

# 20 Series

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Constant-Speed Wire Feeder 

## Quick Specs

### Industrial Applications

Heavy- or light-duty fabrication shops  
Trailer manufacturers  
Furniture manufacturers  
Automotive products  
Educational institutions

### Processes

MIG (GMAW)  
Flux-cored (FCAW)  
(gas- and self-shielded)

### Input Power

24 VAC, 3.5 A, 50/60 Hz

### Wire Feed Speed

75–750 ipm (1.9–19 m/min.)

### Wire Diameter Capacity

.023–5/64 in. (0.6–2.0 mm)

**Net Weight** 46 lb. (21 kg)

20 Series basic model



Packages include Bernard™ BTB Gun 300 A, .035/.045-inch drive rolls and Centerfire™ contact tips.

20 Series digital model

**Wire feed speed range** is 75–750 ipm. This offers a wider operating range than the competition.

**Trigger hold control** allows operator to make long extended welds without having to hold gun trigger.

**Four gear-driven drive rolls** offer smooth, positive and accurate wire feed with long, uninterrupted service life.

**On-board burnback and motor ramp control** offers unmatched starting and stopping performance on a variety of power sources. This helps to ensure positive arc starting performance.

**16-gauge sheet metal housing** is robust in rough service applications and less prone to damage.

**Digital meter and remote voltage control are standard on digital model.** Parameter adjustments can be made in weld cell or at a remote location. (Optional on basic model.)

**Adjustable run-in control is standard on digital model** for better arc-starting performance on a variety of wires. (Optional on basic model.)



Wire feeder is warranted for three years, parts and labor.



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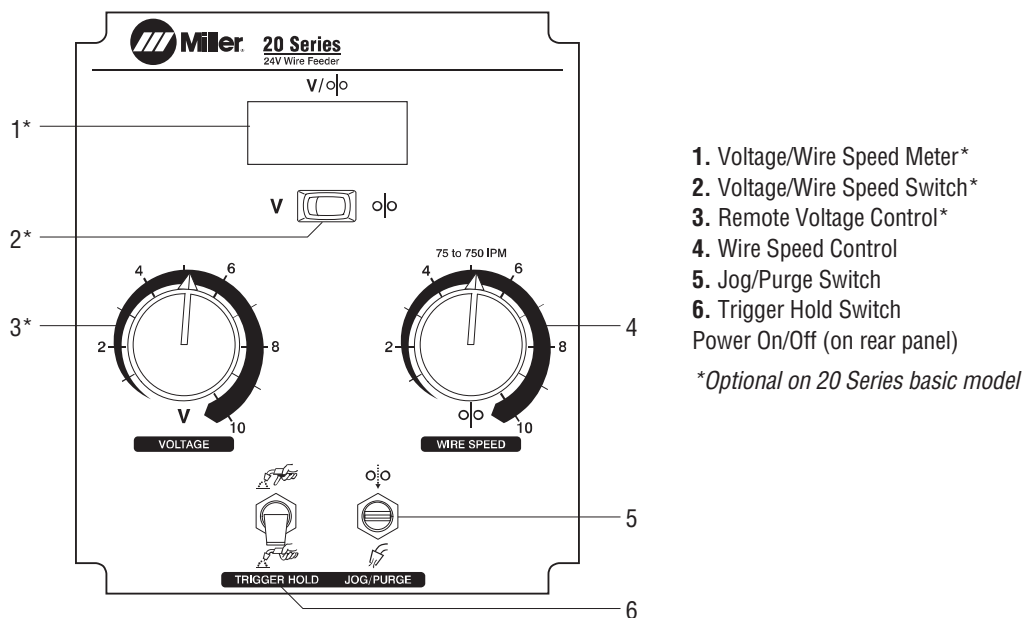
# Specifications (Subject to change without notice.)

**CV DC** (Use with CV, DC power sources.)

Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Dimensions	Net Weight
24 VAC, 3.5 A, 50/60 Hz	500 A at 100 V, 100% duty cycle	75–750 ipm (1.9–19 m/min.)	.023–5/64 in. (0.6–2.0 mm)	H: 16 in. (406 mm) W: 12.375 in. (314 mm) D: 27.875 in. (708 mm)	46 lb. (21 kg)





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

## Control Panels



## Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include four drive rolls, necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	"V" groove for hard wire 	"U" groove for soft wire or soft-shelled cored wires 	"V" knurled for hard-shelled cored wires 	"U" cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types) 
.023/.025 in. (0.6 mm)	<b>087132</b>	—	—	—
.030 in. (0.8 mm)	<b>046780</b>	—	—	—
.035 in. (0.9 mm)	<b>046781</b>	<b>044750</b>	<b>046792</b>	—
.040 in. (1.0 mm)	<b>191917</b>	—	—	—
.045 in. (1.1/1.2 mm)	<b>046782</b>	<b>046785</b>	<b>046793</b>	<b>083319</b>
.052 in. (1.3/1.4 mm)	<b>046783</b>	<b>046786</b>	<b>046794</b>	—
1/16 in. (1.6 mm)	<b>046784</b>	<b>046787</b>	<b>046795</b>	<b>046800</b>
.068/.072 in. (1.8 mm)	—	—	—	—
5/64 in. (2.0 mm)	—	<b>046788</b>	<b>046796</b>	<b>046801</b>

## Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide	Intermediate Guide
.023–.040 in. (0.6–1.0 mm)	056192	056206
.045–.052 in. (1.2–1.3 mm)	056193	056207
1/16–5/64 in. (1.6–2.0 mm)	056195	056209

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

## Genuine Miller® Options and Accessories

### Digital Meter and Voltage Control

**300513** Field

*For basic model only, standard on digital.*

Dual-function, backlit LCD digital meter with selector switch. The digital meter allows the wire feed speed to be preset in inches per minute or meters per minute. The voltage function, if used with a current Miller-manufactured, electronically controlled, constant-voltage power source, allows the arc voltage to be preset and monitored on the digital display.

### Run-In Control 301515

**Field**  
*For basic model only, standard on digital.*

A separate wire feed speed adjustment to control wire speed prior to arc initiation. This control may be beneficial to aid arc starting with certain types of power sources.



### Feeder Cart 142382

A low-profile, creeper cart which allows the operator to easily move the feeder around the work area. Shipped disassembled.

### Turntable Assembly 146236

Allows rotation of the feeder as operator changes work positions. This reduces strain and bending on gun cable.



### Hanging Bail (Electrically Isolated) 058435

Used for suspending feeder over work area.



### Spool Cover 057607

For 12-inch (305 mm) spool.

### Spool Adapter 047141

For use with 14-pound (6.4 kg) spool of Lincoln self-shielding wire.



### Wire Reel Assembly 108008

For 60-pound (27 kg) coil of wire.

### Reel Cover 195412

For 60-pound (27 kg) coil. Helps to protect the welding wire from dust and other contaminants.



### PSA-2 Control 141604

Required when using a 20 Series wire feeder with power sources having only 115 V available.

The PSA-2 control can be conveniently mounted on the wire feeder or positioned at the power source.

The control is equipped with a 14-pin receptacle for direct connection of the wire feeder control cord. A short cord with a four-pin amp plug is hard wired to the control. A 10-foot (3 m) interconnecting cord with a four-pin amp for connection to the PSA-2 and Hubbell connectors for older-style Miller CV power sources is included. The PSA-2 control can also be used with competitive power sources requiring a contact closure for contactor control.

### Extension Cables for 14-Pin Plugs to 14-Pin Sockets

**242208025** 25 ft. (7.6 m)

**242208050** 50 ft. (15.2 m)

**242208080** 80 ft. (24.4 m)

Provides 14-pin, 24 VAC, contactor and voltage control. Add to the standard 10-foot (3 m) feeder cable to extend feeder farther from power source.

### Euro Adapter Kit 164902

Allows European-style welding guns to be used with 20 Series feeders.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>20 Series Basic Model</b>	<b>301499</b> <b>951779</b>	Feeder only With Bernard™ BTB Gun 300 A, .035/.045-inch drive rolls and Centerfire™ contact tips		
<b>20 Series Digital Model</b>	<b>301499001</b> <b>951780</b>	Feeder only with digital meter, remote voltage control and adjustable run-in control With Bernard™ BTB Gun 300 A, .035/.045-inch drive rolls and Centerfire™ contact tips		
Digital Meters and Voltage Control	<b>300513</b>	Field. Standard on digital model		
Run-In Control	<b>301515</b>	Field. Standard on digital model		
<b>Power Sources</b>				
CP-302		Basic model only. See literature DC/13.0		
Deltaweld® Series		See literature DC/16.2		
Dimension™ 650		See literature DC/19.3		
XMT® 350/450		See literature DC/18.93 and DC/18.94		
Invision™ 352 MPa and 450 MPa		See literature DC/23.6		
<b>Accessories</b>				
Drive Roll Kits		See page 2		
Feeder Cart	<b>142382</b>			
Turntable Assembly	<b>146236</b>			
Hanging Bail	<b>058435</b>			
Spool Cover	<b>057607</b>			
Spool Adapter	<b>047141</b>			
Wire Reel Assembly	<b>108008</b>			
Reel Cover	<b>195412</b>			
PSA-2 Control	<b>141604</b>			
Extension Cables	<b>242208025</b> <b>242208050</b> <b>242208080</b>	25 ft. (7.6 m) 50 ft. (15.2 m) 80 ft. (24.4 m)		
Euro Adapter Kit	<b>164902</b>	Allows European-style welding guns to be used with 20 Series feeders		
Bernard™ BTB Guns				
<b>Miscellaneous</b>				
Primary Power Cable				
Secondary Weld Cable				
Work Cable with Work Clamp				
Gas Cylinder				
Gas Hose with Fittings				
Flowmeter Regulator				
Welding Wire				
Helmet				
Welding Gloves				

Date:

Total Quoted Price:

Distributed by:



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