

GOYEN CONTROLS

RCA25TD 1" SINGLE DIAPHRAGM DUST COLLECTOR VALVE MODELS 2561

DESCRIPTION

Model 2561 is equipped with a $\frac{1}{8}$ " Pilot Connection and contains a standard diaphragm of Buna sheet stock with Nylon disc. Valve is right angle, external pilot operated, single diaphragm design, for rapid cycling Dust Collector service. The only moving parts are the diaphragm and diaphragm spring. Valve is provided with bleed passage located in the clamped portion of the diaphragm, which extends diaphragm life. This quick acting design gives high flow to ensure high peak pressure in the blow tube.

CONSTRUCTION

Body and cover are pressure diecast aluminum. Standard diaphragm is made from a Buna N Elastomer, reinforced with Nylon Mesh and Nylon Disc. Optional diaphragms are available with Buna disc and in Viton[®] with Viton[®] disc.

SPECIFICATION

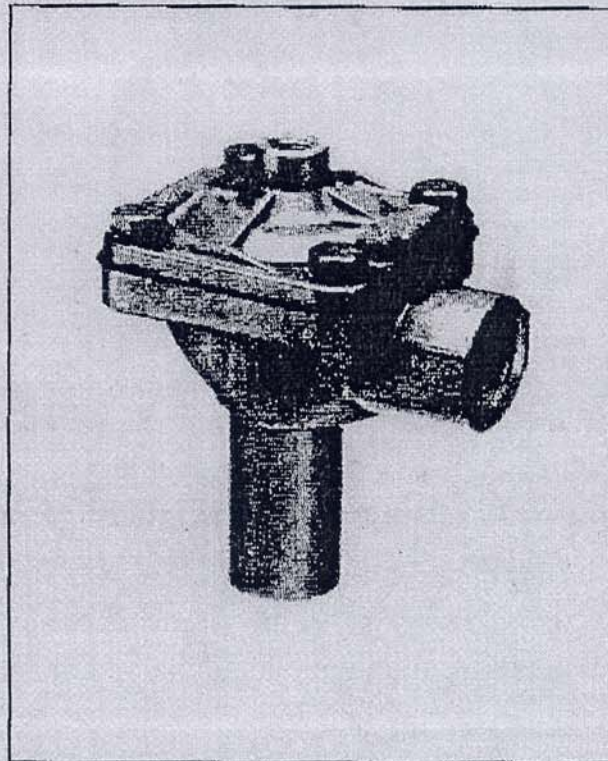
Inlet Port	: 1" Tapered pipe threads
Outlet Port	: $1\frac{1}{8}$ " Dia. Straight Pipe
Pilot Connection Port	: $\frac{1}{8}$ " Tapered pipe threads
Orifice Diameter	: 1"
Cv Flow Factor	: 18.5
Media	: Air or Nitrogen
Operating Pressure	: 110 PSI Maximum*
Temperature Range	: -40°F to + 200° F (Buna N)
	: -25°F to + 450° F (Viton [®])

*Maximum Safe Body Working Pressure is 125 PSI

OPERATION

For optimum performance, valve should be connected to the RCA3D2-T pilot solenoid valve, using $\frac{1}{4}$ " OD tubing with minimum ID of 0.160". If tubing of larger ID is used or length of tubing exceeds 3 feet maximum recommended length, the ratio of mechanical on time to electrical on time will be increased. Recommended electrical on time range is 50 to 100 Milliseconds.

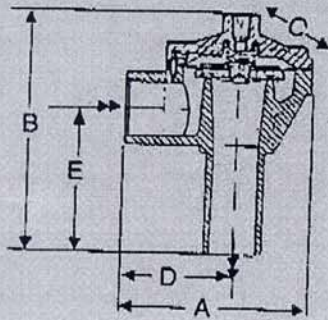
The valve is equipped with internal bleed passage and utilizes system pressure for operation. When the solenoid pilot valve is energized, this exhausts the top of the diaphragm, allowing system pressure to flow through the diaphragm valve. When solenoid pilot valve is de-energized, the operating cycle is reversed.



INSTALLATION

Both diaphragm and pilot valve will operate in any position. Care must be taken to remove condensate from compressed air supply and to position valves, so that rain and/or other foreign substances will not enter the exhaust ports. Connect 1" inlet port to air supply header and the $1\frac{1}{8}$ " outlet port to the blow pipe. A suitable thread sealant should be applied to pipes before parts are engaged. Use caution not to over apply pipe sealant and not to over torque fittings, which can cause damage to valves. Connect appropriate sized tubing between the $\frac{1}{8}$ " pilot connection located on the top of the diaphragm valve to the inlet of the $\frac{1}{8}$ " pilot solenoid valve.

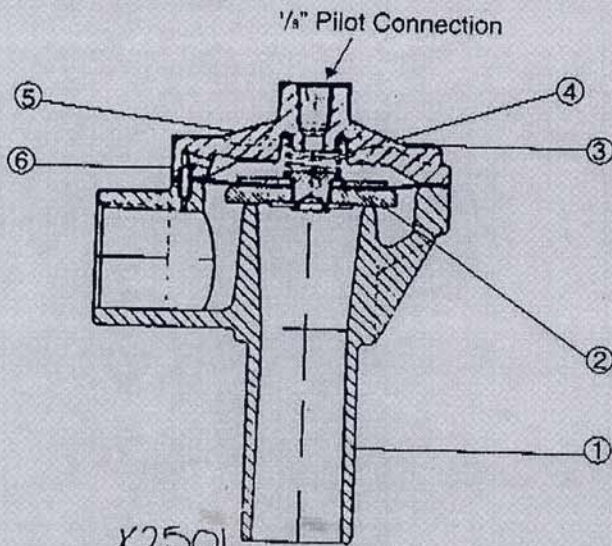
RCA25TD DIAPHRAGM VALVES



DIMENSIONS

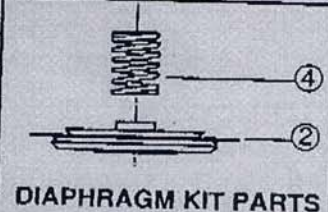
A		B		C= WIDTH		D		E	
INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
4.00	102	5.50	139	3.25	82.5	2.37	60	3.25	82.5

DIAPHRAGM KITS



PARTS IDENTIFICATION

ITEM	DESCRIPTION
1	RCA25TD BODY
2	DIAPHRAGM ASSEMBLY
3	1/4" UNC X 1/4" HEX BOLT
4	DIAPHRAGM SPRING
5	COVER
6	ROLL PIN



- Diaphragm Kit No. **K2501** M11838 (Buna N/Nylon Disc)
 No. M736 (Buna N/Buna Disc)
 No. M1887 (Viton®/Viton® Disc)
K2503

Note: Kits are also suitable for Models Nos. 2513 & 2550

SERVICE

Most maintenance work can be carried out with the valve in it's installed position. Before performing maintenance, electrical power and compressed air supply must be turned off and supply header must be drained of pressure. In case of valve malfunction check the following:

WILL NOT OPEN

- Confirm adequate electrical service
- Check continuity of coil
- Dirt blocking pilot valve orifice
- Dirt in pilot valve connecting tubing
- Worn pilot valve plunger
- Diaphragm perforated
- Exhaust ports blocked

WILL NOT CLOSE

- Leaking pilot valve
- Broken connecting tubing to pilot valve
- Coil energized continuously
- Pilot valve plunger jammed open
- Broken diaphragm springs
- Diaphragm bleed holes blocked
- Air supply line to the header too small

See Form No. ISI/CAS001 for RCA3D2-T Pilot Valve Instructions

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Form No. ISI/CAS 009