

70 Series

Constant-Speed Wire Feeder 

Quick Specs



Heavy Industrial Applications

Heavy manufacturing
Metal fabrication
Construction
Light manufacturing

Processes

MIG (GMAW)
Flux-cored (FCAW)
(gas- and self-shielded)
Pulsed MIG (GMAW) with
MPa Plus feeder and
MPa power source

Input Power 24 VAC, 10 A, 50/60 Hz

Wire Feed Speed 1.3–19.8 m/min. (50–780 ipm)

Wire Diameter Capacity 0.6–2.0 mm (.023–5/64 in.)

Net Weight Single-wire feeder: 26 kg (58 lb.)
Dual-wire feeder: 39.5 kg (87 lb.)



3 m (10 ft.), 14-pin interconnecting cord for connecting to any Miller 14-pin power source.

Trigger receptacle oriented in a downward position to reduce potential damage.

Trigger hold reduces operator fatigue by allowing the operator to make long welds without having to energize the trigger continuously.

Dual-wire feeders allow two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.



For MPa Plus feeders only! XR-Aluma-Pro™ Plus and XR™-Pistol Plus push-pull guns for aluminum. Comes in 4.6, 7.6 and 10.6 m (15, 25 and 35 ft.) lengths for extended reach with trouble-free, reliable feeding. Gun is available in either air- or water-cooled versions.

Posifeed™ wire drive assembly features

- **Quick-change drive rolls.**
- **Quick-release, calibrated drive-roll pressure adjustment arm** allows drive roll change without losing spring preload setting.
- **Easy loading and threading of welding wire** without having to release the drive-roll pressure arm.
- **Uses Miller standard 41 mm (1-5/8 in.) diameter drive rolls.**
- **Quick-connect for all Miller guns.**
- **Covered drive rolls** — easy access, heavy-duty, molded composite cover over drive assembly.



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



ITW Welding – BV

Edisonstraat 10
P.O. Box 1551
NL-3261 LD Oud-Beijerland,
Netherlands
TEL: +31 (0) 186 641 444
FAX: +31 (0) 186 640 880

International Headquarters Miller Electric Mfg. Co.

An Illinois Tool Works Company
1635 W. Spencer Street
Appleton, WI 54914 USA
TEL: +1 920 735 4554
FAX: +1 920 735 4125
MillerWelds.com

Model Features

S-74D
single feeder



D-74D
dual feeder



S-74 MPa Plus
single feeder



D-74 MPa Plus
dual feeder



D models have the following features

- **Wire speed control.**
- **Factory-set run-in control** for improved arc starts.
- **24 VDC high-torque, permanent-magnet motor.**
- **Quick-change drive rolls.**
- **Quick-release, drive-roll pressure adjustment arm** allows drive roll change without losing spring preload setting.
- **Solid-state speed control and brake circuit** for increased service life.
- **Floating positive drive systems** provide trouble-free feeding on a variety of wires.
- **Digital meters** for easy viewing of the wire feed speed and voltage.
- **Remote voltage control** allows operator to set voltage at the wire feeder without having to go back to the power source.
- **Tachometer feedback** to help keep wire feed speed accurate.

MPa Plus models have the features of the D models and add the following

- **Four weld programs** allow the operators to store four independent welding parameters reducing welding setup time. (Four programs available per side on dual feeder.)
- **Adjustable run-in control** for improved arc starts.
- **Adjustable weld sequence control** gives operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.
- **Welding process range control** locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained on the shop floor.
- **Dual schedule, trigger dual schedule and trigger program select** allows operator to switch welding parameters without readjusting machine, eliminating downtime and enhancing quality.
- **Push-pull capability** provides consistent, versatile and dependable aluminum wire feeding over greater distances.
- **Synergic pulsed MIG** operation with MPa power supplies. Provides communication between the power source, feeder and gun. As wire speed increases/decreases, the pulse parameters also increase/decrease to match the right amount of power needed.
- **Trigger schedule select** allows the operator to select the alternative schedule by quickly tapping the gun trigger when not welding. When optimized with MPa power sources the operator can also switch from MIG to pulsed MIG.
- **Profile Pulse™** provides TIG appearance with MIG simplicity and productivity. Achieve “stacked dime” weld bead appearance without back-stepping. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.
- **Accu-Mate™** properly seats the power pin for best feeding performance and prevents Accu-Mate grooved MIG guns from sliding in the casting.



Specifications (Subject to change without notice.)

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

Model	Input Power	IP Rating	Wire Feed Speed	Wire Diameter Capacity	Dimensions	Net Weight
74D	24 VAC, 10 A, 50/60 Hz	IP23	1.3–19.8 m/min. (50–780 ipm) Optional high-speed motor: 2.3–36.6 m/min. (90–1,440 ipm)	0.6–2.0 mm (.023–5/64 in.)*	Single-wire feeders H: 356 mm (14 in.) W: 318 mm (12.5 in.) D: 711 mm (28 in.)	Single-wire feeders 26 kg (58 lb.) Dual-wire feeders 39.5 kg (87 lb.)
74 MPa Plus	24 VAC, 10 A, 50/60 Hz	IP23	1.3–19.8 m/min. (50–780 ipm)	0.6–2.0 mm (.023–5/64 in.) 0.9–1.6 mm (.035–1/16 in.) aluminum**	Dual-wire feeders H: 356 mm (14 in.) W: 533 mm (21 in.) D: 889 mm (35 in.)	

*When using 2.4–3.2 mm (3/32–1/8 in.) wires contact your local Miller representative at itw-welding.com for more information on low-speed options.

Wire kit **230708 is required to run 1.6 mm (1/16 in.) aluminum wire on XR-Aluma-Pro™ Plus guns and XR™-Pistol Plus guns.

CE All CE models conform to the applicable parts of the IEC 60974 series of standards.

70 Series Control Box, Cables and Wire Drive Motor Assemblies

Single Remote Configuration



Note: MPa Plus wire drive motor assemblies and control cables are only for use with MPa Plus control boxes.

Control Box
300882 S-74D (shown)
300738001 S-74 MPa Plus

Standard Motor Control Cable (11 conductor)
254935010 3 m (10 ft.)
254935025 7.6 m (25 ft.)
MPa Plus Motor Control Cable (14 conductor)
254864010 3 m (10 ft.)
254864025 7.6 m (25 ft.)



Standard Wire Drive Motor Assembly
300904 Left-hand drive
MPa Plus Wire Drive Motor Assembly
300740 Left-hand drive

MPa Plus left-hand drive can be used with push-only guns, **OR** XR-Aluma-Pro™ Plus and XR™Pistol Plus push-pull guns.

Gun NOT included. Must be ordered separately.

Dual Remote Configuration



Control Box
300887 D-74D (shown)
300739001 D-74 MPa Plus

Standard Motor Control Cable (11 conductor)
254935010 3 m (10 ft.)
254935025 7.6 m (25 ft.)



Standard Wire Drive Motor Assembly
300741001 Right-hand drive
MPa Plus Wire Drive Motor Assembly
300741 Right-hand drive

MPa Plus right-hand drive can only be used with push-only guns.

Guns NOT included. Must be ordered separately.

Note: MPa Plus wire drive motor assemblies and control cables are only for use with MPa Plus control boxes.

Standard Motor Control Cable (11 conductor)
254935010 3 m (10 ft.)
254935025 7.6 m (25 ft.)
MPa Plus Motor Control Cable (14 conductor)
254864010 3 m (10 ft.)
254864025 7.6 m (25 ft.)



Standard Wire Drive Motor Assembly
300904 Left-hand drive
MPa Plus Wire Drive Motor Assembly
300740 Left-hand drive

MPa Plus left-hand drive can be used with push-only guns, **OR** XR-Aluma-Pro™ Plus and XR™Pistol Plus push-pull guns.

Push-Pull Guns and Accessories for MPa Plus Models

XR-Aluma-Pro™ Plus Guns

300000001 4.6 m (15 ft.), air-cooled
300001001 7.6 m (25 ft.), air-cooled
300004001 7.6 m (25 ft.), water-cooled
 This easy-to-use and easy-to-maintain gooseneck-style MIG gun is designed for push-pull wire feed systems. Available in air- or water-cooled versions. Gun design allows for better access into tight spots.

XR™-Pistol Plus Guns

300753 4.6 m (15 ft.), air-cooled
300754 7.6 m (25 ft.), air-cooled
300755 10.6 m (35 ft.), air-cooled
300757 7.6 m (25 ft.), water-cooled
 This easy-to-use and easy-to-maintain pistol-grip MIG gun is designed for push-pull wire feed systems. Available in air- or water-cooled versions.

1.6 mm (1/16 in.) Wire Kit 230708

Specially designed for 1.6 mm wire. Includes idler roll, head tube liner and inlet guide. Required when running 1.6 mm wires. Not included with standard XR-Aluma-Pro Plus or XR-Pistol Plus guns.

Hardwire Liner Kit for Steel and Stainless 198377

For 4.6, 7.6 or 10.6 m (15, 25, or 35 ft.) guns. Kit consists of gun head tube liner and feed cable liner. Recommend using 0.8–1.1 mm mild steel or stainless steel electrode wire (1.3/1.4 and 1.6 mm wire not recommended).

Phosphorous Bronze Liner (Optional)

233999 Long head tube (air or water)
233998 Short head tube (air only)

Steel Liner (Optional)






242191 Short head tube (air only)

Extension Cables

247831025 7.6 m (25 ft.)
247831050 15.2 m (50 ft.)
247831080 24.4 m (80 ft.)
 Eleven conductors to support contactor control and remote voltage control on all Miller electronic CV 14-pin power sources. Additional functions supported when using the MPa power sources include synergic pulsed MIG, and remote process select and side select capabilities.

Drive Roll Kits and Guides

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) 	"U" Groove for aluminum wires contains nylon guides 
0.9 mm (.035 in.)	151026	—	151052	—	265255
1.0 mm (.040 in.)	161190	—	—	—	—
1.1/1.2 mm (.045 in.)	151027	151037	151053	151070	265256
1.3/1.4 mm (.052 in.)	151028	—	151054	—	—
1.6 mm (1/16 in.)	151029	151039	151055	151072	265257
1.8 mm (.068/.072 in.)	—	—	151056	—	—
2.0 mm (5/64 in.)	—	—	151057	—	—
2.4 mm (3/32 in.)	—	151041	151058	—	—

Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide	Intermediate Guide
0.9 mm (.035 in.)	221912	242417
1.2 mm (.047 in.)	221912	205936
1.6 mm (1/16 in.)	221912	205937

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

Wire Guides

Wire Size	Inlet Guide	Intermediate Guide
0.6–1.0 mm (.023–.040 in.)	221030	149518
1.1–1.4 mm (.045–.052 in.)	221030	149519
1.6–2.0 mm (1/16–5/64 in.)	221030	149520
2.4–2.8 mm (3/32–7/64 in.)	229919	149521

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
S-74D	300617003	Single-wire feeder, Euro, standard motor		
S-74 MPa Plus (Order XR-Aluma-Pro Plus or XR-Pistol Plus and U-groove drive rolls separately)	300577	Single-wire feeder, standard motor, optimized for MPa power sources with push-pull capability		
D-74D	300620002	Dual-wire feeder, Euro, standard motor		
D-74 MPa Plus (Order XR-Aluma-Pro Plus or XR-Pistol Plus and U-groove drive rolls separately)	300578	Dual-wire feeder, standard motor, optimized for MPa power sources with push-pull capability		
Remote Configurations		See page 3		
Power Sources				
XMT® 350 Series		See literature DCM/43.0		
XMT 450 Series		See literature DC/18.94		
Dimension™ 562/812 and Dimension™ 650		See literature DC/19.2 and DCM/40.0		
Accessories				
XR-Aluma-Pro™ Plus and XR™-Pistol Plus		For MPa Plus wire feeders only. See page 3		
Extension Cables		For MPa Plus wire feeders only. See page 3		
Hanging Bail	058435	Electrically isolated		
Wire Straightener	141580 141581	For 0.9–1.1 mm (.035–.045 in.) diameter wire For 1.6–3.2 mm (1/16–1/8 in.) diameter wire		
Spool Covers (Drive assembly cannot be in rotated position)	057607 090389	For 305 mm (12 in.) spools for S-74 and left side of D-74 models For 305 mm (12 in.) spools for right side of D-74 models		
Spool Adapter	047141	For 6.4 kg (14 lb.) Lincoln self-shielding wire spools		
Wire Reel Assembly	108008	For 27 kg (60 lb.) wire coils		
DSS-9 Dual Schedule Switch	071833	For 74DX models only		
Extension Cables	242208025 242208050 242208080	7.6 m (25 ft.). For 14-pin plugs to 14-pin sockets 15.2 m (50 ft.). For 14-pin plugs to 14-pin sockets 24.4 m (80 ft.). For 14-pin plugs to 14-pin sockets		

Date: _____ Total Quoted Price: _____

Distributed by:

