

# + Single use assembly

## LSR Integrated System



From single filling lines to complex processes such as cell culture and purification, we provide solutions to meet your process requirements. Single-use integrated products are pre-sterilized, and the closed system eliminates cross-contamination between batches and reduces the need for extensive cleaning operations. The batch production cycle is shortened, the verification cost is saved, and the production efficiency is improved.

### Pharmaceutical Grade

Through LSR overmolding technology, Inavi SUA products can seamlessly integrate silicone pipelines, filters, and other reactors through an integrated injection molding process. The flow path is smooth, the material is uniform, and the connection is firm. Compared with the traditional joint assembly method, it eliminates the risk of residual liquid in dead ends caused by the use of joints, and the risk of decreased cell yield due to shearing of the sharp edges of the joints, and

completely eliminates the potential risk of leakage caused by loose joints. It is a new generation of customizable single-use system integration solutions for biopharmaceuticals, and can provide a series of services such as system design, component production, component assembly, and integrated system verification according to customer requirements.

### + Features

- Suitable for use with peristaltic pumps
- Ready to use without fittings
- Eliminate risk of leakage
- Smooth flow path increases cell culture yield
- No dead ends and no residual in the flow path
- Integrated and convenient to use
- ISO class 7 clean room production
- Fully customized production and packaging

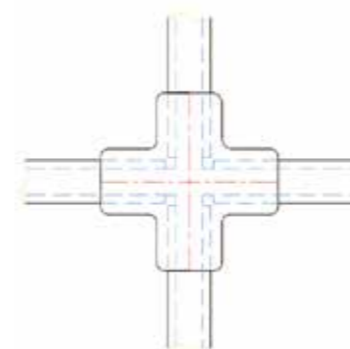
### + Compliance

- ISO 10993-3, 4, 5, 10, 11
- USP 87/88 Class VI
- ADCF
- FDA DMF III
- USP665/BPOG Extractables studies
- FDA 21CFR 177.2600
- USP 788,85,643,71
- EP 3.1.9
- USP 381, 661

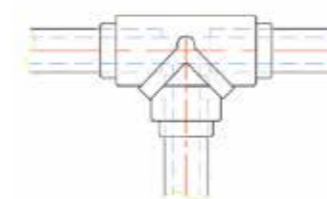
### + Optional Components

- Innovasil P 50/65 silicone tubing
- Innovaflex weldable TPE tubing
- Cross joint
- T shape joint
- Y shape joint
- L shape joint
- Straight connector
- TC flange, gasket, pressure sensor

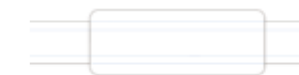
### + Innovapure® single use assembly design



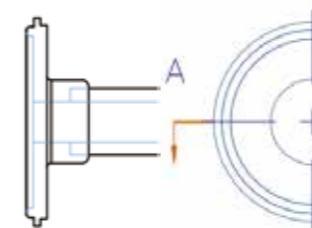
Cross Connection



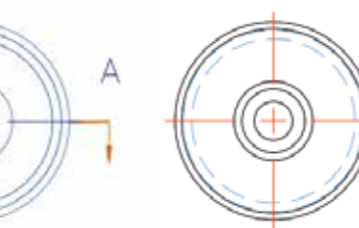
T-Joint



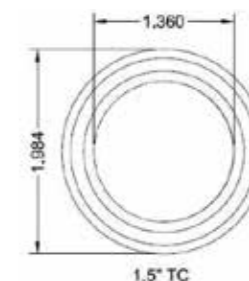
Straight Connection



TC 25/50 flange

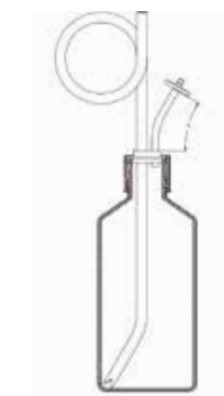
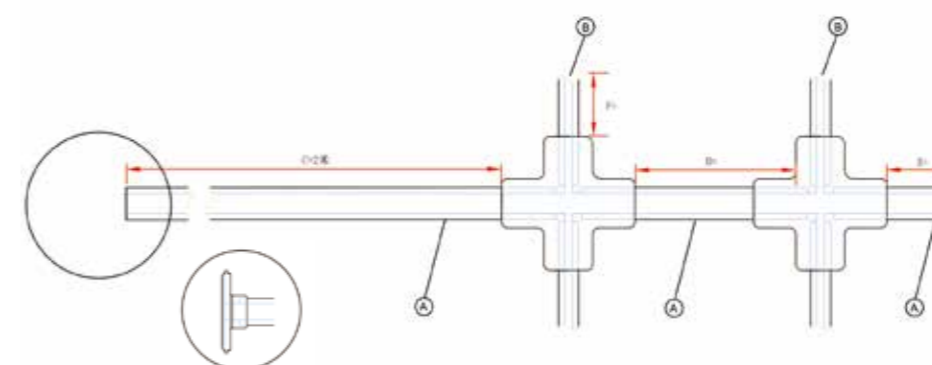


TC 25/50 Gasket



TC 25/50 Pressure Sensor Gasket

### + Innovapure® Integrated Single Use System Solution



### + 1 VOC confirmation

- Use requirements: hardness, pressure, size, tolerance, length, connection method, peristaltic pump conditions, fluid medium, other accessories, sterilization, packaging.
- Verification requirements: biocompatibility, integrity testing, insoluble particles, endotoxin, heat source, pressure resistance, sterilization level.

### + 2 Design Confirmation + 3 Manufacturing

- Sketches
- Drawing Confirmation
- Specification Confirmation
- Delivery Confirmation
- Quotation Confirmation
- Sample confirmation

- Customized production
- Quality inspection
- sterilization
- Shipment

For detailed compatibility with various chemical solvents, please refer to "Innovapure® Product Chemical Compatibility Information Sheet" or consult our sales personnel

