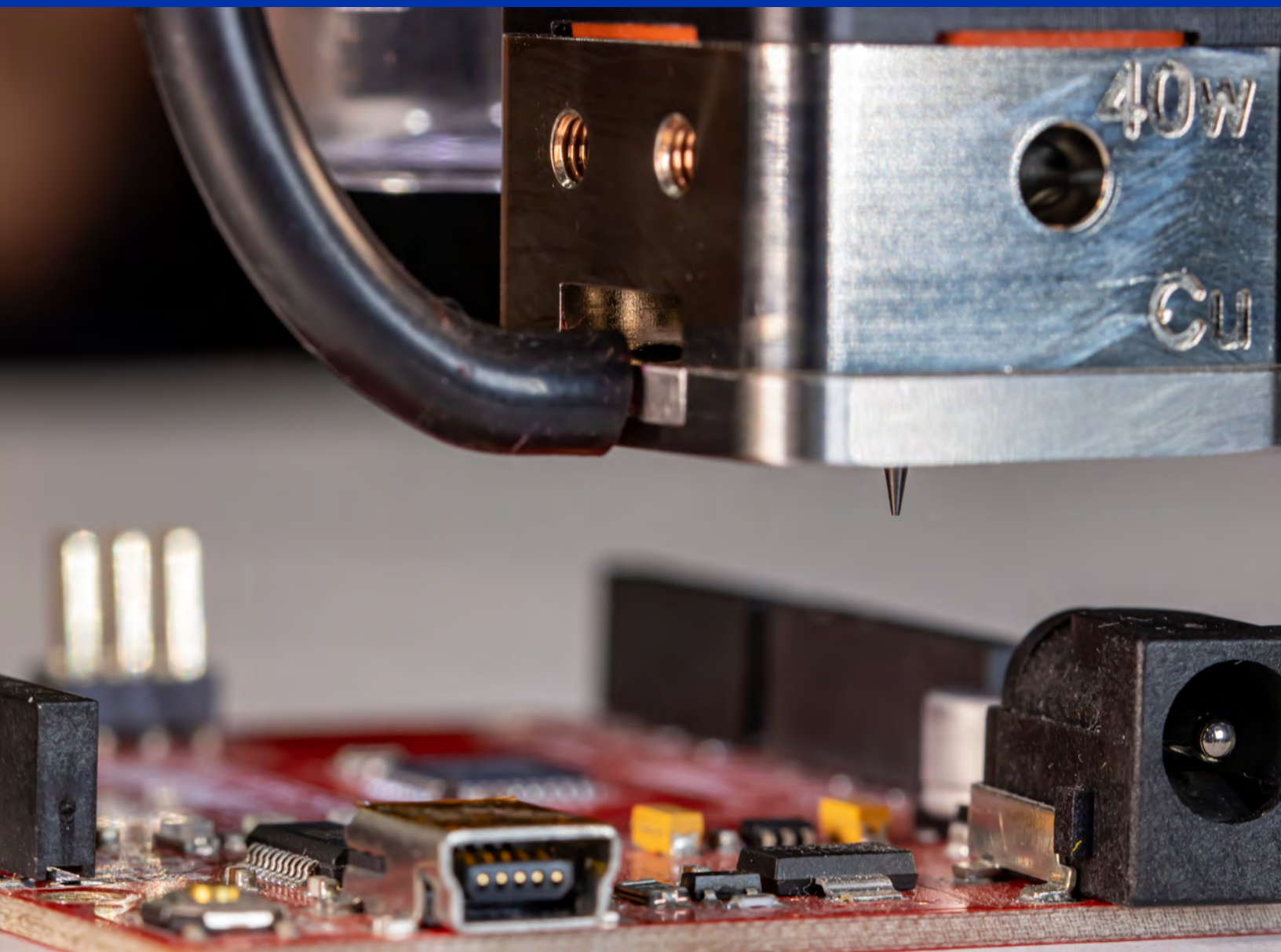




# Advanjet<sup>®</sup> Jet Valve

Microdispensing Non-contact Jet Valve System



PROVEN QUALITY. LEADING TECHNOLOGY.

# Advanjet Jet Valve

## Easy to Clean. Outstanding Performance.

Microdispensing, non-contact jet valves designed to deliver high-process accuracy and flexibility in a variety of applications. What separates our technology from other non-contact jets is the seamless and simple patented design.

### Bolt-on Syringe Brackets

- Provides greater flexibility for varying syringe sizes

### Precise Spacer Design

- High-resolution hammer gap adjustment
- Achieve a more repeatable assembly process
- Higher temperature rating of 140° F (60° C)
- Compatible with backwards configuration

### Easy to Clean

- Only two parts contact material ensuring quick cleaning times
- Jets can be cleaned and parts replaced while still on the robot

### Multiple Feed Tubes Available

- Ability to easily switch between metal and rubber tube options depending on material required

### Improved Nozzle Plate Offering

- New nozzle plates eliminate consumable o-rings
- Rubber o-rings replaced with built in metal diaphragm o-rings



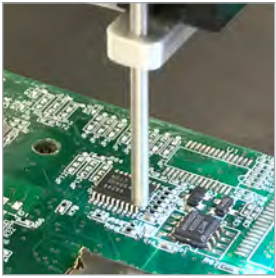
*HV-2000b front shown*



*HV-2000b back shown*

# Applications and Control Solutions

## Markets & Applications



**Electronics**



**Battery**



**Automotive**



**General Industry**

## Materials

- Adhesives
- Silicones
- Anaerobics
- Epoxies
- Silver Epoxies
- UV Cure Adhesives
- Oils/Greases
- Fluxes
- Hot Melt/PUR

## Applications

- Underfill
- Micro-Encapsulation
- Bonding
- Sealing
- Chip Attach

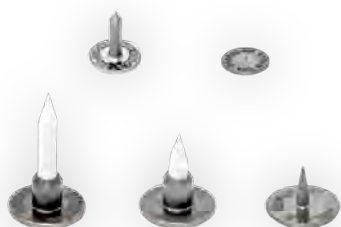


# Accessory Information

## Diaphragms

The diaphragm is the heart of jetting technology. Diaphragms are offered in the three different materials listed below. Contact our application experts for specific recommendations on which diaphragm is best for your application.

Available in FKM, Silicone, and FFKM in 1.6 mm or 3 mm.



## Nozzles

### Standard Flat Nozzles

Graco Advanjet nozzle sizes range from 50-700  $\mu\text{m}$  and are offered in tungsten carbide or high wear-resistant ceramic. Each single-piece nozzle has been custom designed and precision manufactured to provide the repeatability and performance you expect from Graco.

### Extended Tip Nozzles

Many applications require jetting in tight spaces, vias, or cavities. Our nozzles with extended tips allow you to get close to specific targets or around obstacles. Graco offers 3 mm, 6 mm, and a 10 mm versions in several different designs to optimize jetting of certain materials.

## Nozzle Plates

There is a wide selection of both top and bottom nozzle plates offered in the Advanjet product line. Depending on the feed tube and nozzle required for your application, Graco has a nozzle plate to meet your dispensing needs.



# Accessory Information

## Feed Tubes

The feed tube is what moves material from the syringe and delivers it to the jet valve. Advanjet feed tubes are available in both metal and rubber along with having a variety of connections, 6 oz., luer, bulk feed, and threaded.



## Syringe Brackets

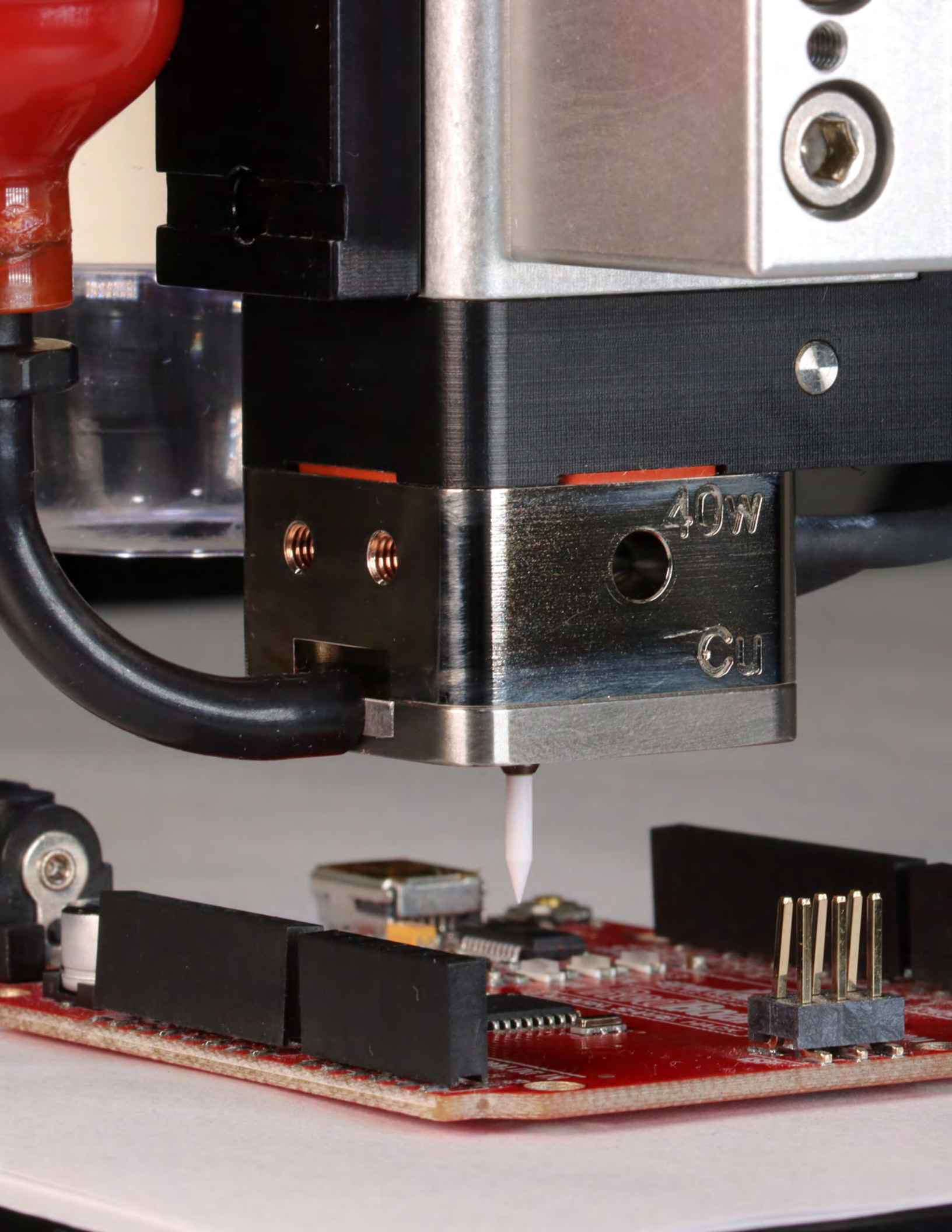
The design of Graco's Advanjet syringe brackets allow you to easily change out the material amount being used on the jet valves, giving you greater flexibility in your manufacturing process. Syringe brackets are bolted on to the jet valve and are offered in a variety of sizes ranging from 5 cc to 6 oz., as well as having options available for bulk feeding.

## Configuration Options

### UniXact Benchtop Jetting System

UniXact Series B tabletop dispensing systems provide the performance and capability needed for precise electronic product assembly. All the advanced process control needed for repeatable and high-quality jetting are included in these compact systems.





# Technical Specifications

	HV-9500b	HV-2000b	HM-2600b
			
Component Type	Single Component	Single Component	Single Component
Container Type	Syringe, Cartridge, Bulk Feed	Syringe, Cartridge, Bulk Feed	Cartridge
Maximum Working Pressure	90 psi (0.62 Mpa, 6.20 bar)	90 psi (0.62 Mpa, 6.20 bar)	90 psi (0.62 Mpa, 6.20 bar)
Minimum Working Pressure	40 psi (.27 Mpa, 2.76 bar)	40 psi (.27 Mpa, 2.76 bar)	40 psi (.27 Mpa, 2.76 bar)
Speed	1-250 drops/second	1-300 drops/second	1-250 drops/second
Maximum Nozzle Heater Temperature	158° F (70° C)	158° F (70° C)	302° F (150° C)
Maximum Fluid Heater Temperature	N/A	N/A	302° F (150° C)
Power Type	Pneumatic	Pneumatic	Pneumatic
Weight (With Mounting Bracket)	1.15 lbs (0.52 kg)	0.94 lbs (0.43 kg)	2.33 lbs (1.06 kg)
Type	Adhesive and Sealant Applicator	Adhesive and Sealant Applicator	Adhesive and Sealant Applicator
Operating Temperature Range	50° F to 122° F (10° C to 50° C)	50° F to 122° F (10° C to 50° C)	50° F to 122° F (10° C to 50° C)
Wetted Parts	Tungsten Carbide, Stainless Steel, Ceramic, FKM, Silicone, FFKM, Tygon	Tungsten Carbide, Stainless Steel, Ceramic, FKM, Silicone, FFKM, Tygon	Tungsten Carbide, Stainless Steel, Ceramic, FKM, Silicone, FFKM, Tygon
Viscosity Range	1-400,000 mPa-s (cps)	1-400,000 mPa-s (cps)	1-1,000,000 mPa-s (cps)
Fluid Syringes	5, 10, 30, 55, 150 cc and 6 oz	5, 10, 30, 55, 150 cc and 6 oz	30 cc
Heat Zone	Nozzle	Nozzle	Nozzle; Fluid

# Ordering Information

## Jet Valves and Accessories Selection

Jet Valves and Controllers			
<b>HV-2000b</b>		<b>HV-9500b</b>	
26B961	HV-2000b Jet Valve, 15 Pin	26B951	HV-9500b Jet Valve, 40 Watt, 28 Pin
<b>HV-2600b</b>		26B952	HV-9500b Jet Valve, 20 Watt, 7 Pin
26B971	HM-2600b Jet Valve, Metal Feed Tube	<b>Jet Controllers</b>	
26B972	HM-2600b Jet Valve, Metal Feed Tube, Low Viscosity	HV-2000C	HV-2000 Jet Valve Controller
26B973	HM-2600b Jet Valve, Plastic Feed Tube	25B085	HM-2600 Jet Valve Controller
Metal Feed Tubes		System Accessories	
09-4083-00	6 oz. Metal Feed Tube	09-4109-00	Prime Station with Purge Lid
09-4130-00	Luer Fitting Metal Feed Tube	09-4105-00	Purge Lid Kit
09-4151-00	Bulk Feed Metal Feed Tube	09-4115-00	Hammer Gap Tool
09-4084-01	Metal Feed Tube, 1/8NPT, Female	60-2358	Thermal Metrology Tool
09-4084-02	Metal Feed Tube, G 1/8, Female		
Rubber Feed Tubes			
<b>Clear Feed Tube</b>		<b>Black Feed Tube</b>	
FT09-2803	Feed Tube Kit, Clear, 35 mm, 50 pack	FT09-2802	Feed Tube Kit, Black, 35 mm, 50 pack
FT09-2809	Feed Tube Kit, Clear, 55 mm, 50 pack	FT09-2811	Feed Tube Kit, Black, 55 mm, 50 pack
<b>Green Feed Tube</b>		FT09-2805	Feed Tube Kit, Black, 57 mm, 50 pack
FT09-2806	Feed Tube Kit, Green, 35 mm, 50 pack	FT09-2812	Feed Tube Kit, Black, 61 mm, 50 pack
FT09-2810	Feed Tube Kit, Green, 45 mm, 50 pack	FT09-2813	Feed Tube Kit, Black, 145 mm, 50 pack
FT09-2808	Feed Tube Kit, Green, 51 mm, 50 pack		
Syringe Brackets			
<b>6 oz. Brackets</b>		<b>Bulk Feed Brackets</b>	
60-2341	Syringe Bracket Kit, 6 oz.	60-2336	Bulk Feed Mount Kit
<b>5 cc - 150 cc Brackets</b>		60-2337	Bulk Feed Mount Kit, Metal Feed Tube
60-2361	Syringe Bracket Kit, 5 cc		
60-2360	Syringe Bracket Kit, 10 cc		
60-2342	Syringe Bracket Kit, 150 cc		



# Ordering Information

## Kit Selection

### Diaphragm Kits

**DK - XXX**

Diaphragm Kit

Pin Type

1	Small Ball, 01.6 mm	3	Large Ball, Tungsten Carbide Flat
2	Large Ball, 03.0 mm	4	Large Ball, Stainless Steel Flat

Diaphragm Material

1	Silicone	2	FKM	3	FFKM
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Diaphragm Shape

1	Collared
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**Example:**

DK-111 is a diaphragm kit the includes a small ball 01.6 mm pin with a silicone diaphragm that is collared shaped.

### Nozzle Plate Kits

**NPK - XX - XXX - XX**

Nozzle Plate Kit

Nozzle Series

00	No Nozzle	32	6 mm Long Slight Taper Capillary, Small Ball
21	3MM Long Slight Taper Capillary, Carbide, Small Ball	34	Flat, Carbide, Small Ball
25	6MM Long Slight Taper Capillary, Carbide Hub with Ceramic Capillary, Large Ball	35	Flat, Carbide, Large Ball
26	10 MM Long Slight Taper Capillary, Carbide Hub with Ceramic Capillary, Large Ball	38	Flat, Ceramic, Small Ball
31	6MM Long Slight Taper Capillary, Large Ball	39	Flat, Ceramic, Large Ball

Nozzle Size

000	No Nozzle	050	50 µm	064	64 µm	075	75 µm
100	100 µm	125	125 µm	150	150 µm	200	200 µm
300	300 µm	400	400 µm	500	500 µm	600	600 µm
700	700 µm						

Top Plate

A	Flat, 1/16 in Barb	B	Flat, 2 mm Barb	C	Tilt, 1/16 in Barb
D	Tilt, 1/8 in Barb	F	Tilt, Face Seal, Metal O-Ring		

Bottom Plate

A	Flat, Countersink	B	3 mm Protective
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**Example:**

NPK-21-125-DB is a nozzle plate kit that includes a 3 mm long slight taper capillary carbide small ball nozzle series, 125, a 125 µm nozzle, tilt 1/8 in barb top plate and 3 mm protective bottom plate.

# Ordering Information

## Kit Selection

### Nozzle Kits

**NK - XX - XXX**

**Nozzle Kit**

**Nozzle Series**

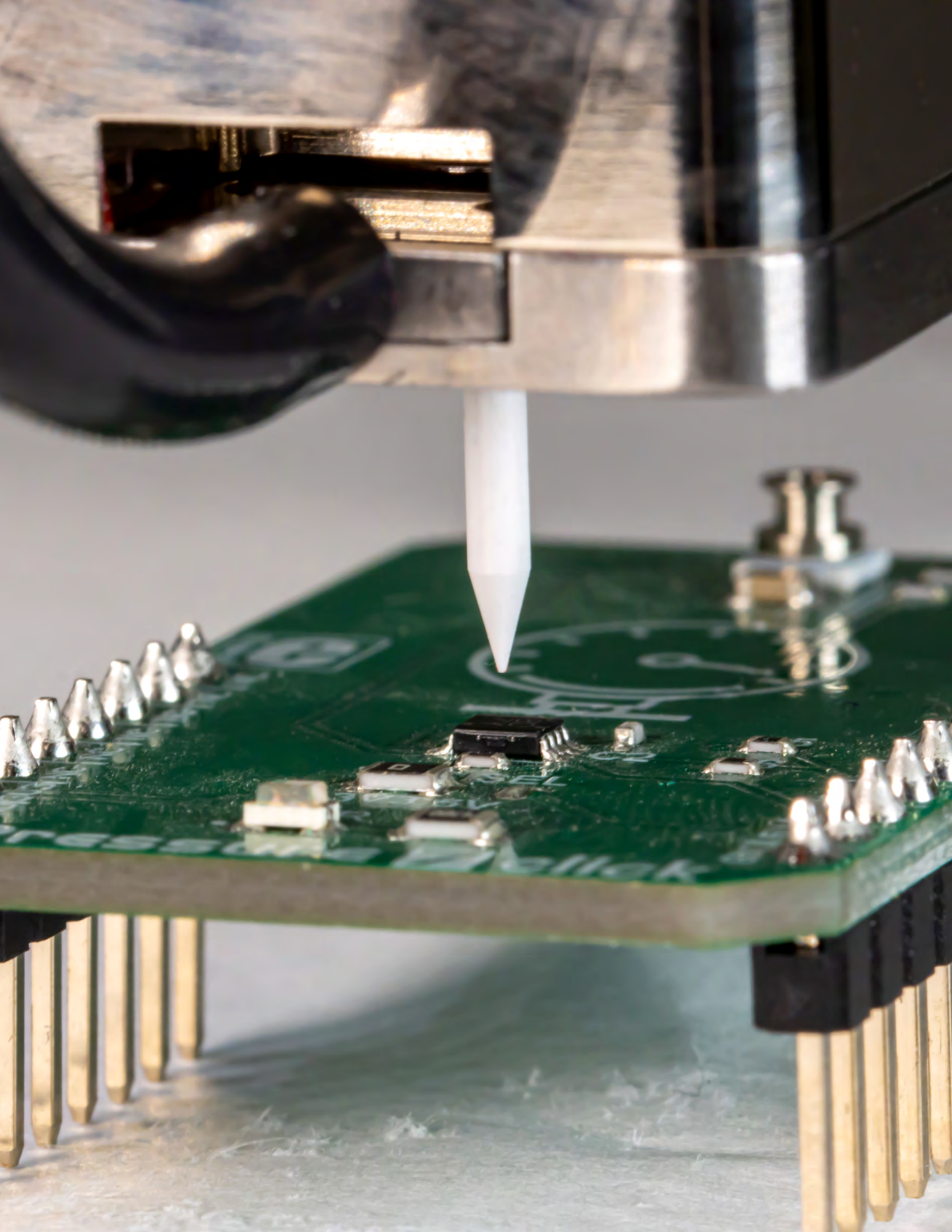
21	3 mm Long Slight Taper Capillary, Carbide, Small Ball	34	Flat, Carbide, Small Ball
25	6 mm Long Slight Taper Capillary, Carbide Hub with Ceramic Capillary, Large Ball	35	Flat, Carbide, Large Ball
26	10 mm Long Slight Taper Capillary, Carbide Hub with Ceramic Capillary, Large Ball	38	Flat, Ceramic, Small Ball
31	6 mm Long Slight Taper Capillary, Large Ball	39	Flat, Ceramic, Large Ball
32	6 mm Long Slight Taper Capillary, Small Ball		

**Nozzle Size**

050	50 µm	064	64 µm	075	75 µm	100	100 µm
125	125 µm	150	150 µm	200	200 µm	300	300 µm
400	400 µm	500	500 µm	600	600 µm	700	700 µm

### Example:

NK-21-050 is a nozzle kit that includes a 3 mm long slight taper capillary carbide small ball and a 50 µm nozzle.





## ABOUT GRACO

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

## GRACO LOCATIONS

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## SALES/ DISTRIBUTION/ SERVICE

Call today for product information or to request a demonstration.

**800-746-1334** or visit us at [www.graco.com](http://www.graco.com).

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