

## Hickman™, Leonard™, Broviac™ Central Venous Catheter Order Information

Product Name	Lumens	French Size	Tray	Total Length (cm)	OD (mm) / ID (mm)	Repair Kit	Product Code
Broviac™ CVC		2.7F	Cutdown	71	0.95 / 0.5	<input type="checkbox"/> 0601600	<input type="checkbox"/> 0600040
Broviac™ CVC		4.2F	Peel-Apart Introducer	71	1.45 / 0.7	<input type="checkbox"/> 0601610	<input type="checkbox"/> 0600520
Broviac™ CVC		4.2F	Cutdown	71	1.45 / 0.7		<input type="checkbox"/> 0600060
Broviac™ CVC	Single	6.6F	Peel-Apart Introducer	90	2.2 / 1.0	<input type="checkbox"/> 0601620	<input type="checkbox"/> 0600540
Broviac™ CVC		6.6F	Cutdown	90	2.2 / 1.0		<input type="checkbox"/> 0600120
Hickman™ CVC		9.6F	Peel-Apart Introducer	90	3.1 / 1.6	<input type="checkbox"/> 0601630	<input type="checkbox"/> 0600560
Hickman™ CVC		9.6F	Cutdown	90	3.1 / 1.6		<input type="checkbox"/> 0600160
Hickman™ CVC		7F	Peel-Apart Introducer	65	2.3 / 1.0-red / 0.8-white	<input type="checkbox"/> 0601760 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg	<input type="checkbox"/> 0600570 <input type="checkbox"/> 0600310
Hickman™ CVC		7F	Cutdown	65	2.3 / 1.0-red / 0.8-white		
Hickman™ CVC		9F	Peel-Apart Introducer	65	2.9 / 1.3-red / 0.7-white	<input type="checkbox"/> 0601700 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg	<input type="checkbox"/> 0600580 <input type="checkbox"/> 0600600
Hickman™ CVC		9F	Peel-Apart Introducer	90	2.9 / 1.3-red / 0.7-white		<input type="checkbox"/> 0600330
Hickman™ CVC	Dual	9F	Cutdown	90	2.9 / 1.3-red / 0.7-white		<input type="checkbox"/> 0600330
Leonard™ CVC		10F	Peel-Apart Introducer	90	3.2 / 1.3-red / 1.3-white	<input type="checkbox"/> 0601750 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg	<input type="checkbox"/> 0600630 <input type="checkbox"/> 0600340
Leonard™ CVC		10F	Cutdown	90	3.2 / 1.3-red / 1.3-white		<input type="checkbox"/> 0600340
Hickman™ CVC		12F	Peel-Apart Introducer	90	4.0 / 1.6-red / 1.6-white	<input type="checkbox"/> 0601710 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg	<input type="checkbox"/> 0600620 <input type="checkbox"/> 0600350
Hickman™ CVC		12F	Cutdown	90	4.0 / 1.6-red / 1.6-white		<input type="checkbox"/> 0600350
Hickman™ CVC	Triple	10F	Peel-Apart Introducer	97	3.3 / 1.5-red / 0.8-white / 0.8-blue	<input type="checkbox"/> 0601790 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg <input type="checkbox"/> 0601730 blue leg	<input type="checkbox"/> 0606560
Hickman™ CVC		12.5F	Peel-Apart Introducer	90	4.1 / 1.5-red / 1.0-white / 1.0-blue	<input type="checkbox"/> 0601740 body <input type="checkbox"/> 0601690 red leg <input type="checkbox"/> 0601680 white leg <input type="checkbox"/> 0601730 blue leg	<input type="checkbox"/> 0600650
Hickman™, Leonard™, Broviac™ Plastic Tunneler 5 Pack							<input type="checkbox"/> 0601930
Hickman™ CVC Adhesive Kit							<input type="checkbox"/> 0601720

### Tray Components

Peel Apart Introducer
Radiopaque Silicone Catheter with Sureuff™ Tissue Ingrowth Cuff and Clamp
Introducer, Peel-Apart Sheath with Vessel Dilator
Needle
Guidewire "J" Tip with Straightener
Tunneler
End Cap
Syringe
I.D. Card

Cutdown
Radiopaque Silicone Catheter with Sureuff™ Tissue Ingrowth Cuff and Clamp
End Cap
I.D. Card

### Hickman™, Leonard™, and Broviac™ Central Venous Catheters

**Indications For Use:** Hickman™, Leonard™ and Broviac™ are designed for long-term vascular access and for use in patients that lack adequate peripheral venous access. They are available in single, dual and triple lumen catheters. All Hickman™, Leonard™ and Broviac™ central venous catheters are designed for the administration of IV fluids, blood products, drugs, and parenteral nutrition solutions, as well as blood withdrawal. Note: While smaller lumen Broviac™ catheters have been used successfully for blood withdrawal, their small lumen sizes increase the chance of clotting. Contraindications, Warnings, Cautions and Precautions/Contraindications: The device is contraindicated whenever: • The presence of device related infection, bacteremia, or septicemia is known or suspected. • The patient's body size is insufficient to accommodate the size of the implanted device. • The patient is known or is suspected to be allergic to materials contained in the device. • Severe chronic obstructive lung disease exists (percutaneous subclavian placement only). • Past irradiation of prospective insertion site. • Previous episodes of venous thrombosis or vascular surgical procedures at the prospective placement site. • Local tissue factors will prevent proper device stabilization and/or access.

**Warnings:** Intended for Single Patient Use. DO NOT REUSE. Bard Access Systems products are single use devices and should never be reimplanted. Reuse carries with it the attendant concern of cross-infection regardless of the cleaning or sterilization method. Sterilization of incompletely cleaned devices may not be effective. Any device that has been contaminated by blood should not be reused or resterilized. • This is not a right atrium catheter. Avoid positioning the catheter tip in the right atrium. Placement or migration of the catheter tip into the right atrium may cause cardiac arrhythmia, myocardial erosion or cardiac tamponade. The risk of these potential complications may be more likely in neonatal patients. • Avoid vessel perforation. Hold thumb over exposed orifice of sheath to prevent air aspiration. The risk of air aspiration is reduced by performing this part of the procedure with the patient performing the Valsalva maneuver. • You should not feel any resistance when withdrawing the catheter from the vein. If you do encounter resistance, this may indicate that the catheter is being pinched between the clavicle and first rib (the "pinch-off" sign). Do not continue pulling against resistance as this may cause catheter breakage and embolism. Free up the resistance (e.g. by repositioning the patient) before proceeding further. • After use, this product may be a potential biohazard. Handle and discard in accordance with accepted medical practice and applicable local, state and federal laws and regulations. • If the artery is entered, withdraw the needle and apply manual pressure for several minutes. If the pleural space is entered, withdraw the needle and evaluate patient for possible pneumothorax. • Pinch-off Prevention: Catheters placed percutaneously or through a cut-down, into the subclavian vein, should be inserted at the junction of the outer and middle thirds of the clavicle, lateral to the thoracic outlet. The catheter should not be inserted into the subclavian vein medially, because such placement can lead to compression of the catheter between the first rib and the clavicle, which can cause damage and even severance of the catheter. A radiographic confirmation of catheter placement should be made to ensure that the catheter is not being pinched by the first rib and clavicle.

**Cautions:** Carefully read and follow all instructions prior to use. • Federal (U.S.A.) law restricts this device to sale by or on the order of a physician. • Only qualified healthcare practitioners should insert, manipulate and remove these devices. • When tunneling, the catheter must not be forced. • Avoid inadvertent puncture of the skin or fascia with the tip of the tunneler. • Do not insert guidewire beyond the bevel of the needle while removing straightener from the needle hub in order to prevent guidewire damage or shearing. If the guidewire must be withdrawn while the needle is inserted, remove both the needle and guidewire as a unit to help prevent the needle from damaging or shearing the guidewire. • Do not grasp the catheter with any instrument that might sever or damage the catheter. • Do not cut the catheter before removal from vein to avoid catheter embolism. • Do not use scissors or any sharp-edged instruments as they could damage the catheter.

**Precautions:** Follow Universal Precautions when inserting and maintaining the catheter. • Follow all contraindications, warnings, cautions, precautions and instructions for all infusates as specified by its manufacturer. • Use aseptic techniques whenever the catheter lumen is opened or connected to other devices. Povidone-iodine is the suggested antiseptic to use with this device and components. Acetone and tincture of iodine should not be used because they could adversely affect the performance of the catheter and connectors. 10% acetone/ 70% isopropyl alcohol swabsticks used for dressing changes should not adversely affect the catheter. • Examine package carefully before opening to confirm its integrity and that the expiration date has not passed. The device is supplied in a double sterile package and is non-pyrogenic. Do not use if package is damaged, opened or the expiration date has passed. Sterilized by ethylene oxide. Do not Resterilize. • Fill (prime) the device with sterile heparinized saline or normal saline solution to help avoid air embolism. • Avoid accidental device contact with sharp instruments and mechanical damage to the catheter material. Use only smoothedged

atraumatic clamps or forceps. • Avoid perforating, tearing or fracturing the catheter when using a guidewire. • Do not use the catheter if there is any evidence of mechanical damage or leaking. • Avoid sharp or acute angles during implantation which could compromise the patency of the catheter lumen(s). • If sutures are used to secure the catheter, make sure they do not occlude or cut the catheter. • When using percutaneous introducers: - Carefully insert the introducer and catheter to avoid inadvertent penetration to vital structures in the thorax. - To avoid blood vessel damage, do not allow the percutaneous introducer sheath to remain indwelling in the blood vessel without the internal support of a catheter or dilator. - Simultaneously advance the sheath and dilator with rotational motion to help prevent sheath damage. • Do not use the catheter if there is any evidence of mechanical damage or leaking. Damage to the catheter may lead to rupture, fragmentation and possible embolism and surgical removal. • Accessories and components used in conjunction with this device should incorporate Luer lock connections. • If signs of extravasation exist, discontinue injections. Begin appropriate medical intervention immediately. • Infusion pressure greater than 25 psi (172 kPa) may damage blood vessels and viscus and is not recommended. DO NOT USE A SYRINGE SMALLER THAN 10 ml.

**Possible Complications:** The use of an indwelling central venous catheter provides an important means of venous access for critically ill patients; however, the potential exists for serious complications including the following. These and other complications are well documented in medical literature and should be carefully considered before placing the catheter. • Air Embolism • Bleeding • Brachial Plexus Injury • Cardiac Arrhythmia • Cardiac Tamponade • Catheter or Cuff Erosion Through Skin • Catheter Embolism • Catheter or Cuff Occlusion • Catheter Occlusion, Damage or Breakage due to Compression Between the Clavicle and First Rib • Catheter-related Sepsis • Endocarditis • Exit Site Infection • Exit Site Necrosis • Extravasation • Fibrin Sheath Formation • Hematoma • Hemothorax • Hydrothorax • Intolerance Reaction to Implanted Device • Laceration of Vessels or Viscus • Myocardial Erosion • Perforation of Vessels or Viscus • Pneumothorax • Spontaneous Catheter Tip Malposition or Retraction • Thoracic Duct Injury • Thromboembolism • Venous Thrombosis • Ventricular Thrombosis • Vessel Erosion • Risks Normally Associated with Local and General Anesthesia, Surgery, and Post-Operative Recovery

#### References

1. Aitken, D.R. and Minton, J.P. "The Pinch-Off Sign: A Subclavian Catheters", American Journal of Surgery, Vol. 148, Nov. 1984, pp. 633-636.
2. Rubenstein, R.B., Alberty, R.E., et al. "Hickman™ Catheter Separation", JPEN, Vol. 9, No. 6, Nov/Dec. 1985, pp. 754-757.

Please consult package inserts for more detailed safety information and instructions for use.

_____
REPRESENTATIVE NAME
_____
CONTACT PHONE NO.
_____
PHYSICIAN'S SIGNATURE

# Complete Line of All-Purpose CVCs

Hickman™  
Central Venous Catheter

Leonard™  
Central Venous Catheter

Broviac™  
Central Venous Catheter

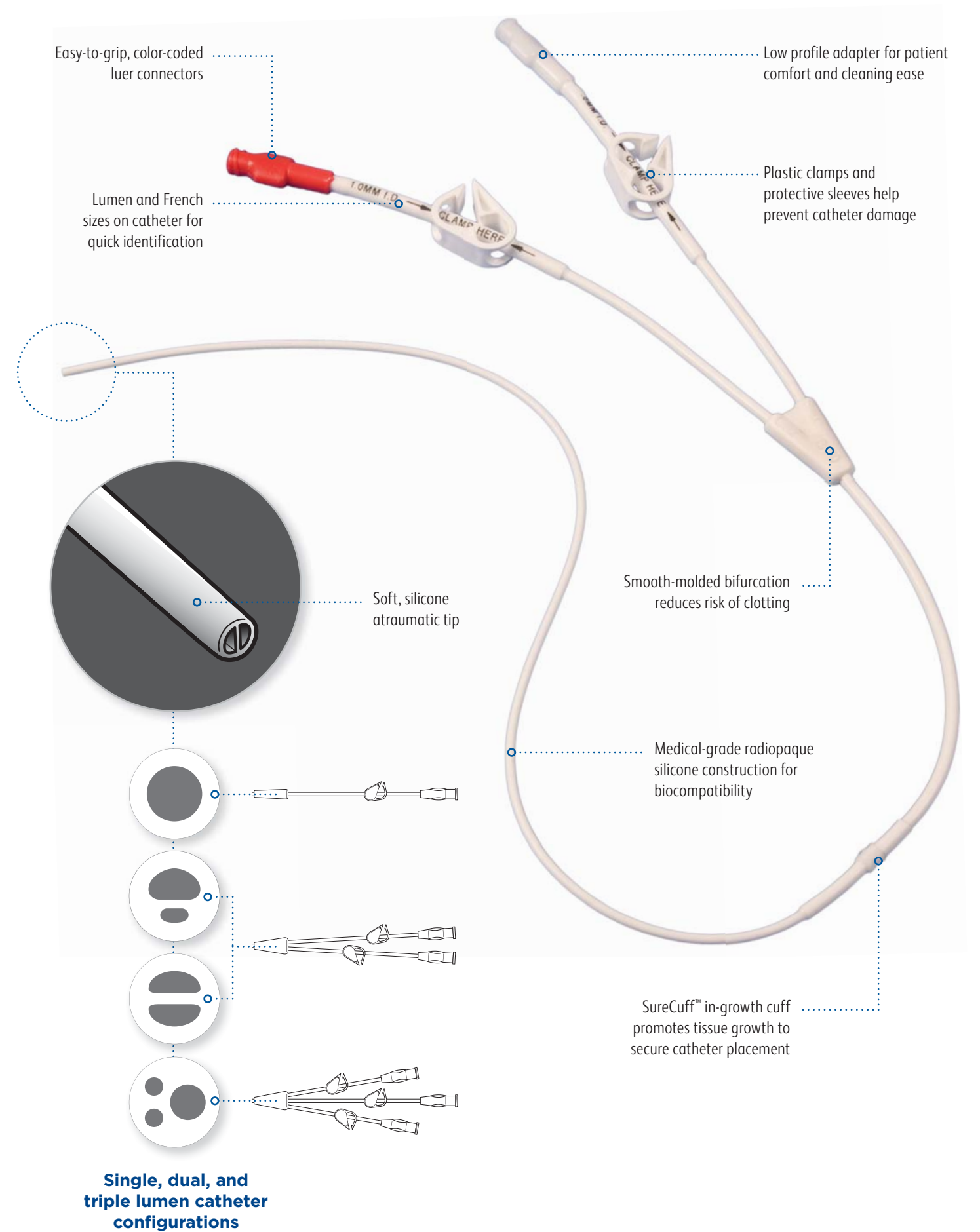
The Hickman™, Leonard™, and Broviac™ Central Venous Catheters form an extensive line of vascular access devices for long-term care.

### Versatile and Effective

- Single, dual, and triple lumen options help increase the flexibility and efficiency of your treatment
- Available with percutaneous introducer kit to facilitate placement
- Time-saving repair kits extend catheter life

### Durable and Comfortable

- Silicone construction for short or long-term use
- Soft, atraumatic tip



**Single, dual, and triple lumen catheter configurations**