

# **FENGCHI**®

# Company profile

Anhui Fengchi Pump and Valve Manufacturing Co., Ltd. is specialized in designing and manufacturing pinch valve, pneumatic pinch valve, and slurry knile gate valve. We focus on flow control solutions to the most demanding conditions. Recently we have more than 50 personnel with the ability to design and produce large size and high pressure pinch valve series. We're named as National High-Tech Enterprise with numerous inventions and utility model patents. Our products are widely applied in large mines domestic and abroad with the features of abrasive & corrosive resistance, free of maintenance, and high performance-price ratio. It is an excellent replacement for conventional valves.

Anhui Fengchi Pump & Valve Manufacturing Co., Ltd. has successively got ISO9001-2015QMS, ISO14000EMS, ISO450010HSMS. CE and RoHS certified.

Fengchi® obtains the ability to design and manufacture large size products by owning large-scale vulcanization equipment, rubber refining equipment, and numerous testing equipment for rubber raw material.

We insist on providing high performance products and professional service team to extend the maintenance intervals of customers' equipment and reduce the loss caused by frequent downtime, so as to bring more benefits to our customers. We wish you prefer Fengchi® pumps and valves, let us customize the exclusive flow control solutions for you according to your working conditions.









We provide customized services of pinch valve series for you.

#### Anhui Fengchi Pump Valve Manufacturing Co., Ltd

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#### Qualification







ISO9001-2015

ISO14001-2015

ISO45001-2015





RoHS



# Pinch Valve

#### Introduction

FENGCHI® heavy duty Pinch Valve is a long-lasting and ideal valve, which is specially designed for shut-off and control applications involving abrasive or corrosive slurries, powders, or granular substances.

Size range: 15~2000mm, 1/2" ~84" in

Pressure range: 1~10Mpa Material of valve body:

DN15~200:

carbon steel, ductile iron, aluminum alloy, stainless steelcasting process.

DN250~2000:

45#steel, stainless steel welding technology.

Material of valve sleeve:

NR, EPDM, CR(chloroprene rubber), NBR, butyl rubber, FPM,

Hypalon rubber



# Principle

The operating principle of FENGCHIØ pinch valves is very simple. In the open position, the valve is full bore with no flow restrictions. During closing, two pinch bars squeeze the valve sleeve shut on the center line. The sleeve is naturally wear resistance and when particles hit the sleeve's rubber surface, the energy is absorbed and released when the rubber bounces back. Heavy duty pinch valves provide bubble tight shut-off even if solids have built up on the sleeve wall. When compressed, any crystallized particles flake off the sleeve surface. The full bore structure ensures free flow of the medium. The construction and materials of the three main components (sleeve, body and actuator) can be tailored to suit your process conditions. Full bore open





Open

Close

#### **Features**

- Full bore no flow restrictions
- Shut off on the center line extend the service lifetime of valve sleeve
- Valve sleeve is the only part in contact with the medium-the only wearing part.
- Self-cleaning no clogging
- Wide variety of material for valve sleeve-to fulfill the requests of fluid medium.
- Strong construction design of metal valve body extend service intervals

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# Application

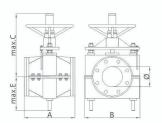
Pinch valve is widely applied in power plant, sewage plant, mining, and chemical process control. It is especially fit for the working conditions with easy scale formation. It can be 100% tight shut-off even with particles, since the rubber valve sleeve, the only part in contact with fluid medium, is made of vulcanized rubber, that's why it is with high abrasive resistance and corrosive resistance, so pinch valve is competent even if complex chemical reactions are taking place in the pipeline.

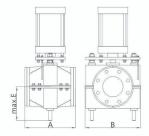
The pinch valves we design and manufacture have been selected by all walks of life and won a good reputation. Some of the applications and working conditions of pinch valves are as below:

			Chemical process control		
FGD system	Sludge control	Tailings disposal	Corrosive and abrasive material		
Gas scrubbingsystem	Sand removal	Flotation control	Powder		
Coal conveyor	Raw sewage	Mud discharge pipeline	Particles		
Fly ash control	Lime, Carbon	Multiple slurry	Waste disposal		



# Dimension drawing





#### Dimension table

Please contact with Fengchi® engineers for larger size and higher pressure.

Model	PN (bar)	DN (mm)	А	В	С	Е	Manual (kg)		Pneumatic (kg)	
500.00							FE	AL	FE	AL
FCE25	1-25	25	165	120	255	87	11	7	8	4
FCE32	1-25	32	165	140	260	90	14	9	10	5
FCE40	1-25	40	165	180	265	105	16	9	12	6
FCE50	1-25	50	165	190	280	120	18	9	13	7
FCE65	1-25	65	165	210	310	136	22	12	17	9
FCE80	1-25	80	200	245	370	155	36	17	27	13
FCE100	1-25	100	250	278	410	175	46	25	33	17
FCE125	1-25	125	310	340	465	210	74	41	48	45
FCE150	1-16	150	375	400	560	240	106	74	75	43
FCE200	1-10	200	500	480	690	295	159	-	119	-
FCE250	1-6	250	625	570	865	380	213	-0	161	-
FCE300	1	300	750	720	1020	445	279	_	212	_

# **Enclosed Pinch Valve**

#### Products real shot









#### Service site





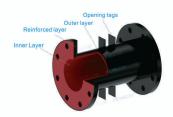






### Valve sleeve

#### Introduction



Rubber sleeve is the most important component for any type of pinch valves, it is the core of pinch valve. Rubber sleeve provides corrosion & wear resistance, and pressure bearing capacity. The quality of pinch valve is as good as the quality of its sleeve.

- Inner Layer: adopt various kinds of rubber materials or formulas in order to fit for the high demanding applications involving abrasion, corrosion or high temperature, etc.
- Reinforced layer: the perfect combination of synthetic rubber and synthetic fibre technology forms a
  unique reinforced skeleton, which enables the sleeve to bear pressure and fatigue.
- Outer layer: Using Natural Rubber to protect and reinforce the flexure resistance of valves leeve.
- Opening tags: the middle part of the outer layer is equipped with opening tags to solve the problem of fixation and tensile strength of the inner sleeve and actuator, also to ensure full opening of valves in all process conditions.

#### Handmade

Each FENGCHI® pinch valve sleeve is handcrafted by professionally trained personnel, each sleeve is affixed with labels, which contains relevant parameters and numbers in order to provide a basis for quality traceability.





#### **Features**



The pinch valve's only part in contact with fluid medium

FENGCHI® pinch valve is designed specially for low maintenance, there are no seats, packing, sealing ring, or expansion pipes to replace. Valve sleeve is the only replacement needed in pinch valve. It will become an almost new pinch valve after the sleeve is replaced. FENGCHI® pinch valve barely needs inventory for other components.

# Large Size Valve sleeve

Factories around the world that have the ability to design and manufacture large size pinch valve is very few, for example: Red Valve, FLOWROX, Jindex, and

As the "core part" of pinch valve, the rubber valve sleeve has high requirements on the manufacturing capability of the suppliers with the size increase of pinch valve. It requires not only large-scale rubber processing and vulcanization equipment, but also a mature and reliable manufacturing process of valve sleeve, which is the basis for manufacturing large-size pinch valves.

We, FENGCHI®, have these basic conditions to design and manufacture DN600-DN2000 large-size pinch valves maturely.

