VC1195N

4-Way Valve Controller

The VC1195N is a 4-way valve controller that can be used to control one or two valves simultaneously. The controller is suitable for all valves in the brochure identified as requiring or optionally accepting a 4-way controller.

The VC1195N valve controller provides a continuous “valve-off” state and remains in this mode until a signal is received to switch to “valve-on” mode. This instruction can derive from a remote robotic device or by the foot switch provided. When the timer is off, the valve will remain in “valve-on” state as long as the foot switch is pressed or to allow a robot to control the operation. When the timer is selected, a momentary pulse will activate the timer to open the valve for a programmed period and then close the valve automatically.

The VC1195N will deliver accurate and repeatable dots or beads for any application.

Example of a 4-way valve requiring the VC1195N controller for 4-way open & close operation.

Features

Simultaneous control of two valves

Timing interval from 0.01 – 31 seconds

Fast response internal pneumatic solenoid

Model

VC-1195N	Controller 110/220V CE

Specifications

Size:	10.50” x 8.25” x 2.75” (26.67 x 20.95 x 6.98cm)
Dispense time:	0.01-30 seconds
Cycle initiation:	Momentary or continuous
Voltage:	100-240 VAC 50/60Hz
Internal voltage:	24 vdc
Air input:	70-100 psi (4.8-6.9 bar)
Air output:	1-100 psi (0.1-6.9 bar)
Weight:	4 lbs. 3 oz. (1.90 kg)

Parts *(included)*

560033-LF	Power Cord 110V
560033E-LF	Power Cord 220V
560033E-PLUG-LF	Power Cord with plug 220V
560752	Input air hose with accessories
560027D	Foot pedal and cord
560524	6 ft. air hoses x2

CV629

Cartridge Valve

CV629 - Adjustable Cartridge Valve

The CV629 is a pneumatically operated valve designed for precision dispensing of many types of fluids, such as solvents, oils, silicones, glues, UV adhesives, inks, etc. The system can be integrated with an automatic dispensing robot or used as a bench-dispensing valve. Avoid clean-up and maintenance by simply replacing the removable cartridge.

3-Way Valve Operation

The valve is opened by air pressure and closed by a return spring when air pressure is released. Applying a minimum of 70 psi (5 bar) air pressure to the air inlet will open the valve. Fluid is supplied to the material inlet through a 1/8 BSPP port.

Shot sizes may be fine tuned by the adjustment screw at the top of the valve; hence the CV629 valve is recommended for applications where micro deposits are required. Shot size and flow rate are controlled by the tip size, fluid pressure and the duration that the valve is open.

The model DSP501N is a suitable controller for the CV629 valve.

Model

CV629	Cartridge valve

Accessories

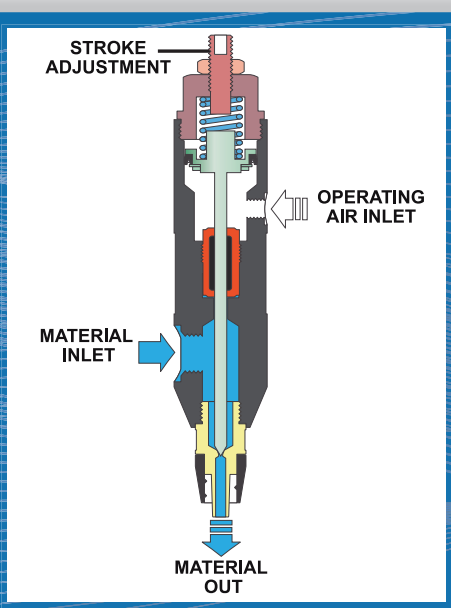
DSP501N	3-way controller 110/220V CE

Features

- Aligned air and material inlets for side-by-side mounting
- Stroke adjustment to fine tune shot size
- Replaceable cartridge
- Microshot deposits

Specifications

Operating air pressure:	70 to 85 psi (4.8 to 5.9 bar)
Material delivery pressure:	MAX 300 psi (20.7 bar)
Connecting Ports:	
Operating air input:	M5 thread with push-in fitting for ø6 O.D. tube
Material inlet:	1/8" BSPP with push-in fitting for ø6 O.D. tube
Material outlet:	Luer lock adapter
Weight:	135g



VD510
Diaphragm Valve

VD510 - Min. Shot Size 0.001cc - Adjustable

The VD510 is a diaphragm valve designed for precise flow control of low to medium viscosity materials. The diaphragm separates the wetted parts from the moving parts and, therefore, the valve is ideal for dispensing cyanoacrylates, reagents, electrolytes, glues, solvents, paints, alcohol and other volatile substances.

The model DSP501N is a suitable controller for the VD510 valve.

3-Way Valve Operation

When air pressure is applied to the VD510 valve, the valve will open and the material will be dispensed. At the end of the dispense cycle a spring assists the diaphragm to return quickly to its closed state for immediate shut-off.

Shot sizes may be fine tuned by turning the stroke adjustment at the top of the valve.

Model

VD510	High-pressure constant-bead valve
VD510-SS	Stainless steel diaphragm valve
VD510-UV	UV suitable diaphragm valve

Accessories

DSP501N	3-way controller 110/220V CE

Features

Stroke adjustment to fine tune shot size

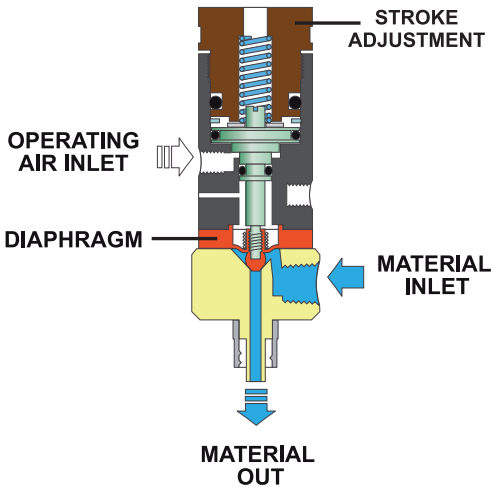
Separated wetted parts

Suitable for robot integration

Suitable for anaerobic fluids

Specifications

Operating air pressure:	60-85PSI (4.1-5.9 bar)
Material delivery pressure:	71PSI (4.9 bar)
Flow rate:	MAX 0.3 l/min
Minimum shot size:	0.001cc (material dependent)
Driving part materials:	
Body:	AL (hard coated, black)
Piston:	SUS303
Piston Seal:	NBR
Wetted part materials:	UHMW-PE
Connecting Ports:	
Operating air input:	M5xP0.8
Material inlet:	1/8" NPT
Material outlet:	Luer lock
Weight:	76g



VMS400

Mini-Spool Valve

VMS400 - Min. Shot Size 0.1cc - Adjustable

The VMS400 is a mini-spool type pneumatic valve designed for dispensing low viscosity to high viscosity materials.

3-Way & 4-Way Valve Operation

When air pressure is applied to the air inlet of the VMS400 valve, the spool will be forced forward and fluid will be dispensed. The VMS400 valve has a suck-back effect that eliminates lumping at the end of the needle after dispensing. Turning the adjustment control at the top of the valve regulates the amount of suck-back.

Shot size and flow rate are controlled by the tip size, fluid pressure and the duration that the valve is open.

The model DSP501N is a suitable controller for the VMS400 valve. For faster actuation, the 4-way VC1195N valve controller is recommended.

Model

VMS400	Mini spool valve

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE

Features

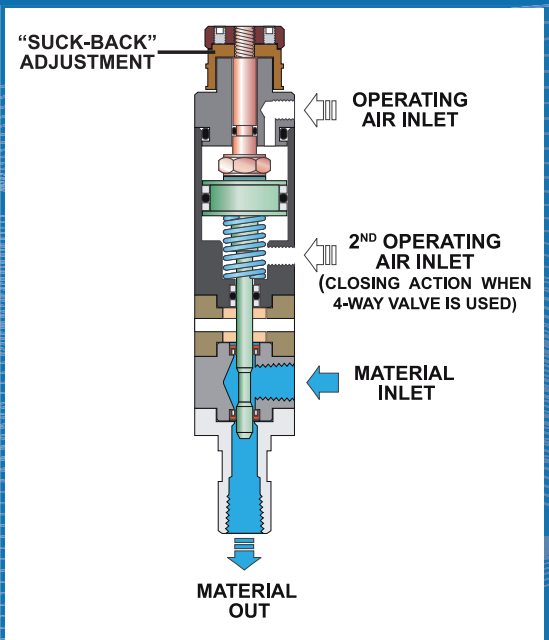
High-pressure fluid input up to 700 psi

Adjustable "suck-back" effect

Suitable for high viscosity fluids

Specifications

Operating air pressure:	60-85PSI (4.1-5.9 bar)
Material delivery pressure:	711PSI (49 bar)
Flow rate:	MAX 5.0 l/min
Minimum shot size:	0.1cc
Driving Part Materials:	
Body, Piston:	SUS303
Spool:	SUS420
CAP:	AL (hard coated)
Wetted Part Materials:	
Chamber, Chamber Cap:	SUS303
Seal:	UHMW-PE lip seal
Connecting Ports:	
Operating air inlet:	M5xP0.8
Exhausting outlet:	M5xP0.8
Material inlet, outlet:	1/8" NPT
Weight:	255g



VP300
Poppet Valve

VP300 - Min. Shot Size 0.05cc - Adjustable

The VP300 is a multipurpose, poppet-type pneumatic valve designed for dispensing low to mid-high viscosity materials, such as silicones, RTV, epoxy, rubber adhesives, grease, liquids containing filler, etc.
A diaphragm located between driving parts and wetted parts increases the valve life and reduces valve maintenance.

3-Way & 4-Way Valve Operation

When air pressure is applied to the valve, the valve seat will open and the material will be dispensed. Shot sizes may be fine tuned by turning the control knob at the top of the valve.

The VP300 valve has a suck-back effect that eliminates lumping at the end of the needle after dispensing. The suck-back effect occurs when the valve is closed because of the change in the volume of the material area as the poppet moves up in the valve.

The model DSP501N is a suitable controller for the VP300 valve. For faster actuation, the 4-way VC1195N valve controller is recommended.

Features

Stroke adjustment to fine tune shot size

"Suck-back" effect

Separated wetted parts

Suitable for filled material

Model

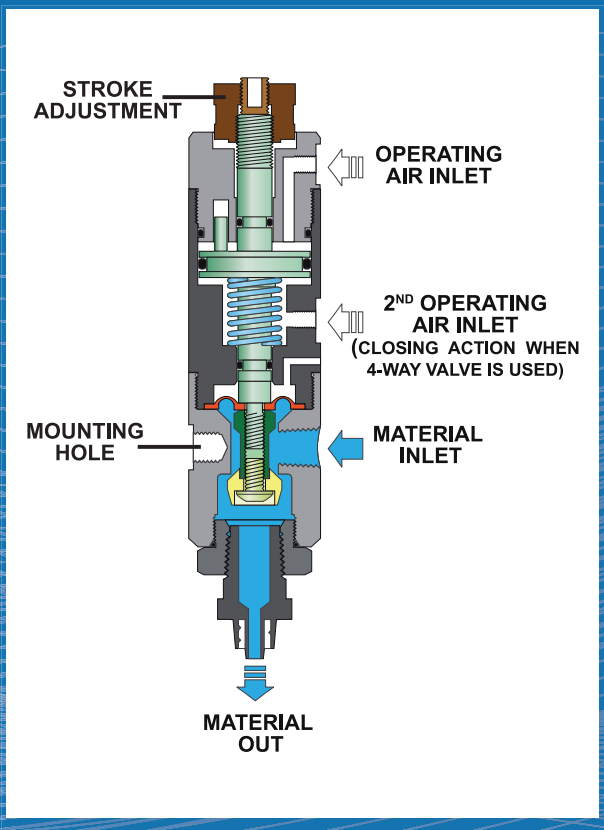
VP300	Poppet valve

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE

Specifications

Operating air pressure:	60-85PSI (4.1-5.9 bar)
Material delivery pressure:	85PSI (5.9 bar)
Flow rate:	MAX 2.4l/min
Minimum shot size:	0.05cc
Driving part materials:	
Body:	AL (hard anodizing, black)
Piston:	SUS303
Piston Seal:	NBR
Wetted part materials:	
Chamber, CAP:	AL (hard anodizing, black)
Diaphragm, Valve Seat:	UHMW-PE
O-Ring (CAP):	Viton
Option:	The Chamber, CAP, and wetted parts can be replaced with SUS303, AL, PPEK, Acteal.
Connecting Ports:	
Operating air input:	M5xP0.8
Material inlet:	1/8" NPT
Material outlet:	1/4" NPT, Luer lock
Mounting Hole:	M5xP0.8
Weight:	258g



VMP30H

Poppet Valve

VMP30H - Min. 0.01cc - Adjustable

The VMP30H is a multipurpose, mini-poppet pneumatic valve designed for dispensing low to mid-high viscosity materials, such as silicones, RTV, epoxy, rubber adhesives, grease and filled materials. The poppet design minimizes surface area and friction between the valve piston and the material, making it ideal for filled materials and extending the life of the valve seals.

A diaphragm located between driving parts and wetted parts increases the valve life and reduces valve maintenance.

3-Way & 4-Way Valve Operation

When air pressure is applied to the valve, the valve seat will open and the material will be dispensed. Shot sizes may be fine tuned by turning the control knob at the top of the valve.

The VMP30H valve has a suck-back effect, which draws material back into the fluid body at the end of the dispensing cycle. This eliminates lumping at the end of the needle after dispensing.

The model DSP501N is a suitable controller for the VMP30H valve. For faster actuation, the 4-way VC1195N valve controller is recommended.

Features

Stroke adjustment to fine tune shot size

"Suck-back" effect

Separated wetted parts

Suitable for filled material

Model

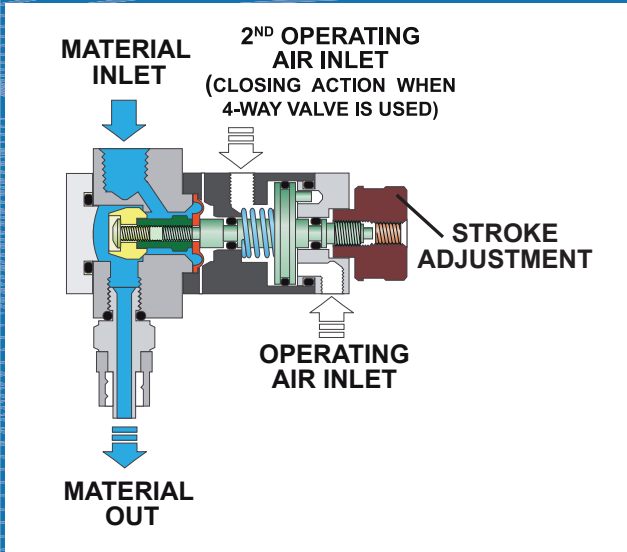
VMP30H	Mini poppet valve

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE

Specifications

Operating air pressure:	50-85PSI (3.4-5.9 bar)
Material delivery pressure:	Max 85PSI (5.9 bar)
Flow rate:	MAX 1.2l/min
Minimum shot size:	0.01cc (material dependent)
Driving part materials:	
Body:	AL (hard anodizing, black)
Piston:	SUS303
Piston Seal:	NBR
Wetted part materials:	
Chamber, CAP:	SUS303
Diaphragm, Valve Seat:	UHMW-PE
O-Ring (CAP):	Viton
Option:	The Chamber, CAP, and wetted parts can be replaced with SUS303, AL, PPEK, Acteal.
Connecting Ports:	
Operating air input:	M5xP0.8
Material inlet:	1/8" NPT
Material outlet:	Luer lock
Weight:	162g



710PT-LF

Pinch Tube Valve

710PT-LF - Pinch Tube Valve

Engineered for precise control of semi-viscous liquids including mixed two-part component fluids and cyanoacrylate. The only part of the valve making contact with the fluid being dispensed is the disposable pinch tube assembly.

3-Way Valve Operation

The 710PT-LF pinch tube valve provides an infinite degree of control for continuous micro-shot applications of low-to semi-viscous materials.

Automatically opening and pinching a molded polyethylene tube assembly achieves the "on/off" control.

The shot size or flow rate is determined by the degree of adjustment in releasing the closed (pinched) tube and by the valve control timer.

Model

710PT-LF	Pinch tube valve

Accessories

DSP501N	3-way controller 110/220V CE

Parts *(included)*

Part #	Qty	Description
580033-LF	1	Mounting rod 0.5" O.D.
580037A	3	Dispense tube 0.10" I.D.
580038A	3	Dispense tube 0.07" I.D.
5601257	5	Teflon lined tips
5601225	5	Blunt end tips 23 gauge
5601390	1	Tip adapter

Features

Throwaway valve and feed tubes

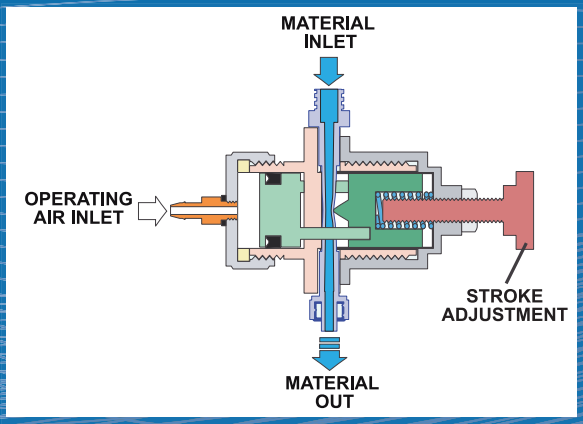
Suitable for low viscosity fluids

Ideal for two-part epoxies and cyanoacrylate

Simple to use and maintain

Specifications

Operating air pressure:	60-75 psi (4.1-5.1 bar)
Material delivery pressure:	Max 100 psi
Driving part materials:	
Body:	Plastic
Piston:	Plastic
Wetted part materials:	Polyethylene
Connecting Ports:	
Operating air input:	1/4" tube adapter
Material inlet:	Luer lock
Material outlet:	Luer lock



790HP-LF

High Volume Valve

790HP-LF - High Volume - Spool Action

The 790HP-LF series high-pressure dispense valve is an economic solution when dispensing high viscosity materials such as silicones, RTV, sealant and grease. The 790HP-LF provides a snap-release shut off after dispensing, resulting in a suck-back at the fluid outlet, preventing any drip or post extrusion.

3-Way & 4-Way Valve Operation

The 790HP-LF is a balanced type "on/off" segmented high-pressure spool valve. Applying a minimum of 50 psi to the air inlet will force the spool forward, under tension from an internal return spring, dispensing the material.

Releasing the air pressure results in the internal spring snapping back into position and closing the valve.

790HP-LF valves can be used with a 3-way air valve controller DSP501N. Should the operation require automation, a faster closing action can be achieved using the 4-way valve controller VC1195N.

Features

High-pressure fluid input up to 2500 psi

Suitable for very high viscosity fluids

Replaceable seals

Model

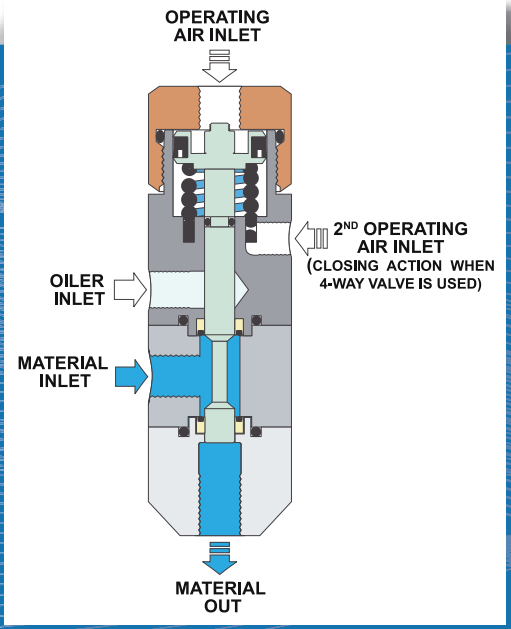
790HP-LF	High-pressure valve aluminum
790HPSS-LF	High-pressure valve stainless steel

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE
580018-LF	Repair kit without valve spool
580017-LF	Repair kit with valve spool
IJ934K	Air & fluid I/O accessory kit
5601390	Tip adapter (Pk/3)
913	3/8” material tube fitting
914	3/8” material tube elbow

Specifications

Material input pressure:	MAX 2500PSI (172.4 bar)
Air pressure required:	Minimum 60PSI (4.1 bar)
Valve body:	
790HP-LF	Aluminum
790HPSS-LF	Stainless steel
Connecting Ports:	
Operating air input:	¼" NPT
Material inlet:	¼" NPT
Material outlet:	¼" NPT
Seals:	O-ring - viton, seats are glass filled Teflon



HP600

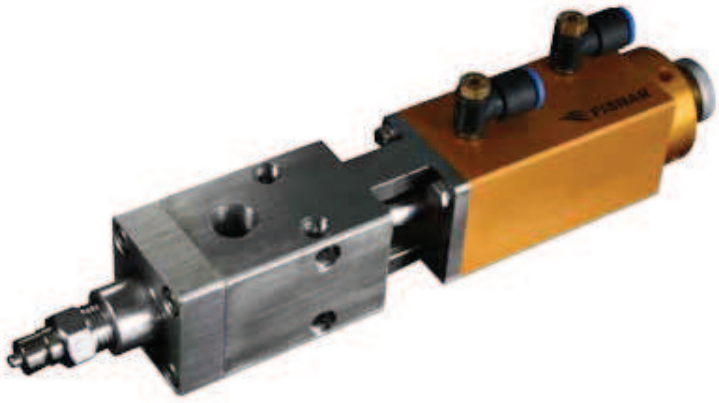
High Pressure Needle Valve

HP600S - small shot, HP600L - large shot

The HP600S and HP600L high-pressure dispense valves are a robust long-life solution for dispensing high viscosity materials such as silicone, RTV, sealant and grease. Both valves are adjustable for shot size.

4-Way Valve Operation

The HP600S & HP600L are balanced type "on/off" segmented high-pressure needle valves, which require a model VC1195N 4-way valve controller. Applying a minimum of 56 psi to the air inlet will retract the needle allowing material to flow. Switching the air signal on the controller will return the needle to its seated position closing the valve.



Model

HP600S	High-pressure valve small shot
HP600L	High-pressure valve large shot

Accessories

VC1195N	4-way controller 110/220V CE
5601390	Tip adapter
913	3/8” material tube fitting
914	3/8” material tube elbow

Features

High-pressure fluid input

4-way operation - quick shut off

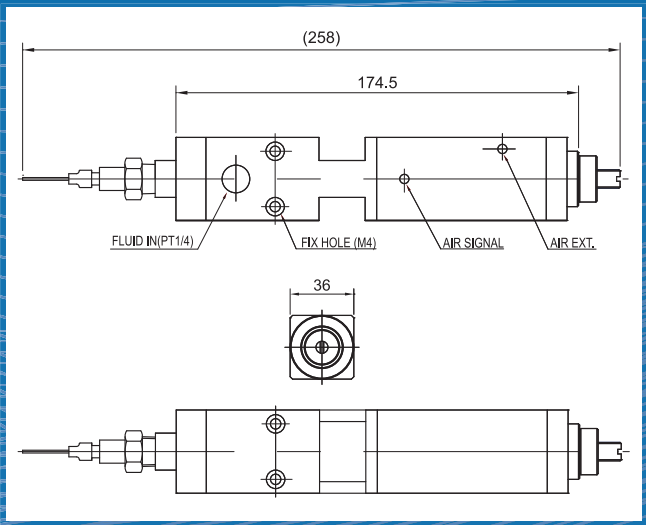
Adjustable for shot size

Suitable for very high viscosity fluids

Replaceable seals

Specifications

Operating air pressure:	60-71PSI (4.1-4.9 bar)
Fluid delivery pressure	
HP600S:	2,133PSI (147 bar)
HP600L:	1,565PSI (107.9 bar)
Minimum shot size:	
HP600S:	0.01cc
HP600L:	0.2cc
Valve type:	Needle
Driving part materials:	
Cylinder body, CAP:	AL hard anodized
Piston, Check body:	STS303
Wetted part materials:	
Chamber:	SUS303
CAP, CV Body:	AL (hard coated)
Seals:	Acetal Teflon
Connecting Ports:	
Operating air input:	M5xP0.8 , 4mm fitting ø6 OD Air hose
Material inlet:	1/4" NPT
Material outlet:	1/4" NPT Luer lock (male)
Weight:	950g

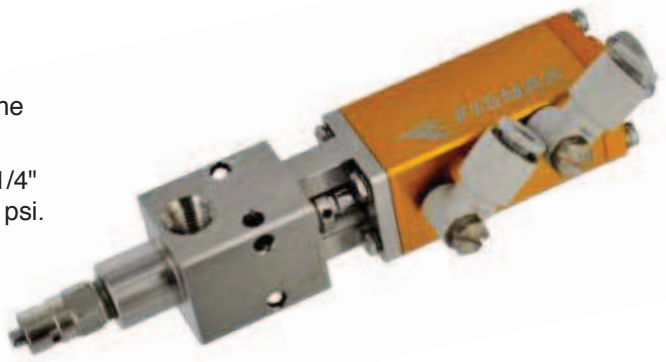


HPN200

High Pressure Needle Valve

HPN200 - Adjustable - High Pressure Needle Valve

The HPN200 is a high-pressure needle valve suitable for high viscosity materials at fluid pressures up to 1,700 psi. It also features a shot size stroke adjustment, which can easily fine tune the front closing needle for precise deposits.



3-Way & 4-Way Valve Operation

The valve is opened and closed by applying pressure to the ports. The valve may be operated with 56 psi.

Material is supplied to the stainless steel body through a 1/4" NPT female port. Fluid pressure may be as high as 1,700 psi.

Shot size and flow rate are controlled by the tip size, fluid pressure and the duration that the valve is open.

The model DSP501N is a suitable 3-way controller for the HPN200. For faster actuation, the 4-way VC1195N valve controller is recommended.

Model

HPN200	High-pressure front closing valve

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE

Features

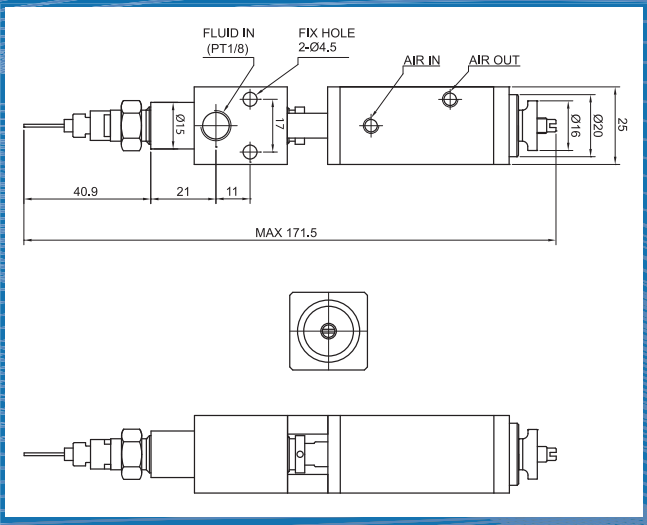
Stainless steel fluid body

High-pressure fluids up to 1,700 PSI

Stroke adjustment to fine tune shot size

Specifications

Operating air pressure:	60-71PSI (4.1-4.9 bar)
Fluid delivery pressure:	Max 120kgf/cm² (1,700 PSI)
Cycle rate:	120 cycles/min
Minimum shot size:	0.005cc
Maximum shot size:	0.15cc/cycle
Valve type:	Needle
Driving part materials:	
Cylinder body:	AL hard anodized
Cap:	AL hard anodized
Piston:	STS303
Check body:	STS303
Wetted part materials:	
Chamber:	SUS303
CAP, CV body:	AL (hard coated)
Seals:	Acetal Teflon
Connecting Ports:	
Operating air input:	M5xP0.8 , 4mm fitting ø6 OD Air hose
Material inlet:	Material inlet: 1/8" NPT
Material outlet:	1/8" NPT, Luer lock
Weight:	350g



800RV

Constant Bead Valve

800RV - High Pressure

The 800RV is a constant-bead, dispense valve. Designed to deliver a uniform bead dimension irrespective of any air pressure build-up at the opening of the valve and at the start of the bead. This neutralizing pressure feature ensures a perfect bead with a clean cut-off of the material at the end of the bead path.

Suitable for medium to high viscosity materials such as silicones, RTV, sealants and greases. The valve is available as model 800RV-LL with a Luer lock fluid outlet and as 800RV-N with ¼" NPT fluid outlet.

4-Way Valve Operation

The 800RV is a two-stage pressure isolation valve. Applying a minimum of 60 psi to the air inlet will cause the valve to open and dispense the material.

The valve is controlled by a 4-way valve controller - VC1195N, which will control the opening and closing of the valve.

Model

800RV-LL	High-pressure constant-bead valve Luer lock
800RV-N	High-pressure constant-bead valve ¼" NPT

Accessories

VC1195N	4-Way valve controller 110/220V CE

Features

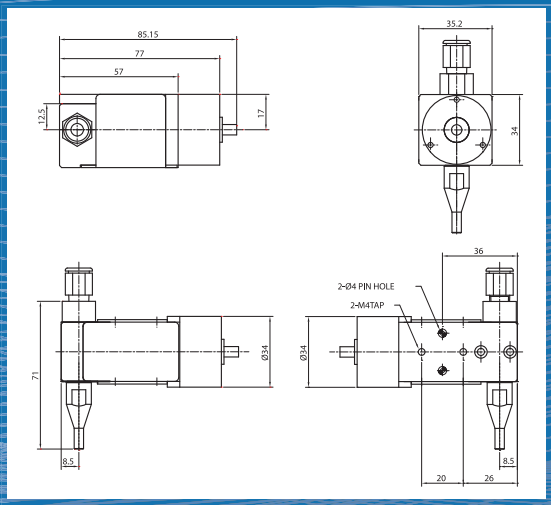
Suitable for high viscosity fluids

Constant uniform bead dispensing

Close tolerance

Specifications

Operating air pressure:	60-71 PSI (4.1-4.9 bar)
Fluid delivery pressure:	60kgf/cm² (853 PSI)
Valve type:	Rotary
Driving part materials:	
Cylinder body, CAP:	AL hard anodized
Material body:	STS303
Wetted part materials:	Packing -Teflon, Urethane
Connecting Ports:	
Operating air input:	M3xP0.8 - ø4 air hose
Exhaust air output:	M3xP0.8 - ø4 air hose
800RV-LL - Material inlet:	1/4" NPT
Material outlet:	Luer lock
800RV-N - Material inlet:	1/4" NPT
Material outlet:	1/4" NPT
Weight:	300g



700RV

High Pressure Constant Bead Valve

700RV - high volume - heavy duty

The 700RV is a high-pressure, constant-bead, dispense valve. Designed for heavy duty production environments. Will deliver a uniform bead dimension irrespective of any air pressure build-up at the opening of the valve and at the start of the bead. This neutralizing pressure feature ensures a perfect bead with a clean cut-off of the material at the end of the bead path.

Suitable for high viscosity materials such as silicones, RTV, sealants and greases.

4-Way Valve Operation

The 700RV is a two-stage pressure isolation high viscosity valve. Applying a minimum of 56 psi to the air inlet will cause the valve to open and dispense the material.

The valve is controlled by a 4-way valve controller - VC1195N, which will control the opening and closing of the valve.

Model

700RV	High-pressure constant-bead valve

Features

High-pressure fluid input up to 900 PSI

Suitable for very high viscosity fluids

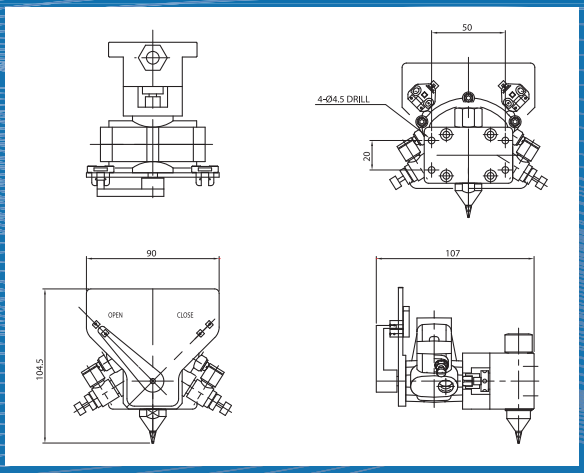
Close tolerance

Accessories

VC1195N	4-Way valve controller 110/220V CE

Specifications

Operating air pressure:	60-71 PSI (4.1-4.9 bar)
Fluid delivery pressure:	70kgf/cm² (995 PSI)
Valve type:	Rotary
Driving part materials:	
Cylinder body, CAP:	AL hard anodized
Material body:	STS303
Wetted part materials:	Packing -Teflon, Urethane
Connecting Ports:	
Operating air input:	PT 1/8" check valve - ø6 air hose
Exhaust air output:	PT 1/8" check valve - ø6 air hose
Material inlet:	¼" NPT
Material outlet:	¼" NPT
Weight:	1300g



MV-0180LF

Mini Valve

MV-0180LF - Adjustable Micro-shot mini valve

Designed for precision dispensing of all types of fluids in minute to moderate shot sizes. Its lightweight pencil-type grip makes the valve suitable for either hand-held or automatic applications. Shot sizes may be fine tuned by turning the adjustment knob at the top.

3-Way & 4-Way Valve Operation

The valve is opened and closed by applying pressure to the air input port. The valve may be operated between 60 and 90 psi.

Shot size and flow rate are controlled by the tip size, fluid pressure and the duration that the valve is open. Shot sizes may be fine tuned by turning the adjustment knob at the top of the valve.

The MV-0180-PLF contains a plastic fluid body for anaerobic materials.

The model DSP501N is a suitable controller but for faster actuation, the 4-way VC1195N valve controller can be used.

Model

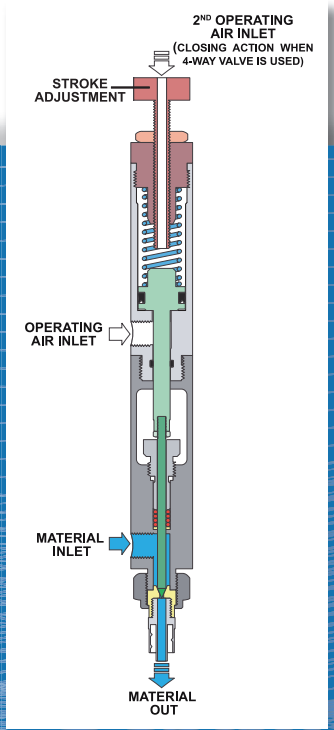
MV-0180LF	Valve, aluminum body
MV-0180SS	Valve, 303 stainless steel body
MV-0180-PLF	Valve, plastic fluid body (suitable for anaerobic fluids)

Accessories

DSP501N	3-way controller 110/220V CE
VC1195N	4-way controller 110/220V CE
561716	pistol grip for valve

Features

- Stainless and plastic fluid body options
- Stroke adjustment to fine-tune shot size
- Comfortable lightweight design
- Positive shut-off
- Microshot deposits



Specifications

Operating air pressure:	60-85 PSI (4.1-5.9 bar)
Material delivery pressure:	Max 120 psi
Minimum shot size:	Micro dots
Driving part materials:	
Body:	AL, SS, Plastic
Piston:	AL, SS, Plastic
Piston Seal:	Teflon
Wetted part materials:	AL, SS, Plastic
Connecting Ports:	
Operating air input:	1/8" NPT
Material inlet:	1/8" NPT
Material outlet:	1/4"-28 / Luer lock
Weight:	172.4g

VBP117

Volumetric Valve

VBP117 - Volatile Fluids - Adjustable

The VBP117 is designed for positive displacement dispensing and filling of volatile low viscosity fluids, such as battery electrolytes reagents and acids. The VBP117 is also suitable for lubrication applications. Operation is by a frictionless bellows. Teflon materials provide excellent resistance to chemical compositions.

An optional model VBP117-16 is available for heavier viscosity battery gel type fluids. An adjuster controls a volumetric range of between 1 and 7cc.

The model VC1195N is a suitable 4-way valve controller for the VBP117 double acting metering valve.

4-Way Valve Operation

The valve is cycled by applying air pressure to the air ports. Low fluid pressure is required for low to medium viscosity materials.

Shot sizes may be fine tuned by turning an adjustment control on the valve.

Model

VBP117	Volumetric bellows valve
VBP117-16	Volumetric bellows valve high viscosity

Accessories

VC1195N	4-way controller 110/220V CE

Features

Positive displacement metering

Integral inlet/outlet check valves

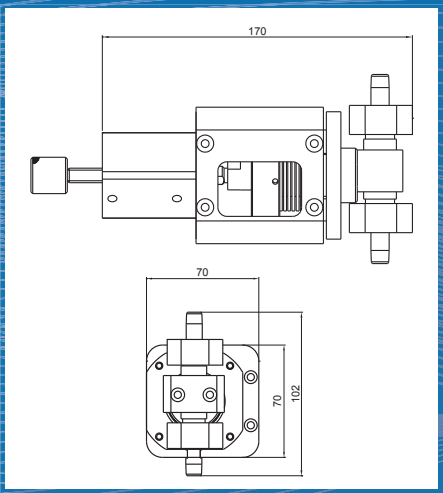
Stroke adjustment 1cc - 7cc

Ideal for volatile materials

Heavy duty performance

Specifications

Operating air pressure:	60-71 PSI (4.1-4.9 bar)
Material delivery pressure:	Frictionless bellows - gravity fed
Minimum shot size:	1.0cc
Maximum shot size:	7.0cc
Measuring type:	Precision cavity
Driving part materials:	
Cylinder Body, CAP:	AL hard anodized
Material body:	STS303, STS16 (special order)
Wetted part materials:	Packing - Teflon
Connecting Ports:	
Operating air input:	M5xP0.8 - ø4 air hose
Material inlet:	1/8" NPT
Material outlet:	1/8" NPT
Weight:	1430g



VDP150

Positive Displacement Valve

VDP150 - Volumetric Valve - Adjustable, 0.005 - 0.15cc

The VDP150 plunger pump is a pneumatically operated positive displacement valve designed for dispensing constant volume shots of low to medium viscosity materials within 1%. The VDP150 has two integral check valves to control the flow of material.

The model VC1195N is a suitable 4-way valve controller for the VDP150 double acting metering valve.

4-Way Valve Operation

The valve is cycled by applying air pressure to the air ports. For low viscosity materials (less than 5,000cps) no fluid pressure is required, as the material is drawn into the displacement chamber by the plunger. Low fluid pressure is required for medium viscosity materials of 5,000 - 20,000cps.

Shot sizes may be fine tuned by turning an adjustment control at the top of the valve.

Model

VDP150	Positive displacement valve

Accessories

VC1195N	4-way controller 110/220V CE

Features

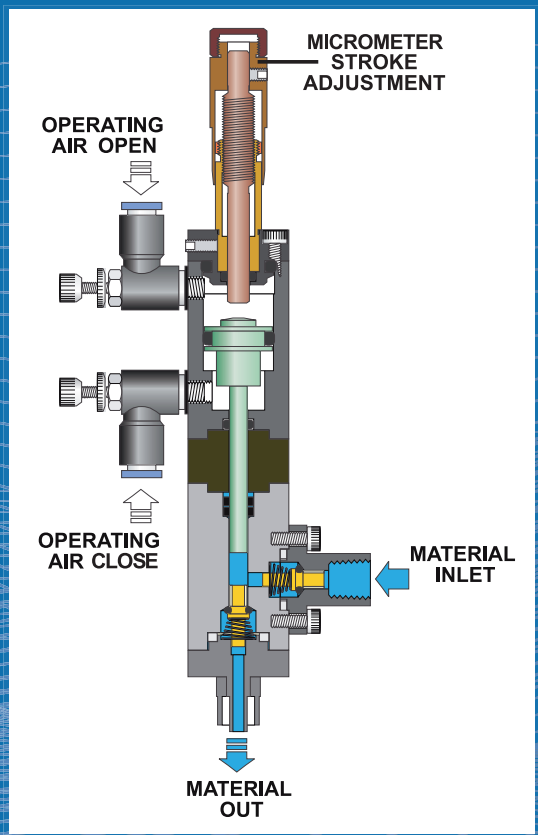
Positive displacement metering

Integral inlet/outlet check valves

Micrometer stroke adjustment to fine tune shot size

Specifications

Operating air pressure:	60-85 PSI (4.1-5.9 bar)
Delivery pressure:	
Spring wire diameter:	ø0.3mm - Max 0.3kgf/cm²
Spring wire diameter:	ø0.5mm - Max 1.2kgf/cm²
Cycle rate:	120 cycles/min (full stroke)
Minimum shot size:	0.005cc
Maximum shot size:	0.15cc/cycle
Measuring type:	Plunger
Driving part materials:	
Cylinder Body, CAP:	AL hard anodized (black)
Piston:	SUS303
Check body:	SUS303, RULON
Wetted part materials:	
Chamber, CAP, CV body:	SUS303
Plunger:	SUS420 (tin coating)
Check valve:	PEEK
O-Ring:	Purfluore
Connecting Ports:	
Operating air input:	M5xP0.8, 4mm O.D. hose
Material inlet:	1/8" NPT
Material outlet:	Luer lock
Weight:	320g



VDP100

Positive Displacement Valve

VDP100 - Volumetric Valve - Adjustable, 0.1 - 0.9cc

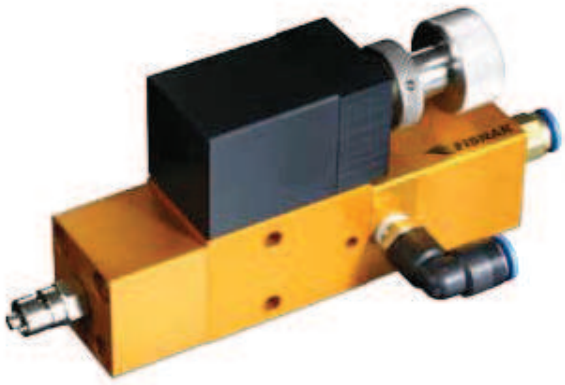
The VDP100 is an adjustable pneumatically operated positive displacement valve designed for dispensing constant volume shots of low to medium viscosity materials within 1%, such as oil and grease. The VDP100 valve has a range up to 0.9cc.

The model VC1195N is a suitable 4-way valve controller for the VDP100 double acting metering valve.

4-Way Valve Operation

The valve is cycled by applying air pressure to the air ports. Low fluid pressure is required for low to medium viscosity materials.

Shot sizes may be fine tuned by turning an adjustment control at the side of the valve.



Model

VDP100	Positive displacement valve

Features

Positive displacement metering

Integral inlet/outlet check valves

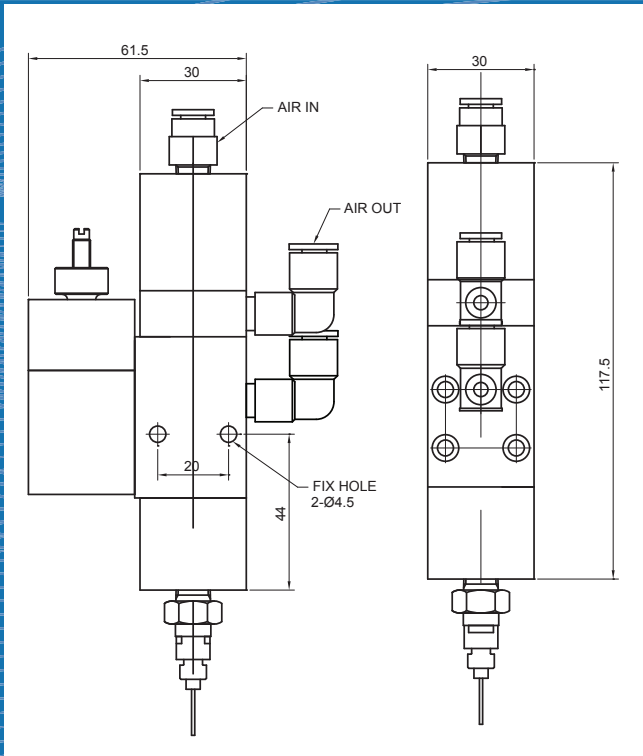
Stroke adjustment 0.1cc - 0.9cc

Accessories

VC1195N	4-way controller 110/220V CE

Specifications

Operating air pressure:	60-71 PSI (4.1-4.9 bar)
Material delivery pressure:	80 kgf/cm Max 1,138 PSI
Minimum shot size:	0.1cc
Maximum shot size:	0.9cc
Measuring type:	Precision cavity
Driving part materials:	
Cylinder Body:	AL hard anodized
Cap:	AL hard anodized
Wetted part materials:	Packing - O-ring (Viton), PS ring
Connecting Ports:	
Operating air input:	M5xP0.8 - ø6 air hose
Material inlet:	1/8" NPT
Material outlet:	1/8" NPT, Luer lock
Weight:	450g



VDP305

Positive Displacement Valve

VDP305 - High Pressure - Adjustable, 0.5 - 5cc

The VDP305 is an adjustable pneumatically operated positive displacement valve designed for dispensing constant volume shots of low to high viscosity materials within 1%, such as oil and grease. The VDP305 valve has a range from 0.5cc up to 5cc.

The model VC1195N is a suitable 4-way valve controller for the VDP305 double acting metering valve.

4-Way Valve Operation

The valve is cycled by applying air pressure to the air ports. Low fluid pressure is required for low to medium viscosity materials.

Shot sizes may be fine tuned by turning an adjustment control at the side of the valve.

Model

VDP305	Positive displacement valve

Accessories

VC1195N	4-way controller 110/220V CE

Features

Positive displacement metering

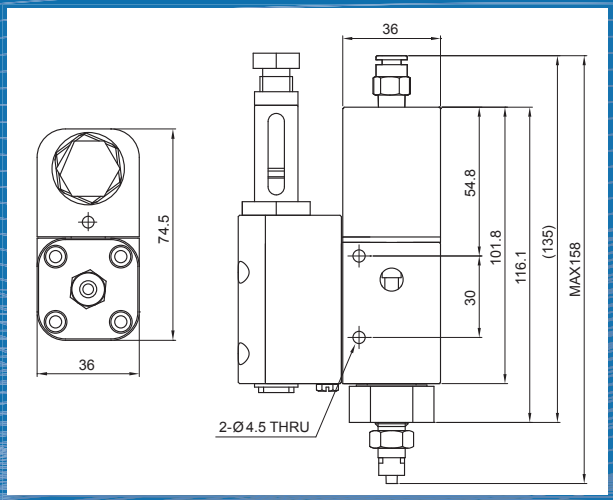
Integral inlet/outlet check valves

Stroke adjustment 0.5cc - 5cc

Ideal for high viscosity paste and grease

Specifications

Operating air pressure:	60-71 PSI (4.1-4.9 bar)
Material delivery pressure:	200 kgf/cm Max (2,845 PSI)
Minimum shot size:	0.5cc
Maximum shot size:	5cc
Measuring type:	Precision cavity
Driving part materials:	
Cylinder Body, CAP:	AL hard anodized
Check body:	SM45C
Wetted part materials:	Packing - Teflon, PS ring
Connecting Ports:	
Operating air input:	1/8" NPT - ø6 air hose
Material inlet:	1/8" NPT
Material outlet:	1/4" NPT, Luer lock
Weight:	1000g



RVC900N

Positive Displacement Screw Valve Controller

The RVC900N controls the PDV-1000 series of Archimedes screw valves and the model RV5000DPM disposable cartridge screw valve. The controller is programmable for timed shots from a minimum of 0.01 seconds. Motor speed output is maintained and kept constant, compensating for any change in material viscosity.

An adjustable forward and reverse time/speed delivers a clean cut from the dispensing cycle.

The RVC900N supplies material pressure to the barrel, adjusted via a regulator and pressure gauge. The digital timer can accept time intervals from 0.01 seconds – 99.99 seconds. A reverse timer and speed control sets the amount of controlled suck-back at the end of the dispense cycle.

The controller delivers accurate and repeatable dots and beads for any application, whether automated or manually operated.

Features

Simple to program
Eight stored programs
Auto or manual control
Constant motor speed
Adjustable forward and reverse speed
Adjustable forward and reverse time

Model

RVC900N Rotary Valve Controller 110/220V CE

Specifications

Size:	9.05” x 8.26” x 2.76” (235 x 210 x 70mm)
Time range:	0.01 – 99.99 seconds
Resolution:	0.001 seconds
Voltage:	100 - 240 VAC 50/60Hz
Storage:	8 programs
Remote operation:	External +24VDC
Communication:	I/O
Output pressure:	0 – 60 PSI 4 bar (regulated)
Manual operation:	Foot switch
Display:	128 x 64 pixels
Voltage:	85 - 264 VAC
Weight:	3.63lb (1.65Kg)

RV5000DPM

Positive Displacement Rotary Valve

RV5000DPM - Positive Displacement Rotary Valve - Filled Material

The RV5000DPM valve is designed for continuous operation where cleaning or refurbishment of a valve is not desirable. A disposable Delrin® auger screw is accessed through a hinged doorway and can be quickly replaced in seconds.

The RV5000DPM allows for easy maintenance and is suitable for abrasive materials and two-part fluids. Removing and replacing the auger maintains the valves accuracy and increases the life of the valve by providing less wear-and-tear on the motor. Three versions of the valve are available, 8, 16 and 32 pitch.

The model RV5000DPME is an encoder valve.

Operation

The RV5000DPM has zero dead space within the valve and can deliver accurate and repeatable dots and beads for any application, whether automated or manually operated.

The RV5000DPM is used in conjunction with the RVC900N controller.

The replaceable Archimedes auger screw is manufactured from Delrin®.

Model

RV5000DPM	Rotary valve, disposable material path
RV5000DPME	Rotary valve, disposable material path, encoder model

Replacement Cartridge Sets

Pk. of 10

Pitch	Disposable Cartridge Set	Rotating Luer Collar Set
8	DPM8-10	DPM8R-10
16	DPM16-10	DPM16R-10
32	DPM32-10	DPM32R-10

Features

- Solder paste dispensing
- Microshots 0.010" (0.254mm) 0.000015cc
- Abrasive (filled) materials
- Motor reverse capability
- No dead space - high repeatability
- Replaceable wetted feed path

Specifications

Size:	1.45" x 3.6" x 5.88" (37 x 91 x 149mm)
Minimum shot size:	0.020" (0.508mm)
Max fluid delivery pressure:	30psi (2.1bar)
Motor voltage:	24V
Motor:	6-watt, 400 RPM (no load)
Connecting Ports:	
Fluid inlet:	Female Luer Lock
Fluid outlet:	Male Luer Lock
Wetted part materials:	Delrin®, Nylon, Viton®
Viscosity:	30,000 - 1,300,000cps
Mounting:	1" (25.4mm) body channel or valve bracket
Weight:	0.75lbs (240g)

PDV-1000

Positive Displacement Rotary Valve

PDV-1000 - Positive Displacement Rotary Valve - Filled Material

The PDV-1000 series of precision auger valves is suitable for all medium- to high-viscosity pastes, epoxies, solder pastes and other filled materials. Capable of dispensing a minimum shot size of 0.020" (0.508mm), the PDV-1000 uses an auger servo-motor-driven screw.

Operation

The PDV-1000 has zero dead space within the valve and can deliver accurate and repeatable dots and beads for any application, whether automated or manually operated.

The PDV-1000 is used in conjunction with the RVC900N controller.

The auger screw is manufactured from hardened stainless steel.

Specifications

Motor voltage:	24V
Motor:	6-watt, 400 RPM (no load)
Auger material:	Stainless steel
Minimum material viscosity:	35,000cps
Minimum shot size (filled materials):	0.020" (0.508mm)
Gear box ratio:	16:2
Weight:	9 oz. (255gm)

Features

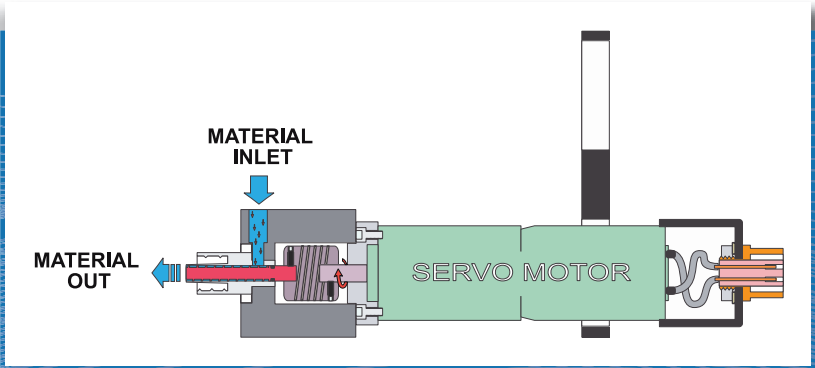
Solder paste dispensing

Microshots 0.020" (0.508mm) 0.00003cc

Abrasive materials

Flexible coupling from motor to screw

No dead space – high repeatability



Models

Model numbers define the pitch of the screw and the barrel (syringe) size connected to the valve.

Pitch	3cc barrel	5cc barrel	10cc barrel	30cc barrel
8 pitch	PDV-1000-0308	PDV-1000-0508	PDV-1000-1008-LF	PDV-1000-3008-LF
16 pitch	PDV-1000-0316	PDV-1000-0516	PDV-1000-1016-LF	PDV-1000-3016-LF
32 pitch	PDV-1000-0332	PDV-1000-0532	PDV-1000-1032	PDV-1000-3032-LF

SV2000N & SV1000SS

Adjustable No-clog Spray Valves

Fisnar spray valves provide close tolerance spray dispensing of fluids up to 1000 cps, including urethanes, flux and paints. The material is fed from a pressure reservoir. Each valve is actuated by air pressure sequenced by a controller. The operating air pressure opens a needle valve allowing material to flow; a separate air line creates pressure in the air cap, atomizing the fluid.

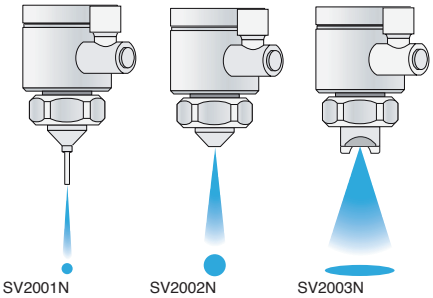
SV2000N

Specifications

Weight:	8.8 oz (250gm)
Operating air pressure:	60 - 80 psi (4.1 - 5.5 bar)
Atomizing air pressure:	1 - 30 psi (0.1 - 2 bar)
Fluid viscosity range:	up to 1000 cps
Fluid pressure:	1 - 100 psi (0.1 - 7 bar) - depending on material viscosity
Spray angle at 40mm:	SV2001N - 20º, SV2002N - 30º, SV2003N - 37º
Spray pattern:	circular (conical spray)

Sample spray path character

SV2001N:	min. bead: 3mm, overspray: 0.5mm, z distance-off: 3mm, speed: 50mm/sec
SV2002N:	min. bead: 12mm, overspray: 5mm, z distance-off: 10mm, speed: 50mm/sec
SV2003N:	min. bead: 18mm, overspray: 10mm, z distance-off: 20mm, speed: 50mm/sec
Flow rate:	up to 2.4 l /min
Operating frequency:	over 200 cycles/min
Operating air inlet:	M5 * P0.8 thread with push-in fitting for ø4 urethane hose (included)
Atomizing air inlet:	M5 * P0.8 thread with push-in fitting for ø4 urethane hose (included)
Material inlet:	1/8 NPT



Model

SV2001N	Spray valve fine dot & bead
SV2002N	Spray valve medium pattern
SV2003N	Spray valve fan pattern

SV1000SS

Specifications

Weight:	10.25 oz (290 gm)
Operating air pressure:	70 - 100 psi (4.8 - 6.9 bar)
Atomizing air pressure:	1 - 30 psi (0.1 - 2.1 bar)
Fluid viscosity range:	up to 1000 cps
Fluid pressure:	1 - 100 psi (0.1 - 7 bar) *material dependant*
Nozzle diameter:	0.028" (0.71 mm)
Flow rate:	up to 28 cc/sec
Operating frequency:	over 200 cycles/min
Spray angle:	12º
Spray pattern:	circular (conical spray)
Operating air inlet:	10-32 thread with push-in fitting for 1/4 tube
Atomizing air inlet:	10-32 thread with push-in fitting for 1/4 tube
Material inlet:	1/8 NPT with compression fitting for 1/4 tube

Operation

The valves are adjustable by turning the stroke-adjust control at the rear of the valve; this will tune the spray pattern.

Coating and flow rate are controlled by the fluid pressure, needle stroke, distance from the valve to the work and the duration the valve is open.

Model

SV1000SS	Spray valve fine dot & bead

Accessories

SVC100-110	Spray valve controller 110V
SVC100-220	Spray valve controller 220V

SVC100

Spray Valve Controller

SVC100 - Spray Valve Controller

The SVC100 is a programmable spray valve controller providing the adjustment controls necessary for a clean spray application. By controlling the relationship (time) between the fluid start signal and the atomizing signal, it is possible to open each independently.

This feature is critical in ensuring that the fluid air line pressure starts momentarily after the atomizing pressure opens and that the atomizing pressure stays on momentarily after the fluid cuts off. This ensures adequate cleaning of the nozzle after the full spray cycle.

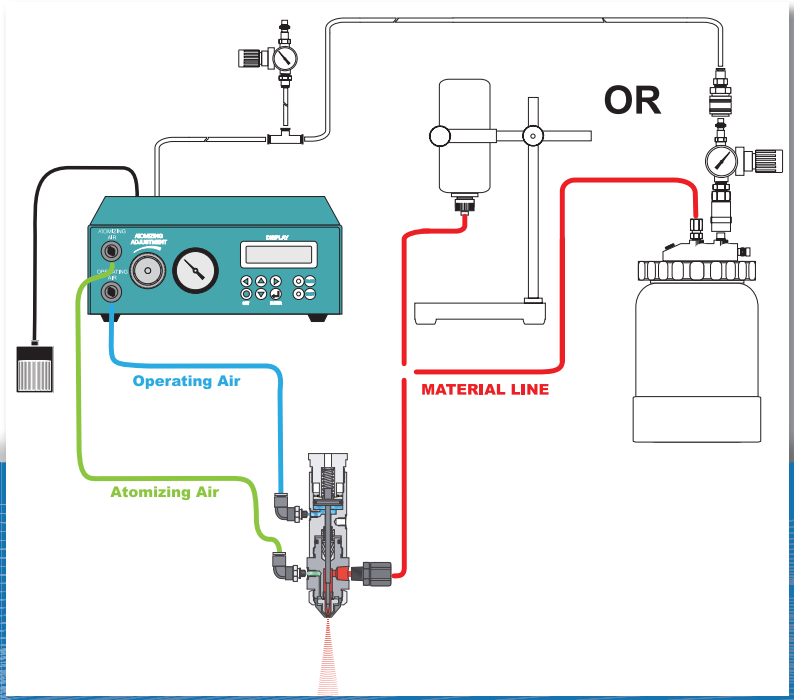
The SVC100 is suitable for all SV series spray valves.

Model

SVC100-110	Spray valve controller 110V
SVC100-220	Spray valve controller 220V CE

Valves

SV1000SS	Spray valve stainless steel
SV2001N	Spray valve fine bead
SV2002N	Spray valve medium bead
SV2003N	Spray valve broad bead



Specifications

Size:	9.05" x 7.32" x 3.54" (22.99 x 18.6 x 8.99 cm)
Power input:	
SVC100-110:	AC 110V 50/60Hz
SVC100-220:	AC 220V 50/60Hz
Dispensing time:	0.001 sec. - 99.99 sec.
Dispensing selection:	LCD digital display
Weight:	6 lbs (2.73 kg)

Pail & Can Dispensing

Introduction to *fluidsure*™ Electric Pumps

Bulk unloading and transfer of medium to high viscosity fluid, such as paste, silicone and grease from a pre-filled can or pail is straightforward using the new quiet electric motor fluidsure™ pump systems. Pump packages are also available in tandem construction for continuous production (5 gallon and cartridges only).

Simply remove the top of the can and place under the extruder pump. Lower the extruder and follower-plate into the can. Set the air pressure input and upon command the material beneath the follower-plate will be dispensed with minimum waste.

When dispensing manually the fluid is extruder-fed to a high-pressure valve seated within a pistol grip. For improved process control we recommend the model VC1195N controller activated by a trigger switch in the pistol grip. For automatic production the valve is mounted on a Fisnar or similar robot for form-in-place or potting applications.

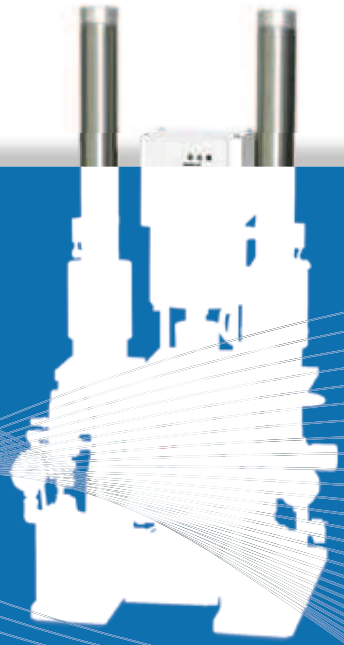
Features

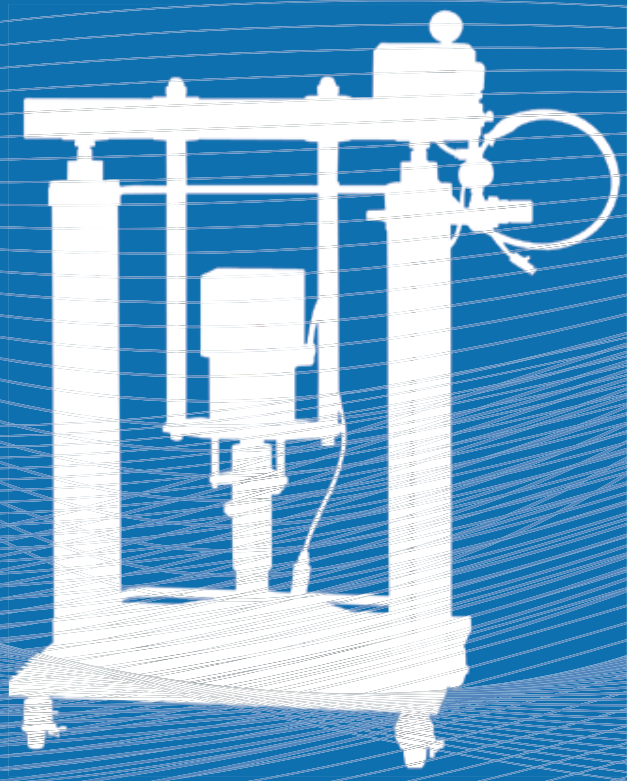
Quiet operation

Eliminates waste and avoids material contamination

No need to hand transfer material

Avoids air entrapment





Fluidsure™ electric pump packages include follower-plates and air-rams to assist the flow of material into the pump Inlet.

Electric motor extruder systems are compact and quiet in operation, delivering pump pressure ratios up to 26:1 dependant upon the model.

DA35 Autocan Extruder

Pump system for 1 gallon & 1 quart cans

Model DA35 electric motor - extruder pump system

The DA35 extrudes medium to high viscosity material, such as paste, silicone and grease under pressure directly from a pre-filled can. Suitable for automatic and semi-automatic controlled dispensing applications, which require a constant supply of air-free material. By using the DA35, air bubbles and material voids that are caused by handling or decanting viscose material are prevented.

The can is prepared by cutting off its top, the extruder pump body is lifted and the can placed in position. The extruder pump body is fitted with a follower-plate that seals and follows the material as the level drops to wipe the sides of the can clean limiting waste. The fluid is pressure fed by reinforced hoses to a valve, which is either mounted to a robot or operator held with a gun handle. The valve is actuated by a valve controller.

Features

Material delivered air-free

Wipe-clean action

Air rams to assist pumping of materials

Follower-plate change for 1kg (1qt) and 3kg (1gallon) cans

Adjustable air ram pressure

Low noise electric extruder motor

Simple load mechanism also provides easy cleaning

Teflon, Viton and PEEK seals for wetted parts

Avoids waste

No need to transfer material

Easy hook up for automatic systems

Specifications

Size base:	8.46" x 17.32" (215 x 440mm)
Height adjustment:	21.65"min - 28.35"max (550min - 720mm max)
Weight:	28 lbs (12.73 kg)
Power Input for pump sensing:	110-220V 50-60Hz
Air input pressure:	243-700 kPa, 2.4-7.0 bar (35-100 psi)
Maximum output pressure:	6.0 Mpa, 60 bar (850 psi)
Fluid viscosity range:	30,000 - 300,000 cps
Ratio:	8.5:1
Volume per stroke: *(dispenses on downstroke only)*	5.0cc (0.17 oz.)
Recommended pump speed for continuous operation:	40cpm
Maximum recommended pump speed:	60cpm
Stroke length:	3/4" (19mm)
Max. operating temperature:	50ºC
Air inlet size:	1/4 npt (f)
Fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level, 100 psi:	64.12 dB (A) @ 40cpm
Sound power level, 100 psi:	70.84 dB (A) @ 40cpm

Model

DA35	autocan pump - 8.5:1 110/220V
DA35-1kg	follower-plate for 1kg (1qt) can
DA35-3kg	follower-plate for 3kg (1gallon) can

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
562037	braided hose 8' (2.44 meter) I.D. 8mm
560566B	braided hose 6ft (1.83 meters)
560601	gun handle (pistol grip)
560599	trigger switch assembly
560565	gun handle (pistol grip) w/switch

EP1300N Can Extruder System

Pump for 1kg (1qt) & 3kg (1gal) cans

fluidsure™

Model - EP1300N - Air ram assisted pump system

The EP1300N series include machine variations to suit a range of can & pail sizes together with differing material characteristics, such as paste, silicone or grease. Systems are designed for quiet operation when handling medium to high viscosity fluids.

A low-pulse pump design that when used in conjunction with a fluid regulator, makes the system suitable for automatic production dispensing applications. These applications require a constant supply of air-free material. Air bubbles and material voids, caused by handling or decanting high viscosity fluids, are prevented.

The extruder pump body is fitted with a follower-plate that seals and follows the material as the level drops to wipe the sides of the can clean limiting waste. The fluid is pressure fed by reinforced hoses to a valve, which is either mounted to a robot or operator held with a gun handle. The valve is actuated by a valve controller.

The EP1301N is designed for a 1kg (1qt) can of medium to high viscosity fluid. The EP1303N is configured for a 3kg (1 gallon) can of similar viscosity. Both systems are rated at 15:1 and provide a maximum of 996psi regulated material pressure.

Features

Material delivered air-free

Wipe-clean action

Air-rams to assist pumping of materials

Follower-plate change for: 1kg (1qt), 3kg (1gallon)

Adjustable ram pressure

Electrical extruder motor

Simple load mechanism also provides easy cleaning

Teflon wetted parts

Avoids waste

No need to hand transfer material

Easy hook up for automatic systems

Specifications

Size base WxDxH:	10.04" x 9.64" x 26.73" (255mm x 245mm x 679mm)
Height adjustment:	17.68" min x 26.73" max (449mm min - 679mm max)
Weight:	18.7 lbs (8.5kg)
Power input for pump sensing:	220V 50-60Hz - 20Watts
Air input pressure:	30 -100psi
Maximum output pressure:	Max 996psi - 68.6 bar
Ratio:	15:1
Fluid viscosity range:	10,000 - 600,000 cps
Min. volume per stroke:	0.01cc/shot
Air consumption:	80 l/min
Can size (EP1301N):	1kg - I.D110mm - height 170mm
Can size (EP1303N):	1gal. - I.D140mm - height 200mm
Air inlet / fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level, 100 psi:	64.12 dB (A) @ 40cpm
Sound power level, 100 psi:	70.84 dB (A) @ 40cpm

Model

EP1301N	pump electric 1kg (1qt) can - 15:1 220V
EP1301WP*	follower-plate for 1kg (1qt) can
EP1303N	pump electric 3kg - 1 gallon - 15:1 220V
EP1303WP**	follower-plate for 3kg - 1 gallon can

* Included with EP1301N
** Included with EP1303N

Option

EP1300LPS	low level sensor
651780-B1A-B	fluid regulator 3000 psi max carbon steel
651780-A3A-B	fluid regulator 3000 psi stainless steel
EP1415K	fluid regulator install kit includes pressure gauge & fittings

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
560565	gun handle (pistol grip) w/switch

See Page 57, for high pressure hoses & fittings

EP1305N Pail Extruder

Medium pressure pump for 5 gallon pails

EP1305N electric motor - air-ram assisted 5 gallon pail extruder pump

A low-pulse pump design that when used in conjunction with a fluid regulator, makes the system suitable for automatic production dispensing applications. These applications require a constant supply of air-free material. Air bubbles and material voids, caused by handling or decanting high viscosity fluids, are prevented.

The extruder pump body is fitted with a follower-plate that seals and follows the material as the level drops to wipe the sides of the pail clean limiting waste. The fluid is pressure fed by reinforced hoses to a valve, which is either mounted to a robot or operator held with a gun handle. The valve is actuated by a valve controller.

The EP1305N is designed for a 5 gallon pail of medium to high viscosity fluid. Ideal for silicones and grease. Systems are rated at 15:1 and provide a maximum of 996 psi regulated material pressure.

Features

Material delivered air-free

Wipe-clean action

Air-rams to assist pumping of materials

Follower-plate 20kg (5 gallons)

Adjustable air-ram pressure

Electrical extruder motor

Simple load mechanism also provides easy cleaning

Teflon wetted parts

Avoids waste

No need to transfer material

Easy hook up for automatic systems

Specifications

Size base WxDxH:	19.68" x 15.74" x 47.24" (500mm x 400mm x 1200mm)
Height adjustment:	29.72" min x 47.24" max, (755mm min - 1200mm max)
Weight:	52.8 lbs (24kg)
Power input for pump sensing:	220V 50-60Hz - 20Watts
Air input pressure:	30 -100psi
Maximum output pressure:	Max 996psi - 68.6 bar
Ratio:	15:1
Fluid viscosity range:	10,000 - 600,000 cps
Min. volume per stroke:	0.01cc/shot
Air consumption:	80 ℓ/min
Max. operating temperature:	50ºC
Can size:	20kg (5gal.) - can I.D. 280mm height 360mm
Air inlet size:	1/4 npt (f)
Fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level @ 100 psi:	64.12 dB (A) @ 40cpm
Sound power level @ 100 psi:	70.84 dB (A) @ 40cpm

Model

EP1305N	pump electric 20kg (5gal.) - 15:1 220V
EP1305WP*	follower-plate for 20kg (5gal.) pail

* Included with EP1305N

Option

EP1300LPS	low level sensor
651780-B1A-B	fluid regulator 3000 psi max carbon steel
651780-A3A-B	fluid regulator 3000 psi stainless steel
EP1415K	fluid regulator install kit includes pressure gauge & fittings

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
560565	gun handle (pistol grip) w/switch

See Page 57, for high pressure hoses & fittings

EP1306N Can Extruder System

High pressure pump for 5 gallon pails

EP1306N electric motor - high pressure automatic air-ram assisted 5 gallon pail extrusion system gallon pail extrusion system

A high-ratio, high-pressure 5 gallon system, suitable for most pastes, silicones and grease type fluids. The system integrates a low-pulse pump design that when used in conjunction with a fluid regulator allows the system to be used in robotic controlled dispensing applications.

The extruder pump body is fitted with a follower-plate that seals and follows the material as the level drops to wipe the sides of the pail clean limiting waste. The fluid is pressure-fed by reinforced hoses to a valve, which is either mounted to a robot or operator held with a gun handle. The valve is actuated by a valve controller.

The EP1306N is designed for a 5 gallon pail of high viscosity fluid.

Features

Material delivered air-free

Wipe-clean action

Air-rams to assist pumping of materials

Follower-plate 20kg (5 gallons)

High-pressure regulation

Adjustable ram pressure

Electrical extruder motor

Simple load mechanism also provides easy cleaning

Teflon wetted parts

Avoids waste

No need to hand transfer material

Easy hook up for automatic systems

Specifications

Size base WxDxH:	19.68" x 15.74" x 62.20" (500mm x 400mm x 1580mm)
Height adjustment:	40.94" min x 62.20" max (1040mm min - 1580mm max)
Weight:	88 lbs (40kg)
Power input for pump sensing:	220V 50-60Hz - 20Watts
Air input pressure:	30 -100psi
Maximum output pressure:	Max 2,133psi - 147 bar
Ratio:	26:1
Fluid viscosity range:	High viscosity
Min. volume per stroke:	0.01cc/shot
Air consumption:	80 ℓ/min
Pail size:	5 gallon 20kg - can I.D. 280mm height 360mm
Air inlet size:	1/4 npt (f)
Fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level, 100 psi:	64.12 dB (A) @ 40cpm
Sound power level, 100 psi:	70.84 dB (A) @ 40cpm

Model

EP1306N	pump electric 20kg (5gal) - 26:1 220V
EP1306WP*	follower-plate for 20kg (5gal) can

* Included with EP1306N

Option

EP1300LPS	low level sensor
651780-B1A-B	fluid regulator 3000 psi max carbon steel
651780-A3A-B	fluid regulator 3000 psi stainless steel
EP1415K	fluid regulator install kit includes pressure gauge & fittings

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
560565	gun handle (pistol grip) w/switch

See Page 57, for high pressure hoses & fittings

EP1310C Cartridge Pump

1/10 gal. - 310ml. cartridge pump

Model EP1310C electric motor - single cartridge pump extrusion system

A powerful medium ratio system for controlled fluid transfer from 1/10 gallon (310ml) plastic cartridges. Suitable for silicone type fluids. The system integrates a low-pulse pump design that can be used with a manual hand valve or connected to an automatic production robot for controlled dispensing applications.

The EP1310C is designed to easily transfer material for controlled dispensing via a high pressure valve. The suitable viscosity range is 5,000cps - 600,000cps. Rated at 15:1 the system provides a maximum of 996 psi regulated material pressure. The cartridge is contained with a metal jacketed cylinder.

Features

Material delivered air-free

Wipe-clean action

High-pressure regulation

Pressure piston assist

Adjustable piston pressure

Adjustable air ram pressure

Electric extruder motor

Simple load mechanism also provides easy cleaning

Teflon wetted parts

Avoids waste

No need to transfer material

Easy hook up for automatic systems

Specifications

Size base WxDxH:	8.86" x 6.69" x 25.55" (225mm x 170mm x 649mm)
Weight:	33 lbs (15 kg)
Power input for pump sensing:	220V 50-60Hz - 20Watts
Air input pressure:	30 -100psi
Maximum output pressure:	995psi - 68.6 bar
Ratio:	15:1
Fluid viscosity range:	10,000 - 600,000 cps
Min. volume per stroke:	0.01cc/shot
Air consumption:	80 ℓ/min
Max. operating temperature:	50ºC
Cartridge size:	1/10th gallon - 300ml - 340ml
Air inlet size:	1/4 npt (f)
Fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level, 100 psi:	64.12 dB (A) @ 40cpm
Sound power level, 100 psi:	70.84 dB (A) @ 40cpm

Model

EP1310C	Cartridge pump - 15:1 220V

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
560565	gun handle (pistol grip) w/switch

See Page 57, for high pressure hoses & fittings

EP1320C Dual Cartridge Pump

1/10 gal. - 310ml. double cartridge pump

fluidsure™

EP1320C electric motor - double cartridge pump extrusion system

A powerful medium-ratio system for controlled fluid transfer from 1/10 gallon (310ml) plastic cartridges. Suitable for silicone type fluids. The system integrates a dual (A + B) tandem cartridge arrangement for continuous-flow management. A low-pulse pump design allows automatic control of dispensing applications.

The EP1320C tandem cartridge pump is designed to easily transfer material for controlled dispensing via a high pressure valve. The suitable viscosity range is 10,000cps - 600,000cps. Rated at 15:1 the system provides a maximum of 995 psi regulated material pressure. The A & B cartridge management automatically switches from either A to B or B to A when the cartridge is exhausted. Cartridges are contained in metal jacketed cylinders.

Features

Material delivered air-free

Wipe-clean action

High-pressure regulation

Pressure piston assist

Adjustable piston pressure

Electrical extruder motor

Simple load mechanism also provides easy cleaning

Teflon wetted parts

Avoids waste

No need to transfer material

Easy hook up for automatic systems

Specifications

Size base WxDxH:	10.71" x 11.34" x 25.55" (272mm x 288mm x 649mm)
Weight:	39.6 lbs (18kg)
Power input for pump sensing:	220V 50-60Hz - 20Watts
Air input pressure:	30 -100psi
Maximum output pressure:	995psi - 68.6 bar
Ratio:	15:1
Fluid viscosity range:	10,000 - 600,000 cps
Min. volume per stroke:	0.01cc/shot
Air consumption:	80 l/min
Max. operating temperature:	50°C
Cartridge size:	1/10th gallon - 300ml - 340ml
Air inlet size:	1/4 npt (f)
Fluid outlet size:	1/4 npt (f)
Wetted parts:	304 and 17-4 pH Stainless Steel, Teflon, Viton, PEEK
Sound pressure level @ 100 psi:	64.12 dB (A) @ 40cpm
Sound power level @ 100 psi:	70.84 dB (A) @ 40cpm

Model

EP1320C	Cartridge dual pump - 15:1 220V

Accessories

VC1195N	valve controller 4-way 110V - 220V
790HP-LF	high pressure valve with suck-back
790HPSS-LF	high pressure valve SS with suck-back
560565	gun handle (pistol grip) w/switch

See Page 57, for high pressure hoses & fittings

High Pressure Fuid Hoses

Features

PTFE Teflon® (Dupont T-62) Moisture Lock

Non-absorbent - will not impart taste or odor

Non-contaminating - easy to clean

High/Low pressure rated - no deterioration over time

Smooth liner - no entrapment issues

Prevents build-up of deposits

Chemically resistant - handles a variety of fluids

Low friction

Specifications

Construction:	Moisture lock DuPont t-62 smooth bore Teflon lined (0.040 wall thickness)
Outer wall:	Stainless steel braided assembly
Working pressure:	0.25” 3,500 lbs, 0.375” 2,500 lbs, 0.50” 2,000 lbs
Burst pressure:	0.25” 12,800 lbs, 0.375” 10,000 lbs, 0.50” 8,000 lbs
Fittings:	Easy-fit hose assembly - straight female with male NPT fitting both ends
Temperature:	-100°F (-73°C) to 500°F (260°C)

Approvals

USP Class VI

FDA 21CFR177.1550

USDA

3A SANITARY STANDARDS

Kit includes hose & male NPT fittings

Kit Part Number	Burst Pressure	Hose Length	Hose I.D.	NPT Fittings
H63814M	10,000 lbs	6ft (182.88cm)	0.375” (9.52mm)	1/4” NPT Male Both Ends
H63838M	10,000 lbs	6ft (182.88cm)	0.375” (9.52mm)	3/8” NPT Male Both Ends
H83814M	10,000 lbs	8ft (243.84cm)	0.375” (9.52mm)	1/4” NPT Male Both Ends
H83838M	10,000 lbs	8ft (243.84cm)	0.375” (9.52mm)	3/8” NPT Male Both Ends
H103838M	10,000 lbs	10ft (304.80cm)	0.375” (9.52mm)	3/8” NPT Male Both Ends
H153838M	8,000 lbs	15ft (457.20cm)	0.375” (9.52mm)	3/8” NPT Male Both Ends

Pump, Regulator & Valve Fittings

Part Number	Type	Male (to pump)	Female (to hose)	Material
AP1214N	Bushing	1/2" NPTM	1/4" NPTF	Brass
AP1014N	Bushing	1" NPTM	1/4" NPTF	Brass
AP1238N	Bushing	1/2" NPTM	3/8" NPTF	Brass
AP1038N	Bushing	1" NPTM	3/8" NPTF	Brass
AP1012N	Bushing	1" NPTM	1/2" NPTF	Brass
AP11438N	Bushing	1 1/4" NPTM	3/8" NPTF	Stainless Steel
AP11412N	Bushing	1 1/4" NPTM	1/2" NPTF	Stainless Steel
AP3814N	Bushing	3/8" NPTM (To Reg)	1/4" NPTF	Brass
AP4266N	Straight Swivel	3/8" NPTM (To Reg.)	3/8" NPTF	Stainless Steel
AP636086-B	Z 360° Swivel	1/4" NPTM (To Valve)	1/4" NPTF (To Valve)	Stainless Steel
AP75364	Straight Swivel	1/4" NPTM (To Valve)	1/4" NPTF (To Valve)	Stainless Steel
AP4246N	Straight Swivel	1/4" NPTM (To Valve)	3/8" NPTF (To Valve)	Stainless Steel