



A BioPulse Brand

# SEAL with Confidence

## INDBio® Tri-Clamp Gaskets

Designed for Pharma and Biopharma process industries



## About INDBio®



INDBio® represents Customised and Engineered Single-use Bioprocessing Systems and Services offered by BioPulse Solutions Pvt.Ltd. It provides a range of single-use products and systems that are used in the production of biopharmaceuticals to improve the efficiency, scalability, and cost-effectiveness of bioprocessing operations. As a brand name, INDBio® is associated with innovation, quality, and reliability in the biopharmaceutical industry. It is known for its expertise in customisation and its commitment to developing new and innovative solutions to meet the evolving needs of the industry.

## Smart Selection for performance and precision

The selection of the right gasket is important for pharma and biopharma processes where precision and reliability are non-negotiable when it comes to ensuring product quality and safety. Gaskets serve as a barrier against leaks and contamination, guaranteeing smooth operations and mitigating the risks of product loss, regulatory hurdles, and compromised integrity.

This is where INDBio® Gaskets are pivotal for upholding the efficiency, dependability, and regulatory compliance of these critical production processes.

## Compliance and Certification Central to our process

- Lot and Batch: Traceability and Certification
- USFDA and 3-A Sanitary Standards
- USP Class VI Sections 87 and 88
- Title 21 CFR 177.2600 and 177.1550
- ASME BPE Standards
- ADI – Animal Derived Ingredient Free
- Phthalate Free

## Gasket Material

Platinum Silicone  
PTFE  
PTFE + EPDM  
PTFE + KFM



### Product Safety & Protection

Protection from Contamination, Spalling, Particulates and TOCs



### Process Downtime Prevention

Associated with seal failure and improper seal materials



### Achieve Consistent Quality

Delivered via application based selection across multiple facilities

## Our Gaskets Portfolio



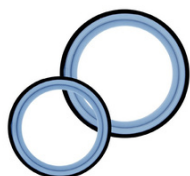
### INDBio® Platinum Silicone TC Gaskets

Most commonly used in Pharma and Biopharma applications, it is highly flexible and tear resistant and is a good choice for sealing applications. It does not contain additives that could leach into a drug. Usable temperature range - 58° to 446° F (-50° to 230° C)



### INDBio® PTFE TC Gaskets

PTFE offers excellent chemical compatibility, high resistance to stress, cracking and corrosion. An ideal choice where low temperature flexibility or seal memory is not needed. PTFE has extremely low extractables, and absorption rate and shows resilience to process fluids. It can remain in service for long periods in both water and steam. Usable from -450° to 550°F (-268° to 288°C).



### INDBio® FLEXi PTFE TC Gaskets

This high-performance gasket features an elastomer core protected by PTFE. Its contact surface integrates PTFE with EPDM rubber, ensuring purity. The bonded design combines mechanical properties of elastomer gaskets with PTFE. Engineered for pharmaceutical and biopharmaceutical applications like Ultrapure water, WFI, and CIP/SIP, it operates in temperatures from 20°F to 300°F (-28°C to 148°C).



### INDBio® PTFE Envelope TC Gaskets

PTFE Envelope TC gasket provides the chemical resistance of PTFE with the elastomeric characteristics of EPDM or FKM Fluoro-elastomer. Envelope gaskets offer consistent sealing in most applications ranging from mild to severely corrosive environments. The PTFE component is USP Class VI certified with an FDA approved rubber insert.

## Ordering Information

Platinum Silicone	Platinum Silicone with collar	PTFE	Flex PTFE	Envelope		Size	Packsize
BP901020-01	BP901020-81	BP901020-33	BP901020-09	BP901020-17	BP901020-25	0.5"	50
BP901020-02	BP901020-82	BP901020-34	BP901020-10	BP901020-18	BP901020-26	0.75"	50
BP901020-03	BP901020-83	BP901020-35	BP901020-11	BP901020-19	BP901020-27	1"	50
BP901020-04	BP901020-84	BP901020-36	BP901020-12	BP901020-20	BP901020-28	1.5"	50
BP901020-05	BP901020-85	BP901020-37	BP901020-13	BP901020-21	BP901020-29	2"	50
BP901020-06	-	BP901020-38	BP901020-14	BP901020-22	BP901020-30	2.5"	25
BP901020-07	-	BP901020-39	BP901020-15	BP901020-23	BP901020-31	3"	25
BP901020-08	-	-	BP901020-16	BP901020-24	BP901020-32	4"	25

Bulk pk of 100 pcs/pk available

**Enquire Now**



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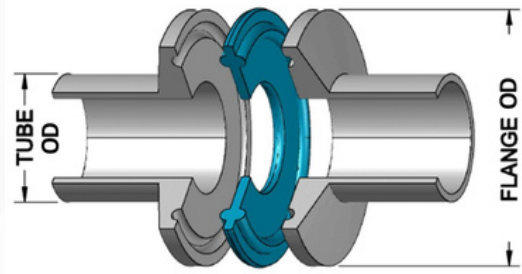
enquiry@biopulsesolutions.com



www.biopulsesolutions.com

## Tri-Clamp Sizing Guide

- Tri-Clamp (TC) is a commonly used term for sanitary fittings with a clamp and ferrule in process applications.
- TC Size is governed by the Tube OD, not the TC/Flange OD.

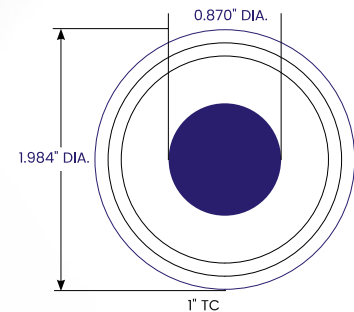
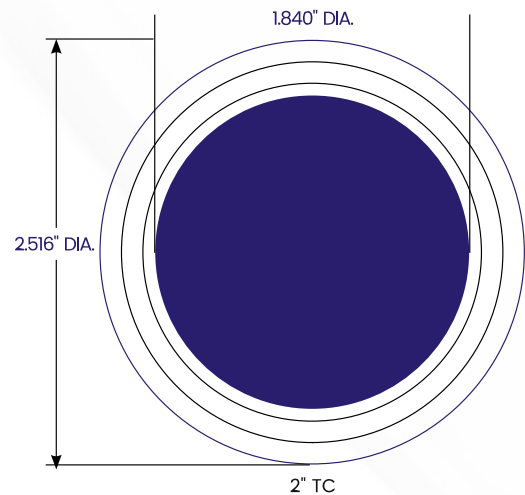
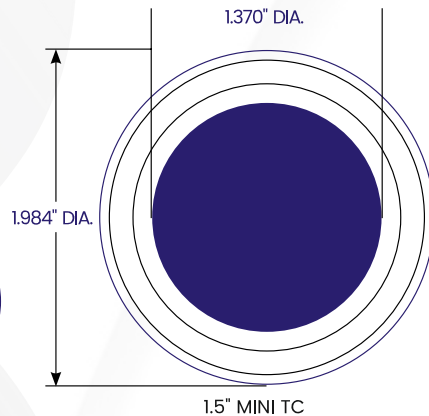
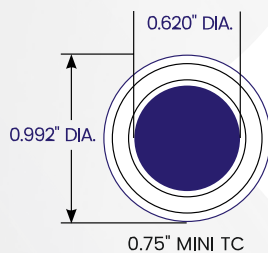
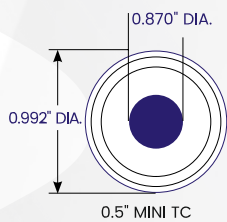


## Tri-Clamp Sizing Guide

Hose/ Gasket Size (inch)	TC Size (inch)	Tube OD (inch)	Tube OD (mm)	TC/ Flange OD (inch)	TC/ Flange OD (mm)
1/2"	1/2"	1/2"	12.7	0.984"	25
3/4"	3/4"	3/4"	19.05	0.984"	25
1"	1"	1"	25.4	1.984"	50.39
1 1/2"	1 1/2"	1 1/2"	38.1	1.984"	50.39
2"	2"	2"	50.8	2.516"	63.91
2 1/2"	2 1/2"	2 1/2"	63.5	3.047"	77.39
3"	3"	3"	76.2	3.579"	90.91
4"	4"	4"	101.6	4.682"	118.92

## Actual Sizing

- These actual-size drawings are provided to eliminate sizing errors when specifying sanitary fittings and gaskets.
- For your convenience and ordering accuracy, all the drawings may be used as sizing ID and OD patterns
- The outside diameter is the same for TC Sizes 1/2" and 3/4".
- The same is seen for the 1" and 1 1/2" TC sizes.
- TC sizes 2", 2 1/2", 3" and 4" ID have specific OD diameters.



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