



## Equipment Information

# Variable Speed Start/Stop Pump Filler

FS-2XXX Standard  
FS-3XXX Sanitary

Utilizing control of both pump rotation and pump speed, this variable speed start/stop pump filler provides an accurate method for filling low to high viscosity liquids into your containers at speeds up to 120 containers per minute.

Multiple models are available to fit a wide range of product filling requirements. E-PAK configures each model with exactly the right contact parts and filling heads (from 4 to 20) for your application.

The filler is able to utilize a range of pumps including gear and lobe pumps. We work with each customer to select the appropriate pumps, valves and fittings to meet your range of products.

Program set-up and changeover is simple using the touch-screen operator interface and advanced PLC control system. Multiple speed fill cycles can be easily programmed to take advantage of the filler's capabilities. One potential filling cycle could initiate the filling process at a slow, controlled speed to minimize material splashing and then rapidly increase fill speed for optimum through-put and finally reduce fill speed for a slow, controlled fill top-off.



## APPLICATIONS

- ❑ Low to heavy viscosity products.
- ❑ Creams, lotions, shampoos and conditioners.
- ❑ Dressings, sauces, soups and jellies.
- ❑ Beverages and spirits.
- ❑ Products with particulate, corn oil and vegetable oil.
- ❑ Stringing products with the use of optional vacuum nozzles.
- ❑ Many other products!

## FEATURES & BENEFITS

- ❑ **Accurate**  
Easy to use and easy to adjust the volume dispensed with a simple control setting. Control of both pump speed and position during the fill cycle guarantees accurate filling!
- ❑ **Simple Changeover**  
Changeover is quick with ability to store multiple programs in the PLC controller. All machine adjustments are designed for fast changes.
- ❑ **Drip Protection**  
An optional drip tray is used to help keep your containers clean.
- ❑ **Customized**  
Construction materials, contact parts, pump style, number of fill heads and other options allow simple customization to your filling needs. Optional sanitary construction for easy and thorough cleaning.
- ❑ **Flexible**  
Modularity and simplicity are intrinsic to the design. Versatile machine options and a wide range of programmability make this filler flexible.

## Equipment Information

Feature	Standard Model	Model Number	Sanitary Model	Model Number
BASE MODEL - 230 VAC, 3Φ, 50/60 Hz) with: 4; 6; 8; 10; 12; 14; 16; 18 or 20 Fill Heads	Variable Speed Start/Stop Pump Filler on a 304 Stainless Steel heavy-duty tube-style frame with gear pumps, standard Air actuated 316 stainless steel ball valves and 304 Stainless Steel reservoir with braided PVC hose with threaded fittings.	FS-2504 FS-2506 FS-2508 FS-2510 FS-2512 FS-2514 FS-2516 FS-2518 FS-2520	Variable Speed Sanitary Start/Stop Pump Filler on a 304 Stainless Steel heavy-duty tube-style frame with sanitary gear pumps, air actuated 316 stainless steel break down valves, with sanitary flanged fittings and 316 Stainless Steel reservoir with sanitary flange fittings.	FS-3504 FS-3506 FS-3508 FS-3510 FS-3512 FS-3514 FS-3516 FS-3518 FS-3520
<b>Control Features</b>				
PLC Control System	Standard		Standard	
Touch-Screen Operator Interface	Standard		Standard	
Alternate Power - (230 VAC, 1Φ, 50/60 Hz) with: 4; 6; 8; 10; 12; 14; 16; 18 or 20 Fill Heads	Option	FS-2604 - FS-2620	Option	FS-3604 - FS-3620
Temperature Monitoring	Option	FSX-2000	Option	FSX-3000
Electrical Spare Parts Kit	Option	FSX-2090	Option	FSX-3090
<b>Mechanical Features</b>				
Gear Pumps, Stainless Steel	Standard		Sanitary Style Standard	
Pin Style Bottle Indexing	Standard		Standard	
Lobe Pumps, Stainless Steel	Option	FSX-2002	Option	FSX-3002
Bottle Grippers	Option	FSX-2004	Option	FSX-3004
Change Part Kit for bottle grippers	Option	FSX-2006	Option	FSX-3006
Safety Guarding with Interlocks	Option	FSX-2008	Option	FSX-3008
Mechanical Wear Parts Kit	Option	FSX-2095	Option	FSX-3095
<b>Options</b>				
Drip Tray	Option	FSX-2010	Option	FSX-3010
Clean-in-place	Option	FSX-2012	Option	FSX-3012
Timing Screw Bottle Indexing	Option	FSX-2014	Option	FSX-3014
Electronically controlled diving fill heads	Option	FSX-2016	Option	FSX-3016
Vacuum nozzles for stringing product	Option	FSX-2018	Option	FSX-3018

## Specifications

Parameter	Value / Description	Comment
Nominal Dispensing Accuracy	Better than 1%	Depends on product consistency and other factors.
Filling Speed	Up to 120 containers/minute	Dependent upon number of fill head modules, container volume and liquid product.
Stainless Steel Gear Pump	6 GPM nominal rating	Optional lobe and sanitary gear pumps available.
Power Consumption	30 Amps (Full Load) - 230 VAC, 3 Φ	10 head unit. Dependent upon number of fill head modules and options.
Operating Temperature	40 °F to 122 °F (5 °C to 50 °C)	10% to 95% Relative humidity (non condensing)
Compressed Air Requirements	< 3 CFM at 80 PSI (< 14 l/min at 5.6 BAR)	Less than 1 CFM nominal
Electrical Enclosure	304 stainless steel NEMA 4	Includes NEMA 4 adjustable operator interface unit.
Weight	500 pounds (225 kg)	10 head unit. Weight varies with number of fill heads.
Exterior Dimensions	50" W x 42" D x 80" H (1.3 M x 1.1 M x 2.0 M)	10 head unit. Size varies with number of heads. Height varies with line height. (80" for 32" line height)