cobetter
filtration

Single-use Accessories Catalog

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
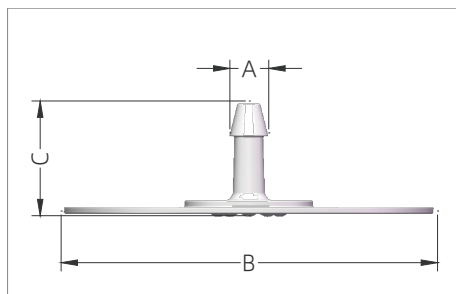
Bag Port with Dimples Barb

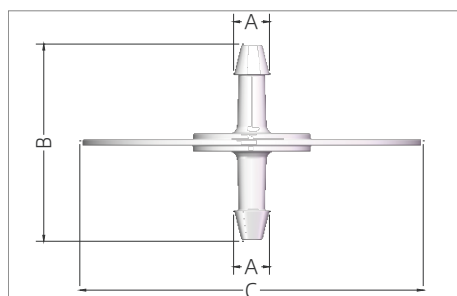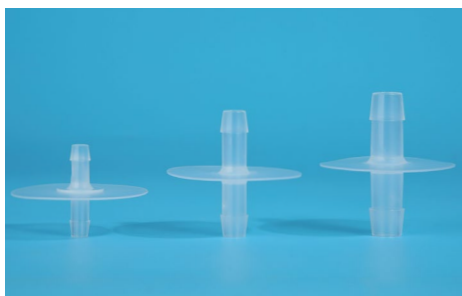| Part Number	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
C21L5N	1/8"HB	Non-sterile	50	6.0	57.5	17.0
C21E5N	3/16"HB	Non-sterile	50	6.4	57.5	15.0
C21R5N	1/4"HB	Non-sterile	50	8.9	57.5	20.7
C21Y5N	3/8"HB	Non-sterile	50	12.2	57.5	27.5
C21H5N	1/2"HB	Non-sterile	50	15.3	57.5	31.7
C21M1N	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）		
				AΦ	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
C22M1N	3/4"HB × 3/4"HB	Non-sterile	10	21.8	67.6	42.0
C22D1N	1"HB × 1"HB	Non-sterile	10	28.0	79.2	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
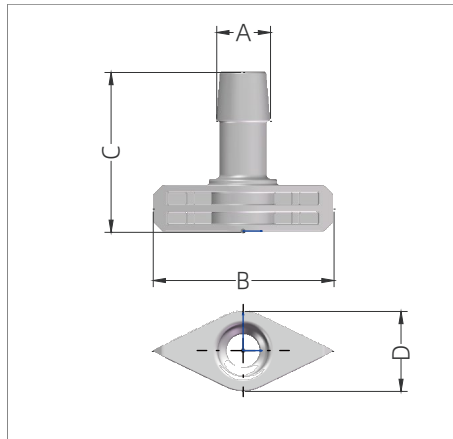
Boat Port Barbed, 1 Port

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	B	C	D
C3SR5N	1/4"HB	Non-sterile	50	7.6	37.0	27.7	16.4
C3SY5N	3/8"HB	Non-sterile	50	11.0	37.0	32.7	16.4
C3SH5N	1/2"HB	Non-sterile	50	14.6	37.0	37.0	16.4
C3SN5N	Plug	Non-sterile	50	/	37.0	9.5	16.4
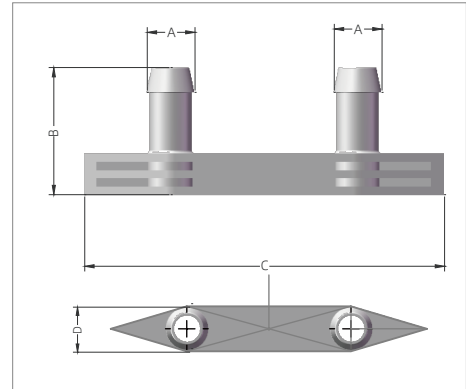
Boat Port Barbed, 2 Ports

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	B	C	D
C3RNR5N	1/4"HB × 1/4"HB	Non-sterile	50	9.5	31.0	83.1	11.3
C3YNY5N	3/8"HB × 3/8"HB	Non-sterile	50	12.8	34.0	96.3	13.7
C3HNH5N	1/2"HB × 1/2"HB	Non-sterile	50	16.0	41.1	96.3	13.7
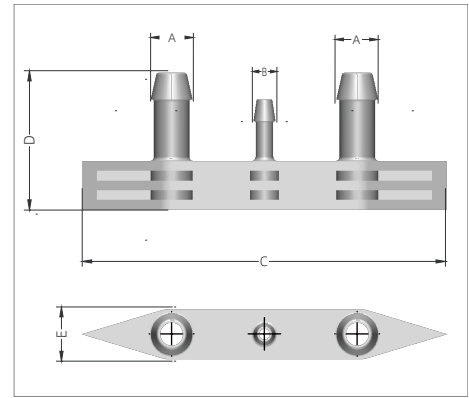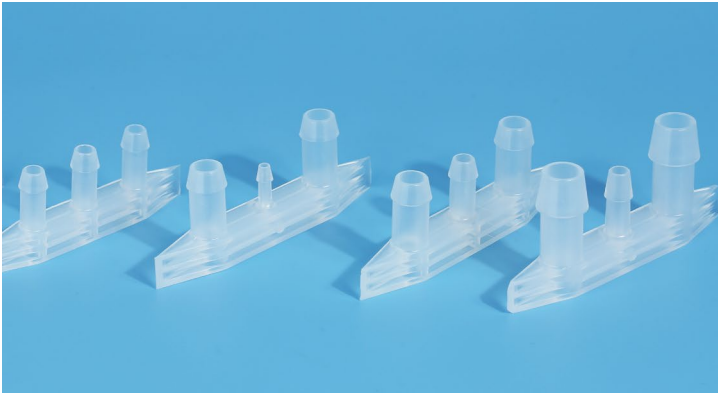
Boat Port Barbed, 3 Ports

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）				
				AΦ	BΦ	C	D	E
C3RLR5N	1/4"HB × 1/8"HB × 1/4"HB	Non-sterile	50	9.5	5.5	83.1	31.0	11.3
C3RRR5N	1/4"HB × 1/4"HB × 1/4"HB	Non-sterile	50	9.5	9.5	83.1	31.0	11.3
C3YLY5N	3/8"HB × 1/8"HB × 3/8"HB	Non-sterile	50	12.8	5.5	96.3	34.0	13.7
C3YRY5N	3/8"HB × 1/4"HB × 3/8"HB	Non-sterile	50	12.8	9.5	96.3	34.0	13.7
C3HRH5N	1/2"HB × 1/4"HB × 1/2"HB	Non-sterile	50	16.0	8.9	96.3	41.1	13.7
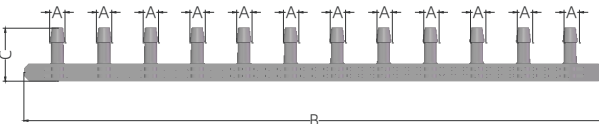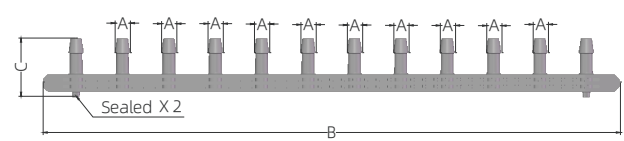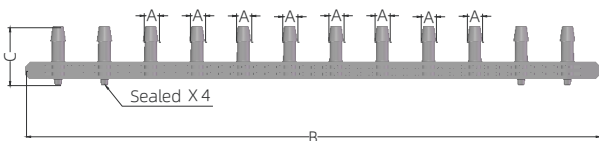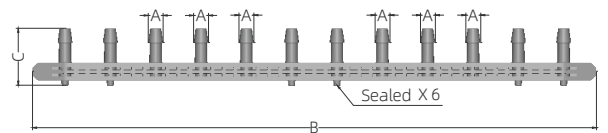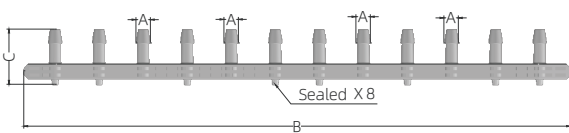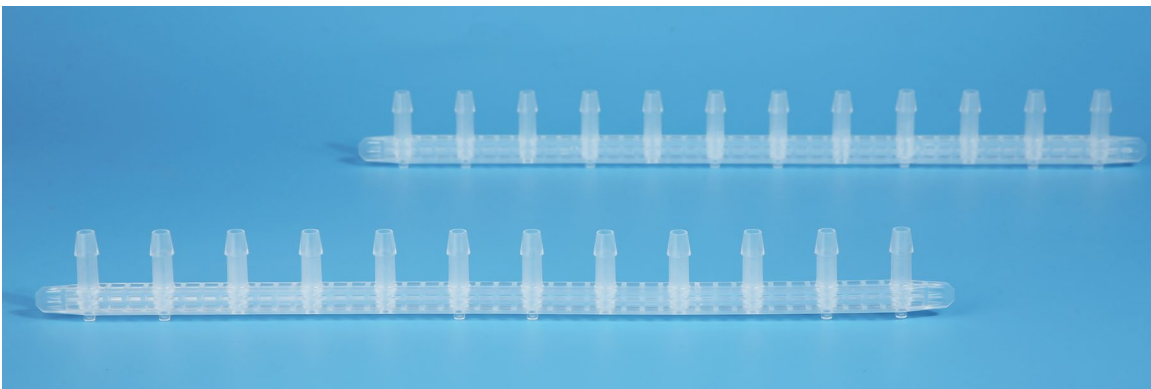
Boat Port Barbed, Multiple Ports

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	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: C3SR5N

2. Sterile:C3SR5S

Tubing Bag Port
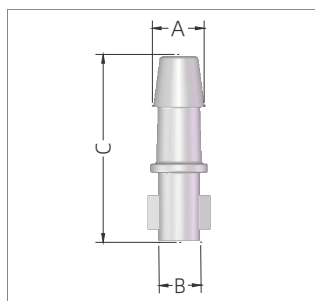
Tubing Bag Port
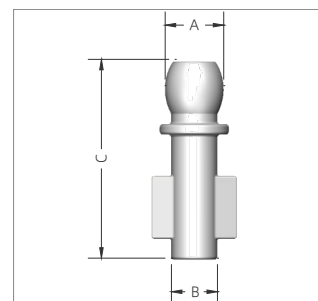
Tubing Bag Port Plug

Tubing Bag Port

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	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）		
				AΦ	BΦ	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.
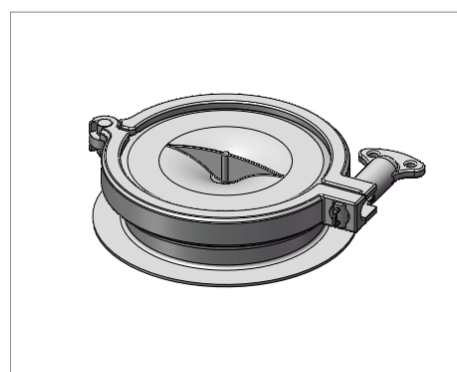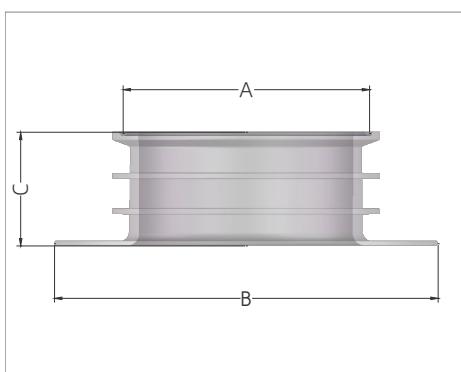
Features

- 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: C9S1N*
2. Sterile:C9S1S

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
- 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
- TC Clamp can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 126℃

■ 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
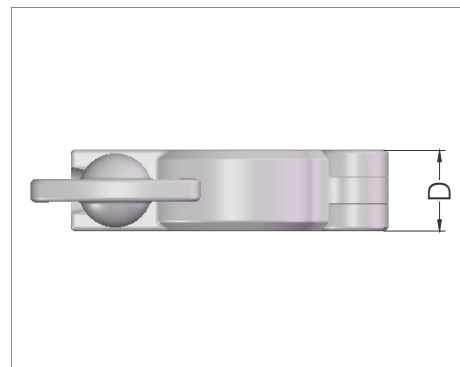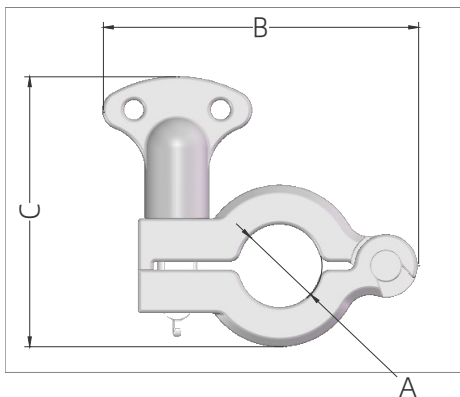
TC Clamp

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	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
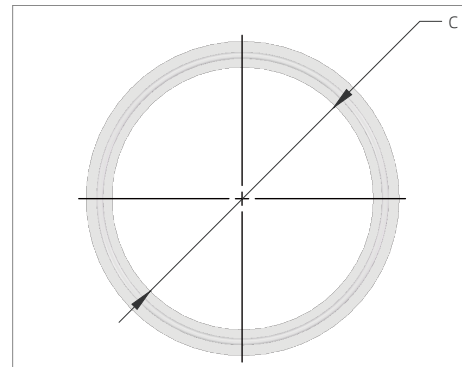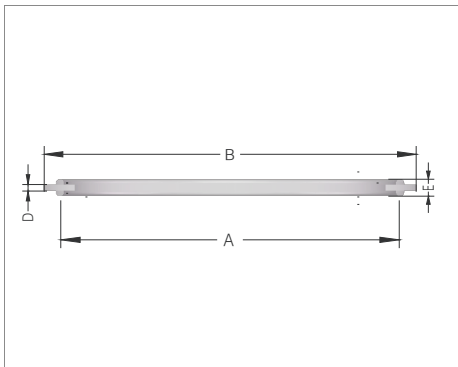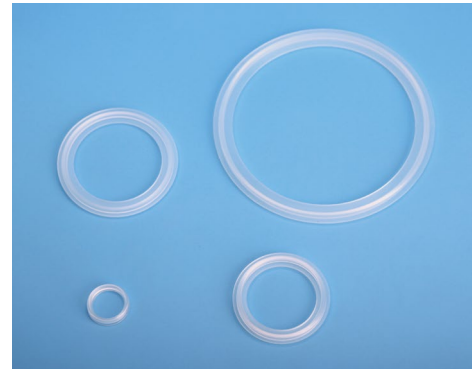
Silicone Gasket

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:
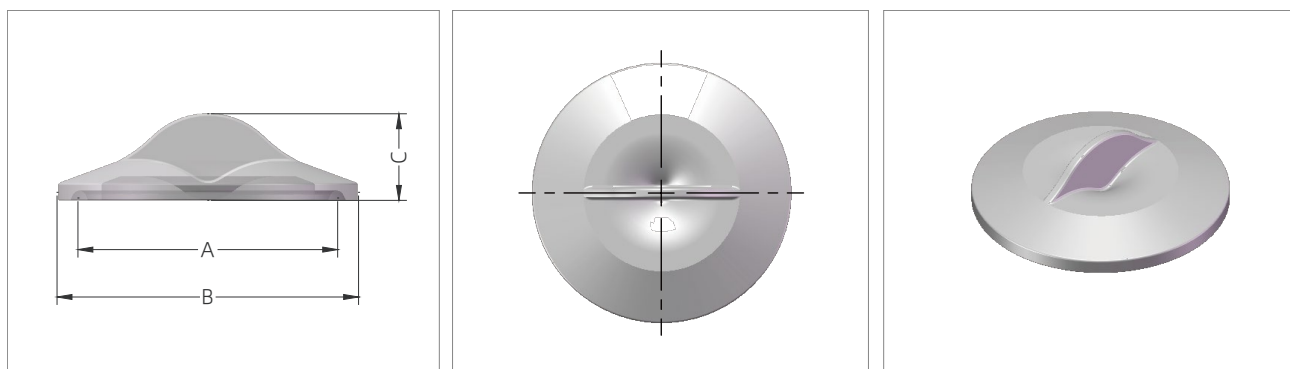
1. Non-sterile: TCEPT1N

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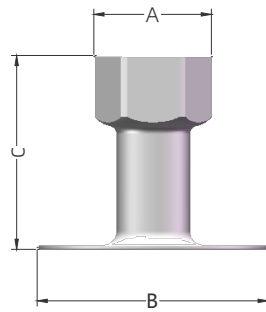
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
C2S1355N	Bag Port with PG13.5 Thread	Non-sterile	50	29.0	57.0	47.8

Inclined Thread Electrode Port
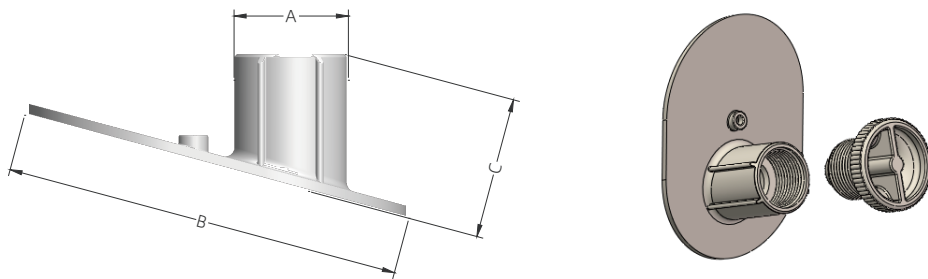
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
C2SK5N	Bag Port with PG13.5 Thread	Non-sterile	50	23.8	82.8	29.5

Bag Electrode Port
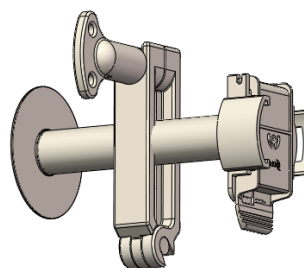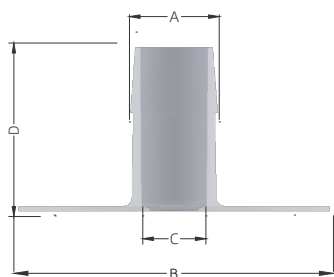
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	BΦ	CΦ	D
C2SM5N	3/4"HB	Non-sterile	50	21.3	57.0	9.0	43.6
C2SH5N	1/2"HB	Non-sterile	50	16.0	57.0	9.0	30.0
C2SH955N	1/2"HB, φ9.5 mm	Non-sterile	50	16.0	57.0	9.5	30.0
C2SH125N	1/2"HB, φ12 mm	Non-sterile	50	16.0	57.0	12.0	30.0

Thread Electrode Port
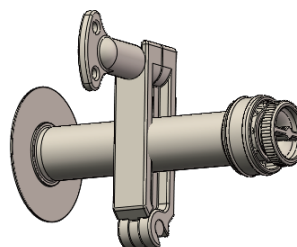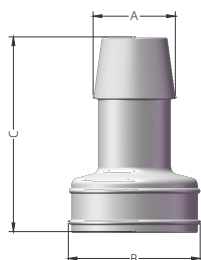
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
C4M3655N	3/4"HB to PG13.5	Non-sterile	50	23.7	38.0	56.1

Thread Plug
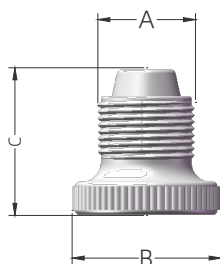
Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
PAS1355N	Thread Plug	Non-sterile	50	20.3	31.0	30.7

*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

Bacterial Endotoxin	Aqueous extraction contains < 0.06 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.
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.
Sterilization	Can be autoclaved 1 cycle for 30 minutes at 130 °C. or Can be sterilized by gamma irradiation at 25-45 kGy.
Quality Assurance	These products are manufactured in a facility which adheres to ISO 9001:2015 Practices.
Manufacturing Process	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
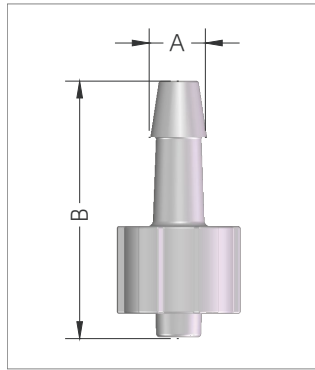
Male Luer Lock
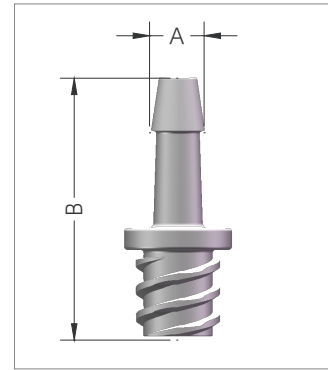
Female Luer Lock

Luer Fitting

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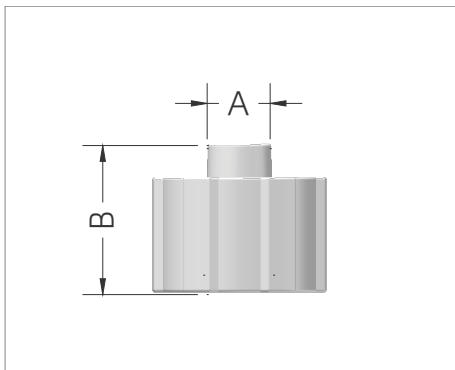
Luer Plug

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）	
				AΦ	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
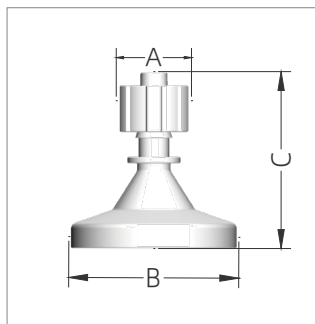
TC × Male Luer Lock
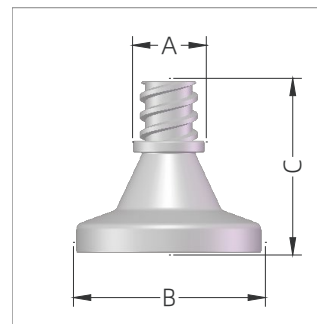
TC × Female Luer Lock

Luer to Tri-clamp Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
SFLPT1N(-S)	3/4"TC × Male Luer Lock	Non-sterile	10	11.0	25.0	26.0
SFLCT1N(-S)	3/4"TC × Female Luer Lock	Non-sterile	10	9.6	25.0	23.0
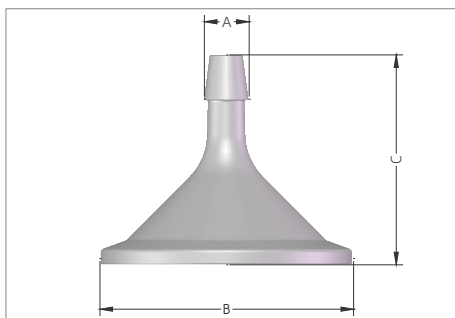
Hose Barb to Tri-clamp Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
SFLLT1N(-S)	1/8"HB × 3/4"TC	Non-sterile	10	4.2	25.0	28.0
SFLRT1N(-S)	1/4"HB × 3/4"TC	Non-sterile	10	8.9	25.0	30.0
SFLYT1N(-S)	3/8"HB × 3/4"TC	Non-sterile	10	12.4	25.0	42.6
SFLHT1N(-S)	1/2"HB × 3/4"TC	Non-sterile	10	16.0	25.0	47.6
SFLMT1N(-S)	3/4"HB × 3/4"TC	Non-sterile	10	23.7	25.0	55.0
SFLRS1N(-S)	1/4"HB × 1-1/2"TC	Non-sterile	10	8.9	50.4	41.7
SFLYS1N(-S)	3/8"HB × 1-1/2"TC	Non-sterile	10	12.4	50.4	41.7
SFLHS1N(-S)	1/2"HB × 1-1/2"TC	Non-sterile	10	16.0	50.4	47.6
SFLMS1N(-S)	3/4"HB × 1-1/2"TC	Non-sterile	10	23.7	50.4	56.0
SFLDS1N(-S)	1"HB × 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）		
				AΦ	BΦ	C
SFLLL5N (-S)	1/8"HB × 1/8"HB	Non-sterile	50	5.0	5.0	27.0
SFLRR5N (-S)	1/4"HB × 1/4"HB	Non-sterile	50	8.9	8.9	42.0
SFLYY5N (-S)	3/8"HB × 3/8"HB	Non-sterile	50	12.4	12.4	54.0
SFLHH5N (-S)	1/2"HB × 1/2"HB	Non-sterile	50	16.0	16.0	58.0
SFLMM5N (-S)	3/4"HB × 3/4"HB	Non-sterile	50	21.8	21.8	84.0
SFLDD5N (-S)	1"HB × 1"HB	Non-sterile	50	27.9	27.9	101.4

Reducer Straight Tube Fitting

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

Elbow Fitting

Elbow Fitting

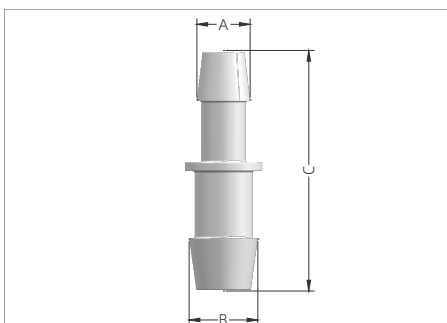| Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	C
SFELL5N (-S)	1/8"HB × 1/8"HB	Non-sterile	50	4.8	4.8	15.8
SFEEE5N (-S)	3/16"HB × 3/16"HB	Non-sterile	50	6.4	6.4	20.9
SFERR5N (-S)	1/4"HB × 1/4"HB	Non-sterile	50	7.6	7.6	27.2
SFEYY5N (-S)	3/8"HB × 3/8"HB	Non-sterile	50	11.0	11.0	36.1
SFEHH5N (-S)	1/2"HB × 1/2"HB	Non-sterile	50	14.6	14.6	43.3
SFEMM5N (-S)	3/4"HB × 3/4"HB	Non-sterile	50	21.8	21.8	57.6
SFEDD5N (-S)	1"HB × 1"HB	Non-sterile	50	28.0	28.0	70.0

*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: SFELL5N

2. PP material/Sterile: SFELL5S

3. PSF material/Non-sterile: SFELL5N-S

4. PSF material/Sterile: SFELL5S-S

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

Tee Fitting

Equal Barbed T-Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	BΦ	C	D
SFTRRR5N (-S)	1/4"HB × 1/4"HB × 1/4"HB	Non-sterile	50	8.9	8.9	31.4	52.2
SFTYYY5N (-S)	3/8"HB × 3/8"HB × 3/8"HB	Non-sterile	50	12.4	12.4	40.9	67.4
SFTHHH5N (-S)	1/2"HB × 1/2"HB × 1/2"HB	Non-sterile	50	14.6	14.6	43.0	69.0
SFTDDD5N (-S)	1"HB × 1"HB × 1"HB	Non-sterile	50	28.0	28.0	70.5	110.0

Reducer T-Fitting

Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	BΦ	C	D
SFTYYR5N (-S)	3/8"HB × 3/8"HB × 1/4"HB	Non-sterile	50	8.9	12.4	39.2	80.2
SFTHHR5N (-S)	1/2"HB × 1/2"HB × 1/4"HB	Non-sterile	50	7.6	14.6	39.9	69.0
SFTHHY5N (-S)	1/2"HB × 1/2"HB × 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）			
				AΦ	BΦ	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	6.4	6.4	30.2	43.7
SFYRRR5N (-S)	1/4"HB × 1/4"HB × 1/4"HB	Non-sterile	50	7.6	7.6	32.3	43.2
SFYYYY5N (-S)	3/8"HB × 3/8"HB × 3/8"HB	Non-sterile	50	11.0	11.0	43.7	56.6
SFYHHH5N (-S)	1/2"HB × 1/2"HB × 1/2"HB	Non-sterile	50	16.0	16.0	65.8	89.0
SFYMMM5N (-S)	3/4"HB × 3/4"HB × 3/4"HB	Non-sterile	50	21.8	21.8	73.1	88.1
SFYDDD5N (-S)	1"HB × 1"HB × 1"HB	Non-sterile	50	28.0	28.0	89.8	106.0

Reducer Y-Fitting

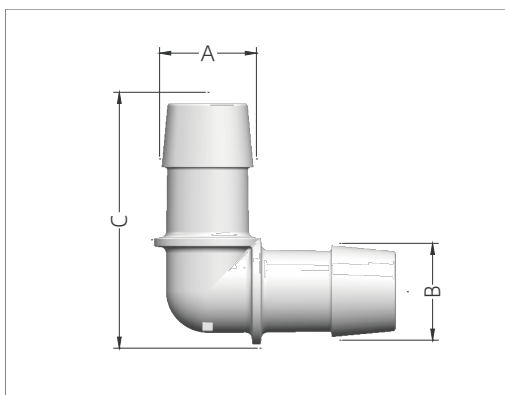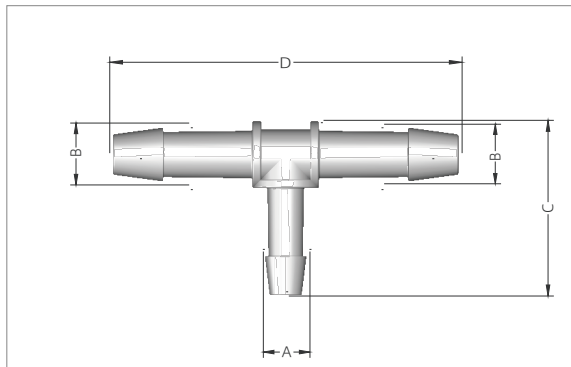| Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）			
				AΦ	BΦ	C	D
SFYLLR5N (-S)	1/8"HB × 1/8"HB × 1/4"HB	Non-sterile	50	8.9	5.0	21.6	42.1
SFYRRY5N (-S)	1/4"HB × 1/4"HB × 3/8"HB	Non-sterile	50	12.4	8.9	40.6	66.0
SFYYYH5N (-S)	3/8"HB × 3/8"HB × 1/2"HB	Non-sterile	50	14.6	11.0	45.2	62.0

*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
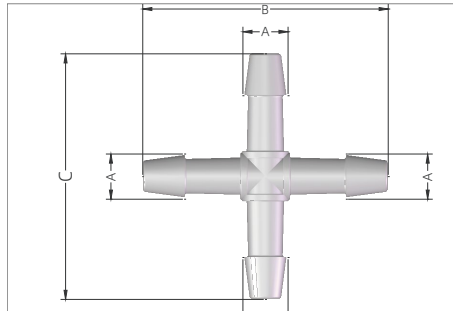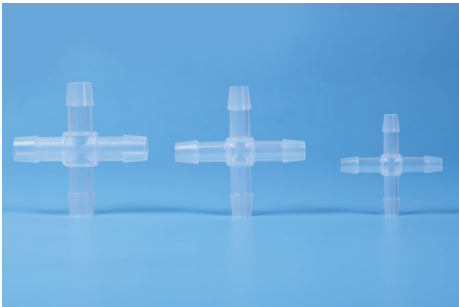
Cross Fitting

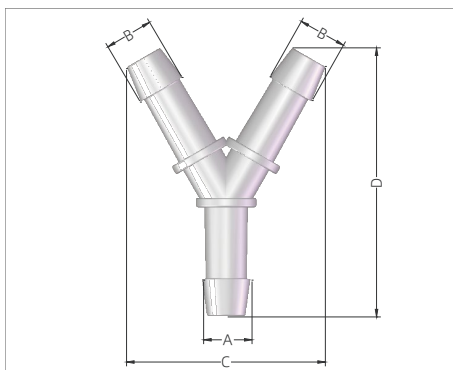| Part No.*	Description	Packgaing**	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	B	C
SFXLLLL5N(-S)	1/8"HB × 4	Non-sterile	50	5.0	32.8	32.8
SFXRRRR5N(-S)	1/4"HB × 4	Non-sterile	50	8.9	52.2	52.2
SFXYYYY5N(-S)	3/8"HB × 4	Non-sterile	50	12.4	67.4	67.4
SFXHHHH5N(-S)	1/2"HB × 4	Non-sterile	50	16.0	104.0	104.0

*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
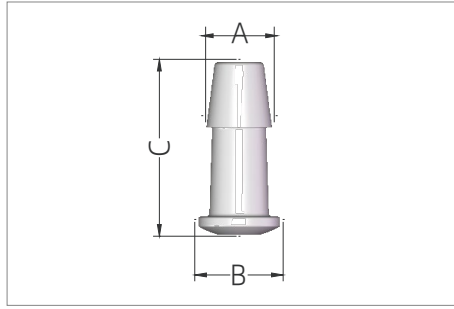
Tubing Plug

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				AΦ	BΦ	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.
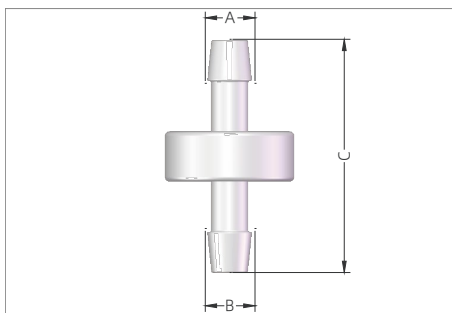
Quality Assurance

- 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
- Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 30 minutes at 121℃

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.
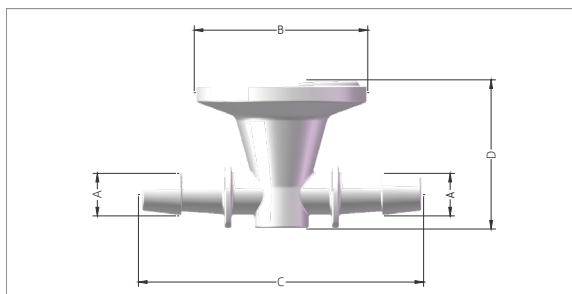
Quality Assurance

- 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
- 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
SFGSYYNN	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: SFGSYYNN
2. Sterile: SFGSYYNS

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
- 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℃ 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, 3/4"TC, 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, 3/4"TC, 1-1/2"TC
Material	Main Body: Polysulfone (PSF); O-ring: Silicone; Thumb Latch: PVDF
Temperature Range	-80~132℃
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℃, 25 cycles

Lifemeta ECS 1/8" Easy Connector

Water Flow Rate —— Cobetter Lifemeta EC Easy Connector
(ECSSFL+ECSSML)
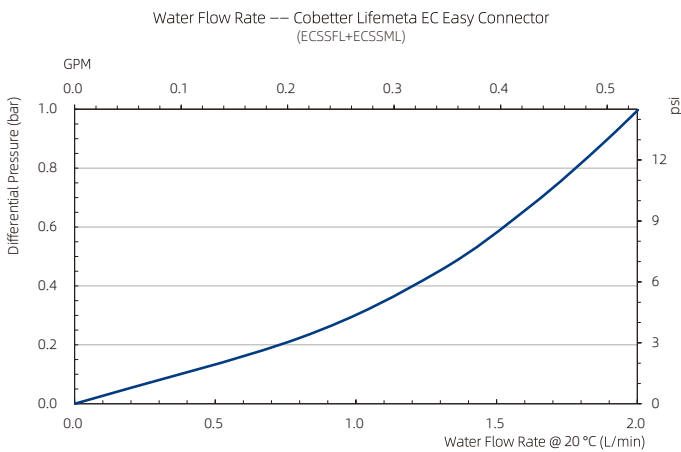
Lifemeta ECS 1/4" Easy Connector

Water Flow Rate —— Cobetter Lifemeta EC Easy Connector
(ECSSFR+ECSSMR)
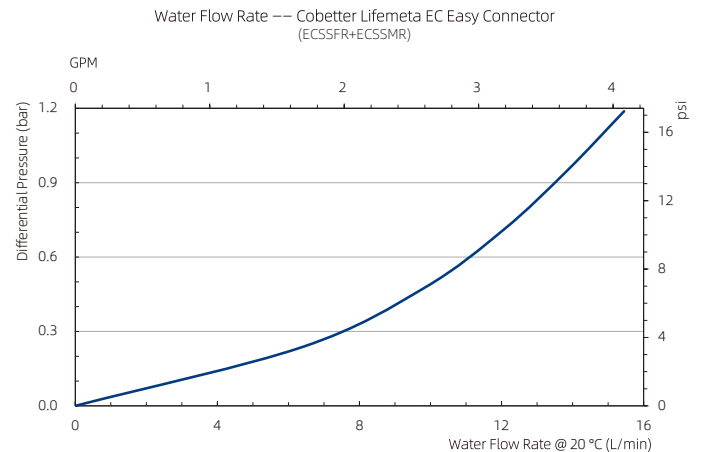
Lifemeta ECS 3/8" Easy Connector
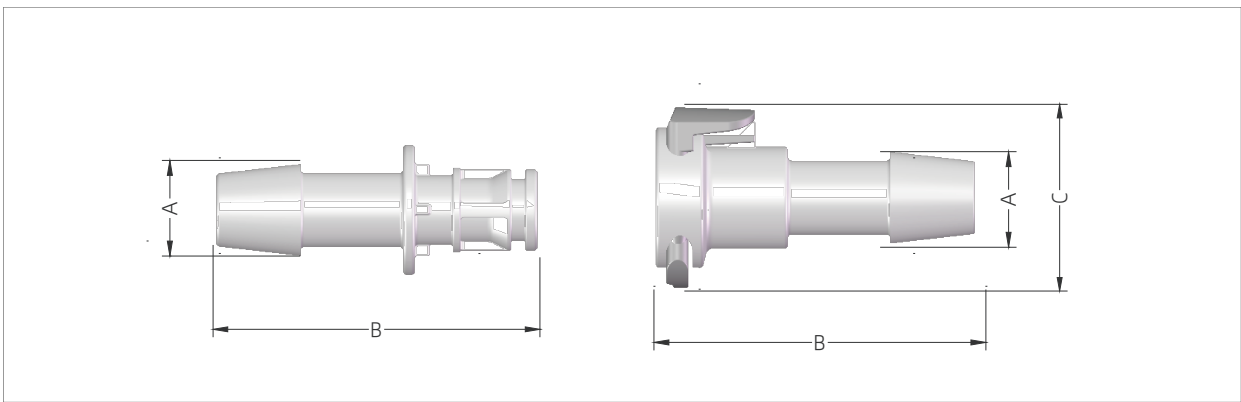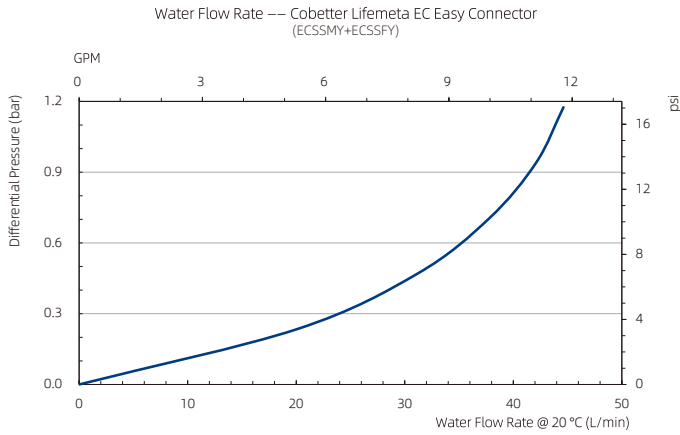
Water Flow Rate —— Cobetter Lifemeta EC Easy Connector
(ECSSMY+ECSSFY)

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
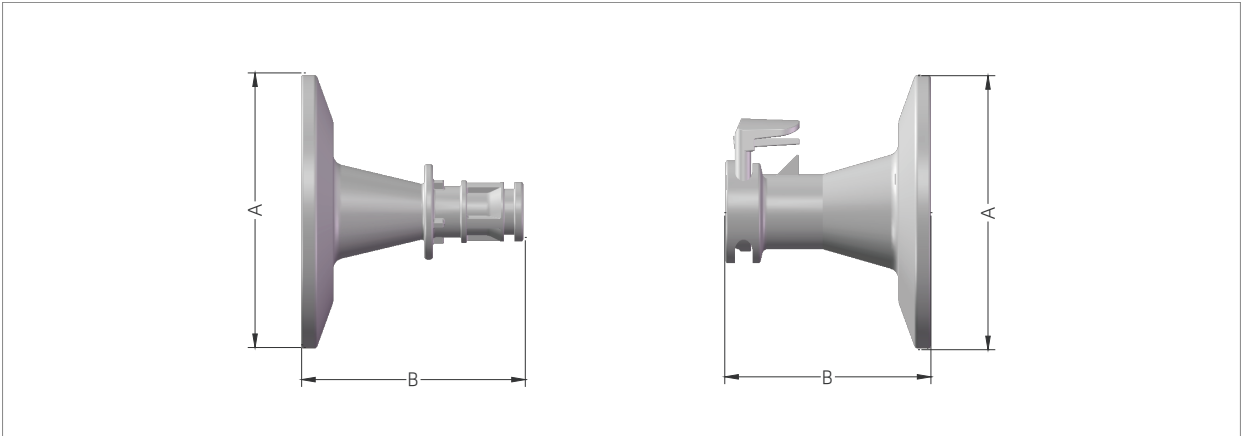
ECS Easy Connector (TC)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）	
				AΦ	B
ECSSFS1N	ECS 1-1/2"TC Female Connector	Non-sterile	10	50.5	38.0
ECSSMS1N	ECS 1-1/2"TC Male Connector	Non-sterile	10	50.5	41.1
ECSSFT1N	ECS 3/4" TC Female Connector	Non-sterile	10	25.0	35.8
ECSSMT1N	ECS 3/4" TC Male Connector	Non-sterile	10	25.0	36.1
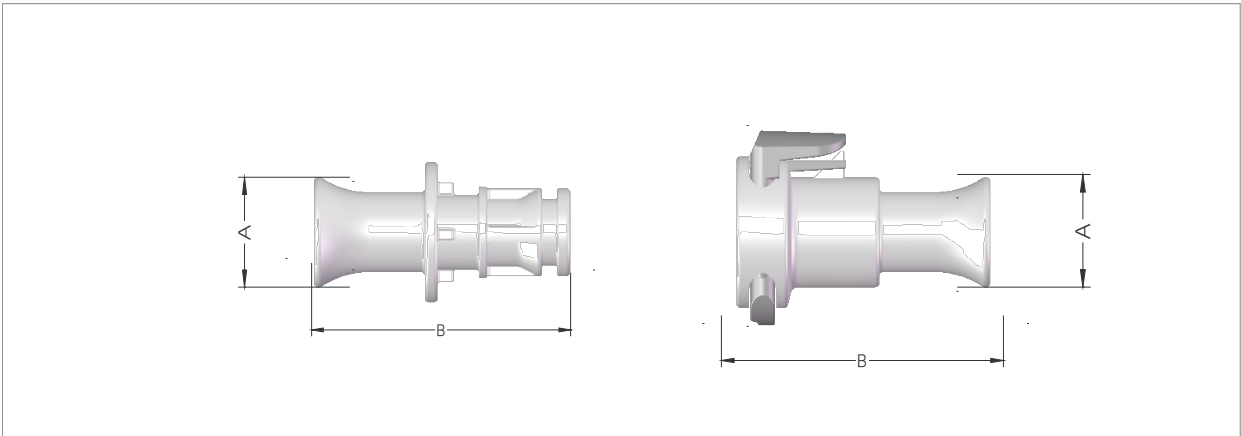
ECS Easy Connector (Plug)

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）	
				AΦ	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
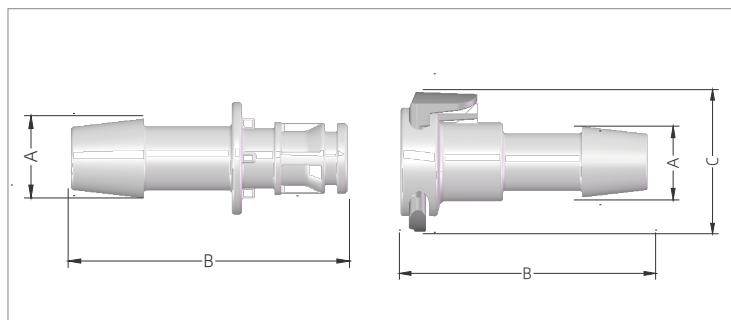
Specification	Description
Size	1/2"HB
Material	Main Body: Polysulfone (PSF); O-ring: Silicone; Thumb Latch: PVDF
Temperature Range	-80~132℃
Vacuum Resistance	>0.09 MPa
Pressure Range	0~0.41 MPa
Retention Volume	0.2 mL
Burst Strength	1.56~2.88 MPa
Sterilization	Can be sterilized by gamma irradiation at 25-45 kGy orautoclaved 60 minutes at 132℃, 25 cycles

Lifemeta ECM 1/2" Easy Connector
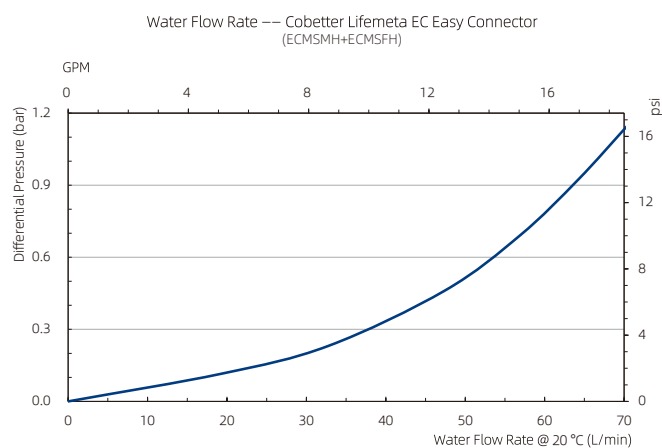
Water Flow Rate —— Cobetter Lifemeta EC Easy Connector
(ECMSMH+ECMSFH)

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

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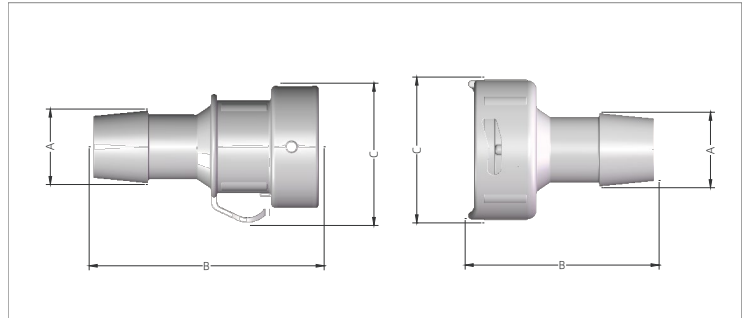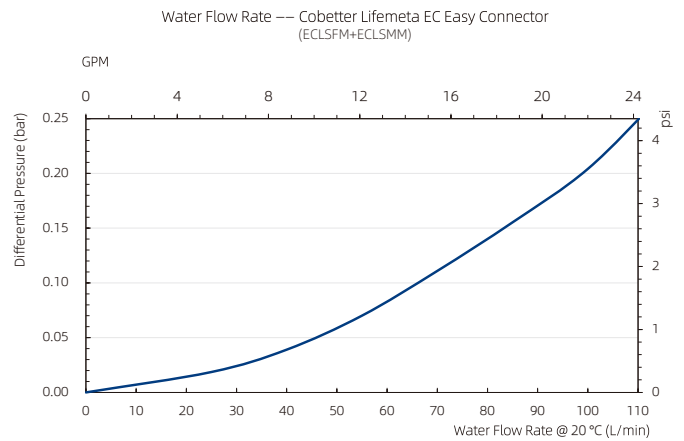
Specification	Description
Size	3/4"HB
Material	Main Body: Polysulfone(PSF); O-ring: Silicone
Temperature Range	-80~132℃
Vacuum Resistance	>0.09 MPa
Retention Volume	0.2 mL
Sterilization	Can be sterilized by gamma irradiation at 25-45 kGy or autoclaved 60 minutes at 132℃, 25 cycles

Water Flow Rate —— Cobetter Lifemeta EC Easy Connector (ECLSFM+ECLSMM)

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
ECLSFP1N	Female Sealing Cap	Non-sterile	10	45.4	20.2	45.4
ECLSMP1N	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

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.
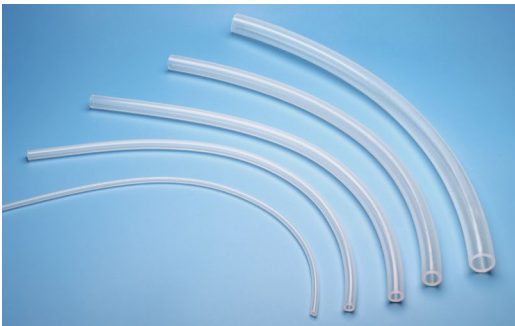
Lifemeta™ ST5P Pt-cured Silicone Pump Tubing

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℉ | -51℃	-58℉ | -50℃	-59.8℉ | -51℃	-59.8℉ | -51℃
Max. Temperature	449.6℉ | 232℃	284℉ | 140℃	449.6℉ | 232℃	449.6℉ | 232℃
Gamma Stability (max. 50 kGy)	√	√	√	√
Sterilization Methods	Autoclave Gamma irradiation	Autoclave Gamma irradiation	Autoclave Gamma irradiation	Autoclave 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.
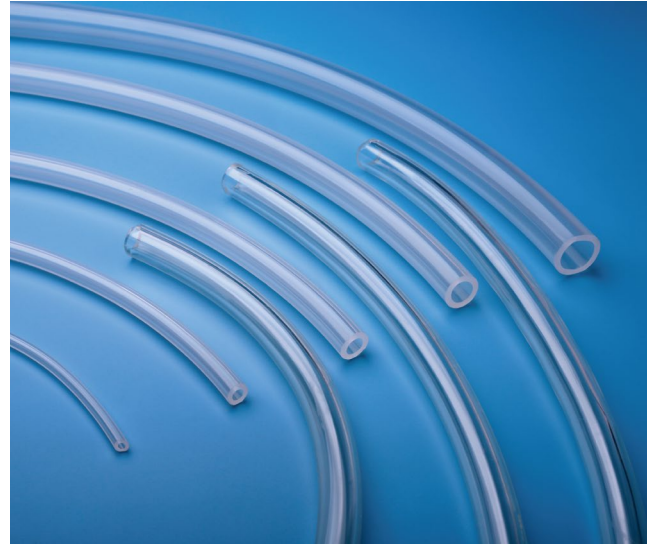
Product Features

- 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 No.	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty
	In.	mm.	In.	mm.	In.	mm.			m/pk
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
STT2424150N	3/32"	2.4	9/32"	7.1	3/32"	2.4	/	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
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
STT15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
STT4832150N	3/16"	4.8	7/16"	11.2	1/8"	3.2	/	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
STTE150N	1/2"	12.7	11/16"	17.5	3/32"	2.4	/	Non-sterile	15
STTX150N	5/8"	15.9	7/8"	22.2	1/8"	3.2	184#	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
STTD050N	1"	25.4	1-3/8"	34.9	3/16"	4.8	92#	Non-sterile	5

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
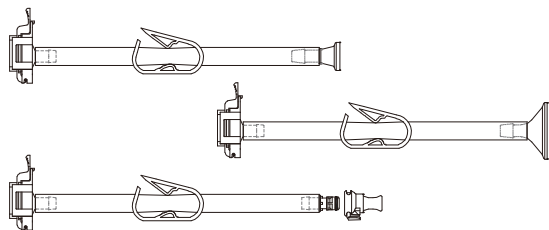
Lifemeta™ STF TPE tubing

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

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.
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	0.4-0.6 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 No.	I.D.		O.D.		Wall Thickness		Tube Number	Packaging*	Qty
	In.	mm.	In.	mm.	In.	mm.			m/pk
STFL150N	1/8"	3.2	1/4"	6.4	1/16"	1.6	16#	Non-sterile	15
STF25150N	3/16"	4.8	5/16"	8.0	1/16"	1.6	25#	Non-sterile	15
STF15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
STF17150N	1/4"	6.4	3/8"	9.6	1/16"	1.6	17#	Non-sterile	15
STFR150N	1/4"	6.4	7/16"	11.2	3/32"	2.4	24#	Non-sterile	15
STF26150N	1/4"	6.4	1/2"	12.7	1/8"	3.2	26#	Non-sterile	15
STF35150N	5/16"	8.0	1/2"	12.7	3/32"	2.4	35#	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
STFD050N	1"	25.4	1-3/8"	34.9	3/16"	4.8	92#	Non-sterile	5

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.
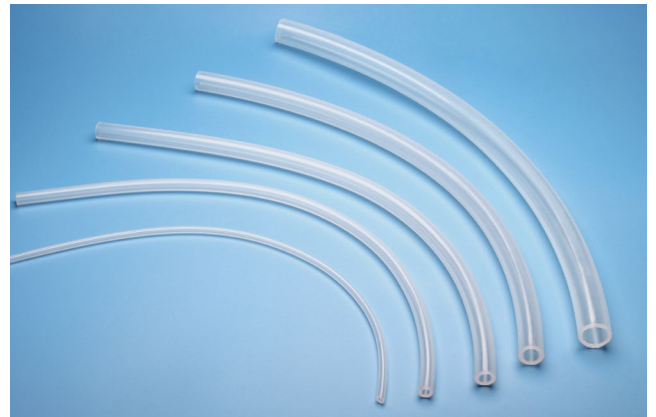
Product Features

- 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

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)	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 No.	I.D. In.	I.D. mm.	O.D. In.	O.D. mm.	Wall Thickness In.	Wall Thickness mm.	Tube Number	Packaging*	Qty m/pk
ST5P0816150N	1/32"	0.8	5/32"	4.0	1/16"	1.6	13#	Non-sterile	15
ST5P0824150N	1/32"	0.8	7/32"	5.6	3/32"	2.4	/	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
ST5P2424150N	3/32"	2.4	9/32"	7.1	3/32"	2.4	/	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
ST5P4832150N	3/16"	4.8	7/16"	11.2	1/8"	3.2	/	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
ST5PE150N	1/2"	12.7	11/16"	17.5	3/32"	2.4	/	Non-sterile	15
ST5PX150N	5/8"	15.9	7/8"	22.2	1/8"	3.2	184#	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
ST5PD050N	1"	25.4	1-3/8"	34.9	3/16"	4.8	92#	Non-sterile	5

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.
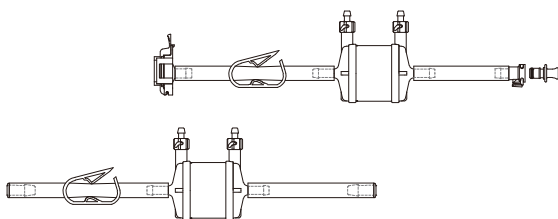
Product Features

- 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

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)	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 No.	I.D. In.	I.D. mm.	O.D. In.	O.D. mm.	Wall Thickness In.	Wall Thickness mm.	Tube Number	Packaging*	Qty m/pk
ST8H3224150N	1/8"	3.2	5/16"	8.0	3/32"	2.4	120#	Non-sterile	15
ST8H15150N	3/16"	4.8	3/8"	9.6	3/32"	2.4	15#	Non-sterile	15
ST8H4832150N	3/16"	4.8	7/16"	11.2	1/8"	3.2	/	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
ST8HE150N	1/2"	12.7	11/16"	17.5	3/32"	2.4	/	Non-sterile	15
ST8HX150N	5/8"	15.9	7/8"	22.2	1/8"	3.2	184#	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
ST8HD050N	1"	25.4	1-3/8"	34.9	3/16"	4.8	92#	Non-sterile	5

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: ST8H3224150N
2.Sterile:ST8H3224150S

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

■ 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	HAVXS	Reinforced Nylon（PA）	For Wall Thickness 1/8"(3.2 mm) - 1/4"(6.4 mm) Tubing
	HAVLG	Reinforced Nylon（PA）	For Wall Thickness 1.5 mm - 1/8"(3.2 mm) Tubing
Slide Clamp	HACRY	Polypropylene（PP）	For OD 6.0 mm - OD 3/8"(9.6 mm) Tubing
Pinch Clamp	HACRH-B	TPEE	For OD 1/4"(6.4 mm) - OD 1/2"(12.7mm) Tubing
	HACHM	Reinforced Nylon（PA）	For OD 1/2"(12.7 mm) - OD 3/4"(19.1 mm) Tubing
	HACHD	Reinforced Nylon（PA）	For OD 1/2"(12.7 mm) - OD 1"(25.4 mm) Tubing

Pinch Valve
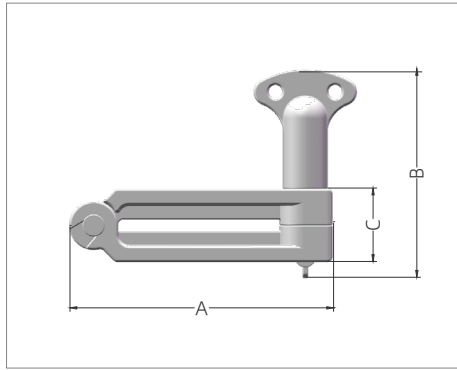
HAVXS

Part No.	Description	Packgaing*	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
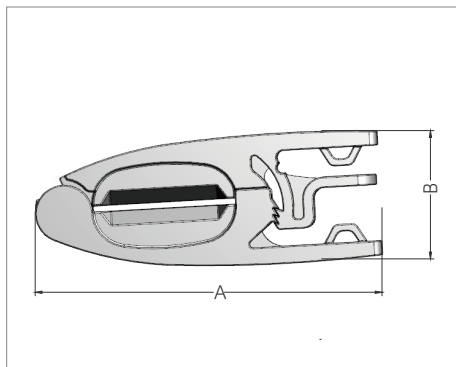
HAVLG

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）	
				A	B
HAVLGVN	For Wall Thickness 1.5 mm - 1/8"(3.2 mm) Tubing	Non-sterile	5	96.0	35.0

Slide Clamp
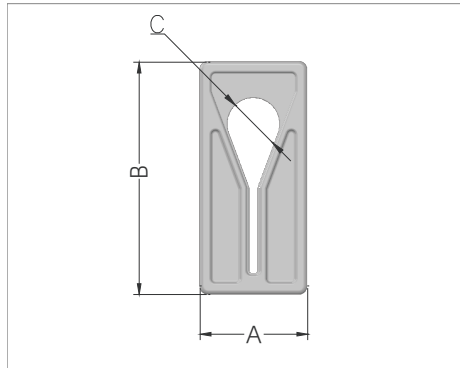
Slide Clamp

Part No.	Description	Packgaing*	Qty (pcs/pk)	Dimensions（mm）		
				A	B	C
HACRY5N	For OD 6.0 mm - OD3/8"(9.6 mm) Tubing	Non-sterile	50	25.0	54.0	12.1

Pinch Clamp
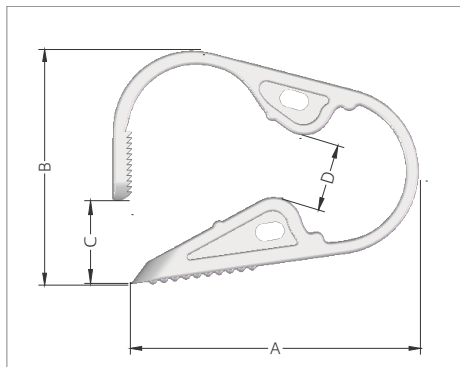
Pinch Clamp

Part No.	Description	Packgaing*	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

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.

Application

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

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.

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

Safty

• 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 operations.

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
Lifemeta™ STF **C-Flex 374** **AdvantaFlex**	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	**LMTWA0**
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℃~40℃ 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

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.

Application

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

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.

Authority Management

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

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 users.

Compatible TPE Tubings

TPE Tubing	Size
Lifemeta™ STF **C-Flex 374** **AdvantaFlex**	ID1/8"*OD1/4"
	ID3/16"*OD5/16"
	ID1/4"*OD3/8"
	ID1/4"*OD7/16"
	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℃~40℃ 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.

Air Filter

Diaphragm Vale

Baffle Fixing Plate

tri-clamp
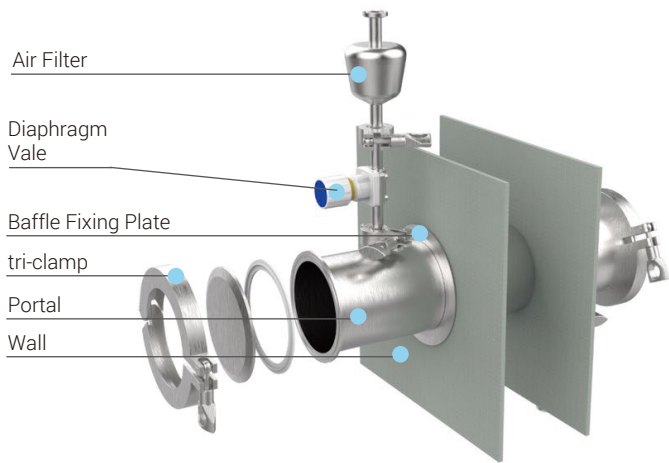
Portal

Wall

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.
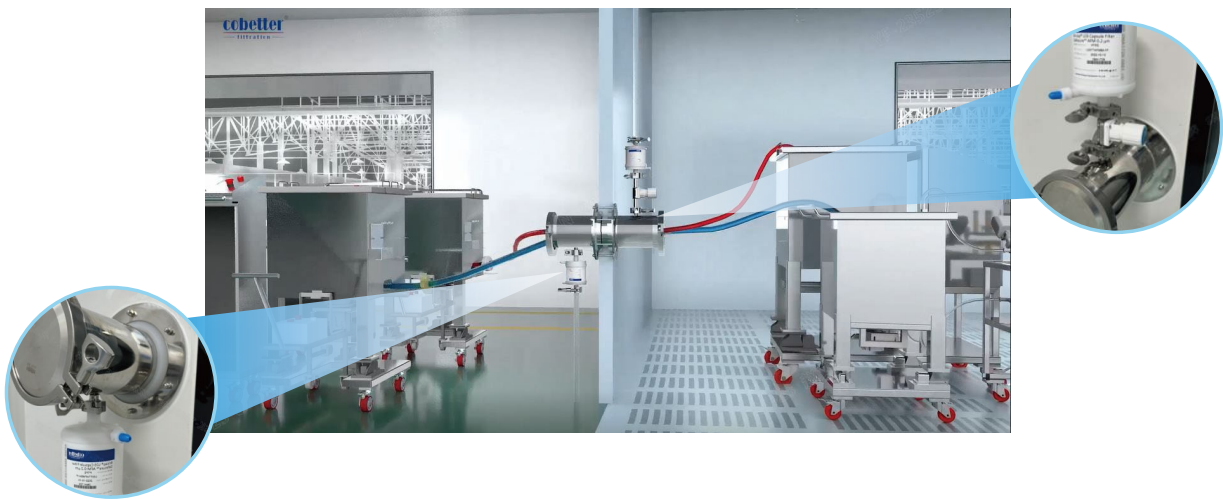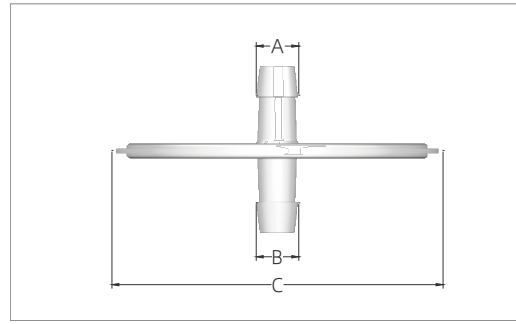
Ordering Information

| 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.

Ordering Information

Type	Part No.	Material	Dimensions (mm)		
			A	B	C
4" Clean Pass Unit with 2 Ports	CP41R	POE	8.9	8.9	107.2
	CP41Y		12.2	12.2	107.2
	CP41H		15.3	15.3	107.2
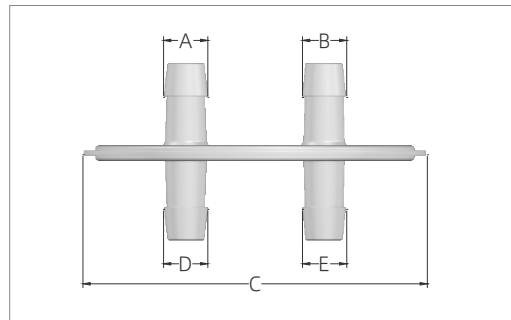
Ordering Information

Type	Part No.	Material	Dimensions (mm)				
			A	B	C	D	E
4" Clean Pass Unit with 4 Ports	CP42HH	POE	15.3	15.3	106.0	15.3	15.3

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.

Φ B
Φ C
178mm
Φ A (ID)
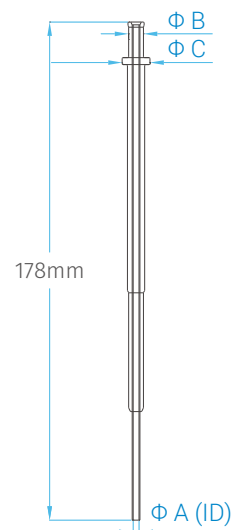
Lifemeta™ SA Sterile Sampling System

Lifemeta™ sterile sampling system is flexible technology for fluids aseptic transfer processes. Lifecube™sampling units are mainly used for liquid transmission. It is composed of different types of sampling needles and ports. The 1 mm needle used for general sampling, and 2 mm needle is usually used for cell culture sampling. The bag unit should be used with Lifemeta™ sampling holder and manual crimping tool. For single-use only, the needle may only penetrate the septum once to ensure proper sealing.

Lifecube™ Sampling Unit
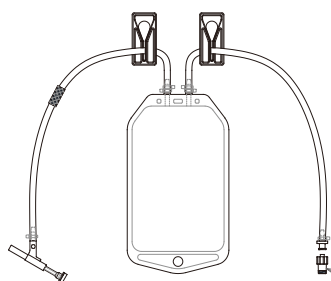
Sampling Bag
Available in 50,100,250 and 500 mL sires

Materials of Construction

Sampling Bag Fluid Contact Layer	ULDPE
Sampling Needle Septum Body	Polypropylene
Sampling Needle	Stainless steel 316 L
Port Plug	Silicone/316L
Metallic Sleeve	Nickel plated copper
Tubing	Double layer PE bags packaging

Specifications

|	
Sampling Needle Max. Operating Pressure	0~2 bar (0~29 psi)
Temperature Range	-20~50°C (-4~122°F)
Sterilization	The sampling needle can be steamed in place cycle at up to 130°C (266 °F) once in its holder after gamma irradiated at 25~45 kGy.
Packaging	Double layer PE bags packaging

Ordering Information

Single Sampling Bag		
Volume	**Cat No.**	**Sampling Lines**
2D 50 mL	KAS0051T4VA1	Line 1: 20 cm ID⅛" * OD¼" Lifemeta™ STT Pt-cured Silicone Tubing *
2D 100 mL	KAS0101T4VA1	+ Metallic Sleeve + NF Sampling Needle, 1 mm
2D 250 mL	KAS0251T4VA1	Line 2: 20 cm ID⅛" * OD¼" Lifemeta™ STT Pt-cured Silicone Tubing + Sampling Plug **
2D 500 mL	KAS0501T4VA1	
2D 50 mL	KAS0051T4VA2	Line 1: 20 cm ID1/8"* OD1/4" LifemetaTM STT Pt-cured Silicone Tubing
2D 100 mL	KAS0101T4VA2	+ Metallic Sleeve + NF Sampling Needle, 2 mm
2D 250 mL	KAS0251T4VA2	Line 2: 20 cm ID1/8"* OD1/4" LifemetaTM STT Pt-cured Silicone Tubing + Sampling Plug*
2D 500 mL	KAS0501T4VA2	
2D 50 mL	KAS0051T4V	Line 1: 20 cm ID1/8"* OD1/4" LifemetaTM STT Pt-cured Silicone Tubing
2D 100 mL	KAS0101T4V	+ Metallic Sleeve + NS Sampling Needle, 2 mm
2D 250 mL	KAS0251T4V	Line 2: 20 cm ID1/8"* OD1/4" LifemetaTM STT Pt-cured Silicone Tubing + Sampling Plug*
2D 500 mL	KAS0501T4V	
2D 50 mL	KAS0051T4VA4	Line 1: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing
2D 100 mL	KAS0101T4VA4	+ Metallic Sleeve + NF Sampling Needle, 1 mm
2D 250 mL	KAS0251T4VA4	Line 2: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing + Sampling Plug
2D 500 mL	KAS0501T4VA4	
2D 50 mL	KAS0051T4VA5	Line 1: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing
2D 100 mL	KAS0101T4VA5	+ Metallic Sleeve + NF Sampling Needle, 2 mm
2D 250 mL	KAS0251T4VA5	Line 2: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing + Sampling Plug
2D 500 mL	KAS0501T4VA5	
2D 50 mL	KAS0051T4VA3	Line 1: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing
2D 100 mL	KAS0101T4VA3	+ Metallic Sleeve + NS Sampling Needle, 2 mm
2D 250 mL	KAS0251T4VA3	Line 2: 20 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing + Sampling Plug
2D 500 mL	KAS0501T4VA3	

*TPE and other brand tubing can be selected

** Needlefree swabable valve and lure fittings can be selected for the end sampling connector

Multiple Sampling Bags		
Volume	Cat No.	Configuration
2D 50 mL	KAS0055T4V	NS Sampling Needle, 2 mm + ID ⅛" * OD ¼"Lifemeta™ STT Pt-cured Silicone Tubing + 5 * Sampling Bags + 1*500 mL Waste Bag
2D 100 mL	KAS0105T4V	
2D 250 mL	KAS0255T4V	
2D 500 mL	KAS0505T4V	
2D 50 mL	KAS0055T4VA3	NS Sampling Needle, 2 mm + ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing + 5 * Sampling Bags + 1*500 mL Waste Bag
2D 100 mL	KAS0105T4VA3	
2D 250 mL	KAS0255T4VA3	
2D 500 mL	KAS0505T4VA3	
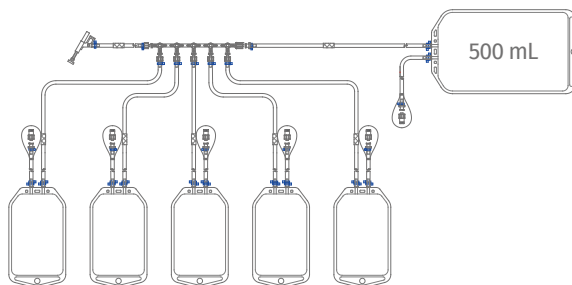
Sampling Assemblies	
Volume	Configuration
SAL1TL054VS	NS Sampling Needle, 2 mm + 50 cm ID1/8"* OD1/4" Lifemeta™ STT Pt-cured Silicone Tubing + Metallic Sleeve + Sampling Plug
SAL1CL104VS	NS Sampling Needle, 2 mm + 100 cm ID1/8"* OD1/4" C-Flex 374 TPE Tubing+ Metallic Sleeve + Sampling Plug
SAL1TL054VSA3	NS Sampling Needle, 2 mm + 50 cm ID 3.0 mm * OD 6.0 mm Lifemeta™ STT Pt-cured Silicone Tubing + Metallic Sleeve + Sampling Plug
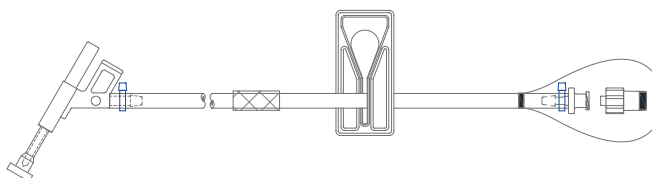
Lifemeta™ Sampling Holder

Lifemeta™ sampling holder is designed to be used with Lifemeta™ sampling units. There are two types of sampling holders that can be matched 1 or 2 mm sampling needles. The sampling holders and needles are pre-assembled and then docked with the stainless steel container for sterile sampling, and reducing the risk of contamination.

Applications

• Sampling from stainless steel containers
• Preconfigured or configure on site
• In conjunction with single-use sampling bags and needles

Benefits

• Accurate, small volume of samples
• Presterilized, reduces the risk of contamination
• Sterile transfer

Materials of Construction

TC Holder Material	Stainless steel 316 L
Magazine Material	Aluminium alloy 6061
Locking Nut and Tool Materials	Stainless steel 316 L
Surface Finish	Wetted parts electropolished Ra ≤0.5 µm
Operating Temperature	-80°C to 150°C (-112° to 302°F)
Maximum Operating Pressure	0-6 bar (0-87 psi)

Ordering Information

Cat No.	Description	Qty/pk
NFM5D	NF Sampling Holder, compatible with 1 mm and 2 mm NF sampling needles and port plug , 5 sampling ports, adapter type 1.5" TC (OD 50.5 mm)	1
NSM5D	NS Sampling Holder, compatible with 2 mm NS sampling needles and port plug , 5 sampling ports, adapter type 1.5" TC (OD 50.5 mm)	1
C5NP	Port Plug	10

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

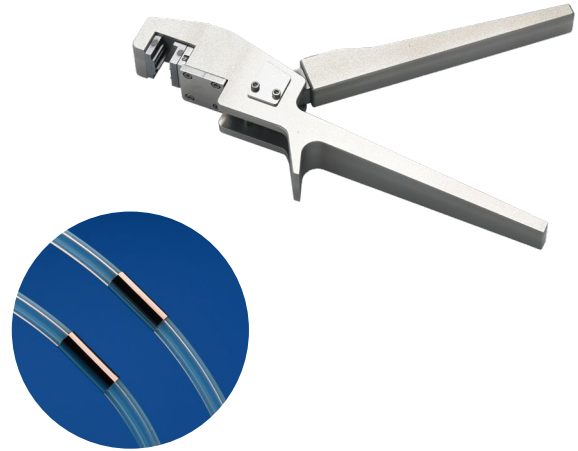## Benefits

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	ID⅛" * OD¼"
Weight	730 g

Ordering Information

Cat No.	Description	Qty/pk
DCMMCT	Manual Crimping Tool	1 pcs
DCM064M-E	Metallic Sleeve	100 pcs
STTL150N	Pt-cured Silicone Tubing, ID⅛" * OD¼"	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
• Pressure resistance after tubing disconnection: 0-0.2 MPa
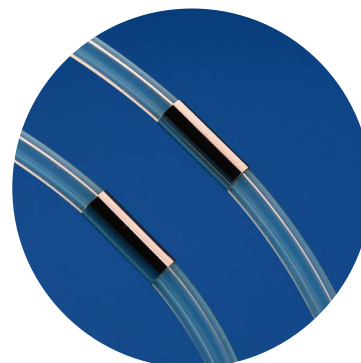
Product Features

• 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-E	For ID1/8"*OD1/4" Tubing	100
DCM112M-E	For ID1/4"*OD7/16" Tubing	100
DCM159M-E	For ID3/8"*OD5/8" Tubing	100
DCM191M-E	For ID1/2"*OD3/4" Tubing	100
DCM060M-E	For ID3.0*OD6.0mm Tubing	100
DCM128M-E	For ID1/4"*OD1/2" Tubing	100

Lifemeta™ Pressure Monitor

Cobetter Lifemteta™ pressure monitor can display the data measured by the pressure sensor and include USB data port protocol can realize real-time data output.The monitor is small and easy to carry, and can be used for testing in factories or laboratories.
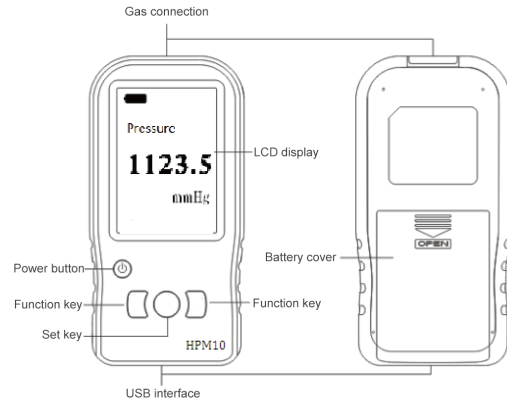
Name	Function
Pressure interface	Connecting gas duct
LCD display screen	Displays parameter information
Power button	On / Off
Function button	Function button
Set button	In the measurement display, press the button to enter the menu list state. Check the button in the function selection interface.
'Function +' button	In the measurement display, adjust the zero shortcut button. In the menu selection status, it is the function + key.
Battery case	Open the battery case for installing or removing the battery

Parameter	Specifications
Working temperature	0~40 °C
Relative humidity	15%～95%，non-condensing
Atmospheric pressure	70.0kPa ～106.0 kPa
Power supply	4.5VDC，USB 5.0VDC
Pressure measurement range	0~60 PSI (0~4 Bar)

Ordering information

Part No.	configuration*
Y0002	Single channel pressure sensor interface

*Please consult sales or technical personnel for details.

Major Function

· USB data communication function and USB power supply
· Pressure measurement unit display
· Zero check
· Li-ion polymer battery power

Lifemeta™ SPC Single-use Pressure Sensor

Cobetter Lifemeta SPC single-use pressure sensor adopts a smooth flow channel design without dead ends, which can accurately measure the static and dynamic pressure of gases and liquids in the process. The sensors connect to monitors via an integral connector for high-precision reading, compatible with other pre-certified third-party displays.

Quality assurance

- ISO 9001:2015 quality management system
- Manufactured in ISO Class 7 clean area
- 100% accuracy tested & leak tested
- Meet the requirement of USP <87> In Vitro Biological Reactivity Test
- Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics
- Aqueous extraction contains < 0.25 EU/mL, USP <85>
- Particulate matter in the product eluent meets the requirements in USP<788> for large volume parenterals
- Double-layer packaging
- Validation documents are available

Sensor	SPC Single use pressure sensor	
Body Material	Polysulfone (PSF)	
	Polycarbonate (PC)	
Sterilization	Sterilizable by gamma irradiation at 25-45 kGy	
Temperature range	From -25 °C to 65 °C	
Chemical resistance	PSF: Tolerates 1 M NaOH, 48 h	
	PC: Intolerance to NaOH	
Accuracy	Range	Specification
	0 to 6 PSI (0 to 41.37 kPa)	±2% of reading
	6 to 30 PSI (41.37 to 206.84 kPa)	±3% of reading
	30 to 45 PSI (206.84 to 310.26 kPa)	±5% of reading

Hose Barbs Sensors Ordering information

Part No.	Description*	Material	Packgaing*	Qty (pcs/pk)
SPCSRR	1/4"HB × 1/4"HB, without calibration certificate	PSF	Non-sterile	1
SPCSYY	3/8"HB × 3/8"HB, without calibration certificate	PSF	Non-sterile	1
SPCSHH	1/2"HB × 1/2"HB, without calibration certificate	PSF	Non-sterile	1
SPCSRR-C	1/4"HB × 1/4"HB, with calibration certificate	PSF	Non-sterile	1
SPCSYY-C	3/8"HB × 3/8"HB, with calibration certificate	PSF	Non-sterile	1
SPCSHH-C	1/2"HB × 1/2"HB, with calibration certificate	PSF	Non-sterile	1

*According to the user's needs, you can choose calibration or non-calibration.

**Pressure sensors can be used with other third-party pressure monitors. Please consult sales or technicians for details.

Luer Sensors Ordering information

Part No.	Description*	Material	Packgaing*	Qty (pcs/pk)
SPCCCP	Female Luer × Male Luer, without calibration certificate	PC	Non-sterile	1
SPCSCP	Female Luer × Male Luer, without calibration certificate	PSF	Non-sterile	1
SPCCCP-C	Female Luer × Male Luer, with calibration certificate	PC	Non-sterile	1
SPCSCP-C	Female Luer × Male Luer, with calibration certificate	PSF	Non-sterile	1

*According to the user's needs, you can choose calibration or non-calibration.

**Pressure sensors can be used with other third-party pressure monitors. Please consult sales or technicians for details.

Appendix
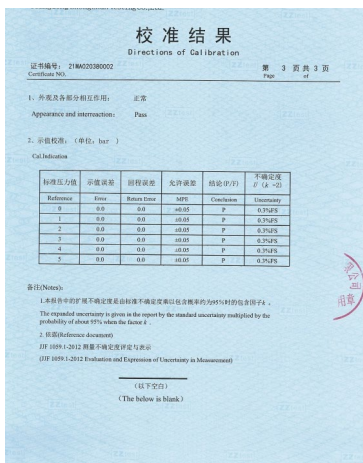
Lifemeta™ AC Single-use Aseptic Connector

Lifemeta AC single-use aseptic connector, exclusively designed by Cobetter, can be widely used in various production stages of biopharmaceuticals, such as upstream media fed-batch, downstream sterile connection of final filling, etc..
Lifemeta AC aseptic connectors are designed with pull tabs to improve ease of operation, while the genderless structure makes the connection more flexible and reduces the risk of upstream and downstream connection mismatches and operational errors.

Quality Assurance

- Validation guide are available
- Extractables and leachables report are available on request
- Meet the requirement of USP <87> In Vitro Biological ReactivityTest
- Meet the criteria of the USP <88> Biological Reactivity Test for Class VI plastics
- Aqueous extraction contains < 0.25 EU/mL as determined by Amebocyte Lysate, USP <85>
- Particulate matter in the product eluent meets the requirements in USP <788> for large volume parenterals
- ISO 9001:2015 Quality Managrment System
- ADCF raw materials

Applications

- Media preparation and transfer
- Buffer preparation and transfer
- Sampling during cell culture
- Bioreactor inoculum and harvest
- Sterile assembly of probe assemblies into single-use bags
- Final filling sterile connection
- Sterile filling of bulk drug substance

Specifications

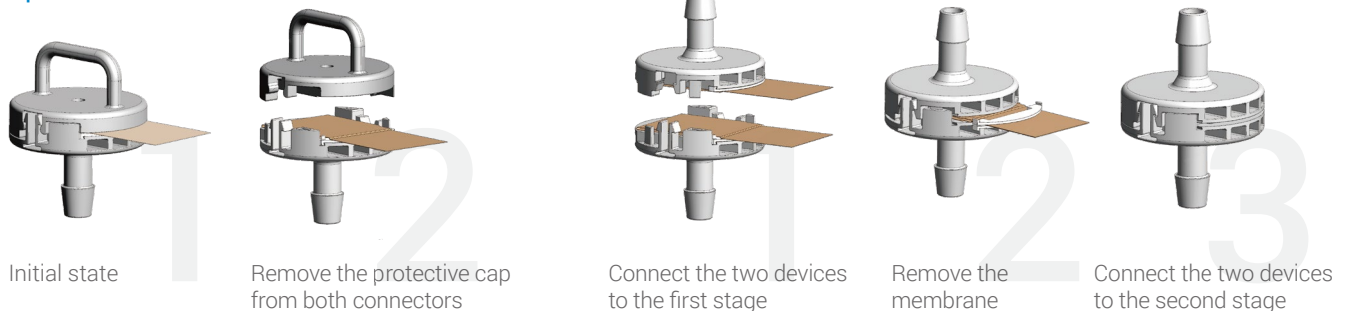|	
Size	1/4"HB、3/8"HB、1/2"HB、3/4"HB
Material	Main Components: PSF Membrane: PES O-ring: Silicone rubber Protective Caps: PP
Temperature Range	-80 ~ 130 °C
Pressure Range	0 ~ 3.0 bar
Vacuum Resistance	Up to 1.0 bar
Sterilization	Can be sterilized by gamma irradiation at 25-45kGy or autoclaved for 60 minutes at 130 °C
pH Range	2~12

Water Flow Rate Test

ACMSSY Water Flow Rate @20°C (L/min)

Two-stage locking
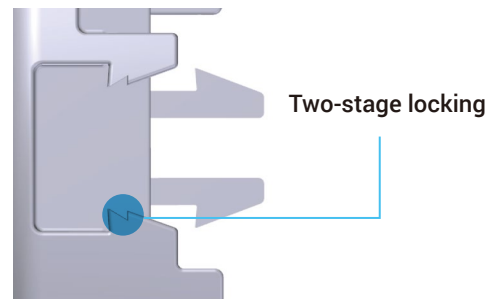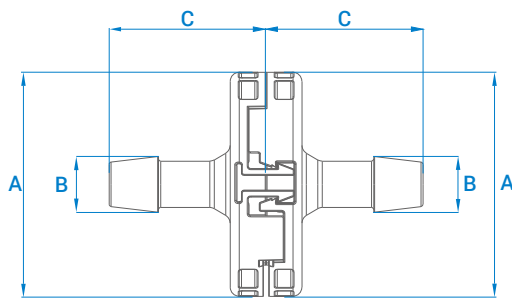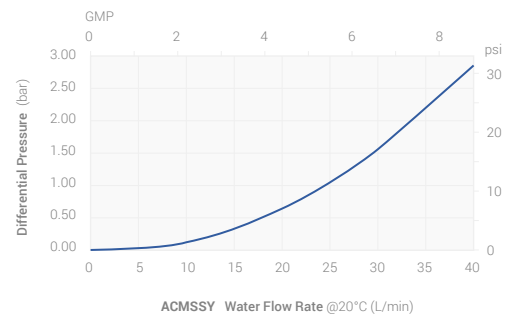
Ordering Information

Part No.	Specification	Packaging*	Qty	Dimensions (mm)		
				A	B	C
ACMSSR	1/4"HB	Non-sterile	5 pcs/pk	50.0	7.6	25.0
ACMSSY	3/8"HB	Non-sterile	5 pcs/pk	50.0	12.4	35.0
ACMSSH	1/2"HB	Non-sterile	5 pcs/pk	50.0	15.4	34.0
ACMSSM	3/4"HB	Non-sterile	5 pcs/pk	50.0	21.8	40.2

＊Note: The product comes default with non-sterile packaging in individual double-layer bags.

Operation

1 Initial state

2 Remove the protective cap from both connectors

1 Connect the two devices to the first stage

2 Remove the membrane

3 Connect the two devices to the second stage

Lifemeta™ CLSB-II Blade for Sterile Welder

Lifemeta CLSB-II blade is a special blade for Sartorius BioWelder® Total Containment. It is suitable for sterile connection of thermoplastic tubes for single-use products such as liquid storage bags and sampling bags, and supports the connection of dry or liquid-filled tubing.

In non-sterile environment, Lifemeta CLSB-II sterile welder blade achieve sterile and reliable connection of thermoplastic tubes on Sartorius Biowelder® TC Sterile Tube Welder, and this blade can be reused if cleaned and used properly.

Features

- Infrared temperature sensing to achieve high-quality welding
- Smooth surface to reduce TPE hot melt residue
- Ensures sterility and pyrogen-free during the welding process
- High-hardness alloy to ensure high flatness of the blade

Application

- Sterile feed and liquid transfer
- Bioreactor feeding and harvesting
- Buffer transfer
- Aseptic sampling

Parameters

Product Name	Lifemeta CLSB- II Blade
Application	Biowelder® Total Containment
Material	Ni80Cr20
Coating	Non

|	
Length	82.5 mm
Width	38.0 mm
Thickness	0.4 mm
Temperature Sensing Point	Yes
Number of Temperature Sensing Points	1
Temperature Sensing Point Size	r=7.4mm

Temperature curve

Comparative temperature curve curve of CLSB-II and S company blades
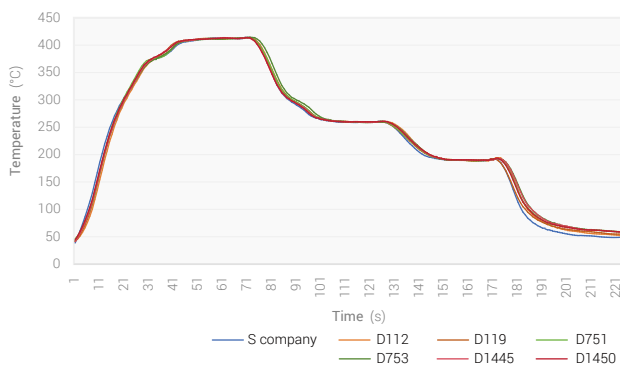
Lifemeta CLSB-II has stable temperature fluctuations during welding and small variation between blades.

Welding performance
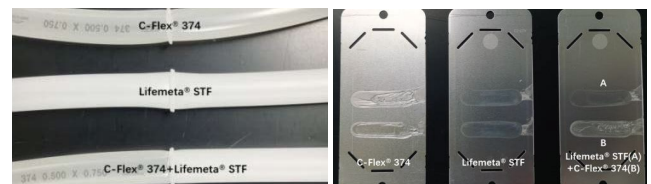
After using Lifemeta CLSB-II to weld C-Flex and Cobetter STF thermoplastic tubings for multiple times, the following can be confirmed from the state of the welded parts:

a. Multiple welding is stable and the welding part is neat.

b. The blade color is stable after multiple samples are welded.

Product Information

Product Name	Part	Product Description	Packaging
Blade	**CLSB-II**	Compatible with Sartorius BioWelder® Total Containment	50 pcs/PK

Our Mission

Through Excellent Products & Sustainable Innovative Solutions,

We Help Customers Solve Process Problems & Increase Yield.

cobetter®
— filtration —
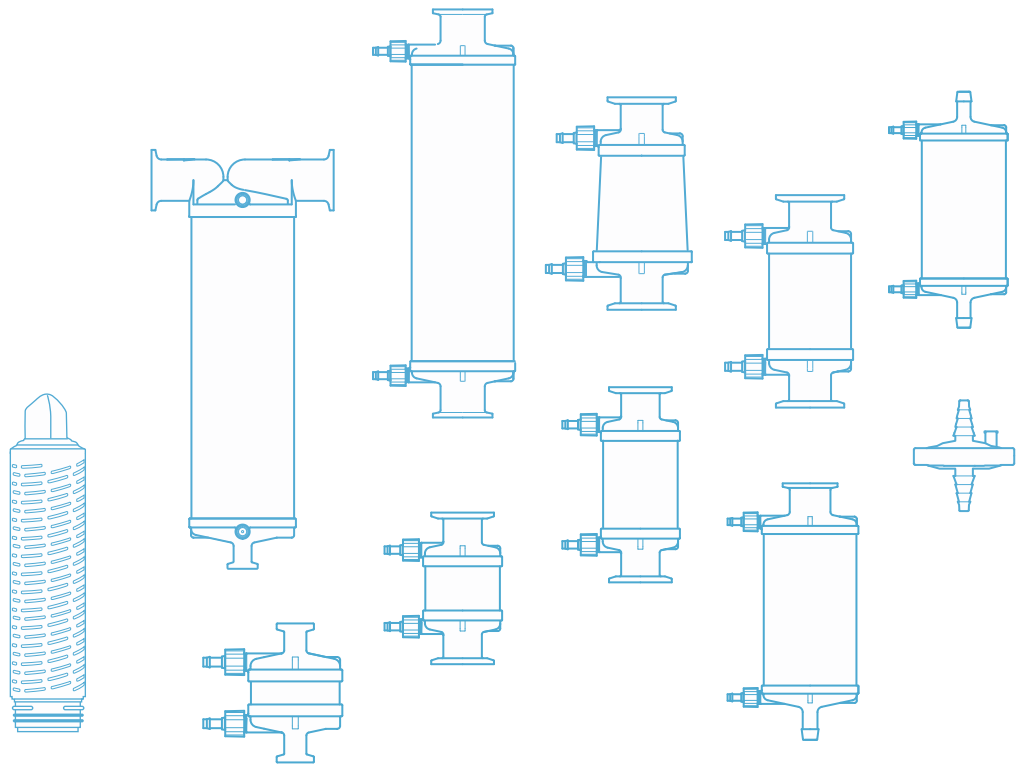
Hangzhou Cobetter Filtration Equipment Co.,Ltd.

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