

# MAGNUM<sup>®</sup> PRO CURVE<sup>™</sup> HDE<sup>™</sup> GUNS

Heavy Duty. Ergonomic.



Shown:  
K4531-2, K4532-2  
K4533-2, K4534-2

## KEY FEATURES

The Magnum PRO Curve HDE guns are the most durable and ergonomic MIG guns in the Magnum PRO family. Designed for rugged welding environments, the Magnum PRO Curve HDE guns with Magnum PRO expendables are built to last.

- **100% Duty Cycle with Mixed Gas** – The Magnum PRO Curve HDE guns have the highest duty cycle rating in their class, making them ideal for rugged environments and high heat applications.
- **Premium Expendable Performance** – Lincoln Electric's patented Magnum PRO expendables are designed with both performance and productivity in mind. The premium performance helps extend the service life of the expendables, reducing downtime and total costs.
- **Tool-less Rotatable Gun Tube** – The bolt of the gun tube can be loosened without the need for tools and rotated 360°, so it is easy to position into a comfortable spot for welding.
- **Over Molded Handle** – The soft rubber over molding enhances comfort and allows for an easier grip of the gun.

**Process »**  
MIG, Pulsed MIG, Flux-Cored

**Output »**



**Input »**



**Product Number »**

See Magnum PRO HDE Guns table for details

**What's Included »**

» Gooseneck

» Insulator

» Diffuser

» Contact tip

» Nozzle

(see next page for details)

## WHAT'S INCLUDED:

### MAGNUM PRO CURVE HDE 250A (K4531-X):

- Gooseneck (KP4693-60)
- Insulator (KP2773-2)
- Diffuser (KP2746-1)
- Contact Tip (KP2744-035)
- Nozzle (KP2742-1-62R)

### MAGNUM PRO CURVE HDE 350A (K4532-X):

- Gooseneck (KP4694-60)
- Insulator (KP2773-1)
- Diffuser (KP2747-1)
- Contact Tip (KP2745-045)
- Nozzle (KP2743-1-62R)

### MAGNUM PRO CURVE HDE 450A (K4533-X):

- Gooseneck (KP4695-60)
- Insulator (KP2773-1)
- Diffuser (KP2747-1)
- Contact Tip (KP2745-045)
- Nozzle (KP2743-1-62R)

### MAGNUM PRO CURVE HDE 550A (K4534-X):

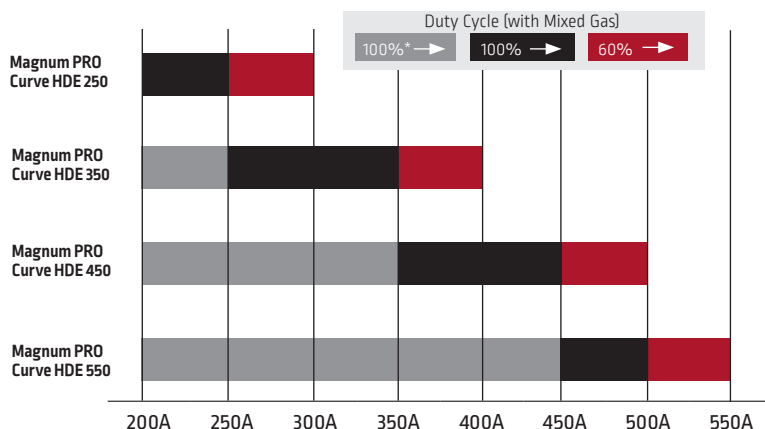
- Gooseneck (KP4696-60)
- Insulator (KP2773-1)
- Diffuser (KP2747-1)
- Contact Tip (KP2745-332)
- Nozzle (KP2743-1-62R)

## HOW TO CONFIGURE A GUN

It is important to select the right product for each application. Use the following steps to select the correct components for your need.

- 1. Select Your Gun** – Three important elements to consider when choosing a gun are amperage, duty cycle, and gas blend. Gun selection should be based off of the amperage and duty cycle of the application, not the amperage rating of the machine the gun is being connected to. The Magnum PRO Curve HDE guns are rated at 100% duty cycle with mixed gas, a unique performance advantage over competitive guns.

**Magnum PRO Curve HDE Performance Chart**



\*Note: We recommend selecting a lower amperage Magnum Pro Curve HDE model

- 2. Select Your Liner** – Select your liner based off of the wire diameter that is being run for your application.
- 3. Select Your Gun Connector Kit** – Choose the correct connector that matches the wire feeder model.
- 4. Choose Your Expendables** – Based off of the application, choose either 350A expendables (for light or medium duty applications) or 550A expendables (for medium or heavy duty applications). Multiple expendable types are available to cater to the type of wire used, the joint configuration, and the welding process.

# 1. SELECT YOUR GUN

## MAGNUM PRO CURVE HDE GUNS

Product Number	Amperage Rating 100% Duty Cycle CO <sub>2</sub>	Amperage Rating 100% Duty Cycle Mixed Gas	Wire Diameter Range in (mm)	Cable Length ft (m)	Gun Tube	Gun Connector	Gun Liner	
K4531-1	250	250	0.025 - 0.045 (0.6-1.2)	10 (3.0)	KP4693-60	Order Separately	Order Separately	
K4531-2				15 (4.5)				
K4531-3				20 (6.1)				
K4531-4				25 (7.6)				
K4532-1	350	350	0.035 - 5/64 (0.9-2.0)	10 (3.0)	KP4694-60			
K4532-2				15 (4.5)				
K4532-3				20 (6.1)				
K4532-4				25 (7.6)				
K4533-1	450	450	0.035 - 5/64 <sup>(1)</sup> (0.9-2.0)	10 (3.0)	KP4695-60			
K4533-2				15 (4.5)				
K4533-3				20 (6.1)				
K4533-4				25 (7.6)				
K4534-1	550	500	0.035 - 1/8 (0.9-3.2)	10 (3.0)	KP4696-60			
K4534-2				15 (4.5)				
K4534-3				20 (6.1)				
K4534-4				25 (7.6)				
K4531-2-10-45	250	250	0.025 - 0.045 <sup>(2)</sup> (0.6-1.2)	15 (4.5)	KP4693-60	K466-10	KP42-4045-15	
K4531-2-6-45						K466-6	KP42-4045-15	
K4531-2-3-45						K466-3	KP42-4045-15	
K4532-2-10-45	350	350	0.035 - 5/64 <sup>(2)</sup> (0.9-2.0)	15 (4.5)	KP4694-60	K466-10	KP44-3545-15	
K4532-2-6-45						K466-6	KP44-3545-15	
K4532-2-3-45						K466-3	KP44-3545-15	
K4532-2-1-45						K466-1	KP44-3545-15	
K4532-2-10-116						K466-10	KP44-116-15	
K4532-2-6-116			K466-6	KP44-116-15				
K4532-2-3-116			K466-3	KP44-116-15				
K4532-2-1-116			K466-1	KP44-116-15				
K4532-4-10-116			25 (7.6)	0.035 - 5/64 <sup>(3)</sup> (0.9-2.0)		15 (4.5)	K466-10	KP44-116-25
K4532-4-6-116							K466-6	KP44-116-25
K4532-4-3-116	K466-3	KP44-116-25						
K4532-4-1-116	K466-1	KP44-116-15						
K4533-2-10-564	450	450			0.035 - 5/64 <sup>(4)</sup> (0.9-2.0)		15 (4.5)	KP4695-60
K4533-2-3-564			K466-3	KP44-564-15				
K4533-2-7-332			0.035 - 5/64 <sup>(5)</sup> (0.9-2.0)	15 (4.5)	KP4696-60SN	K613-7	KP45H-332-15	
K4533-2-3-332						K613-3	KP45H-332-15	
K4534-2-7-332	550	500	0.035 - 1/8 <sup>(5)</sup> (0.9-3.2)	15 (4.5)	KP4696-60	K613-7	KP45H-332-15	
K4534-2-3-332						K613-3	KP45H-332-15	

(1) The 450A gun can be adapted to run up to 1/8 in. wire by using a KP45 series liner, a K613 series backend, and a 550A or 550A short gooseneck. The original 450A gooseneck cannot be used on wire larger than 5/64 in.

(2) 0.035-0.045 liner included in Ready-Pak

(3) 0.052-1/16 liner included in Ready-Pak

(4) 1/16-5/64 liner included in Ready-Pak

(5) 5/64-3/32 liner included in Ready-Pak

## MAGNUM PRO CURVE HDE GUNS VS. MAGNUM PRO BARREL HDE GUNS:

The choice between the Curve style or Barrel style handle comes down to operator preference. Since both styles come with the same premium HDE features, you can experience increased operator comfort, productivity, and quality with whichever Magnum PRO HDE welding gun you choose.

	Magnum PRO Curve HDE	Magnum PRO Barrel HDE
100% Mixed Gas Duty Cycle	✓	✓
Amperage Classes	250/350/450/550	250/350/450
Tool-less Rotatable Gun Tube	✓	✓
Magnum PRO Expendables	✓	✓
Trigger Style	Standard	Paddle
Trigger On Top	-	✓
Over Molded Handle	✓	✓

## 2. SELECT YOUR LINER

### KP44 SERIES LINERS

ft (m)	0.035-.045 in (0.9-1.2 mm)	0.052-1/16 in (1.3-1.6 mm)	1/16-5/64 in (1.6-2.0 mm)
15 (4.5)	KP44-3545-15	KP44-116-15	KP44-564-15
25 (7.6)	KP44-3545-25	KP44-116-25	KP44-564-25

### KP45 SERIES LINERS

ft (m)	0.035-.045 in (0.9-1.2 mm)	0.052-1/16 in (1.3-1.6 mm)	5/64-3/32 in (2.0-2.4 mm)	7/64-1/8 in (2.8-3.2 mm)
15 (4.5)	KP45-3545-15	KP45-116-15	KP45H-332-15	KP45-18-15
25 (7.6)	KP45-3545-25	KP45-116-25	KP45H-332-25	KP45-18-25

### KP42 SERIES LINERS

ft (m)	.025-.030 (0.6-0.8 mm)	.030-.035 (0.8-0.9 mm)	.035-.045 (0.9-1.2 mm)
15 (4.5)	KP42-25-15	KP42-3035-15	KP42-4045-15
25 (7.6)	KP42-25-25	KP42-3035-25	KP42-4045-25

\*250A guns are used with KP42 series liners, the 350A and 450A guns are used with KP44 series liners, and the 550A guns are used with KP45 series liners.

\*\*The 450A gun can be adapted to run up to 1/8 in. wire by using a KP45 series liner, a K613 series backend, and a 550A or 550A short gooseneck. The original 450A gooseneck cannot be used on wire larger than 5/64 in..

## 3. SELECT YOUR GUN CONNECTOR KIT

### GUN CONNECTOR KITS

Manufacturer	Wire Feeder Model	K466 Connector Kits (accepts KP42 & KP44 series liners)	K613 Connector Kits (accepts KP45 series liners)
Lincoln Electric®	LF-72™, LF-74™ Series, Flex Feed® 74 HT, Flex Feed 84, LN-25 PRO™, LN-25X®, Activ8®, Activ8X®, Power Feed® 10, 10M, 25M, and 84 PIPEFAB™	K466-10	K613-7
	LN-7™ Series, LN-8™, LN-9™, LN-25® (up to 0.052 in./1.4 mm wire), LN-23P™	K466-1	K613-1
	POWER MIG® Series and Power Wave® 300C	K466-6	N/A
	LN-8, LN-9 Series, LN-25 (1/16 in./1.6 mm and larger), LN-23P	K466-8	K613-6
Tweco® Adapted	No. 2, No. 3, No. 4 Guns	K466-2	K613-2
Miller®	Intellimatic™, Sidekick, D-51A, Porto-MIG™ Millermatic® 130, 200, MM-35, S-42GL, S-52A, Swingarc™-Dual, Swingarc-Single, S-32S, 52D, 54D, 54E, 60 Series, 70 Series	K466-3	K613-3

## 4. CHOOSE YOUR EXPENDABLES

All Magnum PRO HDE gun tubes will fit on any Magnum PRO HDE gun. However, the 250A, 350A, and 450A gun tubes may restrict wire diameter sizes. Please reference the chart below.

### GUN TUBES

45° Gun Tube	Length in (mm)	60° Gun Tube	Length in (mm)	Wire Diameter Range in (mm)
KP4693-45	5.0 (127)	KP4693-60 <sup>(1)</sup>	4.6 (117)	0.035 - 5/64 (0.9-2.0)
KP4694-45	6.3 (160)	KP4694-60 <sup>(2)</sup>	5.8 (147)	0.035 - 5/64 (0.9-2.0)
KP4695-45	7.8 (198)	KP4695-60 <sup>(3)</sup>	7.4 (188)	0.035 - 5/64 (0.9-2.0)
KP4696-45	8.6 (218)	KP4696-60 <sup>(4)(5)</sup>	8.0 (203)	0.035 - 1/8 (0.9-3.2)
KP4696-45SN	7.8 (198)	KP4696-60SN <sup>(5)</sup>	7.3 (185)	0.035 - 1/8 (0.9-3.2)

(1) Included with the 250A gun.

(2) Included with the 350A gun.

(3) Included with the 450A gun.

(4) Included with the 550A gun.

(5) The 450A gun can be adapted to run up to 1/8 in. wire by using a KP45 series liner, a K613 series backend, and a 550A or 550A short gooseneck. The original 450A gooseneck cannot be used on wire larger than 5/64 in.

## ADDITIONAL GUN TUBE OPTIONS

Need something a little more customizable? The Magnum PRO HDE flexible gun tube adapter and gun tube extensions offer many more gun tube configurations to fit any application.



**Flexible Gun Tube**  
Order KP3200-2



**3 in. Gun Tube Extension**  
Order KP5147-1

**9 in. Gun Tube Extension**  
Order KP5148-1

The Magnum PRO HDE Gun Tube Extensions can be used to add length to the front of the gun for those hard to reach weld joints. These extensions can be used in series to create custom lengths.

### HDE Flexible Gun Tube Adapter

Order KP5146-1

Use the Magnum PRO HDE Flexible Gun Tube Adapter with the KP3200-2 Flexible Gun Tube improves productivity and reduces downtime.

Note: The use of a 350A insulator (KP2773-2) is required between each threaded connection.

## CHOOSING THE RIGHT EXPENDABLES

### 350A OR 550A EXPENDABLES?

Both 350A and 550A expendable parts fit on 250A, 350A, 450A, and 550A guns. The 250A and 350A guns come standard with 350A expendables, and the 450A and 550A guns come standard with the 550A expendables. While the amperage of the expendables does not affect the overall amperage rating of the gun, the 350A expendables should be used in light or medium duty applications and the 550A expendables should be used in medium or heavy duty applications.

### STANDARD, TAPERED, OR EXTENDED LIFE CONTACT TIPS?



#### Standard

Best for multi-purpose welding. Lasts longer than tapered tips.



#### Tapered

Best for welding in tight joints. Use with 3/8 in. or 1/2 in. ID nozzles.



#### Extended Life

Best for heavy-duty or robotic applications. Chrome zirconium copper alloy minimizes annealing and wear.

### NOZZLE ID AND STICKOUT?



#### 3/8 in. & 1/2 in. ID Nozzles

Best for welding in tight joints. Use with tapered contact tips.



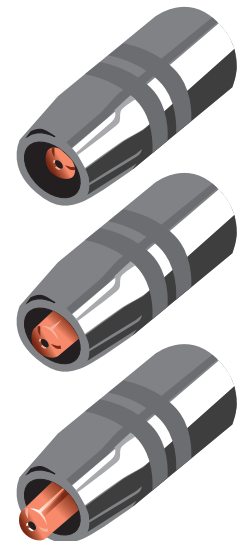
#### 5/8 in. & 3/4 in. ID Nozzles

Best for welds that require larger gas coverage.

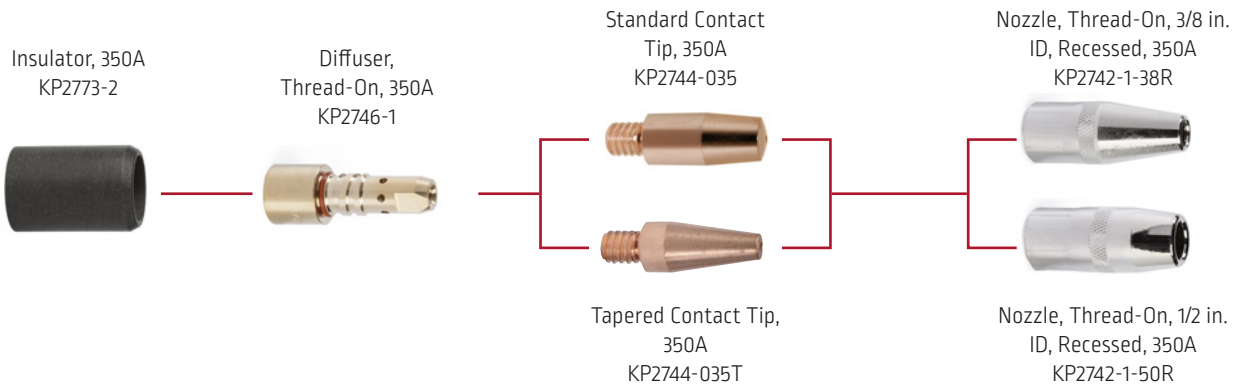
**Recess**  
Used in most spray and pulse applications

**Flush**  
Used in short circuit and STT applications.

**Stickout**  
Used in short circuit and STT applications, or in particularly tight joints for better access.



## 350A EXPENDABLES



### CONTACT TIPS, 350A

Wire Diameter in (mm)	Standard Qty 10	Standard Qty 100	Tapered Qty 10	Tapered Qty 100
0.025 [0.6]	KP2744-025	KP2744-025-B100	KP2744-025T	KP2744-025T-B100
0.030 [0.8]	KP2744-030	KP2744-030-B100	KP2744-030T	KP2744-030T-B100
0.035 [0.9]	KP2744-035	KP2744-035-B100	KP2744-035T	KP2744-035T-B100
0.040 [1.0]	KP2744-040	KP2744-040-B100	KP2744-040T	KP2744-040T-B100
0.045 [1.2]	KP2744-045	KP2744-045-B100	KP2744-045T	KP2744-045T-B100
0.052 [1.3]	KP2744-052	KP2744-052-B100	KP2744-052T	KP2744-052T-B100
1/16 [1.6]	KP2744-116	KP2744-116-B100	KP2744-116T	KP2744-116T-B100
5/64 [2.0]	KP2744-564	KP2744-564-B100	KP2744-564T	KP2744-564T-B100

### GAS DIFFUSERS, 350A

Qty	Thread-On	Thread-On, Extended Reach	Slip-On
1	KP2746-1	KP3360-1	KP2746-2
25	KP2746-1-B25	KP3360-1-B25	KP2746-2-B25

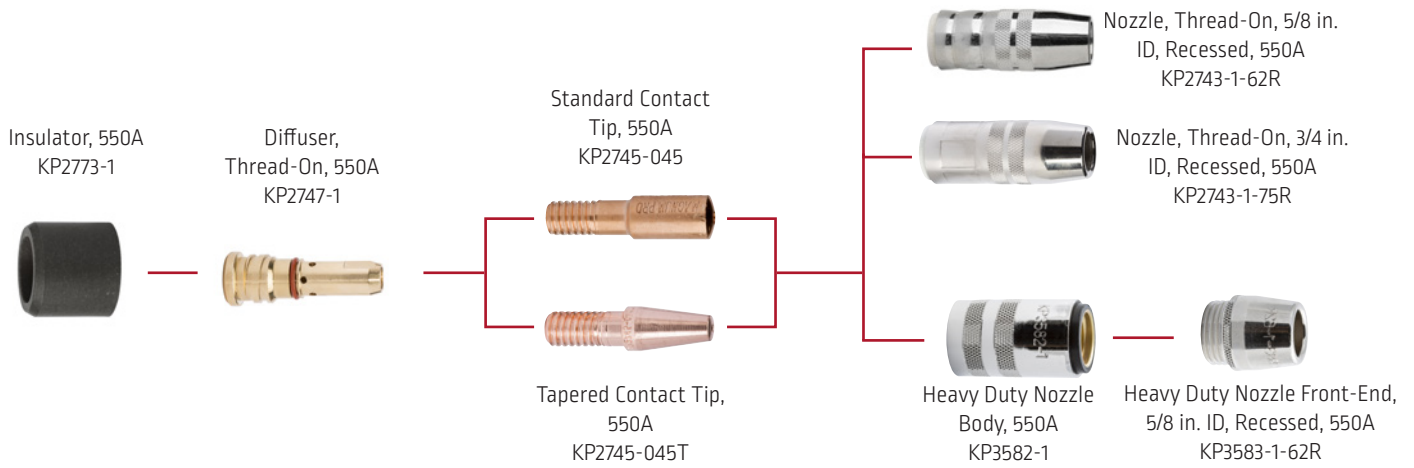
### INSULATORS, 350A

Qty	Part Number
1	KP2773-2
25	KP2773-2-B25

### GAS NOZZLES, 350A

Thread Type	Nozzle Type in (mm)	Qty	3/8 in ID, Standard	1/2 in ID, Standard	1/2 in ID, Extended Reach	1/2 in ID, Narrow Gap	1/2 in ID, Bottleneck	5/8 in ID, Standard
Thread-On	1/8 [3.2] Recess	1	KP2742-1-38R	KP2742-1-50R	KP3359-1-50R	KP3617-1-50R	KP3160-1-50R	KP2742-1-62R
		25	KP2742-1-38R-B25	KP2742-1-50R-B25	KP3359-1-50R-B25	KP3617-1-50R-B25	KP3160-1-50R-B25	KP2742-1-62R-B25
	Flush	1	KP2742-1-38F	KP2742-1-50F	KP3359-1-50F	KP3617-1-50F	KP3160-1-50F	KP2742-1-62F
		25	KP2742-1-38F-B25	KP2742-1-50F-B25	KP3359-1-50F-B25	KP3617-1-50F-B25	KP3160-1-50F-B25	KP2742-1-62F-B25
	1/8 [3.2] Stickout	1	KP2742-1-38S	KP2742-1-50S	KP3359-1-50S	KP3617-1-50S	KP3160-1-50S	KP2742-1-62S
		25	KP2742-1-38S-B25	KP2742-1-50S-B25	KP3359-1-50S-B25	KP3617-1-50S-B25	KP3160-1-50S-B25	KP2742-1-62S-B25
Slip-On	1/8 [3.2] Recess	1	–	KP2742-2-50R	–	–	–	KP2742-2-62R
		25	–	KP2742-2-50R-B25	–	–	–	KP2742-2-62R-B25
	Flush	1	–	KP2742-2-50F	–	–	–	KP2742-2-62F
		25	–	KP2742-2-50F-B25	–	–	–	KP2742-2-62F-B25
	1/8 [3.2] Stickout	1	–	KP2742-2-50S	–	–	–	KP2742-2-62S
		25	–	KP2742-2-50S-B25	–	–	–	KP2742-2-62S-B25

## 550A EXPENDABLES



### CONTACT TIPS, 550A

Wire Diameter in (mm)	Standard Qty 10	Standard Qty 100	Tapered Qty 10	Tapered Qty 100	Extended Life Qty 10	Extended Life 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	KP2745-040R	KP2745-040R-B100
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
3/32 (2.4)	KP2745-332	KP2745-332-B100	-	-	KP2745-332R	KP2745-332R-B100
7/64 (2.8)	KP2745-764	KP2745-764-B100	-	-	KP2745-764R	KP2745-764R-B100
1/8 (3.2)	KP2745-18	KP2745-18-B100	-	-	-	-

### GAS DIFFUSERS, 550A

Material	Qty	Thread-On	Thread-on 1/4 in. Recess	Thread-On, Extended Reach*	Slip-On
Brass	1	KP2747-1	KP3155-1	KP4781-1	KP5129-2
	25	KP2747-1-B25	KP3155-1-B25	KP4781-1-B25	KP5129-2-B25
Copper	1	KP4766-1	-	-	KP4766-2
	25	KP4766-1-B25	-	-	KP4766-2-B25

### INSULATORS, 550A

Qty	Part Number
1	KP2773-1
25	KP2773-1-B25

\* 550A Extended Reach Diffusers are compatible with KP3359-1-50X Nozzles and KP2745-XX 550A Contact Tips

### GAS NOZZLES, 550A

Thread Type	Nozzle Type in (mm)	Qty	3/8 in ID, Standard	1/2 in ID, Standard	5/8 in ID, Standard	5/8 in ID, Bottleneck	3/4 in ID, Standard
Thread-On	1/8 (3.2) Recess	1	KP2743-1-38R	KP2743-1-50R	KP2743-1-62R	KP3161-1-62R	KP2743-1-75R
		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
		25	-	-	KP2743-1-62F-B25	KP3161-1-62F-B25	KP2743-1-75F-B25
	1/8 (3.2) Stickout	1	KP2743-1-38S	KP2743-1-50S	KP2743-1-62S	KP3161-1-62S	KP2743-1-75S
		25	-	-	KP2743-1-62S-B25	KP3161-1-62S-B25	KP2743-1-75S-B25
Slip-On	1/8 (3.2) Recess	1	-	KP5130-2-50R	KP5130-2-62R	-	KP5130-2-75R
		25	-	KP5130-2-50R-B25	KP5130-2-62R-B25	-	KP5130-2-75R-B25
	Flush	1	-	KP5130-2-50F	KP5130-2-62F	-	KP5130-2-75F
		25	-	KP5130-2-50F-B25	KP5130-2-62F-B25	-	KP5130-2-75F-B25
	1/8 (3.2) Stickout	1	-	KP5130-2-50S	KP5130-2-62S	-	KP5130-2-75S
		25	-	KP5130-2-50S-B25	KP5130-2-62S-B25	-	KP5130-2-75S-B25

For high amperage applications, two-piece heavy duty nozzles may be used instead of standard 550A nozzles. Both a nozzle body and a nozzle front end are required for use.

### HEAVY DUTY GAS NOZZLE FRONT-ENDS, 550A

Thread Type	Nozzle Type in (mm)	Qty	5/8 in ID, Heavy Duty	3/4 in ID, Heavy Duty
Thread-On	1/8 (3.2) Recess	1	KP3583-1-62R	KP3583-1-75R
		25	KP3583-1-62R-B25	KP3583-1-75R-B25
	Flush	1	KP3583-1-62F	KP3583-1-75F
		25	KP3583-1-62F-B25	KP3583-1-75F-B25

### HEAVY DUTY GAS NOZZLE BODIES, 550A

Qty	Part Number
1	KP3582-1
25	KP3582-1-B25

#### CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company<sup>®</sup> is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.

#### **THE LINCOLN ELECTRIC COMPANY**

22801 Saint Clair Avenue · Cleveland, OH · 44117 · U.S.A.

Phone: +1 216.481.8100 · [www.lincolnelectric.com](http://www.lincolnelectric.com)