



CROWNJUN

Medical Micro Manufacturer

MICROSURGERY SUTURE
MICROSURGERY PRODUCTS
TSUGE LOOPED SUTURE





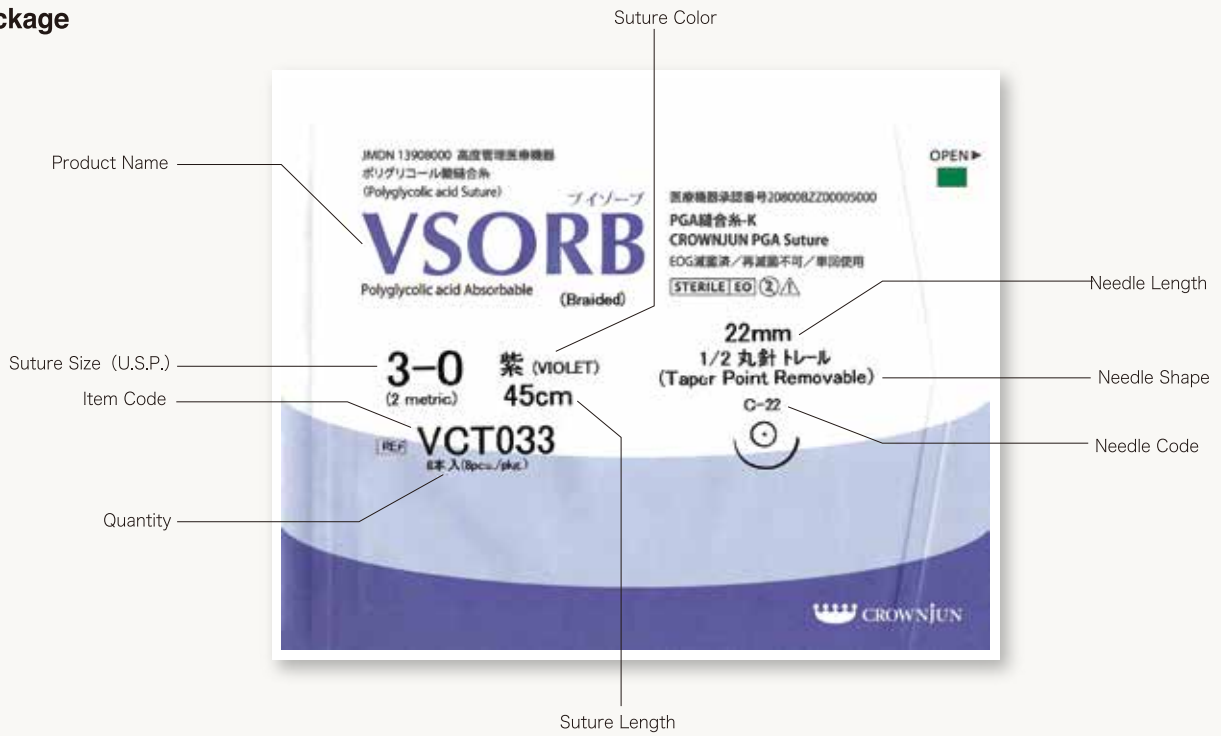
Kono Seisakusho promotes the concept of “medical engineering cooperation”.

We develop products that meet the needs of the medical field by taking advantage of research achievements in the engineering field. Additionally, we listen to surgeons' ideas about new product needs and to their reactions to existing products.

It is Kono Seisakusho's mission to develop medical devices that address even the smallest demands in the furtherance of improving patients' lives.

Create the future by
“medical-engineering cooperation”

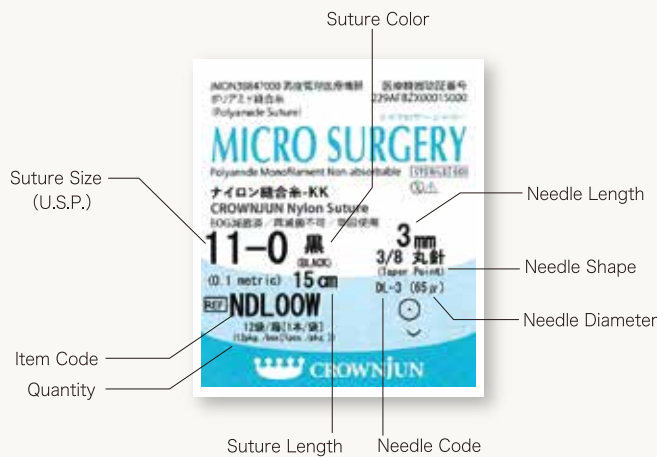
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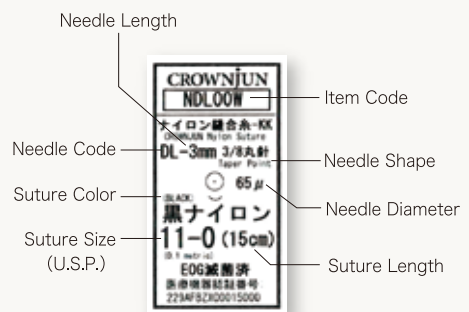
Outer Box Label



Outer Box Label



Package



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NYLON (Polyamide Synthetic Non-absorbable Suture)
ASFLEX (Polyvinylidene-Fluoride Synthetic Non-absorbable Suture)

MICROSURGERY SUTURE



MICROSURGERY SUTURE

The Smallest Suture Needle in the World

At 0.8 mm in length and 30 μm in diameter, our USP 12-0 microsurgery needles with attached micro nylon thread are the smallest suture needles in the world.

Our micromachining technology enables us to manufacture suture needles of a quality high enough for supermicrosurgery. The quality of our micro nylon thread is extremely consistent.

In Japan, our Crownjun micro nylon suture thread is preferred by most surgeons who perform procedures such as lymphaticovenous anastomosis when surgically treating lymphedema.

The high quality of our 11-0, 10-0, and 9-0 suture needles is underpinned by our technical capacity for manufacturing high quality 12-0 suture needles. Furthermore, our suture needles have also long been used for conventional microsurgery.





















In 1965, our suture needles with attached micro nylon thread were used in the world's first successful thumb replantation surgery.

We endeavor to contribute to society through our micromachining technology from the birth of microsurgery to the current age of super microsurgery.










TAPER POINT

NYLON

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.					
					12-0S	12-0	11-0	10-0	9-0	8-0
D 3/8 Circle										
DH-0.8mm 	30 μm	1pc/pkg × 12	Black	8cm (3in)	NDH00Y					
DZ-1.5mm 	40 μm	1pc/pkg × 12	Black	8cm (3in)	NDZ00Y					
DM-2mm 	50 μm	1pc/pkg × 12	Black	8cm (3in)		NDM03X				
DM-2.5mm 	50 μm	1pc/pkg × 12	Black	7cm (3in)		NDM00X-7				
				15cm (6in)		NDM00X				
DM-3mm 	50 μm	1pc/pkg × 12	Black	15cm (6in)		NDM01X				
DL-2.5mm 	65 μm	1pc/pkg × 12	Black	7cm (3in)			NDL01W-7			
DL-3mm 	65 μm	1pc/pkg × 12	Black	5cm (2in)			NDL50W-5			
DL-3mm 	65 μm	1pc/pkg × 12	Black	7cm (3in)			NDL00W-7			
				15cm (6in)			NDL00W			
DU-2.5mm 	80 μm	1pc/pkg × 12	Black	8cm (3in)			NDU03W			
DU-3mm 	80 μm	1pc/pkg × 12	Black	5cm (2in)			NDU50W-5			
DU-3mm 	80 μm	1pc/pkg × 12	Black	6cm (2in)				NDU00V-6		
				15cm (6in)			NDU00W	NDU00V		
DU-3mm 	80 μm	1pc/pkg × 12	Black	25cm (10in)			NDU50W	NDU50V		
DU-4mm 	80 μm	1pc/pkg × 12	Black	15cm (6in)			NDU01W	NDU01V		
DU-4mm 	80 μm	1pc/pkg × 12	Black	25cm (10in)				NDU51V		
DW-4mm 	100 μm	1pc/pkg × 12	Black	7cm (3in)				NDW51V-7		
DW-4mm 	100 μm	1pc/pkg × 12	Black	15cm (6in)				NDW01V	NDW019	
DY-3mm 	120 μm	1pc/pkg × 12	Black	15cm (6in)				NDY00V	NDY009	
DY-4mm 	120 μm	1pc/pkg × 12	Black	8cm (3in)					NDY019-8	
				15cm (6in)				NDY01V	NDY019	
				25cm (10in)				NDY01V-25	NDY019-25	
DO-4mm 	150 μm	1pc/pkg × 12	Black	8cm (3in)						NDO008-8
				15cm (6in)					NDO009	NDO008
				25cm (10in)					NDO00V-25	NDO009-25
DO-4mm 	150 μm	1pc/pkg × 12	Black	45cm (18in)						NDO508



■ TAPER POINT

NYLON

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.					
					12-0	11-0	10-0	9-0	8-0	
C 1/2 Circle										
CM-3mm 	50 μm	1pc/pkg × 12	Black	15cm (6in)	NCM00X					
CU-3mm 	80 μm	1pc/pkg × 12	Black	15cm (6in)		NCU00W				
CU-4mm 	80 μm	1pc/pkg × 12	Black	15cm (6in)			NCU01V			
CY-3mm 	120 μm	1pc/pkg × 12	Black	15cm (6in)				NCY009		
CY-4mm 	120 μm	1pc/pkg × 12	Black	15cm (6in)		NCY01W	NCY01V			
 CY-4mm Double arm	120 μm	1pc/pkg × 12	Black	25cm (10in)			NCY51V			
CO-4mm 	150 μm	1pc/pkg × 12	Black	15cm (6in)				NCO009		
				25cm (10in)					NCO009-25	

■ TAPER POINT

NYLON

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.					
					12-0	11-0	10-0	9-0	8-0	
F Straight										
FZ-4mm 	40 μm	1pc/pkg × 12	Black	15cm (6in)	NFZ00X					
FK-4mm 	60 μm	1pc/pkg × 12	Black	15cm (6in)		NFK00W				

SHARP EDGE



NYLON

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.				
					12-0	11-0	10-0	9-0	8-0
S 3/8 Circle									
SU-4mm	80 μm	1pc/pkg × 12	Black	15cm (6in)			NSU00V		
SY-4mm	120 μm	1pc/pkg × 12	Black	15cm (6in)			NSY00V	NSY009	NSY008
SY-5mm	120 μm	1pc/pkg × 12	Black	25cm (10in)				NSY019-25	
SO-5mm	150 μm	1pc/pkg × 12	Black	15cm (6in)					NSO018

TAPER POINT




Hepatic Artery

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.				
					12-0	11-0	10-0	9-0	8-0
D 3/8 Circle									
DW-5mm Double arm	100 μm	5pcs/pkg × 12	Black	4cm (2in)			NDWKAV		
DY-4mm Double arm	120 μm	5pcs/pkg × 12	Black	4cm (2in)				NDY529S5	
DY-5mm Double arm	120 μm	5pcs/pkg × 12	Black	4cm (2in)				NDYKA9	
DO-5mm Double arm	150 μm	5pcs/pkg × 12	Black	4cm (2in)					NDOKA8

TAPER POINT

ASFLEX

MICROSURGERY SUTURE

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.				
					12-0	11-0	10-0	9-0	8-0
D 3/8 Circle									
DU-3mm 	80 μm	1pc/pkg × 12	Blue	15cm (6in)			ADU00V		
DU-4mm 	80 μm	1pc/pkg × 12	Blue	15cm (6in)			ADU01V		
DW-4mm 	100 μm	1pc/pkg × 12	Blue	15cm (6in)			ADW00V	ADW009	
DY-3mm 	120 μm	1pc/pkg × 12	Blue	15cm (6in)			ADY05V	ADY029	
DY-4mm 	120 μm	1pc/pkg × 12	Blue	15cm (6in)			ADY02V	ADY019	
				25cm (10in)			ADY00V	ADY009	
DO-4mm 	150 μm	1pc/pkg × 12	Blue	15cm (6in)			ADO02V	ADO039	ADO018
				25cm (10in)			ADO01V	ADO029	ADO008
C 1/2 Circle									
CU-3mm 	80 μm	1pc/pkg × 12	Blue	15cm (6in)			ACU02V		
CU-4mm 	80 μm	1pc/pkg × 12	Blue	15cm (6in)			ACU00V		
CY-3mm 	120 μm	1pc/pkg × 12	Blue	15cm (6in)			ACY01V	ACY019	
CY-4mm 	120 μm	1pc/pkg × 12	Blue	15cm (6in)			ACY00V	ACY009	
				25cm (10in)			ACY02V		
CO-4mm 	150 μm	1pc/pkg × 12	Blue	15cm (6in)			ACO01V	ACO019	
				25cm (10in)			ACO00V	ACO009	ACO008

TAPER POINT

Non-sterile Microsurgery Training Suture **NYLON**

Needle Size	Needle Diameter	Quantity	Color	Suture Length	U.S.P.				
					12-0	11-0	10-0	9-0	8-0
D 3/8 Circle									
DM-2mm	50 μm	6pcs/case	Black	8cm (3in)	NTDM03XS6				
DM-2.5mm	50 μm	6pcs/case	Black	15cm (6in)	NTDM00XS6				
DM-3mm	50 μm	6pcs/case	Black	15cm (6in)	NTDM01XS6				
DL-3mm	65 μm	6pcs/case	Black	15cm (6in)		NTDL00WS6			
DU-3mm	80 μm	10pcs/case	Black	15cm (6in)		NTDU00W	NTDU00V		
DU-4mm	80 μm	10pcs/case	Black	15cm (6in)			NTDU01V		
DY-3mm	120 μm	10pcs/case	Black	15cm (6in)			NTDY00V	NTDY009	
DY-4mm	120 μm	10pcs/case	Black	15cm (6in)			NTDY01V	NTDY019	
DO-4mm	150 μm	10pcs/case	Black	15cm (6in)			NTDO00V	NTDO009	NTDO008
C 1/2 Circle									
CU-4mm	80 μm	10pcs/case	Black	15cm (6in)		NTCU01W	NTCU01V		
CY-3mm	120 μm	10pcs/case	Black	15cm (6in)			NTCY00V		
CY-4mm	120 μm	10pcs/case	Black	15cm (6in)			NTCY01V	NTCY019	
CO-4mm	150 μm	10pcs/case	Black	15cm (6in)			NTCO01V	NTCO009	NTCO008



MICROSURGERY PRODUCTS

0JK01 Needle Holder with Stopper (Curved Tip)

Material : Stainless
Length : 13cm (5in)
Tip Shape : Curved
Stopper : ○



0JK02 Needle Holder without Stopper (Straight Tip)

Material : Stainless
Length : 13cm (5in)
Tip Shape : Straight
Stopper : ×



0JK03 Needle Holder without Stopper (Curved Tip)

Material : Stainless
Length : 13cm (5in)
Tip Shape : Curved
Stopper : ×



0SS03 Forceps No.3

Material : Stainless
Length : 12cm (5in)



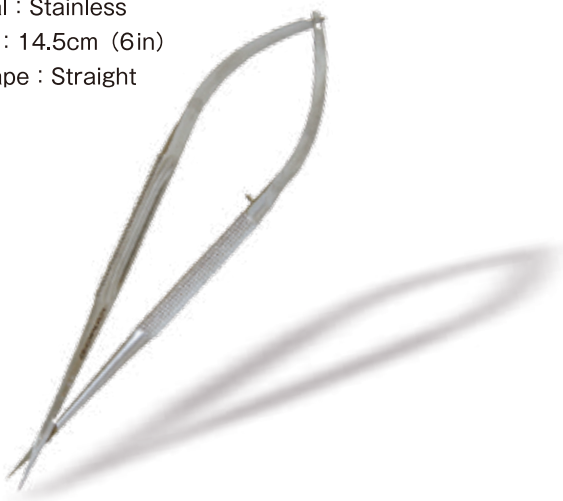
0SS05 Forceps No.5

Material : Stainless
Length : 11cm (4in)



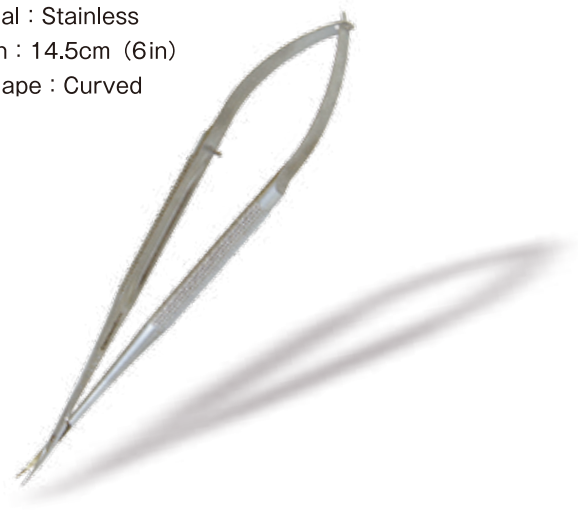
0MS01 Scissors (Straight Tip)

Material : Stainless
Length : 14.5cm (6in)
Tip Shape : Straight



0MS02 Scissors (Curved Tip)

Material : Stainless
Length : 14.5cm (6in)
Tip Shape : Curved



0CK01 Forceps for Single Clamp

Material : Stainless
Length : 14.5cm
(6in)



0CK02 Forceps for Double Clamp

Material : Stainless
Length : 14cm
(6in)



※Non-sterile product

VASCULAR CLAMP

For Microsurgery

□ Vascular Double Clamp

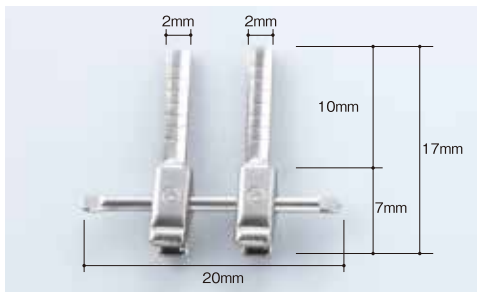
It is used mainly for vessels for a diameter of 0.5 - 1 mm. Pressurization is retained for more than 60 minutes, and it causes no damage to the vessel. As described below, 3 sizes are available. The product is made of titanium.

Supervised by Susumu Tamai, M.D., Department of Orthopedic Surgery, Nara Medical University

□ Vascular Double Clamp

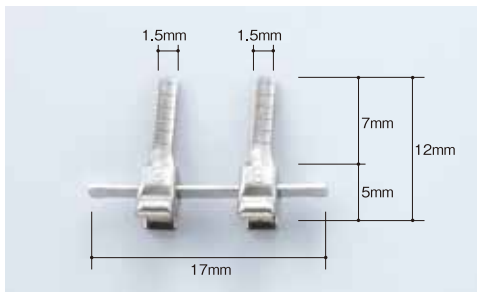
3DC01

(Large)
Weight
600mg
(Holding
Pressure)
90gf



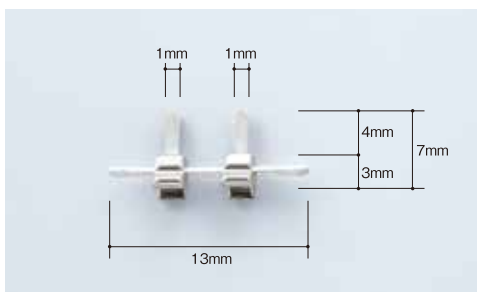
2DC01

(Medium)
Weight
270mg
(Holding
Pressure)
60gf



1DC01

(Small)
Weight
100mg
(Holding
Pressure)
40gf



□ Vascular Single Clamp

3SC01

(Large)
Weight
250mg
(Holding
Pressure)
90gf



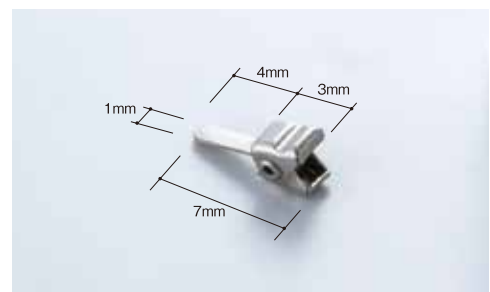
2SC01

(Medium)
Weight
120mg
(Holding
Pressure)
60gf



1SC01

(Small)
Weight
40mg
(Holding
Pressure)
40gf



※Holding pressure is average amount

Product	Size		
	Small	Medium	Large
Single Clamp	1SC01	2SC01	3SC01
Double Clamp	1DC01	2DC01	3DC01

NEUROSURGERY CLAMP

For Neurosurgery

□ STA - MCA Bypass Cortical Branch Clamp

Appropriate pressure minimizes damage on endosporium, endothelium, and cells and prevents blood leakage during suturing.

Constant spring pressure without exhaustion even when used frequently.

3 sizes are available for various conditions.

□ Neurosurgery Single Clamp

3SC02

(Large)
Weight
200mg
(Holding Pressure)
30gf



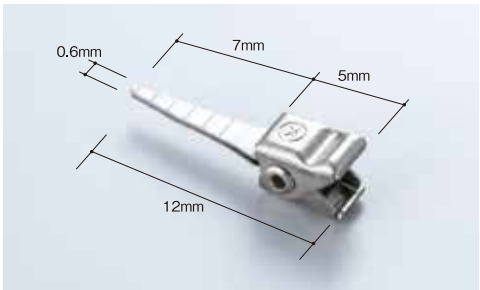
3SC03

(Large)
Weight
250mg
(Holding Pressure)
30gf



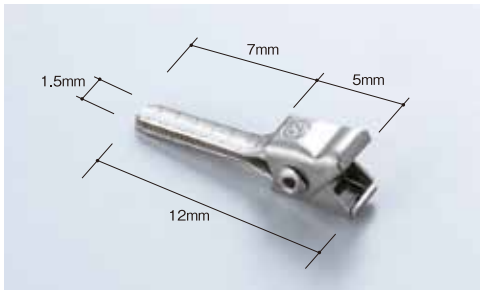
2SC02

(Medium)
Weight
100mg
(Holding Pressure)
25gf



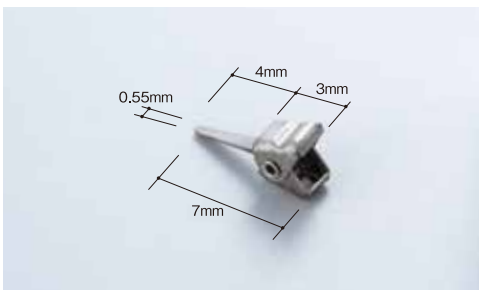
2SC03

(Medium)
Weight
120mg
(Holding Pressure)
25gf



1SC02

(Small)
Weight
35mg
(Holding Pressure)
20gf



1SC03

(Small)
Weight
40mg
(Holding Pressure)
20gf



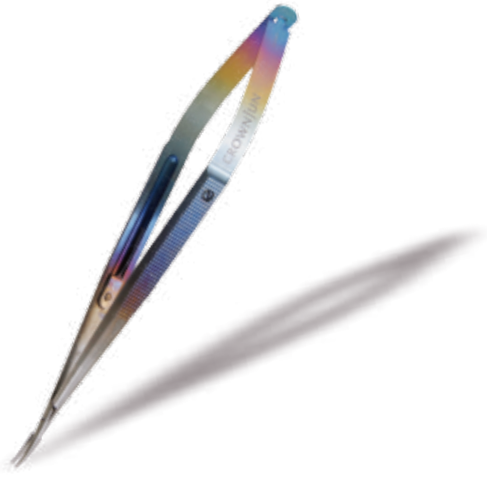
※Holding pressure is average amount

Product	Size		
	Small	Medium	Large
Single Clamp	1SC02	2SC02	3SC02
Single Clamp	1SC03	2SC03	3SC03

※Non-sterile product

For Super Microsurgery

OSJ01 Needle Holder with Stopper



Material : Titanium Length : 14.5cm (6in)
 Tip Shape : Curved Stopper : ○
 Color : Rainbow

OSJ03 Without Stopper

OSJ02 Needle Holder with Stopper



Material : Titanium Length : 18cm (7in)
 Tip Shape : Curved Stopper : ○
 Color : Rainbow

OSJ04 Without Stopper

OSF01 Forceps No.5 Stainless



Material : Stainless
 Color : Pink Gold
 Length : 11cm (4in)

OSF02 Forceps No.5 Titanium



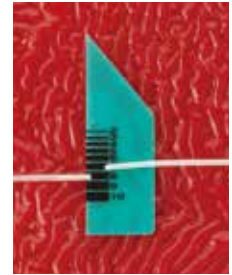
Material : Titanium
 Length : 12.5cm (5in)

□ CROWNJUN Super Micro Sheet K / Micro Sheet K

Easy to measure precisely micro vessels because of the measurement calibrations.
 Helpful for preventing forgetting to measure. Useful to take records by taking a picture.



Item Code	Quantity	Color	Size	Thickness
OKS01	Sterile 10 sheets/box	Green	21mm×7mm	0.3mm



Item Code	Quantity	Color	Size	Thickness
OKM01	Sterile 10 sheets/box	Green	21mm×13mm	0.3mm

□ CROWNJUN Background Sheet

This product can be used as a background sheet to lay beneath the vessel for ease of identify the micro suture thread with needle in operative field during surgery at the time of microvascular anastomosis under a microscope. The size of this product is 50×50mm (10 sheets /box) for use by cutting the appropriate size.

Material : Silicone



Item Code	Quantity	Color	Size	Thickness
5MS01	Sterile 10 sheets/box	Green	50mm×50 mm	0.3mm
5MS01M	Non-sterile 10 sheets/box	Green	50mm×50 mm	0.3mm

□ Retractor



This product retracts the incision with moderate strength under microscopically controlled surgery. The product comes as a single or double hook for different sizes of incision.

Intended Purpose: Small incising operation,
 Lymphaticovenular anastomosis
 Total Length: 15cm (6 in)
 Polyester Suture Length: 8cm (3 in)
 Silicone Rubber Length: 4.5cm (2 in)

Item Code	Product	Quantity
NOGETUS1	Single Retractor	50pcs/box
0KEQ12WTGF	Double Retractor	

□ CROWNJUN Practice Tube



Silicone tube for anastomosis practice. It performs similar experience of actual small vessels and lymphatic vessels. Use with our "Microsurgery Training Suture". Inner diameter is 0.25 - 0.7mm. It corresponds to different types of vessels and lymphatic vessels for microsurgery field. The length is 3 - 5.5cm and it can be used repeatedly.

The sheet mat is made from elastomer-resin, and the stickiness is removed by adding some water.

Item Code	Quantity	ID
1RS02	1pc	0.25mm
	1pc	0.5mm
	1pc	0.7mm
1RS025	3pcs	0.25mm
1RS050	3pcs	0.5mm
1RS070	3pcs	0.7mm

□ Practice Sheet for Microsurgery



Simulation training sheet prior to animal experiments for doctors preparing microsurgery. It can be used for suturing practice by cutting along the lines, and for anastomosis using silicone tube (1.0mm & 1.5mm).

Item Code	Quantity	Size
1RS01	1 Sheet	95mm×170mm

□ CROWNJUN Micro Scale



One of the world's smallest medical measuring scales.

The minimum calibrations is 0.05mm and the maximum measurement is 20mm.

Essential for measuring micro vessels and lymphatic vessels.

Useful to take records on a surgical operations for academic presentations.

Item Code	Quantity
0MR01	10pcs

NYLON (Polyamide Synthetic Non-absorbable Suture)
TEFDESSER II (PTFE-coated Polyester Synthetic Non-absorbable Suture)

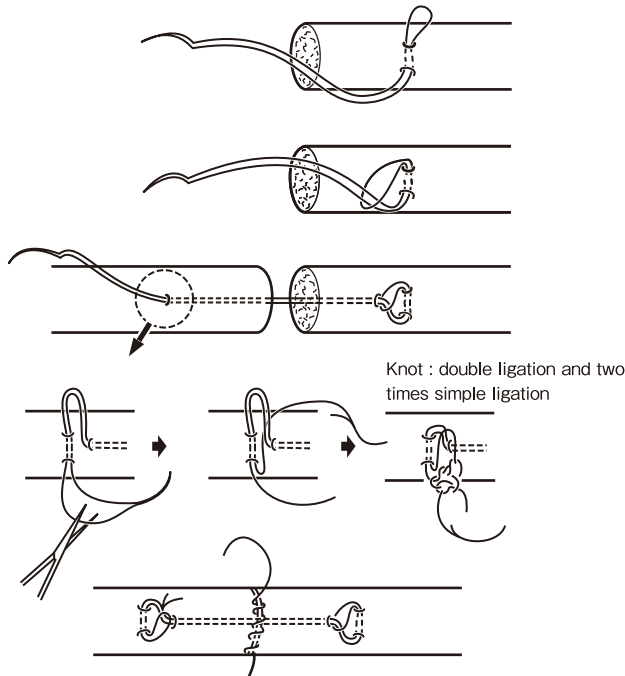
TSUGE LOOPED SUTURE

For Tendon and Nerve Repair



Tendon Suture Method with Tsuge Looped Suture

Tsuge Looped Suture Method for Tendon Repair



Peripheral Suture : four stitches or running suture (6-0 or 7-0 nylon)

Reverse Cutting
3/8 circle



BB-8mm



BB-10mm



BB-12mm



BB-15mm



Taper Point
3/8 circle



DD-8mm



DD-10mm



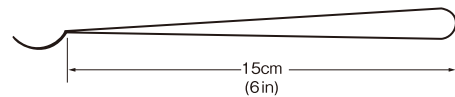
DD-12mm



DD-15mm



Looped Suture with Needle for Tendon and Nerve Repair



Supervised by Kenya Tsuge M.D., Emeritus Professor,
Department of Orthopedic Surgery, Hiroshima University

TSUGE LOOPED SUTURE

The Original Looped Suture for Tendon

In 1975, Professor Kenya Tsuge of the University of Hiroshima published a technique for repairing tendons using loop suture needles, a technique that became known as “Tsuge suture.”

Tsuge looped suture needles were developed by Kono Seisakusho as a tool for making Tsuge sutures at the request of Professor Kenya Tsuge.

These needles have been used along with Tsuge sutures by surgeons around the world for over 40 years.

Reasons why Crownjun LOOPED SUTURE is chosen

1. Looped sutures require high quality manufacturing techniques.
Attaching two threads to one needle requires great technical skill.
Crownjun Looped Sutures are made using our advanced manufacturing technology.
2. Sharpness.
Sharp, specially shaped, cutting needles.
3. Different threads for different requirements.
Two different types of threads are available to suit your needs:
Nylon thread, which is easily distinguishable from tendons (blue)
Polyester thread, which is stronger than nylon (green)
4. Tsuge looped sutures are a product unique to Kono Seisakusho.

REVERSE CUTTING



NYLON

Needle Size	Quantity	Color	Suture Length	U.S.P.						
				8-0	7-0	6-0	5-0	4-0	3-0	2-0
BB 3/8 Circle										
BB-8mm	1pc/pkg × 12	Blue	30cm (12in)	NBB008	NBB007	NBB006	NBB005	NBB004		
BB-10mm	1pc/pkg × 12	Blue	30cm (12in)		NBB017	NBB016	NBB015	NBB014	NBB003	
BB-12mm	1pc/pkg × 12	Blue	30cm (12in)			NBB026	NBB025	NBB024	NBB013	
BB-15mm	1pc/pkg × 12	Blue	30cm (12in)				NBB035	NBB034	NBB023	NBB002

TAPER POINT



Needle Size	Quantity	Color	Suture Length	U.S.P.						
				8-0	7-0	6-0	5-0	4-0	3-0	2-0
DD 3/8 Circle										
DD-8mm	1pc/pkg × 12	Blue	30cm (12in)	NDD008	NDD007	NDD006	NDD005	NDD004		
DD-10mm	1pc/pkg × 12	Blue	30cm (12in)		NDD017	NDD016	NDD015	NDD014	NDD003	
DD-12mm	1pc/pkg × 12	Blue	30cm (12in)				NDD025	NDD024	NDD013	
DD-15mm	1pc/pkg × 12	Blue	30cm (12in)				NDD035	NDD034	NDD023	NDD002

REVERSE CUTTING



TEFDESSERII

Needle Size	Quantity	Color	Suture Length	U.S.P.						
				8-0	7-0	6-0	5-0	4-0	3-0	2-0
BB 3/8 Circle										
BB-8mm	1pc/pkg × 12	Green	30cm (12in)					YBB004		
BB-12mm	1pc/pkg × 12	Green	30cm (12in)				YBB025	YBB024	YBB013	
BB-15mm	1pc/pkg × 12	Green	30cm (12in)				YBB035	YBB034	YBB023	
BB-26mm	1pc/pkg × 12	Green	30cm (12in)							YBB082

TAPER POINT



Needle Size	Quantity	Color	Suture Length	U.S.P.						
				8-0	7-0	6-0	5-0	4-0	3-0	2-0
DD 3/8 Circle										
DD-10mm	1pc/pkg × 12	Green	30cm (12in)					YDD014		
DD-12mm	1pc/pkg × 12	Green	30cm (12in)					YDD024	YDD013	

TSUGE LOOPED SUTURE