# SIPHONGUARD® Anti-Siphon and Flow-Control Device

SIPHONGUARD® is the only dual pathway Anti-siphon device and flow-control device in which both pathways function in concert. During normal flow, both the primary and secondary pathways are open. When excessive flow is detected, the primary pathway closes and flow is diverted to the high resistance secondary pathway. The secondary pathway decreases the flow rate by 90% while maintaining a drainage rate within physiological ranges, which prevents the damaging complications due to overdrainage. PREVENTING THE FAILURES CAUSED BY ENCAPSULATION OR EXTERNAL PRESSURE The SIPHONGUARD ball and spring mechanical design is encased in a polyethersulfone shell making it impervious to the conditions that routinely cause silicone diaphragm device failure (e.g. Delta® chamber). SIPHONGUARD's function and durability are totally unaffected by scar tissue encapsulation or external pressure (pillows, etc.). Assuring consistency and durability with a unique mechanical design The ruby ball & seat and the Stainless Steel spring components were selected for their stability, as proven by their long-term performance in the Codman valve mechanism. Other siphon-control devices with silicone diaphragms change performance over time due to a change in material properties. SIPHONGUARD's unique ball and spring design remains reliably sensitive to differences between normal and excessive flow over time. UNAFFECTED BY IMPLANT ORIENTATION OR LOCATION SIPHONGUARD's design allows for implantation in any orientation and any body location distal to the valve, providing the surgeon with more options during surgery. AVAILABLE IN AN INTEGRATED OR STAND-ALONE CONFIGURATION The SIPHONGUARD Anti-Siphon Device is available as an integral component of the CODMAN® HAKIM® Programmable and Precision valve technologies, or as a stand-alone upgrade to an already implanted valve. The stand-alone device can be placed anywhere distal to the valve or used as a stand-alone low pressure flow-control valve.