

# OPTIMUM COMPONENT

## Selection Guide



- Wide variety for all fluid types
- Certified, industrial safe
- Worldwide stocking locations

 **Nordson**

EFD

# Introduction

This kit contains a complete selection of Nordson EFD disposable dispensing tips to help you determine the best tip for your application.

Detailed descriptions and ordering information are provided in this booklet, along with helpful recommendations.

All EFD components are uniquely designed for safe industrial use and are produced by EFD to the highest quality standards to ensure consistent fluid application.

We hope you will find these samples and this booklet helpful. We appreciate any comments you may have.

<b>Nordson EFD Optimum® Dispensing Systems</b> .....	4-5
<b>Syringe Barrel &amp; Piston Sets</b> .....	6-7
Syringe Barrels .....	8-9
Barrel Pistons .....	10-11
Adapter Assemblies .....	12
End and Tip Caps .....	13
<b>Dispensing Tips</b>	
SmoothFlow Tapered .....	14-15
General Purpose .....	16-17
Flexible Polypropylene .....	18-19
PTFE-lined / PTFE-coated .....	20-21
MicroDot Tips .....	22-23
Precision Nozzles Tips .....	24-25
Special Purpose Tips .....	26-27
<b>Tip Recommendations</b> .....	28-29
Filling Syringe Barrels .....	30-31
Stock Distribution .....	32-33
Ordering .....	34
EFD Quality Assurance .....	35

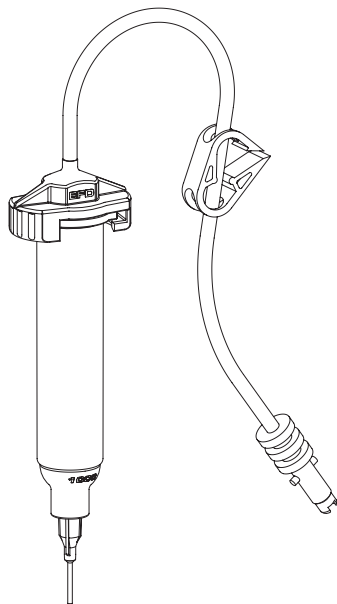
## Optimum Dispensing System

EFD Optimum dispensing system components are uniquely designed for safe industrial use, and are produced by EFD to the highest quality standards.

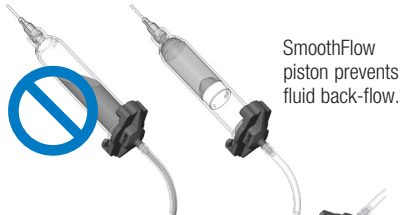
Using the advanced Optimum component system ensures precise fluid deposit control.

- SnapLok™ barrel adapter design securely engages all EFD syringe barrels. The lightweight, flexible tubing allows for easy mobility.
- Industrial grade, ZeroDraft™ barrels and SmoothFlow™ pistons are molded by EFD for close tolerance fit, providing the most advanced technology for controlled fluid application.
- Unique 360° SafetyLok™ thread ensures safe, positive tip attachment to the syringe barrel. Hub flats are engineered for easy twist on, twist off.

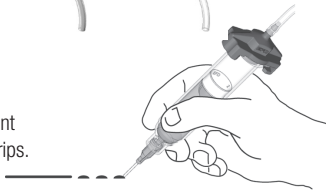
**Note: All EFD components are manufactured silicone-free to prevent fluid contamination.**



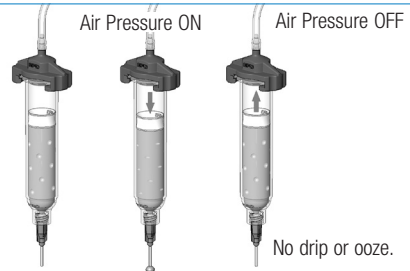
## For Thin Fluids



Exact, consistent deposits. No drips.



## For Thick Fluids



## For Watery-thin Fluids



Blue LVBarrier™ piston for improved control of very low viscosity fluids.

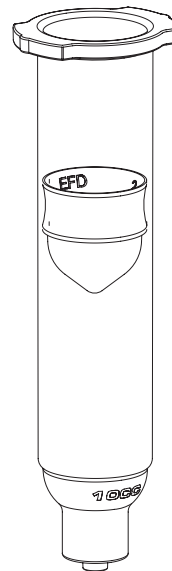
## Syringe Barrel & Piston Sets

Make dispensing easy, safe, and more controlled by using industrial ZeroDraft straight-wall syringe barrels with the unique double-wiper SmoothFlow pistons.

- Ensures controlled, consistent fluid application.
- Prevents dripping and oozing of thick, non-leveling fluids.
- Prevents dripping of watery liquids and accidental back-flow into the dispenser.
- Makes syringe barrel loading easier.
- Prevents harmful fumes from being sucked back into the dispenser and entering the workplace environment.

Whether you are using thick, medium, or low viscosity fluids, the unique double-wiper pistons make your barrel loading and dispensing easy, clean, and accurate.

For convenience in ordering and inventory control, we package equal numbers of syringe barrels and pistons in easy access boxes. Within each box, syringe barrels and pistons are stored in antistatic bags to protect against contamination.



<b>size</b>	<b>clear most fluids</b>	<b>UV/light block amber up to 550 nm</b>	<b>black opaque</b>	<b>sets* per box</b>
3cc	7366044	7366041	7366042	100
5cc	7366045	–	–	100
10cc	7366040	7366039	–	100
30cc	7366054	7366051	7366052	50
55cc	7366056	7366055	–	50

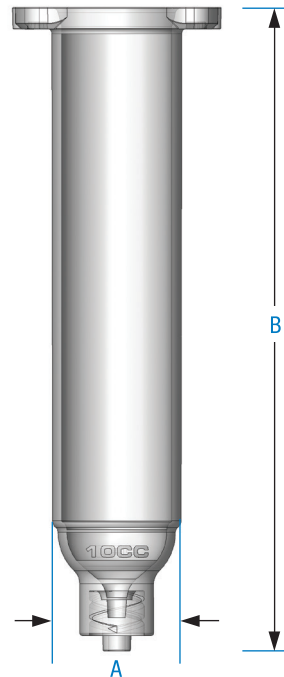
\* Each set includes (1) syringe barrel with (1) piston.

## ZeroDraft Syringe Barrels

EFD's unique ZeroDraft disposable polypropylene molded barrels with luer lock tip adapter ensure safe, reliable dispensing.

- Heavy duty industrial grade.
- Straight-wall, zero (0°) internal draft.
- Available in clear, UV block (240-550 nm) transparent amber, opaque black, and eco-friendly natural.
- Packaged in easy access boxes for user convenience and inventory control. Within each box, barrels are stored in antistatic bags to protect against contamination.

size	A	B
3cc	11.1 mm (0.44")	73.0 mm (2.88")
5cc	14.3 mm (0.56")	68.3 mm (2.69")
10cc	19.1 mm (0.75")	88.9 mm (3.50")
30cc	25.4 mm (1.0")	115.9 mm (4.56")
55cc	25.4 mm (1.0")	173.0 mm (6.81")



size	clear most fluids	UV/light block amber up to 550 nm	black opaque	qty/box
3cc	7366095	7366092	7366093	100
5cc	7366101	7366098	7366099	100
10cc	7366089	7366086	7366087	100
30cc	7366060	7366057	7366058	50
55cc	7366066	7366063	7366064	50
70cc	7366070	7366069	—	50

size	natural eco-friendly*	qty/box
3cc	7366096	100
5cc	7366102	100
10cc	7366090	100
30cc	7366061	50
55cc	7366067	50

\*Optimum ECO syringe barrels made from raw resins derived from sugarcane stock vs. byproducts of the petrochemical industry.

## Unique SmoothFlow Barrel Pistons

Molded of inert polyethylene, these patented SmoothFlow pistons are inserted into syringe barrels to prevent air tunneling of viscous fluids and to provide easier, safer handling of low viscosity liquids.

Close tolerance fit allows trapped air to exhaust past the piston during piston insertion, while still providing an excellent seal.

- Precision molded of inert polyethylene. Available in (white) double-wiper, (red) tight fit, (beige) loose fit, (orange) flat-wall, (clear) flex, and (blue) low viscosity barrier designs.
- Also available in (natural) eco-friendly.
- Relieves pressure of air entrapped in the fluid for clean cutoff.

The (white) double-wiper piston is used for most fluids.

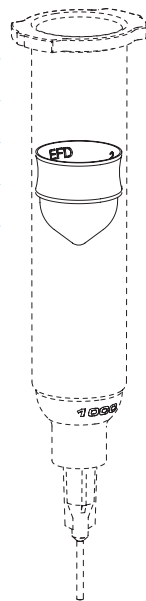
If, after repeated air pulses, the (white) piston bounces too much, causing stringing of the fluid inside the barrel, use the (orange) flat-wall piston, or the (clear) flex piston with viscous fluids. Do not use the (orange) piston with watery fluids.

barrel size	white SmoothFlow	red tight fit	beige loose fit	orange flat-wall	clear flex	qty/box
3cc	7366134	7366133	7366126	7366132	7366131	100
5cc	7366141	7366140	7366135	7366139	7366138	100
10cc	7366125	7366124	7366117	7366123	7366122	100
30cc, 55cc, 70cc	7366084	7366083	7366076	7366082	7366081	50

barrel size	blue LV* Barrier™	natural eco-friendly	qty/box
3cc	7366128	7366129	100
5cc	–	7366136	100
10cc	7366119	7366120	100
30cc, 55cc, 70cc	7366078	7366079	50

\*For watery-thin fluids such as solvents and cyanoacrylates, specify the blue LV Barrier piston.

**Note:** Black neoprene rubber pistons are available. Please contact EFD for ordering information.

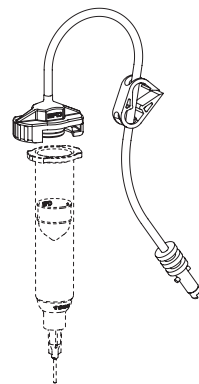


## Adapter Assemblies

EFD's unique SnapLok molded barrel adapters ensure easy, positive connection to the syringe barrel.

Assemblies include the adapter head with Buna N O-ring, 4.0 mm (5/32") OD flexible polyurethane tubing, male quick-connect, and safety clip.

barrel size	assembly with 3 ft. (0.9 m) hose	assembly with 6 ft. (1.8 m) hose	assembly with 3 ft (0.9 m) hose w/ filter trap
	blue	blue	blue
3cc	7012341	7012059	7012063
5cc	7012054	7012058	7012062
10cc	7012339	7012057	7012061
30cc, 55cc, 70cc	7012338	7012056	7012060



## End Caps

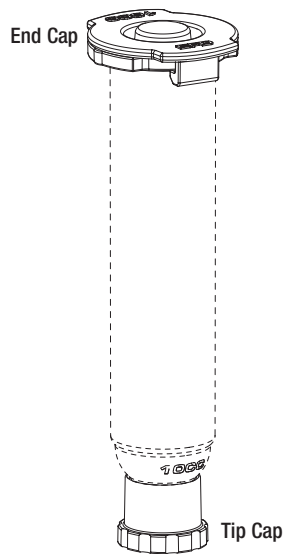
- Unique design provides tight snap seal.
- Molded finger tab makes removal easy.

barrel size	blue	green	eco-friendly	qty/box
3cc	7366108	–	7366109	100
5cc	7366113	7366116	7366114	100
10cc	7366104	7366107	7366105	100
30cc, 55cc, 70cc	7366071	–	7366072	50

## Tip Caps

- Thread-locking design provides positive sealing.
- Eliminates stress and prevents breakage of the barrel luer taper if the sealed barrel is dropped.
- Opaque for use with any fluid, including UV-sensitive.

barrel size	blue	green	eco-friendly	qty/box
all sizes	7012198	–	7364679	50
all sizes	–	7362541	–	1000



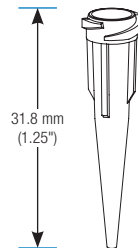
EFD's unique molded end caps and tip caps ensure airtight sealing when filling or storing syringe barrels.

## SmoothFlow Tapered Tips

EFD's unique molded polyethylene tips with UV-block additive improve dispensing of medium-to-high viscosity fluids such as **solder pastes, sealants, or epoxies**.

- Tapered design provides smooth flow of viscous fluids and resists clogging when dispensing **particle-filled materials**.
- Higher flow rate means lower air pressure and shorter dispense time.
- Use safely with **UV-cure adhesives**.
- Will not scratch or puncture fragile surfaces.
- Unique 360° SafetyLok thread ensures safe, positive attachment to barrel.
- Color-coded hubs simplify size identification.
- Engineered hub flats for easy twist on, twist off.
- Packaged 50 pieces in see-through box for easy inventory control and convenience.

	gauge	color	tapered tip	rigid tip	ID size	qty/box
●	14	olive	7018052	7018049	1.60 mm (0.063")	50
●	16	grey	7018100	7018097	1.19 mm (0.047")	50
●	18	green	7018158	7018147	0.84 mm (0.033")	50
●	20	pink	7005009	7005006	0.58 mm (0.023")	50
●	22	blue	7018298	7005007	0.41 mm (0.016")	50
●	25	red	7018391	7018370	0.25 mm (0.010")	50
●	27	clear	7018417	–	0.20 mm (0.008")	50

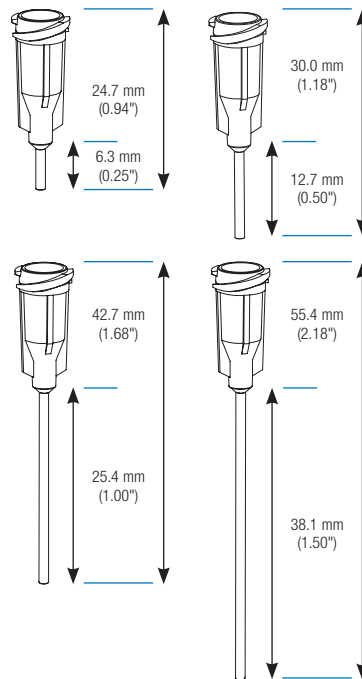


## General Purpose Precision Tips

EFD's unique disposable stainless steel blunt end dispensing tips are used for all kinds of applications, with all types of assembly fluids.

- Unique 360° SafetyLok thread ensures safe, positive attachment to barrel.
- Close tolerance overall length and internal diameters.
- Precision, polished burr-free passivated stainless steel tubing for consistent fluid deposits.
- Color-coded hubs simplify size identification.
- Engineered hub flats for easy twist on, twist off.
- Packaged 50 pieces in see-through box for easy inventory control and convenience.

EFD manufactures dispensing tips to meet special application requirements. (See pages 26-27.)



	gauge	color	6.44 mm (0.25") tip	12.7 mm (0.5") tip	25.4 mm (1.0") tip	38.1 mm (1.5") tip	ID size	qty/box
●	14	olive	7018029	7018043	7018032	7018035	1.54 mm (0.060")	50
●	15	amber	–	7018068	7018059	7018062	1.36 mm (0.053")	50
●	18	green	7018107	7018122	7018110	7018113	0.84 mm (0.033")	50
●	20	pink	7018163	7018178	7018166	7018169	0.61 mm (0.024")	50
●	21	purple	7005005	7018233	7018222	7018225	0.51 mm (0.020")	50
●	22	blue	7018260	7018272	7018263	7018266	0.41 mm (0.016")	50
●	23	orange	7018302	7018314	7018305	7018308	0.33 mm (0.013")	50
●	25	red	7018333	7018345	7018336	7018339	0.25 mm (0.010")	50
●	27	clear	7018395	7005008	–	–	0.20 mm (0.008")	50
●	30	lavender	7018424	7018433	–	–	0.15 mm (0.006")	50
●	32	yellow	7018462	–	–	–	0.10 mm (0.004")	50

**Note:** Dispensing tip lengths are measured from the bottom of the hub to the end of the stainless steel tubing.

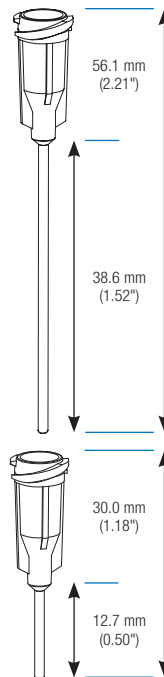
## Flexible Polypropylene Tips

EFD's unique flexible inert tips provide several important features:

- Provide easy dispensing access into hard-to-reach spots for gluing, lubricating, and filling.
- Use to “drag” tip along edges and around corners for painting or solvent bonding.
- Ideal for wiping over a surface where you need to spread a fluid.
- Will not scratch or puncture fragile surfaces.
- Resists clogging.
- Available in two lengths.
- Unique 360° SafetyLok thread ensures safe, positive attachment to barrel.
- Color-coded hubs simplify size identification.
- Engineered hub flats for easy twist on, twist off.
- Packaged 50 pieces in see-through box for easy inventory control and convenience.

	gauge	color	38.1 mm (1.5") flexible tip	ID size	qty/box
●	15	amber	7018080	1.25 mm (0.049")	50
●	18	green	7018138	0.84 mm (0.033")	50
●	20	pink	7018201	0.48 mm (0.019")	50
•	25	red	7018362	0.36 mm (0.014")	50

	gauge	color	12.7 mm (0.5") flexible tip	ID size	qty/box
●	15	amber	7018085	1.25 mm (0.049")	50
●	18	green	7018143	0.84 mm (0.033")	50
●	20	pink	7018205	0.48 mm (0.019")	50
•	25	red	7018366	0.36 mm (0.014")	50



## PTFE-lined Crimped Tips

EFD's unique TLC tips provide non-clogging features with restricted flow to simplify **micro-deposits** of very low viscosity fluids.

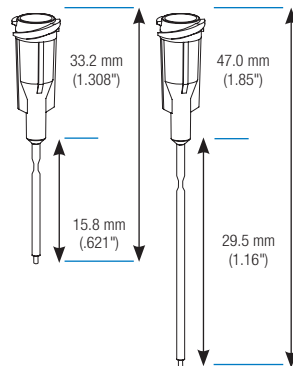
- Inert PTFE lining resists clogging when using **cyanoacrylates**.
- Will not scratch or puncture fragile surfaces because the PTFE lining protrudes beyond the end of the stainless steel tube.
- Provides better dispensing control when making microdots of **watery fluids**.
- 360° SafetyLok thread ensures safe, positive attachment to barrel.
- Color-coded hubs simplify size identification.
- Engineered hub flats for easy twist on, twist off.
- Packaged 50 per see-through box for easy inventory control and convenience.

## PTFE-coated Tips

Controls wicking to stop drips for **optical media** applications.

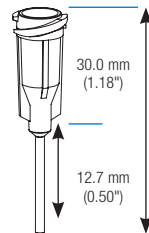
## PTFE-lined Tips

		12.7 mm (0.5") lined tip	25.4 mm (1.0") lined tip	crimp ID	qty/box
•	grey	7018256	7005003	0.51 mm (0.020")	50
•	pink	7018388	7005004	0.30 mm (0.012")	50



## PTFE-coated Tips

	gauge	color	12.7 mm (0.5") coated tip	ID	OD	qty/box
•	21	purple	7018243	0.51 mm (0.020")	0.84 mm (0.033")	20
•	22	blue	7018290	0.41 mm (0.016")	0.74 mm (0.029")	20
•	23	orange	7018326	0.33 mm (0.013")	0.66 mm (0.026")	20
•	25	red	7018359	0.25 mm (0.010")	0.53 mm (0.021")	20



## MicroDot Tips

Ceramic MircoDot tips feature a 37 ga ceramic cannula that is compatible with fine particle-filled materials and can produce precise micro-deposits as small as 100  $\mu\text{m}$ .

- Tapered inner diameter reduces back pressure and ensures consistent fluid deposit and cutoff.
- Reduced back pressure to ensure full deposit is dispensed.
- Longer dispense life, even when dispensing abrasive, particle-filled materials.

## Ceramic MicroDot Tips

gauge	color	PP hub	SS hub	ID	qty/box
37	silver	–	7364386	0.05 mm (0.002")	1

# MicroDot Tips

gauge	color	SS	tapered	chamfered	length	ID	qty/box
27	clear	7018395	–	7015236	6.35 mm (0.25")	0.20 mm (0.008")	50
27	clear	7005008	–	–	12.7 mm (0.5")	0.20 mm (0.008")	50
27	clear	–	7018417	–	32.0 mm (1.26")	0.20 mm (0.008")	50
30	lavender	7018424	–	–	6.35 mm (0.25")	0.15 mm (0.006")	50
30	lavender	7018433	–	–	12.7 mm (0.5")	0.15 mm (0.006")	50
32	yellow	7018462	–	–	6.35 mm (0.25")	0.10 mm (0.004")	50
33	clear	–	–	7018482	6.35 mm (0.25")	0.10 mm (0.004")	25

## Precision Nozzles Tips

SmoothFlow stainless steel precision nozzles feature a tapered nozzle design ideal for micro-deposit dispensing in the compact camera module (CCM), LED, semiconductor, automotive electronics, and high-precision industrial markets.

- Precision-machined 303 stainless steel.
- Reusable nozzles reduce changeover time on production line as well as consumable.
- Precise deposit control in complex applications, such as LED potting, underfills, fine-line bonding, edge sealing, and more.
- Machined for tight tolerance micro-dispensing, offering orifice sizes from 100 to 500  $\mu\text{m}$ .

## Precision Nozzles Tips

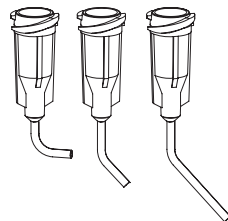
gauge	Description	ID	(1) qty/box	(10) qty/box
21	500 µm stainless steel precision nozzle	0.50 mm (0.020")	7365112	7365121
24	300 µm stainless steel precision nozzle	0.30 mm (0.012")	7365108	7365117
27	200 µm stainless steel precision nozzle	0.20 mm (0.008")	7365106	–
32	100 µm stainless steel precision nozzle	0.05 mm (0.002")	7365104	7365113

## Special Purpose Tips — Bent, Oval, Brush, and Chamfered

EFD manufactures special purpose tips to meet specific application requirements. All tips feature the EFD SafetyLok hubs.

- Oval tips are used to apply **flat stripes** of glues and pastes.
- Brush tips are used to spread fluids such as **lubricants and glues**.
- Chamfered tips are easily positioned between two plastic surfaces.

gauge	color	chamfered tips 12.7 mm (0.5")	oval tips 12.7 mm (0.5")	qty/box
15	amber	–	7018078	50
18	green	7018129	7024653	50
20	pink	7018188	–	50
22	blue	7018284	–	50
23	orange	7018321	7024656	50
25	red	7018352	–	50
27	clear	7015236*	–	50
33	clear	7018482*	–	25



\***Note:** 7015236 and 7018482 are 6.4 mm (0.25") long. 1.5" chamfered tips also available.

brush tips	standard	high flow
soft bristle	7022730	7022731
stiff bristle	7015351	7015467



Sold in quantities of 50 per box.

## Special Purpose Tips — Bent, Oval, Brush, and Chamfered

- Rigid, precisely bent tips (45° and 90° angles) are recommended for accessing **hard-to-reach bonding areas**.

	gauge	color	12.7 mm (0.5") 45° tips	12.7 mm (0.5") 90° tips	38.1 mm (1.5") 45° tips	ID size
●	14	olive	7018044	7018045	7016906	1.54 mm (0.060")
●	15	amber	7018069	–	–	1.36 mm (0.053")
●	18	green	7018123	7018124	7016908	0.84 mm (0.033")
●	20	pink	7018179	7018180	–	0.61 mm (0.024")
●	21	purple	7018234	–	7016910	0.51 mm (0.020")
●	22	blue	7018273	7018274	–	0.41 mm (0.016")
●	23	orange	7018315	7018316	–	0.33 mm (0.013")
●	25	red	7018346	7018347	–	0.25 mm (0.010")
●	27	clear	7018404	7018405	–	0.20 mm (0.008")
●	30	lavender	7018434	7018435	–	0.15 mm (0.006")

# Tip Recommendations

Examples:

- For tiny dots of low viscosity fluids, use a very small diameter tip.
- If the fluid is reactive to metal, use a plastic tip.
- To avoid scratching or puncturing the surface, use a flexible plastic tip.

If you have any questions, please ask.

We have many years of experience with all kinds of fluids.

- Recommended
- Satisfactory
- x Not Recommended

**TT** — Tapered Tip (pp 14–15)

**GP** — General Purpose Tip (pp 16-17)

Application	TT	GP	PP	TLC
Very low viscosity fluids .....	x	●	●	●
Particle-filled pastes .....	●	●	○	x
Solvent bonding .....	x	●	●	●
Depositing in recesses .....	○	●	●	○
To spread a fluid .....	●	○	●	○
Fast-curing glues .....	●	○	●	●
Light-sensitive adhesives .....	●	○	○	○
To avoid scratching or puncturing .....	●	○	●	●
Micro-deposits* .....	x	●	○	●

\* Ceramic MicroDot tips and precision nozzles are the ideal tip choice for micro-deposits.

Fluid/paste	TT	GP	PP	TLC
Adhesives .....	●	●	●	●
Anaerobics .....	●	○	●	○
Brazing Pastes .....	●	●	○	x
Conformal Coating .....	●	○	○	x
Cyanoacrylates .....	●	○	●	●
Dampening Fluids .....	●	●	●	x
Electrolytes .....	●	●	○	x
Epoxies .....	●	●	●	x
Gel Cyanoacrylates .....	●	○	●	○
Greases .....	●	●	●	x

**PP** — Polypropylene Tip (pp 18–19)

**TLC** — PTFE-lined Tip (pp 20-21)

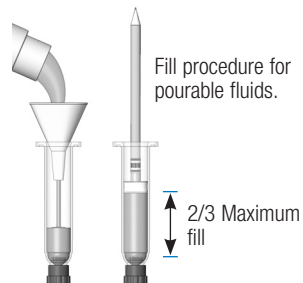
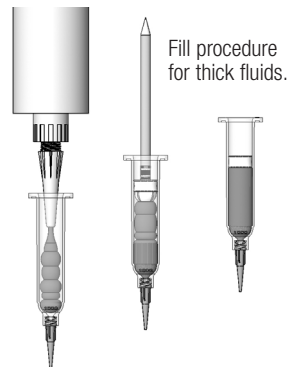
Fluid/paste	TT	GP	PP	TLC
Heat Sink Compounds .....	●	●	○	x
Inks .....	○	●	●	○
Oils .....	○	●	●	○
Paints .....	○	●	●	x
RTVs .....	●	○	○	x
Silicones .....	●	○	○	x
Slurries .....	●	○	○	x
Solder Creams .....	●	●	○	x
Solder Masks .....	●	●	○	x
Solvents .....	x	●	●	●
UV-cure Adhesives .....	●	○	○	○

## Filling Syringe Barrels

If your fluid is thick or non-leveling, you can spoon it into the barrel with a spatula. Or, if the fluid comes packed in a 1/10 gallon cartridge, try loading the barrel with a caulking gun. Then press in the SmoothFlow piston to move the fluid to the bottom of the barrel and to remove trapped air.

If the fluid you are dispensing is pourable, take the barrel, twist on the tip cap, and pour in your fluid. Insert the SmoothFlow piston. Carefully press the piston down until it contacts the fluid. The barrel is now ready for use.

**Note: The correct fill is a maximum 2/3 of the barrel capacity.**  
**(Volume measurements for EFD barrels are at the 2/3 full level.)**  
**Do not completely fill barrels.**

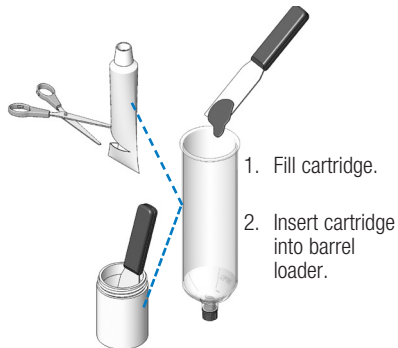


## Productive alternatives to traditional filling

### Atlas Manually Operated Filling Systems

Using air pressure, Atlas™ systems fill the barrel (with piston) from the bottom up.

part #	size of loading cartridge
7022446	2.5 oz (75 ml)
7022447	6 oz (180 ml)
7022445	12 oz (360 ml)
7013568	20 oz (600 ml)
7013901	32 oz (960 ml)
7022452	1/10 gallon (300 ml caulking tubes)



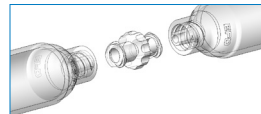
1. Fill cartridge.
2. Insert cartridge into barrel loader.

For high volume filling, request information on the automatic syringe filling systems.

### Luer-to-luer transfer fitting

Fitting allows manual transfer of frozen epoxies and other fluids prepackaged in syringes to EFD barrels.

part #	description
7012606	fit-barrel to barrel PP



# Nordson EFD Dispensing Component Stocking

Each year, EFD produces tens of millions of quality dispensing components.

And EFD maintains high inventory levels to ensure that these components are available to you, in any quantity, when you want them, any place in the world.

EFD is completely committed to **on-time supply** of these important disposable dispensing components. We take this commitment very seriously.

For your convenience and simplified inventory control, EFD accepts scheduled blanket orders for up to (12) months, and guarantees to meet your shipping dates.

Call our experienced Product Specialists for specific recommendations.

Sales and service of EFD dispensers and dispensing components are available through EFD offices and authorized distributors in over 40 countries.

Please contact EFD USA for specific names and addresses required, or go to [www.nordsonefd.com](http://www.nordsonefd.com).

## Ordering

Our disposable dispensing components are supplied pre-counted in boxes.

If you want 50 pieces of our 0.5" 21 gauge General Purpose tip, you would order: (1) 7018233.

**Note:** If you ordered (50) 7018233, you would receive 2,500 pieces.

Examples:

(1) 7366040 is 100 pieces each of our 10cc clear barrel and piston.

(1) 7018100 is 50 pieces of our 16 gauge tapered tip.

# Quality Assurance Statement

It is hereby certified that the materials, parts or assemblies supplied by EFD have been inspected, tested, and manufactured in a silicone-free facility to meet all EFD quality assurance requirements and are shipped free of manufacturing defects.

Nordson EFD components are designed for safe operation under industrial environments, when used in accordance with our technical data, manuals, and brochures.  
Quality made by Nordson EFD in the USA.



## IMPORTANT SAFETY INFORMATION

All EFD disposable components, including syringe barrels, cartridges, pistons, tip caps, end caps, and dispense tips, are precision engineered for one-time use. Attempting to clean and re-use components will compromise dispensing accuracy and may increase the risk of personal injury.

**Always wear appropriate protective equipment and clothing suitable for your dispensing application.**

Do not exceed maximum operating pressure of 7.0 bar (100 psi).

Do not heat syringe barrels or cartridges to a temperature greater than 100°F (38°C).

Dispose of components according to local regulations after one-time use.

Do not clean components with strong solvents (e.g. MEK, Acetone, THF).

Cartridge retainer systems and barrel loaders should be cleaned with mild detergents only.

To prevent fluid waste, use EFD SmoothFlow pistons.



*EFD*

For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to [www.nordsonefd.com](http://www.nordsonefd.com).

### **Global**

800-556-3484; +1-401-431-7000  
[info@nordsonefd.com](mailto:info@nordsonefd.com)

### **Europe**

00800 7001 7001  
[infoefd.europe@nordsonefd.com](mailto:infoefd.europe@nordsonefd.com)

### **Asia**

China: +86 (21) 3866 9006; [china@nordsonefd.com](mailto:china@nordsonefd.com)  
India: +91 80 4021 3600; [india@nordsonefd.com](mailto:india@nordsonefd.com)  
Japan: +81 3 5762 2760; [japan@nordsonefd.com](mailto:japan@nordsonefd.com)  
Korea: +82-31-736-8321; [korea@nordsonefd.com](mailto:korea@nordsonefd.com)  
SEAsia: +65 6796 9522; [sin-mal@nordsonefd.com](mailto:sin-mal@nordsonefd.com)

©2025 Nordson Corporation 7017705 v080625