

# Single-use Accessories Catalog



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# Bag Port

Cobetter Lifemeta™ single-use bag ports can be heat sealed with leading polyethylene (PE) films on the market to meet a variety of customer needs. The ports are made of polyolefin (PO) or polyethylene (PE), which offers excellent hot press weld performance and superior weld strength and durability to ensure long-term use.

## ■ Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Resin raw material meets the requirement of USP <87> in Vitro Biological Reactivity Test
- Resin raw material meets the requirement of USP <88> Biological Reactivity Test, in Vivo for Class VI plastics
- Aqueous extraction contains < 0.25 EU/mL as determined by Limulus Amebocyte Lysate(LAL), USP <85>
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals

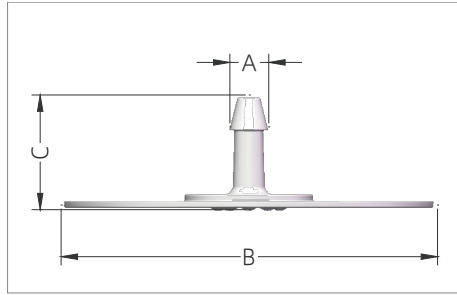
## ■ Features

- Can well heat sealed with polyethylene(PE) film
- Smooth inner surface for unobstructed flow
- Hose barb design facilitates connection with various types of tubing
- High mechanical strength, low risk of cracking
- Can provide double-layer sterile packaging sterilized by 25-45 kGy

## ■ Product Type

Type	Material	Hose Barb Size
Bag Port with Dimples Barb	Polyolefin (PO)	1/8"HB, 1/4"HB, 3/8"HB, 1/2"HB, 3/4"HB, 1"HB
Bag Port with Opposable Barbs	Polyolefin (PO)	1/8"HB, 1/4"HB, 3/8"HB, 1/2"HB
Boat Port	Polyolefin (PO)	1/8"HB, 1/4"HB, 3/8"HB, 1/2"HB
Tubing Port	Polyolefin (PO)	1/8"HB, 1/4"HB
Powder Port	Polyethylene (PE)	1 1/2"TC, 3"TC, 4"TC, 8"TC

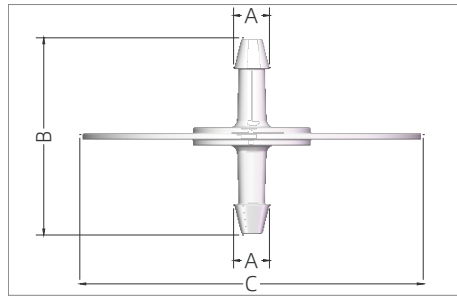
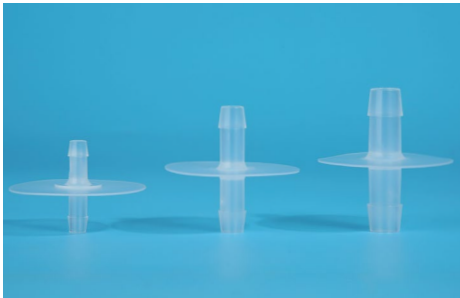
## Bag Port with Dimples Barb



### Bag Port with Dimples Barb

Part Number	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
C21L5N	1/8"HB	Non-sterile	50	6.0	57.5	17.0
C21R5N	1/4"HB	Non-sterile	50	8.9	57.5	20.7
C21Y5N	3/8"HB	Non-sterile	50	12.2	57.5	27.5
C21H5N	1/2"HB	Non-sterile	50	15.3	57.5	31.7
C21M1N	3/4"HB	Non-sterile	10	23.7	64.0	47.0
C21D1N	1"HB	Non-sterile	10	30.0	64.0	62.0

## Bag Port with Opposable Barbs



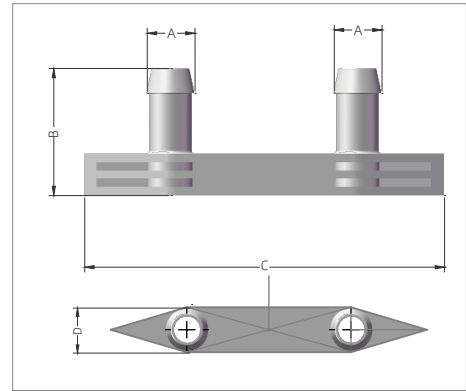
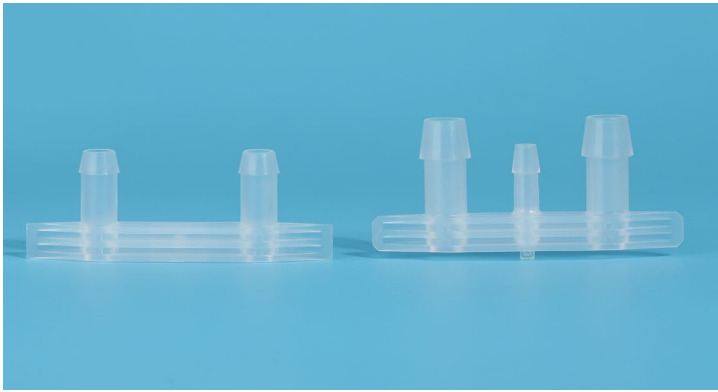
### Bag Port with Opposable Barbs

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B	C
C22L5N	1/8"HB × 1/8"HB	Non-sterile	50	6.0	33.0	57.5
C22R5N	1/4"HB × 1/4"HB	Non-sterile	50	8.9	39.4	57.5
C22Y5N	3/8"HB × 3/8"HB	Non-sterile	50	12.2	54.0	57.5
C22H5N	1/2"HB × 1/2"HB	Non-sterile	50	15.3	61.4	57.5

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

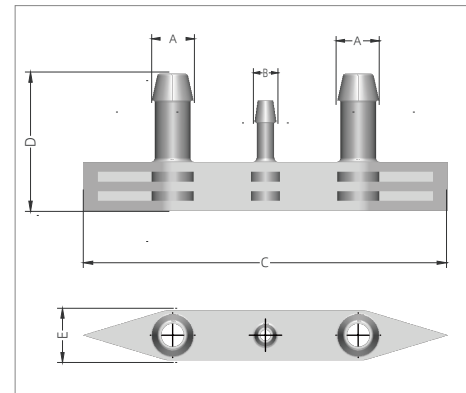
1. Non-sterile: C21L5N
2. Sterile: C21L5S

# Boat Port



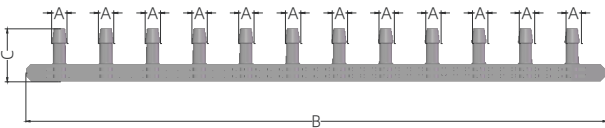
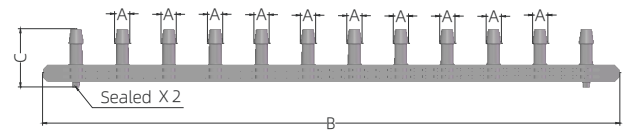
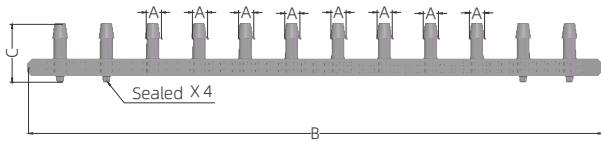
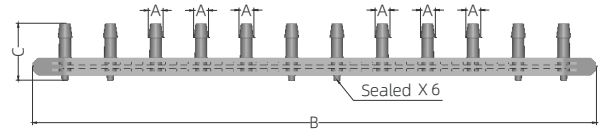
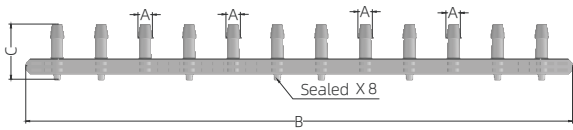
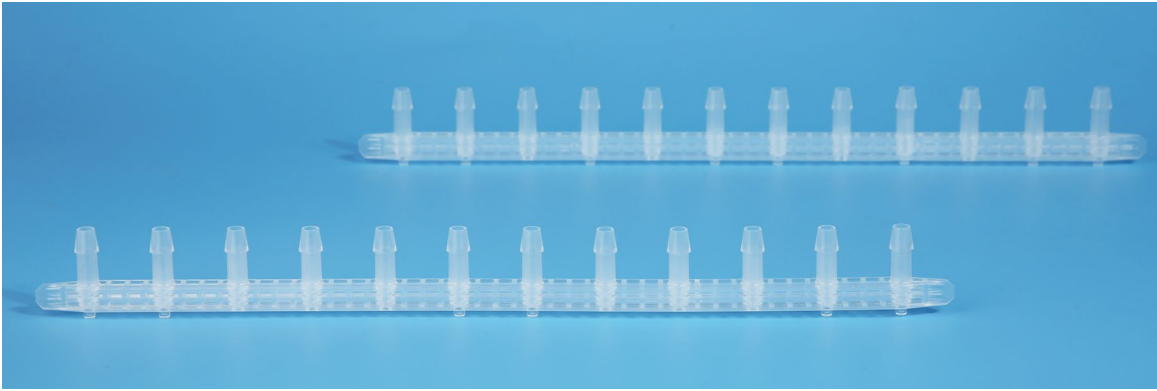
## Boat Port Barbed, 2 Ports

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B	C	D
C3RNR5N	1/4"HB $\times$ 1/4"HB	Non-sterile	50	9.5	31.0	83.1	11.3
C3YNY5N	3/8"HB $\times$ 3/8"HB	Non-sterile	50	12.8	34.0	96.3	13.7
C3HNH5N	1/2"HB $\times$ 1/2"HB	Non-sterile	50	16.0	41.1	96.3	13.7



## Boat Port Barbed, 3 Ports

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)				
				A $\Phi$	B $\Phi$	C	D	E
C3RLR5N	1/4"HB $\times$ 1/8"HB $\times$ 1/4"HB	Non-sterile	50	9.5	5.5	83.1	31.0	11.3
C3RRR5N	1/4"HB $\times$ 1/4"HB $\times$ 1/4"HB	Non-sterile	50	9.5	9.5	83.1	31.0	11.3
C3YLY5N	3/8"HB $\times$ 1/8"HB $\times$ 3/8"HB	Non-sterile	50	12.8	5.5	96.3	34.0	13.7
C3YRY5N	3/8"HB $\times$ 1/4"HB $\times$ 3/8"HB	Non-sterile	50	12.8	9.5	96.3	34.0	13.7
C3HRH5N	1/2"HB $\times$ 1/4"HB $\times$ 1/2"HB	Non-sterile	50	16.0	8.9	96.3	41.1	13.7



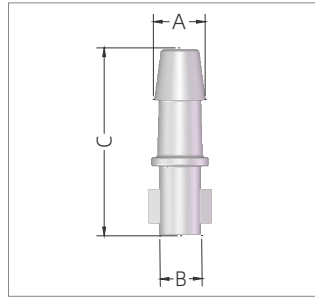
### Boat Port Barbed, Multiple Ports

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B	C	D
C3R041N	1/4"HB X 4	Non-sterile	10	9.2	348.0	35.1	11.2
C3R061N	1/4"HB X 6	Non-sterile	10	9.2	348.0	35.1	11.2
C3R081N	1/4"HB X 8	Non-sterile	10	9.2	348.0	35.1	11.2
C3R101N	1/4"HB X 10	Non-sterile	10	9.2	348.0	35.1	11.2
C3R121N	1/4"HB X 12	Non-sterile	10	9.2	348.0	31.7	11.2

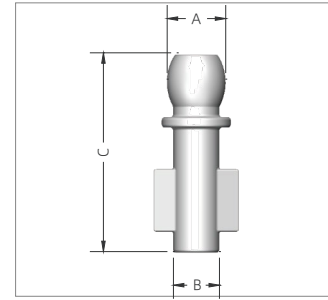
\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: C3RNR5N
2. Sterile: C3RNR5S

# Tubing Bag Port



Tubing Bag Port



Tubing Bag Port Plug

## Tubing Bag Port

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
CBLXN	1/8"HB	Non-sterile	100	5.0	4.4	27.5
CBRXN	1/4"HB	Non-sterile	100	8.9	7.2	32.3

## Tubing Bag Port Plug

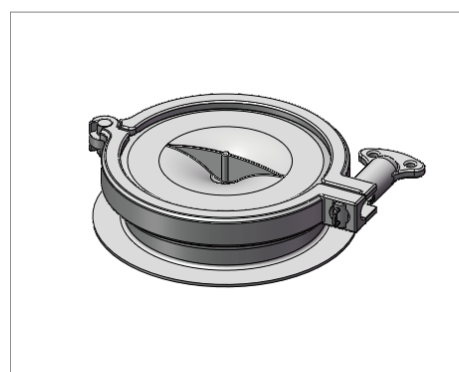
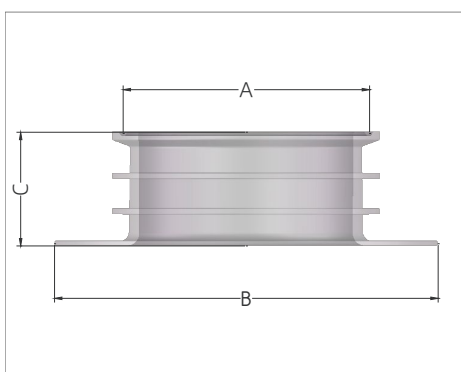
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
CBPLXN	1/8"HB	Non-sterile	100	5.6	4.4	19.0

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: CBLXN
2. Sterile: CBLXS

# Powder Port

Lifemeta™ single-use powder port is mainly used for adding powder reagents to achieve solid-liquid mixing. It can provide different sizes of powder ports to meet the needs of various pharmaceutical production environments. Adding reagents through the powder port can effectively reduce the addition and mixing time of the reagents, and also allows real-time monitoring of the liquid by placing an electrode probe through the powder port.



## Features

- Can be well heat sealed with polyethylene(PE) film
- Achieves the liquid dispensing process through the powder port for powder reagents
- The powder port, blind cap, clamp, and sealing gasket are pre-assembled to form a complete bag-feeding system
- Can provide double-layer sterile packaging sterilized by 25-45 kGy gamma irradiation

## Powder Port

Part No.	Description	Packgaing	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	BΦ	C
C9S1N	1 1/2"TC	Non-sterile	10	43.5	85.5	40.7
C931N	3"TC	Non-sterile	10	83.5	130.0	38.5
C941N	4"TC	Non-sterile	10	110.0	140.0	29.5
C981N-B	8"TC	Non-sterile	10	206.0	251.0	66.7

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

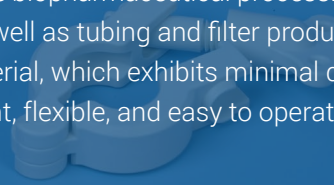
1. Non-sterile: C21L5N
2. Sterile: C21L5S



# Tri-Clamp Sets



Cobetter Lifemeta™ tri-clamp sets includes TC clamps, silicone gaskets, and blind caps, catering to the frequent disconnection or connection needs in the biopharmaceutical process. It is mainly used for bag powder port sealing, flange connections, as well as tubing and filter product connections. This series of clamps is made of reinforced nylon material, which exhibits minimal distortion compared to other high polymer materials, making it lightweight, flexible, and easy to operate.



## ■ Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Aqueous extraction contains < 0.25 EU/mL as determined by Limulus Amebocyte Lysate(LAL), USP <85>
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals
- Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 126 °C

## ■ Features

- More compatible than similar stainless steel products
- Reinforced nylon (PA) material reduces distortion on polymeric components
- Better sealing performance reduces the risk of leakage
- Single-use, convenient disassembly

## ■ Product Type

Type	Material	Size
TC Clamp	Reinforced Nylon (PA)	3/4"TC, 1 1/2"TC, 2"TC, 3"TC, 4"TC, 8"TC
Silicone Gasket	Silicone	3/4"TC, 1 1/2"TC, 2"TC, 3"TC, 4"TC, 8"TC
Blind Cap	Polypropylene (PP)	3/4"TC, 1 1/2"TC, 2"TC, 3"TC, 4"TC, 8"TC

# TC Clamp

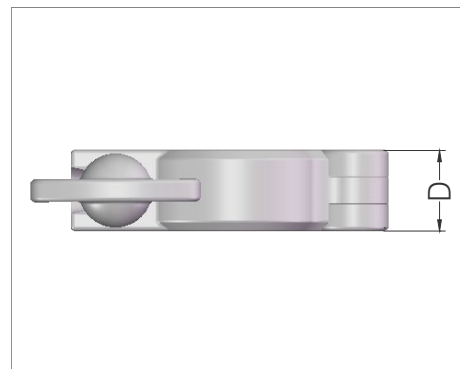
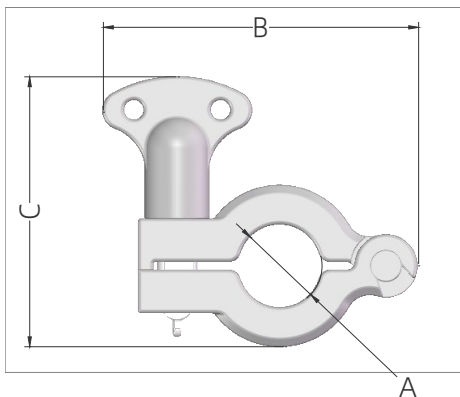
## Features

- More flexible than similar stainless steel products
- Smaller distortion compared to other high polymer materials
- Can be opened and closed repeatedly
- Double-layer PE bag packaging



## Applications

- Realize powder port sealing
- Realize tubing docking of different sizes
- Available for plastic and stainless steel connectors
- Single-use assemblies application



## TC Clamp

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B	C	D
TCCNT1N	3/4"TC	Non-sterile	10	21.0	80.0	68.5	18.0
TCCNS1N	1 1/2"TC	Non-sterile	10	45.0	106.0	88.5	18.0
TCCN21N-B	2"TC	Non-sterile	10	55.6	123.8	87.8	18.0
TCCN31N-B	3"TC	Non-sterile	10	86.0	153.5	104.5	18.5
TCCN41N-B	4"TC	Non-sterile	10	113.0	180.0	132.5	26.9
TCCN81N-B	8"TC	Non-sterile	10	210.0	309.0	239.8	23.5

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: TCCNT1N
2. Sterile: TCCNT1S

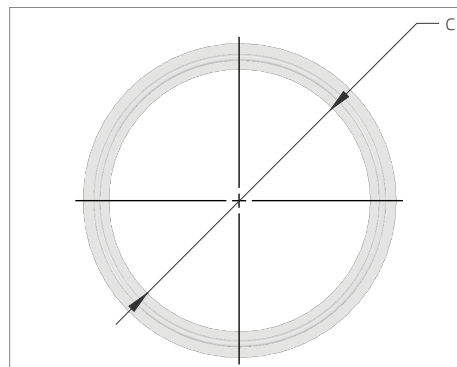
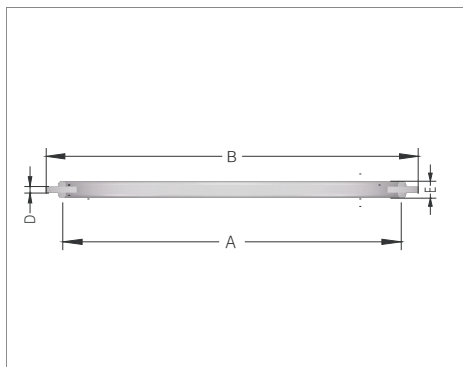
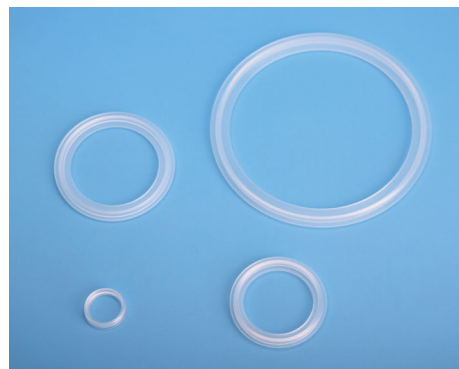
# Silicone Gasket

## Features

- Can maintain long-term sealing
- Prevent leakage caused by twisting of the inner gasket
- Good wear resistance
- Good elasticity and small deformation
- Double-layer PE bag packaging

## Applications

- Realize powder port sealing
- Sealing with TC clamp
- Single-use assemblies application



## Silicone Gasket

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)				
				AΦ	BΦ	CΦ	D	E
TCGST1N-E	3/4"TC	Non-sterile	10	19.9	21.5	16.3	2.0	4.6
TCGSS1N-E	1 1/2"TC	Non-sterile	10	43.6	49.8	35.8	1.7	5.2
TCGS21N-B	2"TC	Non-sterile	10	57.0	63.5	47.5	1.7	4.4
TCGS31N-B	3"TC	Non-sterile	10	81.5	88.7	72.6	2.0	5.2
TCGS41N-E	4"TC	Non-sterile	10	108.8	118.5	99.0	2.0	6.0
TCGS81N-B	8"TC	Non-sterile	10	206.0	217.4	199.4	1.8	5.0

\*Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: TCGST1N-E

2. Sterile: TCGST1S-E

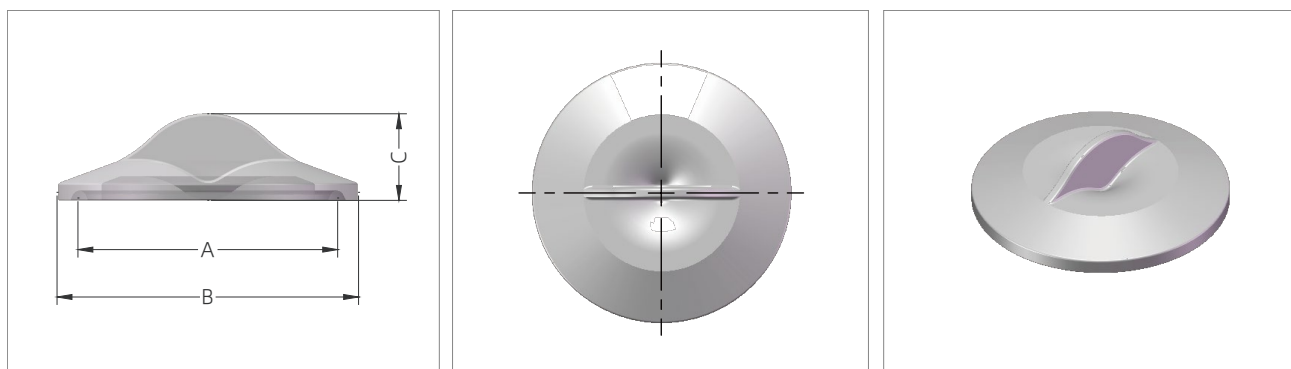
# Blind Cap

## Features

- The handle design allows for quick installation
- Polypropylene(PP) material reduces distortion
- Double-layer PE bag packaging

## Applications

- Realize powder port sealing
- Single-use assemblies application
- Can be used with existing biopharmaceutical clamp



## Blind Cap

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	C
TCEPT1N	3/4"TC	Non-sterile	10	20.3	25.0	15.5
TCEPS1N	1 1/2"TC	Non-sterile	10	43.5	50.5	14.5
TCEP21N-B	2"TC	Non-sterile	10	56.0	63.9	15.0
TCEP31N	3"TC	Non-sterile	10	83.5	91.0	16.6
TCEP41N	4"TC	Non-sterile	10	110.0	119.0	20.3
TCEP81N-B	8"TC	Non-sterile	10	206.0	217.4	25.5

\*Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: TCEPT1N
2. Sterile:TCEPT1S

# Electrode Port

Cobetter Lifemeta™ electrode ports are used to connect single-use bags and electrodes in the pharmaceutical industry. Electrodes are inserted into the bag through the connector to enable the collection and transmission of bioprocess information such as conductivity, pH, and dissolved oxygen. The electrode port is a single-use design that is easy to use and reduces the risk of contamination of the material in the bag.



## ■ Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Resin raw material meets the requirement of USP <87> in Vitro Biological Reactivity Test
- Resin raw material meets the requirement of USP <88> Biological Reactivity Test, in Vivo for Class VI plastics
- Aqueous extraction contains < 0.25 EU/mL as determined by Limulus Amebocyte Lysate(LAL), USP <85>
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals

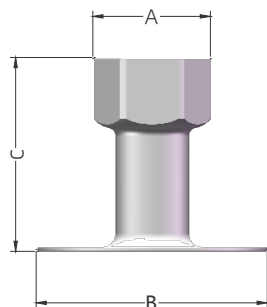
## ■ Features

- Can be well heat sealed with polyethylene (PE) film
- Good compatibility, suitable for the installation of different electrodes
- Simple and easy-to-use design allows for quick electrode installation
- Closely connected to single-use bags, ensuring reliable signal transmission
- Double-layer sterile packaging sterilized by 25-45 kGy gamma irradiation

## ■ Product Type

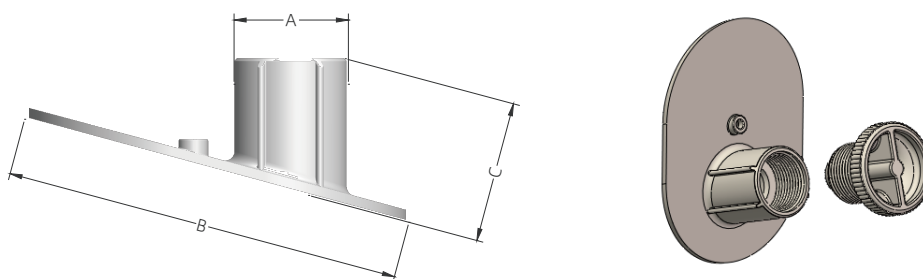
Type	Material	Size
Bag Thread Electrode Port	Polyethylene (PE)	Vertical Thread Electrode Port, Inclined Thread Electrode Port, Thread Plug
Bag Electrode Port	Polyolefin (PO)	3/4"HB, 1/2"HB, 3/4"HB
Thread Electrode Port	Polysulfone (PSF)	3/4"HB to PG13.5 Thread Electrode Port
Bioreactor Probe Sleeve	Silicone	ID1/2"*L17cm, ID1/2"*L18cm, ID3/4"*L19cm

## Vertical Thread Electrode Port



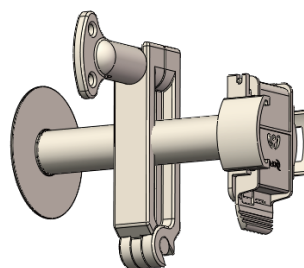
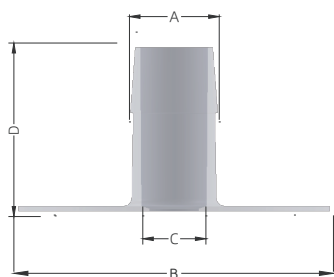
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
C2S1355N	Bag Port with PG13.5 Thread	Non-sterile	50	29.0	57.0	47.8

## Inclined Thread Electrode Port



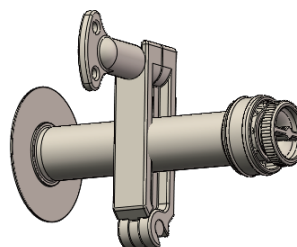
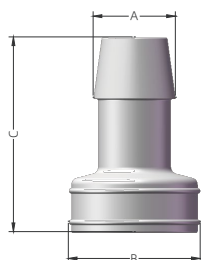
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
C2SK5N	Bag Port with PG13.5 Thread	Non-sterile	50	23.8	82.8	29.5

## Bag Electrode Port



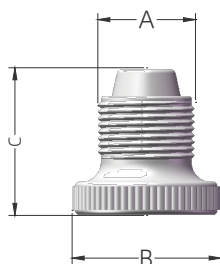
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B $\Phi$	C $\Phi$	D
C2SM5N	3/4"HB	Non-sterile	50	21.3	57.0	9.0	43.6
C2SH5N	1/2"HB	Non-sterile	50	16.0	57.0	9.0	30.0
C2SH955N	1/2"HB, $\phi$ 9.5 mm	Non-sterile	50	16.0	57.0	9.5	30.0
C2SH125N	1/2"HB, $\phi$ 12 mm	Non-sterile	50	16.0	57.0	12.0	30.0

## Thread Electrode Port



Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
C4M3655N	3/4"HB to PG13.5	Non-sterile	50	23.7	38.0	56.1

## Thread Plug



Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
PAS1355N	Thread Plug	Non-sterile	50	20.3	31.0	30.7

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: C2S1355N
2. Sterile: C2S1355S

# Tube Fitting

Cobetter Lifemeta™ SF single-use tube fitting can efficiently assemble with silicone tubings, TPE tubings, reinforced braided silicone tubings, and other tubings to meet various application needs. The fittings are mainly made of polypropylene (PP) or polysulfone (PSF) with excellent mechanical strength and good chemical compatibility, ensuring long-term use. Cobetter is self-produced with reliable quality and meets multiple regulatory requirements. Special sizes can be customized according to customer needs, with fast mold opening and short delivery cycle.

## ■ Regulatory Compliance

<b>Bacterial Endotoxin</b>	Aqueous extraction contains < 0.06 EU/mL as determined by Amebocyte Lysate, USP <85>.
<b>USP &lt;87&gt; Cytotoxicity</b>	Meet the requirement of USP <87> In Vitro Biological Reactivity Test.
<b>USP &lt;88&gt; Biological Reactivity</b>	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics.
<b>Indirect Food Additive</b>	The fluid contact component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177-182.
<b>Animal Derivative Content</b>	Products do not contain animal derived components and are free from TSE risk.
<b>Sterilization</b>	Can be autoclaved 1 cycle for 30 minutes at 130 °C. or Can be sterilized by gamma irradiation at 25-45 kGy.
<b>Quality Assurance</b>	These products are manufactured in a facility which adheres to ISO™ 9001:2015 Practices.
<b>Manufacturing Process</b>	Manufacturing in the ISO Class 7 clean zones

## ■ Features

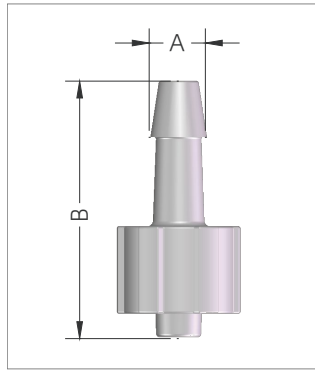
- Lightweight, compact, easy to install and disconnect
- Hose barb design, tightly connected with tubings
- High impact strength
- Excellent chemical resistance

## ■ Product Type

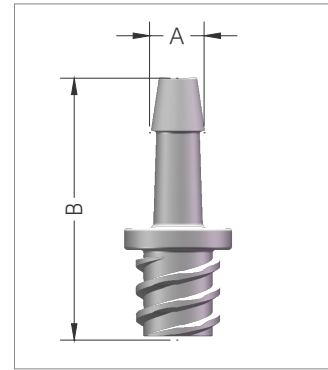
Type	Material	Hose Barb Size
Luer Fitting	Polypropylene(PP)	Male Luer Lock, Female Luer Lock
Tri-clamp Fitting	Polypropylene(PP)/ Polysulfone(PSF)	3/4"TC, 1 1/2"TC
Straight Tube Fitting	Polypropylene(PP) / Polysulfone(PSF)	1/16"HB, 3/32"HB, 1/8"HB, 1/4"HB, 3/16"HB, 3/8"HB, 1/2"HB, 5/8"HB, 3/4"HB, 1"HB
3-way/4-way Joint Fitting	Polypropylene(PP) / Polysulfone(PSF)	3/32"HB, 1/8"HB, 3/16"HB, 1/4"HB, 3/8"HB, 1/2"HB, 1"HB



# Luer Fitting



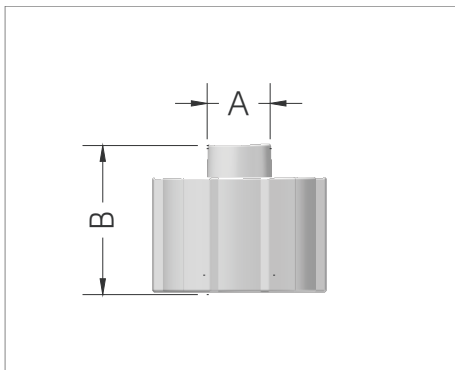
Male Luer Lock



Female Luer Lock

## Luer Fitting

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)	
				A $\Phi$	B
SFLLP5N	1/8"HB $\times$ Male Luer Lock	Non-sterile	50	5.0	22.9
SFLRP5N-A	1/4"HB $\times$ Male Luer Lock	Non-sterile	50	8.9	29.7
SFLLC5N	1/8"HB $\times$ Female Luer Lock	Non-sterile	50	5.0	24.0
SFLRC5N	1/4"HB $\times$ Female Luer Lock	Non-sterile	50	8.9	29.0



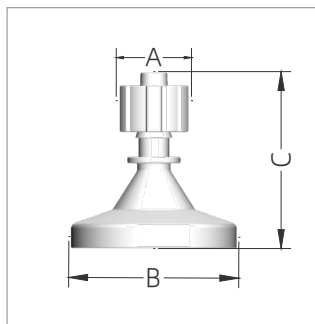
## Luer Plug

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)	
				A $\Phi$	B
SFPC5N	Female Luer Plug	Non-sterile	50	4.3	9.2
SFPP5N-A	Male Luer Plug	Non-sterile	50	4.0	9.4

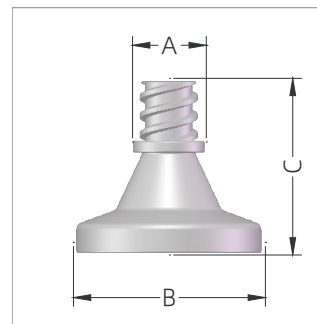
\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: SFLLP5N
2. Sterile: SFLLP5S

# Tri-clamp Fitting



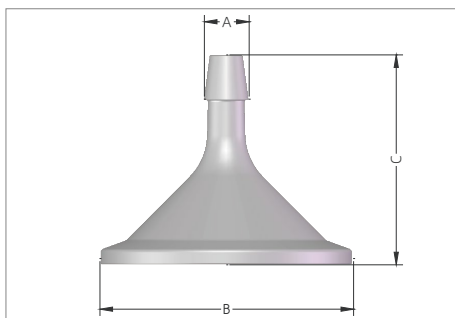
TC x Male Luer Lock



TC x Female Luer Lock

## Luer to Tri-clamp Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	BΦ	C
SFLPT1N(-S)	3/4"TC x Male Luer Lock	Non-sterile	10	11.0	25.0	27.0
SFLCT1N(-S)	3/4"TC x Female Luer Lock	Non-sterile	10	9.6	25.0	23.0



## Hose Barb to Tri-clamp Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	BΦ	C
SFLLT1N(-S)	1/8"HB x 3/4"TC	Non-sterile	10	4.2	24.8	28.0
SFLRT1N(-S)	1/4"HB x 3/4"TC	Non-sterile	10	8.9	25.0	30.0
SFLYT1N(-S)	3/8"HB x 3/4"TC	Non-sterile	10	12.4	25.0	42.6
SFLHT1N(-S)	1/2"HB x 3/4"TC	Non-sterile	10	16.0	25.0	47.6
SFLMT1N(-S)	3/4"HB x 3/4"TC	Non-sterile	10	23.7	25.0	55.0
SFLRS1N(-S)	1/4"HB x 1 1/2"TC	Non-sterile	10	8.9	50.4	41.7
SFLYS1N(-S)	3/8"HB x 1 1/2"TC	Non-sterile	10	12.4	50.4	41.7
SFLHS1N(-S)	1/2"HB x 1 1/2"TC	Non-sterile	10	16.0	50.4	47.6
SFLMS1N(-S)	3/4"HB x 1 1/2"TC	Non-sterile	10	23.7	50.4	56.0
SFLDS1N(-S)	1"HB x 1 1/2"TC	Non-sterile	10	30.0	50.4	68.0

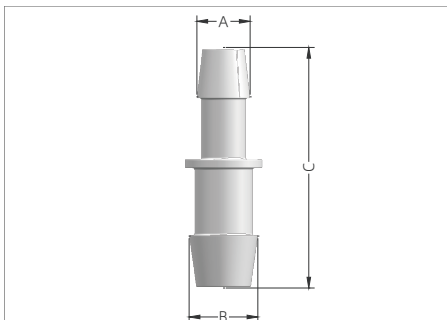
\*Part No. This product is available in polypropylene (PP) and polysulfone (PSF), and is available in sterile and non-sterile packaging.

The reference for naming different types of product numbers is as follows:

1. PP material/Non-sterile: SFLPT1N
2. PP material/Sterile: SFLPT1S
3. PSF material/Non-sterile: SFLPT1N-S
4. PSF material/Sterile: SFLPT1S-S

\*\*Packaging: Can be gamma irradiated at 25-45 kGy in sterile package.

# Straight Tube Fitting



## Equal Barbed Straight Tube Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
SFLLL5N (-S)	1/8"HB $\times$ 1/8"HB	Non-sterile	50	5.0	5.0	27.0
SFLRR5N (-S)	1/4"HB $\times$ 1/4"HB	Non-sterile	50	8.9	8.9	42.0
SFLYY5N (-S)	3/8"HB $\times$ 3/8"HB	Non-sterile	50	12.4	12.4	54.0
SFLHH5N (-S)	1/2"HB $\times$ 1/2"HB	Non-sterile	50	16.0	16.0	58.0
SFLMM5N (-S)	3/4"HB $\times$ 3/4"HB	Non-sterile	50	21.8	21.8	84.0
SFLDD5N (-S)	1"HB $\times$ 1"HB	Non-sterile	50	27.9	27.9	101.4

## Reducer Straight Tube Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
SFLAY5N (-S)	1/16"HB $\times$ 3/8"HB	Non-sterile	50	2.6	11.0	39.0
SFLQL5N (-S)	3/32"HB $\times$ 1/8"HB	Non-sterile	50	3.5	5.0	23.5
SFLLR5N (-S)	1/8"HB $\times$ 1/4"HB	Non-sterile	50	5.0	8.9	38.0
SFLLY5N (-S)	1/8"HB $\times$ 3/8"HB	Non-sterile	50	5.0	12.4	47.1
SFLEY1N (-S)	3/16"HB $\times$ 3/8"HB	Non-sterile	50	6.4	11.0	47.0
SFLRY5N (-S)	1/4"HB $\times$ 3/8"HB	Non-sterile	50	8.9	12.4	48.0
SFLRH5N (-S)	1/4"HB $\times$ 1/2"HB	Non-sterile	50	8.9	16.0	50.0
SFLYH5N (-S)	3/8"HB $\times$ 1/2"HB	Non-sterile	50	12.4	16.0	56.0
SFLYX5N (-S)	3/8"HB $\times$ 5/8"HB	Non-sterile	50	11.0	18.2	68.0
SFLHX5N (-S)	1/2"HB $\times$ 5/8"HB	Non-sterile	50	14.6	18.2	72.0
SFLHM5N (-S)	1/2"HB $\times$ 3/4"HB	Non-sterile	50	14.6	21.8	77.2
SFLMD5N (-S)	3/4"HB $\times$ 1"HB	Non-sterile	50	21.8	28.0	96.0

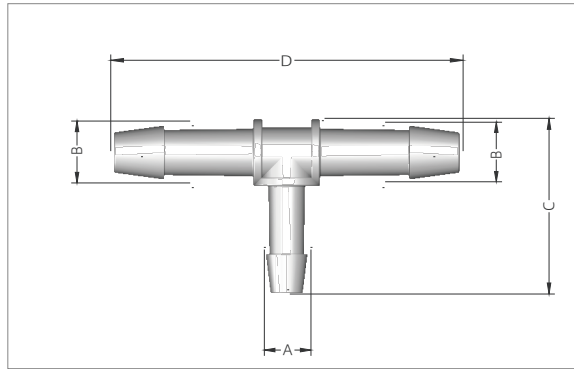
\*Part No. This product is available in polypropylene (PP) and polysulfone (PSF), and is available in sterile and non-sterile packaging.

The reference for naming different types of product numbers is as follows:

1. PP material/Non-sterile: SFLLL5N
2. PP material/Sterile: SFLLL5S
3. PSF material/Non-sterile: SFLLL5N-S
4. PSF material/Sterile: SFLLL5S-S

\*\*Packaging: Can be gamma irradiated at 25-45 kGy in sterile package

# Tee Fitting



## Equal Barbed T-Fitting

Part No.*	Description	Packaging**	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B $\Phi$	C	D
SFTRRR5N (-S)	1/4"HB $\times$ 1/4"HB $\times$ 1/4"HB	Non-sterile	50	8.9	8.9	31.4	52.2
SFTYYY5N (-S)	3/8"HB $\times$ 3/8"HB $\times$ 3/8"HB	Non-sterile	50	12.4	12.4	40.9	67.4
SFTHHH5N (-S)	1/2"HB $\times$ 1/2"HB $\times$ 1/2"HB	Non-sterile	50	14.6	14.6	43.0	69.0
SFTDDD5N (-S)	1"HB $\times$ 1"HB $\times$ 1"HB	Non-sterile	50	28.0	28.0	70.5	110.0

## Reducer T-Fitting

Part No.*	Description	Packaging**	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B $\Phi$	C	D
SFTYYR5N (-S)	3/8"HB $\times$ 3/8"HB $\times$ 1/4"HB	Non-sterile	50	8.9	12.4	39.2	80.2
SFTHHR5N (-S)	1/2"HB $\times$ 1/2"HB $\times$ 1/4"HB	Non-sterile	50	7.6	14.6	39.9	69.0
SFTHHY5N (-S)	1/2"HB $\times$ 1/2"HB $\times$ 3/8"HB	Non-sterile	50	11.0	14.6	34.7	69.0

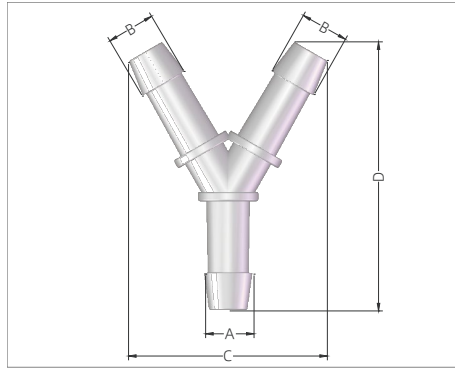
\*Part No. This product is available in polypropylene (PP) and polysulfone (PSF), and is available in sterile and non-sterile packaging.

The reference for naming different types of product numbers is as follows:

1. PP material/Non-sterile: SFTRRR5N
2. PP material/Sterile: SFTRRR5S
3. PSF material/Non-sterile: SFTRRR5N-S
4. PSF material/Sterile: SFTRRR5S-S

\*\*Packaging: Can be gamma irradiated at 25-45 kGy in sterile package

# Y-Fitting



## Equal Barbed Y-Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B $\Phi$	C	D
SFYAAA5N (-S)	1/16"HB × 1/16"HB × 1/16"HB	Non-sterile	50	2.3	2.3	9.5	12.5
SFYQQQ5N (-S)	3/32"HB × 3/32"HB × 3/32"HB	Non-sterile	50	3.5	3.5	15.1	21.9
SFYLLL5N (-S)	1/8"HB × 1/8"HB × 1/8"HB	Non-sterile	50	4.2	4.2	17.4	23.7
SFYEEE5N (-S)	3/16"HB × 3/16"HB × 3/16"HB	Non-sterile	50	7.0	7.0	30.2	43.7
SFYRRR5N (-S)	1/4"HB × 1/4"HB × 1/4"HB	Non-sterile	50	8.9	8.9	40.6	57.1
SFYYYY5N (-S)	3/8"HB × 3/8"HB × 3/8"HB	Non-sterile	50	12.4	12.4	55.2	77.3
SFYHHH5N (-S)	1/2"HB × 1/2"HB × 1/2"HB	Non-sterile	50	16.0	16.0	65.8	89.0

## Reducer Y-Fitting

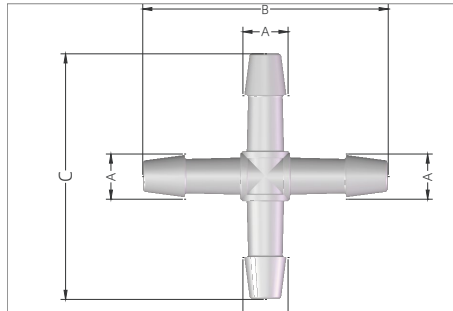
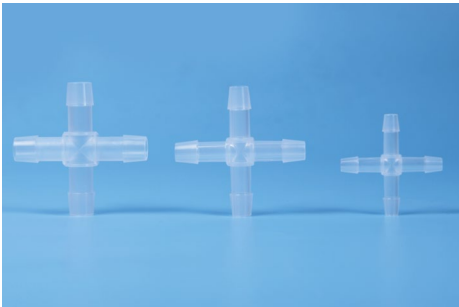
Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions (mm)			
				A $\Phi$	B $\Phi$	C	D
SFYLLR5N (-S)	1/8"HB × 1/8"HB × 1/4"HB	Non-sterile	50	8.9	5.0	21.6	42.1
SFYRRY5N (-S)	1/4"HB × 1/4"HB × 3/8"HB	Non-sterile	50	12.4	8.9	40.6	66.0
SFYYYH5N (-S)	3/8"HB × 3/8"HB × 1/2"HB	Non-sterile	50	14.6	11.0	45.2	62.0

\*Part No. This product is available in polypropylene (PP) and polysulfone (PSF), and is available in sterile and non-sterile packaging. The reference for naming different types of product numbers is as follows:

1. PP material/Non-sterile: SFYAAA5N
2. PP material/Sterile: SFYAAA5S
3. PSF material/Non-sterile: SFYAAA5N-S
4. PSF material/Sterile: SFYAAA5S-S

\*\*Packaging: Can be gamma irradiated at 25-45 kGy in sterile package

# Cross Fitting



## Cross Fitting

Part No.*	Description	Packaging**	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B	C
SFXLLLL5N(-S)	1/8"HB $\times$ 4	Non-sterile	50	5.0	32.8	32.8
SFXRRRR5N(-S)	1/4"HB $\times$ 4	Non-sterile	50	8.9	52.2	52.2
SFXYYYY5N(-S)	3/8"HB $\times$ 4	Non-sterile	50	12.4	67.4	67.4
SFXHHHH5N(-S)	1/2"HB $\times$ 4	Non-sterile	50	16.0	104.0	104.0

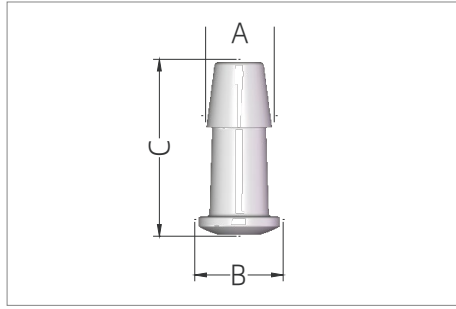
\*Part No. This product is available in polypropylene (PP) and polysulfone (PSF), and is available in sterile and non-sterile packaging.

The reference for naming different types of product numbers is as follows:

1. PP material/Non-sterile: SFXLLLL5N
2. PP material/Sterile: SFXLLLL5S
3. PSF material/Non-sterile: SFXLLLL5N-S
4. PSF material/Sterile: SFXLLLL5S-S

\*\*Packaging: Can be gamma irradiated at 25-45 kGy in sterile package.

# Tubing Plug



## Tubing Plug

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)		
				A $\Phi$	B $\Phi$	C
SFPL5N	1/8"HB	Non-sterile	50	5.0	6.5	13.0
SFPR5N	1/4"HB	Non-sterile	50	8.9	11.1	23.4
SFPY5N	3/8"HB	Non-sterile	50	12.4	15.8	31.0
SFPH5N	1/2"HB	Non-sterile	50	16.0	19.0	38.0
SFPM5N	3/4"HB	Non-sterile	50	23.7	26.0	55.0

\* Packaging: This product can be packaged in sterile or non-sterile modes. The sterilization mode of sterile mode is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods Refer to the following:

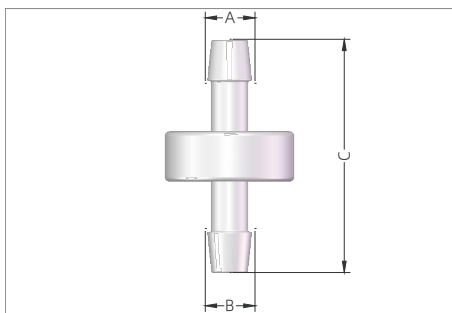
1. Non-sterile: SFPL5N
2. Sterile: SFPL5S

# UNIT CONVERSION TABLE

IMPERIAL (INCHES)		METRIC (mm)	IMPERIAL (INCHES)		METRIC (mm)	IMPERIAL (INCHES)		METRIC (mm)
FRACTIONAL	DECIMAL		FRACTIONAL	DECIMAL		FRACTIONAL	DECIMAL	
1/16"	0.063	1.6	7/16"	0.438	11.1	7/8"	0.875	22.2
3/32"	0.093	2.4	1/2"	0.500	12.7	1"	1.000	25.4
1/8"	0.125	3.2	9/16"	0.563	14.3	1 1/8"	1.125	28.6
3/16"	0.188	4.8	5/8"	0.625	15.9	1 3/16"	1.188	30.2
1/4"	0.250	6.4	11/16"	0.688	17.5	1 1/4"	1.250	31.8
5/16"	0.313	7.9	3/4"	0.750	19.1	1 5/16"	1.313	33.3
3/8"	0.375	9.5	13/16"	0.813	20.6	1 3/8"	1.375	34.9

# Check Valve

Cobetter Lifemeta SF single-use check valve is mainly used to control the direction of fluid flow. The diaphragm sealing design effectively prevents fluid backflow, reducing the risk of material contamination. In the non-working state, the diaphragm of the check valve is in the closed state. Its two ports use a hose barb design, which is convenient to connect tubing and realize liquid transfer.



## Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Resin raw material meets the requirement of USP <87> in Vitro Biological Reactivity Test
- Resin raw material meets the requirement of USP <88> Biological Reactivity Test, in Vivo for Class VI plastics
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals
- Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 121 C

## Features

- Polypropylene main body with silicone septum
- The diaphragm opening pressure is low, basically 0 kPa
- Ensure directional flow of liquid and prevent backflow
- Polypropylene and silicone material, with a maximum pressure resistance of 5 bar
- Alleviate the problem of air trapping

## Check Valve

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	BΦ	C
CVCMR1N	1/4"HB × 1/4"HB	Non-sterile	10	7.6	7.6	40.0
CVCMY1N	3/8"HB × 3/8"HB	Non-sterile	10	11.0	11.0	51.6

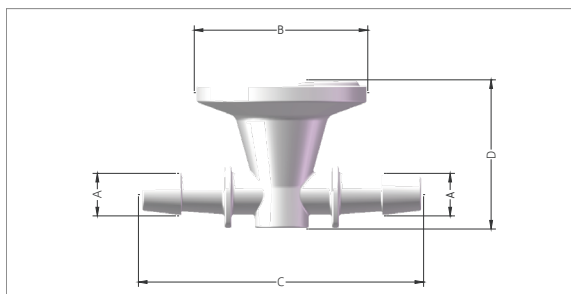
\*Packaging: This product can be packaged in sterile or non-sterile modes. The sterilization mode of sterile mode is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods Refer to the following:

1. Non-sterile:CVCMR1N
2. Sterile: CVCMR1S



# Instrument Tee

Cobetter Lifemeta™ SFG single-use instrument tee can be used in conjunction with existing stainless steel instruments and, when connected to pressure monitoring equipment, can provide good measurement accuracy, helping to reduce the common signal drift in complex monitoring configurations. The tee design provides an integrated and unobstructed fluid path and has good sealing during testing. Additionally, during the sterilization process, there is no need to install pressure measuring instruments, reducing the risk of contamination.



## Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Resin raw material meets the requirement of USP <87> in Vitro Biological Reactivity Test
- Resin raw material meets the requirement of USP <88> Biological Reactivity Test, in Vivo for Class VI plastics
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals
- Can be sterilized by gamma irradiation at 25-45 kGy

## Features

- PE material welded with PE film, withstanding vacuum pressure of 0-0.55 MPa at room temperature
- It does not require proprietary monitors or transmitters / line adjustments
- No need to install instruments during sterilization
- Can be used for pressure testing, fluid transfer, and filtration applications
- The welded film ensures sterile barrier properties, reducing the risk of material contamination

## Applications

- Centrifugal filtration
- Down stream filtration
- Chromatography
- Depth filtration
- Tangential flow filtration (TFF)/Cross-flow filtration(CFF)

## Instrument Tee

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)			
				AΦ	B	C	D
SFGSYNN	3/8"HB × 3/8"HB × 1 1/2"TC	Non-sterile	1	12.4	50.5	83.0	43.4
SFGSHHNN	1/2"HB × 1/2"HB × 1 1/2"TC	Non-sterile	1	16.0	50.5	94.2	43.4

\* Packaging: This product can be packaged in sterile or non-sterile modes. The sterilization mode of sterile mode is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods Refer to the following:

1. Non-sterile: SFGSYNN
2. Sterile: FGSYYNS

# Lifemeta™ EC Easy Connector

Cobetter Lifemeta EC easy connector is mainly used for fluid transmission and has a variety of connector options. It can realize the function of quick connection and disconnection of tubings. When the male and female easy connectors are coupled, they can be rotated to avoid the problem of tubing distortion. Its swivel design reduces the risk of accidental disconnection.

## ■ Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufactured in the ISO Class 8 clean zones
- Meet the requirement of USP <87> in Vitro Biological Reactivity Test
- Meet the requirement of USP < 88> Biological Reactivity Test, in Vivo for Class VI plastics
- Aqueous extraction contains < 0.25 EU/mL as determined by Limulus Amebocyte Lysate(LAL), USP <85>
- Particulate matter in the product eluent meets the requirement in USP <788> for large volume parenterals
- Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 126°C 25 cycles

## ■ Features

- Suitable for fast and stable transmission of various fluids
- Multiple specifications reduce the need for tubing diameter changes
- Sterile connections can be achieved under Class A laminar flow
- Can be applied to upstream low-risk production
- Can be adapted to similar easy connectors on the market

## ■ Product types

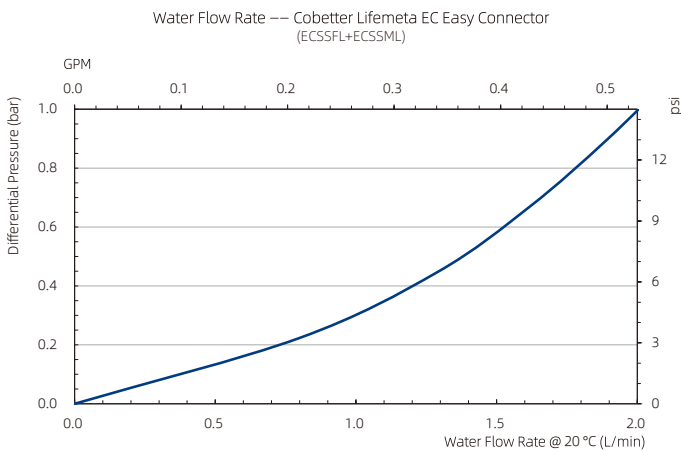
Type	Material	Specification
ECS Easy Connector	Female Coupling Bodies: Polysulfone (PSF) + PVDF Male Coupling Inserts: Polysulfone (PSF) + Silicone	1/8"HB, 1/4"HB, 3/8"HB, 1 1/2"TC, Sealing Plug, Sealing Cap
ECM Easy Connector	Female Coupling Bodies: Polysulfone (PSF) + PVDF Male Coupling Inserts: Polysulfone (PSF) + Silicone	1/2"HB, Sealing Plug, Sealing Cap
ECL Easy Connector	Female Coupling Bodies: Polysulfone (PSF) Male Coupling Inserts: Polysulfone (PSF) + Silicone	3/4"HB, Sealing Plug, Sealing Cap

# ECS Easy Connector

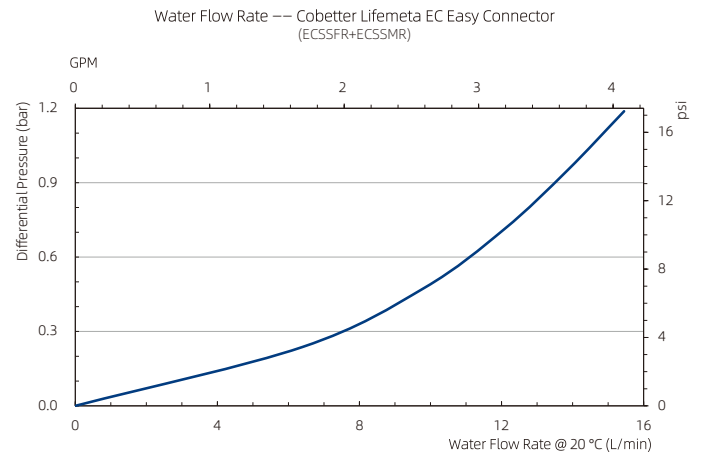


Specification	Description
Size	1/8"HB, 1/4"HB, 3/8"HB, 1 1/2"TC
Material	Main Body: Polysulfone (PSF); O-ring: Silicone; Thumb Latch: PVDF
Temperature Range	-80~132 C
Vacuum Resistance	>0.09 MPa
Pressure Range	0~0.41 MPa
Retention Volume	1/8"HB ~0.2 mL; 1/4"HB ~0.2 mL; 3/8"HB ~0.1 mL
Burst Strength	1/8"HB 5.78~6.36 MPa; 1/4"HB 4.49~4.95 MPa; 3/8"HB 3.09~4.26 MPa
Sterilization	Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 60 minutes at 132 C, 25 cycles

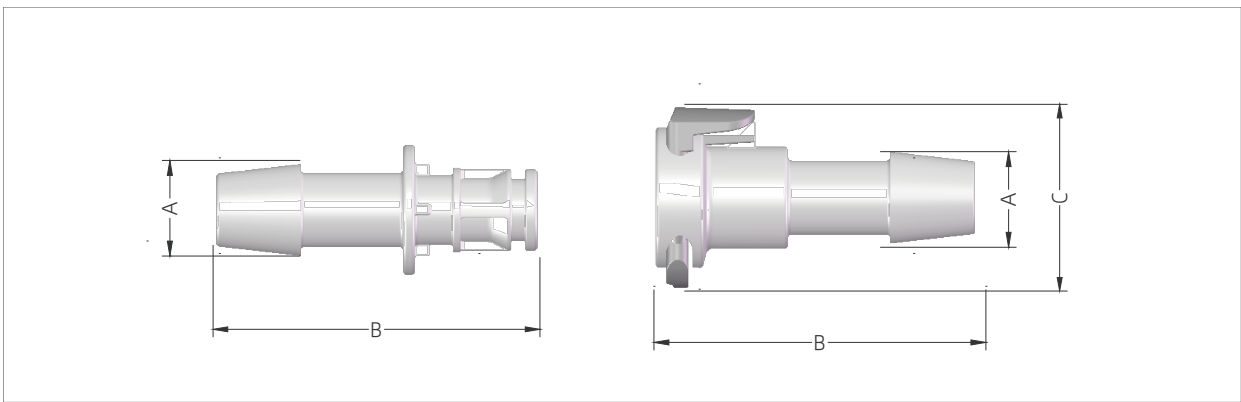
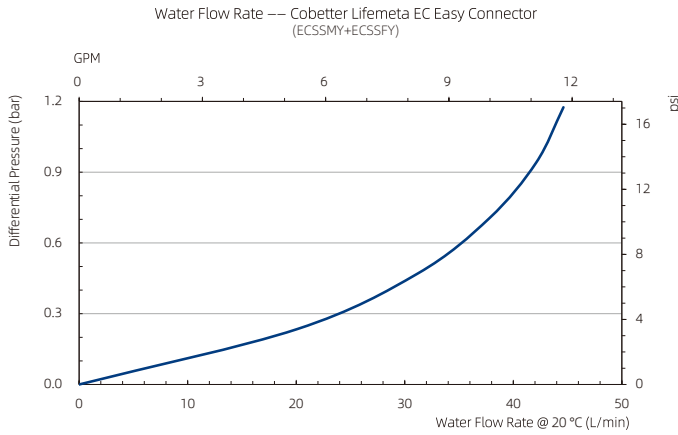
Lifemeta ECS 1/8" Easy Connector



Lifemeta ECS 1/4" Easy Connector



Lifemeta ECS 3/8" Easy Connector

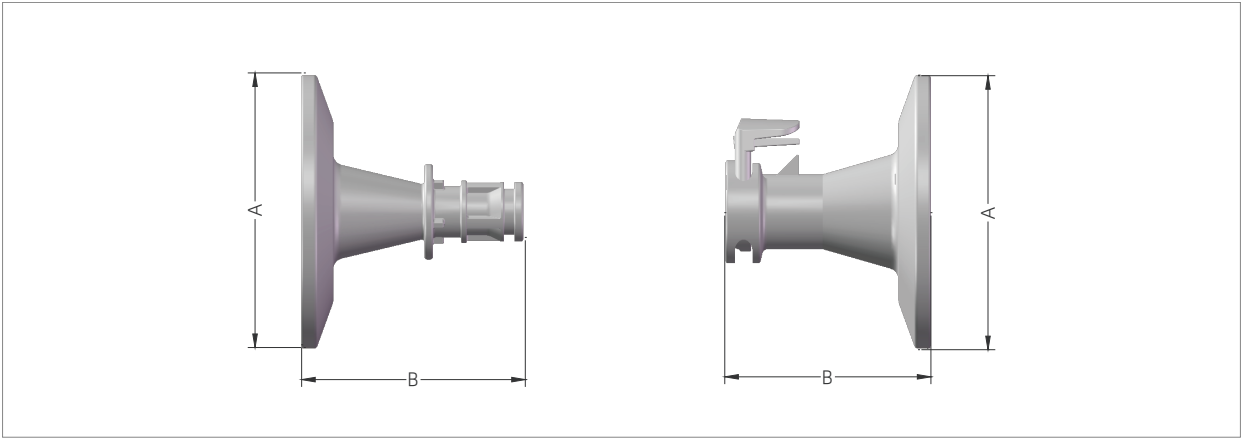


ECS Easy Connector (Female Coupling Bodies, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	CΦ
ECSSFL1N	1/8"HB	Non-sterile	10	5.0	31.0	24.4
ECSSFR1N	1/4"HB	Non-sterile	10	8.9	38.8	24.5
ECSSFY1N	3/8"HB	Non-sterile	10	12.4	43.5	24.4

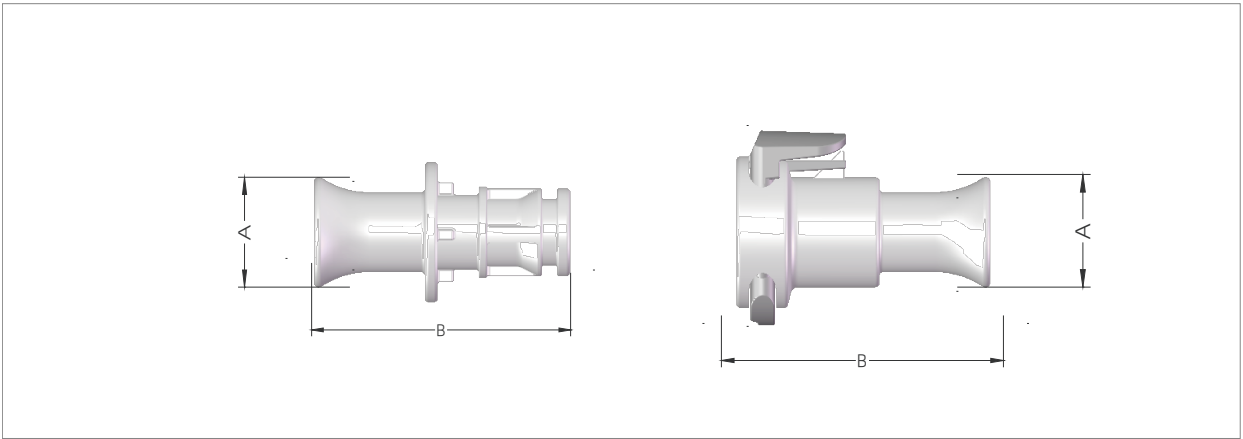
ECS Easy Connector (Male Coupling Inserts, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)	
				AΦ	B
ECSSML1N	1/8"HB	Non-sterile	10	5.0	31.3
ECSSMR1N	1/4"HB	Non-sterile	10	8.9	39.1
ECSSMY1N	3/8"HB	Non-sterile	10	12.4	43.8



### ECS Easy Connector (TC)

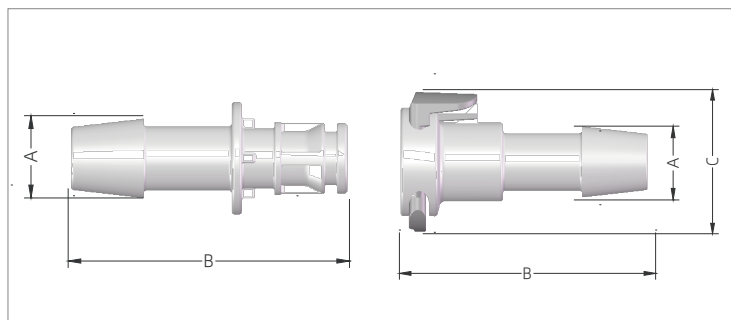
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)	
				A $\Phi$	B
ECSSFS1N	ECS 1 1/2" TC Clamp Female Connector	Non-sterile	10	50.5	38.0
ECSSMS1N	ECS 1 1/2" TC Clamp Male Connector	Non-sterile	10	50.5	41.1



### ECS Easy Connector (Plug)

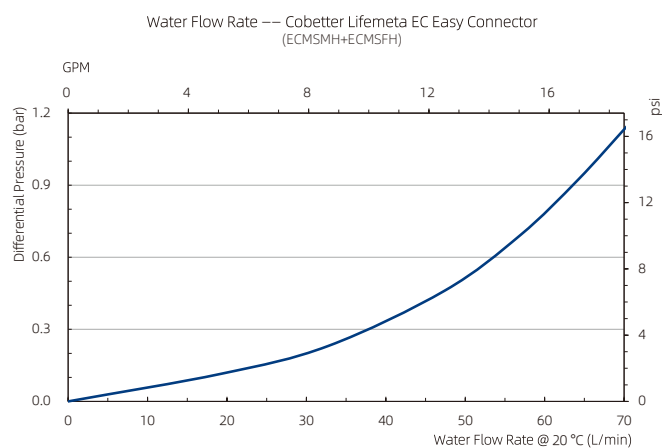
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)	
				A $\Phi$	B
ECSSFP1N	Female Sealing Cap	Non-sterile	10	13.8	32.0
ECSSMP1N	Male Sealing Plug	Non-sterile	10	13.8	32.3

# ECM Easy Connector



Specification	Description
Size	1/2"HB
Material	Main Body: Polysulfone (PSF); O-ring: Silicone; Thumb Latch: PVDF
Temperature Range	-80~132 C
Vacuum Resistance	>0.09 MPa
Pressure Range	0~0.41 MPa
Retention Volume	0.2 mL
Burst Strength	1.56~2.88 MPa
Sterilization	Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 60 minutes at 132 C, 25 cycles

Lifemeta ECM 1/2" Easy Connector



## ECM Easy Connector (Female Coupling Bodies, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	CΦ
ECMSFH1N	1/2"HB	Non-sterile	10	16.0	55.6	34.4

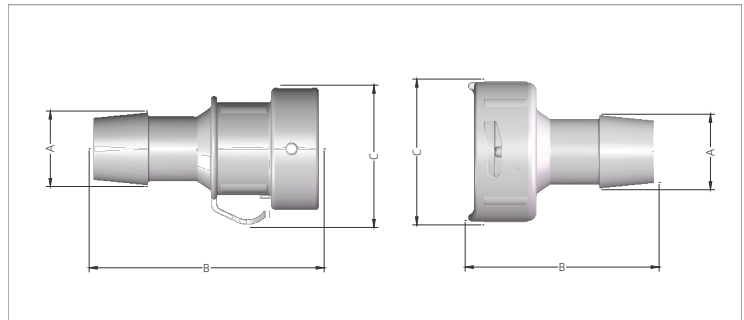
## ECM Easy Connector (Male Coupling Inserts, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)	
				AΦ	B
ECMSMH1N	1/2"HB	Non-sterile	10	16.0	55.6

## ECM Easy Connector (Plug)

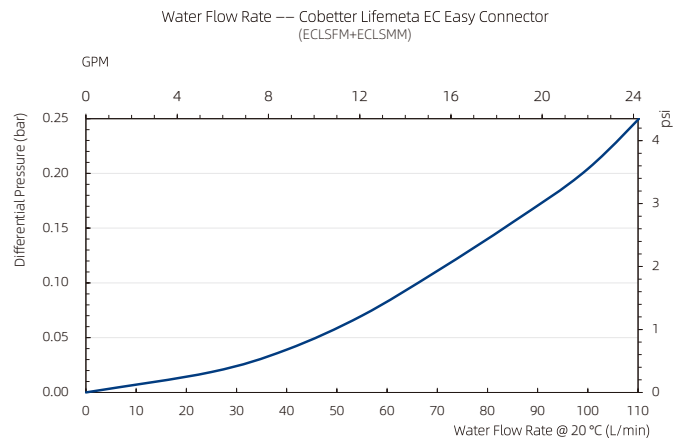
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)	
				AΦ	B
ECMSFP1N	Female Sealing Cap	Non-sterile	10	20.8	45.5
ECMSMP1N	Male Sealing Plug	Non-sterile	10	20.8	45.5

# ECL Easy Connector



Specification	Description
Size	3/4"HB
Material	Main Body: Polysulfone(PSF); O-ring: Silicone
Temperature Range	-80~132 C
Vacuum Resistance	>0.09 MPa
Retention Volume	0.2 mL
Sterilization	Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 60 minutes at 132 C, 25 cycles

Lifemeta ECL 3/4" Easy Connector



## ECL Easy Connector (Female Coupling Bodies, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	CΦ
ECLSFM1N	3/4"HB	Non-sterile	10	23.5	60.4	45.4

## ECL Easy Connector (Male Coupling Inserts, Hose Barb)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	CΦ
ECLSMM1N	3/4"HB	Non-sterile	10	23.5	73.2	44.3

## ECL Easy Connector (Plug)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions (mm)		
				AΦ	B	CΦ
ECLSF1N	Female Sealing Cap	Non-sterile	10	45.4	20.2	45.4
ECLSM1N	Male Sealing Plug	Non-sterile	10	39.6	35.0	31.8

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: ECSSFL1N
2. Sterile: ECSSFL1S

The top section of the page features a blue background with several pieces of clear, flexible tubing arranged in a crisscross pattern. The text 'Lifemeta™ Tubing' is written in a large, white, sans-serif font, with 'Bioprocess Solutions' in a smaller, white, sans-serif font directly below it.

# Lifemeta™ Tubing

## Bioprocess Solutions

### ■ Quality Assurance

Cobetter establishes and continuously maintains the company's quality assurance system in accordance with the requirements of ISO™ 9001:2015 quality management system and cGMP. All the products are manufactured under strict quality system to ensure stable and reliable quality.

### ■ Raw Material Control

Cobetter has established a rigorous supplier selection and periodic evaluation system. The core materials are selected from internationally renowned raw material suppliers and manage the suppliers hierarchically. The outsourced materials or components are inspected according to the company's internal control standards to ensure the quality of raw materials is stable and reliable.

### ■ Environment Management

The entire manufacturing process of Cobetter Lifemeta tubing from raw material storage to product packaging is completed in the ISO Class 7 clean zones, which ensures the cleanliness of the product and prevents pollution. The air purification system is confirmed and maintained regularly to ensure that the cleanliness of environment continuously meets the requirements of ISO Class 7. The suspended particles, sedimentation bacteria, temperature, humidity and differential pressure are monitored periodically to provide for a highly controlled clean environment.



# Overview Tubing Series



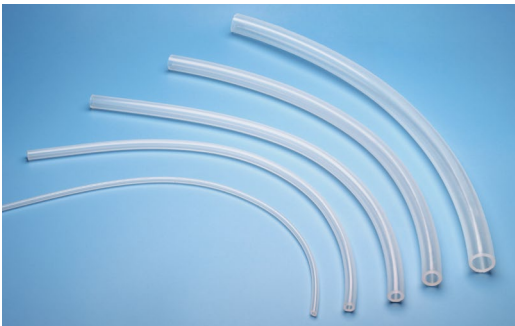
## Lifemeta™ STT Pt-cured Silicone Tubing

Biopharmaceutical grade Pt-cured silicone tubing. Can be widely used in fluid transmission in different aspects of the biopharmaceutical industry. It has good resilience and tear resistance, translucent color and smooth inner surface.



## Lifemeta™ STF TPE Tubing

High-performance tubing extruded from medical-grade thermoplastic elastomer (TPE) material. Compatible with common tube sealers and aseptic tube welders, achieving excellent performance of frequent aseptic disconnection and connection of tubings.



## Lifemeta™ ST5P Pt-cured Silicone Pump Tubing

Biopharmaceutical grade Pt-cured silicone pump tubing, it can be applied to most peristaltic pumps and has a long pump life. Excellent wear resistance reduces wear on the outer wall of the tubing and improves the overall efficiency of the filtration system.



## Lifemeta™ ST8H High Pressure Silicone Tubing

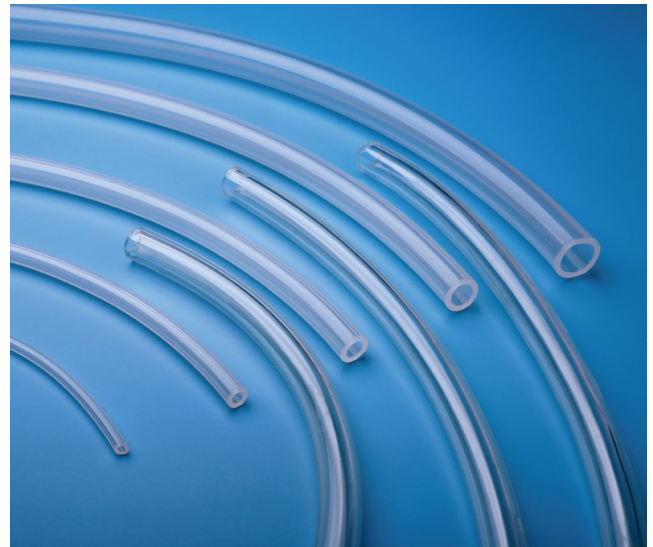
It has very good resilience and kink resistance and typically has a higher pressure rating than softer alternatives. It is the optimal choice for single-use applications such as TFF, virus filtration, inline integrity testing of filtration assemblies, and high volume fluid transfer.

## ■ Product Features

Tubing Series	Lifemeta™ STT	Lifemeta™ STF	Lifemeta™ ST5P	Lifemeta™ ST8H
Material	Pt-cured Silicone	TPE	Pt-cured Silicone	Pt-cured Silicone
Durometer Hardness (Shore A)	60 ± 5	60 ± 5	50 ± 5	82 ± 5
Appearance	Translucent	Translucent	Translucent	Translucent
Aseptic Sealing and Welding	No	✓	No	No
Peristaltic Pump Life	Fair	Limited	Excellent	No
Min. Temperature	-59.8 F   -51 C	-58 F   -50 C	-59.8 F   -51 C	-59.8 F   -51 C
Max. Temperature	449.6 F   232 C	284 F   140 C	449.6 F   232 C	449.6 F   232 C
Gamma Stability (max. 50 kGy)	✓	✓	✓	✓
Sterilization Methods	Autoclave	Autoclave	Autoclave	Autoclave
	Gamma irradiation	Gamma irradiation	Gamma irradiation	Gamma irradiation
Validation Guide	✓	✓	✓	✓
Packaging	Double layer PE bag packaging			
Recommended usage	Culture media and buffers preparation Fermentation/Cultivation Purification	Culture media and buffers preparation Fermentation/Cultivation Purification Aseptic Sealing and Welding	Culture media and buffers preparation Fermentation/Cultivation Purification Peristaltic pump transfer applications	Online integrity testing Large volume fluid transfer

# Lifemeta™ STT Platinum Cured Silicone Tubing

Cobetter Lifemeta™ STT platinum-cured silicone tubing is designed for efficient fluid transfer. The product is manufactured using high-purity medical-grade raw materials through advanced extrusion equipment and molding tools, and can withstand extreme temperatures, a wide range of acid-alkali salts, organic solvents, and radiation, while also exhibiting good resilience and tear resistance, suitable for use in peristaltic pumps. The Lifemeta™ STT tubing is semi-transparent with a smooth internal surface, providing a reliable solution for low adsorption applications.



## Product Features

- High purity, medical-grade raw materials
- Continuous monitoring of the production process
- Semi-transparent tubing with a smooth internal surface
- Resistant to a wide range of acids, alkalis, salts, and organic solvents
- Excellent tensile strength to ensure the toughness of the tubing

## Product Applications

- Culture media and buffers preparation
- Supply feed liquids to bioreactors and cultivation systems
- Upstream and downstream transfer of base liquids
- Integration of single-use assemblies systems
- Laboratory fluid transfer applications
- Food processing applications

## Regulatory Compliance

Particulate Matter	Particulate matter in the product eluent meets the requirements in USP <788> for large volume parenterals.
Bacterial Endotoxin	Aqueous extraction contains < 0.25 EU/mL as determined by Amebocyte Lysate, USP <85>.
USP <87> Cytotoxicity	Meet the requirement of USP <87> In Vitro Biological Reactivity Test.
USP <88> Biological Reactivity	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics.
ISO 10993-4	Meet the requirement of ISO 10993-4 In Vitro Hemolytic Test.
Indirect Food Additive	The fluid contact component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182.
Animal Derivative Content	Products do not contain animal derived components and are free from TSE risk.
Quality Assurance	These products are manufactured in a facility which adheres to ISO™ 9001:2015 Practices.

## Sterilization Methods

Gamma Irradiation	Can be gamma irradiated at 25-45 kGy in sterile package and can not be re-sterilized.
Autoclave	Can be autoclaved 25 cycles for 30 minutes at 121 °C.

## Physical characteristics

Item	Value	Procedure
Durometer Hardness (Shore A)	60 ± 5	ASTM D2240
Burst Strength	0.4-0.9 MPa	ASTM D380
Tensile Strength	7.05-8.96 MPa	ASTM D412
Elongation at Break	378-443 %	ASTM D412
Vacuum Resistance	> 30 kPa	ISO 7233: 2016
Temperature Range	-51-232 °C	

*Note: Please refer to the validation guide document for detailed test methods and results.*

## Lifemeta™ STT Ordering Information

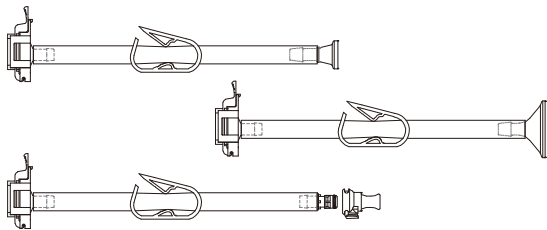
Part Number	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty m/pk
	In.	mm.	In.	mm.	In.	mm.			
STT0816150N	1/32"	0.8	5/32"	4.0	1/16"	1.6	13#	Non-sterile	15
STT1216150N	3/64"	1.2	11/64"	4.4	1/16"	1.6	/	Non-sterile	15
STT1616150N	1/16"	1.6	3/16"	4.8	1/16"	1.6	14#	Non-sterile	15
STT1624150N	1/16"	1.6	1/4"	6.4	3/32"	2.4	119#	Non-sterile	15
STT2416150N	3/32"	2.4	7/32"	5.6	1/16"	1.6	19#	Non-sterile	15
STT3060150N	/	3.0	/	6.0	/	1.5	/	Non-sterile	15
STT3224150N	1/8"	3.2	5/16"	8.0	3/32"	2.4	120#	Non-sterile	15
STT3218150N	1/8"	3.2	/	6.8	/	1.8	/	Non-sterile	15
STTL150N	1/8"	3.2	1/4"	6.4	1/16"	1.6	16#	Non-sterile	15
STT25150N	3/16"	4.8	5/16"	8.0	1/16"	1.6	25#	Non-sterile	15
STT4820150N	3/16"	4.8	/	8.8	/	2.0	/	Non-sterile	15
STT15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
STT17150N	1/4"	6.4	3/8"	9.6	1/16"	1.6	17#	Non-sterile	15
STTR150N	1/4"	6.4	7/16"	11.2	3/32"	2.4	24#	Non-sterile	15
STT26150N	1/4"	6.4	1/2"	12.7	1/8"	3.2	26#	Non-sterile	15
STT35150N	5/16"	8.0	1/2"	12.7	3/32"	2.4	35#	Non-sterile	15
STT36150N	3/8"	9.6	9/16"	14.4	3/32"	2.4	36#	Non-sterile	15
STTY150N	3/8"	9.6	5/8"	15.9	1/8"	3.2	73#	Non-sterile	15
STTH150N	1/2"	12.7	3/4"	19.1	1/8"	3.2	82#	Non-sterile	15
STTN150N	3/4"	19.1	1"	25.4	1/8"	3.2	90#	Non-sterile	15
STTM100N	3/4"	19.1	1 1/8"	28.6	3/16"	4.8	191#	Non-sterile	10

Note: The table is the standard product number for sale, if you need special specifications (length, sterile packaging), please communicate the requirements in advance.

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: STT0816150N

2. Sterile: STT0816150S



# Lifemeta™ STF TPE tubing

Cobetter Lifemeta™ STF TPE tubing is a high-performance flexible tube extruded from medical-grade thermoplastic elastomer (TPE) material, with excellent heat sealing and sterile welding performance. Its inner wall is smooth and low-flaking. The Lifemeta™ STF has demonstrated considerable welding compatibility and weldability in comparison to the leading TPE tubes in the market. Compared with traditional silicone and PVC tubes, this product has wide chemical compatibility and can maintain excellent physicochemical performance under various working conditions.



## Product Features

- Sterile welding and heat sealing
- Excellent low absorption and low binding
- Lower permeability compared to silicone resin
- Smooth inner wall, excellent fluidity
- Outstanding tensile strength

## Product Applications

- Cell culture media and buffer preparation
- Liquid sampling systems
- Filtration processes
- Sterile filling
- Sterile disconnect and connection
- Single-use tubing assemblies

## Regulatory Compliance

<b>Bacterial Endotoxin</b>	Aqueous extraction contains < 0.25 EU/mL as determined by Amebocyte Lysate, USP <85>.
<b>USP &lt;87&gt; Cytotoxicity</b>	Meet the requirement of USP <87> In Vitro Biological Reactivity Test.
<b>USP &lt;88&gt; Biological Reactivity</b>	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics.
<b>Animal Derivative Content</b>	Products do not contain animal derived components and are free from TSE risk.
<b>Quality Assurance</b>	These products are manufactured in a facility which adheres to ISO™ 9001:2015 Practices.

## Sterilization Methods

<b>Gamma Irradiation</b>	Can be gamma irradiated at 25-45 kGy in sterile package and can not be re-sterilized.
<b>Autoclave</b>	Can be autoclaved 25 cycles for 30 minutes at 121 °C.

## Physical characteristics

Item	Value	Procedure
Durometer Hardness (Shore A)	60 ± 5	ASTM D2240
Burst Strength	0.4-0.6 MPa	ASTM D380
Tensile Strength	5.17-5.18 MPa	ASTM D412
Elongation at Break	742-776 %	ASTM D412
Vacuum Resistance	> 30 kPa	ISO 7233: 2016
Temperature Range	-50-140 °C	

Note: Please refer to the validation guide document for detailed test methods and results.

## Lifemeta™ STF Ordering Information

Part Number	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty m/pk
	In.	mm.	In.	mm.	In.	mm.			
STFL150N	1/8"	3.2	1/4"	6.4	1/16"	1.6	16#	Non-sterile	15
STF3060150N	/	3.0	/	6.0	/	1.5	/	Non-sterile	15
STF15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
STFR150N	1/4"	6.4	7/16"	11.2	3/32"	2.4	24#	Non-sterile	15
STFY150N	3/8"	9.6	5/8"	15.9	1/8"	3.2	73#	Non-sterile	15
STFH150N	1/2"	12.7	3/4"	19.1	1/8"	3.2	82#	Non-sterile	15
STFN150N	3/4"	19.1	1"	25.4	1/8"	3.2	90#	Non-sterile	15
STFM100N	3/4"	19.1	1 1/8"	28.6	3/16"	4.8	191#	Non-sterile	10

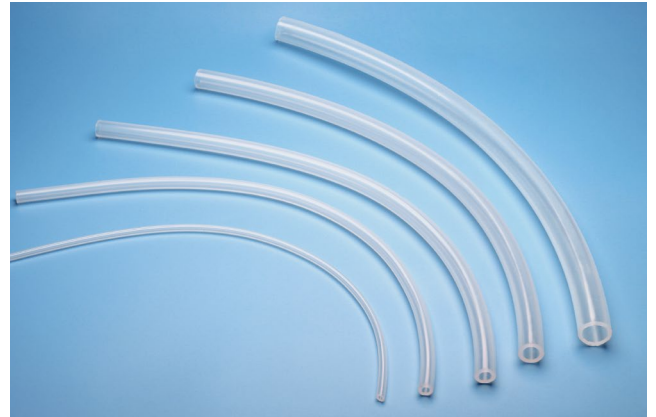
Note: The table is the standard product number for sale, if you need special specifications (length, sterile packaging), please communicate the requirements in advance.

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: STFL150N
2. Sterile:STFL150S

# Lifemeta™ ST5P Pt-cured Silicone Pump Tubing

Cobetter Lifemeta™ ST5P Pt-cured silicone pump tubing can be used in process applications such as ultrapure liquid transfer in production, aseptic filling, packaging and other single-use systems. Fluid transmission is mainly carried out through a peristaltic pump, which reduces the risk of fluid contacting any part of the pump body. Good wear resistance can reduce damage to the outer wall of the tubing, thereby improving the overall transmission efficiency of the filtration system.



## Product Features

- Excellent peristaltic pump life
- The operating life in the pump is over 100 h
- Excellent wear resistance, low flaking
- Good chemical compatibility
- Excellent tensile strength
- Smooth inner wall, excellent fluidity
- Low adsorption performance

## Product Applications

- Aseptic filling and dispensing systems
- Diagnostic equipment
- Vaccine production
- Biological filtration and fermentation
- Bioreactor applications
- Shear sensitive fluid transport

## Regulatory Compliance

<b>Particulate Matter</b>	Particulate matter in the product eluent meets the requirements in USP <788> for large volume parenterals.
<b>Bacterial Endotoxin</b>	Aqueous extraction contains < 0.25 EU/mL as determined by Amebocyte Lysate, USP <85>.
<b>USP &lt;87&gt; Cytotoxicity</b>	Meet the requirement of USP <87> In Vitro Biological Reactivity Test.
<b>USP &lt;88&gt; Biological Reactivity</b>	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics.
<b>ISO 10993-4</b>	Meet the requirement of ISO 10993-4 In Vitro Hemolytic Test.
<b>Indirect Food Additive</b>	The fluid contact component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182.
<b>Animal Derivative Content</b>	Products do not contain animal derived components and are free from TSE risk.
<b>Quality Assurance</b>	These products are manufactured in a facility which adheres to ISO™ 9001:2015 Practices.



## Sterilization Methods

<b>Gamma Irradiation</b>	Can be gamma irradiated at 25-45 kGy in sterile package and can not be re-sterilized.
<b>Autoclave</b>	Can be autoclaved 25 cycles for 30 minutes at 121 °C.

## Physical characteristics

Item	Value	Procedure
Durometer Hardness (Shore A)	50 ± 5	ASTM D2240
Burst Strength	0.74-0.97 MPa	ASTM D380
Vacuum Resistance	> 75 kPa	ISO 7233: 2016
Temperature Range	-51-232 °C	

Note: Please refer to the validation guide document for detailed test methods and results.

## Lifemeta™ ST5P Ordering Information

Part Number	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty m/pk
	In.	mm.	In.	mm.	In.	mm.			
ST5P0816150N	1/32"	0.8	5/32"	4.0	1/16"	1.6	13#	Non-sterile	15
ST5P1216150N	3/64"	1.2	11/64"	4.4	1/16"	1.6	/	Non-sterile	15
ST5P1616150N	1/16"	1.6	3/16"	4.8	1/16"	1.6	14#	Non-sterile	15
ST5P1624150N	1/16"	1.6	1/4"	6.4	3/32"	2.4	119#	Non-sterile	15
ST5P2416150N	3/32"	2.4	7/32"	5.6	1/16"	1.6	19#	Non-sterile	15
ST5P3060150N	/	3.0	/	6.0	/	1.5	/	Non-sterile	15
ST5P3224150N	1/8"	3.2	5/16"	8.0	3/32"	2.4	120#	Non-sterile	15
ST5P3218150N	1/8"	3.2	/	6.8	/	1.8	/	Non-sterile	15
ST5PL150N	1/8"	3.2	1/4"	6.4	1/16"	1.6	16#	Non-sterile	15
ST5P25150N	3/16"	4.8	5/16"	8.0	1/16"	1.6	25#	Non-sterile	15
ST5P4820150N	3/16"	4.8	/	8.8	/	2.0	/	Non-sterile	15
ST5P15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
ST5P17150N	1/4"	6.4	3/8"	9.6	1/16"	1.6	17#	Non-sterile	15
ST5PR150N	1/4"	6.4	7/16"	11.2	3/32"	2.4	24#	Non-sterile	15
ST5P26150N	1/4"	6.4	1/2"	12.7	1/8"	3.2	26#	Non-sterile	15
ST5P35150N	5/16"	8.0	1/2"	12.7	3/32"	2.4	35#	Non-sterile	15
ST5P36150N	3/8"	9.6	9/16"	14.4	3/32"	2.4	36#	Non-sterile	15
ST5PY150N	3/8"	9.6	5/8"	15.9	1/8"	3.2	73#	Non-sterile	15
ST5PH150N	1/2"	12.7	3/4"	19.1	1/8"	3.2	82#	Non-sterile	15
ST5PN150N	3/4"	19.1	1"	25.4	1/8"	3.2	90#	Non-sterile	15
ST5PM100N	3/4"	19.1	1 1/8"	28.6	3/16"	4.8	191#	Non-sterile	10

Note: The table is the standard product number for sale, if you need special specifications (length, sterile packaging), please communicate the requirements in advance.

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: ST5P0816150N
2. Sterile: ST5P0816150S

# Lifemeta™ ST8H High Pressure Silicone Tubing

Cobetter Lifemeta™ ST8H high pressure silicone tubing is a high-quality, cost-effective fluid transfer solution. It can be used to increase the flow rate during the production process and reduce the liquid transfer time. ST8H high pressure silicone tubing is the optimal choice for single-use applications such as TFF, virus filtration, inline integrity testing of filtration assemblies, and high volume fluid transfer.



## Product Features

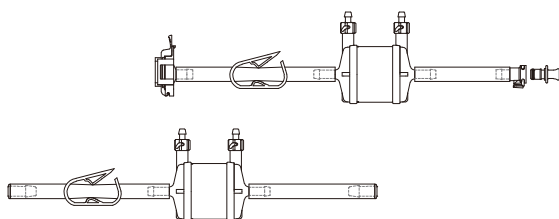
- Allows for processing at higher flow rate
- Full vacuum capabilities on most sizes
- Flexible, translucent and durable
- Excellent resistance to compression set
- Good kink resistance
- Less particle shedding when cutting

## Product Applications

- TFF
- Virus filtering
- Online integrity testing of filter components
- High volume fluid transfer
- Laboratory fluid transfer applications
- Single-use tubing assemblies

## Regulatory Compliance

<b>Particulate Matter</b>	Particulate matter in the product eluent meets the requirements in USP <788> for large volume parenterals.
<b>Bacterial Endotoxin</b>	Aqueous extraction contains < 0.25 EU/mL as determined by Amebocyte Lysate, USP <85>.
<b>USP &lt;87&gt; Cytotoxicity</b>	Meet the requirement of USP <87> In Vitro Biological Reactivity Test.
<b>USP &lt;88&gt; Biological Reactivity</b>	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics.
<b>ISO 10993-4</b>	Meet the requirement of ISO 10993-4 In Vitro Hemolytic Test.
<b>Indirect Food Additive</b>	The fluid contact component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177-182.
<b>Animal Derivative Content</b>	Products do not contain animal derived components and are free from TSE risk.
<b>Quality Assurance</b>	These products are manufactured in a facility which adheres to ISO™ 9001:2015 Practices.



## Sterilization Methods

<b>Gamma Irradiation</b>	Can be gamma irradiated at 25-45 kGy in sterile package and can not be re-sterilized.
<b>Autoclave</b>	Can be autoclaved 25 cycles for 30 minutes at 121 °C.

## Physical characteristics

Item	Value	Procedure
Durometer Hardness (Shore A)	82 ± 5	ASTM D2240
Burst Strength	0.6-1.6 MPa	ASTM D380
Vacuum Resistance	> 80 kPa	ISO 7233: 2016
Temperature Range	-51-232 °C	

Note: Please refer to the validation guide document for detailed test methods and results.

## Lifemeta™ ST8H Ordering Information

Part Number	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty m/pk
	In.	mm.	In.	mm.	In.	mm.			
ST8H0816150N	1/32"	0.8	5/32"	4.0	1/16"	1.6	13#	Non-sterile	15
ST8H1216150N	3/64"	1.2	11/64"	4.4	1/16"	1.6	/	Non-sterile	15
ST8H1616150N	1/16"	1.6	3/16"	4.8	1/16"	1.6	14#	Non-sterile	15
ST8H1624150N	1/16"	1.6	1/4"	6.4	3/32"	2.4	119#	Non-sterile	15
ST8H2416150N	3/32"	2.4	7/32"	5.6	1/16"	1.6	19#	Non-sterile	15
ST8H3060150N	/	3.0	/	6.0	/	1.5	/	Non-sterile	15
ST8H3224150N	1/8"	3.2	5/16"	8.0	3/32"	2.4	120#	Non-sterile	15
ST8H3218150N	1/8"	3.2	/	6.8	/	1.8	/	Non-sterile	15
ST8HL150N	1/8"	3.2	1/4"	6.4	1/16"	1.6	16#	Non-sterile	15
ST8H25150N	3/16"	4.8	5/16"	8.0	1/16"	1.6	25#	Non-sterile	15
ST8H4820150N	3/16"	4.8	/	8.8	/	2.0	/	Non-sterile	15
ST8H15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
ST8H17150N	1/4"	6.4	3/8"	9.6	1/16"	1.6	17#	Non-sterile	15
ST8HR150N	1/4"	6.4	7/16"	11.2	3/32"	2.4	24#	Non-sterile	15
ST8H26150N	1/4"	6.4	1/2"	12.7	1/8"	3.2	26#	Non-sterile	15
ST8H35150N	5/16"	8.0	1/2"	12.7	3/32"	2.4	35#	Non-sterile	15
ST8H36150N	3/8"	9.6	9/16"	14.4	3/32"	2.4	36#	Non-sterile	15
ST8HY150N	3/8"	9.6	5/8"	15.9	1/8"	3.2	73#	Non-sterile	15
ST8HH150N	1/2"	12.7	3/4"	19.1	1/8"	3.2	82#	Non-sterile	15
ST8HN150N	3/4"	19.1	1"	25.4	1/8"	3.2	90#	Non-sterile	15
ST8HM100N	3/4"	19.1	1 1/8"	28.6	3/16"	4.8	191#	Non-sterile	10

Note: The table is the standard product number for sale, if you need special specifications (length, sterile packaging), please communicate the requirements in advance.

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: ST8H0816150N

2. Sterile: ST8H0816150S

# Pinch Clamp

Cobetter Lifemeta™ HA single-use pinch clamp provides various sizes of clamps that can intercept liquid in the tubing, such as silicone tubing, TPE tubing, and reinforced braided silicone tubing. The clamps with excellent mechanical strength and good chemical compatibility, ensure long-term use. Produced by Cobetter, it is reliable in quality, meets multiple regulatory requirements, can customize special sizes according to customer needs, and has a short delivery cycle.

## ■ Quality Assurance

- ISO™ 9001:2015 Quality management system
- ADCF raw materials, manufacturing in the ISO Class 7 clean zones
- Resin raw material meets the requirement of USP <87> in Vitro Biological Reactivity Test
- Resin raw material meets the requirement of USP <88> Biological Reactivity Test, in Vivo for Class VI plastics
- Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 126 C

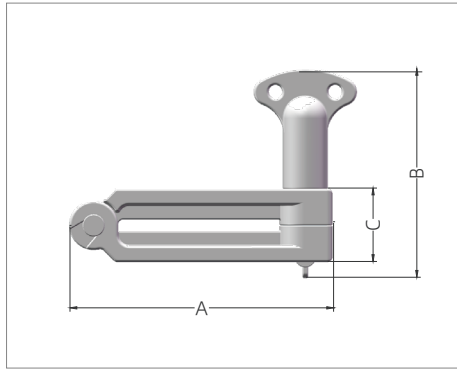
## ■ Features

- Suitable for various specifications of tubings
- Strong sealing, low risk of tubing leakage, long-term usage
- Excellent mechanical strength and good chemical compatibility
- Cobetter self-produced, safe, and reliable in quality, meets multiple regulatory requirements, short delivery time

## ■ Product Type

Type	Part No.	Material	Specification
Pinch Valve	HAVXSVN	Reinforced Nylon (PA)	For Wall Thickness 1/8"(3.2 mm) - 1/4"(6.4 mm) Tubing
Slide Clamp	HACRY5N	HACRY (PP)	For OD 1/4"(6.4 mm) - OD 3/8"(9.6 mm) Tubing
	HACRH-B	TPEE	For OD 1/4"(6.4 mm) - OD 1"(25.4 mm) Tubing
Pinch Clamp	HACHM	Reinforced Nylon (PA)	
	HACHD	Reinforced Nylon (PA)	

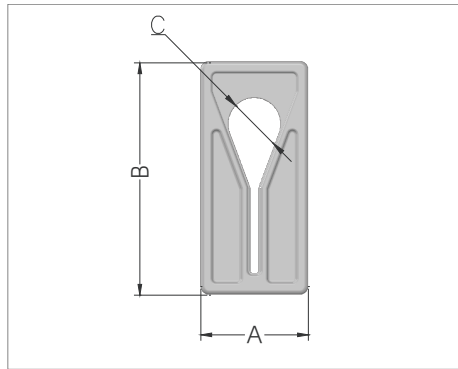
# Pinch Valve



## Pinch Valve

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)		
				A	B	C
HAVXSVN	For Wall Thickness 1/8"(3.2 mm) - 1/4"(6.4 mm) Tubing	Non-sterile	5	97.0	76.8	27.0

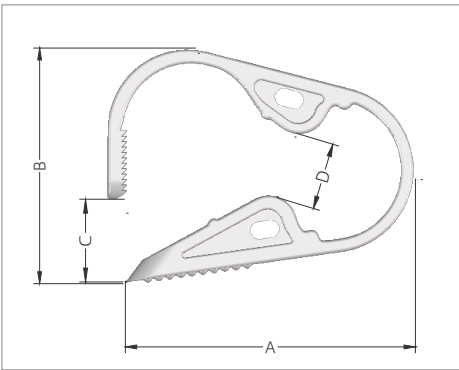
# Slide Clamp



## Slide Clamp

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)		
				A	B	C
HACRY5N	For OD 1/4"(6.4 mm) - OD3/8"(9.6 mm) Tubing	Non-sterile	50	25.0	54.0	12.1

# Pinch Clamp



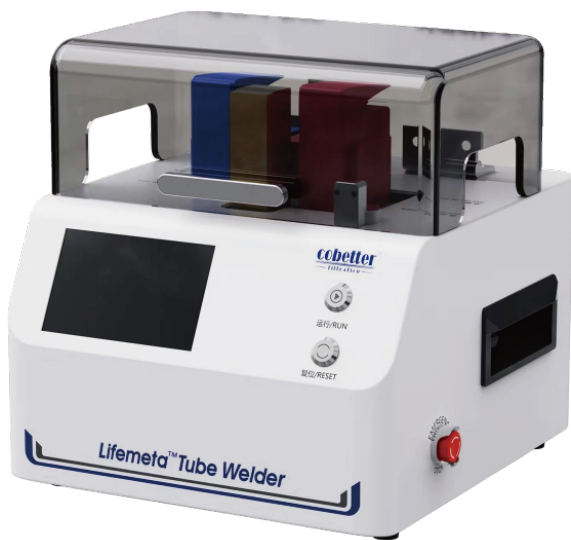
## Pinch Clamp

Part No.	Description	Packaging*	Qty (pcs/pk)	Dimensions (mm)			
				A	B	C	D
HACRH5N-B	For OD 1/4"(6.4 mm) - OD 1/2"(12.7 mm) Tubing	Non-sterile	50	41.3	29.3	3.7	4.8
HACHM5N	For OD 1/2"(12.7 mm) - OD 3/4"(19.1 mm) Tubing	Non-sterile	50	57.7	43.8	15.6	12.3
HACHD5N	For OD 1/2"(12.7 mm) - OD 1"(25.4 mm) Tubing	Non-sterile	50	64.5	48.8	14.8	13.5

\* Packaging: This product is available in sterile or non-sterile packaging. The sterilization method for sterile products is gamma irradiation, and the irradiation dose is 25~45 kGy. Naming of products with different packaging methods refer to the following:

1. Non-sterile: HAVXSVN
2. Sterile:HAVXSVS

# Lifemeta™ Tube Welder



## Application

- Aseptically weld TPE tubes of single-use sampling bags
- Aseptically weld TPE tubes of single-use storage bags

## Performance verification

- Lifemeta™ Tube Welder has completed the following verification and has complete validation guide.
- Pressure resistance test
- Tensile strength test
- Water flow test
- Bacterial challenge test
- Extractable test
- Particulate matter test
- Bacterial endotoxins test

## Powerful Function

- Lifemeta™ Tube Welder can weld either dry, wet or liquid-filled tubing in non-classified and classified environment while maintaining product sterility.
- The shortest length of 10 cm dry tube can be effectively welded.
- The shortest length of 30 cm liquid-filled tube can be effectively welded.
- The external surface of the welding area is exquisite, and the internal surface is smooth and flat.
- Efficient and quick, and the welding process can be completed in about 2 minutes.
- Lifemeta™ Tube Welder has preset 8 welding methods for different tubing sizes and supports supplementing welding methods for tubes of the same size from other common-used brands.

## Comfortable Operatio

- Lifemeta™ Tube Welder has the function of identify the model of the tube holder automatically, which can effectively prevent wrong operation.
- One-key takeover, simple and convenient operation.
- Small and flexible, easy to move, suitable for a variety of operating stations.

## Reliable Welding Ability

- Lifemeta™ Tube Welder support temperature calibration function to ensure the reliability of takeover parameters.
- The blade can be heated to above 410 °C, which is assured to complete depyrogenation and ensure the sterility of the welding process.
- Powerful welding performance, no need to worry about tube breakage and leakage.

## Safety

- The whole process automatically senses the state of the protective cover to prevent high temperature accidental touch.
- Emergency stop function can effectively terminate the wrong takeover opera-

## Authority Management

- Lifemeta™ Tube Welder has authority classification and user management..
- Lifemeta™ Tube Welder operation log traceability.

## Compatible TPE Tubings

TPE Tubing	Size	Tube Holder
<b>Lifemeta™ STF</b> <b>C-Flex 374</b> <b>AdvantaFlex</b>	ID1/8"*OD1/4"	SH1
	ID3/16"*OD5/16"	SH2
	ID1/4"*OD3/8"	1SH3
	ID1/4"*OD7/16"	SH4
	ID3/8"*OD9/16"	SH5
	ID5/16"*OD1/2"	SH6
	ID3/8"*OD5/8"	SH8
	ID1/2"*OD3/4"	SH9

## Parameters

Model	<b>LMTWA0</b>
Input Voltage/Power	100-240 VAC 50/60 HZ 288 W
Screen	4.3 inch high-definition color touch screen with a resolution of 480*272
Dimension	L×W×H: 270×263×263 mm
Weight	11.1Kg
Applicable Environment	Operating Temperature 5°C~40°C Humidity 20%-80%
Log Storage	SD Card
Interface	RJ45*1

## Ordering Information

Name	Model	Unit/Box
Lifemeta™ Tube Welder	LMTWA0	1 pcs
Blade	SH20	50/box
1/8"*1/4"*Tube Holder	SH1	2 pcs/group
3/16"*5/16"*Tube Holder	SH2	2 pcs/group
1/4"*3/8"*Tube Holder	1SH3	2 pcs/group
1/4"*7/16"*Tube Holder	SH4	2 pcs/group
3/8"*9/16"*Tube Holder	SH5	2 pcs/group
5/16"*1/2"*Tube Holder	SH6	2 pcs/group
3/8"*5/8"*Tube Holder	SH8	2 pcs/group
1/2"*3/4"*Tube Holder	SH9	2 pcs/group



# Lifemeta™ Tube Sealer



## Application

- Aseptically seal TPE tubes of single-use sampling bags
- Aseptically seal TPE tubes of single-use storage bags

## Authority Management

- Lifemeta™ Tube Sealer has authority classification and user management.
- Lifemeta™ Tube Sealer operation log traceability.

## Powerful Function

- Lifemeta™ Tube Sealer can seal either dry, wet or liquid-filled tubing in non-classified and classified environment while maintaining product sterility once the assemblies are disconnected.
- The sealing width is up to 20mm, and the cutting guide line is clear and definite.
- Efficient and quick, and the sealing process can be completed in about 3-5 minutes.
- The shortest length of 20 cm liquid-filled tube can be effectively sealed.
- Lifemeta™ Tube Sealer covers TPE tubing of commonly used sizes in the biopharmaceutical industry, and supports the addition of tubing sealing processes of common-used TPE tubing in the market.

## Comfortable Operatio

- Lifemeta™ Tube Sealer is equipped with a 7-inch color touch screen to provide comfortable human-computer interaction.
- A variety of sealing methods are preset in Lifemeta™ Tube Sealer, allowing the user to complete the sealing process in a single operation.
- Lifemeta™ Tube Sealer is small and easy to move.

## Reliable Effect

- Lifemeta™ Tube Sealer has the function of temperature calibration to ensure the reliability of sealing parameters.
- Segmented heating allows more precise temperature control and effectively suppressing temperature overshoot.

## Safty

- The touching parts of Lifemeta™ Tube Sealer have excellent heat insulation.
- Emergency stop function can effectively stop erroneous operations.
- The instrument detects the temperature automatically in the startup process to prevent touching at high temperature and protect the safety of

## Compatible TPE Tubings

TPE Tubing	Size
	ID1/8"*OD1/4"
	ID3/16"*OD5/16"
<b>Lifemeta™ STF</b>	ID1/4"*OD3/8"
<b>C-Flex 374</b>	ID1/4"*OD7/16"
<b>AdvantaFlex</b>	ID3/8"*OD9/16"
	ID5/16"*OD1/2"
	ID3/8"*OD5/8"
	ID1/2"*OD3/4"
	ID3/4"*OD1"

## Parameters

Cat. No	LMTSA0
Input Voltage /Power	100-240 VAC 50/60 HZ 200 W
Screen	7.0 inch high-definition color touch screen with a resolution of 1024 * 600
Dimension	Length:305mm; Width:220mm Height:Controller 160 mm + Handheld Module 150 mm
Weight	Controller 3.3 kg; Handheld module 2.5 kg
Applicable Environment	Operating temperature 5°C~40°C Humidity 35%-80%
Log Capacity	100,000
Interface	USB*1

## Ordering Information

Name/Model	Unit/Box
Lifemeta™ Tube Sealer/LMTSA0	1

# Cobetter CP Wall-through System

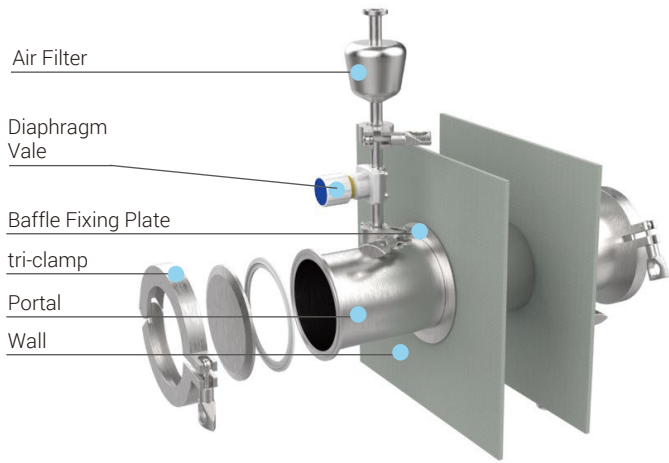
Cobetter CP wall-through system is a solution designed for sterile fluid transfer within cleanrooms, whether at the same or different cleanliness class. This system features a novel design that utilizes stainless steel channels with disposable consumables to achieve aseptic transfer of single or multiple fluids, eliminating the risks of breakage or leakage associated with traditional physical transfer methods such as bags or containers. The transfer process is completely sealed, facilitating the isolation of equipment in different rooms with varying cleanliness requirements and reducing the risk of environmental contamination. The system incorporates many disposable components which eliminate cleaning validation requirements, thereby saving costs and increasing productivity and efficiency.

## System Composition

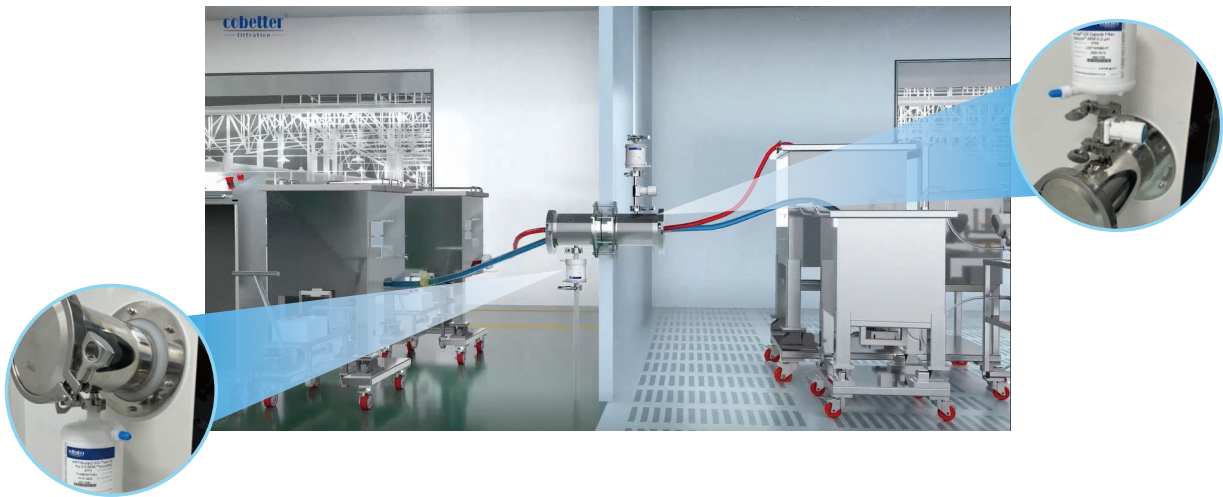
The Cobetter CP wall-through system consists of SS316L stainless steel components, such as portals, clamps, sanitary tri-clamps and blind caps, along with silicone and EPDM gaskets. These components serve as carriers for customized consumables, enabling the achievement of sealing and aseptic fluid transfer. With professional and innovative consumable design and processing capabilities, we will provide customers with high-cost performance consumable components.

## Product Features

- Flexible matching of requirements: Meets the sealing transfer needs of single or multiple liquid during construction of new cleanrooms or renovation of existing ones.
- Advantages of single-use fluid components: The solution carrier eliminates the need to clean and validate at application end.
- Efficient fluid transfer solution: Controllable transfer process, avoiding the risks of breakage, leakage, and loss of liquid during container transfer.
- Application safety: The silicone rubber, TPE, PP, and optional highly compatible connectors that solution contacts have undergone extensive validation.
- Innovative design: Various specifications of opposable barbs are available, and hose barb are compatible with multiple specifications of tubings to meet different assembly application needs.
- Suitable for various wall thicknesses, and assembly and disassembly take only a few minutes.
- Clean connection ports further reduce the opportunity of cross-contamination between non-virally active and virally active workshops.
- Custom production is available for standard components used in each application, including choices of end connections.
- Innovative wall installation method: Effectively reduces the impact of the installation process on the cleanroom environment.



Note:  
The wall-through systems mainly include Portals, wall baffles, baffle fixing plates, wall baffle seals, clamps, blind caps, seals, diaphragm valve, and other components. Air filters need to be purchased separately and are not included in the installation system.



## Ordering Information

Product	Cat.Number	Main Material	Description
Wall-through Components	SS-4-C	SS316L	4"TC same class transfer
	SS-4-CB		4"TC different class transfer
	SS-6-C		6"TC same class transfer
	SS-6-CB		6"TC different class transfer

Note:  
Special specifications and materials can be customized, such as 3"TC wall-through system, double-wall wall-through system.

# Lifemeta™ FCS Single-use Filling Needles

The Cobetter Lifemeta™ FCS Single-Use Filling Needle is an economical and unique filling solution for aseptic filling of liquids. The liquid contact portion is made of stainless steel and can withstand gamma irradiation or steam sterilisation, providing a complete solution for final filling and saving the cost and resources required for cleaning verification and validation.

## Quality Assurance

- ISO™ 9001: 2015 Quality Management System
- ISO Class 7 clean zones
- 316L passivated Stainless Steel Needle + Animal Derived Component Free (ADCF) Polysulfone
- Meet the requirement of USP <87> In Vitro Biological Reactivity Test
- Meet the criteria of the USP <88> Biological Reactivity Test for Class VII plasticse
- Aqueous extraction contains<0.25 EU/mL as determined by Limulus Amebocyte Lysate (LAL), USP <85>
- Particulate matter in the product eluent meets the requirements in USP <788> for small volume parenterals
- Can be gamma irradiated at 25-45 kGy in sterile package or can be autoclaved for 90 minutes at 135°C
- Provide Extractables and Leachables Testing Report



## Advantage

- Reduced turnaround time and cleaning time
- High speed filling from bottom to top
- Available in a wide range of diameters to suit a wide range of filling volumes
- Controlled bead generation for precise filling volume

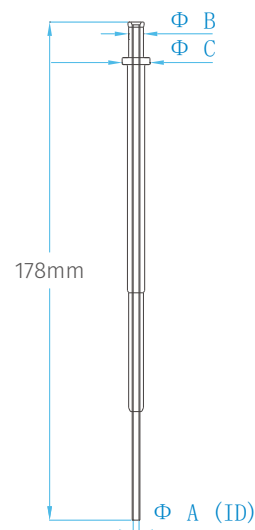
## Applications

- Liquid injectable drugs
- Pre-freeze-drying of biopharmaceuticals
- High performance drug filling
- Blood products filling
- Vaccine filling

## Ordering Information

Part No.	Filling Volume *	Qty (pcs/pk)	Dimensions (mm)		
			AΦ	BΦ	CΦ
FCS0620	> 0.1 mL	10	0.6	2.0	10.0
FCS12L	> 0.5 mL	10	1.2	5.3	10.0
FCS16L	> 1.5 mL	10	1.6	5.3	10.0
FCS21L	> 3 mL	10	2.1	5.3	10.0
FCS30L	> 5 mL	10	3.0	5.3	10.0
FCS38R	> 10 mL	10	3.8	8.6	11.2
FCS46R	> 30 mL	10	4.6	8.6	11.2
FCS55R	> 50 mL	10	5.5	8.6	11.2
FCS4662	> 30 mL	10	4.6	6.2	11.2

\*Filling volume is tested based on pure water, customer solution volume need verify.



# Lifemeta™ Manual Crimping Tool

Lifemeta™ manual crimping tools can realize aseptic disconnection of silicone or TPE tubing, quick disconnection of the tubing with the metallic sleeve into the edge die to prevent external microorganisms from entering the fluid path during disconnection. Lifemeta™ manual crimping tools provide aseptic disconnection in classified or non-classified environments. It protects the liquid inside the tubing from external conditions and seals the tubing without risk of leakage.

## Applications

### Aseptic sampling

As needed, with no pre-defined location

### Fluid transfers

It can disconnect the fluid tubing with small or large volume

### Filling applications

Quickly disconnect after filling, reducing the risk of contamination

## Benefits

### Fast disconnection time

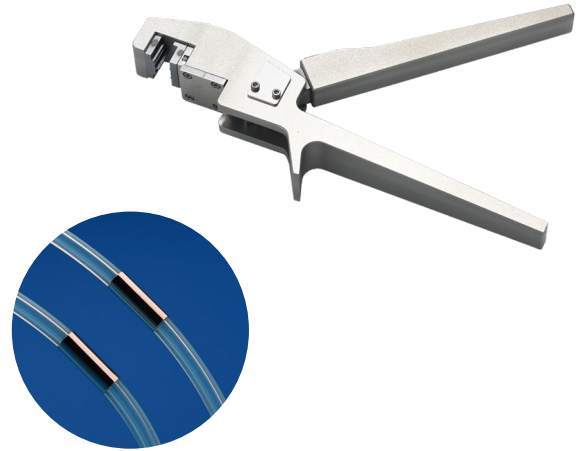
Seal and disconnect in less than 5 seconds

### Secure and trusted seal

Testing validates that the aseptic seal is stronger than the tube

### Intuitive operation

Disconnect in one step-just cut the metallic sleeve, reduces risk of error



## Specifications

Body Material	Aluminium alloy
Die Material	Steel with hardened special surface treatment
Bearing Material	304 Stainless Steel
Diameter of Tubing	ID $\frac{1}{8}$ " * OD $\frac{1}{4}$ "
Weight	730 g
Dies Life	Replace the dies every 1000 cycles or every year

## Ordering Information

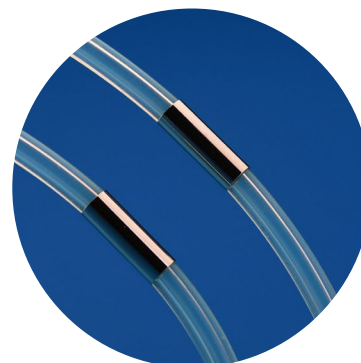
Cat No.	Description	Qty/pk
DCMMCT	Manual Crimping Tool	1
DCM064M	Metallic Sleeve	100
STTL150N	Pt-cured Silicone Tubing, ID $\frac{1}{8}$ " * OD $\frac{1}{4}$ "	15 m

# Metallic Sleeve

Cobetter Lifemeta DCM metallic sleeve can achieve the sterile disconnection of silicone tubing or TPE tubing. They are mainly used in conjunction with manual or electric sterile crimping tools. By placing the metallic sleeve into the blade of the crimping tool and applying a certain force, the fluid tubing can be quickly disconnected, preventing external microorganisms from entering the fluid channel during disconnection. They are primarily used in sterile sampling systems.

## Product Features

- Compatible with OD1/4" - OD3/4" tubing
- Made of nickel-plated brass, with high strength and hardness
- Tensile strength: >80 N
- Pressure resistance after tubing disconnection: 0-0.25 MPa



## Product Features

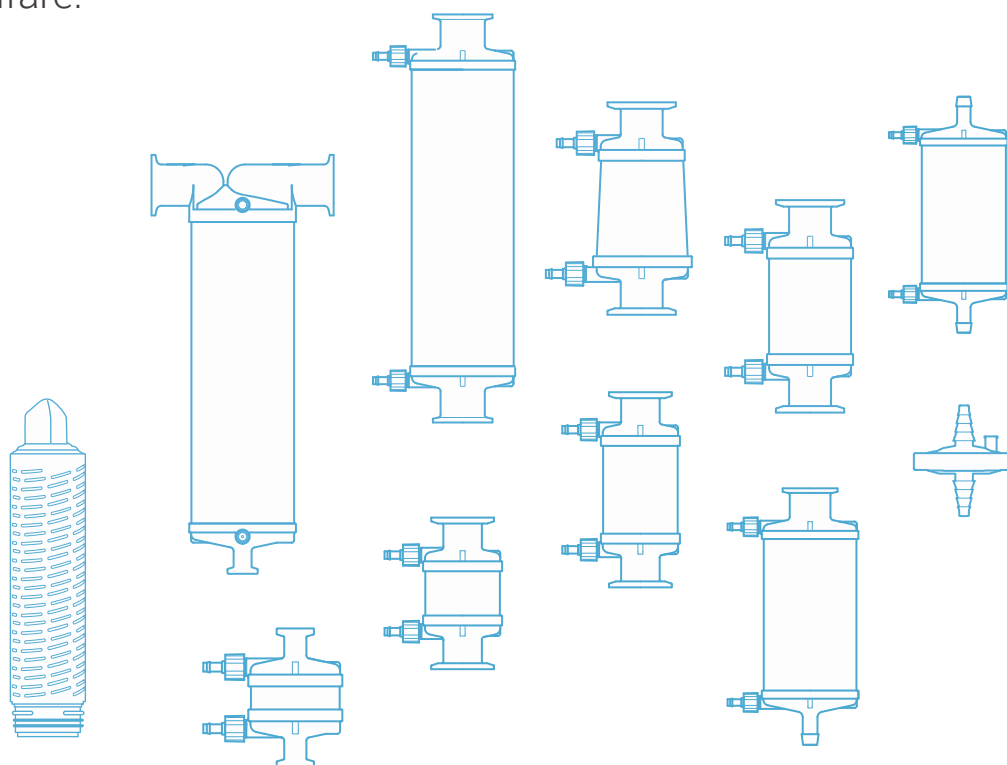
- Strong sealing, low risk of cracking
- Mainly used in sterile sampling systems
- Can achieve sterile disconnection in any workshop environment
- Can be disconnected at any position in the tubing

## Ordering Information

Cat No.	Description	Qty/pk
DCM064M	For ID1/8"*OD1/4" Tubing	100
DCM112M	For ID1/4"*OD7/16" Tubing	100
DCM159M	For ID3/8"*OD5/8" Tubing	100
DCM191M	For ID1/2"*OD3/4" Tubing	100
DCM060M	For ID3.0*OD6.0mm Tubing	100

# Our Mission

Through innovative, cost-efficient, and sustainable filtration solutions, we help our customers enhance human and animal welfare.



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