

Joline® Spine

Main Catalog

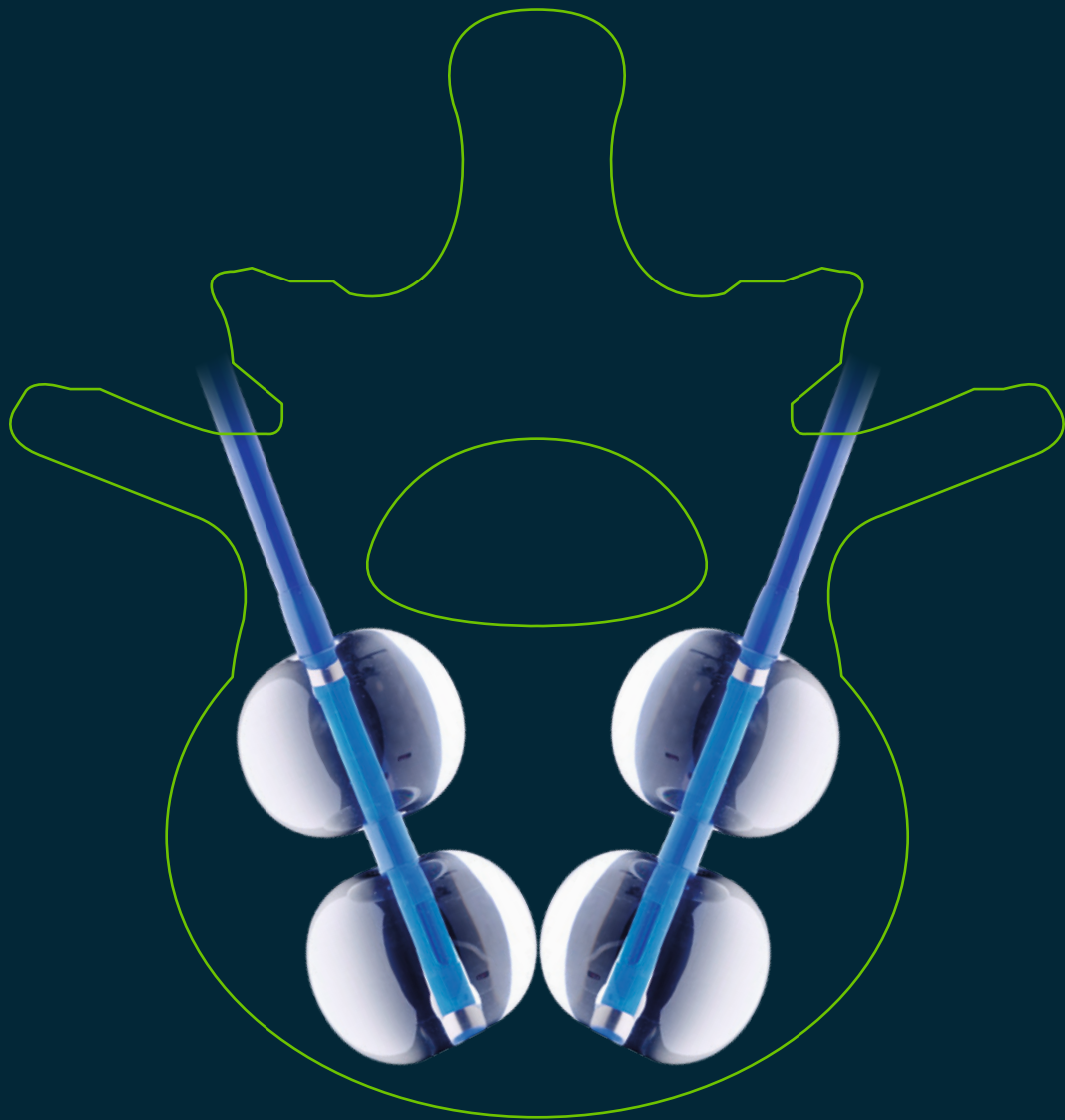


Vertebral Body Reconstruction

Quattroplasty™

Balloon Kyphoplasty

2020



Quattroplasty™

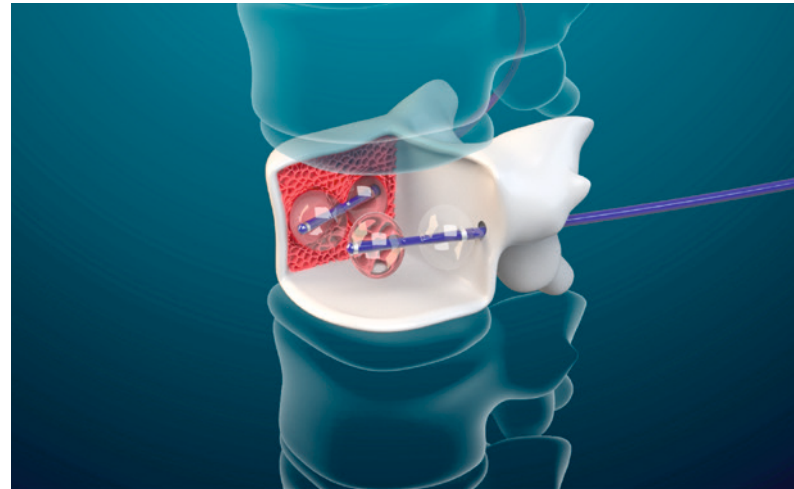
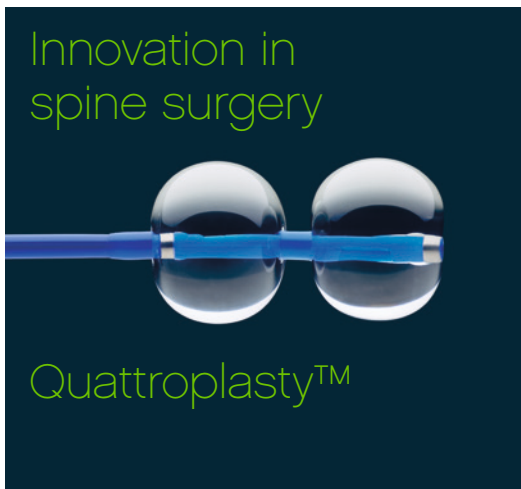
Contents

About Joline	4	5. Kit Variants	22
-----		Quattroplasty™ / Double Balloon Kits	23
Vertebral Body Reconstruction		Stop'n GO Best Kit	23
Balloon Kyphoplasty		Stop'n GO SpeedTrack Short Kit	23
		Stop'n GO One Pedicle Kit	24
		Stop'n GO Mod. One Pedicle Kit	25
1. Bone Access Instruments	6	Kyphoplasty Kits	25
a) Classical Devices	6	Best Kits	25
b) One-step Devices	8	Smart Kits	25
c) Optional Bone Access Instruments	10	SpeedTrack Short Kits	26
		One Pedicle Kits	26
2. Balloon Catheters	12	One Pedicle Kits Flex	27
a) Quattroplasty™ Double Balloon	12	Modular One Pedicle Kits	27
b) Kyphoplasty Single Balloon	14		
c) Catheter Preparation Instruments	15	Accessory Kits	28
		Access Kit	28
3. Cement Application	16	Filler Kit	28
a) Bone Cements	17		
b) Cement Mixing System	18	Recommended Use	29
c) Application Instruments	19		
4. Application Instruments	20		

2020



Company building in Hechingen



We satisfy our customers with our high-quality products, our reliability, and our service.

Joline – a modern medical technology company, rich in tradition

Joline is an international medical technology company headquartered in Hechingen, Southern Germany. Since our foundation in 1999 we have been investing in high-quality products “made in Germany” and in innovative technologies. Joline specializes in minimally invasive treatment solutions, distributing a wide range of Catheters, Balloon Catheters and Stents for different applications worldwide. All Joline products are CE marked and developed and produced exclusively in Germany. Each and every day we place high demands on ourselves and the quality of our products. Satisfying our customers with our high quality products, our reliability and our service, is one of the pillars of our success.

Joline Vertebral Body Reconstruction



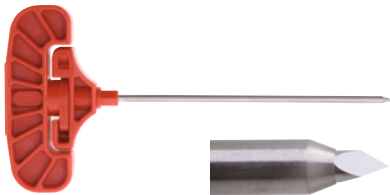
Balloon Kyphoplasty

1. Bone Access Instruments

a. Classical Devices

VERTEBRA ACCESS DEVICE WITH TROCAR TIP ACCESS NEEDLE

S9101

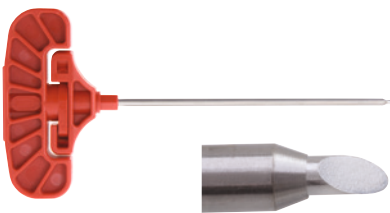


The Jamshidi Needle with Trocar Tip is a bone access instrument. After the Jamshidi Needle has been placed in the vertebral body, the Jamshidi Access Stylet is removed. The guide sleeve remains in situ, and the blunt Guide Pin (K-Wire) is introduced into the vertebral body via the guide sleeve. The guide sleeve is then removed.

In the next step, the Vertebra Introducer Device (working cannula with yellow handle) S9201 is placed over the Guide Pin (K-Wire).

VERTEBRA ACCESS DEVICE WITH BEVEL TIP NEEDLE & STYLET

S9104



This Jamshidi Needle features a beveled tip and can be used as an alternative to the Trocar Tip Jamshidi Needle, depending on the surgeon's preference.

After the Jamshidi Needle has been placed in the vertebral body, the Jamshidi Access Stylet is removed. The guide sleeve remains in situ, and the blunt Guide Pin (K-Wire) is introduced into the vertebral body via the guide sleeve. The guide sleeve is then removed.

In the next step, the Vertebra Introducer Device (working cannula with yellow handle) S9201 is placed over the Guide Pin (K-Wire).

GUIDE PIN, BLUNT, GUIDE WIRE K-WIRE

S9102



The Blunt Guide Pin is introduced into the vertebral body using the Vertebra Access Needle. After the Vertebra Access Needle has been removed, the Guide Pin acts as a guide for the Vertebra Introducer Device (S9201).

VERTEBRA INTRODUCER DEVICE INTRODUCER CANNULA & STYLET

S9201



The Vertebra Introducer Device is inserted into the vertebral body over the Guide Pin (K-Wire) under X-ray control. The Introducer Stylet and the Guide Pin (K-Wire) are then removed. Positioning of the Vertebra Introducer Cannula (Working Cannula with yellow handle) is now complete.

VERTEBRA INTRODUCER WORKING CANNULA

S9202



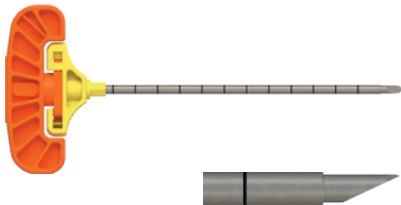
If multiple vertebral bodies are to be treated, additional Working Cannulas (S9202) can be ordered. These are introduced analogously using the freed-up Introducer Stylet (S9201).

2020



1. Bone Access Instruments b. One-Step Devices

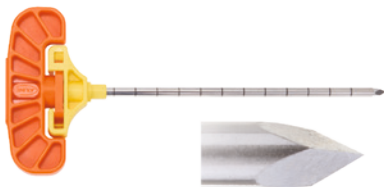
RAPIDINTRO BEVEL TIP INTRODUCER CANNULA & STYLET S9213



Just like the RapidIntro Trocar Tip Introducer, the Stylet of this Introducer has the same size as Working Cannula S9202.

Moreover, this One-Step Access Tool features a beveled tip.

RAPIDINTRO TROCAR TIP INTRODUCER CANNULA & STYLET S9211



We offer three different types of One-Step Access Instruments: The RapidIntro Trocar Tip Instrument, the RapidIntro Bevel Tip Instrument and the SpeedTrack Short Tip Instrument.

RapidIntro: The Stylet of this Introducer has the same size as Working Cannula S9202, thus providing a One-Step version with thicker trocar tip.

SPEEDTRACK SHORT TIP INTRODUCER CANNULA & STYLET S9312



SpeedTrack: This Introducer features a tapered tip corresponding to the diameter of the Jamshidi Needle.

2020

Joline Vertebral Body Reconstruction



Balloon Kyphoplasty

1. Bone Access Instruments c. Optional Access Instruments

INTRODUCER CANNULA PLUG

S9203



The Introducer Cannula Plug is inserted into Working Cannula S9202 to prevent inadvertent blood drainage through the Introducer Cannulas.

This allows for multi-level treatment without the need for instant cement application.

Furthermore, the Introducer Cannula Plug can prevent cement leakage through the working channel.

VERTEBRA BIOPSY DEVICE NEEDLE & PLUNGER

S9301



If a biopsy is required, the Vertebra Biopsy Needle can be used to take a biopsy sample.

Note: The biopsy should always be carried out under radiographic control.

The Vertebra Biopsy Needle can be used in combination with the 20 ml Vacuum Syringe (S9503) to keep bone material in the Vertebra Biopsy Needle during removal.

1. Bone Access Instruments

c. Optional Access Instruments

BONE DRILL

S9302



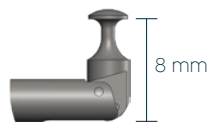
The Bone Drill can be used to create a working channel in the vertebral body. For this purpose, the Bone Drill is advanced into the vertebral body through the Vertebra Introducer Cannula. Under X-ray control, the Bone Drill is rotated into the vertebral body to the desired depth.

ALLEVO CURETTE

S9410



The Joline Allevo Curette with reversible force and torque limiter is used to prepare a channel in hard bone.



2020



2. Kyphoplasty Balloon Catheter

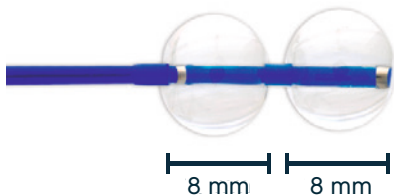
a. Quattroplasty™ - Double Balloon

STOP'N GO DOUBLE BALLOON CATHETER

S9420

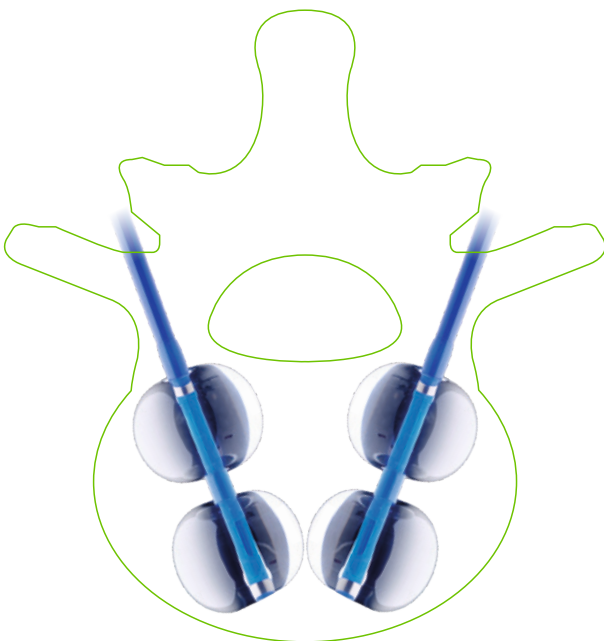
Ø 16 mm, Balloon length = 2 x 8 mm

max. pressure 27 bar (400 psi) / max. vol. 2 x 3 ml



The Stop'n GO Double Balloon (Quattroplasty™) is an advancement of the very successful Single Balloon. The Double Balloon technology provides the surgeon with four instead of two Balloons per vertebra to restore vertebral height of the fractured vertebra. This allows for significantly increased control of the vertebral restoration and for detailed reconstruction of the fractured vertebral body even in its edge regions. Especially in difficult situations, this feature simplifies the procedure and offers additional treatment options.

The Stop'n GO Double Balloon for Quattroplasty™ allows for independent control of four Balloons inserted via a bipedicular approach, thus allowing for precise restoration of the vertebral body even in more complex fractures. The white marking rings on the Catheter shaft indicate the position of the Balloon Catheter in the Vertebra Introducer Cannula and in the vertebral body. The distal ring indicates that the Balloon tip is exiting the Vertebra Introducer Cannula. The middle ring indicates that the distal Balloon is positioned in the vertebral body. When the proximal ring disappears into the Vertebra Introducer Cannula, the proximal Balloon is also positioned in the vertebral body. Our special manufacturing technology prevents the Balloons from expanding beyond their specified length.

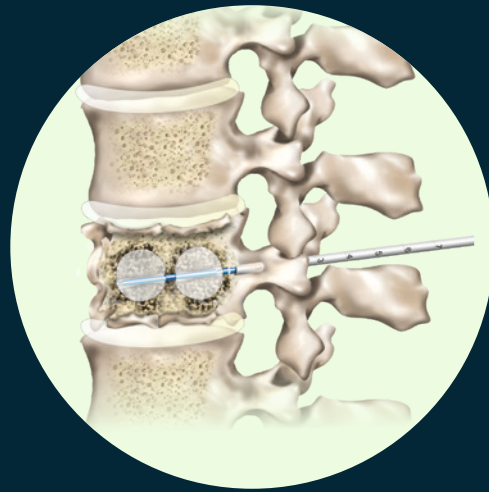
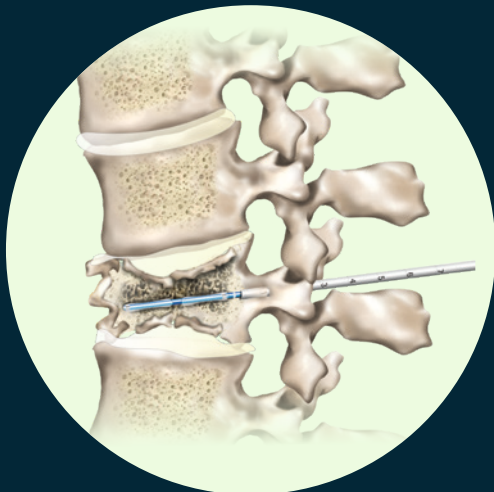


Quattroplasty™ Double Balloon

Joline®

Advantages over Single Balloon

- With the Stop'n GO Double Balloon, the surgeon uses up to four Balloons in one vertebral body.
- The pressure and volume of each single Balloon is adjusted separately.
- The necessary force is directed to the desired point to reconstruct the vertebral body step by step.





2. Kyphoplasty Balloon Catheter

b. Single Balloon

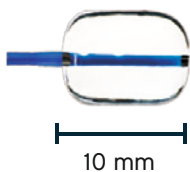
ALLEVO BALLOON CATHETER

KYPHO BALLOON CATHETER 10/16

S9401

Ø 16 mm, Balloon length = 10 mm

max. pressure 27 bar (400 psi) / max. vol. 3 ml

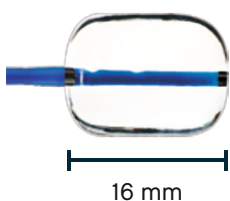


KYPHO BALLOON CATHETER 16/16

S9402

Ø 16 mm, Balloon length = 16 mm

max. pressure 27 bar (400 psi) / max. vol. 4 ml

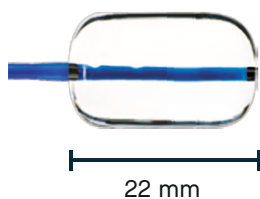


KYPHO BALLOON CATHETER 22/16

S9403

Ø 16 mm, Balloon length = 22 mm

max. pressure 27 bar (400 psi) / max. vol. 6 ml



The high-tech Kypho Balloon Catheters are made in Germany by Joline and feature a Nitinol Wire which allows the Balloon Catheter to bend without the wire becoming permanently kinked.

Our Single Balloon Catheters feature distal and proximal shaft markings. The distal marking on the catheter shaft indicates that the Balloon Catheter has reached the tip of the Vertebra Introducer Cannula.

The proximal marking indicates that the Balloon Catheter has exited the Vertebra Introducer Cannula.

Our special manufacturing technology prevents the Balloons expanding beyond their specified length during inflation.

2. Kyphoplasty Balloon Catheter

c. Catheter Preparation Instruments

INFLATION DEVICE

S9502

max. pressure 30 bar (440 psi)



The Inflation Device is used to inflate the Kyphoplasty catheter balloons in the vertebral body. This enables a targeted cavity to be created for the bone cement.

In its default position (locking lever in the middle), the Inflation Device enables the balloons to be filled precisely by turning the threaded plunger.

As soon as the Inflation Device is unlocked (by moving the locking lever to the left), the plunger can be pushed back by hand. This enables the balloons to be deflated rapidly.

VACUUM SYRINGE 20 ML

S9503



The Vacuum Syringe should be used to remove air from the Single or Double Balloon prior to use. Furthermore it should be used together with Biopsy Needle S9301 for aspiration of bone material from the vertebral body into the biopsy cannula.

BALLOON ADAPTER

S9520



Three-way stopcock with hose connection for controlling the Double Balloon Catheter.

Joline Vertebral Body Reconstruction



Balloon Kyphoplasty

3. Cement Application

a. Bone Cement

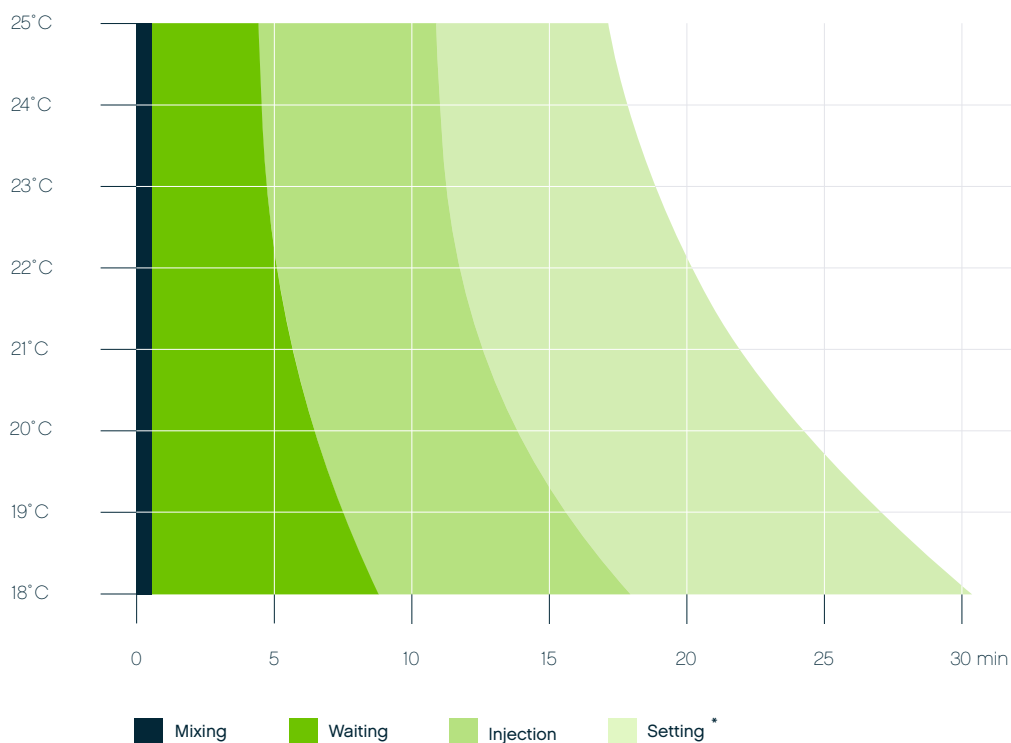
BonOs INJECT BONE CEMENT

S9702



BonOs Inject is a PMMA Bone Cement specifically designed for spine surgery.

BonOs Inject offers optimal features: a short mixing time and a long working time with high initial cohesion to minimize the leakage risk.



* Manufacturer specifications

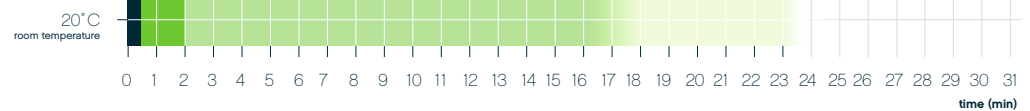
OSTEOPAL V BONE CEMENT

S9704

This PMMA cement is characterized by its shorter preparation time vs. other bone cements on the market.



Working time OSTEOPAL® V
test conditions: 55% humidity



■ Mixing ■ Waiting ■ Application OSTEOPAL® V ■ Setting *

OSTEOPAL PLUS BONE CEMENT

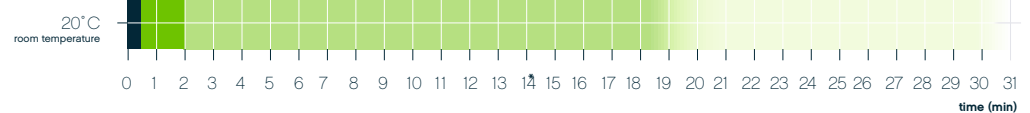
S9705

Osteopal plus with time bonus

- Longer working time
- Based on OSTEOPAL V PMMA cement
- Particularly suitable for multi-level vertebral augmentation
- Optimized viscosity for easy application
- Contains radiopaque zirconium dioxide to enhance controlled cement application



Working time OSTEOPAL® plus
test conditions: 55% humidity



■ Mixing ■ Waiting ■ Application OSTEOPAL® plus ■ Setting *

* Manufacturer specifications

Joline Vertebral Body Reconstruction



Balloon Kyphoplasty

3. Cement Application

b. Cement Mixing System

MIXER

S9610



Optionally, the Mixer (40 ml) is available separately. The Joline Mixer allows for easy and thorough cement mixing with reduced odor and increased application safety. Compared to competitive products, this Mixer is characterized by its small, compact design. The Mixer is extremely robust and its closed system is based on sophisticated technology that allows for odorless and safe cement preparation.

The individual components of the Joline Mixer are:



1x

Mixer



1x

Cover and
single-bore stopcock



1x

Spindle unit
for extruding
the cement



1x

Funnel for
filling the
mixer



1x

Foot

The procedure for using the Mixing System is described in the sheet "Using the Mixing System".

3. Cement Application

c. Application Instruments

VERTEBRA FILLER DEVICE (FRONTAL OPENING)

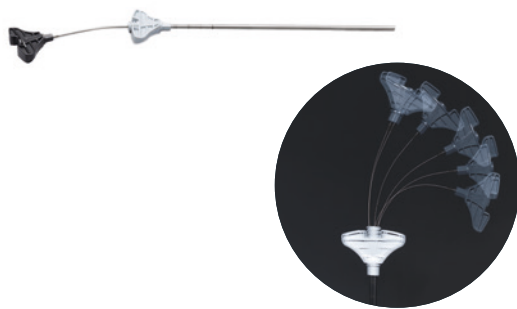
S9601



This Cement Applicator allows for application of up to 1.5 ml cement per cannula into the vertebral body. This offers significant benefits over Cement Syringes, which may, due to differences in pressure, show some residual cement flow.

VERTEBRA FILLER DEVICE FLEX PLUNGER (FRONTAL OPENING)

S9604



The Vertebra Filler Device Flex Plunger features a flexible cement plunger. Flexible for small distances between the patient and the C-arm.

2020

VERTEBRA FILLER DEVICE (SIDE OPENING)

S9602



Unlike the Vertebra Filler Device S9601, this device features a side opening. The marking at the applicator handle indicates the direction of the side opening. This instrument allows for directional cement application.

Joline Vertebral Body Reconstruction



Balloon Kyphoplasty

Application Instruments

	Part	Part number	Diameter	Diameter in millimeters	Diameter in gauge	
Bone Access Instruments Classical Access	Vertebra access device with trocar tip access needle	S9101	External	3	11	
			Internal	1.85	15	
	Vertebra access device with trocar tip stylet	S9101	External	1.8	15	
			Vertebra access device with bevel tip needle	S9104	External	3
	Internal	1.85			15	
	Vertebra access device with bevel tip stylet	S9104	External	1.8	15	
			Guide pin blunt, guide wire	S9102	External	1.6
	Vertebra introducer device introducer cannula	S9201	External	4.1	8	
			Internal	3.6	10	
			Vertebra introducer device stylet	S9201	External	3.5
Internal					1.8	15
Vertebra introducer working cannula	S9202	External	4.1	8		
		Internal	3.6	10		
Bone Access Instruments One-Step Devices	Rapidintro trocar tip introducer cannula	S9211	External	4.1	8	
			Internal	3.6	10	
	Rapidintro trocar tip stylet	S9211	External	3.5	10	
	Rapidintro bevel tip introducer cannula	S9213	External	4.1	8	
			Internal	3.6	10	
	Rapidintro bevel tip stylet	S9213	External	3.5	10	
Speedtrack short tip introducer cannula	S9312	External	4.1	8		
		Internal	3.6	10		
Speedtrack short tip stylet	S9312	External	3.5	10		
Optional Access Instruments	Vertebra biopsy device needle	S9301	External	3.4	10	
			Internal	2.9	12	
	Vertebra biopsy device plunger	S9301	External	2.8	12	
	Bone drill	S9302	External	3.4	10	
Allevo curette	S9410	External	3.5	10		
Application Instruments	Vertebra filler device (frontal opening) filler device nozzle	S9601	External	3.4	10	
			Internal	2.9	12	
	Vertebra filler device (frontal opening) filler device plunger	S9601	External	2.8	12	
			Vertebra filler device (frontal opening) filler device nozzle	S9602	External	3.4
	Internal	2.9			12	
	Vertebra filler device (side opening) filler device plunger	S9602	External	2.8	12	
			Vertebra filler device (frontal opening) flex plunger filler device nozzle	S9604	External	3.4
	Internal	2.9			12	
	Vertebra filler device (frontal opening) filler device flex plunger	S9604	External	2.8	12	

KYPHO-
PLASTY
KITS
2020



It is the composition that makes the difference. Joline offers the right kit for the respective area of application. All kit variants are characterized by their ease of use.

Our Quattroplasty™

Kit variants:

STOP'N GO BEST KIT

Our Comfort Kit featuring the best configuration

With Double Balloon, Flexible Cement Filler, Biopsy Device and Bone Cement

STOP'N GO SPEEDTRACK SHORT KIT

Allows for rapid vertebral access

With Double Balloon, Biopsy Device and Flexible Cement Filler

STOP'N GO ONE PEDICLE KIT

Unipedicular access

With Biopsy Device, Flexible Cement Filler and Bone Cement

STOP'N GO MOD. ONE PEDICLE KIT

Unipedicular access

Without access instruments, w/o Bone Cement

Our Kyphoplasty

Kit variants:

BEST KIT

Our Comfort Kit featuring the best configuration

Two different Balloon sizes available, incl. Biopsy Device, Bone Cement and Flexible Cement Filler

SMART KIT

Our Standard Kit / without Bone Cement

Two different Balloon sizes available, incl. Biopsy Device, Flexible Cement Filler, w/o Bone Cement

SPEEDTRACK SHORT KIT

Allows for rapid vertebral access

Two different Balloon sizes available, incl. Biopsy Device, Flexible Cement Filler, w/o Bone Cement

ONE PEDICLE KIT

Unipedicular access

Two different Balloon sizes available, incl. Biopsy Device and Bone Cement

ONE PEDICLE KIT FLEX

Unipedicular access

Two different Balloon sizes available, incl. Biopsy Device, Bone Cement and Flexible Cement Filler

MODULAR ONE PEDICLE KIT

Unipedicular access

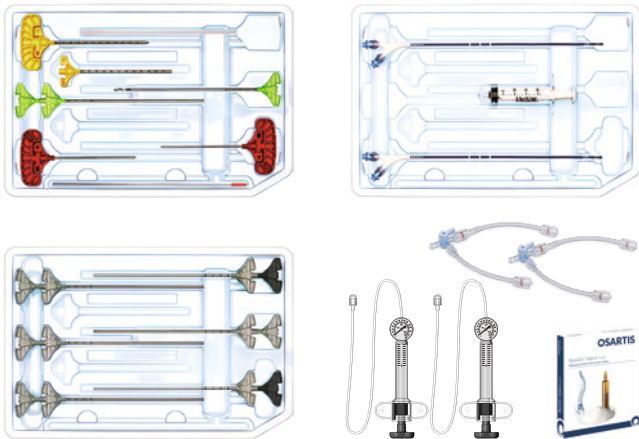
Without access instrument, w/o Bone Cement

STOP'N GO BEST KIT (DOUBLE BALLOON) FOR QUATTROPLASTY™

S1101

Balloons: 2 x Ø 16 mm

Balloon length: 2 x 8 mm



Kit components:

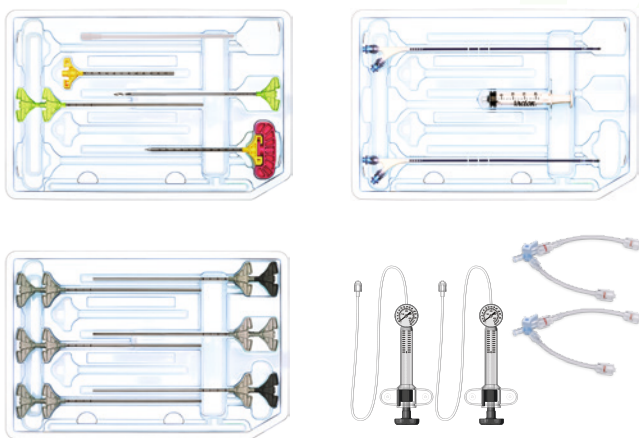
- 2 x Stop'n GO Double Balloon Catheter
- 2 x Vertebra Access Device
- 2 x Guide Pin, blunt
- 2 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 2 x Balloon Adapter
- 1 x Vacuum Syringe
- 2 x Inflation Device
- 4 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)
- 1 x PMMA Bone Cement

STOP'N GO SPEEDTRACK SHORT KIT

S1117

Balloons: 2 x Ø 16 mm

Balloon length: 2 x 8 mm



Kit components:

- 2 x Stop'n GO Double Balloon Catheter
- 1 x SpeedTrack Short Device
- 2 x Cannula Plug
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 2 x Balloon Adapter
- 1 x Vacuum Syringe
- 2 x Inflation Device
- 4 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)

Quattroplasty™ Kits



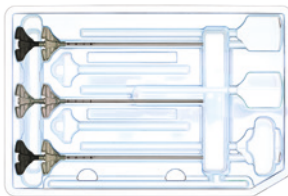
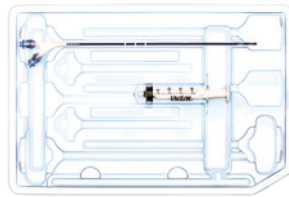
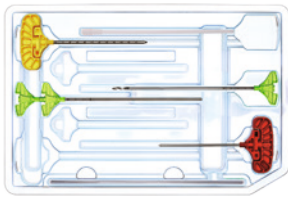
STOP'N GO Double Balloon Kits

STOP'N GO ONE PEDICLE KIT

S5101

Balloons: 2 x Ø 16 mm

Balloon length: 2 x 8 mm



Kit components:

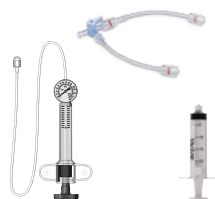
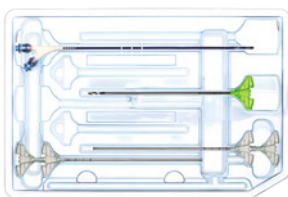
- 1 x Stop'n GO Double Balloon Catheter
- 1 x Vertebra Access Device
- 1 x Guide Pin, blunt
- 1 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 1 x Balloon Adapter
- 1 x Vacuum Syringe
- 1 x Inflation Device
- 1 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)
- 1 x PMMA Bone Cement

STOP'N GO MOD. ONE PEDICLE KIT

S5102

Balloons: 2 x Ø 16 mm

Balloon length: 2 x 8 mm



Kit components:

- 1 x Stop'n GO Double Balloon Catheter
- 1 x Bone Drill
- 1 x Balloon Adapter
- 1 x Vacuum Syringe
- 1 x Inflation Device
- 2 x Vertebra Filler Device (front opening)

Kyphoplasty Kits

Single Balloon Kits

BEST KIT

S1002 / S1003

S1002:

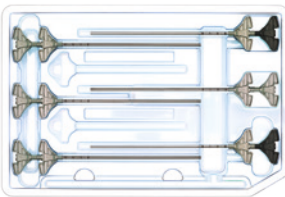
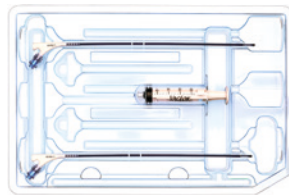
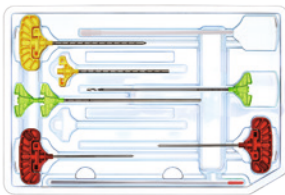
Balloon: Ø 16 mm

Balloon length: 16 mm

S1003:

Balloon: Ø 16 mm

Balloon length: 22 mm



Kit components:

- 2 x Vertebra Access Device
- 2 x Guide Pin, blunt
- 2 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 2 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 2 x Inflation Device
- 4 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)
- 1 x PMMA Bone Cement

SMART KIT

S1005 / S1006

S1005:

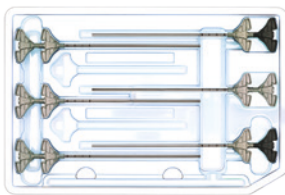
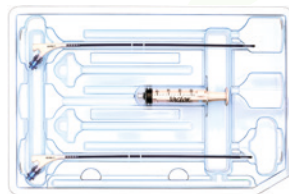
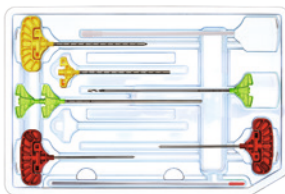
Balloon: Ø 16 mm

Balloon length: 16 mm

S1006:

Balloon: Ø 16 mm

Balloon length: 22 mm



Kit components:

- 2 x Vertebra Access Device
- 2 x Guide Pin, blunt
- 2 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 2 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 2 x Inflation Device
- 4 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)

Kyphoplasty Kits

Single Balloon Kits



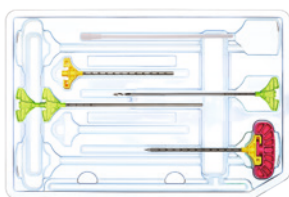
SPEEDTRACK SHORT KIT

S1018 / S1019

S1018:

Balloon: Ø 16 mm

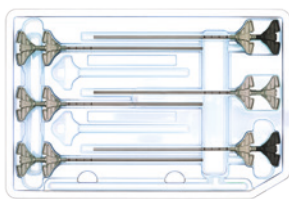
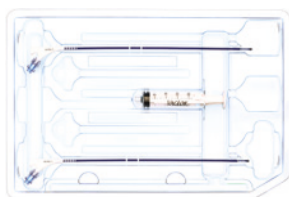
Balloon length: 16 mm



S1019:

Balloon: Ø 16 mm

Balloon length: 22 mm



Kit components:

- 1 x SpeedTrack Short Device
- 2 x Cannula Plug
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 2 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 2 x Inflation Device
- 4 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)

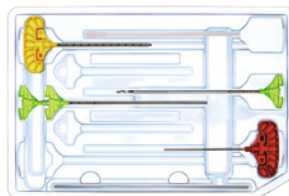
ONE PEDICLE KIT

S5002 / S5003

S5002:

Balloon: Ø 16 mm

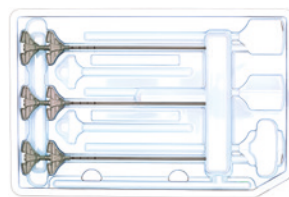
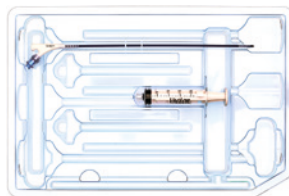
Balloon length: 16 mm



S5003:

Balloon: Ø 16 mm

Balloon length: 22 mm



Kit components:

- 1 x Vertebra Access Device
- 1 x Guide Pin, blunt
- 1 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 1 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 1 x Inflation Device
- 3 x Vertebra Filler Device (frontal opening)
- 1 x PMMA Bone Cement

Kyphoplasty Kits

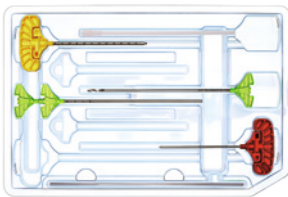
Single Balloon Kits

ONE PEDICLE KIT FLEX

S5005 / S5006

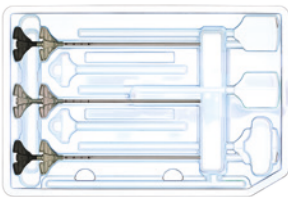
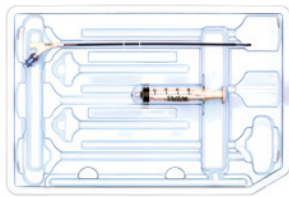
S5005:

Balloons: Ø 16 mm
Balloon length: 16 mm



S5006:

Balloons: Ø 16 mm
Balloon length: 22 mm



Kit components:

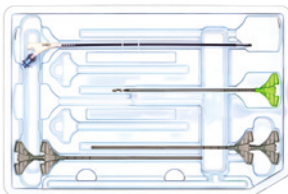
- 1 x Vertebra Access Device
- 1 x Guide Pin, blunt
- 1 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill
- 1 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 1 x Inflation Device
- 1 x Vertebra Filler Device (front opening)
- 2 x Vertebra Filler Device flex Plunger (frontal opening)
- 1 x PMMA Bone Cement

MODULAR ONE PEDICLE KIT

S5008 / S5009

S5008:

Balloon: Ø 16 mm
Balloon length: 16 mm



S5009:

Balloon: Ø 16 mm
Balloon length: 22 mm



Kit components:

- 1 x Bone Drill
- 1 x Single Balloon Catheter
- 1 x Vacuum Syringe
- 1 x Inflation Device
- 2 x Vertebra Filler Device (front opening)

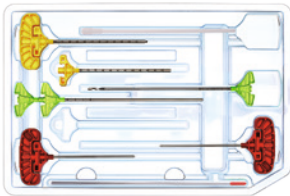
Kyphoplasty Kits

Accessory Kits



ACCESS KIT

S4002

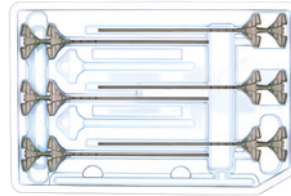


Kit components:

- 2 x Vertebra Access Device
- 2 x Guide Pin, blunt
- 2 x Cannula Plug
- 1 x Vertebra Introducer Device
- 1 x Vertebra Introducer Cannula
- 1 x Vertebra Biopsy Device
- 1 x Bone Drill

FILLER KIT

S4003



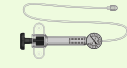

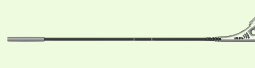

Kit components:

- 6 x Vertebra Filler Device (front opening)

i
Joline®


Preparation manual

Kyphoplasty Single Balloon Catheter



+

+

+


Inflation Device
Vacuum Syringe
Single Balloon Catheter
Contrast Medium

1 Evacuate air from inflation device




2 Prepare contrast medium




in sufficient quantity

3 Fill inflation device with contrast medium



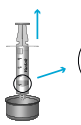
Attention: the scale values might differ if an inflation device other than that provided by Joline is used!

4 Degas inflation device and set to zero



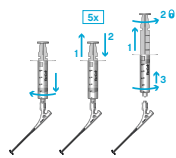
10°

5 Fill syringe with contrast medium



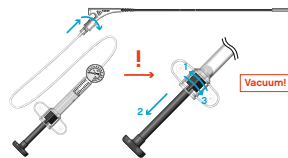
in sufficient quantity

6 Degas catheter and exchange air with contrast medium



5x

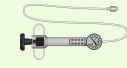



7 Attach inflation device to catheter and evacuate catheter



Vacuum!

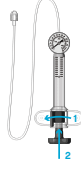
All images are example illustration

Quattroplasty Stop'n GO Double Balloon Catheter



+

+

+


Inflation Device
Vacuum Syringe
Double Balloon Catheter
Contrast Medium

1 Evacuate air from inflation device




2 Prepare contrast medium



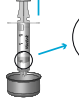
in sufficient quantity

3 Fill inflation device with contrast medium



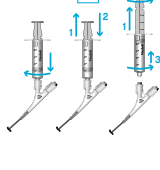
Attention: the scale values might differ if an inflation device other than that provided by Joline is used!

4 Fill syringe with contrast medium




in sufficient quantity

5 Degas catheter and exchange air with contrast medium



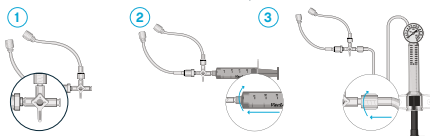
5x

6.1 Fill syringe with contrast medium

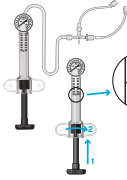


in sufficient quantity

6.2 Degas balloon adapter and exchange air with contrast medium and attach inflation device to the balloon adapter




7 Degas the inflation device and set to zero

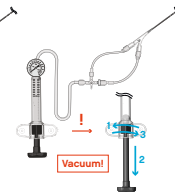


10°

8 Attach inflation device to catheter



9 Evacuate catheter



Vacuum!

CE 0124

JOLINE GmbH & Co. KG 72379 Hechingen / Germany / Tel. +49 (0) 7471 9881-0 www.joline.de Art.Nr. 11573/12/19_RV002

All our Balloons are siliconized in the production facility, which means that each Balloon is treated with medical silicone oil and covered by the white protective cap. The silicone oil facilitates Balloon insertion through the Vertebra Introducer Cannula.

We recommend using the Vacuum Syringe S9503 to create a vacuum, so that the Balloon fits even more snugly to the shaft. This way the Balloons can be introduced easily through the Vertebra Introducer Cannula (Working Cannula with yellow handle).

Joline®

Joline GmbH & Co. KG
Neue Rottenburger Str. 50
72379 Hechingen
Germany

phone: +49 (0) 7471 9881-0
fax: +49 (0) 7471 9881-222
e-mail: info@joline.de
www.joline.de

Quality first: Joline is EN ISO 13485:2016 certified.

All Joline products are CE-marked. Subject to alterations: 53162/01/20_RV002



medical products
developed and produced
exclusively in Germany

CE 0124