



# Vascular and Cardiothoracic Surgery Solutions

Over 50 years of technical and clinical experience in vascular graft technology

This document is intended to provide information to an international audience.

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# Vascular and Cardiothoracic Surgery Solutions

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Refer to Instructions For Use for current indications, warnings, contraindications, and precautions. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets.

Hemacarotid Patches



8  
1

Cardioroot Woven



4

Hemashield Platinum Woven Double Velour



7  
6  
5  
4  
3

Hemashield Gold Knitted Microvel Double Velour



10  
9  
7  
6  
2

Intergard Synergy Knitted Intergard Silver Knitted



10  
9  
7  
6  
2

Intergard Woven Intergard Silver Woven



7  
6  
5  
4  
3

Intergard Knitted/Hemagard Knitted



10  
9  
7  
6  
2

Intergard Knitted Ultrathin Hemagard Knitted Ultrathin



10

Hemashield Woven Double Velour Cardiovascular Fabric



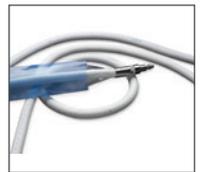
8  
1

Fusion



12  
10  
9

Flixene



14  
13  
11

Fusion Bioline



12  
10  
9

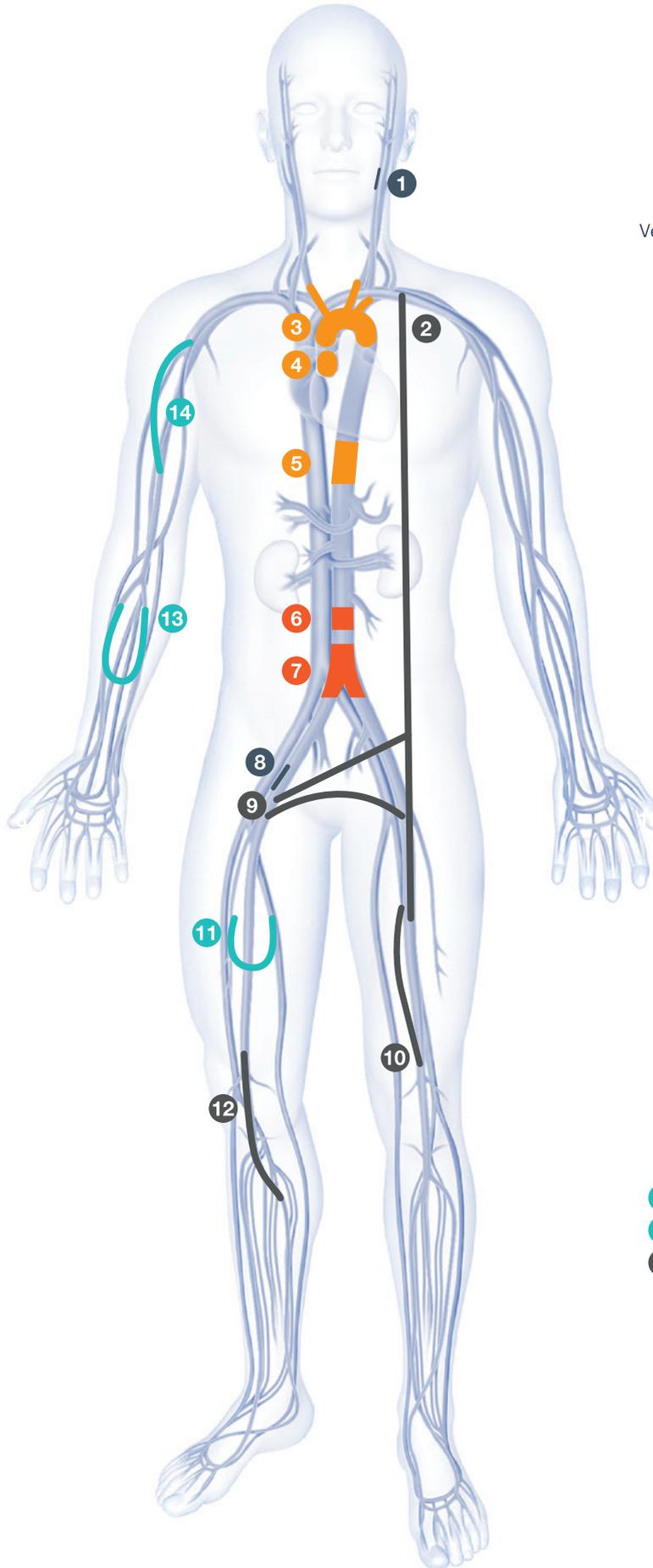
Advanta VXT



14  
13  
12

11  
10  
9

Tunneler



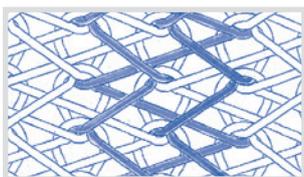
# Knitted Vascular Grafts

# Intergard Knitted

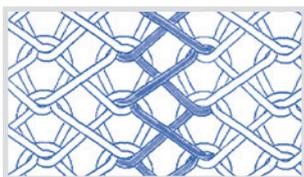
## Knitted Vascular Grafts

### Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min



Reverse Lock-knit



Tricot Knit



\*Intergard Knitted IFU

## Straight



Diameter	Length	Reference
6 mm	20 cm	IGK0006-20
7 mm	20 cm	IGK0007-20
8 mm	20 cm	IGK0008-20
10 mm	20 cm	IGK0010-20
12 mm	20 cm	IGK0012-20
14 mm	20 cm	IGK0014-20
16 mm	20 cm	IGK0016-20
18 mm	20 cm	IGK0018-20
20 mm	20 cm	IGK0020-20
22 mm	20 cm	IGK0022-20
24 mm	20 cm	IGK0024-20

Diameter	Length	Reference
6 mm	40 cm	IGK0006-40
7 mm	40 cm	IGK0007-40
8 mm	40 cm	IGK0008-40
10 mm	40 cm	IGK0010-40
12 mm	40 cm	IGK0012-40
14 mm	40 cm	IGK0014-40
16 mm	40 cm	IGK0016-40
18 mm	40 cm	IGK0018-40
20 mm	40 cm	IGK0020-40
22 mm	40 cm	IGK0022-40
24 mm	40 cm	IGK0024-40

Diameter	Length	Reference
6 mm	70 cm	IGK0006-70
7 mm	70 cm	IGK0007-70
8 mm	70 cm	IGK0008-70
10 mm	70 cm	IGK0010-70
8 mm	100 cm	IGK0008-100

## Straight Radially Supported



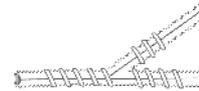
Diameter	Proximal/Distal Length	Supported Length	Total Length	Reference
8 mm	40cm/15cm	15 cm	70 cm	IGK0008RS15
6 mm	35cm/15cm	20 cm	70 cm	IGK0006RS20
8 mm	35cm/15cm	20 cm	70 cm	IGK0008RS20
6 mm	25cm/15cm	30 cm	70 cm	IGK0006RS30
8 mm	25cm/15cm	30 cm	70 cm	IGK0008RS30
8 mm	20cm/20cm	45 cm	85 cm	IGK0008RS45

## Bifurcated



Diameter	Length	Reference
12 mm x 6 mm	50 cm	IGK1206
14 mm x 7 mm	50 cm	IGK1407
16 mm x 8 mm	50 cm	IGK1608
18 mm x 9 mm	50 cm	IGK1809
20 mm x 10 mm	50 cm	IGK2010
22 mm x 11 mm	50 cm	IGK2211
24 mm x 12 mm	50 cm	IGK2412

## Axillo-Bifemoral / Axillo-Bifemoral Radially Supported



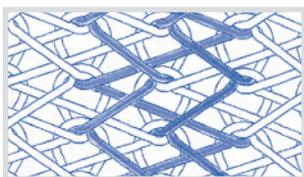
Diameter	Distal Length body/branch	Supported Length body/branch	Total Length body/branch	Reference
10mm x 10mm		Not radially supported	100 cm/60cm	IGKAX1010
8mm x 8mm	20 cm/35 cm	45 cm/20 cm	85 cm/55 cm	IGKAX0808RS45/20
8mm x 8mm	20 cm/25 cm	45 cm/30 cm	85 cm/55 cm	IGKAX0808RS45/30
8mm x 8mm	20 cm/25 cm	60 cm/30 cm	100 cm/55 cm	IGKAX0808RS60/30
10mm x 8mm x 8mm	25 cm/35 cm	35 cm/20 cm	85 cm/55 cm	IGKAX100808RS35/20
8mm x 6mm x 6mm	25 cm/35 cm	35 cm/20 cm	85 cm/55 cm	IGKAX080606RS35/20

# Hemagard Knitted

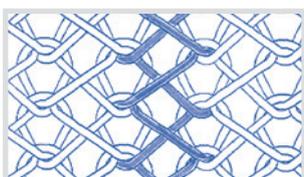
## Knitted Vascular Grafts

### Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min



Reverse Lock-knit



Tricot Knit



\*Hemagard Knitted IFU

## Straight



Diameter	Length	Reference	Diameter	Length	Reference	Diameter	Length	Reference
6 mm	20 cm	HGK0006-20	6 mm	40 cm	HGK0006-40	12 mm	60 cm	HGK0012-60
7 mm	20 cm	HGK0007-20	7 mm	40 cm	HGK0007-40	6 mm	70 cm	HGK0006-70
8 mm	20 cm	HGK0008-20	8 mm	40 cm	HGK0008-40	7 mm	70 cm	HGK0007-70
10 mm	20 cm	HGK0010-20	10 mm	40 cm	HGK0010-40	8 mm	70 cm	HGK0008-70
12 mm	20 cm	HGK0012-20	12 mm	40 cm	HGK0012-40	10 mm	70 cm	HGK0010-70
14 mm	20 cm	HGK0014-20	14 mm	40 cm	HGK0014-40	6 mm	100 cm	HGK0006-100
16 mm	20 cm	HGK0016-20	16 mm	40 cm	HGK0016-40	7 mm	100 cm	HGK0007-100
18 mm	20 cm	HGK0018-20	18 mm	40 cm	HGK0018-40	8 mm	100 cm	HGK0008-100
20 mm	20 cm	HGK0020-20	20 mm	40 cm	HGK0020-40	10 mm	100 cm	HGK0010-100
22 mm	20 cm	HGK0022-20	22 mm	40 cm	HGK0022-40			
24 mm	20 cm	HGK0024-20	24 mm	40 cm	HGK0024-40			

## Straight Radially Supported



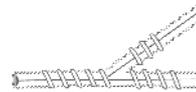
Diameter	Proximal/ Distal Length	Supported Length	Total Length	Reference
8 mm	40 cm/15 cm	15 cm	70 cm	HGK0008RS15
6 mm	35 cm/15 cm	20 cm	70 cm	HGK0006RS20
8 mm	35 cm/15 cm	20 cm	70 cm	HGK0008RS20
6 mm	25 cm/15 cm	30 cm	70 cm	HGK0006RS30
8 mm	25 cm/15 cm	30 cm	70 cm	HGK0008RS30
8 mm	20 cm/20 cm	45 cm	85 cm	HGK0008RS45

## Bifurcated



Diameter	Length	Reference	Diameter	Length	Reference
12 mm x 6 mm	50 cm	HGK1206	18 mm x 9 mm	50 cm	HGK1809
12 mm x 7 mm	50 cm	HGK1207	18 mm x 10 mm	50 cm	HGK1810
14 mm x 7 mm	50 cm	HGK1407	20 mm x 10 mm	50 cm	HGK2010
14 mm x 8 mm	50 cm	HGK1408	20 mm x 11 mm	50 cm	HGK2011
16 mm x 8 mm	50 cm	HGK1608	22 mm x 11 mm	50 cm	HGK2211
16 mm x 9 mm	50 cm	HGK1609	24 mm x 12 mm	50 cm	HGK2412

## Axillo-Bifemoral / Axillo-Bifemoral Radially Supported



Diameter	Distal Length body/branch	Supported Length body/branch	Total Length body/branch	Reference
8mm x 8 mm		Not radially supported	100 cm /60cm	HGKAX0808
10mm x 10 mm		Not radially supported	100 cm /60cm	HGKAX1010
8mm x 8 mm	20 cm /35 cm	45 cm /20 cm	85 cm /55cm	HGKAX0808RS45/20
8mm x 8 mm	20 cm /25 cm	45 cm /30 cm	85 cm /55cm	HGKAX0808RS45/30
8mm x 8 mm	20 cm /25 cm	60 cm /30 cm	100 cm /55cm	HGKAX0808RS60/30
10mm x 8mm x 8 mm	25 cm /35 cm	35 cm /20 cm	85 cm /55cm	HGKAX100808RS35/20
8mm x 6mm x 6 mm	25 cm /35 cm	35 cm /20 cm	85 cm /55cm	HGKAX080606RS35/20

# Intergard Knitted Ultrathin

## Knitted Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Ultrathin Straight



Diameter	Length	Reference
6 mm	20 cm	IGKUT0006-20
7 mm	20 cm	IGKUT0007-20
8 mm	20 cm	IGKUT0008-20
6 mm	40 cm	IGKUT0006-40
7 mm	40 cm	IGKUT0007-40
8 mm	40 cm	IGKUT0008-40
6 mm	70 cm	IGKUT0006-70
7 mm	70 cm	IGKUT0007-70
8 mm	70 cm	IGKUT0008-70

### Ultrathin Straight Radially Supported

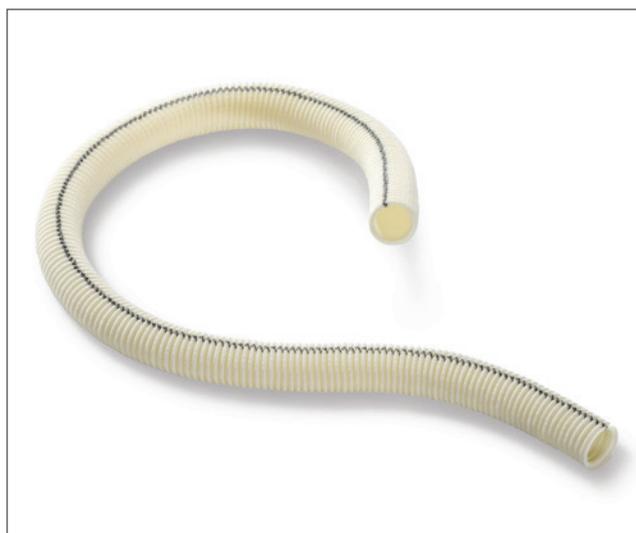


Diameter	Proximal/ Distal Length	Supported Length	Total Length	Reference
8 mm	40 cm /15 cm	15 cm	70 cm	IGKUT0008RS15
6 mm	35 cm /15 cm	20 cm	70 cm	IGKUT0006RS20
7 mm	35 cm /15 cm	20 cm	70 cm	IGKUT0007RS20
8 mm	35 cm /15 cm	20 cm	70 cm	IGKUT0008RS20
6 mm	25 cm /15 cm	30 cm	70 cm	IGKUT0006RS30
7 mm	25 cm /15 cm	30 cm	70 cm	IGKUT0007RS30
8 mm	25 cm /15 cm	30 cm	70 cm	IGKUT0008RS30

\*Intergard Knitted Ultrathin IFU

# Hemagard Knitted Ultrathin

## Knitted Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Ultrathin Straight



Diameter	Length	Reference
6 mm	20 cm	HGKUT0006-20
7 mm	20 cm	HGKUT0007-20
8 mm	20 cm	HGKUT0008-20
6 mm	40 cm	HGKUT0006-40
7 mm	40 cm	HGKUT0007-40
8 mm	40 cm	HGKUT0008-40
6 mm	70 cm	HGKUT0006-70
7 mm	70 cm	HGKUT0007-70
8 mm	70 cm	HGKUT0008-70

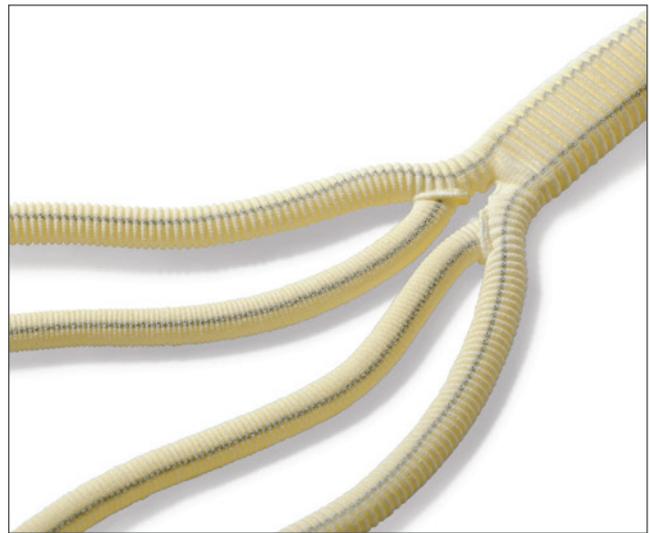
### Ultrathin Straight Radially Supported



Diameter	Proximal/ Distal Length	Supported Length	Total Length	Reference
8 mm	40 cm /15 cm	15 cm	70 cm	HGKUT0008RS15
6 mm	35 cm /15 cm	20 cm	70 cm	HGKUT0006RS20
7 mm	35 cm /15 cm	20 cm	70 cm	HGKUT0007RS20
8 mm	35 cm /15 cm	20 cm	70 cm	HGKUT0008RS20
6 mm	25 cm /15 cm	30 cm	70 cm	HGKUT0006RS30
7 mm	25 cm /15 cm	30 cm	70 cm	HGKUT0007RS30
8 mm	25 cm /15 cm	30 cm	70 cm	HGKUT0008RS30

\*Hemagard Knitted Ultrathin IFU

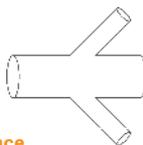
# Intergard Knitted Trifurcated/Quadrifurcated Knitted Vascular Grafts



## Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

## Trifurcated

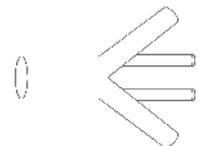


Diameter	Length	Reference
14 mm x 7 mm	20 cm/35 cm	IGKT1407
16 mm x 8 mm	20 cm/35 cm	IGKT1608
18 mm x 9 mm	20 cm/35 cm	IGKT1809
20 mm x 10 mm	20 cm/35 cm	IGKT2010

Diameter	Length	Reference
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	IGKT140707L
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	IGKT140707R
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	IGKT160808L
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	IGKT160808R
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	IGKT180908L
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	IGKT180908R
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	IGKT201009L
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	IGKT201009R

\*Intergard Knitted IFU

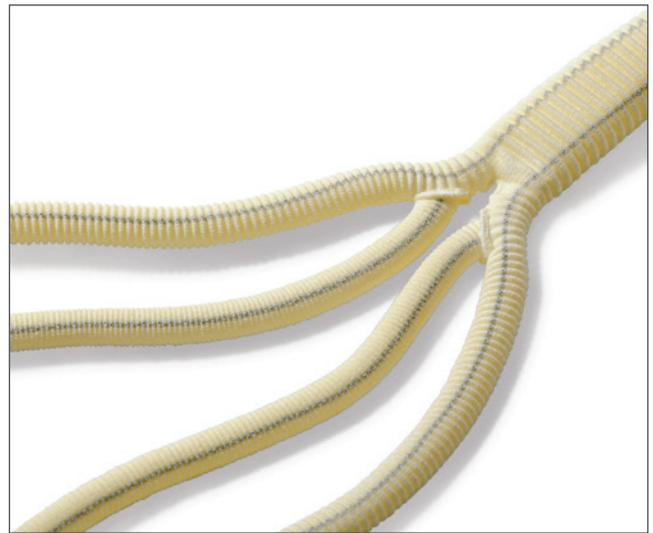
## Quadrifurcated



Main Body Diameter	Length Body/Branches	Reference
14 mm x 7 mm x 6 mm	15 cm/35 cm/34 cm	IGKQ140706/1
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	IGKQ140707/1
16 mm x 8 mm x 6 mm	15 cm/35 cm/34 cm	IGKQ160806/1
16 mm x 8 mm x 7 mm	15 cm/35 cm/34 cm	IGKQ160807/1
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	IGKQ160808/1
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	IGKQ180908/1
20 mm x 10 mm x 8 mm	15 cm/35 cm/34 cm	IGKQ201008/1
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	IGKQ201009/1

# Hemagard Knitted Trifurcated/Quadrifurcated

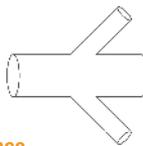
## Knitted Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Trifurcated

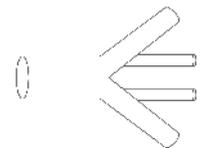


Diameter	Length	Reference
14 mm x 7 mm	20 cm/35 cm	HGKT1407
16 mm x 8 mm	20 cm/35 cm	HGKT1608
18 mm x 9 mm	20 cm/35 cm	HGKT1809
20 mm x 10 mm	20 cm/35 cm	HGKT2010

Diameter	Length	Reference
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	HGKT140707L
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	HGKT140707R
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	HGKT160808L
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	HGKT160808R
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	HGKT180908L
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	HGKT180908R
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	HGKT201009L
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	HGKT201009R

\*Hemagard Knitted IFU

### Quadrifurcated



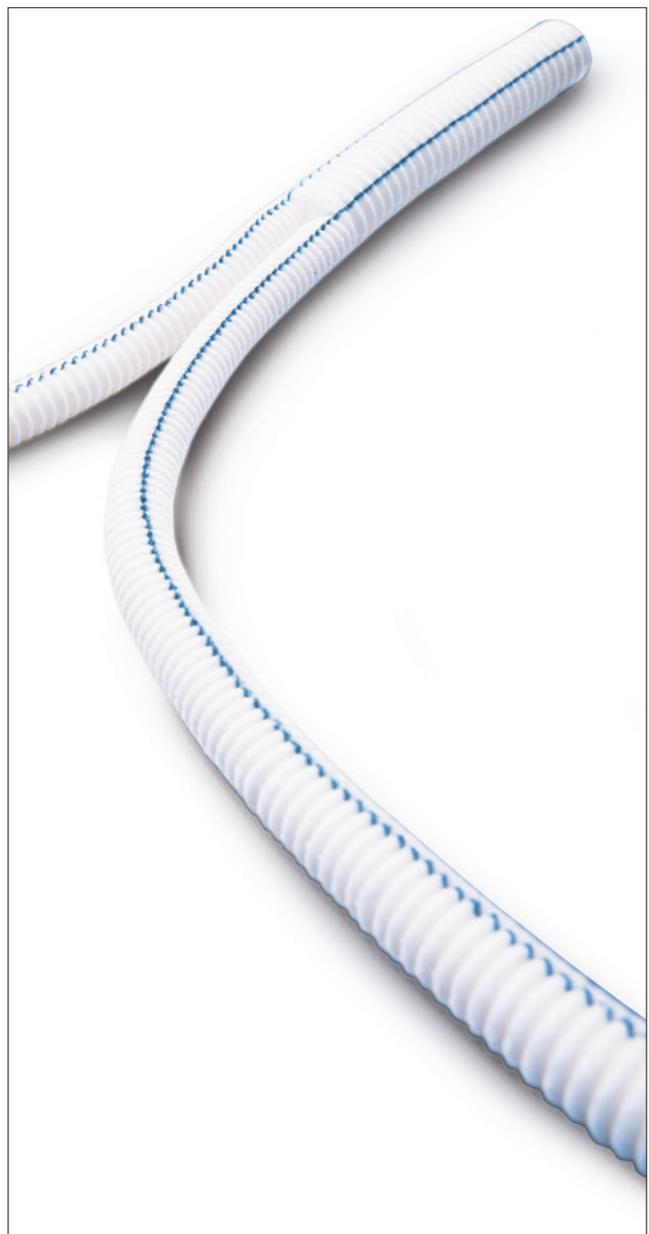
Main Body Diameter	Length Body/Branches	Reference
14 mm x 7 mm x 6 mm	15 cm/35 cm/34 cm	HGKQ140706/1
14 mm x 7 mm x 7 mm	15 cm/35 cm/34 cm	HGKQ140707/1
16 mm x 8 mm x 6 mm	15 cm/35 cm/34 cm	HGKQ160806/1
16 mm x 8 mm x 7 mm	15 cm/35 cm/34 cm	HGKQ160807/1
16 mm x 8 mm x 8 mm	15 cm/35 cm/34 cm	HGKQ160808/1
18 mm x 9 mm x 8 mm	15 cm/35 cm/34 cm	HGKQ180908/1
20 mm x 10 mm x 8 mm	15 cm/35 cm/34 cm	HGKQ201008/1
20 mm x 10 mm x 9 mm	15 cm/35 cm/34 cm	HGKQ201009/1

# Hemashield Gold Knitted Microvel Double Velour

## Knitted Vascular Grafts

### Material\*:

- Collagen impregnated polyester graft
- Reverse lock-knit knitting technique
- Water permeability : < 10ml/cm<sup>2</sup>/min



\*Hemashield Gold Knitted Microvel Double Velour IFU



## Straight

Diameter	Usable Length	Reference
6 mm	15 cm	M002020951060
7 mm	15 cm	M002020951070
8 mm	15 cm	M002020951080
10 mm	15 cm	M002020951100
12 mm	15 cm	M002020951120
14 mm	15 cm	M002020951140
16 mm	15 cm	M002020951160
18 mm	15 cm	M002020951180
20 mm	15 cm	M002020951200
22 mm	15 cm	M002020951220
24 mm	15 cm	M002020951240

6 mm	30 cm	M002020954060
7 mm	30 cm	M002020954070
8 mm	30 cm	M002020954080
10 mm	30 cm	M002020954100
12 mm	30 cm	M002020954120
14 mm	30 cm	M002020952140
16 mm	30 cm	M002020952160
18 mm	30 cm	M002020952180
20 mm	30 cm	M002020952200
22 mm	30 cm	M002020952220
24 mm	30 cm	M002020952240

6 mm	40 cm	M002020953060
7 mm	40 cm	M002020953070
8 mm	40 cm	M002020953080

6 mm	60 cm	M002020952060
7 mm	60 cm	M002020952070
8 mm	60 cm	M002020952080
10 mm	60 cm	M002020952100
12 mm	60 cm	M002020952120

6 mm	100 cm	M002020955060
7 mm	100 cm	M002020955070
8 mm	100 cm	M002020955080
10 mm	100 cm	M002020955100

## Bifurcated

Diameter	Usable Length	Reference
12 mm x 6 mm	40 cm	M002020851260
12 mm x 7 mm	40 cm	M002020851270
14 mm x 7 mm	40 cm	M002020851470
14 mm x 8 mm	40 cm	M002020851480
16 mm x 8 mm	40 cm	M002020851680
16 mm x 9 mm	40 cm	M002020851690
18 mm x 9 mm	40 cm	M002020851890
18 mm x 10 mm	40 cm	M002020851800
20 mm x 10 mm	40 cm	M002020852010
20 mm x 11 mm	40 cm	M002020852110
22 mm x 11 mm	40 cm	M002020852210
24 mm x 12 mm	40 cm	M002020852410

## Axillo-Bifemoral

Diameter	Side Branch	Reference
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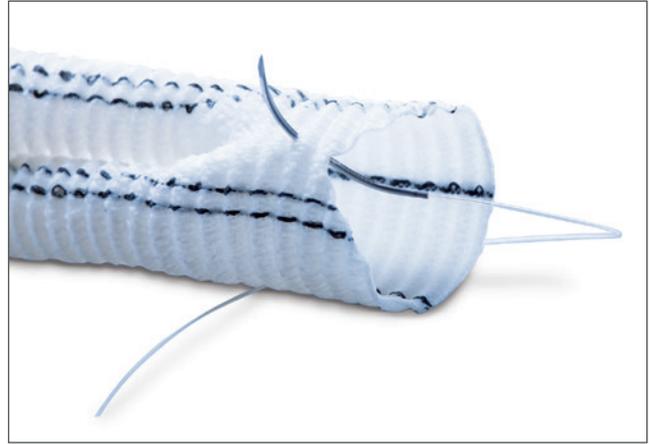
### Over 100 cm usable length with 60 cm Side Branch usable length

8 mm x 8 mm	Right	M002020955880
8 mm x 8 mm	Left	M002020955890
10 mm x 10 mm	Right	M002020955000
10 mm x 10 mm	Left	M002020955010

# Woven Vascular Grafts

# Hemashield Platinum Woven Double Velour

## Woven Vascular Grafts



### Material\*:

- Collagen impregnated polyester graft
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Straight



#### Over 15 cm Usable Length

Diameter	Reference
12 mm	M00202175112P0
14 mm	M00202175114P0
16 mm	M00202175116P0
18 mm	M00202175118P0
20 mm	M00202175120P0
22 mm	M00202175122P0
24 mm	M00202175124P0
26 mm	M00202175126P0
28 mm	M00202175128P0
30 mm	M00202175130P0
32 mm	M00202175132P0
34 mm	M00202175134P0
38 mm	M00202175138P0

#### Over 30 cm Usable Length

Diameter	Reference
6 mm	M00202175206P0
7 mm	M00202175207P0
8 mm	M00202175208P0
10 mm	M00202175210P0
12 mm	M00202175412P0
14 mm	M00202175414P0
16 mm	M00202175416P0
18 mm	M00202175418P0
20 mm	M00202175420P0
22 mm	M00202175422P0
24 mm	M00202175424P0
26 mm	M00202175426P0
28 mm	M00202175428P0
30 mm	M00202175430P0
32 mm	M00202175432P0
34 mm	M00202175434P0
38 mm	M00202175438P0

#### Over 40 cm Usable Length

Diameter	Reference
6 mm	M00202175306P0
7 mm	M00202175307P0
8 mm	M00202175308P0
10 mm	M00202175310P0

#### Over 60 cm Usable Length

Diameter	Reference
6 mm	M00202175406P0
7 mm	M00202175407P0
8 mm	M00202175408P0
10 mm	M00202175410P0
20 mm	M00202175620P0
22 mm	M00202175622P0
24 mm	M00202175624P0
26 mm	M00202175626P0
28 mm	M00202175628P0
30 mm	M00202175630P0
32 mm	M00202175632P0
34 mm	M00202175634P0
38 mm	M00202175638P0

### Bifurcated



#### Over 40 cm Usable Length

Diameter	Reference	Diameter	Reference
12 mm x 6 mm	M00202166126P0	18 mm x 10 mm	M00202166180P0
14 mm x 7 mm	M00202166147P0	20 mm x 10 mm	M00202166201P0
14 mm x 8 mm	M00202166148P0	20 mm x 11 mm	M00202166211P0
16 mm x 8 mm	M00202166168P0	22 mm x 11 mm	M00202166221P0
16 mm x 9 mm	M00202166169P0	24 mm x 12 mm	M00202166241P0
18 mm x 9 mm	M00202166189P0		

\*Hemashield Platinum Woven Double Velour IFU

# Hemashield Platinum

## Woven Double Velour Aortic Branch

### Woven Vascular Grafts

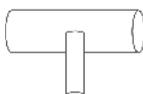


#### Material\*:

- Collagen impregnated polyester graft
- Magnetic Resonance Safe

- Water permeability: < 5ml/cm<sup>2</sup>/min

#### Single Branch Graft



50 cm Usable Length

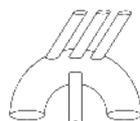
Thoracic Size	Branch Size	Reference
20 mm x 50 cm	10 mm	M00202175820P0
22 mm x 50 cm	10 mm	M00202175822P0
24 mm x 50 cm	10 mm	M00202175824P0
26 mm x 50 cm	10 mm	M00202175826P0
28 mm x 50 cm	10 mm	M00202175828P0
30 mm x 50 cm	10 mm	M00202175830P0
32 mm x 50 cm	10 mm	M00202175832P0
34 mm x 50 cm	10 mm	M00202175834P0

#### 4 Branch Graft

50 cm Usable Length

Thoracic Size	Branch Size	Reference
20 mm x 50 cm	10, 10, 8, 8 mm	M00202175920P0
22 mm x 50 cm	10, 10, 8, 8 mm	M00202175922P0
24 mm x 50 cm	10, 10, 8, 8 mm	M00202175924P0
26 mm x 50 cm	10, 10, 8, 8 mm	M00202175926P0
28 mm x 50 cm	10, 10, 8, 8 mm	M00202175928P0
30 mm x 50 cm	10, 10, 8, 8 mm	M00202175930P0
32 mm x 50 cm	12, 10, 10, 10 mm	M00202175732P0
34 mm x 50 cm	12, 10, 10, 10 mm	M00202175734P0

#### Angled 4 Branch Graft



50 cm Usable Length

Thoracic Size	Branch Size	Reference
24 mm x 50 cm	12, 10, 8, 8 mm	M00202175724AP0
26 mm x 50 cm	12, 10, 8, 8 mm	M00202175726AP0
28 mm x 50 cm	12, 10, 8, 8 mm	M00202175728AP0
30 mm x 50 cm	12, 10, 8, 8 mm	M00202175730AP0

#### Thoraco Abdominal Graft

47 cm Usable Length

Thoracic Size	Branch Size	Reference
20 mm x 47 cm	10, 10, 8, 8 mm	M00202175420T0
22 mm x 47 cm	10, 10, 8, 8 mm	M00202175422T0
24 mm x 47 cm	10, 10, 8, 8 mm	M00202175424T0
26 mm x 47 cm	10, 10, 8, 8 mm	M00202175426T0
28 mm x 47 cm	10, 10, 8, 8 mm	M00202175428T0
30 mm x 47 cm	10, 10, 8, 8 mm	M00202175430T0
32 mm x 47 cm	10, 10, 8, 8 mm	M00202175432T0

#### 3 Branch Graft



30 cm Usable Length

Thoracic Size	Branch Size	Reference
12 mm x 30 cm	8, 8 mm	M00202175912P0
14 mm x 30 cm	10, 10 mm	M00202175914P0

\*Hemashield Platinum Woven Double Velour IFU

# Cardioroot Woven

## Woven Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

Cardioroot Woven delivers another option for the repair or reconstruction of the ascending aorta.

Cardioroot Woven features an uncrimped bulged section with a 1-cm collar at its proximal end.

The design of Cardioroot Woven mimics the anatomy and blood flow dynamics of the natural sinuses of Valvasa<sup>1</sup>.

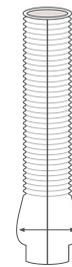
The design incorporates an uncrimped section to facilitate sewing<sup>2</sup>.

### Cardioroot

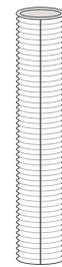
Body Diameter	Body Length	Bulge Diameter	Bulge Length	Collar Length	Reference
24 mm	15 cm	32 mm	24 mm	10 mm	HEWROOT0024
26 mm	15 cm	34 mm	26 mm	10 mm	HEWROOT0026
28 mm	15 cm	36 mm	28 mm	10 mm	HEWROOT0028
30 mm	15 cm	38 mm	30 mm	10 mm	HEWROOT0030
32 mm	15 cm	40 mm	32 mm	10 mm	HEWROOT0032
34 mm	15 cm	42 mm	34 mm	10 mm	HEWROOT0034

\*Cardioroot Woven IFU

1. Tasca, G., et al., Aortic root surgery with the CARDIOROOT vascular graft: results of a prospective multicenter post-market surveillance study. J Cardiothorac Surg, 2019. 14(1): p.94
2. Urbanski, P.P. and S. Frank., New vascular graft for simplification of the aortic valve reimplantation technique. Interact Cardiovasc Thorac Surg, 2008. 7(4): p. 552-4

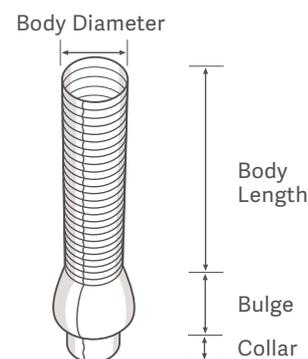


Cardioroot



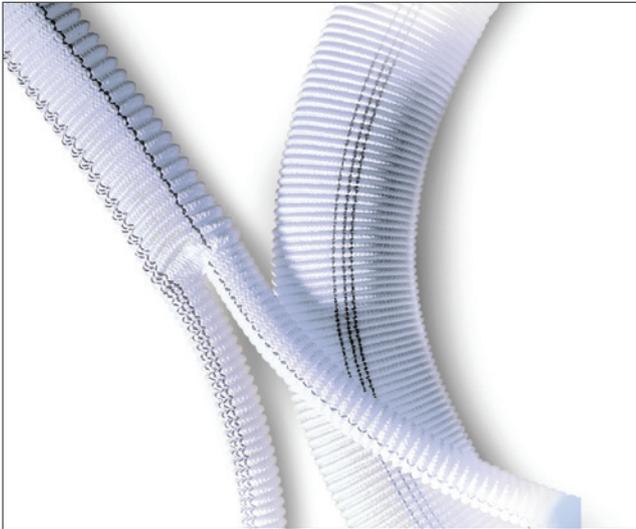
Straight Tube

The proximal collar can be used for prosthetic valve sewing or trimmed/inverted for valve sparing procedures.



# Intergard Woven

## Woven Vascular Grafts



### Material\*:

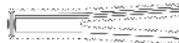
- Collagen-coated polyester graft
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability: < 5ml/cm<sup>2</sup>/min

### Straight



Diameter	Length	Reference	Diameter	Length	Reference	Diameter	Length	Reference
12 mm	15 cm	IGW0012-15	6 mm	30 cm	IGW0006-30	22 mm	60 cm	IGW0022-60
14 mm	15 cm	IGW0014-15	8 mm	30 cm	IGW0008-30	24 mm	60 cm	IGW0024-60
16 mm	15 cm	IGW0016-15	10 mm	30 cm	IGW0010-30	26 mm	60 cm	IGW0026-60
18 mm	15 cm	IGW0018-15	12 mm	30 cm	IGW0012-30	28 mm	60 cm	IGW0028-60
20 mm	15 cm	IGW0020-15	14 mm	30 cm	IGW0014-30	30 mm	60 cm	IGW0030-60
22 mm	15 cm	IGW0022-15	16 mm	30 cm	IGW0016-30	32 mm	60 cm	IGW0032-60
24 mm	15 cm	IGW0024-15	18 mm	30 cm	IGW0018-30			
26 mm	15 cm	IGW0026-15	20 mm	30 cm	IGW0020-30			
28 mm	15 cm	IGW0028-15	22 mm	30 cm	IGW0022-30			
30 mm	15 cm	IGW0030-15	24 mm	30 cm	IGW0024-30			
32 mm	15 cm	IGW0032-15	26 mm	30 cm	IGW0026-30			
34 mm	15 cm	IGW0034-15	28 mm	30 cm	IGW0028-30			
36 mm	15 cm	IGW0036-15	30 mm	30 cm	IGW0030-30			
			32 mm	30 cm	IGW0032-30			
			34 mm	30 cm	IGW0034-30			
			36 mm	30 cm	IGW0036-30			
			38 mm	30 cm	IGW0038-30			

### Bifurcated

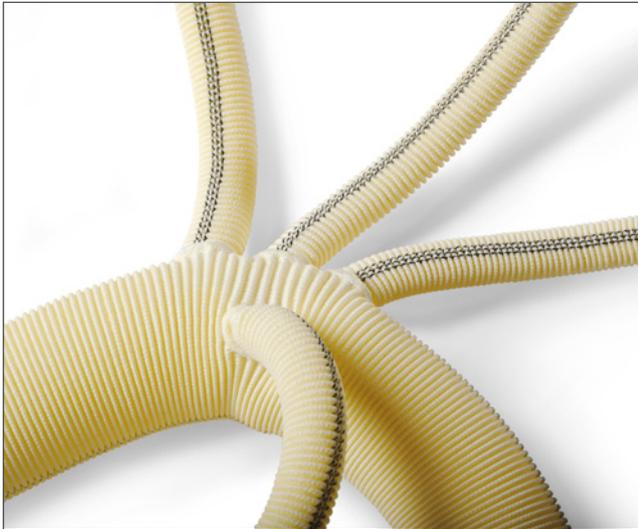


Diameter	Length	Reference
12 x 6 mm	50 cm	IGW1206
14 x 7 mm	50 cm	IGW1407
16 x 8 mm	50 cm	IGW1608
18 x 9 mm	50 cm	IGW1809
20 x 10 mm	50 cm	IGW2010
22 x 11 mm	50 cm	IGW2211
24 x 12 mm	50 cm	IGW2412

\* Intergard Woven IFU

# Intergard Woven Aortic Arch and Hemabridge

## Woven Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

Pre-sewn branches facilitate attachment of aortic arch vessels to graft allow reduced surgery time<sup>1</sup>

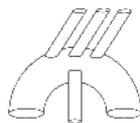
30cm length perfusion branch is designed for easy manipulation about the operative site<sup>2,3,4</sup>

### Material\*:

- Collagen-coated polyester graft
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

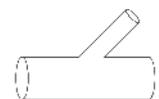
30cm length perfusion branch is designed for easy manipulation about the operative site<sup>2,3,4</sup>

### Aortic Arch



Diameter	Length	Reference
20x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA2010080810/1
22x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA2210080810/1
24x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA2410080810/1
26x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA2610080810/1
28x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA2810080810/1
30x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA3010080810/1
32x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA3210080810/1
34x10x8x8x10 mm	50x30x30x30x30 mm	HEWAA3410080810/1

### Hemabridge



Diameter	Length	Reference
20 mm x 10 mm	35 cm x 40 cm	HEW2010BRIDGE
22 mm x 10 mm	35 cm x 40 cm	HEW2210BRIDGE
24 mm x 10 mm	35 cm x 40 cm	HEW2410BRIDGE
26 mm x 10 mm	35 cm x 40 cm	HEW2610BRIDGE
28 mm x 10 mm	35 cm x 40 cm	HEW2810BRIDGE
30 mm x 10 mm	35 cm x 40 cm	HEW3010BRIDGE
32 mm x 10 mm	35 cm x 40 cm	HEW3210BRIDGE
34 mm x 10 mm	35 cm x 40 cm	HEW3410BRIDGE
36 mm x 10 mm	35 cm x 40 cm	HEW3610BRIDGE

\* Intergard Woven IFU

1. Bednarkiewicz, M., et al., Aortic arch replacement using a four-branched aortic arch graft. Eur J Cardiothorac Surg, 2002, 21(1): p. 89-91
2. Sakamoto, S., et al., Clinical results of aortic arch replacement using a four-branched prosthetic graft. J Cardiovasc Surg (Torino), 2003, 44(6): p. 751-5.
3. Bednarkiewicz, M., et al., Aortic arch replacement using a four-branched aortic arch graft. Eur J Cardiothorac Surg, 2002, 21(1): p. 89-91.
4. Kazui, T., Total arch replacement with separated graft technique and selective antegrade cerebral perfusion. Ann Cardiothorac Surg, 2013, 2(3): p. 353-7.

# Intergard Woven Thoracic Aortic Graft

## Woven Vascular Grafts



### Material\*:

- Collagen-coated polyester graft
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

The design incorporates an uncrimped section to facilitate sewing<sup>1,2,3</sup>

### Thoracic Aortic Graft

Diameter	Length	Reference
24 mm	15 cm	IGW0024-15NGG
26 mm	15 cm	IGW0026-15NGG
28 mm	15 cm	IGW0028-15NGG
30 mm	15 cm	IGW0030-15NGG
32 mm	15 cm	IGW0032-15NGG
34 mm	15 cm	IGW0034-15NGG

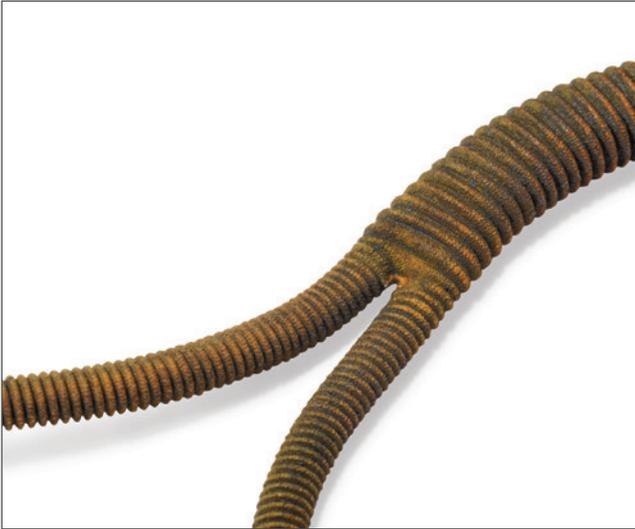
\*Intergard Woven IFU

1. Urbanski, P.P. and S. Frank, New vascular graft for simplification of the aortic valve reimplantation technique. *Interact Cardiovasc Thorac Surg*, 2008. 7(4): p. 552-4.
2. Urbanski, P.P., et al., Reconstructive aortic valve surgery in the elderly: Techniques and outcomes. *J Thorac Cardiovasc Surg*, 2018. 155(4): p. 1414-1420
3. Urbanski, P.P., et al., Aortic root reconstruction using new vascular graft. *Interact Cardiovasc Thorac Surg*, 2009. 8(2): p. 187-90

# Antimicrobial Vascular Grafts

# Intergard Synergy Knitted

## Antimicrobial Vascular Grafts



The grafts combine two antimicrobial agents, which offer a synergistic effect increasing the antimicrobial efficacy as compared to the existing available vascular prostheses on the market as demonstrated *in vitro*.<sup>1,2,3</sup>

Faster antimicrobial efficacy is observed *in vitro* as compared to other antimicrobial vascular grafts.<sup>1,2,3</sup>

### Material\*:

- Collagen-coated vascular graft
- Graft loaded with antimicrobial agents: silver acetate and triclosan
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min

\*Intergard Synergy Knitted IFU

1. Berard, X., et al., In vitro Evidence of Improved Antimicrobial Efficacy of Silver and Triclosan Containing Vascular Grafts Compared with Rifampicin Soaked Grafts. Eur J Vasc Endovasc Surg, 2019. 57(3): p. 424-432.
2. Berard, X., et al., Comparison of the Antimicrobial Properties of Silver Impregnated Vascular Grafts with and without Triclosan. Eur J Vasc Endovasc Surg, 2016. 51(2): p. 285-92.
3. Ricco, J.B., et al., In vitro evaluation of the antimicrobial efficacy of a new silver-triclosan vs a silver collagen-coated polyester vascular graft against methicillin-resistant Staphylococcus aureus. J Vasc Surg, 2012. 55(3): p. 823-9.

# Intergard Synergy Knitted Antimicrobial Vascular Grafts

## Straight



Diameter	Length	Reference
6 mm	20 cm	IGK0006-20SG
8 mm	20 cm	IGK0008-20SG
12 mm	20 cm	IGK0012-20SG
14 mm	20 cm	IGK0014-20SG
16 mm	20 cm	IGK0016-20SG
18 mm	20 cm	IGK0018-20SG
20 mm	20 cm	IGK0020-20SG
22 mm	20 cm	IGK0022-20SG
24 mm	20 cm	IGK0024-20SG

Diameter	Length	Reference
6 mm	40 cm	IGK0006-40SG
7 mm	40 cm	IGK0007-40SG
8 mm	40 cm	IGK0008-40SG
10 mm	40 cm	IGK0010-40SG
12 mm	40 cm	IGK0012-40SG
14 mm	40 cm	IGK0014-40SG
16 mm	40 cm	IGK0016-40SG
18 mm	40 cm	IGK0018-40SG
20 mm	40 cm	IGK0020-40SG
22 mm	40 cm	IGK0022-40SG
24 mm	40 cm	IGK0024-40SG

Diameter	Length	Reference
6 mm	70 cm	IGK0006-70SG
7 mm	70 cm	IGK0007-70SG
8 mm	70 cm	IGK0008-70SG
10 mm	70 cm	IGK0010-70SG

## Straight Radially Supported



Diameter	Proximal Length	Supported Length	Distal Length	Total Length	Reference
6 mm	35 cm	20 cm	15 cm	70 cm	IGK0006RS20SG
6 mm	25 cm	30 cm	15 cm	70 cm	IGK0006RS30SG
6 mm	20 cm	45 cm	20 cm	85 cm	IGK0006RS45SG
8 mm	12.5 cm	15 cm	12.5 cm	40 cm	IGK0008RS15-40SG
8 mm	40 cm	15 cm	15 cm	70 cm	IGK0008RS15SG
8 mm	35 cm	20 cm	15 cm	70 cm	IGK0008RS20SG
8 mm	25 cm	30 cm	15 cm	70 cm	IGK0008RS30SG
8 mm	20 cm	45 cm	20 cm	85 cm	IGK0008RS45SG
8 mm	20 cm	60 cm	20 cm	100 cm	IGK0008RS60SG
10 mm	15 cm	10 cm	15 cm	40 cm	IGK0010RS10-40SG

## Bifurcated



Diameter	Length	Reference
12 mm x 6 mm	50 cm	IGK1206SG
14 mm x 7 mm	50 cm	IGK1407SG
16 mm x 8 mm	50 cm	IGK1608SG
18 mm x 9 mm	50 cm	IGK1809SG
20 mm x 10 mm	50 cm	IGK2010SG
22 mm x 11 mm	50 cm	IGK2211SG
24 mm x 12 mm	50 cm	IGK2412SG

## Axillo-Bifemoral / Axillo-Bifemoral Radially Supported



Diameter Length	Supported Length (body/branch)	Total Length (body/branch)	Reference
8 mm x 8 mm	Not radially supported	100 cm x 60 cm	IGKAX0808SG
8 mm x 8 mm	45 cm x 20 cm	85 cm x 55 cm	IGKAX0808RS45/20SG
8 mm x 8 mm	45 cm x 30 cm	85 cm x 55 cm	IGKAX0808RS45/30SG
8 mm x 8 mm	60 cm x 30 cm	100 cm x 55 cm	IGKAX0808RS60/30SG

## Ultrathin Straight Radially Supported



Diameter	Proximal Length	Supported Length	Distal Length	Total Length	Reference
6 mm	35 cm	20 cm	15 cm	70 cm	IGKUT0006RS20SG
6 mm	25 cm	30 cm	15 cm	70 cm	IGKUT0006RS30SG
7 mm	35 cm	20 cm	15 cm	70 cm	IGKUT0007RS20SG
7 mm	25 cm	30 cm	15 cm	70 cm	IGKUT0007RS30SG
8 mm	15 cm	10 cm	15 cm	40 cm	IGKUT0008RS10-40SG
8 mm	12.5 cm	15 cm	12.5 cm	40 cm	IGKUT0008RS15-40SG
8 mm	40 cm	15 cm	15 cm	70 cm	IGKUT0008RS15SG
8 mm	35 cm	20 cm	15 cm	70 cm	IGKUT0008RS20SG
8 mm	25 cm	30 cm	15 cm	70 cm	IGKUT0008RS30SG

## Ultrathin Straight



Diameter	Length	Reference
6 mm	40 cm	IGKUT0006-40SG
7 mm	40 cm	IGKUT0007-40SG
8 mm	40 cm	IGKUT0008-40SG
6 mm	70 cm	IGKUT0006-70SG
7 mm	70 cm	IGKUT0007-70SG
8 mm	70 cm	IGKUT0008-70SG

# Intergard Silver Knitted / Intergard Silver Woven

## Antimicrobial Vascular Grafts



### Material\*:

- Collagen-coated vascular graft
- Graft loaded with an antimicrobial agent: silver acetate
- Reverse lock-knit knitting technique (only for Knitted graft)
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Intergard Silver Knitted

#### Straight



Diameter	Length	Reference
6 mm	20 cm	IGK0006-20S
8 mm	20 cm	IGK0008-20S
12 mm	20 cm	IGK0012-20S
14 mm	20 cm	IGK0014-20S
16 mm	20 cm	IGK0016-20S
18 mm	20 cm	IGK0018-20S
20 mm	20 cm	IGK0020-20S
22 mm	20 cm	IGK0022-20S
24 mm	20 cm	IGK0024-20S



Diameter	Length	Reference
6 mm	40 cm	IGK0006-40S
7 mm	40 cm	IGK0007-40S
8 mm	40 cm	IGK0008-40S
10 mm	40 cm	IGK0010-40S
12 mm	40 cm	IGK0012-40S
14 mm	40 cm	IGK0014-40S
16 mm	40 cm	IGK0016-40S
18 mm	40 cm	IGK0018-40S
20 mm	40 cm	IGK0020-40S
22 mm	40 cm	IGK0022-40S
24 mm	40 cm	*IGK0024-40S



Diameter	Length	Reference
6 mm	70 cm	IGK0006-70S
7 mm	70 cm	IGK0007-70S
8 mm	70 cm	IGK0008-70S
10 mm	70 cm	IGK0010-70S

#### Bifurcated



Diameter	Length	Reference
12 mm x 6 mm	50 cm	IGK1206S
14 mm x 7 mm	50 cm	IGK1407S
16 mm x 8 mm	50 cm	IGK1608S
18 mm x 9 mm	50 cm	IGK1809S
20 mm x 10 mm	50 cm	IGK2010S
22 mm x 11 mm	50 cm	IGK2211S
24 mm x 12 mm	50 cm	IGK2412S

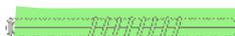
\*Intergard Silver IFU

# Intergard Silver Knitted / Intergard Silver Woven

## Antimicrobial Vascular Grafts

### Intergard Silver Knitted

#### Straight Radially Supported



Diameter	Proximal Length	Supported Length	Distal Length	Total Length	Reference
6mm	35 cm	20 cm	15 cm	70 cm	IGK0006RS20S
6mm	25 cm	30 cm	15 cm	70 cm	IGK0006RS30S
6mm	20 cm	45 cm	20 cm	85 cm	IGK0006RS45S
8mm	12.5 cm	15 cm	12.5 cm	40 cm	IGK0008RS15-40S
8mm	40 cm	15 cm	15 cm	70 cm	IGK0008RS15S
8mm	35 cm	20 cm	15 cm	70 cm	IGK0008RS20S
8mm	25 cm	30 cm	15 cm	70 cm	IGK0008RS30S
8mm	20 cm	45 cm	20 cm	85 cm	IGK0008RS45S
<b>8mm</b>	<b>20 cm</b>	<b>60 cm</b>	<b>20 cm</b>	<b>100 cm</b>	<b>IGK0008RS60S</b>
10 mm	15 cm	10 cm	15 cm	40 cm	IGK0010RS10-40S

#### Axillo-Bifemoral / Axillo-Bifemoral Radially Supported



Diameter Length	Supported Length (body/branch)	Total Length (body/branch)	Reference
8 mm x 8 mm	Not radially supported	100 cm x 60 cm	IGKAX0808S
8 mm x 8 mm	45 cm x 20 cm	85 cm x 55 cm	IGKAX0808RS45/20S
8 mm x 8 mm	45 cm x 30 cm	85 cm x 55 cm	IGKAX0808RS45/30S
8 mm x 8 mm	60 cm x 30 cm	100 cm x 55 cm	IGKAX0808RS60/30S

#### Ultrathin Straight Radially Supported



Diameter	Proximal Length	Supported Length	Distal Length	Total Length	Reference
6mm	35 cm	20 cm	15 cm	70cm	IGKUT0006RS20S
6mm	25 cm	30 cm	15 cm	70cm	IGKUT0006RS30S
7mm	35 cm	20 cm	15 cm	70cm	IGKUT0007RS20S
7mm	25 cm	30 cm	15 cm	70cm	IGKUT0007RS30S
8mm	15 cm	10 cm	15 cm	40cm	IGKUT0008RS10-40S
8mm	12.5 cm	15 cm	12.5 cm	40cm	IGKUT0008RS15-40S
8mm	40 cm	15 cm	15 cm	70cm	IGKUT0008RS15S
8mm	35 cm	20 cm	15 cm	70cm	IGKUT0008RS20S
8mm	25 cm	30 cm	15 cm	70cm	IGKUT0008RS30S

#### Ultrathin Straight



Diameter	Length	Reference
6 mm	40 cm	IGKUT0006-40S
7 mm	40 cm	IGKUT0007-40S
8 mm	40 cm	IGKUT0008-40S
6 mm	70 cm	IGKUT0006-70S
7 mm	70 cm	IGKUT0007-70S
8 mm	70 cm	IGKUT0008-70S

### Intergard Silver Woven

#### Straight



15 cm length

Diameter	Reference
12 mm	IGW0012-15S
14 mm	IGW0014-15S
16 mm	IGW0016-15S
18 mm	IGW0018-15S
20 mm	IGW0020-15S
22 mm	IGW0022-15S
24 mm	IGW0024-15S
26 mm	IGW0026-15S
28 mm	IGW0028-15S
30 mm	IGW0030-15S
32 mm	IGW0032-15S

30 cm length

Diameter	Reference
8 mm	IGW0008-30S
10 mm	IGW0010-30S
12 mm	IGW0012-30S
14 mm	IGW0014-30S
16 mm	IGW0016-30S
18 mm	IGW0018-30S
20 mm	IGW0020-30S
22 mm	IGW0022-30S
24 mm	IGW0024-30S
26 mm	IGW0026-30S
28 mm	IGW0028-30S
30 mm	IGW0030-30S
32 mm	IGW0032-30S

#### Bifurcated



50 cm length

Diameter	Reference
14 mm x 7 mm	IGW1407S
16 mm x 8 mm	IGW1608S
18 mm x 9 mm	IGW1809S
20 mm x 10 mm	IGW2010S
22 mm x 11 mm	IGW2211S
24 mm x 12 mm	IGW2412S

# Heparin Coated Vascular Grafts

# Fusion Bioline

## Heparin Vascular Grafts



### Dual-layer construction: ePTFE and PET layers

Fusion Bioline Vascular Graft is constructed of two layers. The inner layer is comprised of ePTFE. The Bioline heparin coating is bonded to this inner layer with albumin, a natural protein found in human blood. The outer layer is a knit polyester textile. These two layers are fused together with a proprietary polycarbonate-urethane.

### Straight



Diameter	Length	Reference
5 mm	40 cm	M00201501045B0
5 mm	80 cm	M00201501085B0
6 mm	20 cm	M00201501026B0
6 mm	40 cm	M00201501046B0
6 mm	60 cm	M00201501066B0
6 mm	80 cm	M00201501086B0
7 mm	40 cm	M00201501047B0
7 mm	80 cm	M00201501087B0
8 mm	40 cm	M00201501048B0
8 mm	60 cm	M00201501068B0
8 mm	80 cm	M00201501088B0
10 mm	40 cm	M00201501041B0
10 mm	80 cm	M00201501081B0

### Helix Supported

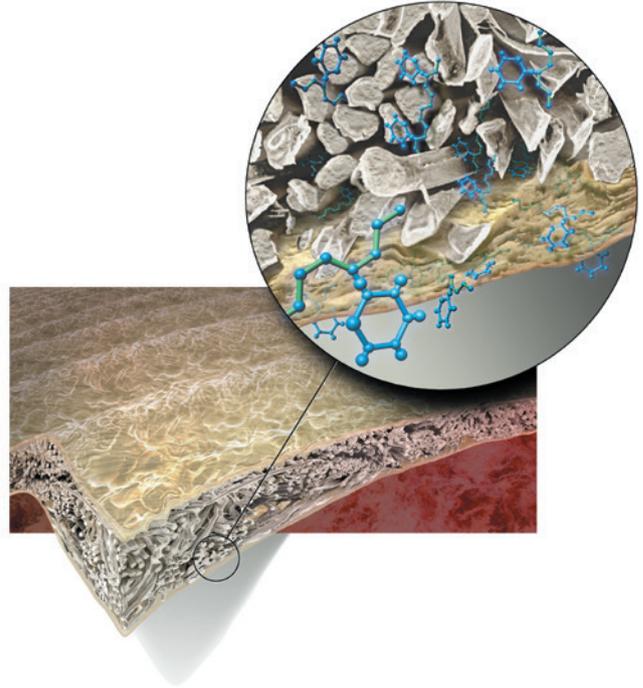
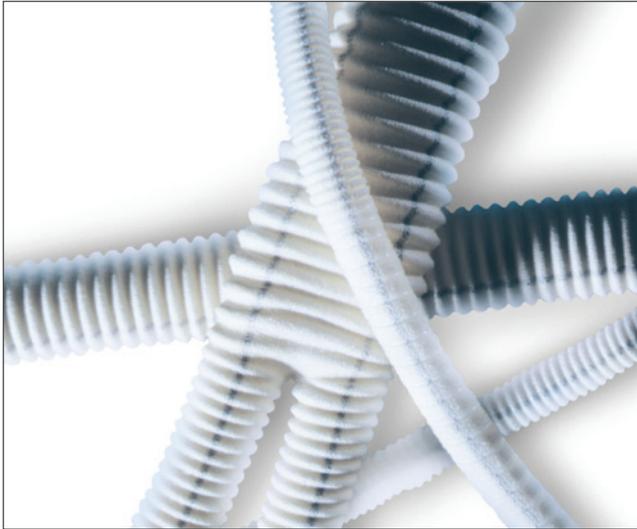


Diameter	Length	Reference
5 mm	40 cm	M00201503045B0
5 mm	80 cm	M00201503085B0
6 mm	40 cm	M00201503046B0
6 mm	60 cm	M00201503066B0
6 mm	80 cm	M00201503086B0
7 mm	40 cm	M00201503047B0
7 mm	80 cm	M00201503087B0
8 mm	40 cm	M00201503048B0
8 mm	60 cm	M00201503068B0
8 mm	80 cm	M00201503088B0
10 mm	40 cm	M00201503041B0
10 mm	80 cm	M00201503081B0

All grafts are fully supported except 3 cm on 1 end.

# Intergard Heparin Knitted

## Heparin Coated Vascular Grafts



### Material\*:

- Collagen-coated vascular graft
- Fabric bonded with heparin, an anti-thrombotic substance
- Reverse lock-knit knitting technique
- External velour surface and non-velour inner surface
- Magnetic Resonance Safe
- Radially Supported grafts have a polypropylene supportive coil
- Water permeability : < 5ml/cm<sup>2</sup>/min

Proprietary heparin-bonding process designed to allow the antithrombotic and antiproliferative properties of biologically active heparin to be available locally at the graft surface.<sup>1</sup>

\*Intergard Heparin Knitted IFU

1. Mohamed, M.S., M. Mukherjee, and V.V. Kakkar, Thrombogenicity of heparin and non-heparin bound arterial prostheses: an in vitro evaluation. J R Coll Surg Edinb, 1998. 43(3): p. 155-7

# Intergard Heparin Knitted

## Heparin Coated Vascular Grafts

### Straight



Diameter	Length	Reference
12 mm	40 cm	IGK0012-40H
14 mm	40 cm	IGK0014-40H
16 mm	40 cm	IGK0016-40H
18 mm	40 cm	IGK0018-40H
20 mm	40 cm	IGK0020-40H
22 mm	40 cm	IGK0022-40H
24 mm	40 cm	IGK0024-40H

Diameter	Length	Reference
6 mm	70 cm	IGK0006-70H
7 mm	70 cm	IGK0007-70H
8 mm	70 cm	IGK0008-70H
10 mm	70 cm	IGK0010-70H

### Straight Radially Supported



Diameter	Proximal / Distal Length	Supported Length	Total Length	Reference
6 mm	35 cm/15 cm	20 cm	70 cm	IGK0006RS20H
8 mm	35 cm/15 cm	20 cm	70 cm	IGK0008RS20H
6 mm	25 cm/15 cm	30 cm	70 cm	IGK0006RS30H
8 mm	25 cm/15 cm	30 cm	70 cm	IGK0008RS30H

### Bifurcated



Diameter	Length	Reference
12 mm x 6 mm	50 cm	IGK1206H
14 mm x 7 mm	50 cm	IGK1407H
16 mm x 8 mm	50 cm	IGK1608H
18 mm x 9 mm	50 cm	IGK1809H
20 mm x 10 mm	50 cm	IGK2010H
22 mm x 11 mm	50 cm	IGK2211H

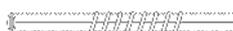
### Ultrathin Straight



Diameter	Length	Reference
6 mm	40 cm	IGKUT0006-40H
7 mm	40 cm	IGKUT0007-40H
8 mm	40 cm	IGKUT0008-40H

Diameter	Length	Reference
6 mm	70 cm	IGKUT0006-70H
7 mm	70 cm	IGKUT0007-70H
8 mm	70 cm	IGKUT0008-70H

### Ultrathin Straight Radially Supported

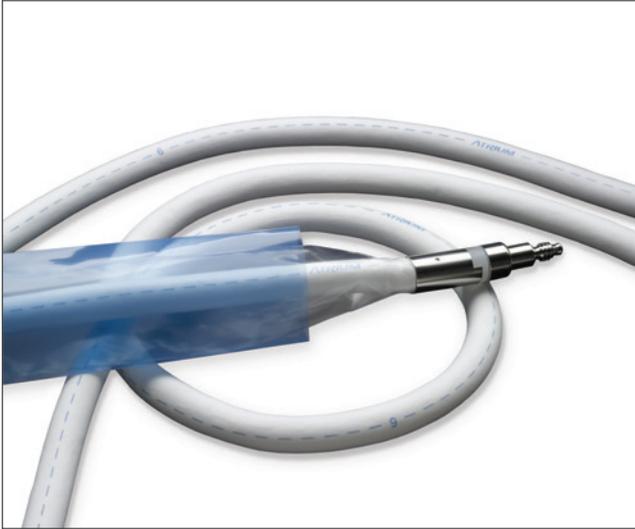


Diameter	Proximal / Distal Length	Supported Length	Total Length	Reference
6 mm	35 cm/15 cm	20 cm	70 cm	IGKUT0006RS20H
7 mm	35 cm/15 cm	20 cm	70 cm	IGKUT0007RS20H
8 mm	35 cm/15 cm	20 cm	70 cm	IGKUT0008RS20H
6 mm	25 cm/15 cm	30 cm	70 cm	IGKUT0006RS30H
7 mm	25 cm/15 cm	30 cm	70 cm	IGKUT0007RS30H
8 mm	25 cm/15 cm	30 cm	70 cm	IGKUT0008RS30H
6 mm	20 cm/20 cm	45 cm	85 cm	IGKUT0006RS45H
8 mm	20 cm/20 cm	45 cm	85 cm	IGKUT0008RS45H

# ePTFE Grafts

# Flixene

## ePTFE Vascular Grafts



### Three-layer Construction

- The Flixene vascular graft has been demonstrated in clinical literature to be a reliable AV access conduit for dialysis care in terms of successful cannulation and patency.

### Published Data

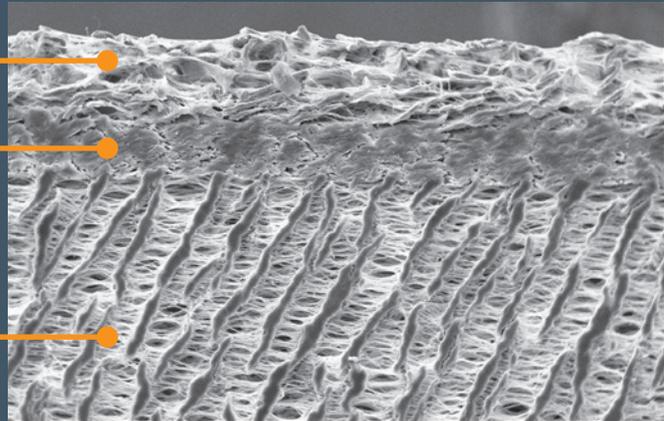
- Published literature has shown that the Flixene graft can be used for early cannulation (24-72 hours)<sup>1, 2, 3</sup>

### 3 Layer ePTFE graft

Large pore (nominal 60 $\mu$ m) surface layer, more receptive to tissue ingrowth\*

Middle layer, reinforcing wrap

Small pore base layer, inner graft surface porosity of nominal 20 $\mu$ m\*



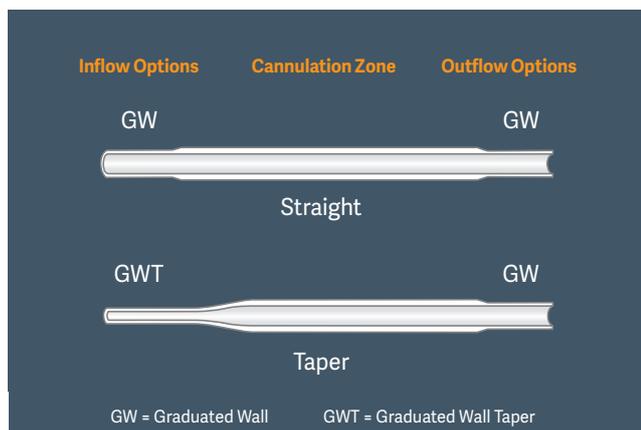
\* Data on file

1. Schild AF, Schuman ES, Noicely K, et al. Early cannulation prosthetic graft (Flixene) for arteriovenous access. *J Vasc Access*. 2011 Jul-Sep;12(3):248-52.
2. Hinojosa CA, Soto-Solis S, Olivares-Cruz S, Laparra-Escareno H, Gomez-Arcive Z, Anaya-Ayala JE. Early cannulation graft Flixene™ for conventional and complex hemodialysis access creation. *J Vasc Access*. 2017 Mar 21;18(2):109-113. doi: 10.5301/jva.5000550. Epub 2017 Feb 6.
3. Berard X, Ottaviani N, Brizzi V, Deglise S, de Precigout V, Ducasse E, Combe C, Midy D. Use of the Flixene vascular access graft as an early cannulation solution. *J Vasc Surg*. 2015 Jul;62(1):128-34. doi: 10.1016/j.jvs.2015.02.002. Epub 2015 Mar 12.

# Flixene

## ePTFE Vascular Grafts

### Flixene Graduated Wall Technology:



### Straight



Diameter	Length	Wall Thickness	Slider GDS	Reference
6 mm	10 cm	SW	No	25053
6 mm	30 cm	GW	Yes, 1	25125
6 mm	30 cm	SW	Yes, 1	25142
6 mm	40 cm	GW	Yes, 1	25061
6 mm	50 cm	SW	Yes, 1	25052
6 mm	50 cm	GW	Yes, 1	25058
7 mm	10 cm	SW	No	25054
7 mm	30 cm	GW	Yes, 1	25126
7 mm	40 cm	GW	Yes, 1	25062
7 mm	50 cm	SW	Yes, 1	25056
7 mm	50 cm	GW	Yes, 1	25059
7 mm	80 cm	GW	Yes, 1	25120
8 mm	50 cm	SW	No	25057

Graduated wall is approximately 8 cm on Flixene straight grafts.

### Tapered



Diameter	Length	Wall Thickness	Slider GDS	Reference
4-6 mm	35 cm	GWT-GW	Yes, 2	25128
4-6 mm	45 cm	GWT	Yes, 2	25134
4-6 mm	45 cm	GWT-GW	Yes, 2	25137
4-7 mm	30 cm	GWT-GW	Yes, 2	25141
4-7 mm	35 cm	GWT-GW	Yes, 2	25129
4-7 mm	45 cm	GWT	Yes, 2	25135
4-7 mm	45 cm	GWT-GW	Yes, 2	25138

Graduated wall is approximately 8 cm on Flixene tapered grafts.

# Advanta VXT

## ePTFE Vascular Grafts



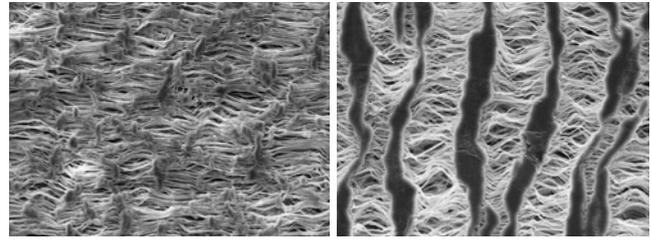
### 2-Layer Reinforced Grafts

Experience Getinge's VXT graft technology in your next surgical graft placement. Designed to withstand the repeated cannulation associated with accessing a graft for hemodialysis.

### Straight



Diameter	Length	Wall Thickness	Helix/Ring Support	Slider GDS	Reference
4 mm	10 cm	SW	No	No	21276
4 mm	50 cm	SW	No	No	21015
4 mm	70 cm	SW	No	No	21024
5 mm	10 cm	SW	No	No	21277
5 mm	40 cm	SW	No	Yes, 1	22011
5 mm	50 cm	SW	No	Yes, 1	22016
5 mm	70 cm	SW	No	Yes, 1	22025
6 mm	10 cm	SW	No	No	21000
6 mm	10 cm	TW	No	No	21154
6 mm	30 cm	SW	No	No	21007
6 mm	40 cm	SW	No	Yes, 1	22012
6 mm	40 cm	TW	No	Yes, 1	22169
6 mm	50 cm	SW	No	Yes, 1	22017
6 mm	50 cm	TW	No	Yes, 1	22175
6 mm	70 cm	SW	No	Yes, 1	22026
6 mm	70 cm	TW	No	Yes, 1	22185
6 mm	80 cm	TW	No	Yes, 1	22190
7 mm	10 cm	SW	No	No	21001
7 mm	50 cm	SW	No	Yes, 1	22018
7 mm	50 cm	TW	No	Yes, 1	22176
7 mm	70 cm	SW	No	Yes, 1	22027
7 mm	70 cm	TW	No	Yes, 1	22186
8 mm	10 cm	SW	No	No	21002
8 mm	40 cm	SW	No	Yes, 1	22014
8 mm	40 cm	TW	No	Yes, 1	22170
8 mm	50 cm	SW	No	Yes, 1	22019
8 mm	70 cm	SW	No	Yes, 1	22028
8 mm	70 cm	TW	No	Yes, 1	22187
8 mm	80 cm	TW	No	Yes, 1	22192
10 mm	50 cm	SW	No	No	21020
10 mm	70 cm	SW	No	No	21029



The large pore (nominal 50-60 μm) surface layer has been shown to promote tissue ingrowth compared with smaller pore surface architecture

VXT has an inner surface porosity of nominal 20 μm

### Externally supported



Diameter	Length	Wall Thickness	Helix/Ring Support	Slider GDS	Reference
5 mm	10 cm	SW	Yes	No	21279
5 mm	40 cm	SW	Yes	Yes, 1	22058
5 mm	50 cm	SW	Yes	Yes, 1	22061
5 mm	80 cm	SW	Yes	No	21074
6 mm	40 cm	SW	Yes	Yes, 1	22059
6 mm	50 cm	SW	Yes	Yes, 1	22062
6 mm	50 cm	TW	Yes	Yes, 1	22212
6 mm	70 cm	SW	Yes	Yes, 1	22070
6 mm	70 cm	TW	Yes	Yes, 1	22220
6 mm	80 cm	SW	Yes	Yes, 1	22075
6 mm	80 cm	TW	Yes	Yes, 1	22225
7 mm	50 cm	SW	Yes	Yes, 1	22063
7 mm	50 cm	TW	Yes	Yes, 1	22213
7 mm	70 cm	SW	Yes	Yes, 1	22071
7 mm	70 cm	TW	Yes	Yes, 1	22221
7 mm	80 cm	SW	Yes	Yes, 1	22076
8 mm	40 cm	TW	Yes	Yes, 1	22209
8 mm	50 cm	SW	Yes	Yes, 1	22064
8 mm	50 cm	TW	Yes	Yes, 1	22214
8 mm	70 cm	SW	Yes	Yes, 1	22072
8 mm	70 cm	TW	Yes	Yes, 1	22222
8 mm	80 cm	TW	Yes	Yes, 1	22227
10 mm	80 cm	SW	Yes	No	21078

### Externally supported - Center Helix \*

Diameter	Length	Wall Thickness	Helix/Ring Support	Slider GDS	Reference
6 mm	45 cm	SW	Yes	Yes, 1	22092

### Tapered



Diameter	Length	Wall Thickness	Helix/Ring Support	Slider GDS	Reference
4-6 mm	45 cm	SW	No	Yes, 1	22114
4-7 mm	45 cm	SW	No	Yes, 1	22115
4-7 mm	70 cm	SW	No	Yes, 1	22117
4-7 mm	45 cm	SW	No	Yes, 2	22297
5-8 mm	45 cm	SW	No	Yes, 1	22116
4-7 mm	80 cm	TW	Yes	Yes, 1	22266
5-8 mm	80 cm	TW	Yes	Yes, 1	22267

### Tapered - Center Helix\*

Diameter	Length	Wall Thickness	Helix/Ring Support	Slider GDS	Reference
4-6 mm	45 cm	SW	Yes	Yes, 1	22124
4-7 mm	45 cm	SW	Yes	Yes, 1	22125

\* Product available in 2022

# Hybrid Vascular Grafts

# Fusion

## Hybrid Vascular Grafts



### Dual-layer construction: ePTFE and PET layers

The Fusion vascular graft is constructed of two layers. The inner layer is comprised of ePTFE. The outer layer is a knit polyester textile. These two layers are fused together with a proprietary polycarbonate-urethane.

### Straight



Diameter	Length	Reference
5 mm	40 cm	M002015010450
5 mm	80 cm	M002015010850
6 mm	20 cm	M002015010260
6 mm	40 cm	M002015010460
6 mm	60 cm	M002015010660
6 mm	80 cm	M002015010860
7 mm	40 cm	M002015010470
7 mm	80 cm	M002015010870
8 mm	40 cm	M002015010480
8 mm	60 cm	M002015010680
8 mm	80 cm	M002015010880
10 mm	40 cm	M002015010410
10 mm	80 cm	M002015010810

### Helix Supported



Diameter	Length	Reference
5 mm	40 cm	M002015030450
5 mm	80 cm	M002015030850
6 mm	40 cm	M002015030460
6 mm	60 cm	M002015030660
6 mm	80 cm	M002015030860
7 mm	40 cm	M002015030470
7 mm	80 cm	M002015030870
8 mm	40 cm	M002015030480
8 mm	60 cm	M002015030680
8 mm	80 cm	M002015030880
10 mm	40 cm	M002015030410
10 mm	80 cm	M002015030810

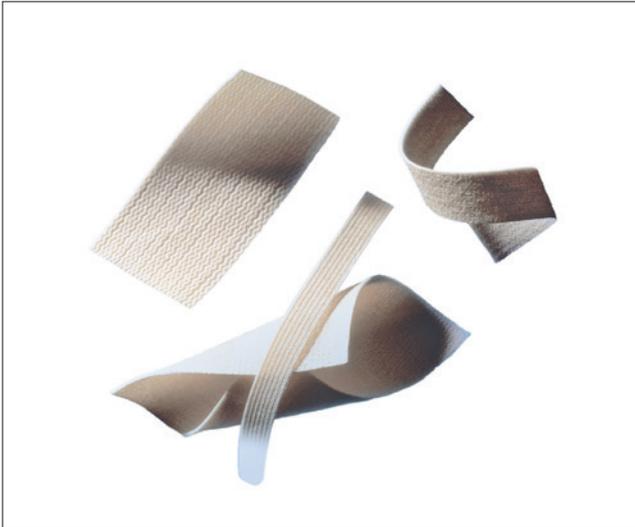
All grafts are fully supported except 3 cm on 1 end.

Hybrid indicates a combination of materials: ePTFE and PET.

# Patches

# Hemapatch Knitted

## Knitted Patches



### Material\*:

- Collagen-coated polyester patch
- Reverse lock-knit knitting technique
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Hemapatch Knitted

Dimensions	Reference
25 mm x 50 mm	HEK25/50P (1)
25 mm x 100 mm	HEK25/100P (1)
50 mm x 50 mm	HEK50/50P (1)
75 mm x 75 mm	HEK75/75P (1)
100 mm x 100 mm	HEK100/100P (1)
10 mm x 140 mm	HEK10/140P (1)
20 mm x 140 mm	HEK20/140P (1)

\*Hemapatch Knitted IFU

# Hemacarotid Patch Knitted

## Knitted Patches



### Material\*:

- Collagen-coated polyester patch
- Reverse lock-knit knitting technique
- Magnetic Resonance Safe
- Water permeability : < 5ml/cm<sup>2</sup>/min

### Hemacarotid Patch Knitted

Dimensions	Reference
6 mm x 75 mm	HEK06/75CP (1)
8 mm x 75 mm	HEK08/75CP (1)
10 mm x 75 mm	HEK10/75CP (1)
12 mm x 75 mm	HEK12/75CP (1)
14 mm x 75 mm	HEK14/75CP (1)

\*Hemacarotid Patch Knitted IFU