



# ARTERIAL ACCESS

## Arterial catheter packs

One great catheter  
+ maximum barrier  
insertion



Value Life

# Difficult Arterial Access

## The problem

### Direct insertion technique

Arterial cannulation is a standard procedure and the artery most frequently cannulated is the radial artery. Short stay I.V. cannula are frequently used, however the problem can often be that despite flash back the cannula cannot be advanced into the artery.

The reason for this is generally that whilst the needle tip is in the artery the cannula remains outside of the vessel or has transixed the artery wall. Plus arterial cannulation of patients who are in shock and with a weak peripheral pulse are especially difficult.

When presented with an arteriosclerotic patient there is also a risk that the vessel wall will be pierced by the needle tip creating flash back. However this is a false flash back as the nature of the artery may prevent the cannula from being successfully advanced.

## The solution

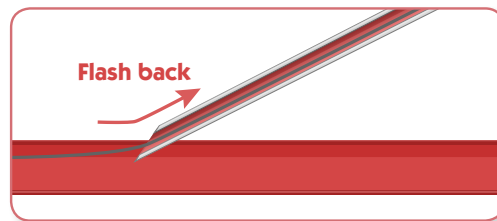
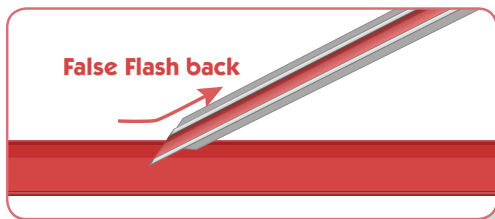
### Seldinger technique

leadercath<sup>®</sup> arterial is placed using the tried and tested Seldinger technique. Once flash back has been confirmed the Seldinger wire stabilises the artery to offer successful catheter placement even when vessel conditions are less than ideal.

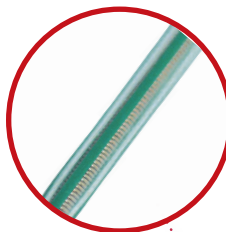
The classic use of naturally echogenic needle, a safety guidewire with a straight, flexible tip and a semi transparent, x-ray contrast-catheter made of pressure-resistant polyethylene reduces the risk of incorrect placement.

The precision grind of the insertion needle enables smooth accurate, percutaneous arterial puncture. The flexible tip of the guidewire adapts precisely to the structure of the vessel and aids safe advancement of the catheter on insertion. Thanks to the homogeneous transition from catheter tip to safety guide, catheter placement is largely atraumatic.

The combination of catheter material, catheter diameter and catheter length delivers consistent pressure signal transmission even for extended dwell times.



**Catheter tip**  
Smooth catheter placement, thanks to homogeneous transition between catheter tip and guidewire



**Catheter material**  
Pressure-resistant polyethylene catheter material avoids damping of the pressure waveform



**Naturally echogenic needle**  
Easy and uniform arterial insertion with precision triangular edge

## leadercath<sup>®</sup> radial artery

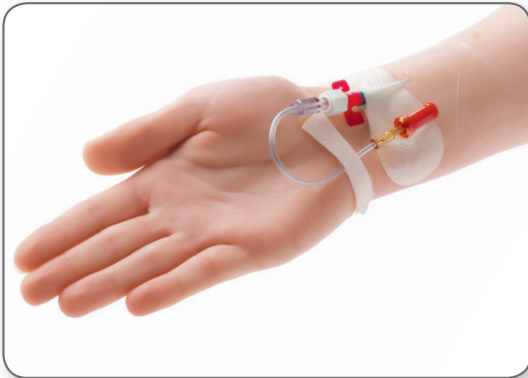
### Catheter for radial arterial pressure monitoring

leadercath<sup>®</sup> is a semi transparent, x-ray visible catheter made of **pressure-resistant polyethylene** that delivers constant pressure transmission even for extended dwell times.

The catheter and insertion needle have the same diameter, meaning that catheter placement is largely atraumatic.

#### Set contents:

- ▶ Catheter
- ▶ Naturally echogenic needle
- ▶ Safety guidewire with a **straight, flexible tip**
- ▶ Low volume pressure tubing with arterial **bionector<sup>®</sup>** or **autoflush<sup>®</sup>**



### Low volume extension line with arterial **bionector<sup>®</sup>** / **autoflush<sup>®</sup>**

- ▶ The pressure-resistant extension tube with **bionector<sup>®</sup>** / **autoflush<sup>®</sup>** reduces the risk of vessel wall injuries through displacement of the manipulation site farther away from the catheter insertion point.
- ▶ **bionector<sup>®</sup>** / **autoflush<sup>®</sup>** guarantees low blood loss when switching between pressure measurement systems and reduces the infection risk.
- ▶ The green slide clamp also allows the supply line to be pinched off.
- ▶ **bionector<sup>®</sup>** / **autoflush<sup>®</sup>** with extension provides a closed system at all times. This helps to avoid frequent near-patient manipulation of the catheter and reduces the risk of catheter colonisation.



| Code      | Catheter  |    |           | Guidewire |           | Insertion needle |    |           | Units per pack |
|-----------|-----------|----|-----------|-----------|-----------|------------------|----|-----------|----------------|
|           | Ø mm      | G  | Length cm | Ø mm      | Length cm | Ø mm             | G  | Length mm |                |
| 115.698*  | 0.6 x 0.9 | 20 | 8         | 0.5       | 20        | 0.9              | 20 | 38        | 20             |
| 115.798** | 0.6 x 0.9 | 20 | 8         | 0.5       | 20        | 0.9              | 20 | 38        | 20             |
| 115.610*  | 0.8 x 1.2 | 18 | 10        | 0.7       | 30        | 1.2              | 18 | 54        | 20             |
| 115.710** | 0.8 x 1.2 | 18 | 10        | 0.7       | 30        | 1.2              | 18 | 54        | 20             |

\* with autoflush<sup>®</sup>

\*\* with bionector<sup>®</sup>

## leadercathset® radial artery

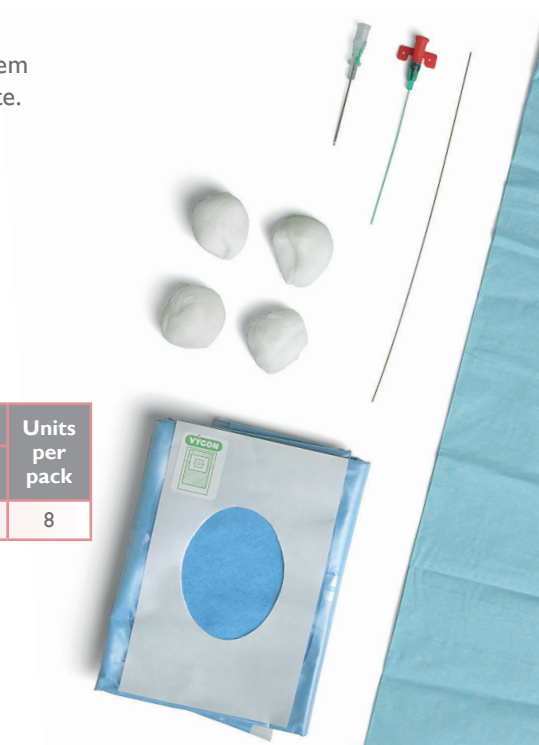
### Mini set for radial arterial access

The set includes a fenestrated drape with patented 'peel off' system and backing adhesive to ensure a close fit around the insertion site.

#### Complete set contents:

- ▶ Catheter
- ▶ Guidewire with **straight, flexible tip**
- ▶ Naturally echogenic needle
- ▶ 4 swabs
- ▶ Outer wrap
- ▶ Fenestrated drape with **Peel-Off-System** (50 x 95 cm) and adhesive viewing window

| Code    | Catheter  |    |           | Guide |           | Insertion needle |    |           | Units per pack |
|---------|-----------|----|-----------|-------|-----------|------------------|----|-----------|----------------|
|         | Ø mm      | G  | Length cm | Ø mm  | Length cm | Ø mm             | G  | Length mm |                |
| 115.079 | 0.6 x 0.9 | 20 | 8         | 0.5   | 20        | 0.9              | 20 | 38        | 8              |



## leadercathset® radial artery

### Complete set for radial arterial access

Complete user-friendly catheter placement set designed to reduce the risk of catheter related infection.

#### Complete set contents:

- ▶ Catheter
- ▶ Guidewire with **straight, flexible tip**
- ▶ Naturally echogenic needle
- ▶ Pressure-resistant extension tube
- ▶ arterial **bionector**®
- ▶ Outer wrap
- ▶ Fenestrated drape
- ▶ Three-way tap
- ▶ 5 gauze dressings
- ▶ 3 swabs
- ▶ Suture material
- ▶ Transparent dressing

| Code      | Catheter  |    |           | Guide |           | Insertion needle |    |           | Units per pack |
|-----------|-----------|----|-----------|-------|-----------|------------------|----|-----------|----------------|
|           | Ø mm      | G  | Length cm | Ø mm  | Length mm | Ø mm             | G  | Length mm |                |
| 115.065*  | 0.6 x 0.9 | 20 | 8         | 0.5   | 20        | 0.9              | 20 | 38        | 6              |
| 115.067** | 0.6 x 0.9 | 20 | 8         | 0.5   | 20        | 0.9              | 20 | 38        | 6              |

\* Suture material with straight needle

\*\* Suture material with curved needle



## leadercathset® femoral artery

### Complete procedure pack for femoral arterial pressure

Catheter for femoral arterial pressure monitoring,  
with straight guidewire

leadercath® is manufactured from **pressure-resistant polyethylene** that delivers constant pressure transmission even for extended dwell times.

#### Complete set contents:

- ▶ leadercath® (18 G, Length 18 cm), ref. 115.12
- ▶ Outer wrap (75 x 90 cm) also serves as a sterile placement surface
- ▶ Tray (19 x 13 x 3.5 cm)
- ▶ 2 gallipots (120 ml)
- ▶ Fenestrated drape (45 x 75 cm)
- ▶ Transparent dressing (8 x 6 cm)
- ▶ arterial **bionector**®
- ▶ 3 swabs
- ▶ 5 gauze dressings
- ▶ Suture material with curved needle
- ▶ Needle holder (15 cm)



| Code    | Catheter  |    |           | Guidewire |           | Insertion needle |    |           | Units per pack |
|---------|-----------|----|-----------|-----------|-----------|------------------|----|-----------|----------------|
|         | Ø mm      | G  | Length cm | Ø mm      | Length cm | Ø mm             | G  | Length mm |                |
| 115.070 | 0.8 x 1.2 | 18 | 18        | 0.7       | 46        | 1.2              | 19 | 68        | 10             |

# octopus<sup>®</sup> with arterial autoflush<sup>®</sup>

autoflush<sup>®</sup> is a needle-free connection system with a positive flush volume for the avoidance of needlestick injuries and to prevent catheter tip occlusions

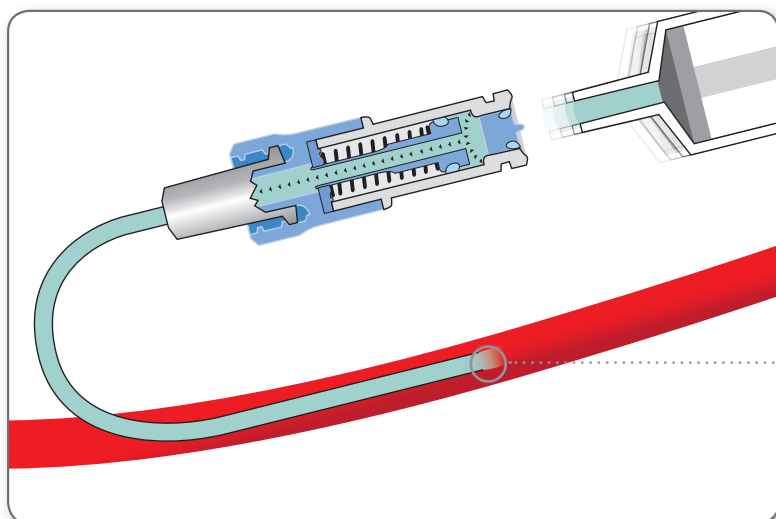
autoflush<sup>®</sup> is a needle-free connection system that delivers a positive flush volume on disconnection of a pressure measurement system. It thus prevents blood from entering the catheter, thereby preventing catheter tip occlusion.

autoflush<sup>®</sup> avoids blood loss when switching between pressure measurement systems and reduces the infection risk. It serves as a closure for as long as no pressure measurement system is connected. The spring presses the plunger against the housing to ensure that the system remains sealed.

The dead space-minimised supply line with autoflush<sup>®</sup> reduces the risk of vessel wall injuries through displacement of the manipulation site farther away from the catheter insertion point.

- ▶ closed system at all times
- ▶ max. 7 days dwell time or 360 connections
- ▶ **positive flush volume** prevents catheter tip occlusion
- ▶ no closure caps or stylets necessary
- ▶ needle-free use reduces the risk of needlestick injuries in accordance with TRBA 250

- Technical data**
- ▶ max. back pressure: 3 bar
  - ▶ flow rate: 200 ml/min
  - ▶ dead space: 0.10 ml
  - ▶ positive flush volume: 0.03 ml
  - ▶ MRI compatible
  - ▶ lipid-resistant
  - ▶ latex-free



### Positive flush volume

Disconnecting a syringe generates a positive displacement of 0.03 ml to prevent catheter occlusions.

| Code     | Designation            | Length<br>cm | Dead space volume<br>ml | Flow rate<br>ml/min. | Units per pack |
|----------|------------------------|--------------|-------------------------|----------------------|----------------|
| 5223.012 | octopus with autoflush | 10           | 0.4                     | 170                  | 50             |

## griplok® suture free fixation

### Secure catheter fixation with Velcro closure

#### SIMPLE

- ▶ VELCRO® brand closure provides simple, quick and secure fixation.

#### SAFE

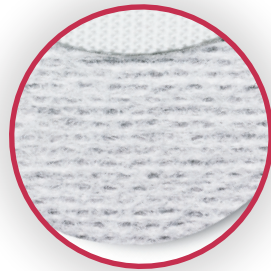
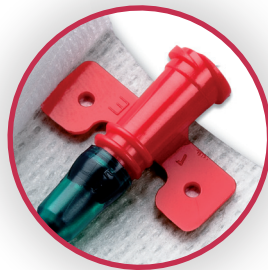
- ▶ Sterile latex-free designed for use at the insertion point.
- ▶ Both the catheter wing and hub are safely secured within the dressing to minimise catheter movement at the insertion site.

#### RELIABLE

- ▶ Consistent and reliable catheter fixation is achieved by using a high strength, hypoallergenic adhesive, to minimise movement and prevent accidental catheter fall out.
- ▶ griplok® is designed to provide suture free catheter security

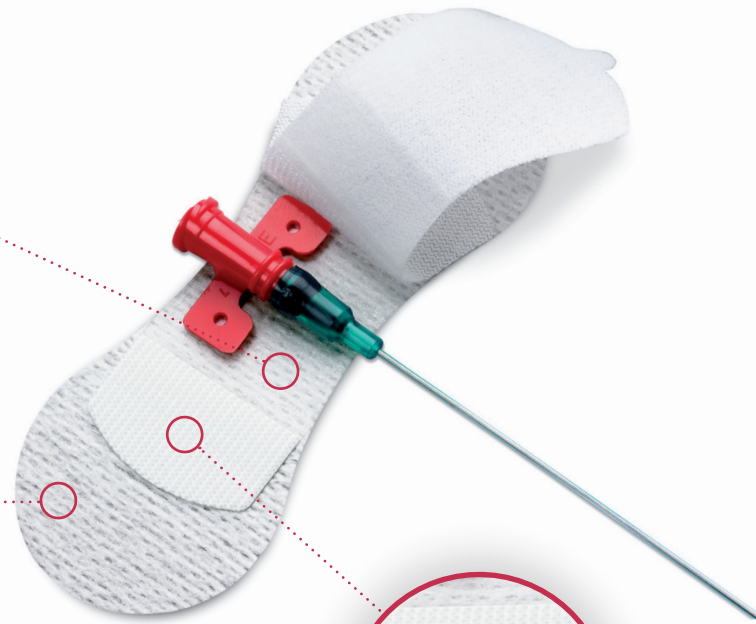
#### Catheter fixation

The velcro and adhesive combination provide strength and stability to minimise catheter movement and to prevent accidental catheter fall out



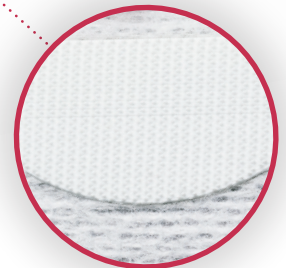
#### Dressing material

Flexible dressing material moulds to the skin



#### VELCRO® closure

Simply open and close for line change management



| Code    | Description | Units per pack |
|---------|-------------|----------------|
| 5804.17 | griplok®    | 100            |

griplok® is also available as part of a range of convenient procedure packs. Please contact Vygon for more information.

VELCRO® is a registered trademark of Velcro Industries B.V.

 **CRITICAL CARE**

**For further information, please contact: [questions@vygon.com](mailto:questions@vygon.com)**

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