

Arterial	Max Flow @ $\Delta 100\text{mmHg}$ drop	Venous	Max Flow w/ 100mmHg drop	Dual Lumen	Max Flow @ 150mmHg drop
Bio-Medicus Femoral		Bio-Medicus Femoral MultiStage		MC3 Crescent	
15Fr	3.0 LPM	21Fr	5.5 LPM	28Fr	4LPM
17Fr	4.0 LPM	25Fr	>6.0 LPM / $\Delta 60\text{mmHg}$ @ 6LPM	30Fr	4.75LPM
19Fr	5.25 LPM			32Fr	5.5LPM
21Fr	7.0 LPM	Bio-Medicus Femoral Bi-caval			
		19Fr	4.5 LPM	Avalon Elite Bi-Caval	
EOPA		21Fr	5.75 LPM	23Fr	2.5LPM
18Fr	4.75 LPM			<u>**DISCLAIMER**</u> This data was copied and interpreted from the respective manufacturers' catalogs. Most of this data was obtained under ideal conditions using water (not blood) to measure the relationship between pressure drops and flows. Patient HCT, tubing dimensions, etc. can alter clinically observed pressure drops. The actual pressure drops vary from circuit to circuit and patient to patient. This data's purpose is to be a general guide for selecting proper cannulas. Always consult the staff perfusionist, the surgeon preference sheet, and the surgeon themselves before making decisions based on this data.	
20Fr	5.5 LPM	DLP Single-Stage Malleables			
22Fr	>6.0 LPM / $\Delta 50\text{mmHg}$ @ 6LPM	16Fr	2.5 LPM		
24Fr	>6.0 LPM / $\Delta 40\text{mmHg}$ @ 6LPM	18Fr	3.25 LPM		
		20Fr	4.0 LPM		
EOPA 3D		22Fr	5.0 LPM		
20Fr	6.0 LPM	24Fr	5.5 LPM		
22Fr	>6.0 LPM / $\Delta 60\text{mmHg}$ @ 6LPM	26Fr	>6.0 LPM / $\Delta 70\text{mmHg}$ @ 6LPM		
		28Fr	>6.0 LPM / $\Delta 50\text{mmHg}$ @ 6LPM		
Covidien Argyle		30Fr	>6.0 LPM / $\Delta 40\text{mmHg}$ @ 6LPM		
24Fr	$\approx 6.5\text{LPM}$ (no data available)	32Fr	>6.0 LPM / $\Delta 30\text{mmHg}$ @ 6LPM		
		34Fr	>6.0 LPM / $\Delta 15\text{mmHg}$ @ 6LPM		
DLP Curved Metal Tip					
20Fr	5.5LPM	Edwards AViD Dual Stage			
22Fr	>6.0 LPM / $\Delta 70\text{mmHg}$ @ 6LPM	29/37Fr	>6.0 LPM / $\Delta 25\text{mmHg}$ @ 6LPM		

Arterial	Max Flow @ Δ100mmHg drop	Venous	Max Flow w/ 100mmHg drop	Venous (Continued)	Max Flow w/ 100mmHg drop
Select Series Angled Tip		MC2 Dual-Stage		DLP Single Stage (Non-Malleables)	
20Fr	6.5LPM	29/29Fr	>5.0 LPM /Δ20mmHg @ 5LPM	28Fr	>6.0 LPM /Δ50mmHg @ 6LPM
22Fr	>6.0 LPM /Δ60mmHg @ 6LPM	32/40Fr	>6.0 LPM /Δ12mmHg @ 6LPM	30Fr	>6.0 LPM /Δ40mmHg @ 6LPM
24Fr	>6.0 LPM /Δ40mmHg @ 6LPM	32/40Fr (Flat Body)	>6.0 LPM /Δ8mmHg @ 6LPM	32Fr	>6.0 LPM /Δ30mmHg @ 6LPM
		36/46Fr	>6.0 LPM /Δ7mmHg @ 6LPM		
DLP One-Piece Pediatric				MC2X Triple-Stage	
10Fr	1.25LPM	DLP Single Stage w/Right Angle Metal Tip		29/29/29Fr	>6.0 LPM /Δ30mmHg @ 6LPM
12Fr	2.0LPM	18Fr	4.75 LPM		
		20Fr	5.5 LPM	Edwards Femoral	
Edwards Fem-Flex II Femoral		22Fr	>6.0 LPM /Δ70mmHg @ 6LPM	22Fr	6.0LPM
16Fr	3.25LPM	24Fr	>6.0 LPM /Δ50mmHg @ 6LPM	24Fr	>6.0 LPM /Δ65mmHg @ 6LPM
18Fr	4.5LPM	28Fr	>6.0 LPM /Δ30mmHg @ 6LPM	28Fr	>6.0 LPM /Δ30mmHg @ 6LPM
20Fr	6.0LPM				
		DLP Single Stage w/ Right Angle Plastic Tip			
LivaNova Easy- Flow		24Fr	5.5LPM		
19Fr	3.0LPM	26Fr	>6.0 LPM /Δ70mmHg @ 6LPM		
23Fr	4.5LPM	28Fr	>6.0 LPM /Δ50mmHg @ 6LPM		

Sources for Manufacturers Data: Medtronic: <https://europe.medtronic.com/content/dam/medtronic-com/xd-en/hcp/documents/digitalhub/cardiovascular/cannulae/cannulae-catalogue-interactive.pdf> MC3 Crescent: <https://www.medtronic.com/us-en/healthcare-professionals/products/cardiovascular/extracorporeal-life-support/crescent-jugular-dual-lumen-catheter.html> Avalon Elite: https://www.getinge.com/dam/hospital/documents/english/avalon_elite_brochure-en-non_us.pdf Edwards: <https://edwardsprod.blob.core.windows.net/media/Default/default/thruport-systems-and-edwards-cardiac-cannulae-product-guide.pdf>