

# Pure Fit<sup>®</sup> SIB<sup>®</sup>

## Smooth Inner Bore Systems

Seamless Transitions  
for Complete Fluid Integrity

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### Seamless Transitions

Quick and secure connections, as well as the prevention of fluid contamination and product loss through leakage, are critical in biopharmaceutical applications. Pure-Fit<sup>®</sup> SIB<sup>®</sup> is a smooth inner bore (SIB) fitting and assembly system that provides a seamless transition between tubing and fittings to maintain complete fluid integrity throughout the system.

Pure-Fit<sup>®</sup> SIB<sup>®</sup>'s unique internal design, with its patented 360° compression seal, reduces the risk of tubing being punctured or cut from sharp, barbed edges like those on traditional fitting systems. The smooth inner bore design eliminates turbulence (dead space) or stagnation of fluid flow, virtually eliminating areas where potential bacteria growth can occur.

### Multiple Configurations

Pure-Fit<sup>®</sup> SIB<sup>®</sup> provides a complete 360° compression along the entire fitting system. Constructed from the highest quality polypropylene or PVDF, the various fitting system elements have been engineered to provide a complete, undisturbed fluid flow path through all flexible tubing. Saint-Gobain Performance Plastics offers a broad line of flexible tubing formulations that are ideally suited for use in conjunction with your particular application and the Pure-Fit<sup>®</sup> SIB<sup>®</sup> system.

### Biocompatibility

Pure-Fit<sup>®</sup> SIB<sup>®</sup> fitting systems meet all USP Class VI and ISO criteria and have been physically tested to meet the most demanding applications and stringent test protocols.



### Features/Benefits

- Total smooth inner bore (SIB<sup>®</sup>) transition design
- Eliminates entrapment and leak points that occur with traditional fitting systems
- Complete 360° compression along the entire fitting system
- No excessive voids at the interface or in the fluid path
- Utilizes the patented retention and seal system
- Compatible with all flexible tubing
- Complete customized manifold and assembly systems
- Autoclavable and sterilizable
- Available in polypropylene or PVDF
- All materials completely animal-free and BPA free
- Manufactured and packaged in a certified clean room

### Typical Applications

- Sterile filling and aseptic fluid transfer
- Biopharmaceutical manufacturing
- Filtration and fermentation
- Peristaltic pump sets
- Drug delivery and discovery
- Product sampling
- Cell harvest and media process systems
- Bioreactor process lines

## Tri-Clamp Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFLS250PPAF	PFLS250PVDF	Tri-Clamp	1/4	6.4	250 psi	100 psi
PFLS375PPAF	PFLS375PVDF	Tri-Clamp	3/8	9.5	250 psi	100 psi
PFLS500PPAF	PFLS500PVDF	Tri-Clamp	1/2	12.7	250 psi	100 psi
PFLS750PPAF	PFLS750PVDF	Tri-Clamp	3/4	19.1	250 psi	100 psi



## Mini Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFMS250PPAF	PFMS250PVDF	Mini	1/4"	6.4	250 psi	100 psi
PFMS375PPAF	PFMS375PVDF	Mini	3/8"	9.5	250 psi	100 psi
PFMS500PPAF	PFMS500PVDF	Mini	1/2"	12.7	250 psi	100 psi



## Connector Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFC250PPAF	PFC250PVDF	Connector	1/4	6.4	250 psi	100 psi
PFC375PPAF	PFC375PVDF	Connector	3/8	9.5	250 psi	100 psi
PFC500PPAF	PFC500PVDF	Connector	1/2	12.7	250 psi	100 psi



## Reducer Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFR250X375PPAF	PFR250X375PVDF	Reducer	1/4-3/8	6.4-9.5	250 psi	100 psi
PFR250X500PPAF	PFR250X500PVDF	Reducer	1/4 -1/2	6.4-12.7	250 psi	100 psi
PFR375X500PPAF	PFR375X500PVDF	Reducer	3/8-1/2	9.5-12.7	250 psi	100 psi



### Wye Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFY250PPAF	PFY250PVDF	Wye	1/4	6.4	250 psi	100 psi
PFY375PPAF	PFY375PVDF	Wye	3/8	9.5	250 psi	100 psi
PFY500PPAF	PFY500PVDF	Wye	1/2	12.7	250 psi	100 psi



### Tee Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFT250PPAF	PFT250PVDF	Tee	1/4	6.4	250 psi	100 psi
PFT375PPAF	PFT375PVDF	Tee	3/8	9.5	250 psi	100 psi
PFT500PPAF	PFT500PVDF	Tee	1/2	12.7	250 psi	100 psi



### Cross Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFX250PPAF	PFX250PVDF	Cross	1/4	6.4	250 psi	100 psi
PFX375PPAF	PFX375PVDF	Cross	3/8	9.5	250 psi	100 psi
PFX500PPAF	PFX500PVDF	Cross	1/2	12.7	250 psi	100 psi



### Elbow Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PFE250PPAF	PFE250PVDF	Elbow	1/4"	6.4	250 psi	100 psi
PFE375PPAF	PFE375PVDF	Elbow	3/8"	9.5	250 psi	100 psi
PFE500PPAF	PFE500PVDF	Elbow	1/2"	12.7	250 psi	100 psi





## Retainer Series

Part Number		Description	Tubing I.D.		Max Working Pressure (psi)	
Polypropylene	PVDF		Inches	mm	at 72°F (22.2°C)	at 200°F (93.3°C)
PF135250PPAF	PF135250PVDF	Retainer	1/4	6.4	250 psi	100 psi
PF135375PPAF	PF135375PVDF	Retainer	3/8	9.5	250 psi	100 psi
PF135500PPAF	PF135500PVDF	Retainer	1/2	12.7	250 psi	100 psi
PF135750PPAF	PF135750PVDF	Retainer	3/4	19.1	250 psi	100 psi



## Pure-Fit® SIB® Typical Physical Properties

Property	Polypropylene	PVDF
Tensile Strength psi (MPa) ASTM D638-91	4,800 (33.1)	6,300 (43.4)
Flexible Modulus, psi (MPa) ASTM D790-92	145,000 (999.7)	290,000 (1,999.5)
Hardness (Shore D) ASTM D2240-91	72	78
Heat Deflection ASTM D648-82 °F (°C) @66psi	189 (87)	266 (130)
°F (°C) @264psi	–	221 (105)
Water Absorption (%) Working Temp., °F (°C)	200 (93)	275 (135)

**PURE-FIT® SIB® IS NOT INTENDED FOR USE  
AS AN IMPLANT MATERIAL**

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