

FLEXiVALVE

FLEXiVALVE 'F-MAX'

Pinch Valves offer a
High-Performance
alternative to
Diaphragm Valves at
pressures up to 10 Bar
throughout the range.



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FLEXiVALVE – F-MAX SERIES

Diaphragm Alternative Pinch Valve

FLEXiVALVE 'F-MAX' Diaphragm alternative Pinch Valves

Maximising Pinch Valve performance and maintenance efficiencies as well as incorporating the same face to face dimensions as Rubber Lined Diaphragm Valves, **FLEXiVALVE 'F-MAX' Pinch Valves** are the viable alternative to Rubber Lined Diaphragm Valves.

These cost-effective industrial valves are suitable to handle a wide range of corrosive and abrasive slurries, powders, or granular substances, and are particularly suitable for bulk solids or solids in suspension in air or liquids. These valves are designed to operate at pressures of up to 10 bar throughout the range.

FLEXiVALVE 'F-MAX' Pinch Valves have a **totally enclosed body** for use in lower pressure applications as well as applications where damage to the environment, people and equipment will be contained in the event of sleeve rupture.

The **Sleeve** has a full bore, allowing unrestricted flow, which helps eliminate turbulence and friction loss. Manufactured using interwoven Fabric and Polyester reinforcing, the sleeves are designed to working pressures of 10 bar throughout the range and have a 3:1 safety factor. The bore of the sleeve has 6mm wear resistant rubber maximising durability and performance. Natural rubber will satisfy most applications; however other polymers are available.

* For higher pressure ratings please consult with Atkins Industries

Applications include:

- Mining (Slurries, corrosives, and acids)
- Chemical Industrial, including fertilizer manufacture (Slurries, corrosives, and acids)
- Power generation (Ash, dust)
- Mineral processing plants (Slurries and Acids)
- Sewage and effluent (Sludge and acids)
- Pulp and paper (Slurry and acids)
- General industry (corrosives, abrasives powders and delicate fluids).

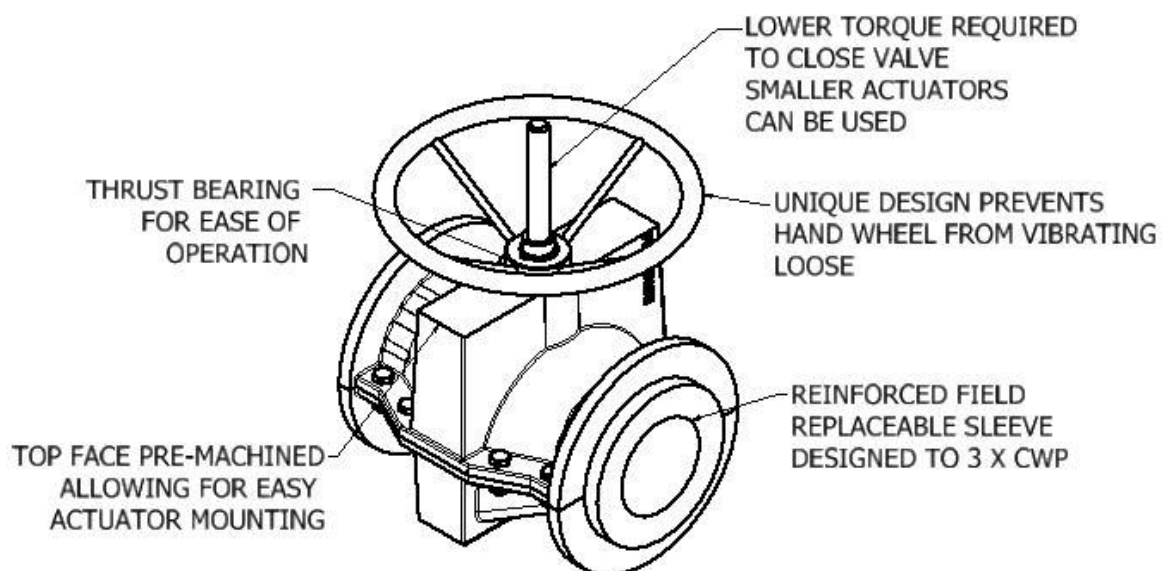
FLEXIVALVE 'F-MAX' Series Pinch Valves

Technical advantages

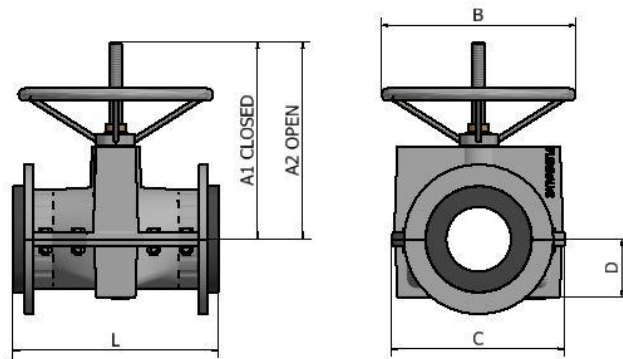
Size Range: 100mm to 250mm / 1" to 10"

Pressure rating: Up to 1000 KPa / 145 PSI

- Pinch Valve Sleeve design incorporates a 3:1 safety factor through the entire range.
- Single Anvil Pinch valve having fewer mechanical parts, therefore less maintenance.
- All mechanical parts are isolated from pipe medium.
- Lower closure thrusts reducing cost of actuation.
- Actuator friendly design to accept all forms of actuators including Pneumatic, Electric and Hydraulic actuators.
- Full bore, unrestricted flow
- Field replaceable rubber sleeve reduces downtime and is more environmentally friendly.
- Flexible Sleeve allows 'self-cleaning' which eliminates in line scaling and blockage.
- Offers easy maintenance and reduced cost of ownership.
- Sleeves available in a wide range of polymers
- Full pressure rating maintained throughout the range.



FLEXIVALVE 'F-MAX' Series Technical specifications:



Valve Size	FLEXIVALVE 'F-MAX' series Pinch Valve Dimensions (Hand wheel operated)						Weight	Pressure Rating
(mm)	(mm)						Kg's	Bar
(In.)	(In.)						Pounds	PSI
	A ₁	A ₂	B	C	D	L	W	(MAX)
50	105	165	180	280	83	198	11	10
2	4.13	6.50	7.09	11.02	3.27	7.80	24	145
80	150	235	180	300	100	263	20	10
3	5.91	9.25	7.09	11.81	3.94	10.35	44	145
100	185	280	250	335	110	312	30	10
4	7.28	11.02	9.84	13.19	4.33	12.28	66	145
125	200	320	250	360	125	365	42	10
5	7.87	12.60	9.84	14.17	4.92	14.37	93	145
150	220	370	300	420	143	415	65	10
6	8.66	14.57	11.81	16.54	5.63	16.34	143	16
200	240	430	350	530	170	535	115	10
8	9.45	16.93	13.78	20.87	6.69	21.06	254	145
250	300	575	500	800	200	645	190	10
10	11.81	22.64	19.69	31.50	7.87	25.39	419	145

The weights and dimensions in these tables are approximate and may change with different pressure ratings, actuators and accessories.

Please contact Atkins Industries if more information is required

FLEXiVALVE 'F-MAX' Sleeve selection

The heart of the **FLEXiVALVE F-MAX** Pinch Valve is the fabric and polyester interwoven flexible rubber sleeve, which incorporates a 3:1 safety factor in design and utilises only the highest quality materials in of the construction of the sleeve.

The Sleeve is designed for use in highly abrasive and corrosive applications at working pressures of up to 10 bar. The sleeve flanges have integrated moulded grooves and are reinforced with a metal ring to ensure a rigid and leak free connection.

The full bore, unrestricted flow pattern and the use of natural gum rubber as an abrasion resistant closing membrane contributes to outstanding longevity, even in high abrasive applications. The sleeves are self-supporting and self-flexing preventing a build-up of scale and blockages.

FLEXiVALVE 'F-MAX' Sleeves are manufactured to CWP ratings of 1000 KPa.

For higher pressures applications we suggest using **FLEXiVALVE 'LDO'** or **'HDE'** Pinch Valves or alternatively please consult Atkins Industries.

The choice of wear resistant rubber for specific applications will ensure optimal performance. Where there is uncertainty regarding selection, contact Atkins Industries.

SLEEVE SELECTION

Sleeve		Application	Temperature °C		Temperature °F	
Grade	Colour		Min	Max	Min	Max
RR	BLACK with RED wet parts	This is a Gum rubber sleeve with a 6mm internal lining of soft red gum rubber. In certain conditions, particularly on abrasive services, this lining will outlast the "NR" Grade sleeve - For Slurry and Abrasives	-30	70	-86	158
NR	BLACK	Natural Rubber specially formulated for abrasion and ozone resistance - For Slurry and Abrasives	-30	80	-86	176
N	BLACK	A general purpose Nitrile rubber - resistant to oils, hydrocarbons and some chemicals.	-20	120	-68	248
E	BLACK	An Ethylene Propylene Polymer (EPDM) - Good abrasion resistance, resistant to most chemicals.	-30	120	-86	248
BN	BLACK	A general purpose Butyl rubber - Good acid resistance.	-30	120	-86	248
NP	BLACK	A general purpose Neoprene - Good abrasive properties and is resistant to oil and moderate chemicals and acids.	-30	90	-86	194