered **separately**:

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 ft interconnect contactor cord. Internal wiring changes may be necessary.





Notes



Ordering Information

Equipment	Stock No.	Description	Qty.	Price
Spoolmate™ 3035 Spool Gun	#195 016	Includes 20 ft (6 m) cable		
Spoolmate™ 3545 Spool Gun	#195 015	Includes 20 ft (6 m) cable		
Spoolmatic® 15A Spool Gun	#195 156	Includes 15 ft (4.6 m) cable		
Spoolmatic® 30A Spool Gun	#130 831	Includes 30 ft (9 m) cable		
Spoolmate Controls				
SGA 100	#043 856	For Spoolmate guns		
SGA 100C	#043 857	For Spoolmate guns		
Spoolmate Consumables and Accessories				
Consumables		See page 3		
25 ft Extension Cable	#194 996	Control cable extension for Spoolmate 3035 and 3545		
Spoolmatic 15A/30A Controls				
WC-24 Weld Control	#137 549	For Spoolmatic guns		
WC-115A Weld Control	#137 546	Without contactor. For Spoolmatic guns		
W0 445 0	#137 546-01-1	With contactor. For Spoolmatic guns		
WC-115 Contactor Kit	#137 548	Field		
Spoolmatic 15A/30A Consumables and Accessories				
Consumables		See page 4		
50-Degree Curved Barrel-A	#195 229	6 in (152 mm)		
10 in Flex Head-A	#195 228			
10 in Head Tube-A	#195 227			
50-Degree Curved Nozzle Kit-A	#147 174			
Cable Cover	#118 678			
Spare Spool Canister	#132 230			
Hose and Cable Extension Kits	#132 228 #132 229	25 ft (7.6 m) 50 ft (15 m)		

Date: Total Quoted Price:



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