

Prescriptive Oxygenation™

Meet each patient's oxygenation and blood management needs more precisely



Patients come in a range of sizes.
Now your oxygenator does, too.





Designed for small and mid-sized adults.



CAPIOX® FX15 or RX15 OXYGENATORS

With the CAPIOX FX15 and RX15 oxygenators, you can significantly lower prime volume for a group of patients that tend to have a higher rate of blood transfusions. Now your smaller patients can have surgery with an oxygenator that best fits their unique metabolic needs, which may help minimize the need for a blood transfusion. Available in two reservoir sizes.

FX15R30 SPECIFICATIONS:

**Prime Volume 144 mL, Maximum Flow 4.0 L/min
Integrated Arterial Filter Surface Area 360 cm²**

FX15R40 SPECIFICATIONS:

**Prime Volume 144 mL, Maximum Flow 5.0 L/min
Integrated Arterial Filter Surface Area 360 cm²**

RX15R30 SPECIFICATIONS:

Prime Volume 135 mL, Maximum Flow 4.0 L/min

RX15R40 SPECIFICATIONS:

Prime Volume 135 mL, Maximum Flow 5.0 L/min

CAPIOX® AF125 ARTERIAL LINE FILTER SPECIFICATIONS:

Prime Volume 125 mL, Surface Area 940 cm², Maximum Flow 7.0 L/min

Right Size Your Perfusion Circuits

*"Minicircuits reduce hemodilution and are indicated for blood conservation, especially in patients at high risk for adverse effects of hemodilution (e.g., pediatric patients and Jehovah's Witness patients)."*²

Improve Patient Outcomes

*"The CAPIOX® FX 1540 was effective in reducing intraoperative packed red cell transfusions."*⁴

The CAPIOX FX15 and RX15 Oxygenators address the needs of a large segment of the patient population.

Based on their body surface area, a significant number of patients would benefit from a smaller or mid-sized oxygenator designed to better match their actual metabolic needs while decreasing hemodilution and other risks associated with cardiopulmonary bypass.

Studies show that controlling hemodilution through lower prime circuits can result in fewer blood transfusions.^{1,2,5} The right size oxygenator can make a difference towards minimizing the need for transfusions.

To learn more about Prescriptive Oxygenation and the full range of CAPIOX products, visit:

www.terumo-cvs.com/prescriptive



Prescriptive Oxygenation™ is Terumo's unique approach to helping you meet each patient's oxygenation and blood management needs more precisely, with the freedom to choose the right size CAPIOX oxygenator.

Patients of different sizes have different oxygenation and blood management needs – therefore no one-size oxygenator fits all patients. In fact, research shows that smaller patients face increased mortality rates and may have less favorable outcomes after cardiac surgery due to greater incidence of transfusion.^{1,2} Terumo's unique Prescriptive Oxygenation approach is part of the solution for every patient population.

As a perfusionist, assessing patients' oxygenation needs is a choice you make every day. Now, you can choose the right oxygenator for every patient, of any size. Only Terumo offers a full line of proven low prime volume oxygenator solutions.



Designed for neonates and infants.



CAPIOX® FX05 or RX05 OXYGENATORS

The CAPIOX FX05 and RX05 oxygenators offer low prime volume and high performance so you don't have to choose one over the other for your smallest patients. Your most delicate patients deserve the smallest prime volume attainable, and Terumo makes it possible.

FX05 SPECIFICATIONS:

**Prime Volume 43 mL, Maximum Flow 1.5 L/min
Integrated Arterial Filter Surface Area 130 cm²**

RX05 SPECIFICATIONS:

Prime Volume 43 mL, Maximum Flow 1.5 L/min

CAPIOX® AF02 ARTERIAL LINE FILTER SPECIFICATIONS:

Prime Volume 40 mL, Surface Area 185 cm², Maximum Flow 2.5 L/min



Designed for all adults.



CAPIOX® FX25 or RX25 OXYGENATORS

The unique design of the CAPIOX FX25 and RX25 oxygenators allow for reduced prime volume with the right fit for adults with a higher metabolic demand. You'll appreciate that a full size oxygenator doesn't have to be high prime volume.

FX25 SPECIFICATIONS:

**Prime Volume 260 mL, Maximum Flow 7.0 L/min
Integrated Arterial Filter Surface Area 600 cm²**

RX25 SPECIFICATIONS:

Prime Volume 250 mL, Maximum Flow 7.0 L/min

CAPIOX® AF125 ARTERIAL LINE FILTER SPECIFICATIONS:

Prime Volume 125 mL, Surface Area 940 cm², Maximum Flow 7.0 L/min

Decrease Hospital Costs

"This significant decrease in blood use, at a cost of \$1275 per unit, translates to an annual savings of \$558,450 based on our institution's caseload."³

Terumo Cardiovascular Group offers oxygenators, Cardiovascular Procedure Kits, brackets and packaging solutions to make choosing the right size oxygenator quick and convenient.

01



Choose the Prescriptive Oxygenation kit which includes a pre-connected Cardiovascular Procedure Kit with reservoir and quick connectors in one package, and an oxygenator in another package.

02



Set up the majority of the Cardiovascular Procedure Kit on the unique bracket system and prime it before you know the patient's size.

03



Select an oxygenator that best meets the patient's unique metabolic needs from a wide range of CAPIOX oxygenator choices.

The unique expandable oxygenator holder adjusts to hold either the small adult or large adult oxygenator.

04



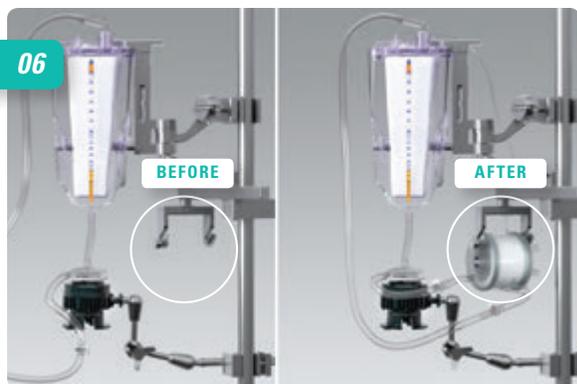
Easily add an oxygenator to the circuit with strategically placed quick connectors which are designed to ensure you make the right connection.

05



Separate the connectors by pressing the white tab. Secure the connection by inserting the male connector into the female connector. The quick connectors are designed to withstand pressure up to 30 PSI (1550 mm Hg) (207 kPa).

06



Prescriptive Oxygenation is easy when you choose CAPIOX oxygenators, the quick connectors and Terumo's unique packaging and holder solutions.

Reduce Hemodilution & Blood Transfusions

*"Minimize hemodilution by matching the size of the CPB circuit to the size of the patient."*⁶

Ordering Information

CATALOG NO.	DESCRIPTION	UNITS/CASE
CAPIOX FX05 Oxygenator		
CX*FX05W	Oxygenator with integrated arterial filter ¹	4
CX*FX05E	Oxygenator with integrated arterial filter ¹	4
CX*FX05RW	Oxygenator with integrated arterial filter/hardshell reservoir ²	4
CX*FX05RE	Oxygenator with integrated arterial filter/hardshell reservoir ²	4
CAPIOX FX15 Oxygenator		
CX*FX15W	Oxygenator with integrated arterial filter ³	4
CX*FX15E	Oxygenator with integrated arterial filter ³	4
74281	CAPIOX® FX15E Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
74282	CAPIOX® FX15W Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
CX*FX15RW30	Oxygenator with integrated arterial filter/hardshell reservoir ⁴	4
CX*FX15RE30	Oxygenator with integrated arterial filter/hardshell reservoir ⁴	4
CX*FX15RW40	Oxygenator with integrated arterial filter/hardshell reservoir	4
CX*FX15RE40	Oxygenator with integrated arterial filter/hardshell reservoir	4
CAPIOX FX25 Oxygenator		
CX*FX25W	Oxygenator with integrated arterial filter	4
CX*FX25E	Oxygenator with integrated arterial filter	4
74283	CAPIOX® FX25E Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
74284	CAPIOX® FX25W Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
CX*FX25RW	Oxygenator with integrated arterial filter/hardshell reservoir	4
CX*FX25RE	Oxygenator with integrated arterial filter/hardshell reservoir	4
Holders for CAPIOX FX/RX Oxygenators		
XX*CXH15	Holder for oxygenator, expandable	1
XX*CXH18R	Holder for hardshell reservoir, long arm	1
XX*XH032	Holder for hardshell reservoir, short arm	1

For more information about Prescriptive Oxygenation, ask your Terumo Cardiovascular Group Sales Representative.

CATALOG NO.	DESCRIPTION	UNITS/CASE
CAPIOX RX05 Oxygenator		
CX*RX05W	Oxygenator ¹	4
CX*RX05E	Oxygenator ¹	4
CX*RX05RW	Oxygenator with hardshell reservoir ²	4
CX*RX05RE	Oxygenator with hardshell reservoir ²	4
CAPIOX RX15 Oxygenator		
CX*RX15W	Oxygenator ³	4
CX*RX15E	Oxygenator ³	4
74285	CAPIOX® RX15E Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
74286	CAPIOX® RX15W Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
CX*RX15RW30	Oxygenator with hardshell reservoir ⁴	4
CX*RX15RE30	Oxygenator with hardshell reservoir ⁴	4
CX*RX15RW40	Oxygenator with hardshell reservoir	4
CX*RX15RE40	Oxygenator with hardshell reservoir	4
CAPIOX RX25 Oxygenator		
CX*RX25W	Oxygenator	4
CX*RX25E	Oxygenator	4
74287	CAPIOX® RX25E Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
74288	CAPIOX® RX25W Oxygenator, with integrated arterial filter/quick connector fittings on inlet and outlet blood ports	1
CX*RX25RW	Oxygenator with hardshell reservoir	4
CX*RX25RE	Oxygenator with hardshell reservoir	4

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"



Specifications

Oxygenator

Material	Housing	Polycarbonate
	Fibers	Microporous polypropylene
	Heat exchanger	Stainless steel

Oxygenator	FX05 RX05	FX15 RX15	FX25 RX25
Fiber bundle surface area	Approx. 0.5 m ²	Approx. 1.5 m ²	Approx. 2.5 m ²
Heat exchanger surface area	Approx. 0.035 m ²	Approx. 0.14 m ²	Approx. 0.2 m ²
Blood flow range	0.1 – 1.5 L/min	0.5 – 5.0 L/min, 0.5 – 4.0 L/min (with R30)	0.5 – 7.0 L/min
Reference blood flow (AAMI std.)	2.5 L/min	7.0 L/min	n.a.
Priming volume (static)	43 mL 43 mL	144 mL 135 mL	260 mL 250 mL
Blood inlet port (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. or blood cardioplegia)	One luer lock 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			
Blood inlet	1000 mmHg (133 kPa)		
Maximum pressure			
Water inlet	2 kgf/cm ² (196 kPa) (28.5 psi)		

FX Integrated Arterial Filter

Filter material	Polyester screen type		
Pore size	32 µm		
Blood contact surface area	130 cm ²	360 cm ²	600 cm ²

CAPIOX® AF125X Arterial Line Filter

Filter material	Lockwoven polyester
Pore size	37 µm
Surface area	940 cm ²
Blood flow range	0.1 – 7.0 L/min

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 RX05	FX15 RX15 with R30	with R40	FX25 RX25
Blood flow range				
Venous flow	0.1 – 1.5 L/min	0.5 – 4.0 L/min	0.5 – 5.0 L/min	0.5 – 7.0 L/min
Cardiotomy inlet	Max. 1.5 L/min	Max. 4.0 L/min	Max. 5.0 L/min	Max. 5.0 L/min
Combined flow	Max. 1.5 L/min	Max. 4.0 L/min	Max. 5.0 L/min	Max. 7.0 L/min
Blood storage capacity	1000 mL	3000 mL	4000 mL	4000 mL
Min. operating volume	15 mL	70 mL	200 mL	200 mL
Venous blood inlet port	1/4" (6.4 mm) rotatable	3/8" (9.5 mm) rotatable	1/2" (12.7 mm) rotatable	1/2" (12.7 mm) rotatable
Blood outlet port (to pump)	1/4" (6.4 mm)	3/8" (9.5 mm)		
Suction ports	Five 3/16" – 1/4" (4.8 mm – 6.4 mm) rotatable	Six 1/4" (6.4 mm)		
Vertical port (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	Three filtered luer locks to cardiotomy filter, one non-filtered luer lock, two luer locks on venous inlet			
Maximum sustainable negative pressure in reservoir	-150 mmHg (-20.0 kPa)			

CAPIOX AF02 Arterial Filter

Filter material	Polyester screen type
Pore size	32 µm
Surface area	185 cm ²
Blood flow range	0.1 – 2.5 L/min

References

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- Lahanas, et al. A retrospective comparison of blood transfusion requirements during cardiopulmonary bypass with two different small adult oxygenators. *Perfusion.* July 2013, 28 (4).
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- Baker, et al. American Society of Extracorporeal Technology Standards and Guidelines For Perfusion Practice: 2013. *J Extra Corpor Technol.* 2013; 45:156-166.



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