# MAGNUM® PRO ROBOTIC GUNS



## WIRE FEEDER/WELDERS

Advanced features for Advanced Welding. Magnum® PRO Robotic Guns combine a robust design with industry-leading expendable parts to help produce consistent high quality welds. Choose either Thru-Arm or External Dress models.

#### **Both Torches Feature:**

- Single Tool Center Point (TCP) Changing between 350A and 550A expendables does not alter the robot TCP.
- Robust Cable System Cables exceed industry standards by a factor of two in durability testing.
- Simplified Expendable Parts Selection 350A and 550A rated consumables are interchangeable across all gun models.
- HexConnect<sup>™</sup> Gun Bushing Ensures better electrical conductivity through full face contact as opposed to rotating connections that have single line contact.
- **Extended Reach** Mounting bracket is designed to optimize clearance for tough to reach welding applications.
- · NEW! Choose a Thru-Arm Ready-Pak®.

#### Processes »

MIG, MIG Pulsed, Flux-Cored

#### Applications »

Industrial Fabrication, Heavy Equipment, Automotive

#### **Product Numbers »**

See Charts

### WHAT'S INCLUDED » External Dress models [K2647-XX] include:

Contact Tip (KP2745-045R) Gas nozzle (KP2743-1-62R) Diffuser (KP2747-1) Insulator (KP2773-1) Liner (KP44-3545-15) Gun Tube (KP3056-22) Gun Connector [K466-2]

## GUN REQUIRES » External Dress Only

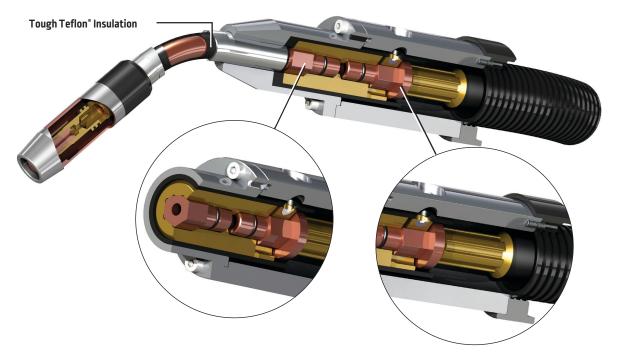
Break-Away Disk Mounting Arm Kit

## Thru-Arm Ready-Pak° (K3359-XX) models include<sup>(1)</sup>:

Contact Tip (KP2745-040) Gas nozzle (KP2743-1-62R) Diffuser (KP2747-1) Insulator (KP2773-1) Liner (KP45-3545-X) Gun Tube (KP3355-45) Gun Connector (K613-12)

(1) K3353-XX Thru-Arm models do not include these items.





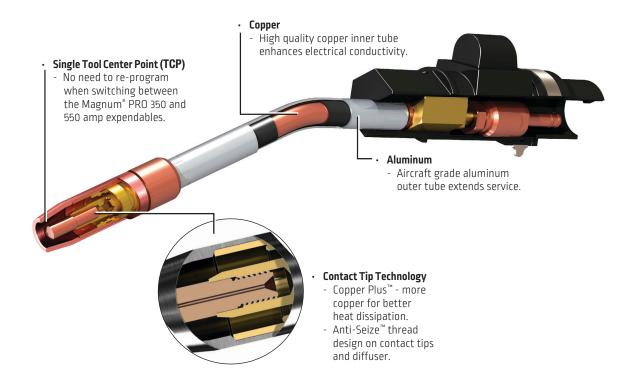
## · Patented HexConnect™ Gun Bushing

- Delivers superior mechanical and electrical connection resulting in longer expendable life.
- Resists twisting and provides more points of contact for current flow.

## · Fixed Electrical Connection

- Robust design resists fatigue Lasted over 1 million tortuous flex cycles in extreme lab testing.
- Competitive rotating designs can cause micro-arcing resulting in arc instability and potential shorter gun life.

## **EXTERNAL DRESS TORCHES**



## **EXPENDABLE PARTS**

350 A and 550 A Magnum® PRO Expendable Parts are interchangeable. Interchanging will require gun tube insulator and gas diffuser changes. Customers may choose to change expendable parts to standardize stocking parts or to make the gun more compact for tight spaces.

## Magnum® PRO 550 A Expendables



**CONTACT TIPS 550 A** 

Wire Diameter	Standard		Та	pered	Extended Life		
in. (mm)	Pkg. Qty 10	Pkg. Qty 100	Pkg. Qty 10	Pkg. Qty 100	Pkg. Qty 10	Pkg. Qty 100	
0.035 (0.9)	KP2745-035	KP2745-035-B100	KP2745-035T	KP2745-035T-B100	KP2745-035R	KP2745-035R-B100	
0.040 (1.0)	KP2745-040	KP2745-040-B100	KP2745-040T	KP2745-040T-B100	NA	NA	
0.045 (1.2)	KP2745-045	KP2745-045-B100	KP2745-045T	KP2745-045T-B100	KP2745-045R	KP2745-045R-B100	
0.052 (1.3)	KP2745-052	KP2745-052-B100	KP2745-052T	KP2745-052T-B100	KP2745-052R	KP2745-052R-B100	
1/16 (1.6)	KP2745-116	KP2745-116-B100	KP2745-116T	KP2745-116T-B100	KP2745-116R	KP2745-116R-B100	
0.068-0.072 (1.7-1.8)	KP2745-072	KP2745-072-B100			KP2745-072R	KP2745-072R-B100	
5/64 (2.0)	KP2745-564	KP2745-564-B100			KP2745-564R	KP2745-564R-B100	

(1) 550 only

#### **GAS DIFFUSER 550 A**

		Туре					
Material	Pkg. Qty.	Thread-on 1/8 in. Recess	Thread-on 1/4 in. Recess	Thread-on, Extended Reach	Slip-on		
Brass	1	KP2747-1	KP3155-1	KP4781-1	KP2747-2		
DIASS	25	KP2747-1-B25	KP3155-1-B25	KP4781-1-B25	KP2747-2-B25		
Conner	1	KP4766-1	-	-	KP4766-2		
Copper	25	KP4766-1-B25	-	-	KP4766-2-B25		





up to 550 A up to 550 A Thread-on Slip-on

**REPLACEMENT O-RING FOR 550 A GAS DIFFUSER** 

	Туре			
Pkg. Qty.	Thread-on	Slip-on		
10	KP3537-1	_		

## **GUN TUBE INSULATOR 550 A**

	Pkg. Qty.	Part Number
	1	KP2773-1
Ī	25	KP2773-1-B25



Gun Tube Insulator 550 A

## **GAS NOZZLE 550 A**

Nozzle			Gas Nozzle Diameter in. (mm)					
in. (mm)	Pkg. Qty.	Standard 0.375 (9.5)	Standard 0.5 (12.7)	Standard 0.625 (15.9)	Bottleneck 0.625 (15.9)	Standard 0.750 (19)		
1/8 (3.2)	1	KP2743-1-38R	KP2743-1-50R	KP2743-1-62R	KP3161-1-62R	KP2743-1-75R		
Recess	25	KP2743-1-38R-B25	KP2743-1-50R-B25	KP2743-1-62R-B25	KP3161-1-62R-B25	KP2743-1-75R-B25		
Flush	1	KP2743-1-38F	KP2743-1-50F	KP2743-1-62F	KP3161-1-62F	KP2743-1-75F		
FluSfi	25	KP2743-1-38F-B25	KP2743-1-50F-B25	KP2743-1-62F-B25	KP3161-1-62F-B25	KP2743-1-75F-B25		
1/8 (3.2)	1	KP2743-1-38S	KP2743-1-50S	KP2743-1-62S	KP3161-1-62S	KP2743-1-75S		
Stickout	25	KP2743-1-38S-B25	KP2743-1-50S-B25	KP2743-1-62S-B25	KP3161-1-62S-B25	KP2743-1-75S-B25		
1/8 (3.2)	1	_	-	KP2743-2-62R	_	KP2743-2-75R		
Recess	25	_	-	KP2743-2-62R-B25	_	KP2743-2-75R-B25		
Fluels	1	_	-	KP2743-2-62F	_	KP2743-2-75F		
Flush	25	_	-	KP2743-2-62F-B25	_	KP2743-2-75F-B25		
1/8 (3.2)	1	_	_	KP2743-2-62S	_	KP2743-2-75S		
Stickout	25	_	_	KP2743-2-62S-B25	_	KP2743-2-75S-B25		



Bottleneck Gas Nozzle for 550 Thread-on 1/8 in. (3.2 mm) Recessed



for 550 Thread-on 1/8 in. (3.2 mm) Recessed

## GUN LINERS 550 A - in. (mm)

ft. (m)	0.035-0.045 (0.9-1.2)	0.052-1/16 (1.3-1.6)
6 (1.8)	KP45-3545-6	_
6 (1.8)	KP45-3545-6-B10	_
15 (4.5)	KP45-3545-15	KP45-116-15

## JUMP LINERS<sup>[2]</sup> 550 A in. (mm) – (for Wire Brake Torches only)

0.035-0.045 (0.9-1.2)	0.052-1/16 (1.3-1.6)	1/16 - 5/64 (1.6-2.0)
KP3364-1	KP3364-2	KP3364-3

## WIRE GUIDES<sup>(2)</sup> – (for Wire Brake Torches only)

Size	0.035-0.045	0.052-1/16	5/64
Part Number	KP3979-1	KP3979-2	KP3979-3

[2] Jump liners and wire guides are only used on Thru-arm torches with wire brake.

## **RECOMMENDED ACCESSORIES**



#### **GENERAL OPTIONS**

Robotic Gun Tube Straightener Used in the event of a robot crash to check and correct robotic gun tube alignment.

Order

K3193-1

(Compatible with all standard KP3056-XX and KP3057-XX gun tubes)

K3193-2

(Compatible with all standard KP3354-XX and KP3355-XX gun tubes)

#### **EXTERNAL DRESS OPTIONS**

#### External Dress Torch Mounting Kits

Designed to mount the External Dress torch in the proper orientation for the application and fixturing presented to the robot. Consult Automation Division for correct mounting kit selection assistance.



KP2769-22 22 Degree – Lincoln Electric Tool Center Point (TCP)

KP2769-45

45 Degree – Lincoln Electric Tool Center Point (TCP)

KP2769-180

180 Degree – Lincoln Electric Tool Center Point (TCP)

KP3054-22

22 Degree – Tregaskiss° TCP, FANUC° Solid Mount

KP3055-22

22 Degree – Tregaskiss° TCP, Tregaskiss° Clutch Mount



22 Degree - Lincoln Electric Tool Center Point (TCP) for ABB and KUKA Robot Arms

KP3499-45

45 Degree - Lincoln Electric Tool Center Point (TCP) for ABB and KUKA Robot Arms

KP3499-180

180 Degree - Lincoln Electric Tool Center Point (TCP) for ABB and KUKA Robot Arms

#### THRU-ARM OPTIONS

#### Thru-Arm Break-Away Disks

Replaceable mounting interface disk designed to protect the robot arm by absorbing the effects of any damage in the event of a robot work envelope collision.

See specification chart below for correct part numberr

#### Wire Brake Plug

Plug when removing wire brake from K4307-2

Order K3563-1



#### **Nose Cone Assemblies**

See specification chart below for correct part number



#### Torch Housings

See specification chart below for correct part number



## Air Blast Kit

Blows spatter from the nozzle orifice. Includes 20 ft (6.1 m) hose and fitting.

Order K3352-1



#### **External Dress Break-Away Disks**

Replaceable mounting interface disk designed to protect the robot arm by absorbing the effects of any damage in the event of a robot work envelope collision.

#### Order

KP3194-1

External Dress Break-Away Disk (Fanuc iB)

KP3194-2

External Dress Break-Away Disk (Fanuc 50 iC)

KP3194-3

External Dress Break-Away Disk (Fanuc iC)

KP3194-4

External Dress Break-Away Disk

(ABB2600)

KP3194-5

**External Dress Break-Away** 

Disk

(KR6, KR8, KR10)



#### Thru-Arm Replacement Cable Assemblies

See specification chart below for correct part number



#### **EXTERNAL DRESS GUN TUBE**[3]

EXTERNAL DIVESS GON TODE					
Product Number	Description				
KP3056-22	Gooseneck, 22° Robotic A/C, LECO TCP				
KP3056-45	Gooseneck, 45° Robotic A/C, LECO TCP				
KP3056-180	Gooseneck, 180° Robotic A/C, LECO TCP				
KP3057-22	Gooseneck, 22° Robotic A/C, LECO TCP				

[3] Note that external dress guns include a 22 degree Lincoln Electric TCP gooseneck, liner and consumables. Mounting kit is not included.

## **THRU-ARM GUN TUBE**

Product Number	Description
KP3354-22	22 <sup>o</sup> Thru-Arm Gooseneck (Tregaskiss™)
KP3354-45	45° Thru-Arm Gooseneck (Tregaskiss™)
KP3355-22	22º Thru-Arm Gooseneck (Binzel <sup>™</sup> )
KP3355-45	45° Thru-Arm Gooseneck (Binzel <sup>™</sup> )
KP3355-180	180° Thru-Arm Gooseneck (Binzel <sup>™</sup> )

## **GUN CONNECTOR KIT**

CON COMMECTOR			
Manufacturer	Wire Feeder Model	Magnum <sup>®</sup> PRO 250/350/450	Magnum° PRO 550
Lincoln Electric®	LN-7 Series, LN-8, LN-9, LN-25 [Up to .052 in. (1.4 mm) Wire]	K466-1	K613-1
	LN-8, LN-9 Series, LN-25 [1/16 in. (1.6 mm) and Larger Wire]	K466-8	K613-6
	LF-72, LF-74 Series, LN-25 PRO	K466-10	K613-7(1)
	Power Feed® 10 and 25 series	K466-10	K613-7(1)
	POWER MIG* Series and Power Wave* C300	K466-6	NA
Tweco® Adapted	No. 2, No. 3, No. 4 Guns (K466), No. 5 (K613)	K466-2 <sup>[3]</sup>	K613-2
Miller <sup>®</sup>	Intellimatic, Sidekick, D-51A, Porto-Mig, Millermatic 130, 200, MM-35, S-42GL, S-52A, S-54A, Swing Arc-Dual, Swing Arc-Single, S-32S, 52D, 54D, 54E, 60 Series <sup>[2]</sup>	K466-3	K613-3
_	Integrated pin/bushing connector kit	K466-12	K613-12 <sup>[4]</sup>



K466-10

## **SPECIFICATIONS**

Product Name	Product Number	Torch Type	Cable	Nose Cone	Housing	Breakaway Disk	Amperage Rating
Magnum <sup>®</sup> PRO Thru-Arm	n Air Cooled Ready-Pak® (comes	with KP3355-45 goo	seneck)				•
FANUC 100iC	K3359-100iC	Standard	KP3066-100iC	K4307-1	K4308-3	KP2920-4	100% @ 550A (CO2
	K3359-100iCA	Air Blast		K4307-1	K4308-3		
	K3359-100iCW	Wire Brake		K4307-2	K4308-4		
FANUC 100iC/6L	K3359-100iC/6L	Standard	KP3066-100iC/6L	K4307-1	K4308-3	KP2920-4	
	K3359-100iC/6LA	Air Blast		K4307-1	K4308-3		
	K3359-100iC/6LW	Wire Brake		K4307-2	K4308-4		
FANUC 100iC/8L	K3359-100iC/8L	Standard	KP3066-100iC/8L	K4307-1	K4308-3	KP2920-4	1
	K3359-100iC/8LA	Air Blast		K4307-1	K4308-3		
	K3359-100iC/8LW	Wire Brake		K4307-2	K4308-4		
FANUC 120iC	K3359-120iC	Standard	KP3066-120iC	K4307-1	K4308-3	KP2920-4	]
	K3359-120iCA	Air Blast		K4307-1	K4308-3		
	K3359-120iCW	Wire Brake		K4307-2	K4308-4		
FANUC 120iC/10L	K3359-120iC/10L	Standard	KP3066-120iC/10L	K4307-1	K4308-3	KP2920-4	
	K3359-120iC/10LA	Air Blast		K4307-1	K4308-3		
	K3359-120iC/10LW	Wire Brake		K4307-2	K4308-4		
FANUC M710iC/12L	K3359-M710iC/12L	Standard	K3066-M710iC/12L	K4307-1	K4308-3	KP2920-4	
	K3359-M710iC/12LA	Air Blast		K4307-1	K4308-3		
	K3359-M710iC/12LW	Wire Brake		K4307-2	K4308-4		
FANUC 100iD	K3359-100iD	Standard	KP3066-100iD	K4307-1	K4308-3	KP2920-9	
	K3359-100iDA	Air Blast		K4307-1	K4308-3		
	K3359-100iDW	Wire Brake		K4307-2	K4308-4		
FANUC 100iD/10L	K3359-100iD/10L	Standard	KP3066-100iD/10L	K4307-1	K4308-3	KP2920-9	1
and FANUC 120iD	K3359-100iD/10LA	Air Blast		K4307-1	K4308-3		
	K3359-100iD/10LW	Wire Brake		K4307-2	K4308-4		
ABB IRB 1520ID	K3359-1520ID	Standard	KP3066-1520ID	K4307-1	K4308-7	KP2920-7	
	K3359-1520IDA	Air Blast		K4307-1	K4308-7		
	K3359-1520IDW	Wire Brake		K4307-2	K4308-8		]
ABB IRB 1600ID	K3359-1600ID	Standard	KP3066-1600ID	K4307-1	K4308-7	KP2920-7	
	K3359-1600IDA	Air Blast		K4307-1	K4308-7		
	K3359-1600IDW	Wire Brake		K4307-2	K4308-8		

 $<sup>^{\</sup>rm M}$  K1500-3 Gun Receiver Bushing is required for Power Feed 10 series, LF series and LN-25 PRO wire feeders.

 $<sup>^{\</sup>mbox{\tiny{$\boxtimes$}}}$  Terms are tradmarks of Illinois Tool Works.

<sup>&</sup>lt;sup>⅓</sup> Included with External Dress Torch

<sup>[4]</sup> Included with Thru-Arm Torch

#### SPECIFICATIONS, con't.

Product Name	Product Number	Torch Type	Cable	Nose Cone	Housing	Breakaway Disk	Amperage Rating
Magnum° PRO Thru-Arm Ai	r Cooled Ready-Pak® (comes w	ith KP3355-45 goo	seneck), con't.				
ABB IRB 1660ID	K3359-1660ID	Standard	KP3066-1660ID	K4307-1	K4308-3	KP2920-8	100% @ 550A (CO2)
	K3359-1660IDA	Air Blast		K4307-1	K4308-3		
	K3359-1660IDW	Wire Brake		K4307-2	K4308-4		
ABB IRB 2600ID-8/2.0	K3359-2600ID-20	Standard	KP3066-2600ID-20	K4307-1	K4308-3	KP2920-8	
	K3359-2600ID-20A	Air Blast		K4307-1	K4308-3		
	K3359-2600ID-20W	Wire Brake		K4307-2	K4308-4		
ABB IRB 2600ID-15/1.85	K3359-2600ID-185	Standard	KP3066-2600ID-185	K4307-1	K4308-3	KP2920-8	
	K3359-2600ID-185A	Air Blast		K4307-1	K4308-3		
	K3359-2600ID-185W	Wire Brake		K4307-2	K4308-4		
KUKA KR6R1820HW	K3359-KR6R1820HW	Standard	KP3066-KR6R1820HW	K4307-1	K4308-11	KP2920-5	
	K3359-KR6R1820HWA	Air Blast		K4307-1	K4308-11		
	K3359-KR6R1820HWW	Wire Brake		K4307-2	K4308-12		
KUKA KR8R1420HW	K3359-KR8R1420HW	Standard	KP3066-KR8R1420HW	K4307-1	K4308-11	KP2920-5	
	K3359-KR8R1420HWA	Air Blast		K4307-1	K4308-11		
	K3359-KR8R1420HWW	Wire Brake		K4307-2	K4308-12		
KUKA KR8R2100HW	K3359-KR8R2100HW	Standard	KP3066-KR8R2100HW	K4307-1	K4308-11	KP2920-5	
	K3359-KR8R2100HWA	Air Blast		K4307-1	K4308-11		
	K3359-KR8R2100HWW	Wire Brake		K4307-2	K4308-12		
MOTOMAN MA1440	K3359-MA1440	Standard	KP3066-MA1440	K4307-1	K4308-3	KP2920-4	
	K3359-MA1440A	Air Blast		K4307-1	K4308-3		
	K3359-MA1440W	Wire Brake		K4307-2	K4308-4		
MOTOMAN MA2010	K3359-MA2010	Standard	KP3066-MA2010	K4307-1	K4308-3	KP2920-4	
	K3359-MA2010A	Air Blast		K4307-1	K4308-3		
	K3359-MA2010W	Wire Brake		K4307-2	K4308-4		
Magnum <sup>®</sup> PRO Thru-Arm Ai	r Cooled Ready-Pak® (comes w	ithout gooseneck)					
FANUC 100iC	K3353-100iC	Standard	KP3066-100iC	K4307-1	K4308-3	KP2920-4	100% @ 550A (CO2)
	K3353-100iCW	Wire Brake		K4307-2	K4308-4		
FANUC 100iC/6L	K3353-100iC/6L	Standard	KP3066-100iC/6L K4307-1 K4308-3 KP2920-4 K4307-2 K4308-4	K4307-1	K4308-3	KP2920-4	
	K3353-100iC/6LW	Wire Brake					
FANUC 120iC	K3359-120iC	Standard	KP3066-120iC K4307-1 K4308-3 KP292 K4307-2 K4308-4	K4307-1	K4308-3	KP2920-4	
	K3359-120iCW	Wire Brake					
FANUC 120iC/10L	K3359-120iC/10L	Standard	KP3066-120iC/10L	K4307-1	K4308-3	KP2920-4	
	K3359-120iC/10LW	Wire Brake		K4307-2	K4308-4		

## Magnum® PRO External Dress Air Cooled Ready-Pak®

The state of the s							
Product Number	Cable Length, ft. (m)	Amperage Rating					
K2647-4	4 (1.2)	100% @ 550A (CO2)					
K2647-4L	4.5 (1.4)						
K2647-5L	5.5 (1.7)						
K2647-8	8 (2.4)						
K2647-11	11 (3.3)						

## CUSTOMER ASSISTANCE POLICY

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