

Features

Standard Flexboy[®] bioprocessing bags



Description

Standard Flexboy[®] Bioprocessing bags are designed for the preparation, storage and transport of biopharmaceutical solutions, intermediates and final bulk products. They provide a single-use alternative to traditional glass, stainless steel and rigid plastic carboys in a large variety of applications.

Applications

The broad chemical compatibility of Flexboy[®] Bags assures the safe processing of a wide range of biopharmaceutical fluids in a variety of applications:

- Buffers and Media sterile
- filtration & storage
- Bulk Harvest
- Product pooling
- Fraction collection
- Sample collection
- Bulk intermediate hold
- Final Product transport

Cost reduction and risk reduction

Single-Use Systems used in biopharmaceutical manufacturing improve process safety as they reduce the risk of cross contamination from batch-to-batch and product-to-product. Cost and time consuming CIP & SIP operations are minimized. This results not only in significant cost savings within the entire manufacturing process, but also in the optimization of capacity utilization.



Standard Flexboy[®] bags are available as

stand-alone bags and filter & bag assemblies

incorporating a variety of filter and bag sizes

allowing easy adaptation to process volume

and media. Multiple configurations that also integrate thermoweldable TPE tubing

are provided for flexible incorporation into your process. Thus, sterile connection and disconnection devices like the BioWelder[®] and

connections and disconnections from and to

the BioSealer® can be used to allow safe

| Multiple manufacturing sites | High security of supply |
|---|---|
| 100% integrity testing of bag and immediate connection | Process safety and integrity |
| All connections extensively qualified | Safe and robust |
| Full compliance with ISO11137 | Highest sterility assurance level |
| Standard design | Most designs available from stock |
| Specifications | |
| Bag Chamber | Multiple Film Construction, EVA Fluid Contact Layer |
| Tubing | EVA, TPE |
| Fittings | Female Luer Lock, MPC Male Coupling, Mini Triclamp, Needle free sampling port |
| Filters | Sartopore [®] 2 Gamma Filter Capsule |
| Number of Ports | 3 (except for 5 mL: 1 Port) |

Benefits

Female luer fittings with a needle-free sampling port allow easy and convenient sampling, quick connects may be attached directly or adapted to a variety of connections and mini triclamps that are constantly used in industrial environment assure maximum flexibility.

Easy Implementation

another process step.

Flexibility

Standard Flexboy[®] Bags are available in bag chamber volumes between 5 mL and 50 L. They are supplied sterilized and ready to use. This allows an easy and convenient process implementation. A series of associated systems such as Flexboy[®] Trays and Racks facilitate an easy bag handling. Sartorius Stedim Biotech supports users already at the design & implementation phase of a new production facility with the most comprehensive support program that ensures successful design implementation of Single-Use Manufacturing.

| Secu | ritv | of | Sur | vlac | |
|------|------|----|-----|------|--|

Volumes

Sterilization

Sartorius Stedim Biotech has established multiple manufacturing sites with consistent industrial processes. The expertise of designing Single Use solutions based on collaborative supplier management and customer demand planning assures a state of the art and robust supply chain that can cope with strong market growth.

5 mL - 50 L

by Gamma Irradiation

SPL2003-e10056 | 1

Validation Flexboy[®] bags have been gualified applying

Quality Assurance

Dimensions

5 mL – 3 L

| Volume | 5 mL | 50 mL | 150 mL | 250 mL | 500 mL | 1 L | 3 L |
|----------------------|-----------|------------|------------|------------|------------|-------------|-------------|
| Length (L) mm | 70 | 134 | 205 | 230 | 241 | 299 | 381 |
| | (2.76") | (5.28") | (8.07") | (9.06") | (9.49") | (11.77") | (15.00") |
| Width (W) mm | 59 | 95 | 85 | 94 | 130 | 155 | 223 |
| | (2.32") | (3.74") | (3.35") | (3.70") | (5.12") | (6.10") | (8.78") |
| Length inc. | 110 | 231 | 302 | 327 | 338 | 396 | 478 |
| Tubing (T) mm | (4.33") | (9.09") | (11.89") | (12.88") | (13.31") | (15.59") | (18.82") |
| Film Surface | 21 | 143 | 275 | 329 | 452 | 707 | 1346 |
| Area cm ² | (3.3 in²) | (22.2 in²) | (42,6 in²) | (51.0 in²) | (70.0 in²) | (109.6 in²) | (208.7 in²) |

5 L – 50 L

| Volume | 5 L | 10 L | 20 L | 50 L |
|--------------------------------------|---------------------|---------------------|---------------------|----------------------|
| Length (L) mm | 376 (14.80") | 621 (24.45") | 654 (25.75") | 790 (31.10") |
| Width (W) mm | 332 (13.07") | 300 (11.81") | 431 (16.97") | 580 (22.83") |
| Length inc. Tubing (T) mm | 473 (18.62") | 718 (28.27") | 749 (29.57") | 887 (34.92") |
| Film Surface Area cm ² | 1929 (299.0 in²) | 3528 (546.9 in²) | 4826 (748.0 in²) | 8106 (1256.4 in²) |

Flexboy[®] bags are tested for compliance to:

- USP <87>: Biological reactivity tests, in Vitro

Design, Manufacture and Sterilization processes are conducted under conditions that mirror biopharmaceutical operations

the most complex and innovative test regimes. Biological, chemical and physical tests combined with extensive extractable testing provide users of Flexboy[®] with data representing the widest range of process fluids in a variety of processing conditions.

Full compliance with ISO11137 allows sterility assurance level validation of 10⁻⁶ for each Single Use System over its entire shelf life.

Sartorius Stedim Biotech Quality Systems for Single Use Products follow applicable ISO and FDA regulations for Medical Devices.

- USP <88>: Biological reactivity tests, in Vivo
- USP <661>: Tests for plastic

and meet cGMP requirements.

- USP <788> and E.P. 2.9.19 : Particulate
- ISO 11737 : Bioburden
- ISO 11137 : Sterilization of Medical Devices

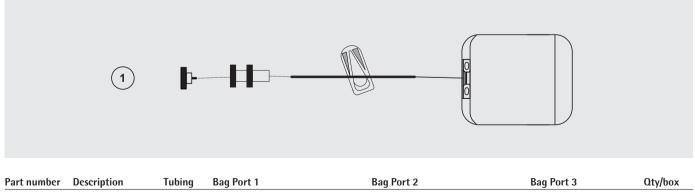
Rapid Supply

The majority of Standard Flexboy[®] storage systems are available from stock.

Ordering Information

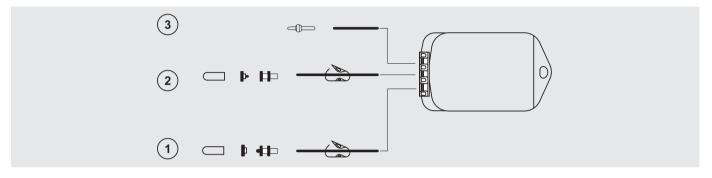
1. Standard Flexboy[®] with EVA tubes

1.1. Standard Flexboy® with EVA tubes (5 mL with Luer® lock connection)



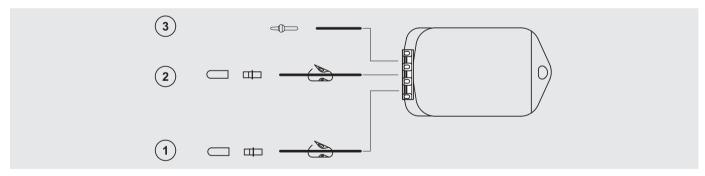
| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|---------------------------|--------|---|------------|------------|---------|
| FFB115270 | Flexboy [®] 5 mL | EVA | 3/16" × 1/4" × 5 cm (2") Female LL + plug, slide clamp | NA | NA | 100 |

1.2. Standard Flexboy $^{\circ}$ with EVA tubes (50mL to 3L with Luer lock connection)



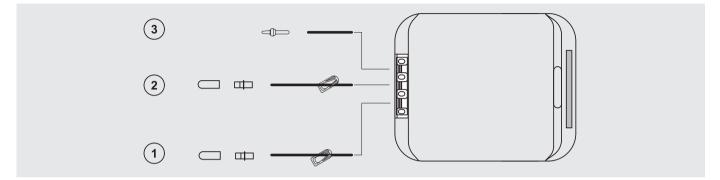
| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|------------------------------|--------|---|---|--|---------|
| FFB102603 | Flexboy [®] 50 ml | EVA | 1/4" × 5/16" × 10 cm (4") LL male + Cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") LL female + Cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102643 | Flexboy [®] 150 ml | EVA | 1/4" × 5/16" × 10 cm (4") LL male + Cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") LL female + Cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102670 | Flexboy [®] 500 ml | EVA | 1/4" × 5/16" × 10 cm (4") LL male + Cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") LL female + Cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB103547 | Flexboy [®] 1000 ml | EVA | 1/4" × 5/16" × 10 cm (4") LL male + Cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") LL female + Cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102812 | Flexboy [®] 3000 ml | EVA | 1/4" × 5/16" × 10 cm (4") LL male + Cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") LL female + Cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |

1.3. Standard Flexboy® with EVA tubes (50mL to 3L with MPC Connection)



| Part Number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|------------------------------|--------|---|---|--|---------|
| FFB102640 | Flexboy [®] 50 ml | EVA | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102877 | Flexboy [®] 150 ml | EVA | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB103398 | Flexboy [®] 500 ml | EVA | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102606 | Flexboy [®] 1000 ml | EVA | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102704 | Flexboy [®] 3000 ml | EVA | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 1/4" × 5/16" × 10 cm (4") MPC male + dust cap, pinch clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |

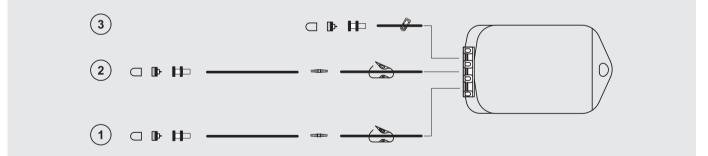
1.4. Standard Flexboy[®] with EVA tubes (5L to 50L with MPC Connection)



| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|-------------------------------|--------|--|--|--|---------|
| FFB102025 | Flexboy [®] 5 liter | EVA | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB101974 | Flexboy [®] 10 liter | EVA | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB101961 | Flexboy [®] 20 liter | EVA | $3/8" \times 15/32" \times 10$ cm (4") MPC Male + dust cap, slide clamp | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |
| FFB102340 | Flexboy [®] 50 liter | EVA | $3/8" \times 15/32" \times 10$ cm (4") MPC Male + dust cap, slide clamp | 3/8" × 15/32" × 10 cm (4") MPC Male + dust cap, slide clamp | 3/16" × 1/4" × 5 cm (1,97 in.) + septum | 20 |

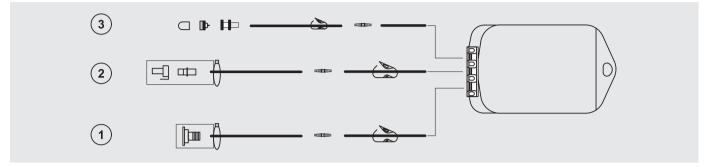
2. Standard Flexboy[®] with TPE tubes

2.1.Standard Flexboy[®] with TPE tubes (150 mL)



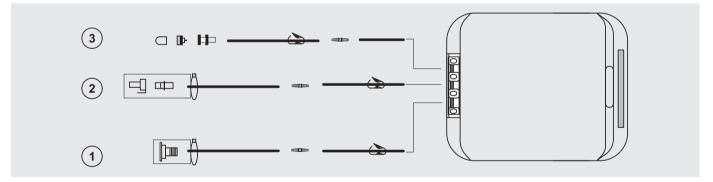
| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|-----------------------------|---------------------------|---|---|--|---------|
| FFB110898 | Flexboy [®] 150 ml | EVA + Clear C-Flex 374 | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, dust cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, dust cap, pinch clamp | EVA port tube + slide clamp + LL female + needle free sampling port, dust cap | 50 |

2.2. Standard Flexboy[®] with TPE tubes (1L to 3L)



| Part Number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|------------------------------|---------------------------|---|--|---|---------|
| FFB110900 | Flexboy [®] 1000 ml | EVA + Clear C-Flex 374 | 1/4" × 7/16" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/4" × 7/16" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110902 | Flexboy [®] 3000 ml | EVA + Clear C-Flex 374 | 1/4" × 7/16" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/4" × 7/16" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |

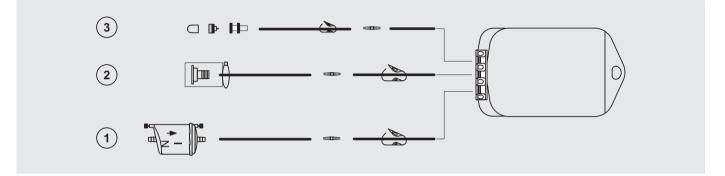
2.3. Standard Flexboy[®] with TPE tubes (5L to 50L)



| Part Number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|-------------------------------|---------------------------|--|---|---|---------|
| FFB110904 | Flexboy [®] 5 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 3/8" × 5/8" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110905 | Flexboy [®] 10 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 3/8" × 5/8" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110906 | Flexboy [®] 20 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 3/8" × 5/8" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 10 |
| FFB110907 | Flexboy [®] 50 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 3/8" × 5/8" × 50 cm (20") MPC Male + sealing cap, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 10 |

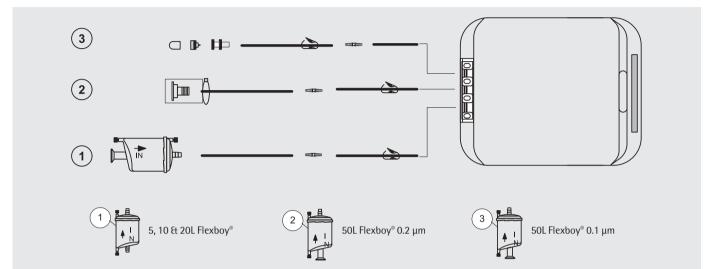
3. Standard Flexboy[®] with TPE tubes & Sartopore[®] 2 Gamma Capsules

3.1. Standard Flexboy[®] with TPE tubes (1L to 3L)



| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|------------------------------|---------------------------|---|---|---|---------|
| FFB110908 | Flexboy [®] 1000 ml | EVA + Clear C-Flex 374 | 1/4" × 7/16" × 50 cm (20") 5441307H4G-00, Sartopore 2, 0.2 μm, filter inlet: 1/4" stepped Hose Barb filter outlet: 1/4" stepped Hose Barb; 150 cm ² , pinch clamp | 1/4" × 7/16" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110909 | Flexboy [®] 3000 ml | EVA + Clear C-Flex 374 | 1/4" × 7/16" × 50 cm (20") 5441307H4G-00, Sartopore 2, 0.2 μm, filter inlet: 1/4" stepped Hose Barb filter outlet: 1/4" stepped Hose Barb; 150 cm ² , pinch clamp | 1/4" × 7/16" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |

3.2.Standard Flexboy[®] with TPE tubes (5L to 50L)



| Part number | Description | Tubing | Bag Port 1 | Bag Port 2 | Bag Port 3 | Qty/box |
|-------------|-------------------------------|---------------------------|---|--|---|---------|
| FFB110910 | Flexboy [®] 5 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 5441307H5G-OO, Sartopore 2, 0.2 µm, filter inlet: 1/4" stepped Hose Barb filter outlet: 1/4" stepped Hose Barb; 300 cm ² , pinch clamp | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110911 | Flexboy [®] 10 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 5441307H5G-00, Sartopore 2, 0.2 μm, filter inlet: 1/4" stepped Hose Barb filter outlet: 1/4" stepped Hose Barb; 300 cm ² , pinch clamp | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 20 |
| FFB110912 | Flexboy [®] 20 liter | EVA + Clear C-Flex 374 | 3/8" × 5/8" × 50 cm (20") 5441307H5G-OO, Sartopore 2, 0.2 µm, filter inlet: 1/4" stepped Hose Barb filter outlet: 1/4" stepped Hose Barb; 300 cm ² , pinch clamp | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 10 |
| FFB110913 | Flexboy [®] 50 liter | EVA + Clear C-Flex 374 | $\begin{array}{l} 1/2'' \times 3/4'' \times 50 \mbox{ cm} (20'') \\ 5441307H7G-SM, \\ Sartopore 2, 0.2 \mbox{ \mum}, \\ filter inlet: \\ 1.5'' Sanitary flange \\ filter outlet: 5/8'' Hose Barb; \\ 500 \mbox{ cm}^2, \mbox{ pinch clamp} \end{array}$ | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 10 |
| FFB110915 | Flexboy [®] 50 liter | EVA + Clear C-Flex 374 | 1/2" × 3/4" × 50 cm (20") 5441358K7G-SM, Sartopore 2, 0.1 μm, filter inlet: 1.5" Sanitary flange filter outlet: 5/8" Hose Barb; 500 cm ² , pinch clamp | 3/8" × 5/8" × 50 cm (20") 3/4" Triclamp, pinch clamp | 1/8" × 1/4" × 50 cm (20") LL female + needle free sampling port, pinch clamp | 10 |

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