

HEAVY DUTY PINCH VALVES



Efficiency Experts

DURAPINCH VALVES



Service Life

DuraPinch pinch valves are designed for use in throttling or isolation applications and is ideally suited for the harshest chemical, slurry or dry particle environments.



Reliability

All pinch valves are perfectly balanced between size and performance. Multiple actuator types can be used to achieve the best performance possible.



Efficiency

A maintenance friendly feature of the QTP rotary pinch valve is the replaceable sleeve while the valve is in-line which reduces operating downtime and greatly extends the service life of the valve.



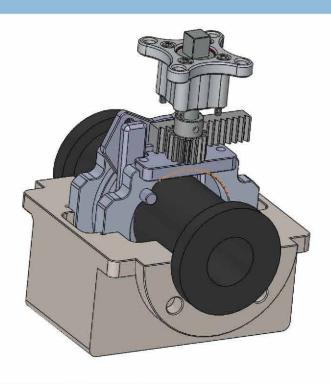
Leaders in elastomer valve innovation

Optimal performance in the most abrasive environments



DuraPinch Valves

PINCH VALVE FEATURE ANALYSIS



What are Pinch Valves

- Pinch valves are types of elastomer valves that use a tube, sleeve, or elastomer cover to control or stop flow
- Pinch valves are a type of elastomer valves which use a tube, sleeve, seal to control or stop flow.

ADVANTAGES

- No Valve Packing
- High Corrosion Resistance
- Non-Clogging

DISADVANTAGES

- Limited by Temp & Pressure (<250°F;<150PSI)
- Cannot be used with gas media

EXAMPLES

- Rotary
- Shell & Tube
- Duck Bill Check

MECHANICALLY PINCHED SLEEVE

- Linear
- Rotary



QTP Rotary Pinch Valve

DURAPINCH® VALVES





Increased Service Life

Reduced Downtime

The newly patented rotary pinch valve makes actuation a breeze because it's suited for use with a quarter-turn actuator. As the line size goes up; the closing force requirement from the actuator increases exponentially. However, rotary pinch valves can easily scale to the task using the mechanical lever arms of the drive system. This reduces actuator costs while maintaining mechanical reliability and allows for an unobstructed sleeve.

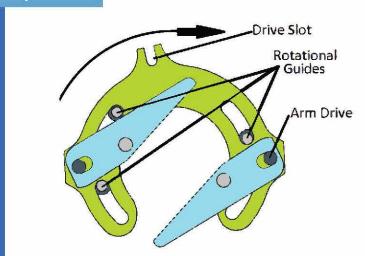
Quarter-Turn Design

DURAPINCH® QTP VALVE SERIES

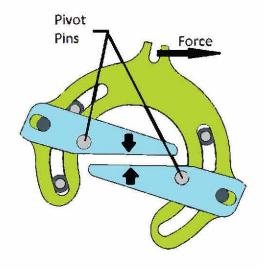


The revolutionary design is unmatched in quality, delivery and performance for many slurry, chemical high-purity, and food industry applications.

Open



Closed





DuraPinch® QTP Rotary Pinch



Step 1:

Remove Bottom or Top of Valve Assembly while in-line

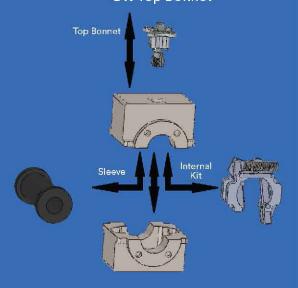


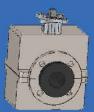
Step 2:

Field Inspection of Sleeve & Internal Kit

Step 3:

Replace Sleeve **OR** internal-replacement-KIT **OR** Top Bonnet





Step 4:

Reconnect top and bottom assembly (can be done in-line for field repairs)



Design Features

DURAPINCH® QTP VALVE SERIES

- Full Bore Opening
- Self-Cleaning
- Non-Clogging
- Few Parts & Inexpensive
- FAST Maintenance
- Wear Resistant
- Easy to Control
- Can be used in Throttling
- ZERO Leakage
- Low Cost

ROTARY ADVANTAGES

- By using leverage, there is a 3:1 mechanical advantage over linearly driven pinch valves.
- Center-line closing exponentially increases uptime by uniformly stretching the sleeve
- Handwheel sizes significantly reduced
- The compact design reduces the overall footprint and weight by roughly 40%

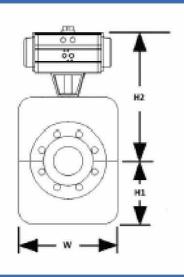
MAINTENANCE: RUGGED SPLIT BODY DESIGN

- The sleeve has a clear exit path should it need to be replaced while the actuator and valve body remain in-place
- The entire drive assembly can be replaced after years of service while remaining in place

VALVE PACKING AVAILABLE

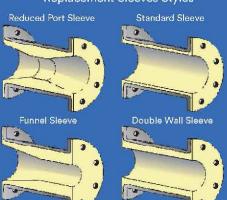
- A uniform chamber and equally distributed gland bolts provide uniform compression
- Using a secondary leakage protection system is not mandatory as the sleeve and O-ring seals are sufficient; however, a secondary containment system can be used in environments where needed.

DuraPinch® QTP Valve Specification



Part	Standard Materials				
Body	CF8M (SS316)	Ductile Iron	Aluminum		
Pinch Arms	SS317				
Stem	SS316	SS317	SS304		
Packing	Optional: O -ring or graphite and PTFE - impregnated synthetic yarn (ph: 0-14)				
Cam	SS316				
Bolts	SS304 or SS316				
Cam Follower	SS316				
Gasket	PTFE or Reinforced Fiber				
Sleeve	Pure Gum Rubber, Linatex, Neoprene, EPDM				





- All stainless steel construction
- Center-line closure
- Suitable for bi-directional operation
- Sleeves thoroughly tested in a variety of applications for all slurries and caustic chemicals
- Up to 150 psig (10.3 bar) maximum working pressure. 150°F (65°C) maximum working temperature

Valve Size	Face-to- Face	H1	H2	Working Pressure (psi)
1"	7.25"	2"	8"	150
2"	10"	4.25 "	10"	150
3"	11.75"	6.5"	12"	150
4"	13.875"	8.5"	16"	150
6"	17.75"	10 "	22"	125
8"	21.375"	9"	28"	125
10"	26.5"	11"	32"	100
12"	29"	12"	38"	100

