Ratio-Pak Cartridge Systems

Snap-together cartridges for two-component (2K) materials



Ratio-Pak cartridges snap together in package volumes from 60mL to 1500mL





Ratio-Pak cartridge with separated bores

Ratio-Pak cartridge with joined bores



Select ratios from 1:1 up to 25:1

Ratio-Pak[®] cartridge systems offer a versatile solution to package a variety of two-part materials, including foams, coatings, potting compounds, and other adhesives and sealants.

The Ratio-Pak line uses individual cartridges that snap together with Ratio-Pak cartridges of any other size. This unique, patented design gives users the flexibility to combine multiple ratios, from 1:1 up to 25:1, to achieve proper mixing results.

Cartridge configurations are available with a variety of capping solutions, assorted thread forms, and self-venting seals for easy filling.

Features

- Snap-together design for easily changeable configurations
- May be filled through the nozzle or back side of the cartridge
- Fit industry-standard dispense guns
- Many mixer options available

Benefits

- Versatile design allows different mix ratios and volumes
- Snap-together cartridges help reduce inventory; join side A with different sizes of side B
- Match different resins for chemical compatibility; for example, mate PP side A with nylon side B
- Point-of-use mixing
- Easy filling and handling, with quick clean-up





Ratio-Pak Cartridges

		RATIO-PAK SNAP-TOGETHER CARTRIDGES		
		30mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7660364	30mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natura
7660391	-	30mL piston rear seal, non-vented	MDPE	Black
		75mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7661540	75mL	Ratio-Pak cartridge, 7/8 - 9 outlet thread	PP	Natura
7661411	75mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natur
7660543	75mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PE	Natur
7661440	75mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660545	-	75mL piston rear seal, non-vented	MDPE	Black
7660873	-	75mL piston rear seal, self-vented	MDPE	Black
7660872	-	75mL piston rear seal, self-vented	HDPE	Black
		100mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7660569	100mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natur
7661037	100mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660589	-	100mL piston rear seal, non-vented	MDPE	Black
7661372	-	100mL piston rear seal, non-vented	HDPE	Black
		150mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7660598	150mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natura
7660604	150mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PE	Natur
7660599	150mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660609	-	150mL piston rear seal, non-vented	MDPE	Black
7660878	-	150mL piston rear seal, self-vented	MDPE	Black
7660610	-	150mL piston rear seal, non-vented	HDPE	Black
7660610 7660877	-	· · ·	HDPE HDPE	
		150mL piston rear seal, non-vented 150mL piston rear seal, self-vented 200mL Ratio-Pak Cartridges		
		150mL piston rear seal, self-vented		Black
7660877	-	150mL piston rear seal, self-vented 200mL Ratio-Pak Cartridges Description	HDPE	Black Color
7660877 Part # 7661405	- Usable Volume 200mL	150mL piston rear seal, self-vented 200mL Ratio-Pak Cartridges Description Ratio-Pak cartridge, 7/8 - 14 outlet thread	HDPE Material	Black Color Natur
7660877 Part # 7661405 7661655	– Usable Volume 200mL 200mL	150mL piston rear seal, self-vented 200mL Ratio-Pak Cartridges Description Ratio-Pak cartridge, 7/8 - 14 outlet thread Ratio-Pak cartridge, 7/8 - 14 outlet thread	HDPE Material PP PP	Black Color Natur Blue
7660877 Part # 7661405 7661655 7661530	Usable Volume 200mL 200mL 200mL	150mL piston rear seal, self-vented 200mL Ratio-Pak Cartridges Description Ratio-Pak cartridge, 7/8 - 14 outlet thread	HDPE Material PP PP Nylon	Black Color Natura Blue Natura
7660877 Part # 7661405 7661555 7661530 7661403	- Usable Volume 200mL 200mL 200mL -	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented	HDPE Material PP PP Nylon MDPE	Black Color Natur Blue Natur Black
7660877 Part # 7661405 7661655 7661530	Usable Volume 200mL 200mL 200mL	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented200mL piston rear seal, self-vented	HDPE Material PP PP Nylon	Black Black Color Natura Blue Natura Black Black
7660877 Part # 7661405 7661550 7661530 7661403 7661404	- Usable Volume 200mL 200mL 200mL	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented	HDPE Material PP PP Nylon MDPE MDPE	Black Color Natura Blue Natura Black Black
7660877 Part # 7661405 7661655 7661530 7661403 7661404 Part #	Usable Volume 200mL 200mL 200mL Usable Volume	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented250mL Ratio-Pak CartridgesDescription	HDPE Material PP PP Nylon MDPE MDPE Material	Black Color Natur Blue Natur Black Black Black
7660877 Part # 7661405 7661530 7661403 7661403 7661404 Part # 7661408	- Usable Volume 200mL 200mL 200mL 200mL	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented250mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 9 outlet thread	HDPE HDPE HDPE HDPE HDPE HDPE HDPE HDPE	Black Color Natur Blue Natur Black Black Black
7660877 Part # 7661405 7661655 7661530 7661403 7661404 Part #	Usable Volume 200mL 200mL 200mL Usable Volume	150mL piston rear seal, self-vented200mL Ratio-Pak CartridgesDescriptionRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet threadRatio-Pak cartridge, 7/8 - 14 outlet thread200mL piston rear seal, non-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented200mL piston rear seal, self-vented250mL Ratio-Pak CartridgesDescription	HDPE Material PP PP Nylon MDPE MDPE Material	Black Color Natur Blue Natur Black Black Color

Order both side A and side B based on ratio requirement and volume.

Continued on next page



Ratio-Pak Cartridges

Continued from previous page

		300mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7660650	300mL	Ratio-Pak cartridge, 7/8 - 9 outlet thread	PP	Natura
7660625	300mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natur
7661715	300mL	Ratio-Pak cartridge, 7/8 - 9 outlet thread	PE	Natur
7660630	300mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PE	Natur
7660626	300mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660653	-	300mL piston rear seal, non-vented	MDPE	Black
7660884	-	300mL piston rear seal, self-vented	MDPE	Black
7660656	-	300mL piston rear seal, non-vented	HDPE	Black
7660883	-	300mL piston rear seal, self-vented	HDPE	Black
		600mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7660665	600mL	Ratio-Pak cartridge, 7/8 - 9 outlet thread	PP	Natur
7660663	600mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natu
7660664	600mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660666	-	600mL piston rear seal, non-vented	MDPE	Black
7661708	-	600mL piston rear seal, self-vented	MDPE	Black
		750mL Ratio-Pak Cartridges		
Part #	Usable Volume	Description	Material	Color
7661410	750mL	Ratio-Pak cartridge, 7/8 - 9 outlet thread	PP	Natur
7660667	750mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	PP	Natur
7660683	-	750mL piston rear seal, non-vented, for PP cartridges	MDPE	Black
7660887	-	750mL piston rear seal, self-vented, for PP cartridges	MDPE	Black
7660668	750mL	Ratio-Pak cartridge, 7/8 - 14 outlet thread	Nylon	Natur
7660686	-	750mL piston rear seal, non-vented, for nylon cartridges	HDPE	Natur
7660687	-	750mL piston rear seal, self-vented, for nylon cartridges	HDPE	Natur

Order both side A and side B based on ratio requirement and volume.

Material:

PP (polypropylene)	LDPE (low-density polyethylene)
PE (polyethylene)	MDPE (medium-density polyethylene)
	HDPE (high-density polyethylene)

RATIO-PAK ACCESSORIES			
Part #	Description	Notes	
7660792	Disc, 1.9 x 1.6 mm (0.75 x 0.062"), PE, white	When installed between a capped barrel and nut, keeps the nose plug stable.	
7660794	Gasket tape, 1.9 x 1.9 mm (0.75 x 0.75"), two-sided, white	Place gasket tape on the flat side of the cartridge neck to prevent material from flowing between the cartridges.	
7660945	Vent strip, PE, white	Reusable vent strip for non-vented rear seals.	
7660731	Retaining nut, 7/8 - 9 cartridges	Retaining nuts secure the mixer to the cartridge.	
7660818	Retaining nut, 7/8 - 14 cartridges	Retaining nuts secure the mixer to the cartridge.	





Flow Restrictors

EFD's low-cost, plastic flow restrictors eliminate problems caused by low-viscosity fluids by slowing the thinner component's flow.

RATIO-PAK FLOW RESTRICTORS				
Part #	Туре	Orifice Size (mm / ")	Material	Color
7660763	Flat	3/16 x 3/16 / 9.5 x 9.5	PE	Black
7660764	Flat	1/16 x 1/16 / 3.2 x 3.2	PE	Black
7660765	Flat	1/16 x 3/16 / 3.2 x 9.5	PE	Black
7660766	Flat	Dual Slit	PE	Black
7660767	Flat	Slit x 1/16 / Slit x 3.2	PE	Black
7660768	Flat	Slit x 3/16 / Slit x 9.5	PE	Black
7661324	Tabbed	3/16 x 3/16 / 9.5 x 9.5	PE	Black
7661325	Tabbed	3/32 x 3/16 / 2.4 x 9.5	PE	Red
7661323	Tabbed	Slit x 3/16 / Slit x 9.5	PE	Grey
7661231	Tabbed	3/32 x 3/32 / 2.4 x 2.4	PE	White
7661232	Tabbed	Dual Slit	PE	Blue
7661233	Tabbed	Slit x 3/32 / Slit x 2.4	PE	Green



Cartridge Caps

Each Ratio-Pak cartridge set requires a one-piece or two-piece sealing cap. Two one-piece caps (called D-plugs) are required per cartridge set. Only one two-piece cap is required per cartridge set.

RATIO-PAK CARTRIDGE CAPS					
Part #	Description	Material	Color	# per Cartridge	
7660214	Cartridge cap	PE	Black	2	
7661259	Cartridge cap, 6 pack	PE	Black	2	
7660215	Cartridge cap	PE	Natural	2	
7660216	Cartridge cap	PE	White	2	
7660218	Cartridge cap	Santoprene*	Black	2	
7660217	Cartridge cap	Santoprene	Natural	2	
7660220	Cartridge cap	PE	White	1	
7661196	Cartridge cap	PE	White	1	
7660379	Cartridge cap**	PE	Blue	1	

*For difficult-to-seal materials.

**For 30mL cartridges only.

Recommended 2K Mixers

Nordson EFD offers a variety of static mixers for Ratio-Pak cartridges, including OptiMixers[™] and other square and spiral mixers. To request samples for your application, go to <u>www.nordsonefd.com/2Ksamples</u>.

DISPOSABLE MIXERS			
Series	Туре	Style	
Series 480	OptiMixer	Square	
Series 280	Turbo Integral Nut	Square	
Series 160	Bell Inlet	Spiral	
Series 161N	High-Flow Integral Nut	Spiral	
Series 260	Bell & Integral Nut	Spiral	

2K Dispense Guns

Nordson EFD's 2K dispense guns are compatible for use with our Film-Pak[®], Side x Side, Ratio-Pak, and coaxial cartridge systems. Lightweight and durable, 2K dispense guns make applying two-component adhesives quicker and easier. Available in three models.





Manual dispense gun

Pneumatic dispense gun Cordless



Cordless dispense gun





Series 480 OptiMixers

Series 280N









For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com.

800-556-3484; +1-401-431-7000 info@nordsonefd.com europe@nordsonefd.com asia@nordsonefd.com ©2018 Nordson Corporation v101718