## Process Automation

IMI PBM

# Igenix® Manual & Automated Pinch Valves



Breakthrough engineering for a better world

VERSAGRIP® Solenoid Pinch Valves



## IMI PBM Engineering UNIQUE solutions through people, products, innovation and service

IMI PBM is a prominent worldwide manufacter of safe, reliable, high quality valves. Building close, collaborative relationships with our customers, we gain a deeper understanding of their engineering needs and mobilize our resources and expertise to deliver distinctive products and solutions.

#### Reliability

Tested and proven to provide absolute shutoff on tubing. Independent test report available on flexible braided hose and clear tubing on request.

#### **High Performance Products**

Our unique designs offer true "fail closed" with air-assist for flexible tubing sizes. Our valves have absolutely no contact with any process media, thus will never introduce contaminants.

#### **Problem Solving**

Our modular safety cover shields the pinch area when the valve is in service. It can be opened to load/unload the valve without the need for process breaks or complete removal from the valve body. These valves also may be chosen when minimal turbulence is required or in cases where excellent drainage is necessary.

# Advantages of Igenix® Pinch Valves

#### Features

- Compact, lightweight designs
- Simple operation
- Linear flow
- Absolute shut off
- Simple installation
- Fast and simple tube replacement
- Long performance and reliability
- Maximize productivity
- Variety of materials for valve body plastics, stainless steel, aluminum and other metals
- Suitable for braded and non-braided hose
- Valve body not affected by corrosive fluids
- Requires very low maintenance
- Manual & Automation available



## Pinch Valve Styles

- Integral Sleeve
- Clamp Style



## What is a Pinch Valve?

A pinch valve is a type of valve, which incorporates all mechanical components external of the flow path. The compressor forces the tube to closure; collapsing to provide positive shut off. This can be achieved manually, pnematically or through electric automation. Proportional control is also available.

## Why use Pinch Valves?

Pharmaceutical leaders looking for a low-maintenance and more costeffective solution for controlling liquids, gases and slurries in a pipeline are turning to pinch valves over traditional valves.

Pinch valves feature a straightthrough flow, minimal pressure drop over the valve, and full shutoff, making it the most practical and efficient solution for various flow control applications.

934 Series Stainless Steel actuator and pinch head



### Actuated Pinch Valve with Limit Switch

# Manual & Automated

#### Stainless Steel Pinch Valves

#### Features & Benefits

- > Compact, lightweight design
- > Affordable without compromising quality
- > Designed for biopharmaceutical processing, medical devices, food & beverage, and industrial applications where sterility and wash down procedures are needed for harsh and corrosive environments
- > Pneumatic and solenoid actuaion available
- > Pneumatic model covers tube sizes from 0.125" (3.2mm) up to 1.625" (41.2 mm) O.D.
- > Solenoid model covers tube sizes 0.094"
  (2.3876 mm) to 0.375" (9.525mm)

936 Hybrid Auminum Actuator and Stainless Steel Pinch Head

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#### Potential Applications

#### Stainless Steel Pinch Valves

- > Tangential Flow Filtration (TFF)
- > Pharmaceutical Process Skids
- > Centrifugation
- > Biopharmaceutical Processing
- > Bioreactors
- > Sterile Liquid Filing/Packaging
- > Epoxy Dispensing Equipment
- > Food & Beverage
- > Slurry Delivery Systems



Find out more **pbmvalve.com** 

#### 900-Series Pneumatic Pinch Valves

#### Features & Benefits

- > Support tubing durometer up to 85 Shore A and 75 psi/5.2 bar media pressure
- Offer reliability and performance when working with larger diameter or hard tubing that requires stronger pinch forces
- > Flexible tubing sizes from 0.125"(3.2mm) to 1.625" (41.2mm) O.D.
- > Pinch head designed for washdown and clean rooms
- > Offered in Black Anodized Aluminum or 316L Stainless Steel



#### Electric & Pneumatic Proportional Pinch Valves

#### Features & Benefits

- > Provides a robust solution for accurate closed loop proportional control and precision fluid management
- > Dependable, compact solution for immediate response
- > Each model contains a snap-in-tube slot for quick loading and unloading procedures
- > Flexible tubing sizes from 0.063" (1.6002mm) to 1.625" (4.1275mm) O.D.

#### VERSAGRIP® Solenoid Pinch Valves

#### Features & Benefits

- > Supports average tubing durometer up to 60 Shore A and 15 psi/1 bar media pressure
- > Compact design with low operational noise
- > Average actuation speeds of 80 milliseconds or less without tube loaded
- > Seals prevent liquid penetration supporting easy cleaning or sterilization procedures
- > Optimized performance when used with solenoid controller, utilizing pulse-width modulation methods (PWM) for power and heat management
- > 3 million MTBF\* or 12 month warranty



Supports tubing 0.187-0.375" (4.7498-9.525mm) O.D.



#### **Custom Built Solutions**

Need a custom designed pinch valve or fluidic assembly? Let IMI PBM's team of experienced engineers work closely with you to produce the ideal solution that fits your exact specifications and needs.

\* MTBF based on 50% duty cycle testing carried out at 20° ambient C using 60 Shore A tubing. Duty cycle is defined as On Time/(On Time + Off Time).

IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, the UK and the USA.

Supported by distributors worldwide.

For further information, scan this QR code or visit pbmvalve.com or imiplc.com/process-automation



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Due to our policy of continuous development, IMI reserves the right to change specifications without prior notice.

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