CAPIOX® FX Family of Oxygenators with Integrated Arterial Filter

Breakthrough technology for added patient safety

With integrated filter!

Surrounded by Safety

32 µm filter
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.

Terumo’s own biocompatible amphiphilic polymer surface coating, is a standard feature of all CAPIOX® FX oxygenators.
**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 cm²
- Reservoir storage capacity: 1000 mL

Choose the blood outlet port configuration that best suits your circuit.
**CAPIOX® FX15 Oxygenator**
*For children, small adults and minimized circuits*

- Maximum blood flow: 4.0 L/min
- Oxygenator priming volume: 144 mL
- Arterial filter surface area: 360 cm²
- Reservoir storage capacity: 3000 mL

**CAPIOX® FX25 Oxygenator**
*For all adults*

- Maximum blood flow: 7.0 L/min
- Oxygenator priming volume: 260 mL
- Arterial filter surface area: 600 cm²
- Reservoir storage capacity: 4000 mL

**TOTM – an alternative plasticizer**
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 Performance Data

Conditions
Blood = Bovine
Hb = 12 ± 1 g/dL
Temp = 37 ± 1°C
pH = 7.4

CAPIOX FX15 Performance Data

Conditions
Blood = Bovine
Hb = 12 ± 1 g/dL
Temp = 37 ± 1°C
pH = 7.4

CAPIOX FX25 Performance Data

Conditions
Blood = Bovine
Hb = 12 ± 1 g/dL
Temp = 37 ± 1°C
pH = 7.4

Holder Systems

CAPIOX FX05 Oxygenator

Order # XX*CH05R

CAPIOX FX15 and CAPIOX FX25 Oxygenators

Order # 801804 XX*CH18R (Europe only)
Order # 801139 XX*CH022 (Europe only)
Order # 812613 for FX25 (US only)
812614 for FX15 (US only)
XX*CH15 (Europe only)
# CAPIOX FX Family of Oxygenators

## Specifications

<table>
<thead>
<tr>
<th>Oxygenator</th>
<th>FX05</th>
<th>FX15</th>
<th>FX25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber bundle surface area</td>
<td>Approx. 0.5 m²</td>
<td>Approx. 1.5 m²</td>
<td>Approx. 2.5 m²</td>
</tr>
<tr>
<td>Heat exchanger surface area</td>
<td>Approx. 0.035 m²</td>
<td>Approx. 0.14 m²</td>
<td>Approx. 0.2 m²</td>
</tr>
<tr>
<td>Blood flow range</td>
<td>0.1 – 1.5 L/min</td>
<td>0.5 – 5.0 L/min</td>
<td>0.5 – 7.0 L/min</td>
</tr>
<tr>
<td>Reference blood flow (AAMI std.)</td>
<td>2.5 L/min</td>
<td>7.0 L/min</td>
<td>n.a.</td>
</tr>
<tr>
<td>Priming volume (static)</td>
<td>43 mL</td>
<td>144 mL</td>
<td>280 mL</td>
</tr>
<tr>
<td>Blood inlet port (from pump)</td>
<td>1/4” (6.4 mm)</td>
<td>3/8” (9.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Blood outlet port</td>
<td>1/4” (6.4 mm)</td>
<td>3/8” (9.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Luer port (for recirc. or blood cardioplegia)</td>
<td>One luer lock on blood outlet port</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>Gas inlet port</td>
<td>1/4” (6.4 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas outlet port</td>
<td>5/16” (7.9 mm)</td>
<td>1/4” (6.4 mm)</td>
<td></td>
</tr>
<tr>
<td>Water ports</td>
<td>1/2” (12.7 mm) Hansen quick-connect fittings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum pressure</td>
<td>1000 mmHg (133 kPa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water inlet</td>
<td>2 kgf/cm² [196 kPa] (28.5 psi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arterial filter</td>
<td>Filter material</td>
<td>Polyester screen type</td>
<td></td>
</tr>
<tr>
<td>Pore size</td>
<td>32 µm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface area</td>
<td>130 cm²</td>
<td>360 cm²</td>
<td>800 cm²</td>
</tr>
</tbody>
</table>

## Hardshell Reservoir

<table>
<thead>
<tr>
<th>Hardshell Reservoir</th>
<th>FX05</th>
<th>FX15</th>
<th>FX25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Housing</td>
<td>Polycarbonate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heat exchanger</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>Blood flow range</td>
<td>Venous flow</td>
<td>0.1 – 1.5 L/min</td>
<td>Max. 15.5 L/min</td>
</tr>
<tr>
<td></td>
<td>Cardioplemy inlet</td>
<td>Max. 15.5 L/min</td>
<td>Max. 5.0 L/min</td>
</tr>
<tr>
<td></td>
<td>Combined flow</td>
<td>Max. 15.5 L/min</td>
<td>Max. 4.0 L/min</td>
</tr>
<tr>
<td>Blood storage capacity</td>
<td>1000 mL</td>
<td>3000 mL</td>
<td>4000 mL</td>
</tr>
<tr>
<td>Min. operating volume</td>
<td>15 mL</td>
<td>70 mL</td>
<td>290 mL</td>
</tr>
<tr>
<td>Venous blood inlet port</td>
<td>1/4” (6.4 mm) rotatable</td>
<td>3/8” (9.5 mm) rotatable</td>
<td>1/2” (12.7 mm) rotatable</td>
</tr>
<tr>
<td>Blood outlet port (to pump)</td>
<td>1/4” (6.4 mm)</td>
<td>3/8” (9.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Suction ports</td>
<td>Five 3/16” – 1/4” (4.8 mm – 6.4 mm) rotatable</td>
<td>Six 1/4” (6.4 mm)</td>
<td></td>
</tr>
<tr>
<td>Vertical port (to CR filter)</td>
<td>n.a.</td>
<td>3/8” (9.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Quick prime port</td>
<td>1/4” (6.4 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent port</td>
<td>1/4” (6.4 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary port</td>
<td>1/4” – 3/8” (6.4 mm – 9.5 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luer ports</td>
<td>Three filtered luer locks to cardiotomy filter, one non-filtered luer lock, two luer locks on venous inlet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum sustainable negative pressure in reservoir</td>
<td>-150 mmHg (-20.0 kPa)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Ordering Information

### CAPIOX FX05 Oxygenator

- Oxygenator with integrated arterial filter | CX*FX05W | 4
- Oxygenator with integrated arterial filter | CX*FX05E | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX05RW30 | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX05RE30 | 4

### CAPIOX FX15 Oxygenator

- Oxygenator with integrated arterial filter | CX*FX15W | 4
- Oxygenator with integrated arterial filter | CX*FX15E | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX15RW40 | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX15RE40 | 4

### CAPIOX FX25 Oxygenator

- Oxygenator with integrated arterial filter | CX*FX25W | 4
- Oxygenator with integrated arterial filter | CX*FX25E | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX25RW | 4
- Oxygenator with integrated arterial filter/hardshell reservoir | CX*FX25RE | 4

### Holders for CAPIOX FX Oxygenators

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”