

# CAPIOX<sup>®</sup> FX Family of Oxygenators with Integrated Arterial Filter

Breakthrough technology for added patient safety



# CAPIOX<sup>®</sup> FX Family of Oxygenators

# Integrated arterial filter with self-venting technology

A 32 µm screen filter surrounds the fiber layer of the oxygenator. Particulate micro-emboli that may be present in the blood are trapped in the filter mesh while gaseous emboli remain inside the oxygenator and in contact with the hollow fibers. Driven by the pressure difference, gaseous emboli enter the inner lumen of the microporous hollow fiber and are eliminated via the gas outlet.



# Integrated arterial filter

- Filter inside oxygenator housing
- 32 µm pore size
- Self-venting technology

# Oxygenator

#### Proven performance

- Fully integrated arterial filter with self-venting technology
- Low priming volume, high gas exchange and low pressure drop are optimally balanced for superb performance
- Hollow fibers manufactured exclusively by Terumo using a patented technology means total quality management from raw materials to finished product
- Woven fiber bundle ensures consistent and high-performance gas exchange
- Choice of blood outlet port configurations for easy access and increased circuit flexibility
- No DEHP used in PVC tubing

# Hardshell Reservoir

#### Full featured

- Elongated shape provides stable blood flow path and enhanced visibility at all levels from all angles
- Rotating venous inlet improves set-up flexibility
- Connecting mount increases flexibility in circuit set-up and oxygenator rotation
- Funnel-shaped cardiotomy filter improves breakthrough and residual volumes
- No DEHP used in PVC tubing

# CAPIOX® FX05 Oxygenator

For neonates and infants



- Maximum blood flow: 1.5 L/min
- Oxygenator priming volume: 43 mL
- Arterial filter surface area: 130 cm<sup>2</sup>
- Reservoir storage capacity: 1000 mL



# CAPIOX<sup>®</sup> FX15 Oxygenator

For children, small adults and minimized circuits

# Available in two reservoir sizes



- Maximum blood flow: 4.0 L/min
- Oxygenator priming volume: 144 mL
- Arterial filter surface area: 360 cm<sup>2</sup>
- Reservoir storage capacity: 3000 mL
- Maximum blood flow: 5.0 L/min
- Oxygenator priming volume: 144 mL
- Arterial filter surface area: 360 cm<sup>2</sup>
- Reservoir storage capacity: 4000 mL

CAPIOX® FX25 Oxygenator

For all adults



- Maximum blood flow: 7.0 L/min
- Oxygenator priming volume: 260 mL
- Arterial filter surface area: 600 cm<sup>2</sup>
- Reservoir storage capacity: 4000 mL

## TOTM – an alternative plasticizer

TOTM

Terumo is ever striving to develop new medical technologies with minimal negative impact to patients and the environment.

In line with this goal, Terumo provides an alternative plasticizer for the manufacturing of its products. TOTM (trioctyl trimellitate) offers outstanding physical properties (such as flexibility) to the material and low plasticizer elution.

# CAPIOX® FX05 Oxygenator Performance Data



# CAPIOX® FX15 Oxygenator Performance Data



# CAPIOX® FX25 Oxygenator Performance Data



### Holder Systems CAPIOX FX05 Oxygenator



Order # XX\*CXH05R



Order # XX\*CXH05

#### CAPIOX FX15 and CAPIOX FX25 Oxygenators



Order # 801804 XX\*CXH18R (Europe only)



Order # 801139 XX\*XH032 (Europe only)



Order # 812613 for FX25 (US only) 812614 for FX15 (US only) XX\*CXH15 (Europe only)

# CAPIOX<sup>®</sup> FX Family of Oxygenators

#### **Specifications**

#### Oxygenator

| 1 | 10       |                |                           |  |  |
|---|----------|----------------|---------------------------|--|--|
|   | Material | Housing        | Polycarbonate             |  |  |
|   |          | Fibers         | Microporous polypropylene |  |  |
|   |          | Heat exchanger | Stainless steel           |  |  |
|   | -        |                |                           |  |  |

| Oxygenator                                       | FX05   | FX15  | FX25                        |  |  |
|--|--|---|-----------------------------|--|--|
| Fiber bundle<br>surface area                     | Approx. 0.5 m <sup>2</sup>                   | Approx. 1.5 m <sup>2</sup>                        | Approx. 2.5 m <sup>2</sup>  |  |  |
| Heat exchanger<br>surface area                   | Approx. 0.035 m <sup>2</sup>                 | Approx. 0.14 m <sup>2</sup>                       | Approx. 0.2 m <sup>2</sup>  |  |  |
| Blood flow range                                 | 0.1 – 1.5 L/min                              | 0.5 – 5.0 L/min,<br>0.5 – 4.0 L/min<br>(with R30) | nin, 0.5 – 7.0 L/min<br>nin |  |  |
| Reference blood flow<br>(AAMI std.)              | 2.5 L/min                                    | 7.0 L/min   | n.a.                        |  |  |
| Priming volume (static)                          | 43 mL  | 144 mL  | 260 mL                      |  |  |
| Blood inlet port<br>(from pump)                  | 1/4" (6.4 mm)                                | 3/8" (9.5 mm)                                     |                             |  |  |
| Blood outlet port                                | 1/4" (6.4 mm)                                | 3/8" (9.5 mm)                                     |                             |  |  |
| Cardioplegia port                                | _  | 1/4" (6.4 mm)                                     |                             |  |  |
| Luer port (for recirc.<br>or blood cardioplegia) | One luer lock<br>on blood outlet port        | n.a.  |                             |  |  |
| Gas inlet port                                   | 1/4" (6.4 mm)                                |   |                             |  |  |
| Gas outlet port                                  | 5/16" (7.9 mm)                               | 1/4" (6.4 mm)                                     |                             |  |  |
| Water ports                                      | 1/2" (12.7 mm) Hansen quick-connect fittings |   |                             |  |  |
| Maximum pressure<br>Blood inlet                  | 1000 mmHg (133 kPa)                          |   |                             |  |  |
| Maximum pressure<br>Water inlet                  | 2 kgf/cm² (196 kPa) (28.5 psi)               |   |                             |  |  |
| Arterial filter                                  |  |   |                             |  |  |
| Filter material                                  | Polyester screen type                        |   |                             |  |  |
| Pore size  | 32 µm  |   |                             |  |  |
| Surface area                                     | 130 cm <sup>2</sup>                          | 360 cm <sup>2</sup>                               | 600 cm <sup>2</sup>         |  |  |

Oxygenator with integrated arterial filter/hardshell reservoir ...CX\*FX15RW40 ......2

Oxygenator with integrated arterial filter ...... 4 Oxygenator with integrated arterial filter ...... 4 Oxygenator with integrated arterial filter/hardshell reservoir ...... CX\*FX25RE ...... 2

| Hardshell Reservoir |                   |  |
|---------------------|-------------------|--|
| Material            | Housing           | Polycarbonate                          |
|                     | Venous filter     | Polyester screen type, Pore size 47 μm |
|                     | Cardiotomy filter | Polyester depth type                   |
|                     | Defoamer          | Polyurethane foam                      |
|                     |                   |  |

| Hardshell reservoir  | FX05  | FX15<br>R30 (for FX15)                              | R40 (for FX15)                                      | FX25  |  |
|--|---|---|---|---|--|
| Blood flow range<br>Venous flow<br>Cardiotomy inlet<br>Combined flow | 0.1 – 1.5 L/min<br>Max. 1.5 L/min<br>Max. 1.5 L/min | 0.5 – 4.0 L/min<br>Max. 4.0 L/min<br>Max. 4.0 L/min | 0.5 – 5.0 L/min<br>Max. 5.0 L/min<br>Max. 5.0 L/min | 0.5 – 7.0 L/min<br>Max. 5.0 L/min<br>Max. 7.0 L/min |  |
| Blood storage<br>capacity  | 1000 mL   | 3000 mL   | 4000 mL   | 4000 mL   |  |
| Min. operating<br>volume   | 15 mL   | 70 mL   | 200 mL  | 200 mL  |  |
| Venous blood<br>inlet port   | 1/4" (6.4 mm)<br>rotatable                          | 3/8" (9.5 mm)<br>rotatable                          | 1/2" (12.7 mm)<br>rotatable                         | 1/2" (12.7 mm)<br>rotatable                         |  |
| Blood outlet port<br>(to pump)                                       | 1/4" (6.4 mm)                                       | 3/8" (9.5 mm)                                       |   | •   |  |
| Suction ports  | Five 3/16" – 1/4"<br>(4.8 mm – 6.4 mm)<br>rotatable | Six 1/4" (6.4 mm)                                   |   |   |  |
| Vertical port<br>(to CR filter)                                      | n.a.  | 3/8" (9.5 mm)                                       |   |   |  |
| Quick prime port   | 1/4" (6.4 mm)                                       |   |   |   |  |
| Vent port  | 1/4" (6.4 mm)                                       |   |   |   |  |
| Auxiliary port 1/4" – 3/8" (6.4 mm – 9.5 mm)                         |   |   |   |   |  |
| Luer ports   | filter, one non-filte                               | red luer lock,                                      |   |   |  |
| Maximum sustainable<br>negative pressure<br>in reservoir             | -150 mmHg (-20.0 k                                  | Pa)   |   |   |  |

#### **Ordering Information**

#### DESCRIPTION

CAPIOX FX05 Oxygenator

CAPIOX FX15 Oxygenator

CAPIOX FX25 Oxygenator

#### CATALOG NO. UNITS/CASE DESCRIPTION

#### Holders for CAPIOX FX Oxygenators

#### 1 Holder for FX15/25 oxygenator with hardshell reservoir (long arm) ...... 801804 ...... 1 Oxygenator with integrated arterial filter<sup>3</sup> CX\*FX15W 4 Holder for FX25 oxygenator (US only) 812613 .. 1 Holder for FX15/25 oxygenator when separated from reservoir ...... XX\*CXH25F ..... Holder for FX15/25 oxygenator with hardshell reservoir (Europe only) ...... XX\*CXH18R ..... Holder for FX15/25 oxygenator with hardshell reservoir,

# $^1$ Contains 2 adapters 3/16" – 1/4" and a recirculation line 2 Contains 4 adapters 3/16" – 1/4", 1 adapter 1/4" – 3/8" and a recirculation line 3 Contains 2 adapters 1/4" – 3/8" 4 Contains 4 adapters 1/4" – 3/8"

short arm (Europe only) ...

**TERUMO CARDIOVASCULAR** 

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SYSTEMS CORPORATION

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CATALOG NO. UNITS/CASE

.....XX\*XH032 .....

**TERUMO CORPORATION**