

**SPECIFICATIONS**

Description	Pharmenta SIPTube Valves (BSP Series)
Tank connection size	37mm (1 1/2") Tri-clamp (Other sizes on Request)
Body Material	Barstock ASTM A276/A479 316L (S31603)
Bonnet Material	ASTM A276/A479 316L (S31603)
Handwheel Material	Stainless Steel
Diaphragm Material	EPDM
Diaphragm Retainer	ASTM A276/A479 316L (S31603)
Electropolishing	Validated as per ASME BPE (2014)
Pressure Rating	6 Bar (90psi)
Operating Temperature Range	0°C to 135°C (32°F to 275°F)
Operating Modes	Manual

Diaphragm Material	Steam	Liquid Media	
		Min	Max
EPDM	Constant 135°C (275°F)	-10°C (14°F)	90°C (194°F)

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**ABOUT PHARMENTA**

Pharmenta, Inc. was founded in 2003 and is headquartered in Cincinnati, OH. Pharmenta is committed to the pursuit of quality and excellence in the development, production and manufacturing of engineered diaphragm valves and specialty equipment for sanitary processing. Pharmenta stands out for its fresh solutions to age-old industry problems. Each one of Pharmenta's product lines is the result of careful study of real industry problems and requirements, and a passion for finding an optimal solution.

**COMPREHENSIVE TESTING**

Pharmenta valves are rigorously tested to industry standards, including SIP thermal cycling, CIP flow testing, and verification of drainability and fluid control. Additionally, valves can be tested to custom specifications.

**GLOBAL NETWORK**

Pharmenta's global network of distribution, manufacturing and engineering partners ensures fast time to market, and responsiveness to your purchase and support needs.

**ENGINEERING SERVICES**

Pharmenta supports its customers through engineering services including modular design, flow analysis and calculations based on customer request.

**DIDN'T FIND WHAT YOU NEED?**

Give us a call. We love engineering challenges.

**PHARMENTA SIPTUBE VALVES**  
**A CIP/SIP CAPABLE DIPTUBE FOR ASEPTIC PROCESSES**



## FEATURES/BENEFITS

- Tip-mounted seal moves the seal right up to the process, eliminating all deadspace found in traditional assemblies.
- Clean-thru/Steam-thru passage; all internal surfaces, including the tip seal, are along the flow path through the valve.
- With no quiet zones, every surface can be fully flushed, cleaned and steamed on demand.
- Optional insulation protects heat sensitive processes during steam sterilization.
- Retrofit to existing ports as small as 1 inch sensor ports.
- Designs are available to work in orientations from vertical to horizontal.
- Fully CIP/SIP capable.
- Lengths from flush-mounting to 16 inches of process penetration.
- Diaphragm and secondary seals made from FDA-compliant USP Class VI materials

## Advantages of tubular-based valve body design

Traditional dip tubes, feed tubes and sterile block feed assemblies position the valve seal outside the tank, and extend an open-ended tube into the tank for access to the process. Once production begins, this length of tube cannot be recleaned and constitutes deadspace, which becomes increasingly susceptible to internal stagnation, plaque formation and grow-back as production progresses. This results in deteriorating sample or feed quality, and potential contamination of the process.

Pharmenta SIPTube valve technology works by eliminating blind passages and deadspace and replacing them with a combination of:

1. Clean-thru/Steam-thru passage: all internal surfaces, including the tip seal, are along a smooth U-shaped flow path through the valve. With no quiet zones, every surface can be fully flushed, cleaned, sterilized and purged on demand.
2. Tip-Seal™ technology: the valve seal is positioned at the tip of the SIPTube valve, at the process interface.

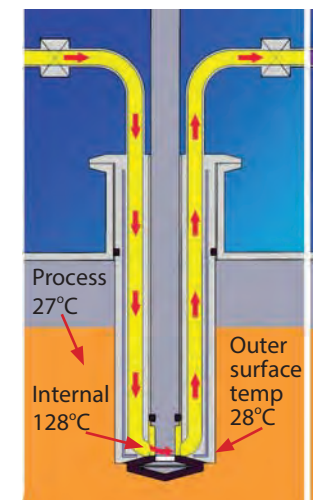
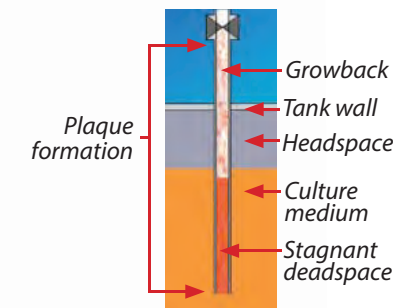
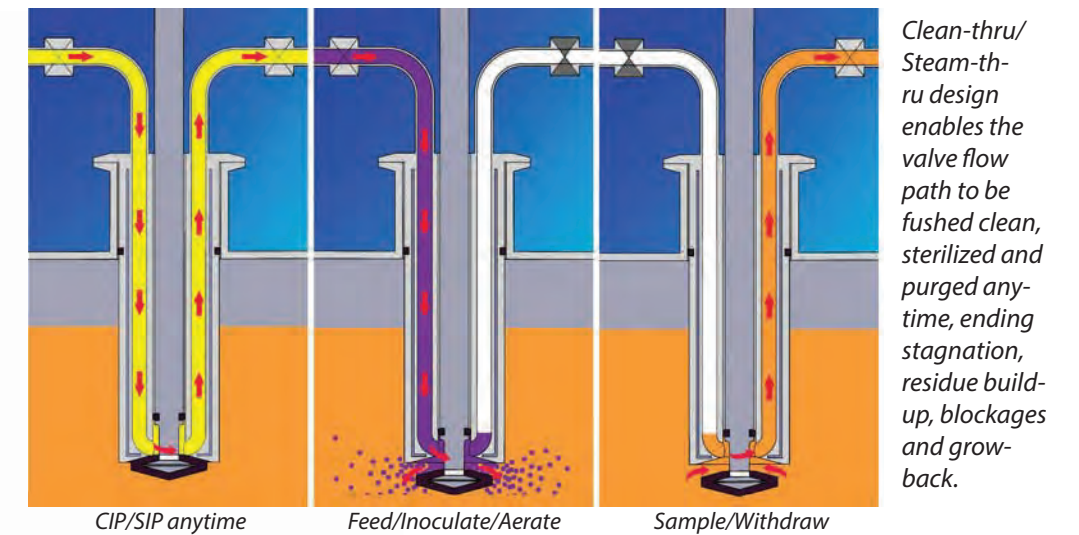
## REACH BEYOND BOUNDARY CONDITIONS

Where a boundary conditions form at sampling sites, necessitating significant purging in order to obtain representative samples, a SIPTube valve is the ideal solution.

A 4" or 8" long SIPTube valve can be retrofitted into any sensor port or tri-clamp port, allowing you to reach beyond boundary layers, far into the process to capture pure, representative samples at the sample depth your process sensors are capturing their readings.

## ONE VALVE, MULTIPLE USES

If you have a limited number of ports available, a single SIPTube® valve can serve several functions, freeing up other ports for other uses. For example, you can use a valve to feed material into the process, then clean and resterilize, and use the same valve to draw material out of the process.



*In independent testing, optional SIPTube® double-wall insulation was shown to be highly effective at protecting the process during steam sterilization.*

## INDUSTRIES

- Biotech
- Pharmaceutical
- Food & Beverage
- Chemical

## TYPICAL APPLICATIONS

- Bioreactors/Fermentors
- WFI System Storage tanks
- Formulation/Mixing Tanks
- Sterile Holding Tanks
- Buffer Tanks
- General Storage Tanks

