

# Series 450RC Autovalve

## Recirculating Valve



Part #	Description
7702217	Alum. Recirc Valve, Single Air Cylinder w/Snuff Back, GT Seals

### Ordering Guide

- Valve, manifold, and handle are ordered individually
- Optional swivel base available
- For high back pressure conditions (i.e. over 1,000 psi/69 bar) order a double air cylinder
- Seal Designations: T=PTFE, P=Polyurethane, V=Viton, G=Polytuff

The 450RC valve allows continuous flow of material while still being able to control shut-off at the mixer. Typical uses are for heated materials or materials with fillers that need to remain suspended. Gear pump applications can also benefit from the recirculating valve because pumps can be kept running while material is shut off at the mixer.

Recirculation occurring at the valve instead of the pump eliminates pressure buildup in the lines, preventing off-ratio dispensing. The valve also incorporates a snuff-back feature that minimizes or eliminates the possibility of material dripping or stringing when the valve shuts off.

### Features

- Dispenses two-component adhesives and sealants
- Dispenses low- to high-viscosity urethanes, epoxies and silicones
- Adjustable snuff-back prevents dripping
- Can be mounted for beads or timed shots; optional handle is available for handheld applications
- Provides an ON-OFF function. The metering of the adhesives in the proper ratio of A:B is controlled by the metering pumps.
- Flow rates of 2-3 gallons/minute, depending on pump and material viscosity
- Materials remain separate until they enter the mixer
- Available in aluminum or stainless steel configurations
- Manual, robotic or stationary operation

### Specifications

- **Valve**
  - Size:** 5.2" x 2.5" x 2.3" (132 mm x 63.5 mm x 58.4 mm)
  - Body Material:** 6061-T6 Aluminum or 303 Stainless Steel
  - O-ring Options\*:** Viton®, PTFE, Ethylene-Propylene (E-P)
  - Lip Seal Options\*:** Viton, Polyurethane (PU), PTFE, Polytuff, Ethylene-Propylene (E-P)

\*Repair kits containing a complete set of lip seals and O-rings are available.
- **Manifold**
  - Size:** 1.9" x 2.5" x 1.5" (48.3 mm x 63.5 mm x 38.1 mm)
  - Material:** 6061-T6 Aluminum or 303 Stainless Steel
  - Options:** 1:1 Ratio (with or without solvent port )  
Wide Ratio (with or without solvent port)
  - Outlet Thread Size Options:** 7/8"-14 (for standard bell mixers);  
1 5/16"-12 (for oversized bell mixers)
- **Weight**
  - Aluminum Valve and Manifold:** 2.0 lb (0.9 kg)
  - Stainless Steel Valve and Manifold:** 3.4 lb (1.5 kg)
- **Operating Parameters**
  - Min. Operating Pressure:** 80 psi (5.5 bar)
  - Max. Fluid Pressure:** 3500 psi (240 bar)
  - Electric Handle Mount Switch:** 24V



more info



## Manifolds

Part #	Components	Ratio	Flow Rate
7702221	Aluminum Manifold	1:1	Low Flow
7702222	Aluminum Manifold with Air/Solvent Flush Valve	1:1	Low Flow
7702224	Aluminum Manifold	Wide	Low Flow
7702451	Stainless Steel Manifold	1:1	Low Flow

## Fluid Inlet Adapter

Elbow adapter is available to connect the material lines to the valve.

### Carbon Steel Pipe Adapters

Part #	Description
7702407	90° Elbow w/1/4" FNPS
7702414	90° Elbow w/1/4" MNPT
7702419	Straight Adapter w/1/4" MNPT
7702420	90° Elbow w/3/8" FNPS
7702425	Straight Adapter w/3/8" FNPS
7702428	Straight Adapter w/3/8" MNPT

### Swivel Check Valve Adapters

Part #	Description
7702407	SS w/Alum. Collar, 1/4" FNPT
7702409	All SS, 1/4" FNPT

## Repair Kit

Part #	Description
7704012	2K Kit V 450RC Repair GT

## Night Cap & Ratio Check Cap

Part #	Description
7701181*	Night Cap w/Retaining Nut
7701184*	Ratio Check Cap w/Retaining Nut

\*These items are used in conjunction with the 1:1 ratio manifolds

## Handles & Base

Part #	Description
7701971	Pistol Grip Handle w/Electric Momentary Switch (24V)
7701973	Pistol Grip Handle w/Electric Push On/Off Switch (24V)
7701977	Pistol Grip Handle w/Pneumatic Switch

## Handles/Mounts

Nordson EFD offers electric or pneumatic handles for actuating the air cylinder of the valve. If using an electric handle, a solenoid from an outside vendor is required.

## Static Mixers

Mixer selection is critical when it comes to curing two-component adhesives and sealants. EFD offers a wide range of static mixers with different diameters, lengths, geometries, and orifices to meet many different applications.

## Retaining Nuts and Jackets

Retaining nuts and jackets are available for all mixers. Nordson EFD recommends using a jacket when the working pressure inside the mixer is greater than 150 psi (10 bar).

## Hose Adapters

Elbow adapters are available to connect the material lines to the valve.



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to [www.nordsonefd.com](http://www.nordsonefd.com).

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