



Specialists in Liquid Filling Systems

FUS - FKS FILLING UNITS



POSITIVE DISPLACEMENT PISTON PUMPS

FUS and FKS Filling Units are designed for dispensing free flowing to semi viscous liquids in a continuous controlled flow from the beginning of the fill to the end of the fill ensuring quick fills, as compared to peristaltic systems. Fill range from .05mL to 1100mL with fill accuracy to 0.5%. Using servos to drive the Filling Units enables the flow rate to be increased and decreased at different times during dispensing to allow all shapes of containers to be filled with ease and precision.

Adjustable Teflon piston rings take all of the wear to provide many years of dispensing with no need to replace the stainless steel components due to wear. O-Ring piston seals are also available. Adjustable suck back feature provides sharp clean cut-off even with stringy material.



All metal liquid contact parts fabricated from 316/316-L S.S.

APPLICATIONS

Water thin Reagents ■ Perfumes ■ Alcohol Shampoos ■ Lotions ■ Light Creams + Oils

BENEFITS

Fast fill rates ■ Proven Reliability ■ Autoclavable High Repetitive Accuracy ■ Easy to maintain

FEATURES

Fill Range: .05mL to 1100mL ■ Self priming Fills from floor level drum, overhead supply, or pressurized reservoir ■ Optional sanitary design

FUS Part Guide

For filling free-flowing liquids

Additional sizes available

PUMP SIZE	FUS-1	FUS-10	FUS-60	FUS/XL-140	FUS/XL-560	FUS/XL-1100
FILL RANGE	0.1mL to 1mL	1mL to 10mL	6mL to 60mL	6mL to 140mL	26mL to 560mL	50mL to 1100mL
PART NUMBER	1025-4	1065-2	1125	2301	2303	1265

FKS Part Guide

For filling semi viscous liquids

Additional sizes available

PUMP SIZE	FKS-3	FKS-10	FKS-60	FKS/XL-140	FKS/XL-560	FKS/XL-1100
FILL RANGE	0.3mL to 3mL	1mL to 10mL	6mL to 60mL	6mL to 140mL	26mL to 560mL	50mL to 1100mL
PART NUMBER	1250-2	1260-2	1262	2305	2309	1225

NATIONAL INSTRUMENT COMPANY, INC.

4119 Fordleigh Road • Baltimore, Maryland 21215, USA

800.526.1301 • www.filamatic.com

FUS - FKS PISTON PUMP OPERATION DESCRIPTION

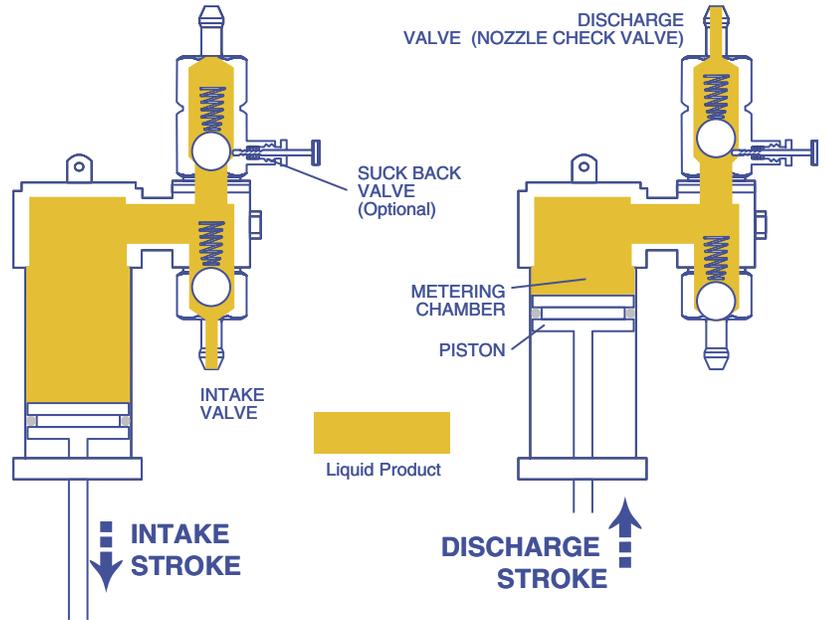
Step 1: Downward motion of the piston creates a vacuum in the pump chamber, thus opening the intake valve.

Step 2: A preset volume of liquid then flows from the supply source into the pump chamber.

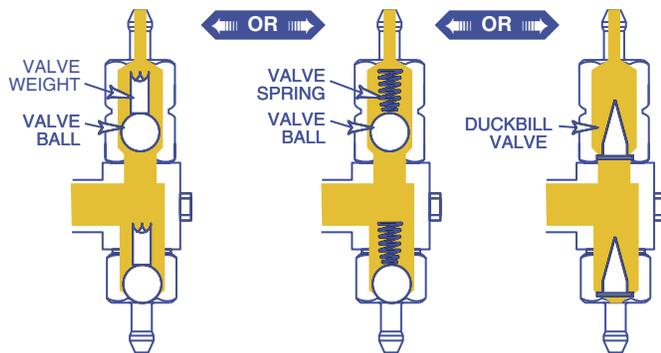
Step 3: Upward motion of the piston closes the intake valve and opens the discharge valve.

Step 4: Liquid is then discharged from the nozzle.

A graduated micrometer volume or a servo pump drive determines the piston travel, and thus the volume of liquid product dispensed from the filling nozzle.



PISTON PUMP VALVING OPTIONS



WEIGHT/BALL CHECK VALVE

General purpose valve for use with water thin liquids.

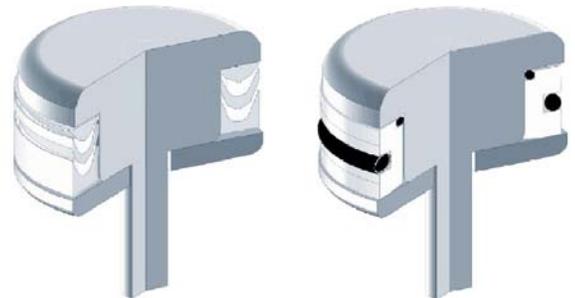
SPRING/BALL CHECK VALVE

General purpose valve for use with semi-viscous liquids.

DUCK-BILL VALVE

Special purpose valve for sheer sensitive liquids.

PISTON SEAL OPTIONS



TEFLON CHEVRON

The most versatile and durable piston seal. Normal wear is compensated by tightening an adjustment stem.

O-RING ADAPTER

Replaces chevron style and offers a more sanitary design.

FILAMATIC



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4119 Fordleigh Road Baltimore, Maryland 21215, U.S.A.

410-764-0900 800-526-1301 Fax: 410-764-7719

www.filamatic.com info@filamatic.com

