

Engineered Fluid Dispensing™



EFD[®]
A NORDSON COMPANY

The Optimum™ Cartridge System



The Clear Advantage™ in fluid packaging and dispensing.

EFD's new Optimum cartridges and retainers have been designed to function as a complete, integrated system that improves yields and reduces costs in fluid packaging and dispensing processes.

Optimum cartridges are made of a new polypropylene that provides exceptional clarity, chemical compatibility, impact strength and dimensional stability. The proprietary Zero Draft™ design ensures that the internal diameter is consistent from top to bottom, with no taper to restrict piston travel or affect process results.

Optimum pistons are engineered and molded to mate perfectly with cartridge walls. Consistent piston dimensions and uniform fit prevent blow-by and leakage during filling and storage. Precision wiper edges eliminate waste as fluid is dispensed to reduce production costs.

End caps provide an air-tight seal at the top of the cartridge, while threaded, self-venting outlet caps prevent leaks and keep air from being introduced into the fluid.

New, see-through cartridge retainers permit easy visual confirmation of fluid levels. Retainer caps feature a large gripping surface, a convenient push-in air line connector, and locking tabs that snap into place with an audible click to confirm proper installation. All components are patent pending.

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Optimum Retainers





Each Optimum cartridge system component – from the ergonomic retainer cap down to the threaded cartridge outlet cap – is precision engineered to function as a complete, integrated system that will improve a wide variety of fluid packaging and dispensing applications.

Retainers

Optimum cartridge retainers are molded from high-tensile, clarified nylon that permits easy visual monitoring of fluid levels. Large textured ribs provide an ergonomic grip for cap installation.



Chamfered entryway for easy installation

Retainer Caps

Retainer caps feature locking tabs that snap into detents on the retainer body with an audible click. Only ¼ turn is required to lock the cap securely in place. A push-in air line connector on top of the cap eliminates the need for bayonet connectors.



Ergonomic grip with locking tabs

Optimum Cartridges



Cartridges

Optimum cartridges are molded from a proprietary FDA- and RoHS-compliant polymer that provides exceptional clarity, chemical compatibility and dimensional stability.



Molded ribs prevent splitting
Hex fits into retainer for tool-free fitting/nozzle installation

Precision molded threads and a tapered counterbore at the 1/4" NPT outlet ensure a secure, leakproof seal. The outlet hex fits into a matching orifice on the retainer, allowing fast, tool-free installation of fittings and nozzles.



Zero Draft walls for smooth piston travel

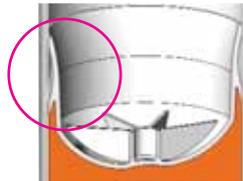
The new design features Zero Draft™ internal walls, improved fluid flow characteristics and reduced turbulence. Unique external end ribs prevent splitting when installing fittings or nozzles.

Optimum cartridges are available in clear, UV-blocking amber, and light-blocking black configurations. Capacities include 2.5 oz (74ml), 6 oz (177ml), 12 oz (355ml), 20 oz (591ml), and 32 oz (946ml).

Note: The new Optimum cartridges are backward-compatible with most retainers on the market today.

Pistons

Optimum pistons are precision molded from high-density polyethylene for a consistent fit that perfectly matches cartridge walls for smooth, unobstructed travel that ensures consistent results in fluid packaging and dispensing processes.



Dual wipers eliminate waste and residue

Unique channels help dissipate air during the filling process, reducing or eliminating the need to centrifuge. Dual wiping edges eliminate waste and residue to lower production costs and simplify disposal of used cartridges.



Molded channels dissipate trapped air

End Caps and Outlet Caps



Pushbutton ensures an airtight seal

End caps snap securely over cartridge flanges to prevent leaks and fluid contamination. The center pushbutton presses the cap against the cartridge wall to form a positive, airtight seal.



Tapered seat prevents leaks

Self-venting outlet caps feature a large ribbed gripping area that simplifies manual installation, along with precision molded threads and a tapered seat that provide a snug, leakproof seal. A recessed hex molded into the cap exterior facilitates installation with automated equipment.



Hex on outlet cap allows automated installation

EFD offers a complete line of fittings to complement the Optimum Cartridge System.

