

# AutoDrive® 4R100 and AutoDrive® 4R220

## Powerful and Dependable Robotic Wire Feeders



Shown: AutoDrive® 4R100



Shown: AutoDrive® 4R220

### INDUSTRY-PROVEN PERFORMANCE

The AutoDrive® 4R100 and 4R220 Robotic Wire Feeding Systems offer powerful, industry-proven wire feeding performance for robotic and hard automation applications. Engineered with the patented MAXTRAC® Wire Drive System, both the AutoDrive® 4R100 and 4R220 help deliver the wire feeding results you need for maximizing automated welding productivity and quality.

#### Processes

**[Power source controlled] »**

MIG, Pulsed, STT®, Flux-Cored, Metal-Cored

#### Applications »

Robotic Fabrication,  
Hard Automation,  
Flexible Automation

#### Output »



#### Input »



#### Compatible Robotic Arms »

Fanuc®  
Yaskawa®  
ABB®  
Kuka®  
Kawasaki®

#### Universal Certificate »

CE, CSA (C/US), C-Tick, CCC

## FEATURES

- » **Industry-Proven Performance** – Patented MAXTRAC® 4-roll wire drive system delivers powerful and dependable wire feeding.
- » **Best in Class Torque** – Reliable feeding in high-speed applications or long conduit runs.
- » **Precise Speed Control** – High-resolution tachometer for precise forward and reverse wire feed speed control.
- » **Optimized Design** – Compact, lightweight package maximizes robot performance and work envelope.
- » **Durable and Rugged** – Heavy-duty wire drive system engineered to withstand demanding robotic applications with hinged cover for extra protection.
- » **Hassle-Free Maintenance** – Toolless design for drive roll, wire guide or pressure arm adjustments.
- » **Quick Release Mounting** – Robot-specific mounting brackets allow for quick and easy wire drive servicing.

## PERFORMANCE

### AutoDrive® 4R100

- Small, lightweight design
- Ideal for general purpose applications or robotic applications that require fast robotic arm speeds and small work envelopes.



### AutoDrive® 4R220

- Features a powerful 220 watt motor
- Ideal for feeding larger wire diameters, pulling wire through longer conduit runs and in applications requiring extra ruggedness.





At the heart of the AutoDrive® 4R100 and 4R220 is the rugged and dependable MAXTRAC® 4-roll wire drive system that delivers industry-proven performance and reliability for even the most demanding robotic or hard automation applications.

**Patented Dual Spring Pressure Arm**

- Easy turn numeric tension indicator
- Set heavy tension for solid steel and stainless steel wire
- Set moderate tension for cored wires
- Set soft tension for aluminum wire
- Wide idler arm hinge delivers improved drive roll clamping pressure

**Rigid Cast Aluminum Frame**

- Enhances precise drive roll alignment

**Twist-Lock Drive Roll Hubs**

- Four gear driven rolls
- Fast, tool-less changeovers

**Patented Split Wire Guides**

- Full support for wire throughout the drive path
- Minimizes feeding problems
- Removable outer wire guide for easy access
- No tools required

**Separate Drive Gear**

- Reduces pressure on motor for extended service life

**Patented Drive Rolls**



- For steel new design delivers 20% more feeding force
- For aluminum – chrome-plated to resist build-up



Shown: AutoDrive® 4R220

## OPTIONS

### DRIVE ROLL AND WIRE GUIDE KITS

Description	Wire Size in. (mm)	Product Number
<b>Solid Steel Wire, Smooth V Groove</b> 	.023-.030 (0.6-0.8)	KP1505-030S
	.035 (0.9)	KP1505-035S
	.040 (1.0)	KP1505-040S
	.040-.045 (1.0-1.2)	KP1505-045S
	.052 (1.4)	KP1505-052S*
<b>Solid Steel Wire, Smooth V Groove - Heavy Duty</b> Heavy duty tool-steel drive rolls designed for maximum life. Recommended for automated and high WFS applications.	.035 (0.9)	KP1505-035R
	.040 (1.0)	KP1505-040R
	.045 (1.2)	KP1505-045R
	.052 (1.4)	KP1505-052R*
<b>Cored Steel Wire, Knurled V Groove</b>	.030-.035 (0.8-0.9)	KP1505-035C
	.040-.045 (1.0-1.2)	KP1505-045C
	.052 (1.4)	KP1505-052C*
	1/16 (1.6)	KP1505-1/16C*
<b>Cored or Solid Steel Wire, Knurled V Groove</b>	.068-.072 (1.8)	KP1505-068*
	5/64 (2.0)	KP1505-5/64*
<b>Aluminum Wire, Smooth U Groove</b> 	.035 (0.9)	KP1507-035A
	.040 (1.0)	KP1507-040A
	3/64 (1.2)	KP1507-3/64A
	1/16 (1.6)	KP1507-1/16A*

\*NOTE: Wire size requires selection of 4R220 model.

### MOUNTING BRACKETS

Description	Product Number
<b>MOTOMAN</b>	
MA1440	K3572-1
MA2010	K3572-2
<b>KUKA</b>	
Kuka Thru-Arm	K3574-1
Kuka Over-Arm	K3574-2
<b>FANUC</b>	
iD	K3562-1
iC	K3562-2
4R100/4R220 Retrofit*	K3580-1
<b>ABB</b>	
IRB1520ID	K3573-1
IRB1660ID	K3573-2
IRB2600ID	K3573-3
IRB2600	K3573-5
IRB4600	K3573-6

\*For existing installations with mounting configuration of K2685-3 or K3002-2 feeder.

## RECOMMENDED ACCESSORIES TO EXPAND MACHINE CAPABILITIES

### GENERAL OPTIONS



**Wire Straightener**  
Straightens wire for better, smoother feeding.  
Order **K1733-1**



### Incoming Bushing for Lincoln Conduit

Feed Plate Incoming Bushings connect directly to wire conduit (sold separately) for use in boom system, long distances or large payoff packages. Bushings can be used with K515-L or K565-L wire conduit.

Order **K1546-1** for .025-1/16 in. wire

Order **K1546-2** for 1/16-1/8 in. wire

### PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Output Capacity Current @ Duty Cycle	Wire Feed Speed Range in/min (m/min)	Wire Size Range: in (mm)		H x W x D inches (mm)	Net Weight lbs. (kg)
					Solid	Cored		
<b>AutoDrive® 4R100</b>	K3560-1	40V DC 4 amps	500 Amps @ 100%	50-800 (1.3-20.3)	0.023-0.045 (0.6-1.2)	0.035-0.045 (0.9-1.2)	8.4 x 7.5 x 9.1 (213 x 191 x 231)	13.2 (6.0)
<b>AutoDrive® 4R220</b>	K3561-1	40V DC 8 amps	500 Amps @ 100%	30-1200 (0.8-30.5)	0.023-1/16 (0.6-1.6)	0.035-5/64 (0.9-2.0)	10.43 x 10.07 x 9.92 (265 x 256 x 252)	20.9 (9.5)

For best welding results with Lincoln Electric® equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.

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