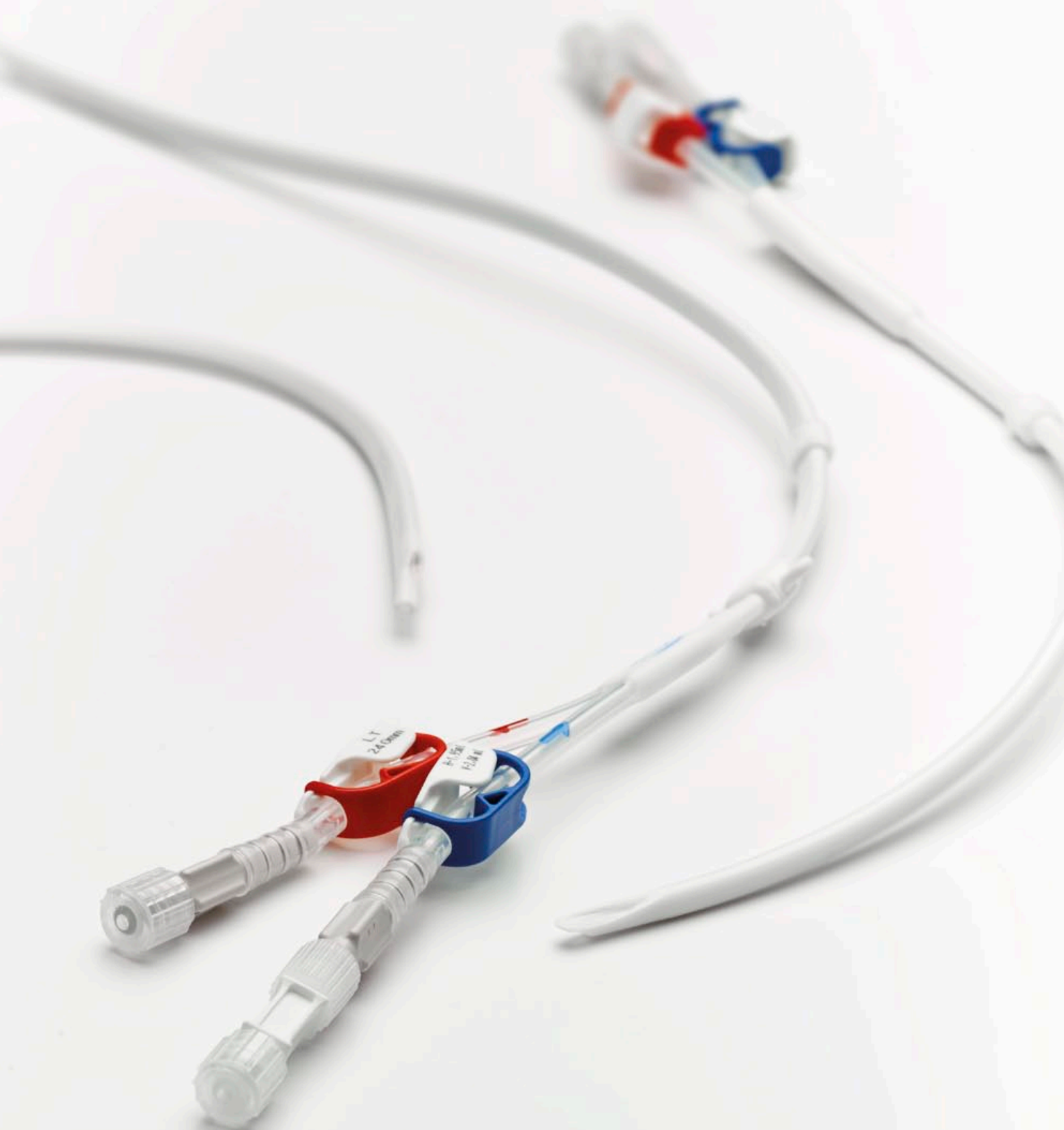


Made in
Germany

Joline®



Long Term

Dialysis

Joline - a modern medical technology company built on tradition

Joline GmbH & Co. KG has built on a long tradition in the development and production of dialysis catheters and has been manufacturing medical products under the highest 'Made in Germany' quality standards for more than a decade. Advanced production technology and medical expertise ensure production consistency and reliability. Joline guarantees exceptional medical product quality in compliance with Germany's high standards.

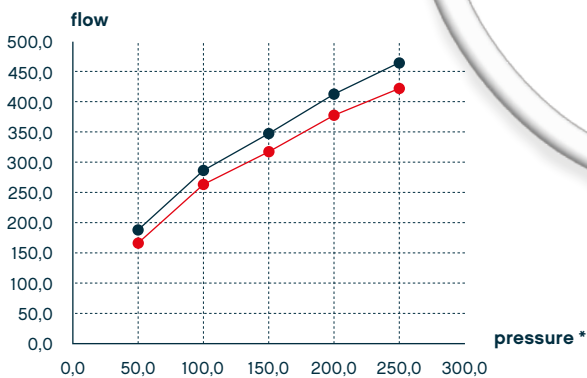
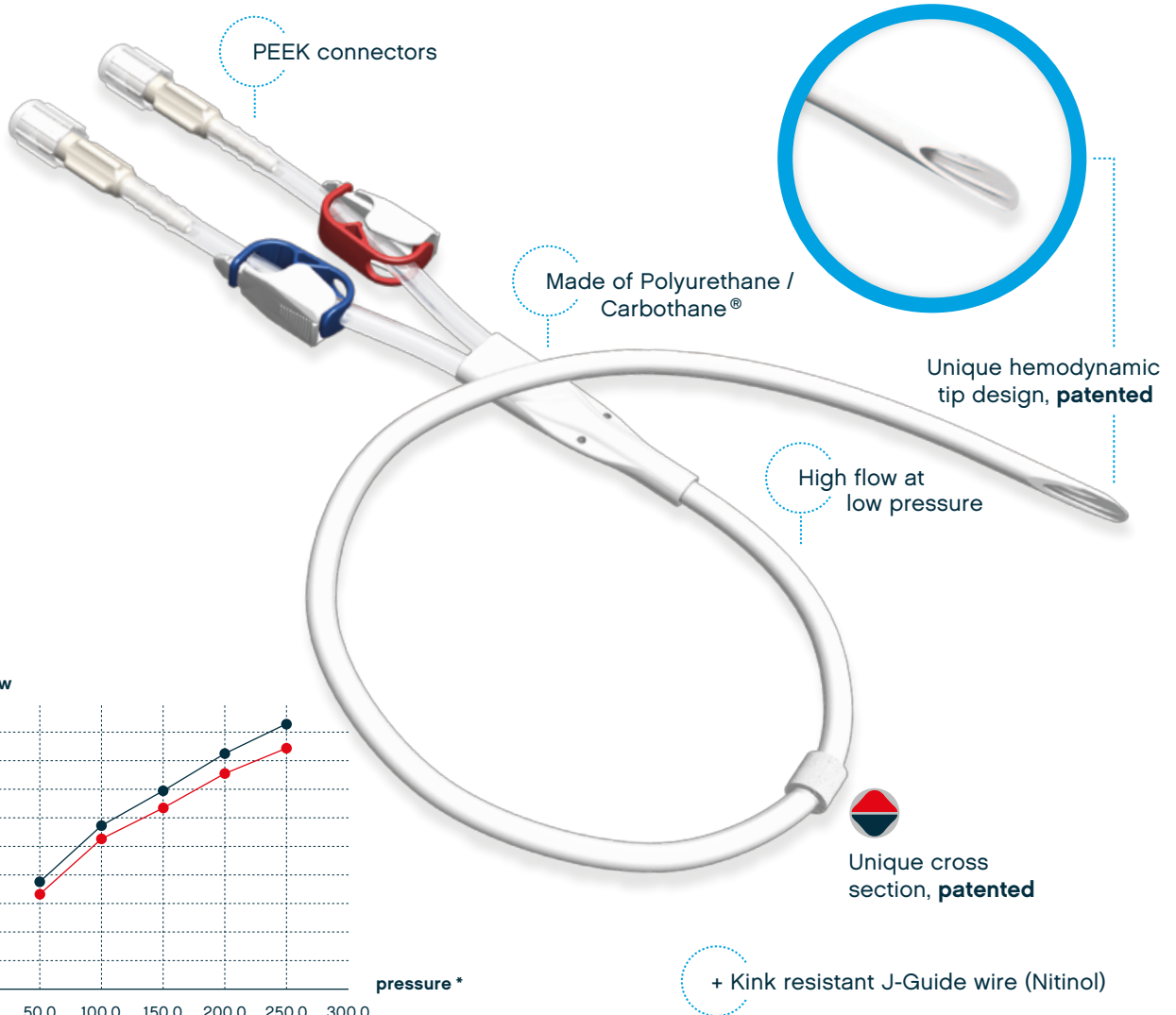
For further information please contact us!

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D-72379 Hechingen

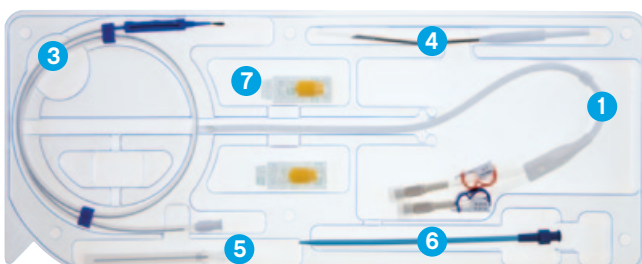
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E. info@joline.de
www.joline.de

Smooth Flow 15 Fr

Double Lumen LT Anterograde — Long Term



Kit components



- 1 x Catheter
- 1 x Valved Split Sheath dilator 16 Fr
- 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- 1 x Trocar
- 1 x Introducer Needle 18 G
- 1 x Dilator 12 Fr
- 2 x Luer Lock injection caps

* Measured in Ringer-solution calculated for blood

Smooth Flow 15 Fr

Double Lumen LT Anterograde — Long Term

Ordering Information

| Anterograde Implantation | | |
|--------------------------|--------------------------------------|----------------------|
| Item No. | Insertion length Tip-to-cuff (mm) | Total length (mm) |
| PKSF15C19/36 | 190 | 360 |
| PKSF15C23/40 | 230 | 400 |
| PKSF15C28/45 | 280 | 450 |
| PKSF15C33/50 | 330 | 500 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Made of Polyurethane / Carbothane®
- Packaging unit 2 pcs. per box

For further information,
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Double Lumen

Ø 5,8 x 3,4 mm oval \cong 14,8 Fr Double Lumen LT — Long Term

PEEK Connectors:
outstanding mechanical
stability

Dacron™ cuff:
safe ingrowth

Outstanding kink
resistance

Soft Silicone material,
highly biocompatible

Hemodynamic tip design,
easy implantation

Cross section

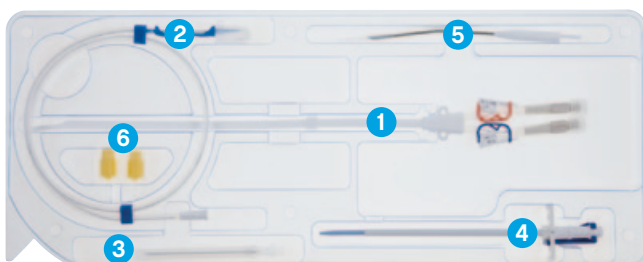
+ Kink resistant J-Guide wire (Nitinol)

flow

| pressure * | flow (red lumen) | flow (blue lumen) |
|------------|------------------|-------------------|
| 50,0 | 80,0 | 70,0 |
| 100,0 | 170,0 | 160,0 |
| 150,0 | 200,0 | 190,0 |
| 200,0 | 240,0 | 230,0 |
| 250,0 | 270,0 | 260,0 |

pressure *

Kit components



- 1 x Catheter
- 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- 1 x Introducer Needle 18 G
- 1 x Split Sheath Dilator
- 1 x Trocar
- 2 x Luer Lock injection caps

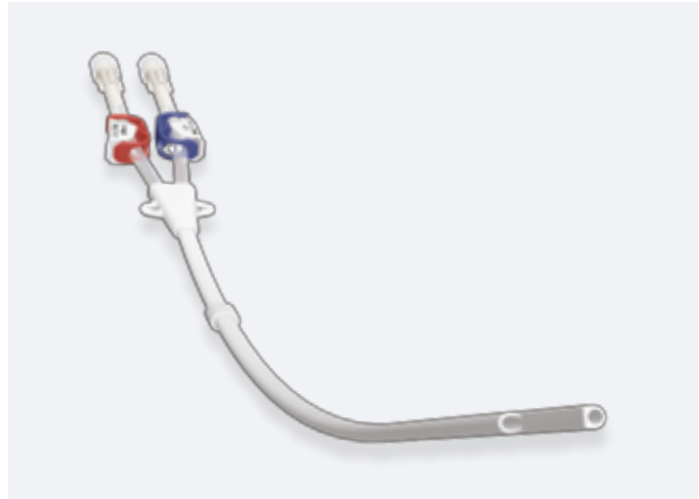
* Measured in Ringer-solution calculated for blood

Double Lumen

Ø 5,8 x 3,4 mm oval $\hat{=}$ 14,8 Fr Double Lumen LT — Long Term

Ordering Information

| Ø 5,8 x 3,4 mm oval | | |
|---------------------|--------------------------------------|--|
| Item No. | Insertion length Tip-to-Cuff (mm) | Catheter shaft length Tip-to-Hub (mm) |
| PKLDS370 | 190 | 270 |
| PKLDS420 | 240 | 320 |
| PKLDS470 | 290 | 370 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

For further information,
please contact us

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Perm Flow anterograde

Ø 6,1 x 3,5 mm oval \approx 15,5 Fr Double Lumen LT — Long Term

Outstanding kink resistance

Soft Silicone material, highly biocompatible

Cross section

Hemodynamic tip design, easy implantation

PEEK Connectors: outstanding mechanical stability

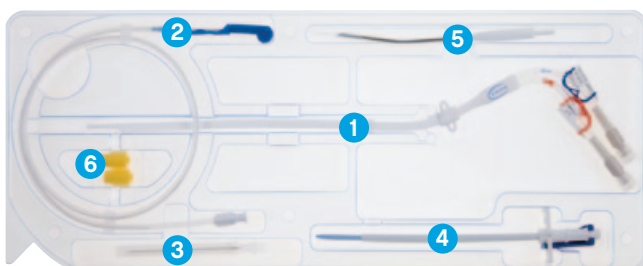
+ Kink resistant J-Guide wire (Nitinol)

flow

| pressure * | flow |
|------------|-------|
| 50,0 | 120,0 |
| 100,0 | 180,0 |
| 150,0 | 230,0 |
| 200,0 | 280,0 |
| 250,0 | 320,0 |

pressure *

Kit components



- 1 x Catheter
- 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- 1 x Introducer Needle 18 G
- 1 x Split Sheath Dilator
- 1 x Trocar
- 2 x Luer Lock injection caps

* Measured in Ringer-solution calculated for blood

Perm Flow anterograde

Ø 6,1 x 3,5 mm oval $\hat{=}$ 15,5 Fr Double Lumen LT — Long Term

Ordering Information

| Ø 6,1 x 3,5 mm oval | | |
|---------------------|--------------------------------------|--|
| Item No. | Insertion length Tip-to-Cuff (mm) | Catheter shaft length Tip-to-Hub (mm) |
| PKADS270 | 190 | 270 |
| PKADS320 | 240 | 320 |
| PKADS370 | 290 | 370 |
| PKADS420 | 340 | 420 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

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Perm Flow retrograde

Ø 6,1 x 3,5 mm oval \approx 15,5 Fr Double Lumen LT — Long Term

Pre-fill adapters

Outstanding kink resistance

Cross section

Soft Silicone material, highly biocompatible

PEEK Connectors: outstanding mechanical stability

Hemodynamic tip design, easy implantation

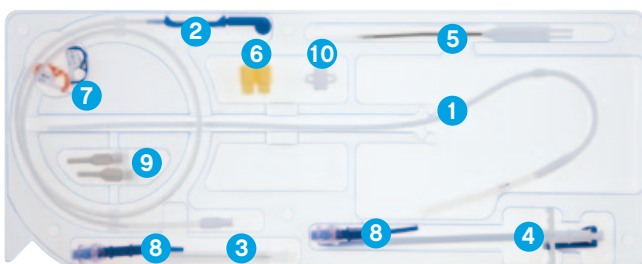
+ Kink resistant J-Guide wire (Nitinol)

flow

| pressure * | flow |
|------------|-------|
| 50,0 | 130,0 |
| 100,0 | 200,0 |
| 150,0 | 240,0 |
| 200,0 | 280,0 |
| 250,0 | 320,0 |

pressure *

Kit components



- | | |
|---|---|
| 1 x Catheter | 6 x 2 x Luer Lock injection caps |
| 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm | 7 x 1 x Venous clamp (blue) + 1x Arterial clamp (red) |
| 1 x Introducer Needle 18 G | 8 x 2 x Pre-fill adapter |
| 1 x Split Sheath Dilator | 9 x 2 x PEEK-connectors |
| 1 x Trocar | 10 x 1 x Suture wing |

* Measured in Ringer-solution calculated for blood

Perm Flow retrograde

Ø 6,1 x 3,5 mm oval $\hat{=}$ 15,5 Fr Double Lumen LT — Long Term

Ordering Information

| Ø 6,1 x 3,5 mm oval | | |
|---------------------|--------------------------------------|--|
| Item No. | Insertion length Tip-to-Cuff (mm) | Catheter shaft length Tip-to-Hub (mm) |
| PKRDS270 | 190 | 270 |
| PKRDS320 | 240 | 320 |
| PKRDS370 | 290 | 370 |
| PKRDS420 | 340 | 420 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

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Silicone 2.0 anterograde

Ø 6,4 x 3,7 mm oval \cong 16,3 Fr Double Lumen LT — Long Term

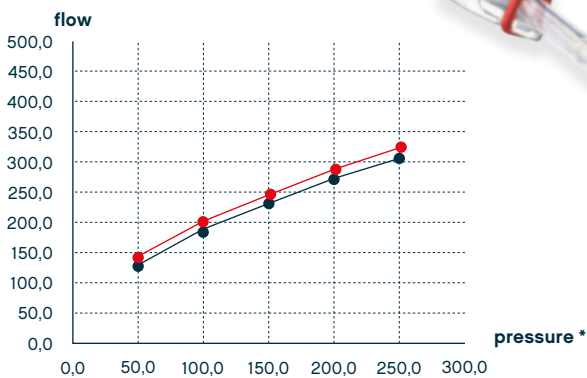
Soft Silicone material,
highly biocompatible

Outstanding kink
resistance

Cross section

Hemodynamic tip design

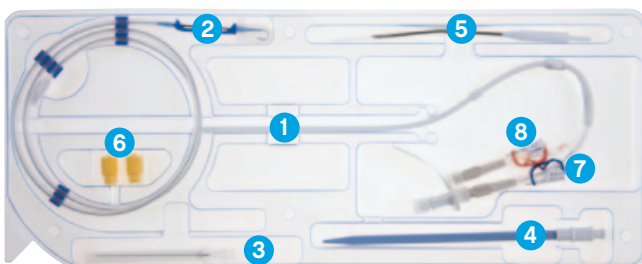
Pre-loaded stylet:
easy implantation



Over the wire implantation
No split-sheath required

+ Kink resistant J-Guide wire (Nitinol)

Kit components



- 1 1 x Catheter
- 2 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 900 mm
- 3 1 x Introducer Needle 18 G
- 4 1 x Dilator
- 5 1 x Trocar
- 6 2 x Luer Lock injection caps
- 7 1 x Venous clamp (blue)
- 8 1x Arterial clamp (red)

* Measured in Ringer-solution calculated for blood

Silicone 2.0 anterograde

Ø 6,4 x 3,7 mm oval $\hat{=}$ 16,3 Fr Double Lumen LT — Long Term

Ordering Information

| Ø 6,4 x 3,7 mm oval | | |
|---------------------|--------------------------------------|--|
| Item No. | Insertion length Tip-to-Cuff (mm) | Catheter shaft length Tip-to-Hub (mm) |
| PKADS270M | 190 | 270 |
| PKADS320M | 240 | 320 |
| PKADS370M | 290 | 370 |
| PKADS420M | 340 | 420 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 900 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

For further information,
please contact us

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Silicone 2.0 retrograde

Ø 6,4 x 3,7 mm oval \approx 16,3 Fr Double Lumen LT — Long Term

Soft Silicone material,
highly biocompatible

Outstanding kink
resistance

Cross section

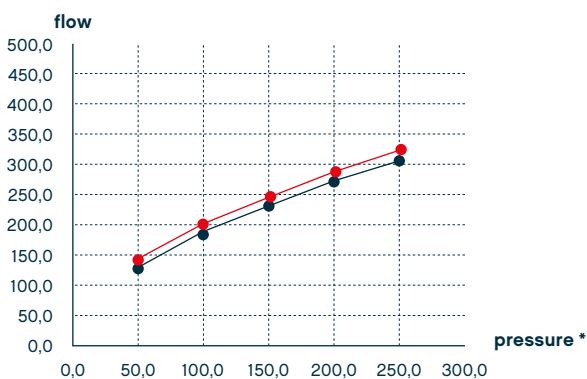
Hemodynamic tip design,
easy implantation

Pre-loaded stylet:
easy implantation

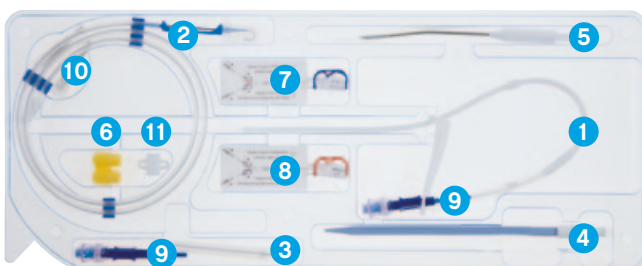
Pre-fill adapters

Over the wire implantation
No split-sheath required

+ Kink resistant J-Guide wire (Nitinol)



Kit components



- 1 1 x Catheter
- 2 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 900 mm
- 3 1 x Introducer Needle 18 G
- 4 1 x Dilator
- 5 1 x Trocar
- 6 2 x Luer Lock injection caps
- 7 1 x Venous clamp (blue)
- 8 1 x Arterial clamp (red)
- 9 2 x Pre-fill adapter
- 10 2 x PEEK-connectors
- 11 1 x Suture wing

* Measured in Ringer-solution calculated for blood

Silicone 2.0 retrograde

Ø 6,4 x 3,7 mm oval $\hat{=}$ 16,3 Fr Double Lumen LT — Long Term

Ordering Information

| Ø 6,4 x 3,7 mm oval | | |
|---------------------|--------------------------------------|--|
| Item No. | Insertion length Tip-to-Cuff (mm) | Catheter shaft length Tip-to-Hub (mm) |
| PKRDS270M | 190 | 270 |
| PKRDS320M | 240 | 320 |
| PKRDS370M | 290 | 370 |
| PKRDS420M | 340 | 420 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 900 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

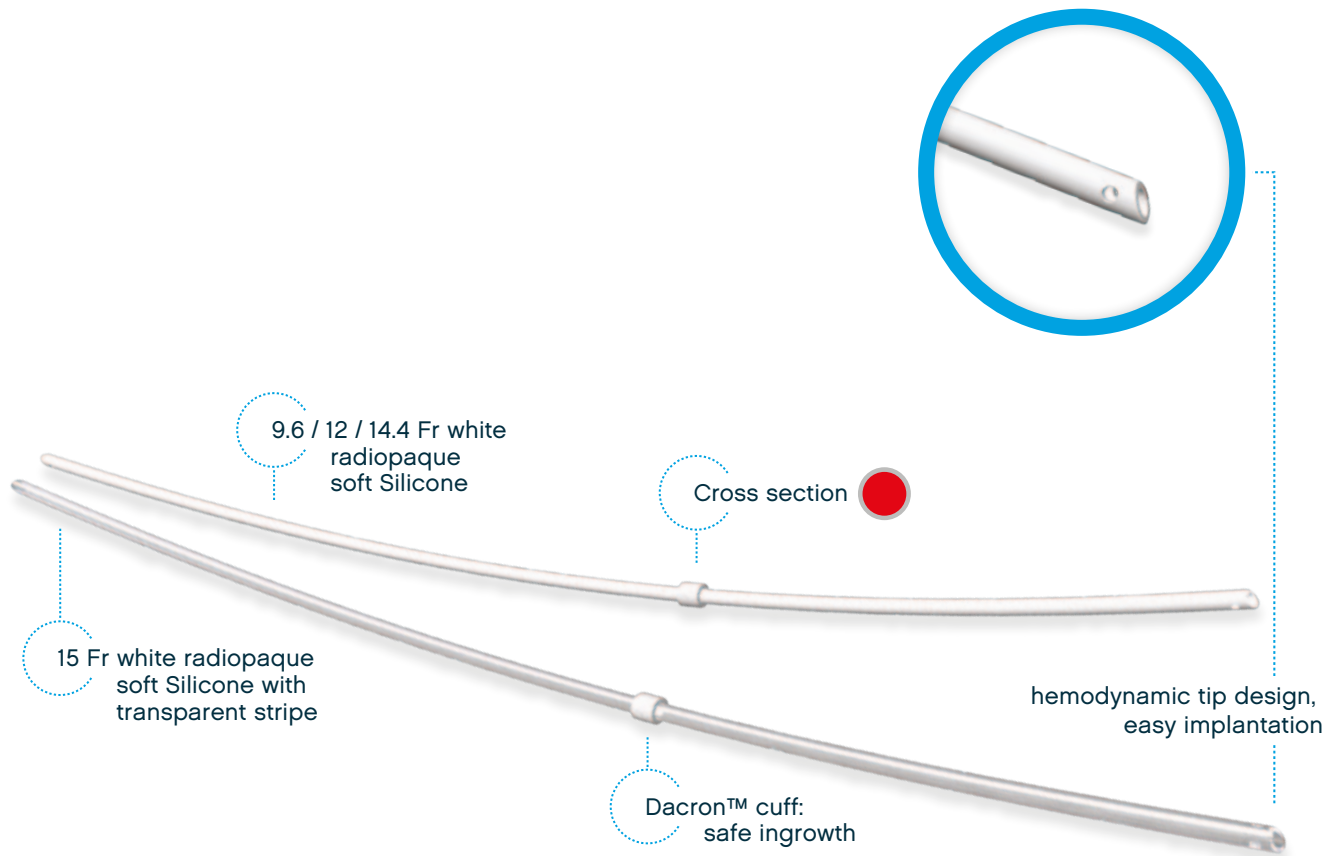
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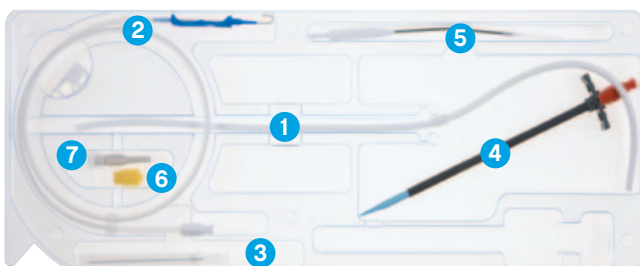
Single Lumen 9.6 / 12 / 14.4 / 15 Fr

Single Lumen LT — Long Term



+ Kink resistant J-Guide wire (Nitinol)

Kit components



- 1 x Catheter
- 1 x Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- 1 x Introducer Needle 18 G
- 1 x Split Sheath Dilator
- 1 x Trocar
- 1 x Luer Lock injection caps
- 1 x PEEK Luer Lock connector

* Measured in Ringer-solution calculated for blood

Single Lumen 9.6 / 12 / 14.4 / 15 Fr

Single Lumen LT — Long Term

Ordering Information

| white Silicone tube radiopaque | |
|-----------------------------------|-------------|
| Item No. | Length (mm) |
| 9.6 Fr | |
| PKLS10S450 | 250 / 200 |
| PKLS10S470 | 300 / 170 |
| 12 Fr | |
| PKLS12S450 | 250 / 200 |
| PKLS12S470 | 300 / 170 |
| 14.4 Fr | |
| PKLS14S450 | 250 / 200 |
| PKLS14S470 | 300 / 170 |



| transparent Silicone tube white radio-opaque stripe | |
|--|-------------|
| Item No. | Length (mm) |
| 15 Fr | |
| PKLS15S450 | 250 / 200 |
| PKLS15S470 | 300 / 170 |



length / cuff position



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Soft Silicone Material
- Packaging unit 3 pcs. per box

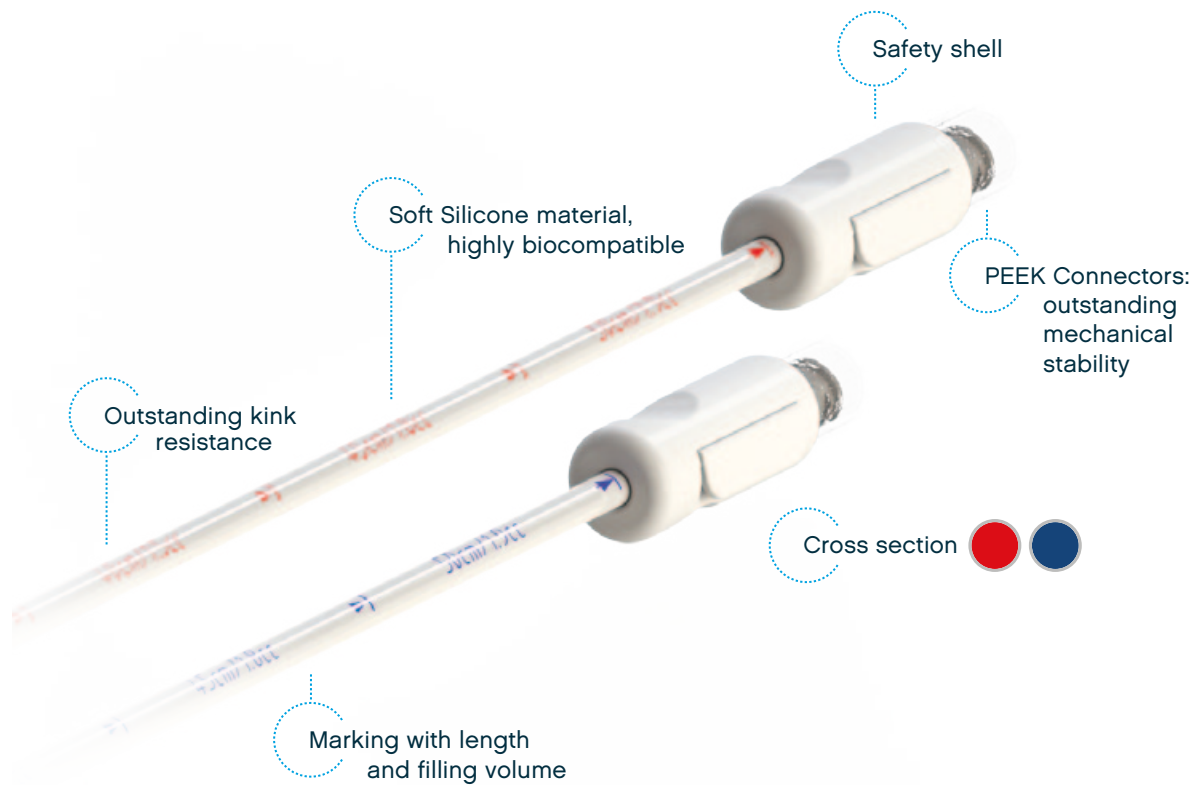
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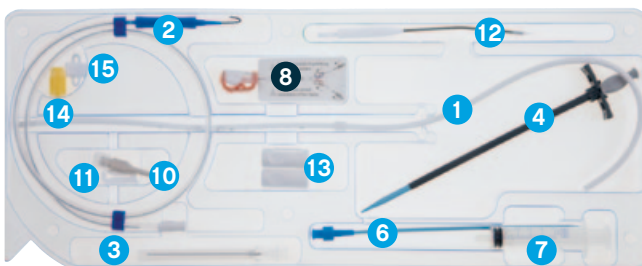
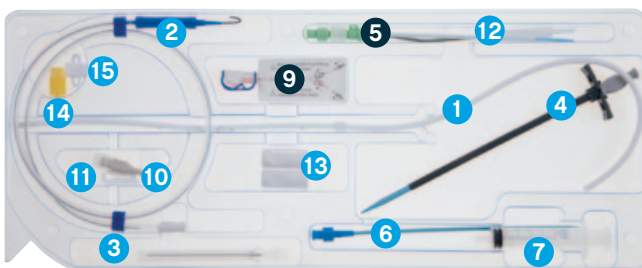
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Dual Flow Silicone 11 Fr

2 x Single Lumen LT — Long Term



Kit components



- | | | | |
|---|------------------------------|----|--------------------|
| 1 | 2 x Catheter | 10 | 2 x PEEK-connector |
| 2 | 2 x Kink resistant J-Guide | 11 | 2 x Tube clamp |
| | wire (Nitinol) 0.97 / 700 mm | 12 | 2 x Trocar |
| 3 | 2 x Introducer Needle 18 G | 13 | 2 x Safety shell |
| 4 | 2 x Split Sheath Dilator | 14 | 2 x Injection cap |
| 5 | 1 x Sheath Dilator | 15 | 2 x Suture wing |
| 6 | 2 x Dilator | | |
| 7 | 2 x Syringe 5ml | | |
| 8 | 1 x Arterial clamp (red) | | |
| 9 | 1 x Venous clamp (blue) | | |

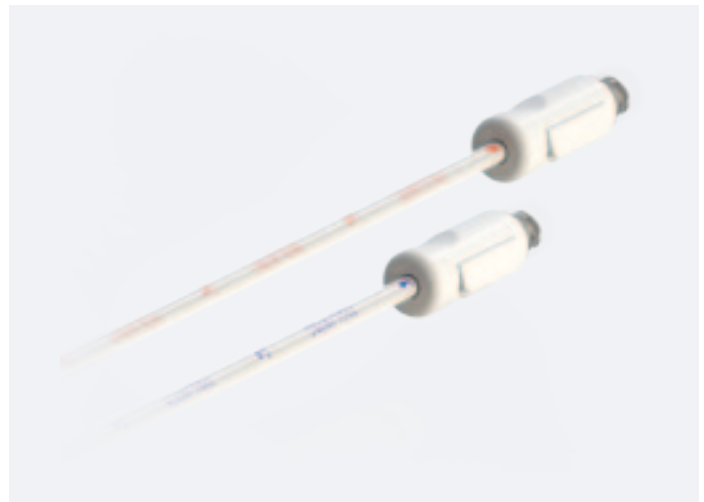
* Measured in Ringer-solution calculated for blood

Dual Flow Silicone 11 Fr

2 x Single Lumen LT — Long Term

Ordering Information

| Ø 5,8 x 3,4 mm oval | | |
|---------------------|---|--|
| Item No. | Venus insertion length Tip-to-Cuff (mm) | Arterial insertion length Tip-to-Cuff (mm) |
| PKDF11S25/22 | 250 | 220 |
| PKDF11S30/27 | 300 | 270 |



- Kink resistant J-Guide wire (Nitinol) 0.97 / 700 mm
- Soft Silicone Material
- Packaging unit 1 pcs. per box

For further information,
please contact us

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