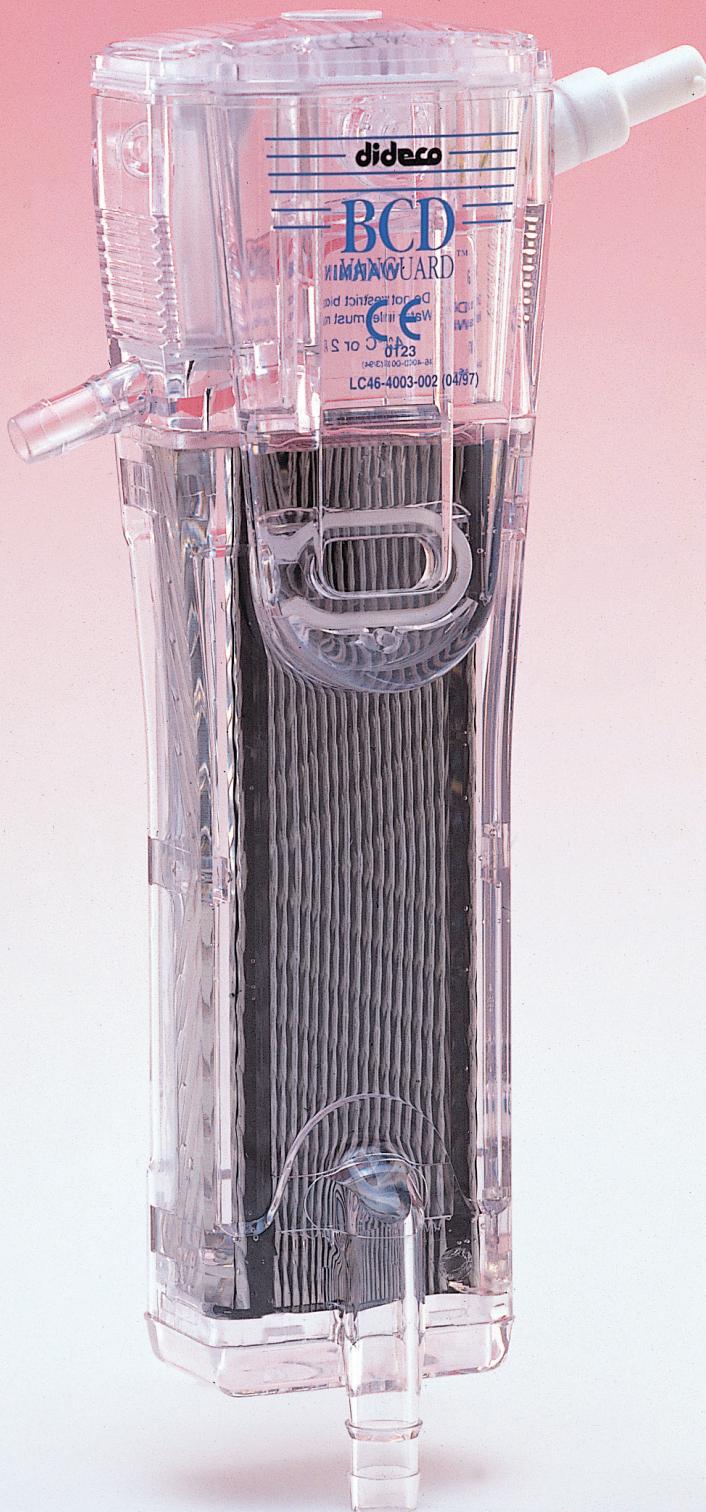


DIDECO BCD VANGUARD™



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The complete Picture of Efficiency, Safety and Convenience.

EFFICIENCY - The BCD Vanguard™ heat exchanger incorporates a chevron-grooved, closely packed, pleated stainless steel sheet that enhances mixing without hemolytic turbulence. Because both the sheet and the blood film are thin, it transfers heat with remarkable efficiency. The result is more rapid hypothermic arrest and cardioplegic rewarming.



SAFETY - Safety is strongly emphasized throughout the design of the BCD Vanguard™. Its unique pressure relief valve prevents rupture if a tube line is inadvertently clamped, helping protect both the device and the patient.



The device has a bubble trap that includes a filter screen to deflect bubbles up to the membrane, which then vents the air out of the system.

The 105 micron screen also filters solution particulate.

CONVENIENCE - The hydrophobic membrane of the BCD Vanguard™ makes priming more convenient, too, without any extra steps.



All you need to do is clamp the outlet line and turn on the pump - the air is automatically purged out of the device via the membrane. This new feature helps you come up to speed without unnecessary delays - qualities to keep in mind with more and more emergency cases coming from the cath lab.

Specifications

GENERAL FEATURES

Maximum blood flow rate: 500 ml/min.

Priming Volume (Device only): 35 ml

Pressure Drop (@ 300 ml/min): 13 mmHg

Housing Material: Polycarbonate

HEAT EXCHANGER

Type: Pleated epoxy-coated stainless steel

Surface Area: 0,05 m²

Maximum Water Path Pressure: 30 psi

CONNECTIONS

Blood Inlet: 1/4"

Blood Outlet: 3/16"

Water Ports: 1/2" Hansen Quick Connectors

The diagram illustrates the BCD Vanguard™ heat exchanger's internal structure and operational principles. It shows a cross-section of the device with a hydrophobic membrane at the top. Air is shown venting out through small holes in the membrane. Below the membrane, a one-way valve prevents air from entering. The central part of the device contains a red, curved heat exchanger coil. A blue arrow indicates the flow of blood through the coil, while a red arrow indicates the flow of water. The bottom section shows the housing and connections. To the right, a detailed view of the heat exchanger coil is shown, highlighting its pleated design and the exposed fin potting that prevents blood-to-water leaks.

The hydrophobic membrane of the BCD Vanguard™ allows air to vent out of the system while the one-way valve keeps air from entering if negative pressure is generated.

The BCD Vanguard™ heat exchanger is uniquely designed to channel blood into a thin film for gentle mixing and very efficient heat exchange. In addition, exposed fin potting prevents the possibility of a blood-to-water leak.

Heat Exchanger Performance

A line graph titled "Heat Exchanger Performance" showing the relationship between flow rate and performance. The Y-axis represents performance from 0.5 to 1.0. The X-axis represents flow rate from 100 to 500 ml/min. The curve starts at approximately 1.0 at 100 ml/min and remains relatively flat until about 300 ml/min, then gradually declines to about 0.95 at 500 ml/min.

Flow Rate (ml/min.)	Performance
100	~1.0
200	~1.0
300	~1.0
400	~0.98
500	~0.95

Flow Rate (ml/min.)

Order Guide

D 921	1:1	Code # 05471
D 924	4:1	Code # 05472
D 924 S	4:1	Code # 05473 (with Shunt)
D 924 P	4:1	Code # 05474 (pediatric)
D 928 S	8:1	Code # 05475 (with Shunt)
Holder	D 610	Code 05044

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