B-Capta®
The new ready-to-go in-line blood-gas monitoring system, integrated into the S5.

B-Capta® is designed to **easily and accurately** monitor **Arterial and Venous** Blood Gas Parameters even in long and complex **Pediatric and Adult** cardiopulmonary bypass procedures.

B-Capta® provides an in-line continuous monitoring of the patient’s blood parameters and allows the operator to **quickly react to parameters’ changes**.

B-Capta® supports the **implementation of the Goal-Directed Perfusion (GDP) therapy** in Connect, that enables perfusionists to maintain accurate perfusion procedure records.
Patient blood parameters can change rapidly during cardiopulmonary bypass (CPB) procedures due to many dynamic conditions. Blood gas analyzers only reflect the patient’s clinical condition at the exact moment the sample is drawn, meaning that, by the time the result is received, the blood gas parameters no longer reflect the patient’s actual condition. In line monitoring systems may improve patient outcome during cardiopulmonary bypass procedures. By continuously monitoring the patient’s blood gas parameters, B-Capta can support the Perfusionist during the entire CPB procedure.

- **Easy and intuitive user interface**
  - The Venous and Arterial parameters monitored by B-Capta are shown in the S5 system panel. The B-Capta user interface is intuitive and easy to use: easy parameter configuration and menu navigation, clearly displayed parameters and accessible system panel layout.

- **S5 user-experience**
  - The B-Capta display is integrated in the S5 heart-lung machine allowing the perfusionist to:
    - Do without additional external monitors and holders that may obstruct the perfusionist’s view during the procedure
    - Have all patient and procedure parameters in the same location, reducing the levels of stress felt by the perfusionist during the procedure.

- **Visual and audible warnings**
  - B-Capta has an integrated warning system based on thresholds selected by the user, providing visual and audible indicators when parameters fall outside said thresholds.

- **Accurate perfusion records**
  - Throughout the entire procedure, the B-Capta blood gas values are automatically transferred to Connect, LivaNova’s data management system, enabling the perfusionist to maintain accurate perfusion procedure records.

- **Support the implementation of Goal-Directed Perfusion (GDP) therapy in Connect**
  - The B-Capta Arterial and Venous parameters can be used to feed the GDP formulas in Connect, as they are continuously transferred to Connect during the procedure through the S5 serial interface.

- **Ready-to-go**
  - B-Capta does not require any calibration procedure to set the device measurements, allowing the perfusionist to save time during device set up, especially in emergency cases.

- **Disposable solution tailored to customers’ needs**
  - The Venous and Arterial disposable cuvettes are available as sterile stand-alone disposables or included in the Perfusion Tubing Systems, both pre-connected and not.

**Proven safe and reliable**
B-Capta is based on an accurate and reliable optical-based technology, improved to guarantee the highest level of accuracy and reliability when measuring patient blood gas parameters, even in long and complex cardiopulmonary bypass procedures.

**Accurate and continuous measurements**
B-Capta allows accurate monitoring of pO2 and temperature in the Arterial line and saturation, HCT/Hb and temperature in the Venous line. It does not provide calculated parameters, but only measured values to guarantee accurate monitoring.

**Pediatric and adult procedures with the same sensor**
The B-Capta Arterial and Venous sensors fit all disposable cuvette sizes, allowing the perfusionist to use the same sensor for both pediatric and adult procedures. They are easy to couple with the relevant disposable cuvettes as they are identified by different color-coded labels.

**Easy parameters alignment with ABL measurement**
B-Capta’s innovative technology embeds a compensation algorithm to easily adjust the blood gas parameters according to those of the Hospital Laboratory Blood Gas Analyzer (ABL) to ensure trending accuracy during the entire procedure.

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Technical claims supported by LivaNova data on file.
### B-Capta article numbers – Equipment & Disposable

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<td>FULL SYSTEM</td>
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### Components Measured Parameters Operating Range

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<tr>
<th>Technology</th>
<th>Resolution</th>
<th>Measurement Unit</th>
<th>Accuracy</th>
<th>Operating Range</th>
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<td>Optical reflectance</td>
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<td>%</td>
<td>-0.71; +/-0.77</td>
<td>40.0 - 99.9</td>
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<td>0.30%; +/-5.96</td>
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### References: