

Product Catalog 2021

For tender: Thai Nguyen Hospital





LinX **Obere**
Medizintechnik GmbH

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About us

We care about you That's what we do

We are committed to maintain our costs to keep our prices in affordable level. We are also committed to prompt supply, post sales surveillance and monitoring of safety and efficacy of our products. These are the main subjects on top of our priorities.

We are committed to consider all patients, healthcare professionals, concerned authorities, distributors and employees as stakeholders who shall equality thrive through our meaningful activities.

We are committed to improve everything around us, starting from our beautiful city Bremen to the whole planet earth. We are committed to use the best ECO friendly technologies to save the mother earth for the next generations.

We are committed to science and technology. Our goals are set to change the global standards to a higher level. We are responsible to give the next generation the gift of knowledge as our predecessors did for us.

Manufacturing Process

LINXobere Manufacturing Facilities in Bremen are Equipped With the Best Technologies

The production process is designed to avoid any possible mistake. From needle manufacturing to final stage of packaging we manufacture our products with fully automatic robotic machineries. Through several different logs and batch information tracing finished products has become possible.

Unique in-house & customized machineries have enable us to manufacture the best medical devices has been ever made.

So we use the best testing methods to measure ourselves. It is not a random process we test every single product we manufacture before release it.

In LINXobere facility we manufacture the best steel wires of 300 and 400 series by our self to ensure the quality of our needles.

Atraumatic needles are manufactured both of drilled-end and channel type, and are made from stainless steel to custom 455, 1RK91, austenitic AISI 302 and as appropriate for the application. Presently we are manufacturing atraumatic needles USP 11/0 to USP 7.

Our Products

Sutures

Absorbable



VIPRONE

Polyglycolic acid (PGA)



RAPID
VIPRONE

Polyglycolic acid (RPGA)



VIPRONE 910

Polyglactin 910 (PGLA 910)



RAPID
VIPRONE 910

Polyglactin 910 (RPGLA 910)



MONOPRONE

Poliglecaprone 25



PDO

Polydioxanone (PDO)



X-PLAIN

Natural plain catgut



X-CHROM

Natural chromic catgut

Sutures

Non-Absorbable



SILK

Natural Silk



NYLON

Polyamide 6



CARDIOPILENE

Polypropylene (PP)



X-BOND

Polyester

Meshes

X-MESH

Regular



X-MESH
REGULAR

X-MESH


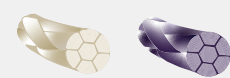






Light



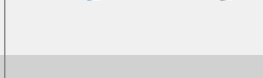
X-MESH
LIGHT

Sutures Material

Absorbable

Material	Material Description	BSR Profile	Mass Absorption
VIPRONE (Polyglycolic Acid) Comparable to: Vicryl	 Braided - Undyed (clear) - Dyed (Violet) Monofilament - Undyed (Clear) - Dyed (Violet) - Coated & Uncoated Common Uses: Skin Closure, OB/Gyn, Urology, Gastrointestinal	In Vivo Strength Retention: 50% at 14 days 20% at 21 days	Essentially Complete Between 50 and 90 Days
RAPID VIPRONE (Polyglycolic Acid) Comparable to: Vicryl Rapide*	 Braided - Undyed (Clear) - Dyed (Violet) Common Uses: General Closure, OB/Gyn, Urology	In Vivo Strength Retention: 48% at 7 days 0% at 14 days	Essentially Complete Between 49 and 63 Days
VIPRONE 910 (Polyglactin 910) Comparable to: Vicryl	 Multifilament, Coated - Undyed (Clear) - Dyed (Violet) Common Uses: General Soft Tissue Approximation and/or Ligation, Including use in Ophthalmic Procedures, but not for use in Cardiovascular and Neurological Tissues.	In Vivo Strength Retention: 75% at 14 days 50% at 21 days 25% at 28 days	Essentially Complete Between 56 and 70 Days
RAPID VIPRONE 910 (Polyglactin 910) Comparable to: Vicryl Rapide	 Multifilament, Coated - Undyed (Clear) - Dyed (Violet) Common Uses: Soft Tissue Approximation, Skin Closure, Paediatric Surgery, Episiotomies, Circumcision and Closure of Oral Mucosa, Ophthalmic Surgery	In Vivo Strength Retention: 75% at 14 days 50% at 21 days 25% at 28 days	Essentially Complete by 42 Days
MONOPRONE (Poliglecaprone 25) Comparable to: Monocryl*	 Monofilament - Undyed (Clear) - Dyed (Violet) Common Uses: Skin Closure, OB/Gyn, Urology, Gastrointestinal	In Vivo Strength Retention: 42% to 76% at 7 days 36% to 52% at 14 days	Essentially Complete by 90 Days
PDO (Polydioxanone) Comparable to: PDS II*	 Monofilament - Dyed (Violet) Common Uses: Plastic Surgery, Orthopedic, OB/Gyn, Gastrointestinal	In Vivo Strength Retention: 80% to 90% at 14 days 60% to 82% at 28 days 47% to 79% at 42 days	Essentially Complete Between 180 and 220 Days
X-PLAIN (Natural Plain Catgut) Comparable to: Surgical Gut Suture - Plain	 Twisted Plain Packaged Dry or in Wetting Solution Common Uses: General Closure, OB/Gyn, Urology, Bowel Anastomosis	In Vivo Strength Retention: Varies	Varies Depending Upon Type of Suture (Plain Vs. Chromic) and site of placement
X-CHROME (Natural Chromic Catgut) Comparable to: Surgical Gut Suture - Chromic	 Twisted Chromic Coated Packaged Dry or in Wetting Solution Common Uses: General Closure, OB/Gyn, Urology, Bowel Anastomosis	In Vivo Strength Retention: Varies	Varies Depending Upon Type of Suture (Plain Vs. Chromic) and Site of Placement

Non-Absorbable

Material	Material Description	Qualities
SILK (Natural Silk) Comparable to: Perma-Hand* Silk	 Braided - Undyed (White) - Dyed (Blue and Black) - Coated Common Uses: General & Skin Closure, Gastrointestinal, Cardiovascular Surgery, Plastic Surgery, Ophthalmology	Excellent Handling and Tying Characteristics
NYLON (Long-Chain Aliphatic Polyamide Nylon 6 & 6,6) Comparable to: Ethilon*	 Monofilament - Undyed (Clear) - Dyed (Blue and Black) - Packaged dry or in wetting solution Common Uses: General & Skin Closure, Gastrointestinal, Cardiovascular Surgery, Plastic Surgery, Ophthalmology	Passes Easily Through Tissue
CARDIOPILENE (Polypropylene) Comparable to: Prolene*	 Monofilament - Undyed (Clear) - Dyed (Blue) Common Uses: General & Skin Closure, Neurosurgery, Plastic Surgery, Ophthalmology, Microsurgery, Cardiovascular Surgery	Inert Easy to Handle Passes Easily Through Tissue
X-BOND (Polyester) (Uncoated): Comparable to: Mersilene* (Coated): Comparable to: Ethibond*	 Braided - Undyed (White) - Dyed (Green) - Coated - Uncoated Common Uses: General & Skin Closure, Plastic Surgery, Ophthalmology, Cardiovascular Surgery, Neurological Procedures	Smooth Easy to Handle Good Knot Security

Guarantee Of Consistent High Quality

Used For	Symbol		Symbol
Do Not Reuse		Caution Consult Accompanying Documents	
Date Of Manufacture (YYYY-MM-DD)		Authorized Representative In The European Community	
Sterilized Using Ethylene Oxide		In Vitro Diagnostic Medical Device	
Catalog Number		Temperature Limitation	
Manufacturer		Batch Code	
For In Vitro Diagnostic Performance Evaluation Only		Sterile	
Lower Limit Of Temperature		Sterilized Using Dry Or Steam Heat	
Biological Risk		Sterilized Using Aseptic Processing Technique	
Use By (YYYY-MM-DD)		Contains Sufficient Number For <N> Tests	
Serial Number		Upper Limit Of Temperature	
Sterilized Using Irradiation		Consult Instructions For Use	

Certificates

It's All About The Quality

We Have Maintained Our Best Quality For Generations!

Our state of the art manufacturing facilities are approved by, EC and US-FDA.



High Performance Surgical Needles

High Performance Surgical Needles

Quality And High Performance

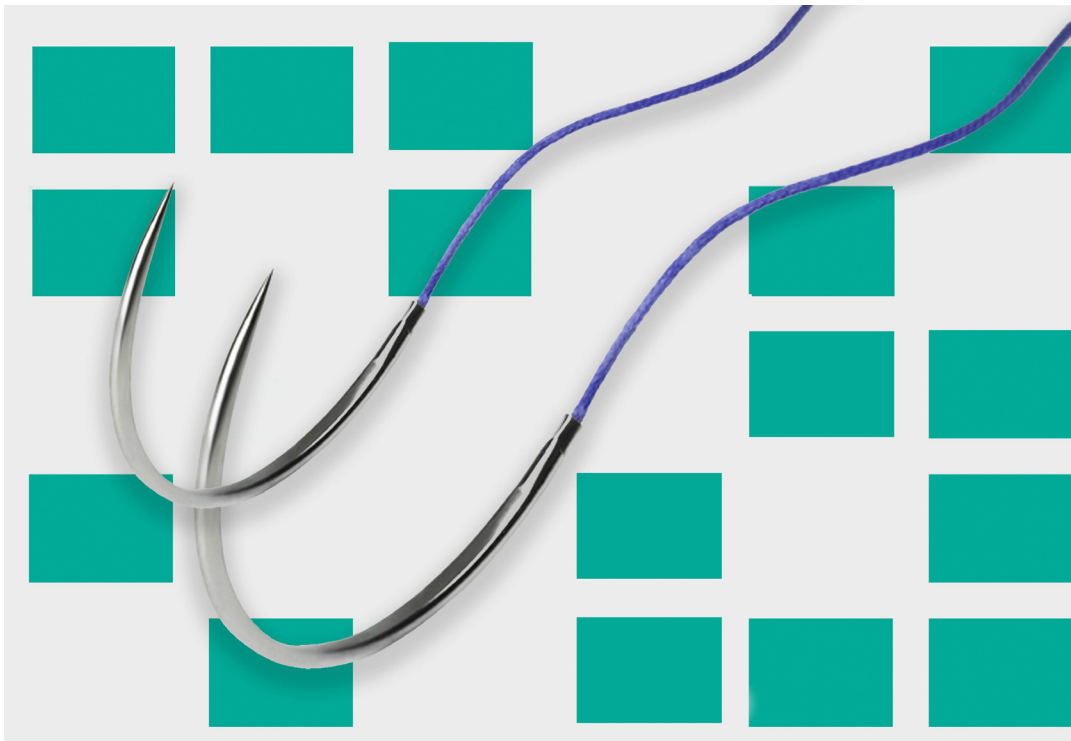
LINXobere needles have gained recognition over the years for their quality and high performance.

Constant Development

LINXobere has state of the art technology and is committed to constant research and development in order to improve needles to the need of all surgical disciplines.

More Than 300 Different Types Of Needles

LINXobere has over 300 different types of needles to meet the needs of the surgical procedure as well as the surgeon's personal preferences.



Unique Technologies, X-STEELMAX

X-STEELMAX
STEEL ALLOY

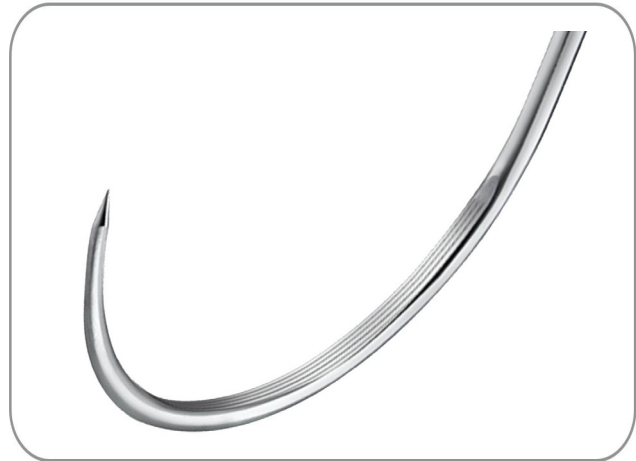
Obere

X-LASER⁺
LAM+EDM
DRILLING TECHNOLOGY

Obere

X-POLISH⁺⁺
EDM+AWJM+
POLISHING TECHNOLOGY

Obere



X-STEELMAX

in LINXobere – Hamburg Facility we manufacture the best Steel wires of 300 and 400 series to ensure the quality of our needles

Alloy Grade Types (Series)

300 Series

300 Series are composed of 18% chromium and 8% / 10% nickel

420 Series

S42000 stainless steel is composed of 12-14% chromium without nickel or titanium

455 Series

S45500 is composed of 7.5-9.5% nickel, 0.8-1.4% titanium and 11-12.5% chromium

X-alloy

Proprietary alloy composed of 12% Chrome, 9% Nickel, 2% Cu, 0.9% Ti plus addition of Molybdenum.



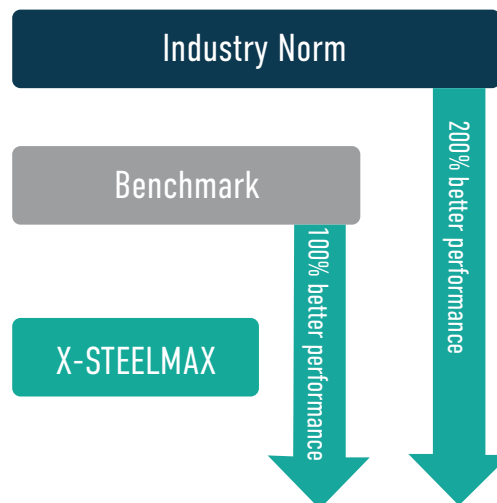
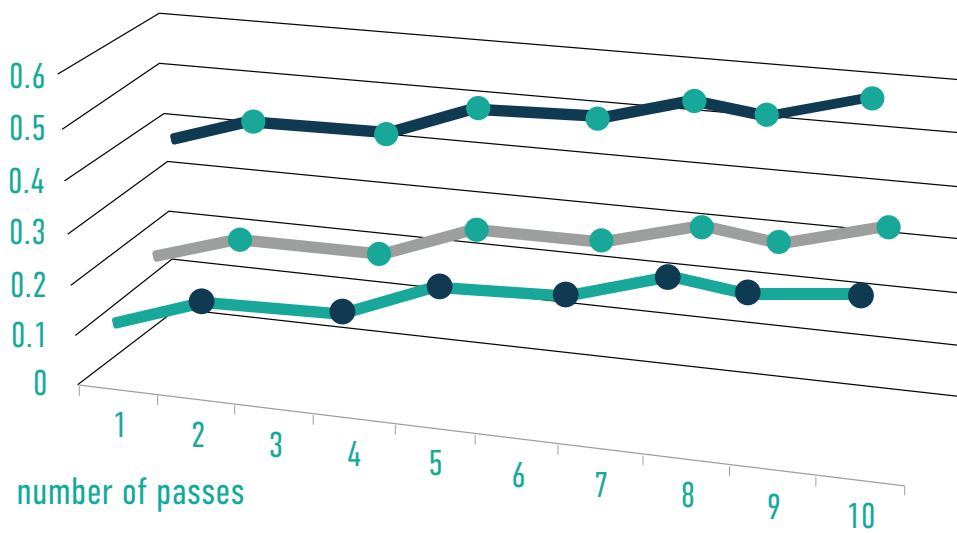
X-STEELMAX

X-STEELMAX

The Best Needles Made Of The Best Steel

LINXobere is dedicated to manufacture high performance surgical needles for sutures. As one of the biggest manufacturers, the company produces and supplies suture needles worldwide. Using exclusive stainless steel X-STEELMAX® materials, surgical needles are made from the highest quality, the 300 series. With a full comprehensive range, LINXobere surgical needles cover general surgery and specialty surgery such as cardio-vascular, plastic surgery and sternal closure.

Comparison of force requirement through 10 passes between needles made by X-STEELMAX® with needles made of other steel alloys

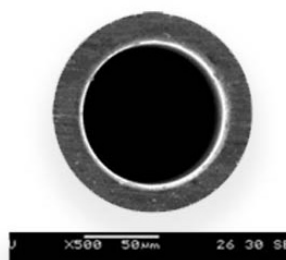
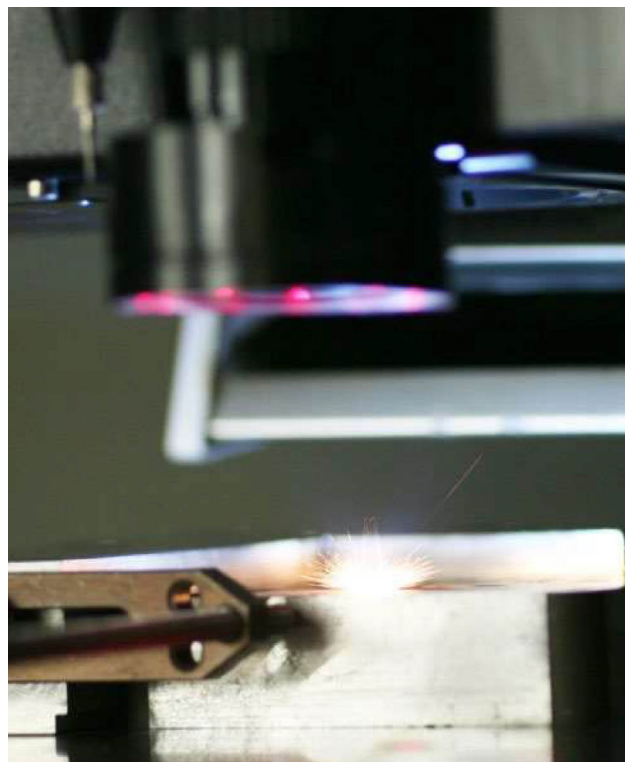


X-LASER PLUS

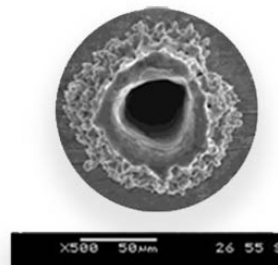
X-LASER PLUS

A Modern Technique In Micro Drills.

Laser ablation is not new! Few of surgical needle manufacturers are using this technique instead of drilling. X-LASER invented by LINXobere Medizintechnik GmbH is a unique technology for micro drilling of surgical needles through combining SHORT PULSE LASER + EDM with significant better outcome.



X-LASER PLUS
LASER+EDM



Laser drilled



X-POLISH

X-POLISH

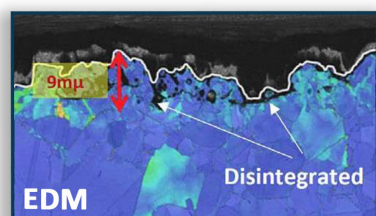
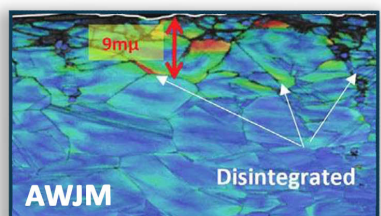
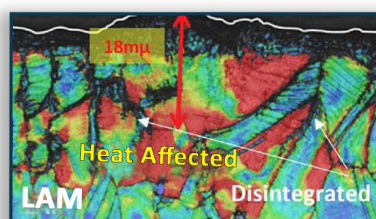
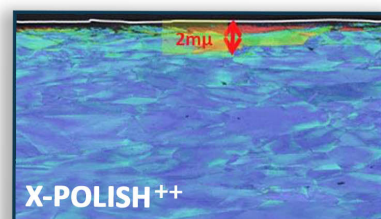
Needle polishing techniques is very important as energy based techniques could affect the integrity of needle and change its physical and chemical attributions. This may lead to easy bending and also breaking of the needle during the surgical operations.

A well-polished needle can pass more smoothly through the tissue with less bleeding.

Older techniques like Abrasive Water Jet Machining (AWJM), Elector Discharge Machining (EDM) and Laser Ablation Machining (LAM) is being used by many benchmark brands.

in LINXobere Medizintechnik GmbH we invented X-POLISH which is a sophisticate combined of EDM+AWJM+LAM.

- Best Result
- Minimum Disintegration
- Minimum Heat Affection

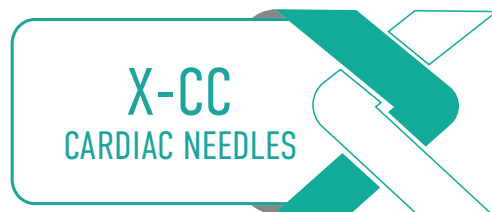
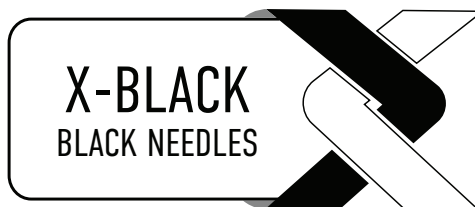
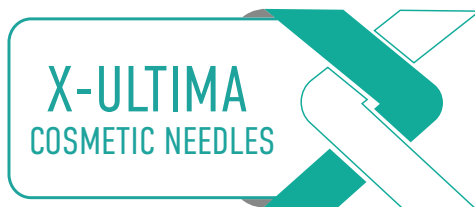


The Linxobere's Top Needle Range

The Linxobere's Top Needle Range

Needles Made Of High Quality Stainless Steel Alloy

X-PRIME and X-CC needles are the result of both extensive research in metallurgical technology and clinical experience



Bending Resistance With High Performing Needles

- Special steel confers superior strength
- Outstanding bending and breaking resistance

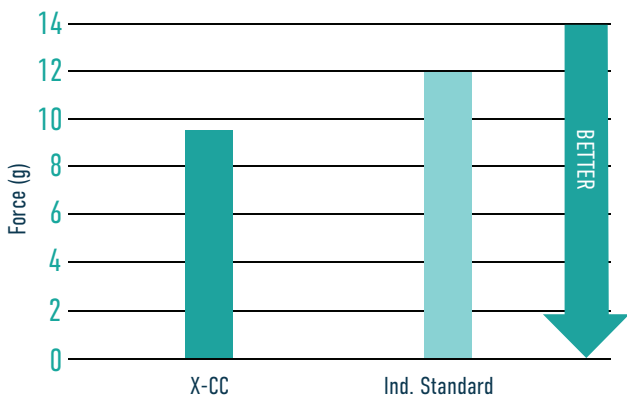
Penetration Specific Needle Tip Design

- Continuous penetration performance passes after pass
- Engineered surface treatment that improves needle

Penetration And Bending Performance

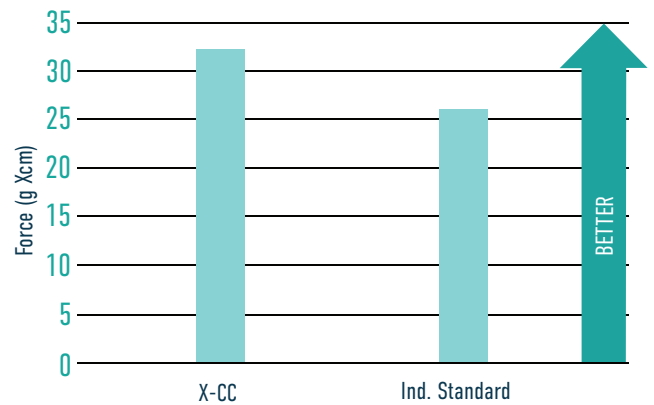
Penetration And Bending Performance

For 3/8 Circle Round Body 10 mm Taper Point Needle USP 7/0



Penetration

Average penetration force after 10 stitches



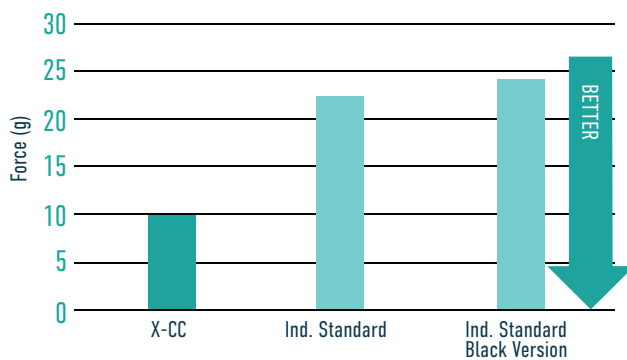
Bending

Maximum force applied to bend the needle

Source: Internal laboratory tests

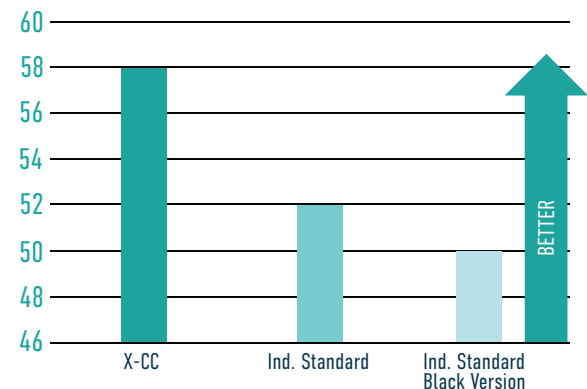
Penetration And Bending Performance

For 3/8 Circle Round Body 13 mm Taper Point Needle USP 6/0



Penetration

Average penetration force after 10 stitches



Bending

Maximum force applied to bend the needle













Source: Internal laboratory tests

Our Needle Types

Needle Type	Point	Description	Commonly Use For
TAPER POINT		Round shaft, straight or curved, taper point with no cutting edge	Soft tissue closure such as fascia, vascular, gastrointestinal, and most soft tissue below the skin
TAPER POINT - HEAVY		Round shaft, straight or curved, taper point with no cutting edge with heavier diameter	whereas heavier diameters are required for tougher tissue such as muscle
SLIM BLADE TAPER POINT		Round shaft, straight or curved, taper point with no cutting edge	Smaller diameter, suitable for relatively soft tissue with the aim of ensuring clean and smooth penetration
X-V BLACK		Round shaft, curved, taper point with no cutting edge	specially blackened needle in order to avoid dazzling, suitable for cardiovascular procedures – calcified arteries
X-GUARD		The X-GUARD Needle point is sharp enough to penetrate fascia and muscle but not skin	suitable for blunt tissue dissection and suturing of friable tissue
BLUNT POINT		Round shaft, straight or curved, with no cutting edge and ball point	This needle has been designed for suturing extremely friable tissue such as the liver
X-CC		Round shaft, straight or curved, with cutting point no cutting edge	Significantly improved penetration properties for the Cardiac / Vascular surgeon when suturing tough, calcified vessels
TAPER POINT PLUS		the tapered cross section immediately behind the tip has been flattened to an oval shape	This design was developed to help facilitate improved separation of tissue layers.
TAPERCUT		Four (4) cutting edges on the tip that taper to a rounded shaft	sclerotized, calcified and densely fibrous connective tissue, suitable for cardiovascular surgery, neurosurgery, neurological injuries, microvascular applications
REVERSE CUTTING		triangular in cross section, having the apex cutting edge on the outside of the needle curvature	The third cutting edge on the outer, convex, curved part of the needle, suitable for particularly dense tissues which are difficult to permeate
REVERSE CUTTING HEAVY		Reverse Cutting with heavier diameter	larger diameter, suitable for particularly dense tissues which are difficult to permeate



Our Needle Types

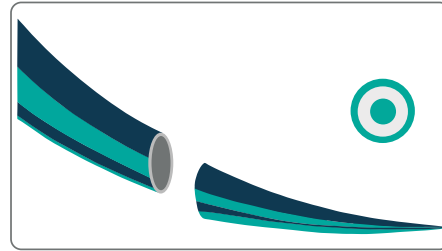
Needle Type	Point	Description	Commonly Use For
REVERSE CUTTING SLIM BLADE		Reverse Cutting with smaller diameter	smaller diameter, for relatively softer tissue with the aim of ensuring clean and smooth penetration, for cutaneous and subcutaneous sutures, suitable for plastic surgery
REVERSE CUTTING PRECISION POINT		Reverse cutting with extra sharp point and special polished	For using in softer tissues
REVERSE CUTTING MICROPOINT		very smooth and sharp, with the blade on the outer arc	suitable for eye surgery
X-PRIME REVERSE		A square body on the needle greatly increases needle strength and offers improved stability in the needle holder	Plastic and Cosmetic Surgery
CONVENTIONAL CUTTING		Triangular cross section with the apex of the triangle on the inside of the needle curvature.	Commonly used for general skin closure and in subcutaneous tissue in ophthalmic, plastic, reconstructive, and cardiovascular surgery
X-PRIME CUTTING		A square body on the needle greatly increases needle strength and offers improved stability in the needle holder.	suitable for Plastic and Cosmetic Surgery
X-TROCAR		strong cutting head which then merges into a robust round body	For easy penetration, deep in dense tissue
X-ULTIMA SPATULA		Six Side cut spatula	Ophthalmic surgery when precise suturing is required. Less damage and cut in soft tissues
MICROPOINT SPATULA		Thin, flat profile Spatula	For easy penetrate between the layers of scleral or corneal tissue.
CONVENTIONAL SPATULA		Spatula	for scleral suturing which requires stronger needles and where the elimination of cut out or cut down by a third edge is essential
ADVANCED MICRO POINT SPATULA		Spatula needle with the cutting edge on the inner or outer curvature	For easy penetrate between the layers of scleral or corneal tissue. Commonly used in ophthalmic and microsurgery
CENTER POINT SPATULA		4 side cutting spatula	For easy penetrate between the layers of scleral or corneal tissue.



LINXobere Needle Types

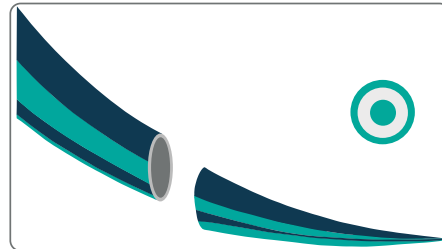
TAPER POINT

Suitable For Soft And Easily Permeable Tissue,
Suitable For Neurosurgery, Microvascular
Applications, Neurological Injuries



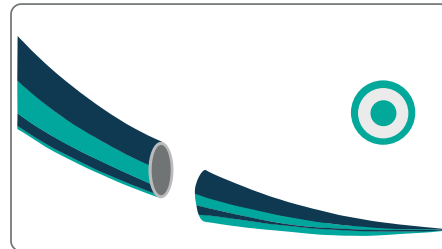
TAPER POINT HEAVY

Heavier In Diameter Suitable For Soft And Easily
Permeable Tissue, Where More Force Is
Required



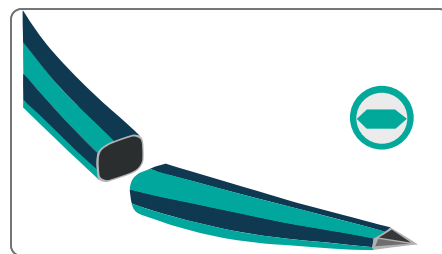
SLIM BLADE TAPER POINT

Smaller Diameter, Suitable For Relatively Soft
Tissue With The Aim Of Ensuring Clean And
Smooth Penetration



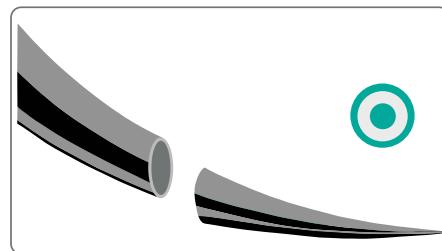
TAPER POINT PLUS

This Design Was Developed To Help Facilitate
Improved Separation Of Tissue Layers.



X-BLACK

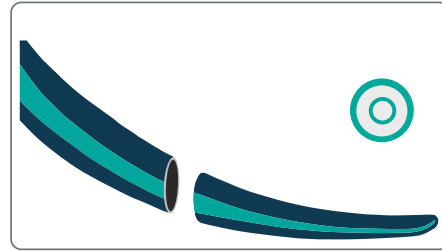
Specially Blackened Needle In Order To Avoid
Dazzling, Suitable For Cardiovascular
Procedures – calcified Arteries



LINXobere Needle Types

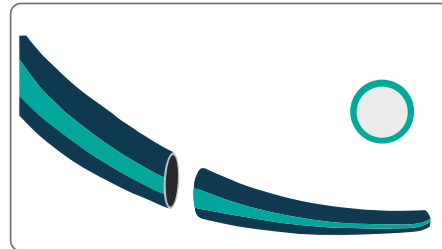
X-GUARD

Suitable For Blunt Tissue Dissection And Suturing Of Friable Tissue



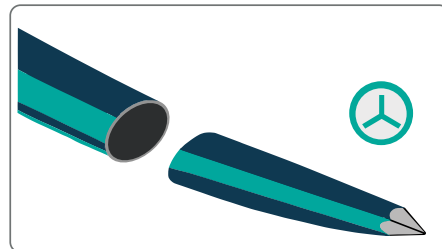
BLUNT POINT

This Needle Has Been Designed For Suturing Extremely Friable Tissue Such As The Liver.



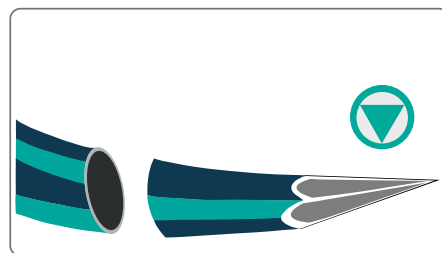
X-CC CARDIAC CALCIFIED

Significantly Improved Penetration Properties For The Cardiac / Vascular Surgeon When Suturing Tough, Calcified Vessels.



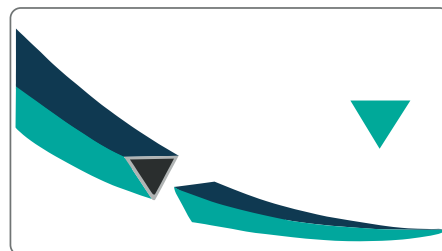
TAPER CUTTING

This Needle Combines The Initial Penetration Of a Cutting Needle With The Minimized Trauma Of a Round Bodied Needle.



REVERSE CUTTING

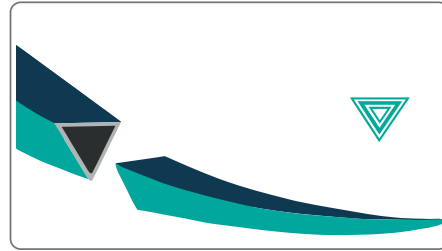
The Third Cutting Edge On The Outer, Convex, Curved Part Of The Needle, Suitable For Particularly Dense Tissues Which Are Difficult To Permeate



LINXobere Needle Types

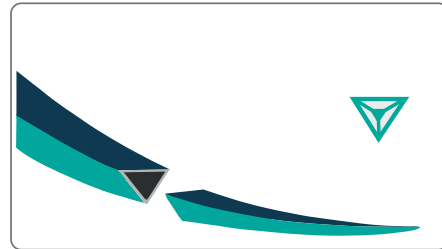
REVERSE CUTTING HEAVY

Larger Diameter, Suitable For Particularly Dense Tissues Which Are Difficult To Permeate



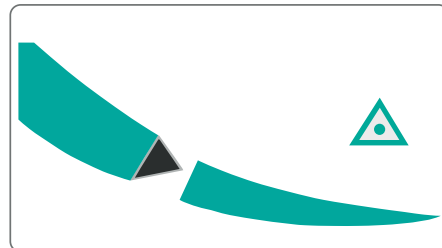
REVERSE CUTTING SLIM BLADE

Smaller Diameter, For Relatively Softer Tissue With The Aim Of Ensuring Clean And Smooth Penetration, For Cutaneous And Subcutaneous Sutures, Suitable For Plastic Surgery



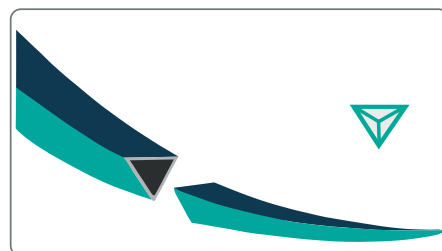
X-TROCAR

Strong Cutting Head Which Then Merges Into a Robust Round Body



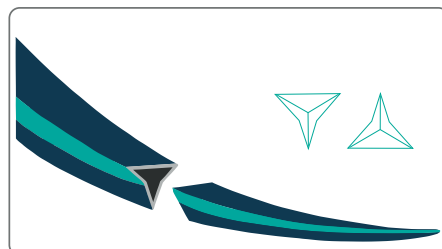
PRECISION POINT REVERSE CUTTING

Electrolytically Polished, Suitable Especially For Softer Tissue



X-PRIME CUTTING & REVERSE CUTTING

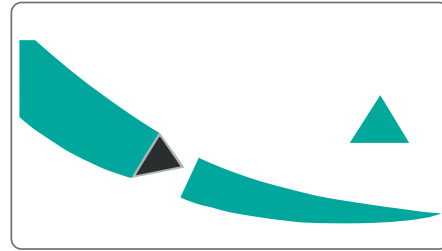
A Square Body On The Needle Greatly Increases Needle Strength And Offers Improved Stability In The Needle Holder.



LINXobere Needle Types

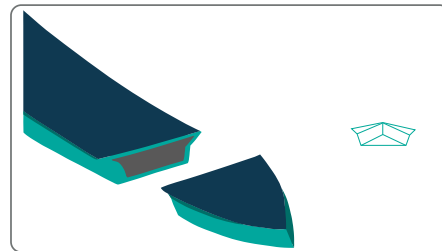
CONVENTIONAL CUTTING

This Needle Has a Triangular Cross Section With The Apex Of The Triangle On The Inside Of The Needle Curvature.



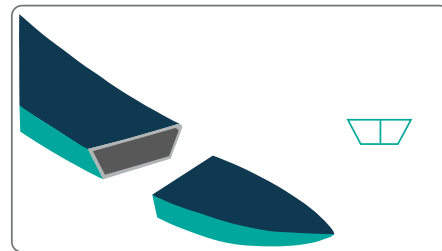
X-ULTIMA SPATULA

Six (6) Faceted Sides And Two (2) Cutting Edges On The Tip



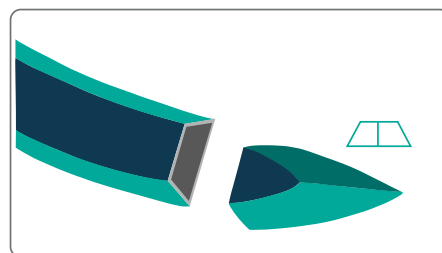
MICROPOINT SPATULA

An Extremely Sharp Cutting Point Has Been Merged Into a Square Body To Produce Superb Penetration Characteristics.



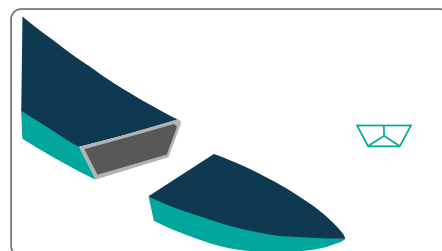
CONVENTIONAL SPATULA

Spatula With Excellent Visibility Of The Tip For Checking The Depth Of Penetration



ADVANCED MICRO POINT

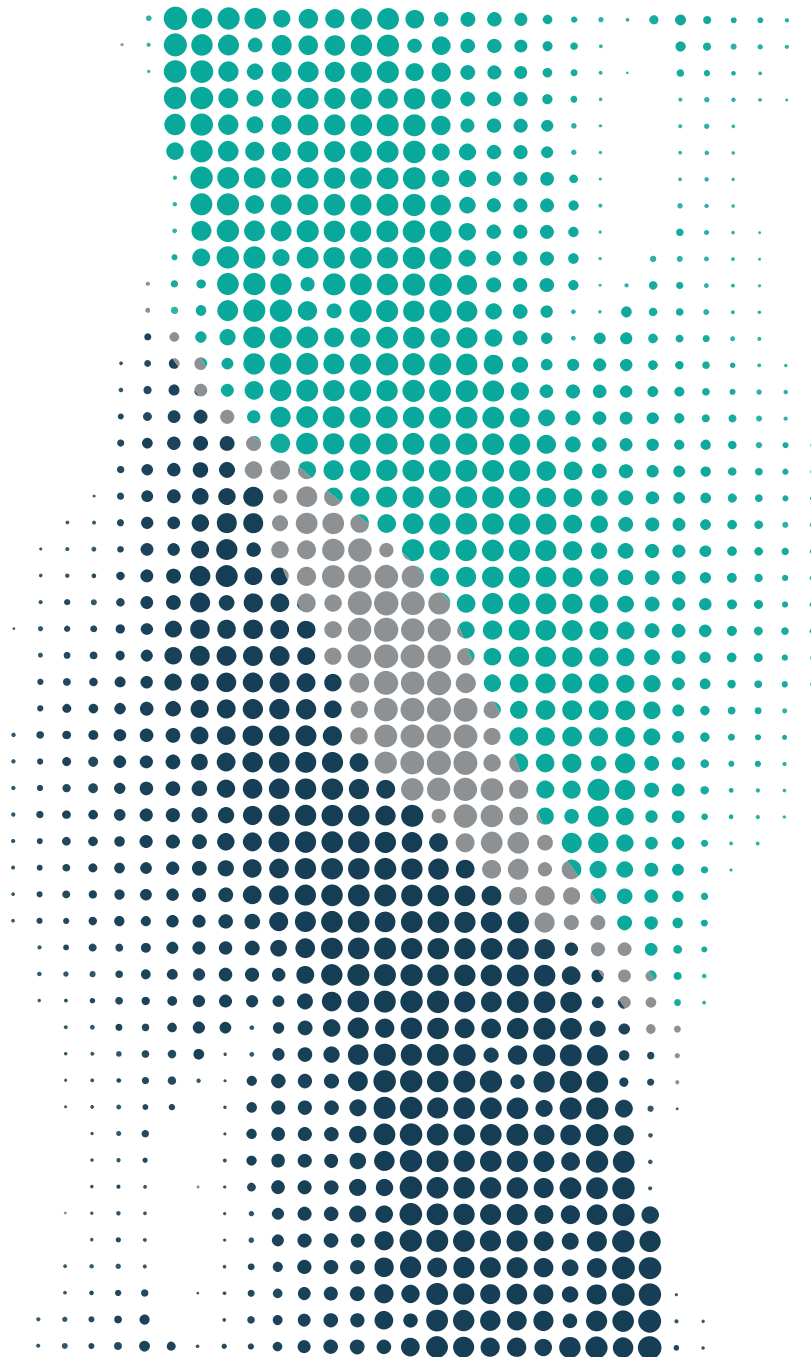
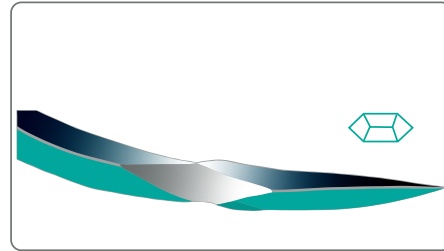
An extremely sharp cutting point has been merged into a square body to produce superb penetration characteristics.



LINXobere Needle Types

CENTER POINT SPATULA

Two (2) cutting edges in a horizontal plane
tapering to a round body



Coding Manual

MATERIAL	
G	VIPRONE
K	RAPID VIPRONE
H	VIPRONE 910
R	RAPIDE VIPRONE 910
E	X-PLAIN
F	X-CHROME
D	PDO
M	MONOPRONE
N	NYLON
S	SILK
P	CARDIOPILENE
X	X-BOND

USP	
V	#5
X	#2
1	#1
0	#0
2	2/0
3	3/0
4	4/0
5	5/0
6	6/0
7	7/0
8	8/0
9	9/0
A	10/0
B	11/0

NEEDLE BODY AND POINT			
R	ROUND BODY / TAPER POINT	M	REVERSE CUTTING MICROPOINT
C	REVERSE CUTTING	D	X-PRIME CUTTING
K	CONVENTIONAL CUTTING	X	X-PRIME REVERSE
T	TAPER CUTTING	E	X-TROCAR
G	X-GUARD	U	X-ULTIMA
B	BLUNT POINT	F	MICROPOINT SPATULA
H	X-CC	Z	CONVENTIONAL SPATULA
Q	TAPER POINT PLUS	A	ADVANCED MICRO POINT SPATULA
PC	PRECISION POINT REVERSE CUTTING	O	CENTER POINT SPATULA
PK	PRECISION POINT CONVENTIONAL CUTTING		

S	SLIM BODIED
H	HEAVY
E	EXTRA HEAVY
L	LOOP SUTURE
D	DOUBLE ARMED
Z	X-BREAK
O	X-OFF
B	X-BLACK
PL	PLEDGET

NEEDLE CURVATURE	
T	1/8
Q	1/4
C	3/8
U	1/2
O	5/8
Y	STRAIGHT
S	SKI
J	HOOK
P	PROGRESSIVE

G1R40U75D

NEEDLE LENGTH (mm)

THREAD LENGTH (cm)

Coding Manual



VIPRONE (Polyglycolic acid)

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 60-90 days






Tensile strength:	Post implantation	Approximate % original Strength remaining
	14 days	75%
	21 days	50% (6-0 and larger) 40% (7-0 and smaller)
	28 days	25% (6-0 and larger)

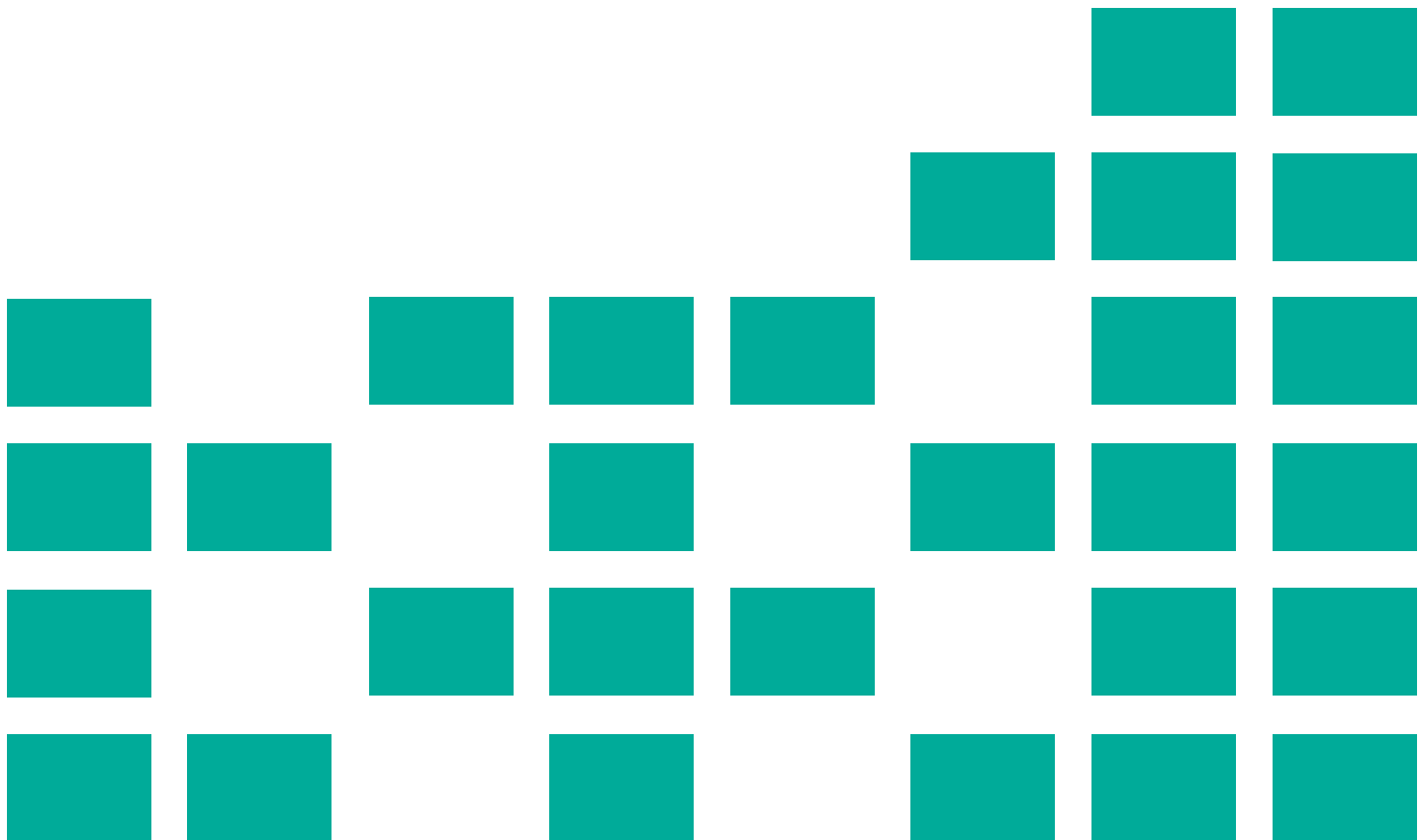
Color: Violet or undyed.

Range: 10-0 to 6 (USP). Supplied as needed sutures and ligatures.
 Sizes 10-0 and 9-0 are monofilament in structure

INDICATIONS: VIPRONE* sutures are intended for use in soft tissue approximation and /or ligation, including use in ophthalmic surgery, peripheral nerve adaptation and microsurgery for vessels less than 2 mm in diameter.
 Typical areas of use include:
 Fascia closure – due to the 28-day claim
 Subcutaneous fat
 Joint capsule
 Uterus
 Full details in the Instruction for Use included in every package.



1/2 Circle			Taper Point Needles					
Needle			(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
R17U		17mm	5-0	1	VIOLET	70	TENDER REF: 12	G5R17U70
R22U		22mm	4-0	1.5	VIOLET	70	TENDER REF: 11	G4R22U70
R26U		26mm	3-0	2	VIOLET	70	TENDER REF: 10	G3R26U70
R26U		26mm	2-0	3	VIOLET	70	TENDER REF: 9	G2R26U70
R40U		40mm	1	4	VIOLET	90	TENDER REF: 8	G1R40U90



RAPID VIPRONE (Polyglycolic acid for faster absorption)

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 42 days

Tensile strength:	Post implantation	Approximate % original Strength remaining
	5 days	50%
	10-14 days	0%

Rapid Viprone Suture typically falls off 7-10 days post-operative or can be wiped off subsequently with gauze. Normally the removal of the suture is not required.

Color: Violet or undyed.

Range: 8-0 to 1 (USP). Supplied as needled sutures and ligatures.

INDICATIONS: Rapid Viprone is intended for use in soft tissue approximation where only short term wound support is required and where the rapid absorption off the suture would be beneficial. Typical areas of use include:

- Skin closure, cuticular or subcuticular
- Episiotomies
- Closure of oral mucosa
- Conjunctival sutures in ophthalmic surgery


Full details in the Instruction for Use included in every package.

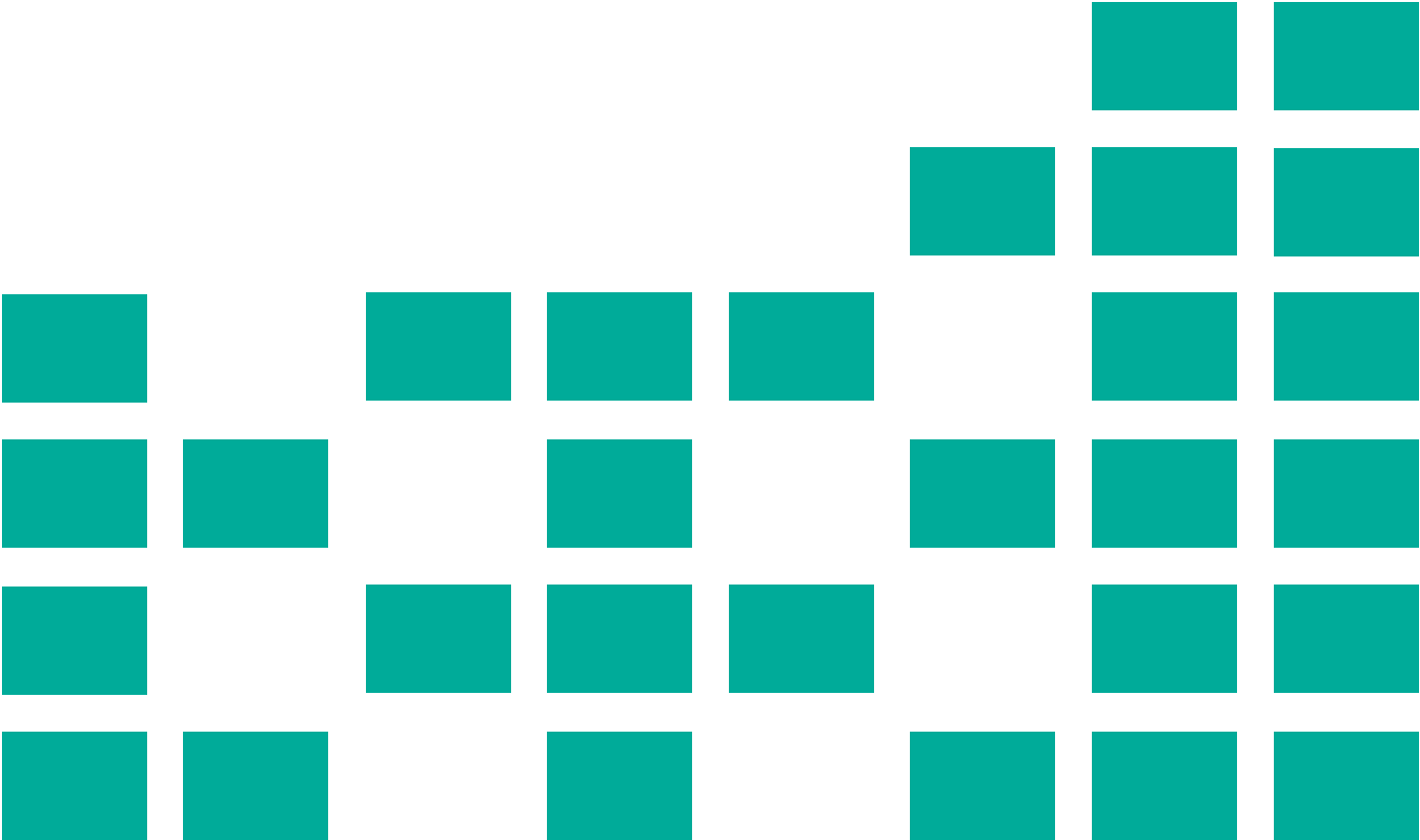


**RAPID
VIPRONE**

RAPID VIPRONE

(Polyglycolic acid for faster absorption)

1/2 Circle		Reverse Cutting Needles					
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
C37U	 37mm	2-0	3	VIOLET	90	TENDER REF: 13	K2C37U90



VIPRONE 910 (Polyglactin 910)

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 56-70 days

Tensile strength:	Post implantation	Approximate % original strength remaining
	14 days	75%
	21 days	50% (6-0 and larger) 40% (7-0 and smaller)
	28 days	25% (6-0 and larger)

Color: Violet or undyed.





Range: 10-0 to 6 (USP). Supplied as needled sutures and ligatures. Sizes 10-0 and 9-0 are monofilament in structure


INDICATIONS: VIPRONE(910)* sutures are intended for use in soft tissue approximation and/or ligation, including use in ophthalmic surgery, peripheral nerve adaptation and microsurgery for vessels less than 2 mm in diameter. Typical areas of use include:

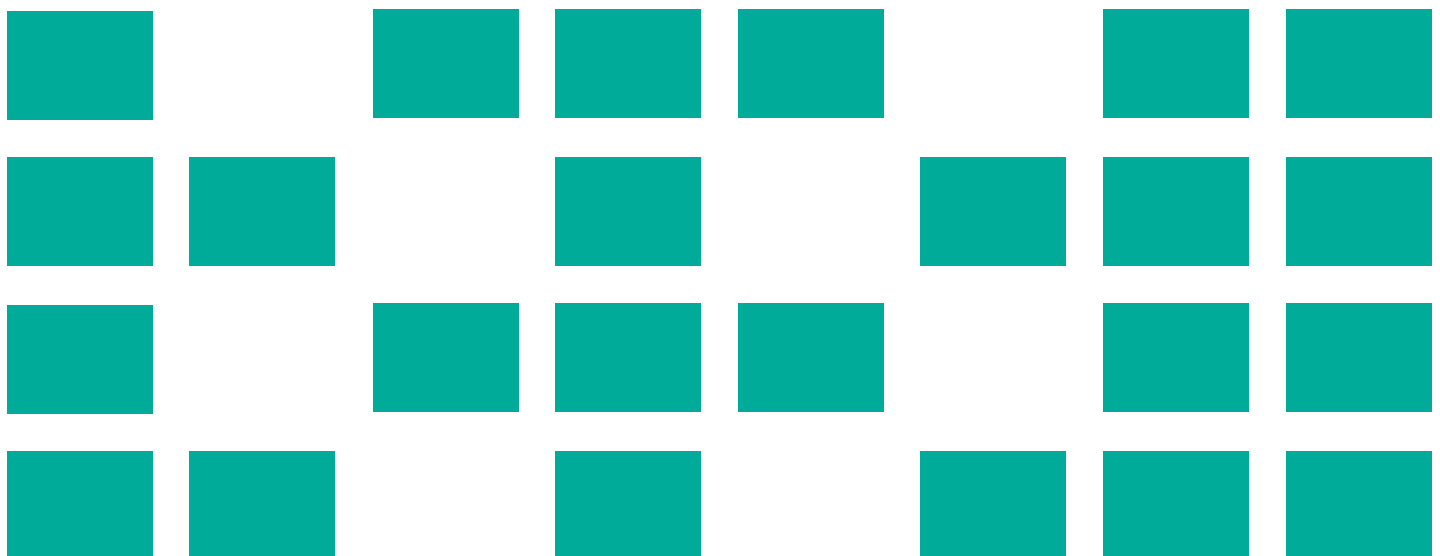
- Fascia closure - due to the 28-day claim
- Subcutaneous fat
- Joint capsule
- Uterus

Full details in the Instruction for Use included in every package.



1/2 Circle		Taper Point Needles			◎		
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
R17U	 17mm	4-0	1.5	VIOLET	75	TENDER REF: 3	H4R17U75
		5-0	1	VIOELT	75	TENDER REF: 96	H5R17U75
R20U	 20mm	4-0	1.5	VIOELT	75	TENDER REF: 95	H4R20U75
R26U	 26mm	2-0	3	VIOELT	75	TENDER REF: 93	H2R26U75
		3-0	2	VIOLET	75	TENDER REF: 2	H3R26U75
R40U	 40mm	1	4	VIOLET	90	TENDER REF: 1	H1R40U90

1/4 Circle		Conventional Spatula Needles			Micro Needles		
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
Z8-90Q-200-D	Length: 8mm Radius: 5.1mm Curvature: 90° Chord: 7.21mm Diameter: 200µ	6-0	0.7	VIOELT	45	TENDER REF: 97	H6Z8Q45D
 8mm							



RAPID VIPRONE 910 (Polyglactin 910 for faster absorption)

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 42 days

Tensile strength:	Post implantation	Approximate % original strength remaining
	5 days	50%
	10-14 days	0%

Rapid Viprone 910 suture typically falls off 7-10 days post-operative or can be wiped off subsequently with gauze. Normally the removal of the suture is not required.

Color: Violet or undyed.

Range: 8-0 to 1 (USP). Supplied as needed sutures and ligatures.

INDICATIONS: Rapid Viprone (910) is intended for use in soft tissue approximation where only short term wound support is required and where the rapid absorption of the suture would be beneficial. Typical areas of use include:

- Skin closure, cuticular or subcuticular
- Episiotomies
- Closure of oral mucosa
- Conjunctival sutures in ophthalmic surgery


Full details in the Instruction for Use included in every package.




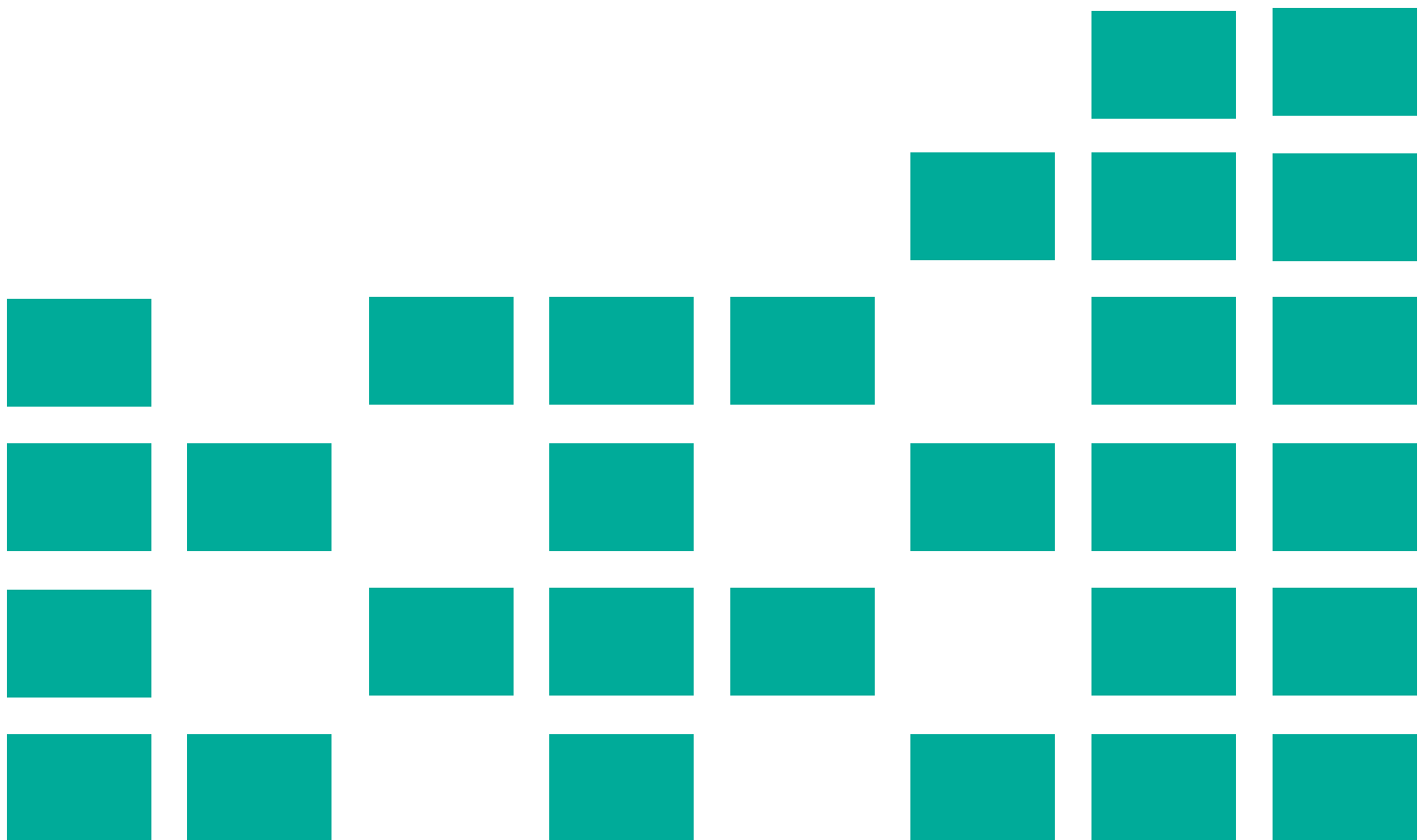
**RAPID
VIPRONE 910**

RAPID VIPRONE 910

(Polyglactin 910 for faster absorption)

3/8 Circle		Taper Point Needles			⊙			
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code	
R16C		16mm	2-0	3	UNDYED	75	TENDER REF: 4	R2R16C75

1/2 Circle		Taper Cutting Needles			▽			
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code	
T36U		36mm	2-0	3	VIOELT	90	TENDER REF: 91	R2T36U90



PDO (Polydioxanone)

SUTURE

Description:	Monofilament	For smooth passage through tissue.
	Synthetic Absorbable	For minimal tissue reaction. By hydrolysis. Essentially complete in 182-238 days.

Tensile strength: Post implantation Approximate % of original strength remaining

14 days	80% (3-0 and larger) 60% (4-0 and smaller)
28 days	70% (3-0 and larger) 40% (4-0 and smaller)
42 days	60% (3-0 and larger)
28 days	35% (4-0 and smaller)

Color: Violet or undyed.


Range: 6-0 to 1 (USP). Supplied as needled sutures and ligatures.


INDICATIONS: PDO* sutures are intended for use in general soft tissue approximation, including in pediatric cardiovascular tissue, and in ophthalmic surgery (other than contact with cornea and sclera). PDO* sutures are particularly useful where the combination of absorbable suture and extended wound support is desirable. Typical areas of use include:

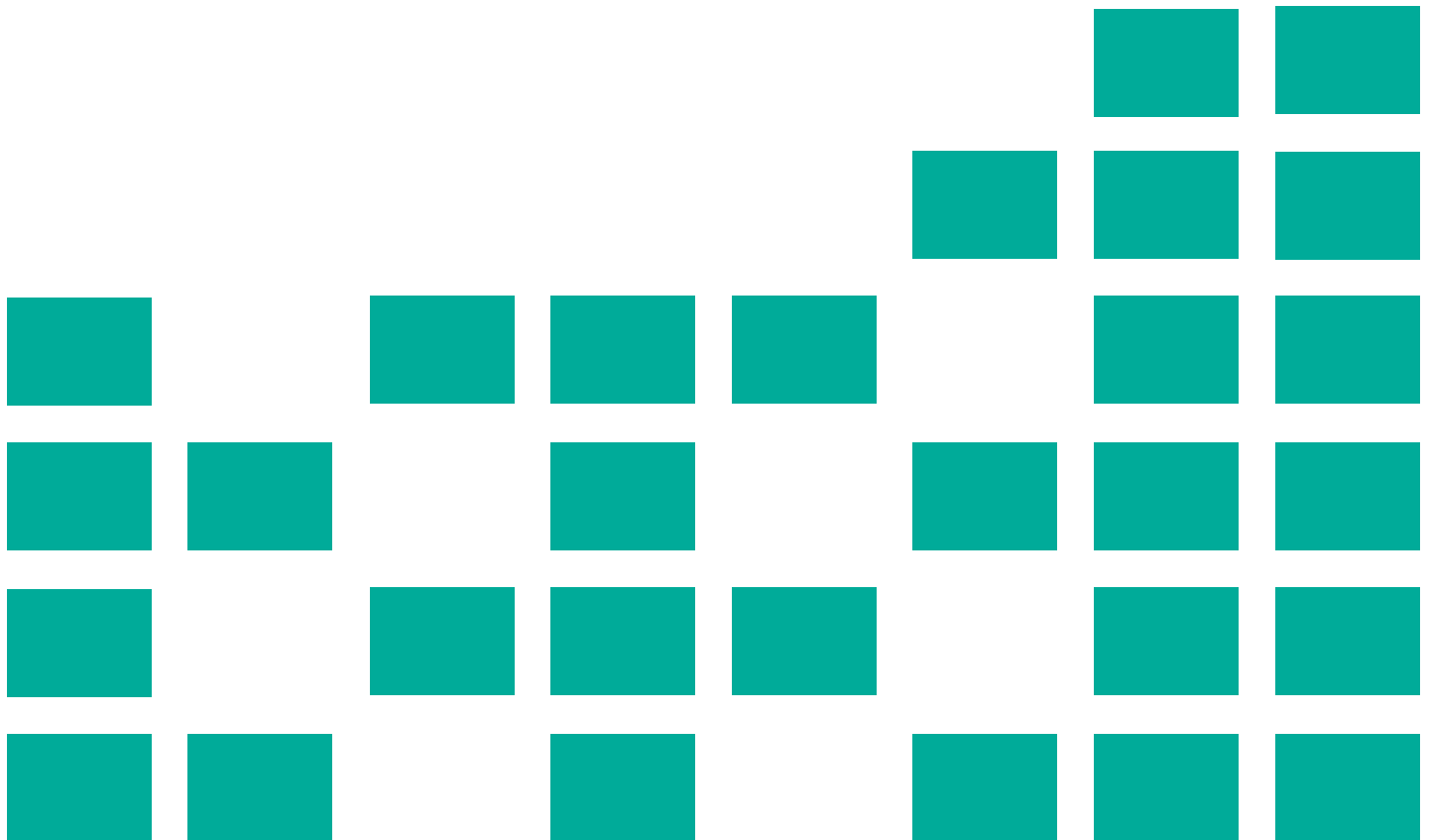
- Abdominal wall closure
- Intestinal anastomoses
- Ligament and tendon repair

Full details in the Instruction for Use included in every package.



1/2 Circle		Taper Point Needles			⊙			
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code	
R20U		20mm	5-0	1	VIOELT	75	TENDER REF: 89	D5R20U75

3/8 Circle		Taper Cutting Needles			▽			
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code	
T13C-D		13mm	6-0	0.7	VIOELT	70	TENDER REF: 90	D6T13C70D



NYLON (Polyamide 6)

SUTURE

Description:	Monofilament	For smooth passage through tissue.
	Synthetic	For minimal tissue reaction.
	Non-Absorbable	Provides prolonged tensile strength retention in tissue.
Color:	Blue, black or clear	
	Range: 11-0 to 2 (USP). Supplied as needed sutures armed with, for example, PRIMIPASS* needles	



INDICATIONS: NYLON* (Blue, black and clear) sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic, microsurgical and neurosurgical procedures. Blue NYLON* sutures are intended for use in skin closure.


Typical areas of use include:

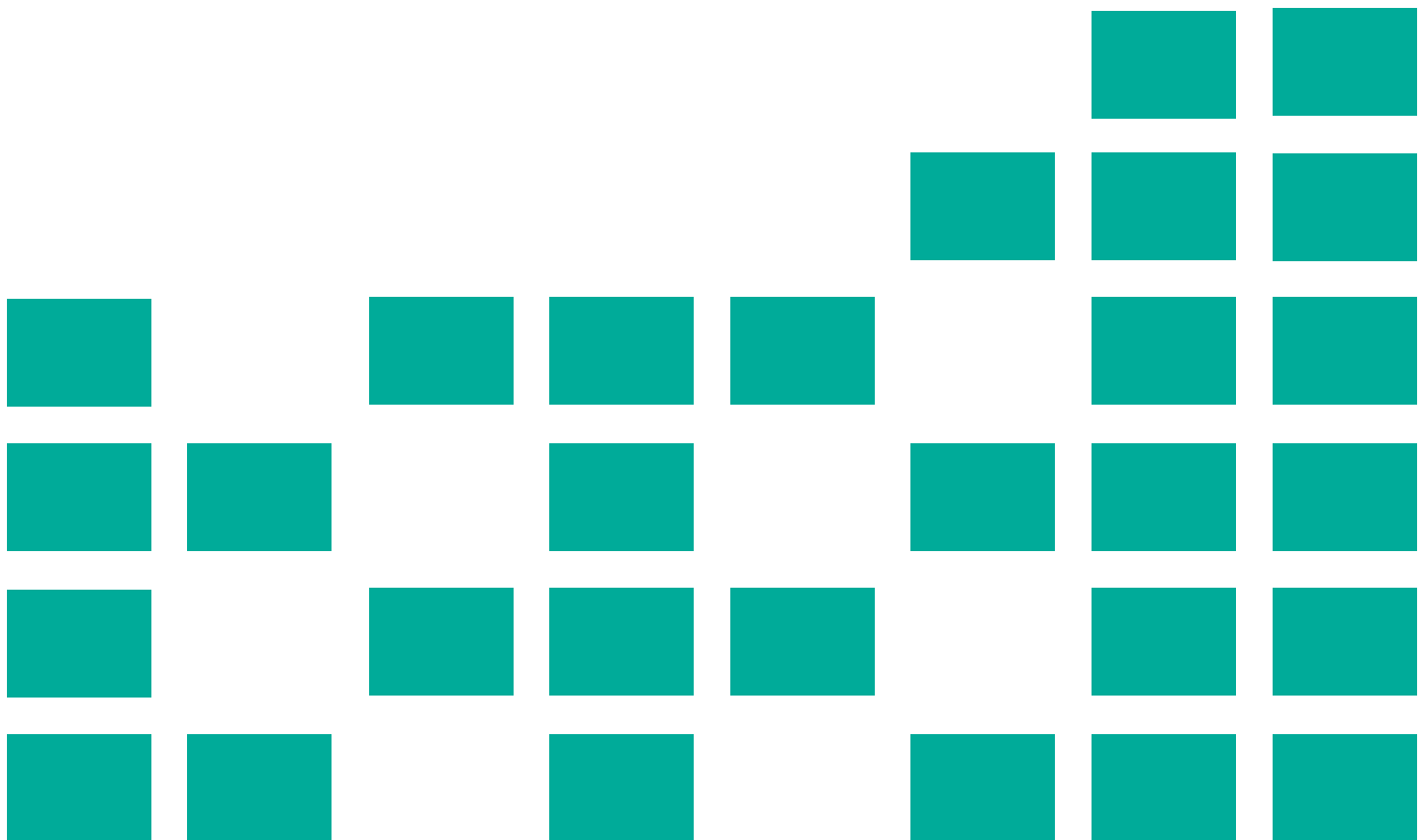
- Cuticular sutures
- Nerve adaptation
- Ophthalmology

Full details in the Instruction for Use included in every package.



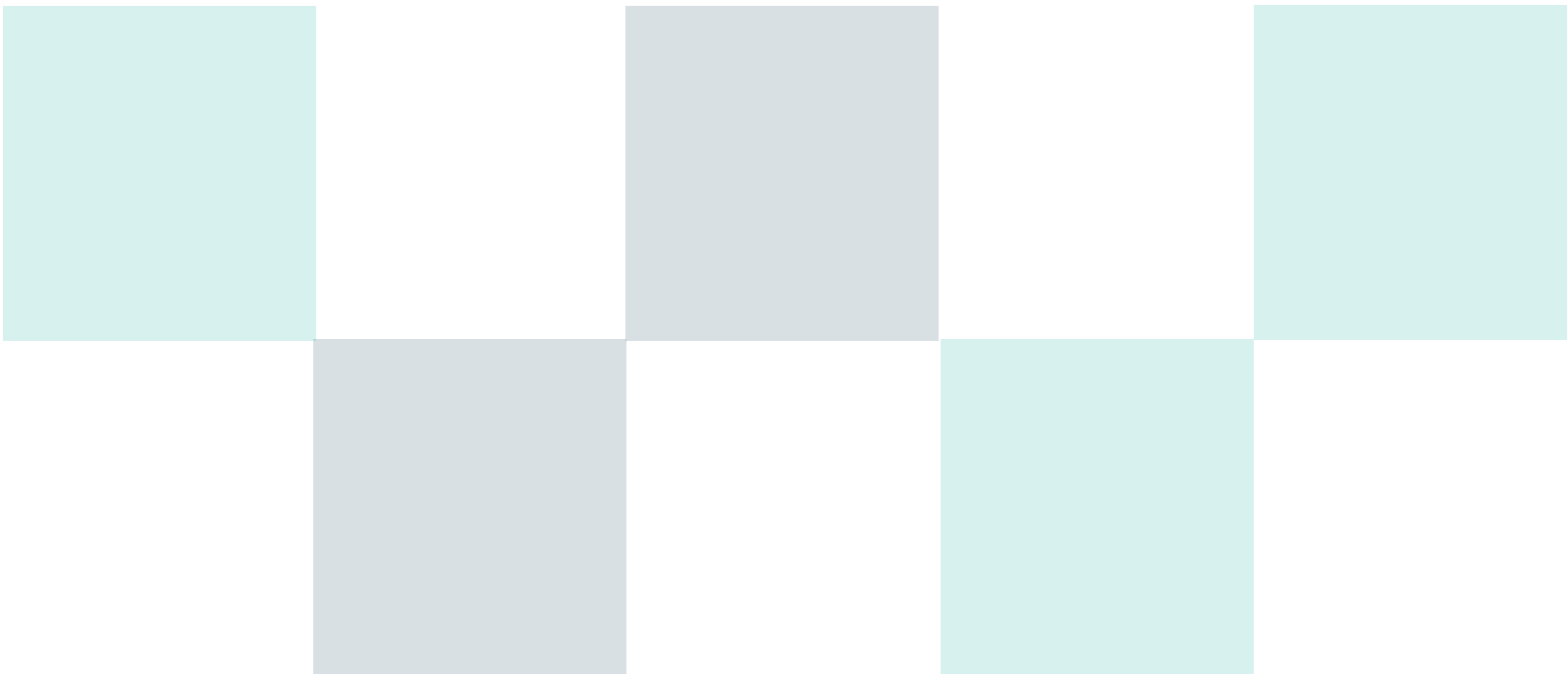
3/8 Circle		Reverse Cutting Needles					
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
C19C 	19mm	4-0	1.5	BLACK	50	TENDER REF: 7	N4C19C50
		4-0	1.5	BLACK	75	TENDER REF: 83	N4C19C75
C25C 	25mm	3-0	2	BLACK	75	TENDER REF: 6	N3C25C75
		2-0	3	BLUE	75	TENDER REF: 5	N2C25C75B

3/8 Circle		Taper Cutting Needles					
Needle		(USP)	(Metric)	Suture Color	Length (cm)	Other Information	LINXobere Code
T30C 	30mm	1	4	BLACK	75	TENDER REF: 100	N1T30C75



Additional Information

Code	Material	Needle Material	Knot pull Strength (Kgf)	Packing
H1R40U90	Polyglactin 910	300 Series are composed of 18% chromium and 8% / 10% nickel	5.08	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
H3R26U75	Polyglactin 910	300 Series are composed of 18% chromium and 8% / 10% nickel	1.77	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
H4R17U75	Polyglactin 910	300 Series are composed of 18% chromium and 8% / 10% nickel	1.77	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
R2R36U90	Polyglactin 910	300 Series are composed of 18% chromium and 8% / 10% nickel	2.68	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
N2C25C75B	POLYAMIDE	300 Series are composed of 18% chromium and 8% / 10% nickel	1.44	Each suture inside a medical Paper (low memory 8 shape) which enfolded inside a Plastic and DuPont™ Tyvek® Pouch Peel Open Cover. 12 of such inside a box of 12 covered with Plastic
N3C25C75	POLYAMIDE	300 Series are composed of 18% chromium and 8% / 10% nickel	2.04	Each suture inside a medical Paper (low memory 8 shape) which enfolded inside a Plastic and DuPont™ Tyvek® Pouch Peel Open Cover. 12 of such inside a box of 12 covered with Plastic
N4C19C50	POLYAMIDE	300 Series are composed of 18% chromium and 8% / 10% nickel	0.6	Each suture inside a medical Paper (low memory 8 shape) which enfolded inside a Plastic and DuPont™ Tyvek® Pouch Peel Open Cover. 12 of such inside a box of 12 covered with Plastic
G1R40U90	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	5.9	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
G2R26U70	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	2.68	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
G3R26U70	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	1.77	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
G4R22U70	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	0.95	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
G5R17U70	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	0.68	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic
K2C37U90	Polyglycolic Acid	300 Series are composed of 18% chromium and 8% / 10% nickel	0.95	Each Suture inside a PEEL OPEN high Medical Grade Aluminum Foil 12 of such inside a box of 12 covered with Plastic



LINX Obere Medizintechnik GmbH



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