ELSA Delivered Flow & ECMO Cardiac Flow

The ELSA Monitor measures Delivered Flow, Recirculation and ECMO Cardiac Flow (ECF). These measurements allow adjustment of Pump Flow and Catheter Placement to optimize ECMO therapy in VV ECMO patients.

- Delivered Flow (DLVFLW) is an actual measurement of blood flow in the ECMO lines (within the Monitor's measurement accuracy).
- ECMO Cardiac Flow is the oxygenated blood flow delivered by the pump to the heart.

ECMO Cardiac Flow (ECF) = DLVFLW[1 – (% Recirculation Value/100)]

The higher the Recirculation, the lower the ECF

If increasing Pump Flow leads to increased Recirculation and no change or minimum change in ECF, the pump setting is not delivering the optimal flow.



ELSA Monitor screen showing 100% Recirculation.

