

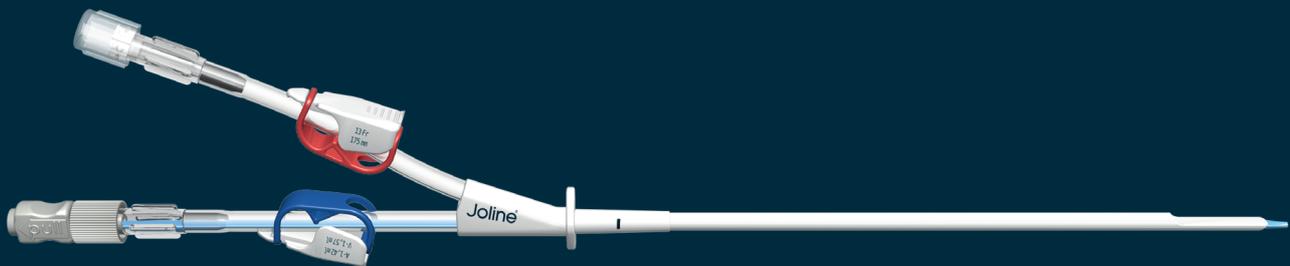
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Joline®

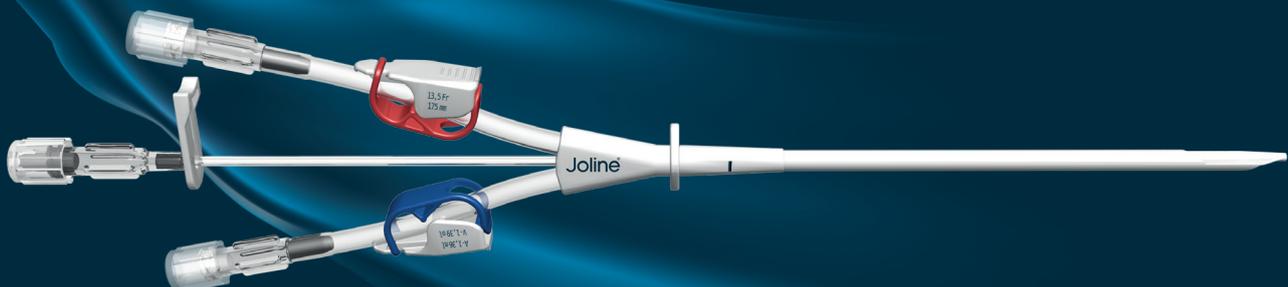
High Flow Family

Short Term Catheters

High Flow Double Lumen 11 Fr & 13 Fr



High Flow Triple Lumen 13.5 Fr



 medical products
developed and produced
exclusively in Germany

High Flow Double Lumen 11 Fr & 13 Fr



Step Tip-Design

- With Stylet for supportive insertion and pre-dilatation during placement*
- Supports laminar blood flow*

High Flow Double Lumen

11 Fr & 13 Fr



Straight Extensions



Curved Extensions

High Flow Double Lumen 11 Fr

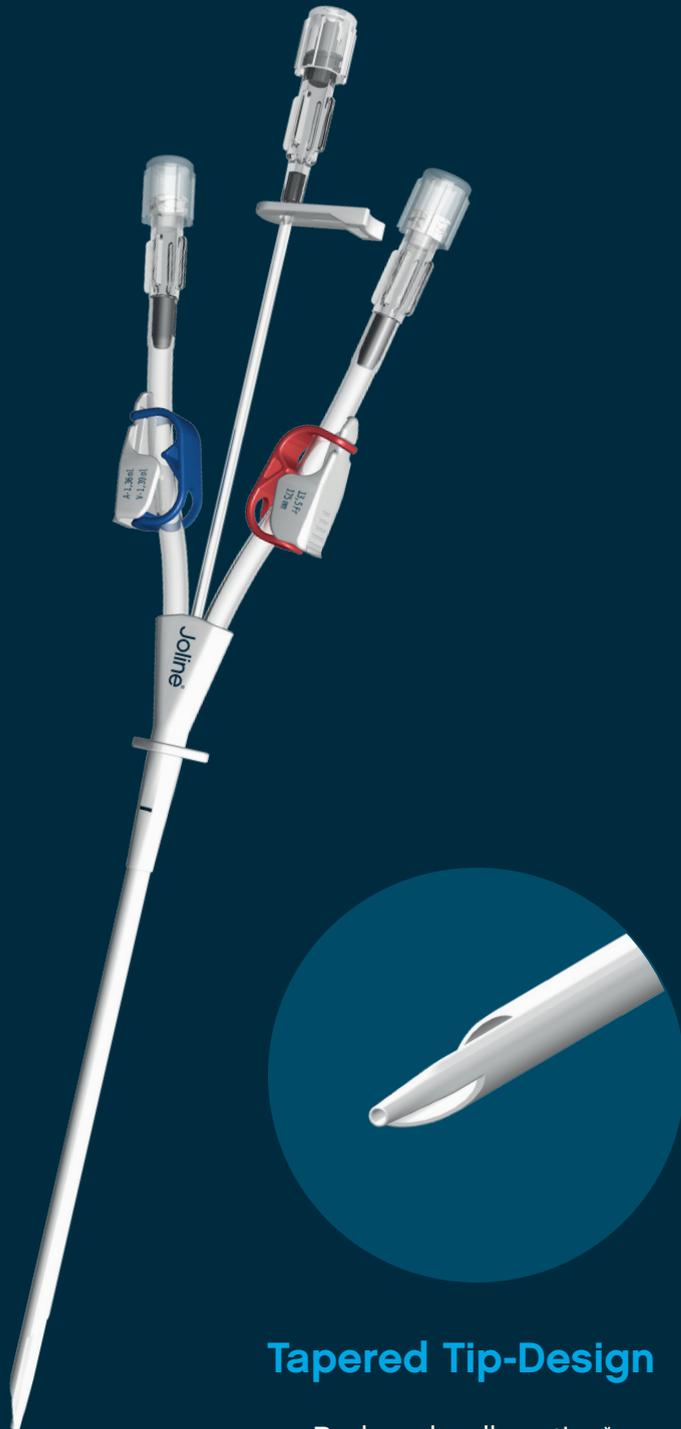
Straight Extensions		Curved Extensions		pcs. per box
Item No.	Length (mm)	Item No.	Length (mm)	
PKHF11P150	150	PKHF11P150R	150	3
PKHF11P175	175	PKHF11P175R	175	3
PKHF11P200	200	PKHF11P200R	200	3
PKHF11P250	250	PKHF11P250R	250	3

High Flow Double Lumen 13 Fr

Straight Extensions		Curved Extensions		pcs. per box
Item No.	Length (mm)	Item No.	Length (mm)	
PKHF13PH150	150	PKHF13PH150R	150	3
PKHF13PH175	175	PKHF13PH175R	175	3
PKHF13PH200	200	PKHF13PH200R	200	3
PKHF13PH250	250	PKHF13PH250R	250	3
PKHF13PH300	300	-	-	3

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High Flow Triple Lumen 13.5 Fr



Tapered Tip-Design

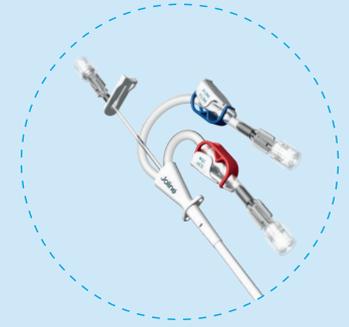
- Reduced wall suction*
- Reduced clotting compared to side hole catheters*
- Tapered tip – easy insertion*

High Flow Triple Lumen

13.5 Fr



Straight Extensions



Curved Extensions

High Flow Triple Lumen 13.5 Fr

Straight Extensions		Curved Extensions		pcs. per box
Item No.	Length (mm)	Item No.	Length (mm)	
PKTHF13P150	150	PKTHF13P150R	150	5
PKTHF13P175	175	PKTHF13P175R	175	5
PKTHF13P200	200	PKTHF13P200R	200	5
PKTHF13P250	250	PKTHF13P250R	250	5

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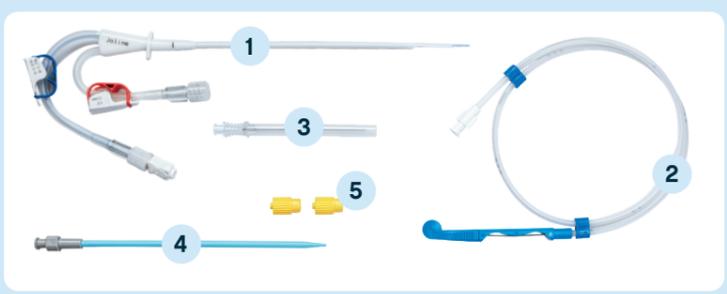
Notes



The High-Flow-Design of Double Lumen Catheters

- Step Tip-Design supports laminar blood flow*
- Pre-loaded Stylet for supportive insertion and pre-dilatation during placement*
- Large Double-D-Design

Example kit High Flow Double Lumen 11 Fr



- 1 Catheter
- 2 Kink resistant Nitinol guidewire
- 3 Introducer needle
- 4 Dilator
- 5 Luer-Lock injection caps

Advantages of our High Flow Family

- Thermosensitive Polyurethane providing stiffness during implantation but softness at body temperature
- X-ray visible and MR safe
- Rotatable Suture wing
- Prolonged hub with marking line and smooth transition to catheter shaft
- Safety clamps with side protection, avoiding sliding off the connector lines
- Printing on clamps indicate priming volume, length and French size



All kits include Kink resistant guidewire

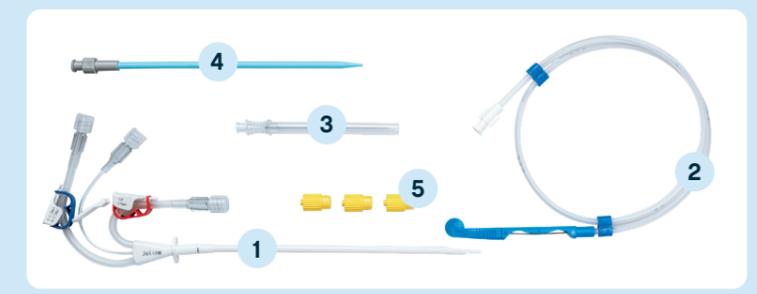
Kink resistant Nitinol guidewire – for safe and easy catheter placement



The High-Flow-Design of Triple Lumen Catheters

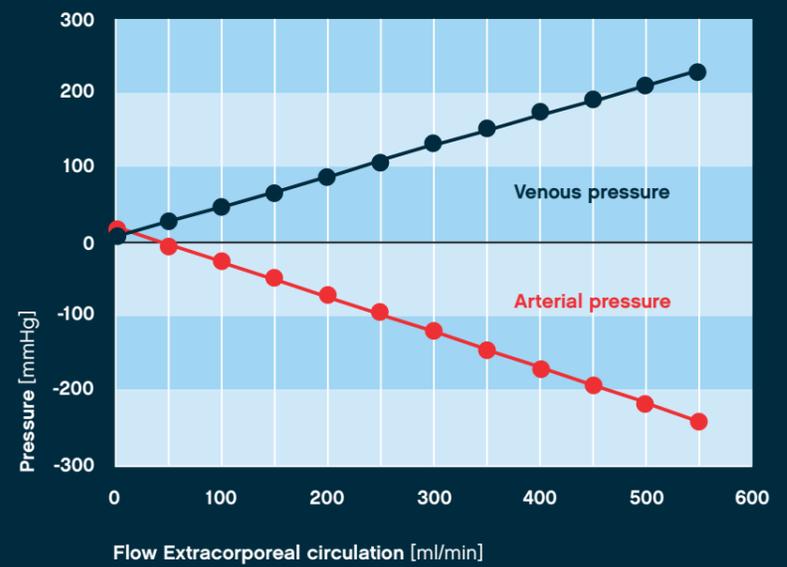
- Tapered tip for easy insertion*
- Large inner lumen
- Reduced wall suction*
- Reduced clotting compared to side hole catheters*
- Third lumen: Additional access for central venous pressure monitoring, fluid administration and vasoactive drug therapy

Example kit High Flow Triple Lumen 13.5 Fr



- 1 Catheter
- 2 Kink resistant Nitinol guidewire
- 3 Introducer needle
- 4 Dilator
- 5 Luer Lock injection caps

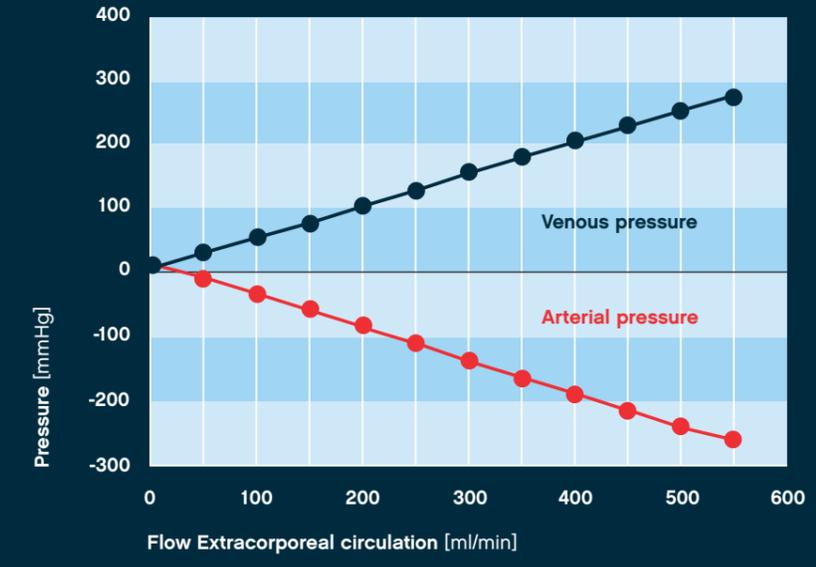
High Flow Double Lumen 13 Fr**



The best design for fast acute dialysis therapies

- Polyurethane in combination with **large Double-D-Design** maximizes internal diameter and allows high blood flow rates with small French sizes (outer diameter)
- More flexibility concerning the pump speed because lower pressure settings are possible
- Low local infection rate at exit site of the catheter

High Flow Triple Lumen 13.5 Fr**



- Very low complication rate during implantation
- Visualization of the Flow/Pressure Ratio at 0-550 ml/min blood flow
- Sufficient blood flow rates can be achieved at low pressure rates

References

* Joannidis M, Oudemans-van Straaten HM. Clinical review: Patency of the circuit in continuous renal replacement therapy. Crit Care. 2007;11(4):218. doi: 10.1186/cc5937. PMID: 17634148; PMCID: PMC2206533.

** PKHF13PH300 / mean catheter 1-10, each measurement 1-3 (vena cava flow: 1.7 L/min)

** HF-TLK 13/30 / mean value catheter 1-10, each measurement 1-3 (flow vena cava: 1.7 L/min)



About Joline

Joline is an internationally active medical device company located in the South of Germany with more than 20 years experience in minimally invasive therapies.

Joline is an expert provider of catheter, balloon and stent technology for various medical applications and maintains an important tradition of 'Made in Germany' quality in all its products and services.

All Joline products are developed and produced exclusively in Germany. We integrate quality aspects in our daily work and strive to meet the high standards of our customers. The highest priority we place on the health and safety of our patients.

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Quality first: Joline is
EN ISO 13485:2016 certified.
All Joline products are CE-marked.
Subject to alterations:
52985/23/03_R05