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ORDIN DE PLATA NR.: 2889                                TIP.DOC. 1 :
                DATA EMITERII:luni, 3 iunie 2024:
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PLATITI: 1800-00          LEI: Una Mie Opt Sute lei 00 bani :
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PLATITOR: (R) "BIOSISTEM          CONTUL DE PLATI/CODUL IBAN :
MLD" S.R.L.                MD95ML000000002251429243 :
                CODUL FISCAL :1010600028048 / :
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PRESTATORUL PLATITOR                                CODUL BANCII:
BC"Moldindconbank"S.A. suc."Invest" Chisinau          :MOLDMD2X329:
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BENEFICIAR (R) I.M.S.P. "S          CONTUL DE PLATI/CODUL IBAN :
pitalul Clinic Republican Tim MD57MO2251ASV96476607100 :
ofei Mosneaga"                CODUL FISCAL :1003600150783 / :
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PRESTATORUL BENEFICIAR                                CODUL BANCII:
OTP Bank S.A.                :MOBBMD22 :
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DESTINATIA PLATII:Pentru garantia pentru:      TIPUL TRANSFERULUI :
oferta la procedura de achizitie public:        NORMAL/URGENT :N:
a nr. ocds-b3wdp1-MD-1715947563697 din 0:      :
4.06.2024 : :
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                DATA PRIMIRII:03/06/2024 : SEMNATURILE :
                DATA EXECUTARII: : EMITENTULUI :
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                (semnatura electronica) :
CONTABIL-SEF:Web Nasedchin Alexandr :
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L.S.                (semnatura electronica) :
CONducATOR:                _____:
                (semnatura manuala) :
CONTABIL-SEF:                _____:
                (semnatura manuala) :
SEMnATURA PRESTATORUL                L.S. :
:-----:
MOTIVUL REFUZULUI : L.S. :
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BC "MOLDINDCONBANK" S.A. Filiala "Invest"

Republica Moldova, MD-2068
mun. Chişinău, bd. Moscovei, 14/1
Tel. : (373-22) 43-44-81, 43-46-24
Fax : (373-22) 43-44-22
cod: MOLDM2X329

Data 14. IAN. 2016
Nr. 03/2 - 19/23

Республика Молдова, MD-2068
мун. Кишинэу, бул. Московей, 14/1
Тел. : (373-22) 43-44-81, 43-46-24
Факс : (373-22) 43-44-22
код: MOLDM2X329

Filiala „Invest” BC „Moldindconbank” SA confirmă existența contului curent
in moneda nationala al **“BIOSISTEM MLD” S.R.L. (c/f 1010600028048)**, cu
IBAN MD95ML000000002251429243.

Codul băncii MOLDM2X329.

Director

Nina Turcan

Director financiar



Nina Balmuş

Ex. Diana Brinza
Tel. 43-45-96

REPUBLICA



MOLDOVA

CERTIFICAT DE ÎNREGISTRARE

Societatea cu Răspundere Limitată "BIOSISTEM MLD"
— ESTE ÎNREGISTRATĂ LA CAMERA ÎNREGISTRĂRII DE STAT —

Numărul de identificare de stat - codul fiscal
1010600028048

Data înregistrării

12.08.2010

Data eliberării

12.08.2010

Svirepova Ludmila, registrator

*Funcția, numele, prenumele persoanei
care a eliberat certificatul*

semnătura

MD 0101250





AGENȚIA SERVICII PUBLICE

Departamentul înregistrare și licențiere a unităților de drept

EXTRAS

din Registrul de stat al persoanelor juridice

Nr. 531522 data 15.09.2023

Denumirea completă: **Societatea cu Răspundere Limitată "BIOSISTEM MLD"**

Denumirea prescurtată: **"BIOSISTEM MLD" S.R.L.**

Forma juridică de organizare: **Societate cu răspundere limitată,**

Numărul de identificare de stat și codul fiscal (IDNO): **1010600028048**

Data înregistrării de stat: **12.08.2010**

Sediul: **MD-2001, str. Albișoara, 16/1, ap. 7, mun. Chișinău, Republica Moldova.**

Obiectul principal de activitate:

- 1. Activitatea farmaceutică; importul și (sau) producerea articolelor de parfumerie și cosmetică**
- 2. Fabricarea, comercializarea, asistența tehnică, repararea și verificarea articolelor de tehnică și optică medicală**
- 3. Acordarea asistenței medicale de către instituțiile medico-sanitare private**
- 4. Comerțul cu ridicata al calculatoarelor, echipamentelor periferice și software-ului**
- 5. Întreținerea și repararea mașinilor de birou și a tehnicii de calcul**
- 6. Consultații în domeniul sistemelor de calcul**

Capitalul social: **5400 lei.**

Administrator: **POIATA VITALIE, IDNP 0983103892591,**

Asociații:

1. **POIATA VITALIE, IDNP 0983103892591, cota 1803,60 lei, ce constituie 33,4%**

Beneficiar efectiv:

1.1. **POIATA VITALIE, IDNP 0983103892591,**

2. **NASEDCHIN ALEXANDR, IDNP 2002001070747, cota 1798,20 lei, ce constituie 33,3%**

Beneficiar efectiv:

2.1. **NASEDCHIN ALEXANDR, IDNP 2002001070747,**

3. **KOJEVNIKOV DMITRII, IDNP 0972305012362, cota 1798,20 lei, ce constituie 33,3%**

Beneficiar efectiv:

3.1. **KOJEVNIKOV DMITRII, IDNP 0972305012362**

Prezentul extras este eliberat în temeiul art.34 al Legii nr.220-XVI din 19 octombrie 2007 privind înregistrarea de stat a persoanelor juridice și a întreprinzătorilor individuali și confirmă datele din Registrul de stat la data de: **15.09.2023.**

**Registrator în domeniul
înregistrării de stat**

Digitally signed by Rusu Diana
Date: 2023.09.15 16:44:17 EEST
Reason: MoldSign Signature
Location: Moldova



Rusu Diana



EB 0461494

Lista fondatorilor Biosistem-mld SRL

Nr.	Nume, Prenume	IDNP
1.	Vitalie Poiata	0983103892591
2.	Alexandr Nasedchin	2002001070747
3.	Dmitrii Kojevnikov	0972305012362

Produkt catalog



valid from
2018

 **OSYPKA**
Technology for an active life



Technology for an active Life

Located on the bank of the Rhine River in the most Southern part of Germany, OSYPKA AG is well-known for innovation and precision in the development and manufacturing of medical devices for cardiology and cardiac surgery.

Since 1977 the company has been manufacturing pacing leads, implantable stimulation electrodes, cardiac pacemakers and post-surgical pacing wires. OSYPKA AG is renown for their pioneering work in various medical fields which have since become standard, like multi-filar implantable pacing leads or the world's first radio frequency ablation generator for the treatment of cardiac arrhythmias.

Today OSYPKA AG is offering a wide range of products for cardiac pacing, cardiac surgery, electrophysiology ablation and mapping catheters including a state of the art RF ablation generator, an extensive line of valvuloplasty balloon catheters for adults and pediatric patients and other specialty products for interventional and pediatric cardiology and cardiac surgery. OSYPKA branded products are distributed worldwide through a professional distributor network.

OSYPKA AG is an experienced and trusted supply partner for international medical device companies and OEM customers offering development, production and complete turn-key services in medical technology.

Beyond its headquarters in Germany, OSYPKA AG has additional locations in the USA and the Czech Republic.

The family enterprise, which is majority-owned by the non-profit and charitable Peter Osypka Foundation, is committed to the promotion of medical research and charitable projects in developing countries.

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CERABLATE® easy

Steerable ablation catheter

- Temperature measurement: thermistor
- 4 mm platinum iridium tip
- RF ablation of almost all arrhythmias (i.e. AVNRT, WPW, RVOT)
- Various curve diameters and curve shapes available
- Four 2mm electrodes

Special features: Individual adjustment of force to deflect the catheter, optimal curve stability and torque control, precise manipulation of the catheter's curve

Article No.	Outer Ø	Pole spacing	Curve shape	Curve Ø	Usable length
283083	7F	2-2-2 mm	Classic	30 mm	110 cm
283084	7F	2-2-2 mm	Classic	45 mm	110 cm
283085	7F	2-2-2 mm	Classic	60 mm	110 cm
283086	7F	2-2-2 mm	Classic	30 mm	80 cm
283087	7F	2-2-2 mm	Classic	45 mm	80 cm
283088	7F	2-2-2 mm	Classic	60 mm	80 cm
283089	7F	1-4-1 mm	Sigma	30 mm	110 cm
283090	7F	1-4-1 mm	Sigma	45 mm	110 cm
283091	7F	1-4-1 mm	Sigma	60 mm	110 cm
283092	7F	1-4-1 mm	Sigma	30 mm	80 cm
283093	7F	1-4-1 mm	Sigma	45 mm	80 cm
283094	7F	1-4-1 mm	Sigma	60 mm	80 cm

Connection cables for ablation catheters see page 5.



CERABLATE® easy TC

Steerable ablation catheter

- Temperature measurement: thermocouple (TC)
- 4 mm platinum iridium tip
- RF ablation of almost all arrhythmias (i.e. AVNRT, WPW, RVOT)
- Various curve diameters and pole spacing available
- Four 2mm electrodes

Special features: Individual adjustment of force to deflect the catheter, optimal curve stability and torque control, precise manipulation of the catheter's curve, extra fast temperature measurement for maximum safety

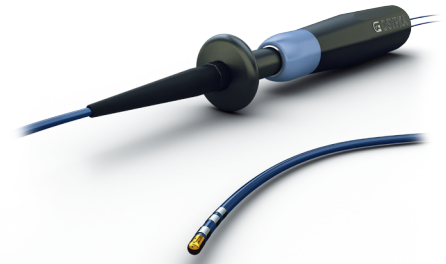
Article No.	Outer Ø	Pole spacing	Curve shape	Curve-Ø	Usable length
283080	7F	2-5-2 mm	Classic	30 mm	110 cm
283081	7F	2-5-2 mm	Classic	45 mm	110 cm
283082	7F	2-5-2 mm	Classic	60 mm	110 cm
283095	7F	2-2-2 mm	Classic	30 mm	110 cm
283096	7F	2-2-2 mm	Classic	45 mm	110 cm
283097	7F	2-2-2 mm	Classic	60 mm	110 cm

Connection cables for ablation catheters see page 5.

CERABLATE cool®

Steerable ablation catheter, irrigated

- Temperature measurement: thermocouple (TC)
- 3,5mm gold tip
- Various curve diameters and pole spacings available
- RF ablation of almost all arrhythmias



Special features: Irrigation especially effective by coil construction and 25 irrigation holes, lesions are extraordinary effective and safe through configuration of material and assembly: Less chars and decreased ablation time ^{1,2}

Article No.	Outer Ø	Pole #	Pole spacing	Curve shape	Curve Ø	Usable length
283120	7F	4	1-4-1 mm	Classic	30 mm	110 cm
283121	7F	4	1-4-1 mm	Classic	45 mm	110 cm
283122	7F	4	1-4-1 mm	Classic	60 mm	110 cm
283123	7F	4	2-5-2 mm	Classic	30 mm	110 cm
283124	7F	4	2-5-2 mm	Classic	45 mm	110 cm
283125	7F	4	2-5-2 mm	Classic	60 mm	110 cm

Connection cables for ablation catheters see page 5.

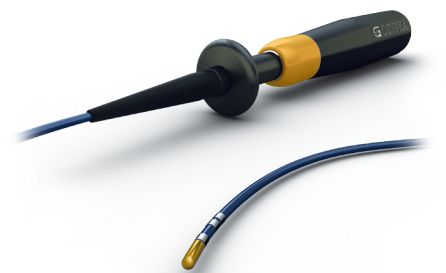
¹ Balazs T, Laczko R, Bogнар E, et al: Ablation time efficiency and lesion volume – in vitro comparison of 4mm non-irrigated gold- and platinum-tip radio frequency ablation catheters. J Interv Card Electrophysiol. 2013 Jan;36(1):13-8; discussion 18.

² Linhart M, Ilberman I et al: Superiority of gold versus platinum irrigated tip catheter ablation of the pulmonary veins and the cavotricuspid isthmus: a randomized study comparing tip temperatures and cooling flow requirements. J Cardiovasc Electrophysiol. 2012 Jul;23(7):717-21.

CERABLATE flutter®

Steerable ablation catheter

- Temperature measurement: thermocouple (TC)
- 8 mm gold or platinum iridium tip
- Various curve diameters with a continuously variable radius up to 270°
- Four 2 mm electrodes with special electrode spacing of 0,5-4-1 mm
- Developed for the treatment of atrial flutter with the Maximum Voltage Guided (MVG) technique ^{2,3,4}.



Special features: Extra fast temperature measurement for maximum safety, decrease of char formation and ablation time by special tip electrode for fast and deep lesions ^{1,2,3}

Gold tip

Article No.	Outer Ø	Curve Ø	Usable length
283110	7F	30 mm	110 cm
283111	7F	45 mm	110 cm
283112	7F	60 mm	110 cm

Platinum Iridium tip

Article No.	Outer Ø	Curve Ø	Usable length
283113	7F	30 mm	110 cm
283114	7F	45 mm	110 cm
283115	7F	60 mm	110 cm

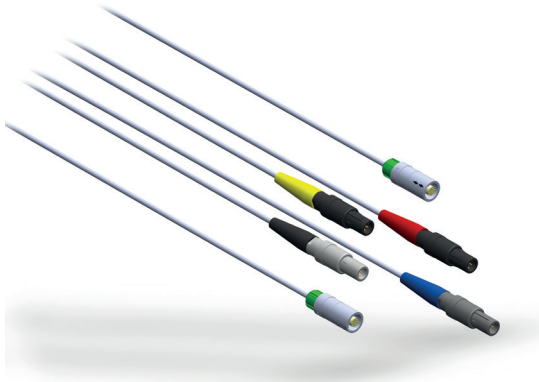
Connection cables for ablation catheters see page 5.

¹ Balazs T, Laczko R, Bogнар E, et al: Ablation time efficiency and lesion volume – in vitro comparison of 4mm non-irrigated gold- and platinum-tip radio frequency ablation catheters. J Interv Card Electrophysiol. 2013 Jan;36(1):13-8; discussion 18.

² Kardos A, Foldesi C, Mihalcz A et al: Cavotricuspid Isthmus Ablation with Large-Tip Gold Alloy Versus Platinum-Iridium-Tip Electrode Catheters. Pacing Clin Electrophysiol. 2009 Mar;32 Suppl 1:S138-40.

³ Lewalter T, Lickfett L, Weiss C, et al: “Largest Amplitude Ablation” is the Optimal Approach for Typical Atrial Flutter Ablation: A Subanalysis from the Aurum 8 Study. J Cardiovasc Electrophysiol. 2012 May;23(5):479-85

⁴ Deutsch K, Sledz J, Mazij M, et al: Maximum voltage gradient technique for optimization of ablation for typical atrial flutter with zero-fluoroscopy approach. Medicine (2017) 96:25(e6939)



Connection cables for ablation catheters

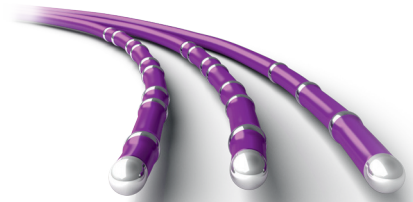
Connection of ablation catheters with thermistor or thermocouple (TC) to ablation generators

Article No.	Name	Length	Connectable catheter	Connectable generator (Company, Name)	Special features
82002	TX-HAT 500	2,50 m	CERABLATE easyTC / flutter / cool	OSYPKA, HAT 500®	For catheters with thermocouple (TC) Resterilizable (10 cycles autoclave)
82003	TX-IBI	2,50 m	CERABLATE easyTC / flutter / cool	SJM, T11 / Ampere	For catheters with thermocouple (TC) Resterilizable (10 cycles autoclave)
82004	TX-SMARTABLATE	2,50 m	CERABLATE easyTC / flutter / cool	Stockert, Smartablate	For catheters with thermocouple (TC) Resterilizable (10 cycles autoclave)
82005	TX-Qubic/EpShuttle	2,50 m	CERABLATE easyTC / flutter / cool	Stockert, EpShuttle Biotronik, Qubic RF	For catheters with thermocouple (TC) Resterilizable (10 cycles autoclave)
82006	TX-HAT 500-SJMf	2,50 m	SJM Safire TX	OSYPKA, HAT 500®	Resterilizable (10 cycles autoclave)
82007	TX-HAT 500-SJMm	2,50 m	SJM Safire BLU	OSYPKA, HAT 500®	Resterilizable (10 cycles autoclave)
82008	TX-HAT 500-BSW	2,50 m	BSW EzSteer	OSYPKA, HAT 500®	Resterilizable (10 cycles autoclave)
82011	TX-HAT 500-MDT	2,50 m	MDT Mariner	OSYPKA, HAT 500®	Resterilizable (10 cycles autoclave)
82012	TX-HAT 500-BIO	2,50 m	Bio AICath	OSYPKA, HAT 500®	Resterilizable (10 cycles autoclave)
82013	CX-HAT 500-BSW	22 cm	Adapterkabel BSW	OSYPKA, HAT 500®	Adapter cable (22 cm) to connect the HAT 500-Generator: - to Rhythmia™ via Stockert Box or - to diverse Ablationskatheter via cable for EP Shuttle™
81936	D369	1,50 m	CERABLATE easy	OSYPKA, HAT300 Pin Box	Slimline cable for catheters with thermistor
81942	D369	1,50 m	CERABLATE easy	OSYPKA, HAT300 Pin Box	For catheters with thermistor
81948	D369	2,50 m	CERABLATE easy	OSYPKA, HAT300 Pin Box	For catheters with thermistor
81997	D389	1,50 m	CERABLATE easyTC / flutter / cool	OSYPKA, HAT300 Pin Box	Slimline cable for catheters with thermocouple (TC)
82000	D389-CW	2,00 m	CERABLATE easyTC / flutter / cool	Stockert, EpShuttle	For catheters with thermocouple (TC)
82001	D389-IBI	2,00 m	CERABLATE easyTC / flutter / cool	SJM, T11 / Ampere	For catheters with thermocouple (TC)
82513	D369-EPT	0,60 m	CERABLATE easy	BSc, EPT	For catheters with thermistor
82514	D369-CW	1,50 m	CERABLATE easy	Stockert, EpShuttle	For catheters with thermistor
82521	D369-CW	2,00 m	CERABLATE easy	Stockert, EpShuttle	For catheters with thermistor
82523	D369-CW	3,50 m	CERABLATE easy	Stockert, EpShuttle	For catheters with thermistor
82525	D369-IBI	2,50 m	CERABLATE easy	SJM, T11 / Ampere	For catheters with thermistor

FINDER®

Diagnostic and temporary stimulation catheter

- Non-steerable (fixed curve)
- Multipolar intracardiac potential recording / mapping
- Stimulation with an external stimulator
- Various curve types for the standard positions in HIS-bundle, right atrium and ventricle (Cournand / Josephson curve) or right atrium and coronary sinus (Damato curve)



Special features: Bulky electrodes, excellent torqueability, optimal shaft- and curve stability, atraumatic catheter tip

Article No.			Outer Ø	Number of poles	Pole spacing	Usable length
C-Curve	J-Curve	D-Curve				
24485	24443	24446	5F	4	5-5-5 mm	110 cm
24489	24499	24477	5F	4	2-5-2 mm	110 cm
		24480	5F	10	2-5-2-5-2-5-2-5-2 mm	110 cm
24415	24429	24401	6F	4	2-2-2 mm	110 cm
24420	24434	24406	6F	4	5-5-5 mm	110 cm
24424	24438	24410	6F	4	2-5-2 mm	110 cm
24416	24430		6F	6	2-2-2-2-2 mm	110 cm
24421	24435		6F	6	5-5-5-5-5 mm	110 cm
24425	24439		6F	6	2-5-2-5-2 mm	110 cm
24418	24432		6F	10	2-2-2-2-2-2-2-2-2 mm	110 cm
24423	24437		6F	10	5-5-5-5-5-5-5-5-5 mm	110 cm
24427	24441	24413	6F	10	2-5-2-5-2-5-2-5-2 mm	110 cm

Connection cables for diagnostic catheters see page 8.

FINDER pure®

Diagnostic and temporary stimulation catheter

- Non-steerable (fixed curve)
- Cost efficient solution for multipolar intracardiac potential recording / mapping
- Various curve types for the standard positions, incl HIS-hugger-curve (C2)
- 6F outer diameter and 110cm usable length allow for a quick and reliable positioning within the heart
- Flat 2 mm ring electrodes



Special features: Excellent positioning features, ideal adaptation to cardiac tissue

Article No.	Number of poles	Curve geometry	Pole spacing
24510	4	J-Kurve	2-2-2 mm
24511	4	J-Kurve	2-5-2 mm
24512	4	J-Kurve	5-5-5 mm
24513	4	C-Kurve	2-2-2 mm
24514	4	C-Kurve	2-5-2 mm
24515	4	D-Kurve	5-5-5 mm
24517	4	C2-Kurve	2-5-2 mm
24520	10	J-Kurve	2-2-2 mm
24521	10	J-Kurve	5-5-5 mm
24522	10	J-Kurve	2-5-2 mm
24523	10	C-Kurve	2-2-2 mm
24524	10	C-Kurve	5-5-5 mm
24525	10	C-Kurve	2-5-2 mm
24526	10	D-Kurve	2-5-2 mm
24527	10	J-Kurve	5-5-5-5-5-5-30-2-5-2 mm

Connection cables for diagnostic catheters see page 8.



Map-iT™ GuideTip™

Diagnostic catheter

- Non-steerable (fixed curve)
- Ideally suited for coronary sinus access: Ø 3,3F / 4F (dist./prox.)
- Multi-polar potential detection on left side of the heart
- Mapping of VTs and posteroseptal conduction pathways
- Confirmation of PV isolation success through left-sided stimulation via coronary sinus

Special features: A guide wire-like catheter tip and the very thin distal catheter profile allow deep positioning of the catheter in the coronary sinus and its side branches.

Article No. OSYPKA	Outer-Ø	Number of poles	Pole spacing	Curve	Usable length
24530	3.3F	10	2-8-2 mm	ST	120 cm
24531	3.3F	10	2-10-2 mm	ST	120 cm
24532	3.3F	10	2-5-2 mm	ST	120 cm

Connection cables for diagnostic catheters see page 8.

Further versions with 10 Poles and 20 Poles are available on request. Our sales staff will be happy to advise you (see back cover).



SIRIUS®

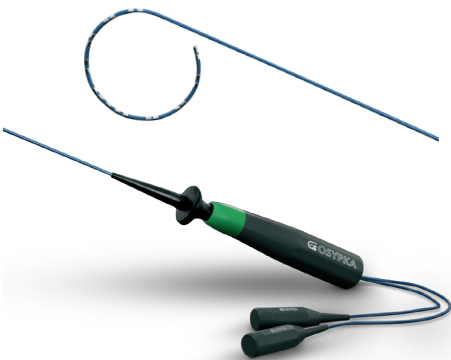
Steerable diagnostic catheter

- Unidirectional steerable
- Various pole numbers and pole spacings
- Curve diameter 45 or 60 mm
- Special curve geometry for mapping in the coronary sinus
- Excellent electrical signal quality during intracardiac mapping and stimulation

Special features: Excellent torque control, optimal curve shape, excellent x-ray visibility, continuously variable curve manipulation

Article No.	Outer-Ø	Number of poles	Pole spacing	Curve-Ø	Usable length
28426	6 F	4	5 mm	45 mm	110 cm
28427	6 F	10	5 mm	45 mm	110 cm
28428	6 F	10	2-5-2 mm	45 mm	110 cm
28429	6 F	10	2 mm	60 mm	110 cm
28430	6 F	10	2-5-2 mm	60 mm	110 cm
28431	6 F	10	2-8-2 mm	60 mm	110 cm

Connection cables for diagnostic catheters see page 8.



SIRIUS flutter®

Steerable diagnostic catheter

- Mapping around the tricuspid valve and the complete right atrium
- Excellent torsion and longitudinal stability
- Curve diameter is individually adjustable to the specific anatomy of the heart

Special features: Usable length adapted to mapping of the right atrium
- ideal combination of stability and usability

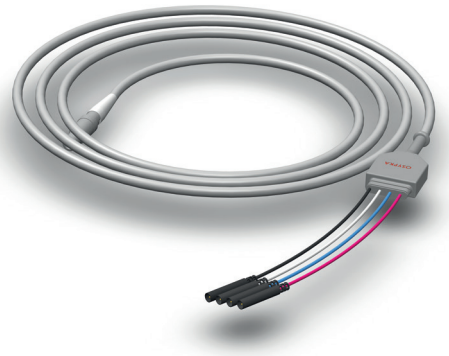
Article No.	Outer-Ø	Number of poles	Pole spacing	Curve-Ø	Usable length
28435	7 F	20	2-8-2 mm	80 mm	90 cm
28436	7 F	20	2-12-2 mm	100 mm	90 cm

Connection cables for diagnostic catheters see page 8.

Connection cables for diagnostic catheters

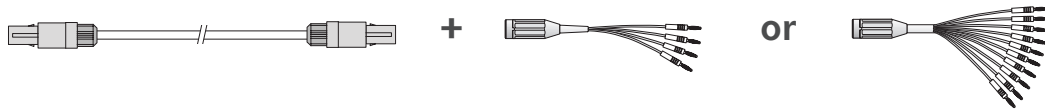
Connection between OSYPKA diagnostic catheters and EP-Systems

- Usable with all OSYPKA diagnostic catheters
- Connectable to standard ECG monitoring systems via respective pin box



Two-piece

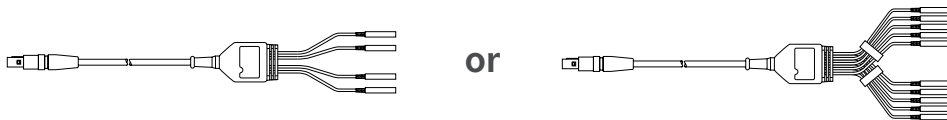
Special features: The clever cable-system - Increased safety and reduced set-up time.



Article No.	Name	Length	Resterilizable (Cycles)	Connectable catheter	Additional required accessories
53820	D350 slimline	2,00 m	no	4 polar and 10 polar (SIRIUS, FINDER, FINDER pure) 20 polar (SIRIUS flutter, 2 cable necessary)	Adapter 53821 or 53822
53821	Adapter 350-4	n/a	yes, remain in the pin box	4 polar (SIRIUS, FINDER, FINDER pure)	Anschlusskabel 53820
53822	Adapter 350-10	n/a	yes, remain in the pin box	10 polar (SIRIUS, FINDER, FINDER pure) 20 polar (SIRIUS flutter, 2 cable necessary)	Anschlusskabel 53820

One-piece

Special features: Resterilizable



Article No.	Name	Length	Resterilizable (Cycles)	Connectable catheter	Additional required accessories
53825	DX 4/10	2,30 m	yes (20)	4 polar (SIRIUS, FINDER, FINDER pure)	n/a
53827	DX 10/10	2,30 m	yes (20)	10 polar (SIRIUS, FINDER, FINDER pure) 20 polar (SIRIUS flutter, 2 cable necessary)	n/a
24533	APT XT 10-pol Kabel	n/a	no	Map-i™ Catheters	n/a

HAT 500[®] Generator

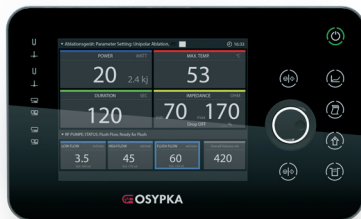
For cardiac RF ablations



- Uni- or bipolar ablation with one device and one or two catheters
- Automatic recognition of catheters with thermocouple or thermistor
- Power up to 100 W
- Connection and control of two irrigation pumps for bipolar ablation with two catheters
- Simultaneous pacing and ablation possible
- Connection of different neutral electrodes possible
- Clearly structured user interface. Graphical or numerical representation of parameters
- Filing of individual ablation programs
- Extensive logging and storage of ablation history
- Control with foot switch (optional)

HAT 500[®] Remote

For optional remote control of the HAT 500[®] devices



- Handy remote control for X-ray-free operation outside the operating room
- High-contrast, viewing angle-independent Display of ablation and pump parameters graphically or numerically
- Storage and retrieval of the ablation history
- Various cable lengths available for placement inside and outside of the OR- and x-ray zone

HAT 500[®] Pump

For irrigated RF ablations



- Reliable communication with the HAT 500[®] Generator in both directions
- Flow rates from 1 ml/min and up to 80 ml/min
- Monitoring of bottle depletion
- Detection of air bubbles < 2µl inside tubing set
- Automated control of pressure and flow rate
- Clear and well-structured display of flow rates and parameters
- Control with foot switch (optional)

HAT 500®-System

Consisting of generator, pump, remote control and required accessories

- All listed accessories are also available as individual units



Article No.	Name	Abbr.	Description
11790	HAT 500® Generator (100 Watt)		RF Generator for endo- and epicardial ablation, 100 W maximum power
11791	HAT 500® Generator (75 Watt)		RF Generator for endo- and epicardial ablation, 75 W maximum power
11792	HAT 500® Generator (50 Watt)		RF Generator for endo- and epicardial ablation, 50 W maximum power
11793	HAT 500® Generator (30 Watt)		RF Generator for endo- and epicardial ablation, 30 W maximum power
11794	HAT 500® Pump		Flushing pump for cooled ablation catheters, particularly smooth-running roller pump
11795	HAT 500® Remote		Remote control for HAT500 Generator und HAT500 Pump, wired
61120	HAT 500® Single Use Connection Cable	NE single	Connection cable for single use neutral electrodes
61121	HAT 500® Multi Use Connection Cable	NE multi	Connection cable for reusable neutral electrodes
61122	HAT 500® Single Use (splitted)		Single use neutral electrode with splitted pad
61123	HAT 500® Single Use (unsplitted)		Single use neutral electrode with unsplitted pad
61124	HAT 500® Single Use (splitted, small)		Single use neutral electrode with splitted pad, small
61125	HAT 500® Single Use (unsplitted, small)		Single use neutral electrode with unsplitted pad, small
61126	HAT 500® Multi Use		Reusable silicone rubber neutral electrode
61127	HAT 500® Generator - Pump (2 m)	VK1-2	Connection cable between HAT 500® Generator and HAT 500® Pump, L=2 m
61128	HAT 500® Generator - Pump (5 m)	VK1-5	Connection cable between HAT 500® Generator and HAT 500® Pump, L=5 m
61129	HAT 500® Generator - Remote (15 m)	VK2-15	Connection cable between HAT 500® Generator and HAT 500® Remote, L=15 m
61130	HAT 500® Generator - Remote (30 m)	VK2-30	Connection cable between HAT 500® Generator and HAT 500® Remote, L=30 m
61131	HAT 500® Generator - EPM / data (3 m)	VK10-3	Connection cable for data to the EP-System, L=3 m
61132	HAT 500® Generator - EPM / data (15 m)	VK10-15	Connection cable for data to the EP-System, L=15 m
61133	HAT 500® Generator - EPM / IECG (2 m)	VK20-2	Connection cable to the pin box of the EP-System, L=2 m
61156	HAT 500® Generator - EPM / IECG (3 m)	VK20-3	Connection cable to the pin box of the EP-System, L=3 m
61134	HAT 500® Power Cord (DE + FR)	NK1-DE	Power cord of HAT 500® Generator and HAT 500® Pump for Germany, France and others
61135	HAT 500® Power Cord (JP + US + CA)	NK1-US	Power cord of HAT 500® Generator and HAT 500® Pump for Japan, USA, Canada
61136	HAT 500® Power Cord (CH)	NK1-CH	Power cord of HAT 500® Generator and HAT 500® Pump for Switzerland
61137	HAT 500® Power Cord (IT)	NK1-IT	Power cord of HAT 500® Generator and HAT 500® Pump for Italy
61138	HAT 500® Power Cord (GB-UK)	NK1-GB	Power cord of HAT 500® Generator and HAT 500® Pump for Great Britain
61144	HAT 500® Remote - Power Supply	P1-DE	Power cord of the HAT 500® Remote for Germany, France and others
61145	HAT 500® Remote - Power Adapter (JP + US + CA)	A1-JP	Adaptor for the power cord of the HAT 500® Remote: Japan, USA and Canada
61147	HAT 500® Remote - Power Adapter (EU)	A1-EU	Adaptor for the power cord of the HAT 500® Remote: Europe
61148	HAT 500® Remote - Power Adapter (GB-UK)	A1-GB	Adaptor for the power cord of the HAT 500® Remote: Great Britain
61154	HAT 500® Potential Equalization WW	POAG1	Connection of potential equalization
61110	HAT 500® Tubing Set	S1	Tubing set for cooled ablation catheters on the HAT 500® Pump
61180	HAT 500® Pump Mounting Support	SK1	Holder for attachment to a vertical rod (e. g. infusion stand)
61158	HAT 500® Foot Switch	FS1	Foot switch for HAT 500® Generator, HAT 500® Pump and HAT 500® Remote
61159	HAT 500® Adapter USB-RS232	A2-0.1	Adaptor to connect the data port of the HAT 500® to an USB port
61164	HAT 500® Pump adapter box	AB-2	Adaptor to connect two HAT 500® Pump to the HAT 500® Generator
61183	HAT 500® Medizingerätebuch		Summary of appertaining documentation
61185	HAT 500® IFU Generator		Instruction for use HAT 500® Generator, available in different languages
61186	HAT 500® IFU Pump		Instruction for use HAT 500® Pump, available in different languages
61187	HAT 500® IFU Remote		Instruction for use HAT 500® Remote, available in different languages
61189	HAT 500® Technical Information		Datasheet with technical and ordering information
61190	HAT 500® Quick Guide English		Quick Guide for HAT 500® Generator, HAT 500® Pump and HAT 500® Remote, English
61191	HAT 500® Quick Guide German		Quick Guide for HAT 500® Generator, HAT 500® Pump and HAT 500® Remote, German
Catheter connection cable			
82002	HAT 500® Generator - OSYPKA TC catheters (2,5 m)	TX-HAT 500	Connection Cable HAT 500® Generator to CERABLATE® easyTC / flutter® / cool®
82006	HAT 500® Generator - SJM Safire TX (2,5m)	TX-HAT 500-SJMf	Connection Cable HAT 500® Generator to Safire TX (St.Jude Medical / Abbott)
82007	HAT 500® Generator - SJM Safire BLU (2,5m)	TX-HAT 500-SJMm	Connection Cable HAT 500® Generator to Safire BLU (St.Jude Medical / Abbott)
82008	HAT 500® Generator - BSW EzSteer (2,5 m)	TX-HAT 500-BSW	Connection Cable HAT 500® Generator to EZ Steer (Biosense Webster)
82011	HAT 500® Generator - MDT Marinr (2,5 m)	TX-HAT 500-MDT	Connection Cable HAT 500® Generator to Marinr (Medtronic)
82012	HAT 500® Generator - Bio AICath (2,5 m)	TX-HAT 500-BIO	Connection Cable HAT 500® Generator to AICath (Biotronik)
82013	HAT 500® Adapter Cable BSW	CX-HAT 500-BSW	Adapter Cable (22 cm) to connect the HAT 500® Generator: - to Rhythmia™ via Stockert Box - to various Ablation Catheter via Cable for EP Shuttle™

For more information about set configurations and special offers please contact us.

VACS® II

Valvuloplasty balloon catheter

- Percutaneous Transluminal Valvuloplasty (PTV) of the Aortic and Pulmonary Valve
- Balloon Predilation during the TAVI procedure
- Angioplasty of central vessels: Pulmonary Artery, Aortic Arch, Coarctation of the Aorta.



Special features: Dedicated low profile balloon to access small vessels and challenging vasculature. Designed both for pediatric patients and minimally invasive access in adults.

Balloon ∅	Article No.					Nominal pressure [atm]	Rated burst pressure [atm]	Recomm. guide wire [inch]	Recomm. introducer [F]	Usable catheter length [cm]
	Balloon length									
	20 mm	30 mm	40 mm	50 mm	60 mm					
4	YA0010					4.5	6.0	0.021	4	70
5	YA0011					4.5	6.0	0.021	4	70
6	YA0012					3.5	4.0	0.021	4	70
7	YA0013	YA0014				3.5	4.0	0.021	4	70
8	YA0015	YA0016				3.5	4.0	0.021	4	70
9	YA0018	YA0019				3.0	3.5	0.025	5	90
10	YA0020	YA0021	YA0022			3.0	3.5	0.025	5	90
12	YA0023	YA0024				3.0	3.5	0.025	5	90
12			YA0025		YA0026	3.0	3.5	0.035	6	90
14		YA0027	YA0028	YA0029	YA0030	2.0	3.0	0.035	7	100
16		YA0035	YA0036	YA0037	YA0038	2.0	2.5	0.035	7	100
18		YA0043	YA0044	YA0045	YA0046	1.5	2.0	0.035	8	100
20		YA0047	YA0048	YA0049	YA0050	1.5	2.0	0.035	8	100
22		YA0051	YA0052	YA0053	YA0054	1.5	2.0	0.035	8	100
24		YA0055	YA0056		YA0057	1.0	1.5	0.035	9	100
26		YA0058	YA0059	YA0060	YA0061	1.0	1.5	0.035	9	100
28		YA0062	YA0063	YA0064	YA0065	1.0	1.5	0.035	10	100
30		YA0066	YA0067	YA0068	YA0069	1.0	1.5	0.035	10	100

VACS® III

High performance valvuloplasty balloon catheter

- Percutaneous Transluminal Valvuloplasty (PTV) of the Aortic and Pulmonary Valve
- Balloon Predilation during the TAVI - procedure
- Angioplasty of central vessels: Pulmonary Artery, Aortic Arch, Coarctation of the Aorta



Special features: Balloon segment with increased rated burst pressure and puncture resistance. Designed for challenging applications in calcified valves or vessels and rigid stenoses.

Balloon ∅	Article No.				Nominal pressure [atm]	Rated burst pressure [atm]	Recomm. guide wire [inch]	Recomm. introducer [F]	Usable catheter length [cm]
	Balloon length								
	20 mm	30 mm	40 mm	60 mm					
5	YA30520				6.0	15.0	0.025	6	100
6	YA30620				6.0	15.0	0.025	6	100
7	YA30720				6.0	15.0	0.025	6	100
8	YA30820	YA30830			6.0	15.0	0.035	7	100
9	YA30920	YA30930			6.0	14.0	0.035	7	100
10	YA31020	YA31030	YA31040		6.0	13.0	0.035	7	100
12	YA31220	YA31230	YA31240	YA31260	6.0	10.0	0.035	8	100
14		YA31430	YA31440	YA31460	5.0	10.0	0.035	9	100
16		YA31630	YA31640	YA31660	4.0	8.0	0.035	9	100
18		YA31830	YA31840	YA31860	4.0	7.0	0.035	10	100
20			YA32040	YA32060	2.0	5.0	0.035	12	100
22			YA32240	YA32260	2.0	4.0	0.035	12	100
23			YA32340		2.0	4.0	0.035	14	100
24			YA32440	YA32460	2.0	4.0	0.035	14	100
25			YA32540		2.0	4.0	0.035	14	100
26			YA32640	YA32660	2.0	4.0	0.035	14	100
28			YA32840	YA32860	2.0	4.0	0.035	14	100
30			YA33040	YA33060	2.0	4.0	0.035	14	100



LASSOS®

Snare catheter

Vascular retrieval catheter to remove embolized implants, defective pacemaker leads or infected port catheters from the central circulation or from the peripheral vasculature ^{1,2,3,4}.

Special features: The predefined deviation of the snare remains constant when snare size is adjusted. Fast and uncomplicated ensnaring. Reduced sheath size due to object (e.g. pacing lead) alignment alongside the snare catheter.

Article No.	Snare diameter	Snare angle	Catheter shaft size	Recomm. vascular introducer	Usable catheter length
22792	0-40 mm	45°	1.75 mm	> 5.5 F	110 cm
22793	0-40 mm	90°	1.75 mm	> 5.5 F	110 cm



CATCHER®

Forceps catheter

Catheter with completely retractable grasping forceps designed to retrieve broken or embolized implants or device fragments from the central circulation or from the peripheral vasculature.

Special features: Forceps-like grasping arms that can smoothly be extended to approx. 12 mm in width. Especially useful to retrieve closed-loop objects and other devices or fragments which are otherwise difficult to ensnare ^{1,2,3}.

Article No.	Snare diameter	Catheter shaft size	Recomm. vascular introducer	Usable catheter length
07091	0-12 mm	1.75 mm	> 5.5 F	110 cm

¹ Shebani S, Rehman R, Taliotis D et al: Techniques for Transcatheter Retrieval of the Occlutech ASD Device United Kingdom-European Multicenter Report. *Catheterization and Cardiovascular Interventions* 89:690-698 (2017)

² Bongiorno M, Zucchelli G, Soldati E et al: Usefulness of mechanical transvenous dilation and location of areas of adherence in patients undergoing coronary sinus lead extraction. *Europace* (2007) 9, 69-73

³ Lucia R, Segreti L, Soldati E et al: Port-a-Cath Complicated by Infection or Migration Not Removed by Manual Traction: Usefulness of Cardiac Pacing Leads Extraction Techniques. *Ann Vasc Surg* 2013; 27: 529-536

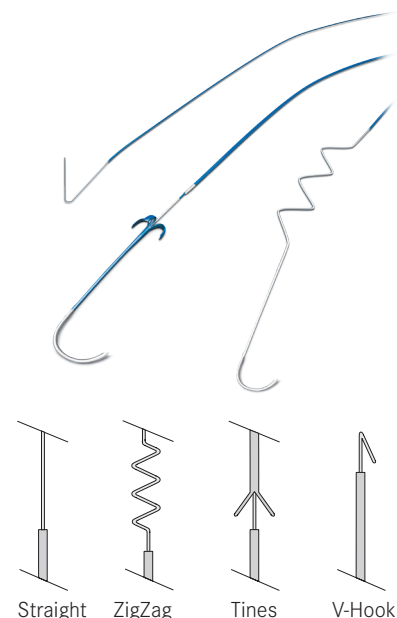
⁴ Bongiorno M, Segreti L, Di Cori A et al: Retrieval of a transcatheter pacemaker in sheep after a mid-term implantation time. *HeartRhythm Case Rep.* 2016 Jan; 2(1): 43-46

TME

Temporary myocardial leads

- For stimulation therapy of post-operative cardiac arrhythmias
- Application in ventricle and atrium
- Special pacing wires for adults, children and babies with different litz diameters, thoracic and heart needle dimensions
- Safe fixation characteristics: Tines (T), Zigzag (Z), V-Hook (V) and Straight (S)
- Available in unipolar, bipolar, bipolar bifurcated, quadripolar und double bipolar
- Length of pacing wires: 60 cm and 220 cm as well as custom wires

Adapter: Easy to handle, patented adapter systems as well as unique Confix (pin) connection for direct connection to an external pacemaker or via extension cables.



Adult TME , Packaging unit 25 pieces, \varnothing Litz: 0,45 mm; \varnothing /Length heart needle: 0,46 mm/21 mm; \varnothing /Length thoracic needle: 1 mm/82 mm								
Article No.	Name	Design	No. poles	Fixation	Length	Connector	Color	Heart / Thoracic needle
45017-01	TME1-60T	unipolar	1	Tines	60 cm	2mm-Adapter	blue	curved / straight
45016-01	TME1-61T	unipolar	1	Tines	60 cm	2mm-Adapter	blue	curved / curved
45001	TME1-60Z	unipolar	1	Zigzag	60 cm	2 mm-Adapter	blue	curved / curved
46013C02	TME2-66T	bipolar	2	Tines	60 cm	1 mm-Confix	blue	curved / curved
45042-02	TME2-66T, 220	bipolar	2	Tines	220 cm	2 mm-Adapter	blue	curved / curved
46033C01	TME2-67T	bipolar bifurcated	2	Tines	60 cm	1 mm-Confix	blue	curved / curved
45044-01	TME2-67T , 220	bipolar bifurcated	2	Tines	220 cm	2 mm-Adapter	blue	curved / curved
45045	TME2-67V	bipolar bifurcated	2	V-Hook	220 cm	2 mm-Adapter	blue	curved / curved
47005C01	TME4-68T	quadrip. bifurcated	4	Tines	60 cm	1 mm-Confix	blue + white	curved / curved
45046-01	TME4-68T, 220	quadrip. bifurcated	4	Tines	220 cm	2mm-Adapter	blue + white	curved / curved
45052-01	TME4-68TV	quadrip. bifurcated	4	Tines + V-Hook	220 cm	2 mm-Adapter	blue + white	curved / curved
S5620-01	TME4-70T	double bipolar	4	Tines	220 cm	2 mm-Adapter	blue + white	curved / curved

For a large selection of additional models – please inquire.

Children TME , Packaging unit 25 pieces, \varnothing Litz: 0,45 mm; \varnothing /Length heart needle: 0,40 mm/21 mm; \varnothing /Length thoracic needle: 1 mm/82 mm								
Article No.	Name	Design	No. poles	Fixation	Length	Connector	Color	Breast- / Thoracic needle
45055	TME2-56T	bipolar	2	Tines	60 cm	2mm-Adapter	blue	curved / curved
45056	TME2-56T, 220	bipolar	2	Tines	220 cm	2mm-Adapter	blue	curved / curved
45061	TME4-52T	double bipolar	4	Tines	220 cm	2mm-Adapter	blue	curved / curved

For a large selection of additional models – please inquire.

Baby TME , Packaging unit 25 pieces, \varnothing Litz: 0,30 mm; \varnothing /Length heart needle: 0,30 mm/13 mm; \varnothing /Length thoracic needle: 0,5 mm/40 mm								
Article No.	Name	Design	No. poles	Fixation	Length	Connector	Color	Breast- / Thoracic needle
45200	TME1-40S	unipolar	1	Straight	60 cm	2mm-Adapter	blue	curved / curved
45206	TME2-47Z	bipolar bifurcated	2	Zigzag	60 cm	2mm-Adapter	blue	curved / curved
45206WS	TME2-47Z	bipolar bifurcated	2	Zigzag	60 cm	2mm-Adapter	white	curved / curved
45207	TME2-47V	bipolar bifurcated	2	V-Hook	60 cm	2mm-Adapter	blue	curved / curved

For a large selection of additional models – please inquire.

For accessories (connection cable, adapter etc.) see page 17.

¹ Bougioukas I et al: Is there a correlation between late re-exploration after cardiac surgery and removal of epicardial pacemaker wires? Journal of Cardiothoracic Surgery (2017) 12:3

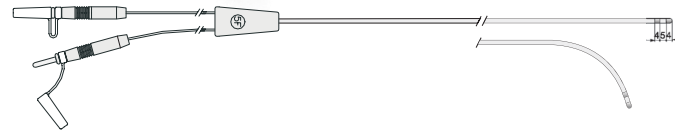
² Ceresnak et al: Predictors for hemodynamic improvement with temporary pacing after pediatric cardiac surgery. The Journal of Thoracic and Cardiovascular Surgery c Volume 141, Number 1, S.183-187

³ Kappus S, Haber T, Ismer B et al: Qualitative in-vitro-Investigation of the MRI Compatibility of Temporary Myocardial Electrodes and Pacemaker Leads. 130-133 I forschung im fokus 2015 I IAF Hochschule Offenburg

⁴ Baikoussis et al: Safety of Magnetic Resonance Imaging in Patients with Implanted Cardiac Protheses and Metallic Cardiovascular Electronic Devices. Cardiothoracic Surgery Department, University Hospital of Rio, Patras, Greece (Ann Thorac Surg 2011;91:2006 -11) © 2011 by The Society of Thoracic Surgeons

⁵ Pfeil et al: Compatibility of Temporary Pacemaker myocardial pacing leads with magnetic resonance imaging: an ex vivo tissue study. Received: 13 August 2010 / Accepted: 8 January 2011 Springer Science+Business Media, B.V. 2011

⁶ Wirtz St, Schulte HD, Winter J, Godehardt E, Kunert J et al: Reliability of Different Temporary Myocardial Pacing Leads. Thorac. cardiovasc. Surgeon 37 (1989) 163- 168 © Georg Thieme Verlag Stuttgart . NewYork



TB-II

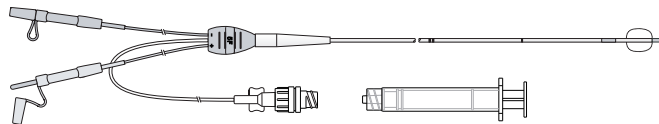
Temporary transvenous pacing lead

- Pre- and postoperative stimulation/ monitoring
- Rapid Pacing during TAVI, valvuloplasty
- Mapping during electrophysiological procedures
- Emergency stimulation

Special features: Stimulation catheter without stylet; distal end of the electrode straight or with J-Curve; more stiff distal end of the electrode in comparison to the stimulation catheter TUA-II.

Packaging unit 5 pieces

Article No.	Name	Diameter	No. poles	Pole spacing	Curve	Usable length
27003	TB-II X	4 F	2	5 mm	Straight	110 cm
27004	TB-II X	5 F	2	5 mm	Straight	110 cm
27005	TB-II X	6 F	2	5 mm	Straight	110 cm
27006	TB-II X J	4 F	2	5 mm	J-Curve	110 cm
27007	TB-II X J	5 F	2	5 mm	J-Curve	110 cm
27008	TB-II X J	6 F	2	5 mm	J-Curve	110 cm



Helios

Bipolar floating balloon stimulation catheter

- Temporary stimulation of the heart, especially convenient in emergencies such as bradyarrhythmia or saltatory conduction diseases
- Ideally for interventions in emergency outpatient, ambulance, intervention rooms, intensive care unit and monitoring station, anaesthesia and emergency stations or operating rooms

Special features: Positioning without X-ray control, Latex-free, volume-limited syringe included

Packaging unit 1 piece

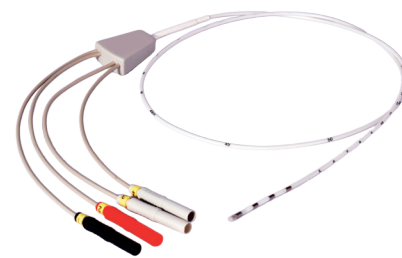
Article No.	Name	Description	Length
29207	HELIOS™	5F bipolar temporary floating balloon stimulation catheter	110 cm

Availability of products on this page may vary. If necessary, we will endeavour to offer an alternative product. Thank you for your understanding.

TO-F and TO-F J

Esophageal leads

- The temporary esophageal leads TO-F and TO-F J in combination with the esophagus stimulator OSYPKA PACE50E and the Rostock Filter (Butterworth high pass filter) are designed for the transesophageal stimulation and recording of proximal cardiac potentials of the atrium and ventricle
- They can be used for numerous trans-esophageal applications, e. g. in pediatric cardiology, in emergency situations and in clinical studies
- left atrial hyperstimulation for scheduling atrial flutter
- left ventricular emergency stimulation
- Derivation of the left atrial electrogram for differential diagnosis of cardiac arrhythmias
- Imaging of the esophagus and left atrial stimulation during a pulmonary vein ablation
- Derivation of the left ventricular electrogram for determining the extent of cardiac (ventricular) dyssynchrony in heart failure
- AV-Delay optimization: precise determination of inter-atrial conduction intervals
- CRT Optimization: Precise determination of the VV-Delay during left-ventricular electrode implantation



Article No.	Name	No. of poles	Pole length	Pole spacing	Usable length	Diameter	Unit
27514	TO-F 4-polig / 4-polar	4	6 mm	15 mm	95 cm	7F	1
27515	TO-F J 4-polig / 4-polar	4	6 mm	10 mm	95 cm	6F	1
81827	2-polar Connection cable, single-use						1
81826	4-polar Connection cable, reusable						1

OSYPKA PACE50E

Esophageal stimulator and booster

- The OSYPKA PACE50E is a stimulator and booster for the transesophageal semi-invasive rhythm diagnostic and therapy
- The increased amplitudes and pulse widths of up to 20 ms required for trans-esophageal stimulation are provided by the special esophageal stimulator. Flexible adjustment of numerous parameters and the connection of an interface to external electrophysiological analysis devices are possible.
- Pacing Rate 30 -1200 Ppm
- Pulse Duration 1 - 2 - 3 - 5 - 10 - 15 - 20 ms
- Pulse Amplitude 1-40 mA
- Protection From Defibrillation Yes
- Protection Grade Ip65
- Input External Trigger



Rostock Filter

Butterworth High-Pass-Filter

- The Rostock Filter is a Butterworth Filter which provides a filtered bipolar ECG recording for an unambiguous P wave interpretation at minimal risk
- The Rostock Filter was developed in cooperation with the University of Rostock, Germany
- Bipolar signal recording allows to focus on the selected area while providing noise free detection



Article No.	Name	Description
61311	OSYPKA PACE50E	Esophageal Stimulator and Booster
61312	Rostock Filter	Butterworth High-Pass-Filter
61311-ST	Set	OSYPKA PACE50E and Rostock Filter



OSYPKA PACE 101H®

Single chamber temporary external cardiac pacemaker

- Temporary stimulation of the heart for patients with heart rhythm disturbances or conduction defects
- Pacing Modes: AA0, AAI, V00, VVI
- Basic rate from 30ppm - 180ppm
- stimulus threshold from 0,3V - 12V (pulse width 0,75ms) and sensitivity to perception of 1,0mV - 20mV adjustable
- 2 atrial stimulation modes, in which the basic frequency can be multiplied up to 720ppm (x2 and x4)
- Visual and acoustic representation of the sense and stimulation activity (LED and sound)
- Protective cover for the prevention of an unintentional parametre conversion
- Battery term up to 38 days, visual and acoustic low battery indication, compatible with standard 9V Alkaline Batteries
- Overstimulation protection at 200ppm

Packaging unit 1 piece

Article No.	Name	Description
61216	PACE 101 H	Single chamber temporary external cardiac pacemaker

OSYPKA PACE203H®

Dual chamber temporary external cardiac pacemaker



- Temporary stimulation of the heart for patients with heart rhythm disturbances or conduction defects
- Pacing Modes: DDD, VDD, D00, V00, AAI, AAT, A00, DVI, DAI, VAT, DDD + AT, DAT
- Basic rate from 30ppm - 220ppm
- Stimulus threshold from 0,1V - 18V (pulse width 0,05 - 1,5ms)
- Sensing threshold 0,02 - 20mV (Atrium) and 1,0mV - 20mV (Ventricle) adjustable
- Automatic functions for AV-Delay, PVARP, MRT and sensitivity to perception
- Rapid Ventricular Pacing (up to 220ppm) for TAVI procedures as well as Atrial High Rate pacing (up to 1000ppm)
- Surveillance of electrode integrity and indication of EM disturbances
- Emergency Mode button (D00)
- Key lock prevents unintentional parameter changes
- Statistical storage and analysis of pacemaker activity
- Battery life up to 240h

Special features: Display of electrode impedance + current and statistical data review

Packaging unit 1 piece

Article No.	Name	Description
61225-ST	PACE 203 H	Dual chamber temporary external cardiac pacemaker

OSYPKA PACE300®

Triple chamber temporary external cardiac pacemaker



- For temporary biventricular stimulation (CRT) for the optimization of LV hemodynamics
- Use for non-synchronous ventricular contractions, significant criteria: NYHA III, LBBB (QRS > 150ms), EF <35%
- Perception and stimulation of the atrium as well as the right and left ventricles
- Stimulation and sensing parameters independently adjustable for all 3 chambers
- Variable setting of VV-Delay
- Additional functions same as OSYPKA PACE203H®

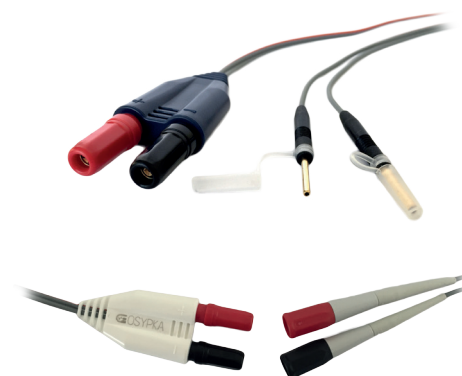
Special features: AV + biventricular (CRT) stimulation, display of electrode impedance + current and statistical data review




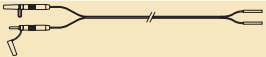


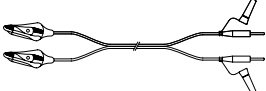
Packaging unit 1 piece

Article No.	Name	Description
61227-ST	PACE 300	Triple chamber temporary external cardiac pacemaker

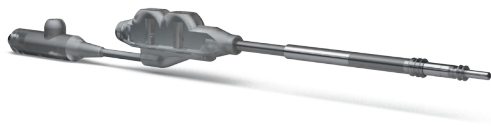
Accessories temporary pacing

- The extension cables are compatible with the OSYPKA pacing wires (TME), temporary OSYPKA pacing catheters (TB-II) as well as Helios™ Floating Balloon Catheter in connection with OSYPKA PACE101H®, OSYPKA PACE203H®, OSYPKA PACE300®
- Additional accessories and cables for OSYPKA or other pacemakers are listed below. Please inquire for additional specialty products.



Article No.	Name	Description		Stück
81973	D2-SP	Universal extension cable (grey) to the connection of pacing wires and temporary catheters to external cardiac pacemakers, 2,50 m		5
81975-3 81975-5 81975-10	D2-SP Adapter	Adapter in different lengths: 3, 5 and 10 cm		5
81986BL 81986WS	D2P-SP	Extension cable blue / white (Color-coded PM Atrium), 2,50 m		5
53819BL 53819WS	TCE	TME Confix Extension Easy – Extension cable blue / white, only for Confix TME		5
82101	Y2-SP Adapter	Y-Adapter		5
81825	F7819	Adapter F7819MED for MDT Pacemaker		5
81830	F7833	Cable for external pacemaker with crocodile clamps		10
85020	Armstrap	Armstrap with velcro fastener for PACE 101 H; Length 45 cm		1
23002	R2 Electrode for Adults	Transcutaneous pacing and defibrillation electrode connectable to OSYPKA PACE500		5
23003	R2 Electrode for Children	Transcutaneous pacing and defibrillation electrode connectable to OSYPKA PACE500		5

For a large selection of additional accessories – please inquire.




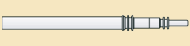

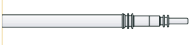

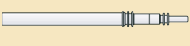




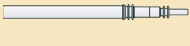





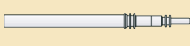



Permanent Adapters

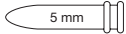
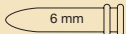
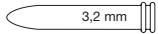
Implantable lead extensions and couplings

- To the repair / exchange of defective heart pacemaker lines
- Adaptation of unipolar and bipolar electrodes
- Extension of implantable pacemaker lead systems

Special features: Adaptation of different connections and plug variations

Unipolar lead adapter and extensions						
Article No.	Model	Receptacle		Connector		Length
53222	VKU		Coil-Ø max. 1.4 mm Insulation-Ø max. 2.4 mm		IS-1 unipolar	10 cm
53413	VIS		IS-1 unipolar		IS-1 unipolar	40 cm
53904	VM		5 mm (Medtronic)		IS-1 unipolar	10 cm
53905	VC		6 mm (Cordis)		IS-1 unipolar	10 cm
53427	VU		LV-1 unipolar		IS-1 unipolar	10 cm
53415	VIS	 	2x IS-1 unipolar		IS-1 bipolar	15 cm

Bipolar lead adapter and extensions						
Article No.	Model	Receptacle		Connector		Length
53420 53421	VB		IS-1 bipolar		IS-1 bipolar	17 cm 40 cm
53446	VB		LV-1 bipolar		IS-1 bipolar	10 cm
53424 53425	VB	 	2x IS-1 bipolar		IS-1 bipolar	17 cm 40 cm

Endcaps			
Article No.	Model		Piece
53302	Silicone End Caps for 5 mm Connector		1
53306	Silicone End Caps for 6 mm Connector		1
53312	Silicone End Caps for 3,2 mm Connector		1

ADELANTE® & D-EB-P

Lead introducer sets (Peel-away)

- The radiopaque ADELANTE® introducer set is for the Seldinger venous puncture to introduce implantable pacing leads (probes)
- Lead Introducer Sets consisting of contrasting plastic material, can be pulled back and peeled off into two parts
- The D-EB-P Introducer Set is for the Seldinger venous puncture to introduce 2 catheters (conceived for the implantation of two electrodes)
- Color code indicates French Size



Special features: Reliable and easy peel-away technique for safe removal.

Single introducers, Packaging unit 5 pieces

Article No.	Name	French-size
52401	ADELANTE® easy, Peel-away lead introducer set	6F
52402	ADELANTE® easy, Peel-away lead introducer set	7F
52403	ADELANTE® easy, Peel-away lead introducer set	7.5F
52404	ADELANTE® easy, Peel-away lead introducer set	8F
52405	ADELANTE® easy, Peel-away lead introducer set	8.5F
52406	ADELANTE® easy, Peel-away lead introducer set	9F
52407	ADELANTE® easy, Peel-away lead introducer set	9.5F
52408	ADELANTE® easy, Peel-away lead introducer set	10F
52409	ADELANTE® easy, Peel-away lead introducer set	10.5F
52410	ADELANTE® easy, Peel-away lead introducer set	11F
52411	ADELANTE® easy, Peel-away lead introducer set	11.5F
52412	ADELANTE® easy, Peel-away lead introducer set	12F
52413	ADELANTE® easy, Peel-away lead introducer set	12.5F

Double introducers, Packaging unit 5 pieces

Article No.	Name	French-size
52545	D-EB-P 07 double, Peel-away lead introducer set for 2 catheters/electrode leads	7F
52553	D-EB-P 10 double, Peel-away lead introducer set for 2 catheters/electrode leads	10F
52555	D-EB-P 10.5 double, Peel-away lead introducer set for 2 catheters/electrode leads	10.5F
52557	D-EB-P 11 double, Peel-away lead introducer set for 2 catheters/electrode leads	11F

Your IDEA - Our MISSION

Contract Manufacturing at OSYPKA



1.

Your idea

2.

Research and
Development

3.

Product Design

4.

Testing &
Validation

5.

Certification

6.

Production

7.

Your product

- Glovebox
- Balloon catheter

- Laser welding
- Injection Molded Parts

- Active Implants
- Electrode Implants

We are your PARTNER

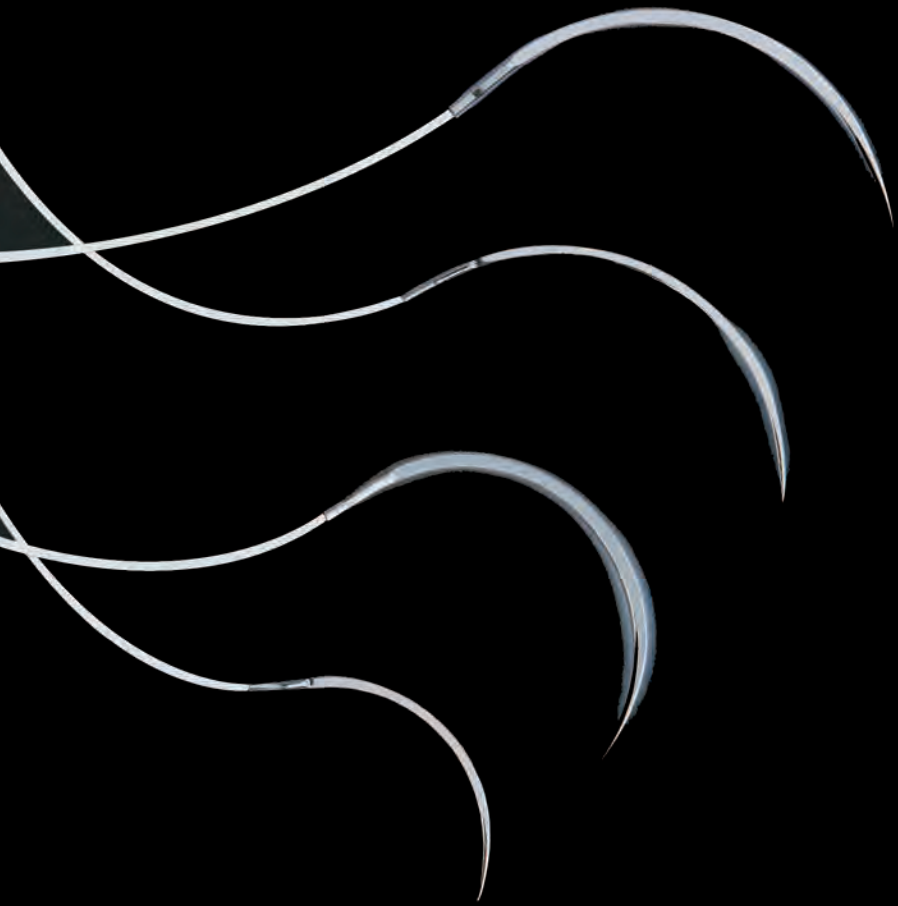
If you have any ideas or questions, please contact our product management by e-mail at mail@osypka.de or by phone at **+49 7623 7405-0**.

TECHNOLOGY FOR AN

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GORE-TEX® Suture

Ordering Information

PERFORMANCE through innovation



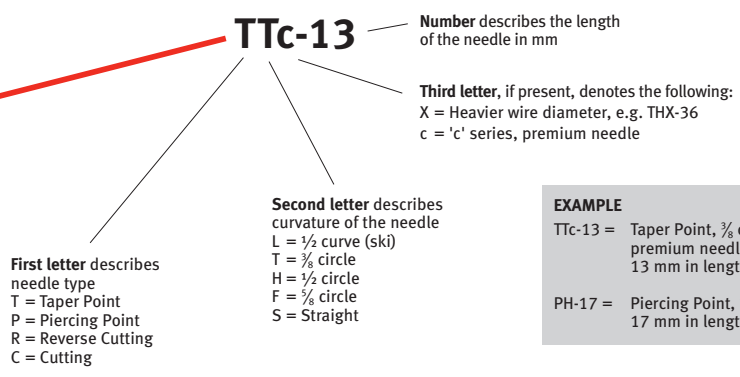
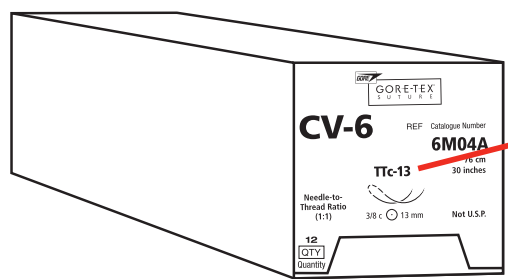


Needle to Thread Ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approx USP Size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1
	TTC-7 (1.6:1)	TTC-9 (1.4:1)	TTC-9 (1:1)	TTC-13 (1:1)	TT-17 (1.2:1)	TT-17 (1:1)	TFX-25 (1.6:1)	TFX-25 (1.6:1)
	TTC-9 (1.9:1)	TTC-12 (1.4:1)	TTC-12 (1:1)	TT-17 (1.2:1)	TH-18 (1.2:1)	TH-18 (1:1)	TLX-25 (1.9:1)	TLX-25 (1.6:1)
	TTC-13 (2.2:1)	TTC-13 (1.6:1)	TTC-13 (1.4:1)	THC-13 (1:1)	TH-22 (1.3:1)	TH-26 (1.2:1)	TH-26 (1:1)	TH-50 (1.6:1)
	PT-9 (1.9:1)	THC-13 (1.6:1)	THC-9 (1:1)	TH-18 (1.2:1)	TH-26 (1.6:1)	TH-35 (1.2:1)	THX-22 (1.9:1)	THX-25 (1.6:1)
	PT-13 (2.2:1)	PT-9 (1.4:1)	THC-13 (1.4:1)	TH-22 (1.7:1)	TH-35 (1.6:1)	PT-17 (1:1)	THX-25 (1.9:1)	THX-26 (1.3:1)
		PT-13 (1.6:1)	TH-18 (1.6:1)	TH-26 (1.7:1)	PT-17 (1.2:1)	PH-17 (1:1)	THX-26 (1.6:1)	THX-36 (1.3:1)
			PT-9 (1:1)	PT-13 (1:1)	PH-17 (1.2:1)	PH-24 (1.2:1)	THX-36 (1.6:1)	
			PT-13 (1.4:1)	PT-17 (1.2:1)	PH-24 (1.6:1)	PH-30 (1.3:1)	PH-24 (1:1)	
			PH-13 (1.4:1)	PH-13 (1:1)	PH-35 (1.8:1)	PH-35 (1.5:1)	PS-4 (1.9:1)	
				PH-17 (1.2:1)		CS-65 (1.4:1)	CS-65 (1.2:1)	
							TS-50 (1.2:1)	

Minimize suture hole bleeding with 1:1 needle to thread ratio




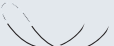










Needle Coding System























EXAMPLE

TTC-13 = Taper Point, 3/8 circle, premium needle, 13 mm in length

PH-17 = Piercing Point, 1/2 circle 17 mm in length

						Thread Size:		CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0		
						Approx USP Size:		7-0	6-0	5-0	4-0	3-0	2-0	0	1		
		Single-armed Needles	Double-armed Needles	Needle Code	Ethicon Reference	Syneture Reference	Thread Length	Catalogue Number									
Taper Point $\frac{3}{8}$ Circle 				TTc-7	BV130-5	CV-351, MV-135-5	24" – 61 cm	8K10									
				TTc-9	BV-1, BV175-8	CV-1, CVF-1, MV-175-8	18" – 46 cm 24" – 61 cm 30" – 76 cm	8J02 8K02 8M02	7J02 7K02 7M02	6J02 6K02 6M02							
				TTc-12	BV	CV-11, CVF	24" – 61 cm 30" – 76 cm				6K10 6M10						
				TTc-13	C-1	CV-11, CVF-11	18" – 46 cm 24" – 61 cm 30" – 76 cm 36" – 91 cm		7J06 7K06 8M04	6J04 6K04 7M06		5K02 5M02 6M04 6N04					
				TT-17	BB	CV-15, CVF-15	36" – 91 cm					5N06	4N04	3N02			
				THc-9	N/A	CV-20	30" – 76 cm				6M24						
Taper Point $\frac{1}{2}$ Circle 				THc-13	RB-2	CV-22, CVF-22	18" – 46 cm 24" – 61 cm 30" – 76 cm 36" – 91 cm		7J10	6J12	6K12	5K12					
				TH-18	RB-1	CV-23, CVF-23	36" – 91 cm 48" – 122 cm			6N16	5N04	4N02	3N04				
				TH-22 (with pledgets)	SH-1	CV-25	36" – 91 cm					3201†† 3202†	3200††				
				TH-26	SH	V-20	36" – 91 cm 36" – 91 cm 48" – 122 cm					5N20	4N06	3N08	2N02		
				TH-35	MH	V-26	36" – 91 cm 48" – 122 cm						4N12	3N06			
														3U06			

			TH-50	CTX	GS-25	48" – 122 cm													0U01			
			THX-22	M07	GS-23	36" – 91 cm													2N03			
			THX-25	M06	GS-22	36" – 91 cm													2N13 0N13			
			THX-26	CT-2	GS-22	36" – 91 cm													2N06			
						36" – 91 cm															2N05 0N05	
						48" – 122 cm																2U06 0U06
						48" – 122 cm																2U05
			THX-36	CT-1	GS-21	36" – 91 cm													2N08 0N08			
						36" – 91 cm																2N07 0N07
						42" – 107 cm																2P08
Taper Point 1/8 Circle 			TFX-25	UR-6	GU-46	36" – 91 cm													2N19 0N09			
Taper Point 1/2 Curve (ski) Smooth, even point for easily penetrated tissues, tapered body 			TLX-25	EN-S	SK	48" – 122 cm													2U17 0U03			
Taper Point Straight 			TS-50	ST-1	ST-1	36" – 91 cm													2N23			
Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body 			PT-9	CC	KV-1	18" – 46 cm		7J04														
						24" – 61 cm	8K08	7K04	6K06													
						30" – 76 cm	8M08	7M04	6M06													
			PT-13	CC-1	KV-11	24" – 61 cm		7K08	6K08	5K08												
						30" – 76 cm	8M06	7M08	6M08													
						36" – 91 cm						5N08										
			PT-17	V-4	KV-15	36" – 91 cm				5N10	4N10	3N14										
Piercing Point 1/2 Circle 			PH-13	N/A	N/A	30" – 76 cm			6M14	5M16												
			PH-17	V-5	KV-5	36" – 91 cm				5N14	4N08	3N12										



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AB0491-EN9 JANUARY 2014

THREAD SIZES


THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD
RATIO

CATALOGUE
NUMBERS

PROCEDURES



GORE-TEX[®] Suture
Ordering
Information

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0








CV-0 | 1

Single-armed needles

Double-armed needles

CV-8 Thread size | Approximate USP size 7-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-7	24" – 61 cm	8K10	BV130-5	CV-351, MV-135-5
		TTc-9	18" – 46 cm	8J02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8
			24" – 61 cm	8K02		
			30" – 76 cm	8M02		
	TTc-13	30" – 76 cm	8M04	C-1	CV-11, CVF-11	
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-9	24" – 61 cm	8K08	CC	KV-1
			30" – 76 cm	8M08		
		PT-13	30" – 76 cm	8M06	CC-1	KV-11

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0










CV-0 | 1

Single-armed needles

Double-armed needles

CV-7 Thread size | Approximate USP size 6-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-9	18" – 46 cm	7J02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8
			24" – 61 cm	7K02		
			30" – 76 cm	7M02		
		TTc-12	30" – 76 cm	7M12	BV	CV-11, CVF
				TTc-13	24" – 61 cm	7K06
	30" – 76 cm	7M06				
 Taper point 1/2 circle		THc-13	18" – 46 cm	7J10	RB-2	CV-22, CVF-22
			30" – 76 cm	7M10	RB-2	CV-22, CVF-22
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-9	24" – 61 cm	7K04	CC	KV-1
			30" – 76 cm	7M04		
		PT-13	24" – 61 cm	7K08	CC-1	KV-11
			30" – 76 cm	7M08		

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-6 Thread size | Approximate USP size 5-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference	
 Taper point 3/8 circle		TTc-9	18" – 46 cm	6J02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8	
			24" – 61 cm	6K02			
			30" – 76 cm	6M02			
			TTc-12	24" – 61 cm	6K10	BV	CV-11, CVF
				30" – 76 cm	6M10		
			TTc-13	18" – 46 cm	6J04	C-1	CV-11, CVF-11
				24" – 61 cm	6K04		
				30" – 76 cm	6M04		
				36" – 91 cm	6N04		
 Taper point 1/2 circle		THc-9	30" – 76 cm	6M24	N/A	CV-20	
		THc-13	24" – 61 cm	6K12	RB-2	CV-22, CVF-22	
			30" – 76 cm	6M12			
			TH-18	36" – 91 cm	6N16	RB-1	CV-23, CVF-23
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-9	24" – 61 cm	6K06	CC	KV-1	
			30" – 76 cm	6M06			
		PT-13	24" – 61 cm	6K08	CC-1	KV-11	
			30" – 76 cm	6M08			
 Piercing point 1/2 circle		PH-13	30" – 76 cm	6M14	N/A	N/A	

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-5 Thread size | Approximate USP size 4-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-13	24" – 61 cm	5K02	C-1	CV-11, CVF-11
			30" – 76 cm	5M02	C-1	CV-11, CVF-11, MV-175-8
			36" – 91 cm	5N02		
		TT-17	36" – 91 cm	5N06	BB	CV-15, CVF-15
 Taper point 1/2 circle		THc-13	24" – 61 cm	5K12	RB-2	CV-22, CVF-22
			30" – 76 cm	5M12		
			36" – 91 cm	5N12		
		TH-18	36" – 91 cm	5N04	RB-1	CV-23, CVF-23
		TH-22 (with pledgets)	36" – 91 cm	3201 ^{††} 3202 [†]	SH-1	CV-25
	TH-26	36" – 91 cm	5N20	SH	V-20	
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-13	24" – 61 cm	5K08	CC-1	KV-11
			36" – 91 cm	5N08		
 Piercing point 1/2 circle		PT-17	36" – 91 cm	5N10	V-4	KV-15
				PH-13	30" – 76 cm	5M16
	PH-17	36" – 91 cm		5N14	V-5	KV-5

† With ePTFE pledgets (3)
†† With ePTFE pledgets (4)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0













CV-0 | 1

Single-armed needles

Double-armed needles

CV-4 Thread size | Approximate USP size 3-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TT-17	36" – 91 cm	4N04	BB130-56	CV-15, CVF-15
 Taper point 1/2 circle		TH-18	36" – 91 cm	4N02	RB-1	CV-23, CVF-23
			48" – 122 cm	4U02		
		TH-22 (with pledgets)	36" – 91 cm	3200 ^{††}	SH-1	CV-25
		TH-26	36" – 91 cm	4N06	SH	V-20
		48" – 122 cm	4U06			
	TH-35	36" – 91 cm	4N12	MH	V-26	
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-17	36" – 91 cm	4N10	V-4	KV-15
	 Piercing point 1/2 circle		PH-17	36" – 91 cm	4N08	V-5
		PH-24	36" – 91 cm	4N16	V-7	KV-7
		48" – 122 cm	4U16			

† With ePTFE pledgets (3)

†† With ePTFE pledgets (4)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0



CV-0 | 1

Single-armed needles

Double-armed needles

CV-3 Thread size | Approximate USP size 2-0

Single-armed needles

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-26	36" – 91 cm	3N07	SH	V-20

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0














CV-0 | 1

Single-armed needles

Double-armed needles

CV-3 Thread size | Approximate USP size 2-0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TT-17	36" – 91 cm	3N02	BB130-5	CV-15, CVF-15
 Taper point 1/2 circle		TH-18	36" – 91 cm	3N04	RB1	CV-23, CVF-23
		TH-26	36" – 91 cm	3N08	SH	V-20
				48" – 122 cm		
		TH-35	48" – 122 cm	3U06	MH	V-26
 Piercing point 3/8 circle	Multifaceted tip for tough tissue, tapered body 	PT-17	36" – 91 cm	3N14	V-4	KV-15
 Piercing point 1/2 circle		PH-17	36" – 91 cm	3N12	V-5	KV-5
		PH-24	36" – 91 cm	3N10	V-7	KV-7
				48" – 122 cm		
			PH-30	42" – 107 cm	3P24	N/A
		PH-35	48" – 122 cm	3U20	V-34	KV-34

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0






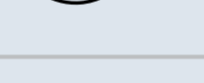



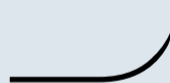

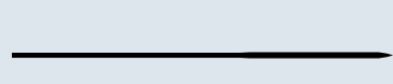


CV-0 | 1

Single-armed needles

Double-armed needles

CV-2 Thread size | Approximate USP size 0

Single-armed needles

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-26	36" – 91 cm	2N01	SH	V-20
		THX-22	36" – 91 cm	2N03	M07	GS-23
		THX-25	36" – 91 cm	2N13	M06	GS-22
		THX-26	36" – 91 cm	2N05	CT-2	GS-22
			48" – 122 cm	2U05		
		THX-36	36" – 91 cm	2N07	CT-1	GS-21
 Taper point 5/8 circle	 <p>Smooth, even point for easily penetrated tissues, tapered body</p>	TFX-25	36" – 91 cm	2N19	UR-6	GU-46
 Taper point 1/2 curve (ski)		TLX-25	48" – 122 cm	2U17	EN-S	SK
 Taper point straight		TS-50	36" – 91 cm	2N23	ST-1	ST-1
 Straight cutting		CS-65	30" – 76 cm	2M25	KS	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0




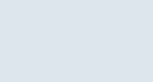





CV-0 | 1

Single-armed needles

Double-armed needles

CV-2 Thread size | Approximate USP size 0

Double-armed needles

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-26	36" – 91 cm	2N02	SH	V-20
			48" – 122 cm	2U02		
		THX-26	36" – 91 cm	2N06	CT-2	GS-22
			48" – 122 cm	2U06		
		THX-36	36" – 91 cm	2N08	CT-1	GS-21
			42" – 107 cm	2P08		
 Piercing point 1/2 circle		PH-24	36" – 91 cm	2N10	V-7	KV-7
			48" – 122 cm	2U10	V-5	KV-5
 Piercing point		PS-4	48" – 122 cm	2U22	N/A	N/A
				PS-4 THX-26	48" – 122 cm	M2U28

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0









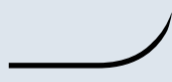
CV-0 | 1

Single-armed needles

Double-armed needles

CV-0 Thread size | Approximate USP size 1

Single-armed needles

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-50	48" – 122 cm	0U01	CTX	GS-25
		THX-25	36" – 91 cm	0N13	M06	GS-22
		THX-26	36" – 91 cm	0N05	CT-2	GS-22
		THX-36	36" – 91 cm	0N07	CT-1	GS-21
 Taper point 5/8 circle		TFX-25	36" – 91 cm	0N09	UR-6	GU-46
 Taper point 1/2 curve (ski) Smooth, even point for easily penetrated tissues, tapered body		TLX-25	48" – 122 cm	0U03	EN-S	SK

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0




CV-0 | 1

Single-armed needles

Double-armed needles

CV-0 Thread size | Approximate USP size 1

Double-armed needles





Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper point 1/2 circle		THX-26	48" – 122 cm	OU06	CT-2	GS-22
		THX-36	36" – 91 cm	ON08	CT-1	GS-21

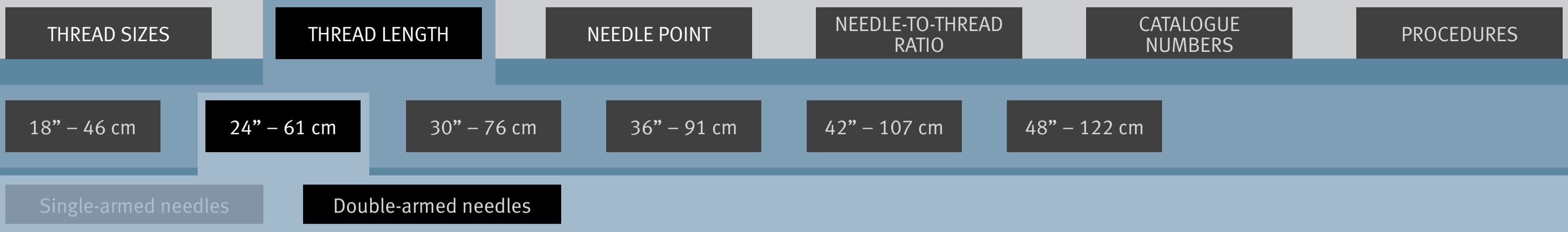
THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
18" – 46 cm	24" – 61 cm	30" – 76 cm	36" – 91 cm	42" – 107 cm	48" – 122 cm
Single-armed needles	Double-armed needles				

18" – 46 cm thread lengths

Double-armed needles

Thread size:	CV-8	CV-7	CV-6
Approximate USP size:	7-0	6-0	5-0










Needle type	Double-armed needles	Needle code	Thread length	Catalogue number			Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-9	18" – 46 cm	8J02	7J02	6J02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8
		TTc-13	18" – 46 cm			6J04	C-1	CV-11, CVF-11
		THc-13	18" – 46 cm			7J10	6J12	RB-2



24" – 61 cm thread lengths

Double-armed needles

Thread size:	CV-8	CV-7	CV-6	CV-5
Approximate USP size:	7-0	6-0	5-0	4-0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number			Ethicon reference	Medtronic reference	
 Taper point 3/8 circle		TTc-7	24" – 61 cm	8K10			BV130-5	CV-351, MV-135-5	
		TTc-9	24" – 61 cm	8K02	7K02	6K02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8	
		TTc-12	24" – 61 cm			6K10	BV	CV-11, CVF	
		TTc-13	24" – 61 cm		7K06	6K04	5K02	C-1	CV-11, CVF-11
		THc-13	24" – 61 cm			6K12	5K12	RB-2	CV-22, CVF-22
 Piercing point 3/8 circle Multifaceted tip for tough tissue, tapered body		PT-9	24" – 61 cm	8K08	7K04	6K06	CC	KV-1	
		PT-13	24" – 61 cm		7K08	6K08	5K08	CC-1	KV-11

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

18" – 46 cm

24" – 61 cm

30" – 76 cm

36" – 91 cm

42" – 107 cm

48" – 122 cm


Single-armed needles

Double-armed needles

30" – 76 cm thread lengths

Single-armed needles

Thread size: CV-2
Approximate USP size: 0













Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
▲ Straight cutting Cutting edges for tough tissue, triangular body		CS-65	30" – 76 cm	2M25	KS	N/A

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
18" – 46 cm	24" – 61 cm	30" – 76 cm	36" – 91 cm	42" – 107 cm	48" – 122 cm
Single-armed needles	Double-armed needles				

30" – 76 cm thread lengths

Double-armed needles

Thread size:	CV-8	CV-7	CV-6	CV-5
Approximate USP size:	7-0	6-0	5-0	4-0


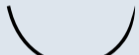
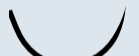

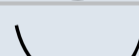
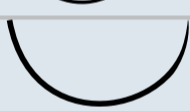




Needle type	Double-armed needles	Needle code	Thread length	Catalogue number				Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-9	30" – 76 cm	8M02	7M02	6M02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8	
		TTc-12	30" – 76 cm		7M12	6M10	BV	CV-11, CVF	
		TTc-13	30" – 76 cm	8M04	7M06	6M04	5M02	C-1	CV-11, CVF-11
 Taper point 1/2 circle		THc-9	30" – 76 cm			6M24	N/A	CV-20	
		THc-13	30" – 76 cm		7M10	6M12	5M12	RB-2	CV-22, CVF-22
 Piercing point 3/8 circle <small>Multifaceted tip for tough tissue, tapered body</small>		PT-9	30" – 76 cm	8M08	7M04	6M06	CC	KV-1	
		PT-13	30" – 76 cm	8M06	7M08	6M08	CC-1	KV-11	
 Piercing point 1/2 circle		PH-13	30" – 76 cm			6M14	5M16	N/A	N/A

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
18" – 46 cm	24" – 61 cm	30" – 76 cm	36" – 91 cm	42" – 107 cm	48" – 122 cm
		Single-armed needles	Double-armed needles		

36" – 91 cm thread lengths

Single-armed needles

Thread size:	CV-3	CV-2	CV-0
Approximate USP size:	2-0	0	1

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number			Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-26	36" – 91 cm	3N07	2N01		SH	V-20
		THX-22	36" – 91 cm		2N03		M07	GS-23
		THX-25	36" – 91 cm		2N13	0N13	M06	GS-22
		THX-26	36" – 91 cm		2N05	0N05	CT-2	GS-22
		THX-36	36" – 91 cm		2N07	0N07	CT-1	GS-21
 Taper point 5/8 circle		TFX-25	36" – 91 cm		2N19	0N09	UR-6	GU-46
 Taper point straight		TS-50	36" – 91 cm		2N23		ST-1	ST-1
















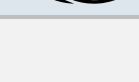
† With ePTFE pledgets (3)
 †† With ePTFE pledgets (4)

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
18" – 46 cm	24" – 61 cm	30" – 76 cm	36" – 91 cm	42" – 107 cm	48" – 122 cm
Single-armed needles			Double-armed needles		

36" – 91 cm thread lengths

Double-armed needles

Thread size:	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	5-0	4-0	3-0	2-0	0	1

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number						Ethicon reference	Medtronic reference
 Taper point 3/8 circle		TTc-13	36" – 91 cm	6N04	5N02					C-1	CV-11, CVF-11
		TT-17	36" – 91 cm		5N06	4N04	3N02			BB	CV-15, CVF-15
 Taper point 1/2 circle		THc-13	36" – 91 cm		5N12					RB-2	CV-22, CVF-22
		TH-18	36" – 91 cm	6N16	5N04	4N02	3N04			RB-1	CV-23, CVF-23
		TH-22 (with pledgets)	36" – 91 cm		3201 ^{††} 3202 [†]	3200 ^{††}				SH-1	CV-25
		TH-26	36" – 91 cm		5N20	4N06	3N08	2N02		SH	V-20
		TH-35	36" – 91 cm			4N12				MH	V-26
		THX-26	36" – 91 cm					2N06		CT-2	GS-22
		THX-36	36" – 91 cm					2N08	0N08	CT-1	GS-21
 Taper point straight		PT-13	36" – 91 cm		5N08					CC-1	KV-11
		PT-17	36" – 91 cm		5N10	4N10	3N14			V-4	KV-15
		PH-17	36" – 91 cm		5N14	4N08	3N12			V-5	KV-5
		PH-24	36" – 91 cm			4N16	3N10	2N10		V-7	KV-7

† With ePTFE pledgets (3)
 †† With ePTFE pledgets (4)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

18" – 46 cm

24" – 61 cm

30" – 76 cm

36" – 91 cm

42" – 107 cm

48" – 122 cm

Single-armed needles

Double-armed needles

42" – 107 cm thread lengths

Double-armed needles

Thread size:	CV-3	CV-2
Approximate USP size:	2-0	0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference	
⊙ Taper point 1/2 circle		THX-36	42" – 107 cm		2P08	CT-1	GS-21
⊙ Piercing point 1/2 circle		PH-30	42" – 107 cm	3P24		N/A	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

18" – 46 cm

24" – 61 cm

30" – 76 cm

36" – 91 cm

42" – 107 cm

48" – 122 cm






Single-armed needles

Double-armed needles

48" – 122 cm thread lengths

Single-armed needles

Thread size:	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	3-0	2-0	0	1

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-50	48" – 122 cm		0U01	CTX	GS-25
		THX-26	48" – 122 cm		2U05	CT-2	GS-22
 Taper point 1/2 curve (ski) Smooth, even point for easily penetrated tissues, tapered body		TLX-25	48" – 122 cm		2U17 0U03	EN-S	SK

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

18" – 46 cm

24" – 61 cm

30" – 76 cm

36" – 91 cm

42" – 107 cm

48" – 122 cm












Single-armed needles

Double-armed needles

48" – 122 cm thread lengths

Double-armed needles

Thread size:	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	3-0	2-0	0	1

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number				Ethicon reference	Medtronic reference
 Taper point 1/2 circle		TH-18	48" – 122 cm	4U02				RB-1	CV-23, CVF-23
		TH-26	48" – 122 cm	4U06	3U08	2U02		SH	V-20
		TH-35	48" – 122 cm			3U06		MH	V-26
		THX-26	48" – 122 cm				2U06	0U06	CT-2
 Piercing Point 1/2 Circle		PH-24	48" – 122 cm	4U16	3U10	2U10		V-7	KV-7
	Multi-needle 	PH-35	48" – 122 cm			3U20		V-34	KV-34
 Piercing point		PS-4	48" – 122 cm				2U22	N/A	N/A
		PS-4 THX-26	48" – 122 cm				M2U28	N/A	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Taper point 3/8 circle

Taper point 1/2 circle

Taper point 5/8 circle

Taper point 1/2 curve (ski)

Taper point straight

Piercing point 3/8 circle

Piercing point 1/2 circle

Multi-needle

Piercing point






Straight cutting

Single-armed needles

Double-armed needles

⊙ Taper point 3/8 circle Double-armed needles







Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0

Double-armed needles	Needle code	Thread length	Catalogue number						Ethicon reference	Medtronic reference
	TTc-7	24" – 61 cm	8K10						BV130-5	CV-351, MV-135-5
	TTc-9	18" – 46 cm	8J02	7J02	6J02				BV-1, BV175-8	CV-1, CVF-1, MV-175-8
		24" – 61 cm	8K02	7K02	6K02					
		30" – 76 cm	8M02	7M02	6M02					
	TTc-12	24" – 61 cm			6K10			BV	CV-11, CVF	
		30" – 76 cm		7M12	6M10					
	TTc-13	18" – 46 cm			6J04			C-1	CV-11, CVF-11	
		24" – 61 cm		7K06	6K04	5K02				
		30" – 76 cm	8M04	7M06	6M04	5M02				
		36" – 91 cm			6N04	5N02				
	TT-17	36" – 91 cm				5N06	4N04	3N02	BB	CV-15, CVF-15

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES				
Taper point 3/8 circle	Taper point 1/2 circle	Taper point 5/8 circle	Taper point 1/2 curve (ski)	Taper point straight	Piercing point 3/8 circle	Piercing point 1/2 circle	Multi-needle	Piercing point	Straight cutting
Single-armed needles		Double-armed needles							

⊙ Taper point 1/2 circle Single-armed needles

Thread size:	CV-3	CV-2	CV-0
Approximate USP size:	2-0	0	1




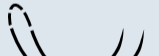
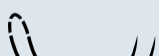
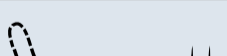
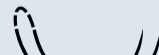
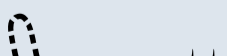
Single-armed needles	Needle code	Thread length	Catalogue Number			Ethicon reference	Medtronic reference
	TH-26	36" – 91 cm	3N07	2N01		SH	V-20
	TH-50	48" – 122 cm			0U01	CTX	GS-25
	THX-22	36" – 91 cm		2N03		M07	GS-23
	THX-25	36" – 91 cm		2N13	0N13	M06	GS-22
	THX-26	36" – 91 cm		2N05	0N05	CT-2	GS-22
		48" – 122 cm		2U05			
	THX-36	36" – 91 cm		2N07	0N07	CT-1	GS-21

† With ePTFE pledgets (3)
 †† With ePTFE pledgets (4)

THREAD SIZES		THREAD LENGTH		NEEDLE POINT		NEEDLE-TO-THREAD RATIO		CATALOGUE NUMBERS		PROCEDURES									
Taper point 3/8 circle		Taper point 1/2 circle		Taper point 5/8 circle		Taper point 1/2 curve (ski)		Taper point straight		Piercing point 3/8 circle		Piercing point 1/2 circle		Multi-needle		Piercing point		Straight cutting	
Single-armed needles				Double-armed needles															

⊙ Taper point 1/2 circle Double-armed needles

Thread size:	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	6-0	5-0	4-0	3-0	2-0	0	1

Double-armed needles	Needle code	Thread length	Catalogue Number							Ethicon reference	Medtronic reference	
	THc-9	30" – 76 cm		6M24							N/A	CV-20
	THc-13	18" – 46 cm	7J10	6J12							RB-2	CV-22, CVF-22
		24" – 61 cm		6K12	5K12							
		30" – 76 cm	7M10	6M12	5M12							
		36" – 91 cm			5N12							
	TH-18	36" – 91 cm		6N16	5N04	4N02	3N04				RB-1	CV-23, CVF-23
		48" – 122 cm				4U02						
	TH-22 (with pledgets)	36" – 91 cm			3201 ^{††} 3202 [†]	3200 ^{††}					SH-1	CV-25
	TH-26	36" – 91 cm			5N20	4N06	3N08	2N02			SH	V-20
		48" – 122 cm				4U06	3U08	2U02				
	TH-35	36" – 91 cm				4N12					MH	V-26
		48" – 122 cm					3U06					
	THX-26	36" – 91 cm						2N06			CT-2	GS-22
		48" – 122 cm						2U06	0U06			
	THX-36	36" – 91 cm						2N08	0N08		CT-1	GS-21
		42" – 107 cm						2P08				

† With ePTFE pledgets (3)
†† With ePTFE pledgets (4)

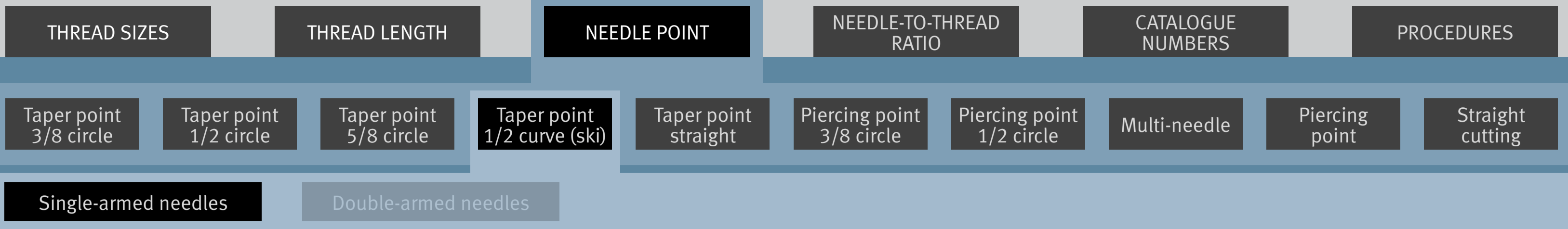
THREAD SIZES		THREAD LENGTH		NEEDLE POINT	NEEDLE-TO-THREAD RATIO		CATALOGUE NUMBERS		PROCEDURES
Taper point 3/8 circle	Taper point 1/2 circle	Taper point 5/8 circle	Taper point 1/2 curve (ski)	Taper point straight	Piercing point 3/8 circle	Piercing point 1/2 circle	Multi-needle	Piercing point	Straight cutting
Single-armed needles		Double-armed needles							

⊙ Taper point 5/8 circle Single-armed needles

Thread size: **CV-2** **CV-0**

Approximate USP size: **0** **1**

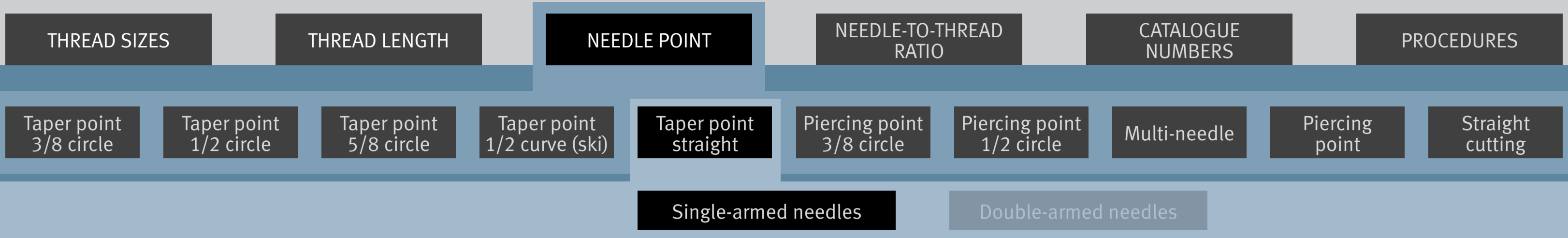
Single-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
	TFX-25	36" – 91 cm	2N19	0N09	UR-6	GU-46



⊙ Taper point 1/2 curve Single-armed needles

Thread size:	CV-2	CV-0
Approximate USP size:	0	1


Single-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
	TLX-25	48" – 122 cm	2U17	0U03	EN-S	SK

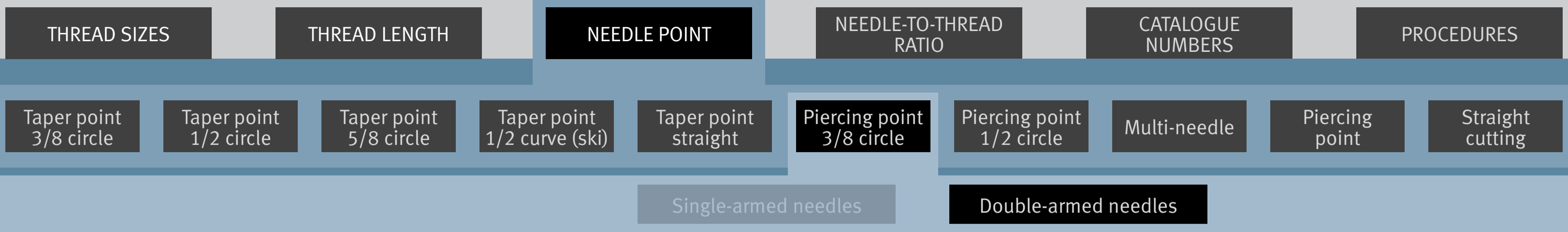


⊙ Taper point straight Single-armed needles

Thread size: **CV-2**




Approximate USP size: **0**

Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
	TS-50	36" – 91 cm	2N23	ST-1	ST-1



▲ Piercing point 3/8 circle Double-armed needles

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0

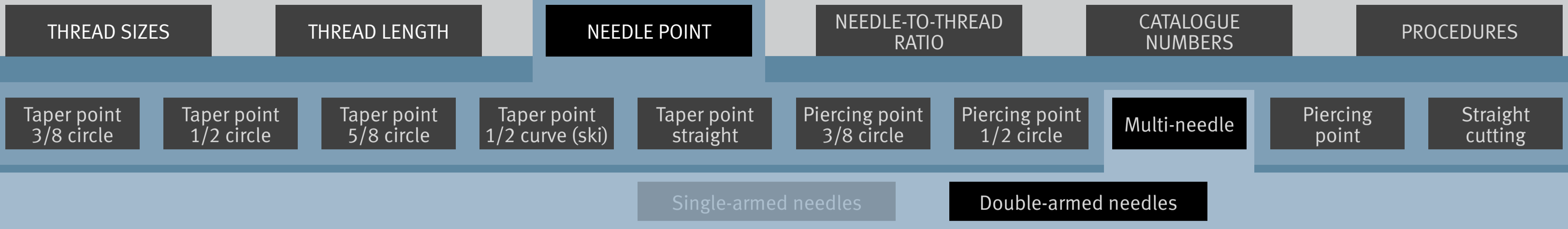
Double-armed needles	Needle code	Thread length	Catalogue number						Ethicon reference	Medtronic reference
	PT-9	24" – 61 cm	8K08	7K04	6K06				CC	KV-1
		30" – 76 cm	8M08	7M04	6M06					
	PT-13	24" – 61 cm		7K08	6K08	5K08			CC-1	KV-11
		30" – 76 cm	8M06	7M08	6M08					
		36" – 91 cm				5N08				
	PT-17	36" – 91 cm				5N10	4N10	3N14	V-4	KV-15

THREAD SIZES		THREAD LENGTH		NEEDLE POINT		NEEDLE-TO-THREAD RATIO		CATALOGUE NUMBERS		PROCEDURES	
Taper point 3/8 circle	Taper point 1/2 circle	Taper point 5/8 circle	Taper point 1/2 curve (ski)	Taper point straight	Piercing point 3/8 circle	Piercing point 1/2 circle	Multi-needle	Piercing point	Straight cutting		
Single-armed needles						Double-armed needles					

▲ Piercing point 1/2 circle Double-armed needles

Thread size:	CV-6	CV-5	CV-4	CV-3	CV-2
Approximate USP size:	5-0	4-0	3-0	2-0	0

Double-armed needles	Needle code	Thread length	Catalogue number					Ethicon reference	Medtronic reference
	PH-13	30" – 76 cm	6M14	5M16				N/A	N/A
	PH-17	36" – 91 cm		5N14	4N08	3N12		V-5	KV-5
	PH-24	36" – 91 cm			4N16	3N10	2N10	V-7	KV-7
		48" – 122 cm			4U16	3U10	2U10		
	PH-30	42" – 107 cm				3P24		N/A	N/A
	PH-35	48" – 122 cm				3U20		V-34	KV-34




Multi-needle

Double-armed needles

Thread size: **CV-4**

Approximate USP size: **0**

Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
	THX-26 PS-4	48" – 122 cm	M2U28	N/A	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Taper point 3/8 circle

Taper point 1/2 circle

Taper point 5/8 circle

Taper point 1/2 curve (ski)

Taper point straight

Piercing point 3/8 circle

Piercing point 1/2 circle

Multi-needle

Piercing point

Straight cutting



Single-armed needles

Double-armed needles

▲ Piercing point Double-armed needles

Thread size: CV-2

Approximate USP size: 0

Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
	PS-4	48" – 122 cm	2U22	N/A	N/A
	THX-26 PS-4	48" – 122 cm	M2U28	N/A	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Taper point 3/8 circle

Taper point 1/2 circle

Taper point 5/8 circle

Taper point 1/2 curve (ski)

Taper point straight

Piercing point 3/8 circle

Piercing point 1/2 circle

Multi-needle

Piercing point

Straight cutting


Single-armed needles

Double-armed needles

▲ Straight cutting Single-armed needles

Thread size: CV-2

Approximate USP size: 0

Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
	CS-65	30" – 76 cm	2M25	KS	N/A

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

All products and needle-to-thread ratios

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1
	PTc-7 (1.6:1)	PTc-9 (1.4:1)	PTc-9 (1:1)	PTc-13 (1:1)	PT-17 (1.2:1)	PT-17 (1:1)	TFX-25 (1.6:1)	TFX-25 (1.6:1)
	PTc-9 (1.9:1)	PTc-12 (1.4:1)	PTc-12 (1:1)	PT-17 (1.2:1)	TH-18 (1.2:1)	TH-18 (1:1)	TLX-25 (1.9:1)	TLX-25 (1.6:1)
	PTc-13 (2.2:1)	PTc-13 (1.6:1)	PTc-13 (1.4:1)	THc-13 (1:1)	TH-22 (1.3:1)	TH-26 (1.2:1)	TH-26 (1:1)	TH-50 (1.6:1)
	PT-9 (1.9:1)	THc-13 (1.6:1)	THc-9 (1:1)	TH-18 (1.2:1)	TH-26 (1.6:1)	TH-35 (1.2:1)	THX-22 (1.9:1)	THX-25 (1.6:1)
	PT-13 (2.2:1)	PT-9 (1.4:1)	THc-13 (1.4:1)	TH-22 (1.7:1)	TH-35 (1.6:1)	PT-17 (1:1)	THX-25 (1.9:1)	THX-26 (1.3:1)
		PT-13 (1.6:1)	TH-18 (1.6:1)	TH-26 (1.7:1)	PT-17 (1.2:1)	PH-17 (1:1)	THX-26 (1.6:1)	THX-36 (1.3:1)
			PT-9 (1:1)	PT-13 (1:1)	PH-17 (1.2:1)	PH-24 (1.2:1)	THX-36 (1.6:1)	
			PT-13 (1.4:1)	PT-17 (1.2:1)	PH-24 (1.6:1)	PH-30 (1.3:1)	PH-24 (1:1)	
			PH-13 (1.4:1)	PH-13 (1:1)	PH-35 (1.8:1)	PH-35 (1.5:1)	PS-4 (1.9:1)	
				PH-17 (1.2:1)		CS-65 (1.4:1)	CS-65 (1.2:1)	
							TS-50 (1.2:1)	

Indicates products with 1:1 needle-to-thread ratio

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1
			TTc-9 (1:1)	TTc-13 (1:1)		TT-17 (1:1)	TH-26 (1:1)	
			TTc-12 (1:1)	THc-13 (1:1)		TH-18 (1:1)	PH-24 (1:1)	
			THc-9 (1:1)	PT-13 (1:1)		PT-17 (1:1)		
			PT-9 (1:1)	PH-13 (1:1)		PH-17 (1:1)		

Indicates products with 1:1 needle-to-thread ratio

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.2 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TT-17 (1.2:1) TT-17 (1.2:1) TH-26 (1.2:1) CS-65 (1.2:1)

TH-18 (1.2:1) TH-18 (1.2:1) TH-35 (1.2:1) TS-50 (1.2:1)

PT-17 (1.2:1) PT-17 (1.2:1) PH-24 (1.2:1)

PH-17 (1.2:1) PH-17 (1.2:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.3 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TH-22 (1.3:1)

PH-30 (1.3:1)

THX-26 (1.3:1)

THX-36 (1.3:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.4 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TTc-9 (1.4:1)

TTc-13 (1.4:1)

CS-65 (1.4:1)

TTc-12 (1.4:1)

THc-13 (1.4:1)

PT-9 (1.4:1)

PT-13 (1.4:1)

PH-13 (1.4:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.5 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

PH-35 (1.5:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.6 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1
	TTc-7 (1.6:1)	TTc-13 (1.6:1)	TH-18 (1.6:1)		TH-26 (1.6:1)		TFX-25 (1.6:1)	TFX-25 (1.6:1)
		THc-13 (1.6:1)			TH-35 (1.6:1)		THX-26 (1.6:1)	TLX-25 (1.6:1)
		PT-13 (1.6:1)			PH-24 (1.6:1)		THX-36 (1.6:1)	TH-50 (1.6:1)
								THX-25 (1.6:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.7 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TH-22 (1.7:1)

TH-26 (1.7:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.8 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

PH-35 (1.8:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

1.9 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TTc-9 (1.9:1)

PT-9 (1.9:1)

TLX-25 (1.9:1)

THX-22 (1.9:1)

THX-25 (1.9:1)

PS-4 (1.9:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

1 : 1

1.2 : 1

1.3 : 1

1.4 : 1

1.5 : 1

1.6 : 1

1.7 : 1

1.8 : 1

1.9 : 1

2.2 : 1

2.2 : 1 Needle-to-thread ratio

Thread size:	CV-8	CV-7	CV-6	CV-5	CV-4	CV-3	CV-2	CV-0
Approximate USP size:	7-0	6-0	5-0	4-0	3-0	2-0	0	1

TTc-13 (2.2:1)

PT-13 (2.2:1)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-8 Thread size | Approximate USP size 7-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
8J02	CV-8	18" (46 cm)	TTc-9
8K02	CV-8	24" (61 cm)	TTc-9
8K08	CV-8	24" (61 cm)	PT-9
8K10	CV-8	24" (61 cm)	TTc-7
8M02	CV-8	30" (76 cm)	TTc-9
8M04	CV-8	30" (76 cm)	TTc-13
8M06	CV-8	30" (76 cm)	PT-13
8M08	CV-8	30" (76 cm)	PT-9

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-7 Thread size | Approximate USP size 6-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
7J02	CV-7	18" (46 cm)	TTc-9
7J10	CV-7	18" (46 cm)	THc-13
7K02	CV-7	24" (61 cm)	TTc-9
7K04	CV-7	24" (61 cm)	PT-9
7K06	CV-7	24" (61 cm)	TTc-13
7K08	CV-7	24" (61 cm)	PT-13
7M02	CV-7	30" (76 cm)	TTc-9
7M04	CV-7	30" (76 cm)	PT-9
7M06	CV-7	30" (76 cm)	TTc-9
7M08	CV-7	30" (76 cm)	PT-13
7M10	CV-7	30" (76 cm)	THc-13
7M12	CV-7	30" (76 cm)	TTc-12

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-6 Thread size | Approximate USP size 5-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
6J02	CV-6	18" (46 cm)	TTc-9
6J04	CV-6	18" (46 cm)	TTc-13
6K02	CV-6	24" (61 cm)	TTc-9
6K04	CV-6	24" (61 cm)	TTc-13
6K06	CV-6	24" (61 cm)	PT-9
6K08	CV-6	24" (61 cm)	PT-13
6K10	CV-6	24" (61 cm)	TTc-12
6K12	CV-6	24" (61 cm)	THc-13
6M02	CV-6	30" (76 cm)	TTc-9
6M04	CV-6	30" (76 cm)	TTc-13
6M06	CV-6	30" (76 cm)	PT-9
6M08	CV-6	30" (76 cm)	PT-13
6M10	CV-6	30" (76 cm)	TTc-12
6M12	CV-6	30" (76 cm)	THc-13
6M14	CV-6	30" (76 cm)	PH-13
6M24	CV-6	30" (76 cm)	TH-9
6N04	CV-6	36" (91 cm)	TTc-13
6N16	CV-6	36" (91 cm)	TH-18

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-5 Thread size | Approximate USP size 4-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
5K02	CV-5	24" (61 cm)	TTc-13
5K08	CV-5	24" (61 cm)	PT-13
5K12	CV-5	24" (61 cm)	THc-13
5M02	CV-5	30" (76 cm)	TTc-13
5M12	CV-5	30" (76 cm)	THc-13
5M16	CV-5	30" (76 cm)	PH-13
5N02	CV-5	36" (91 cm)	TTc-13
5N04	CV-5	36" (91 cm)	TH-18
5N06	CV-5	36" (91 cm)	TT-17
5N08	CV-5	36" (91 cm)	PT-13
5N10	CV-5	36" (91 cm)	PT-17
5N12	CV-5	36" (91 cm)	THc-13
5N14	CV-5	36" (91 cm)	PH-17
5N20	CV-5	36" (91 cm)	TH-26

Catalogue number	Thread size	Thread length	Needle code
3201*	CV-5	36" (91 cm)	TT-22
3202**	CV-5	36" (91 cm)	TH-22

* With ePTFE pledgets (4)
 ** With ePTFE pledgets (3)

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-4 Thread size | Approximate USP size 3-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
4N02	CV-4	36" (91 cm)	TH-18
4N04	CV-4	36" (91 cm)	TT-17
4N06	CV-4	36" (91 cm)	TH-26
4N08	CV-4	36" (91 cm)	PH-17
4N10	CV-4	36" (91 cm)	PT-17
4N12	CV-4	36" (91 cm)	TH-35
4N16	CV-4	36" (91 cm)	PH-24
4U02	CV-4	48" (122 cm)	TH-18
4U06	CV-4	48" (122 cm)	TH-26
4U16	CV-4	48" (122 cm)	PH-24

Catalogue number	Thread size	Thread length	Needle code
3200*	CV-4	36" (91 cm)	TT-22

* With ePTFE pledgets (4)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-3 Thread size | Approximate USP size 2-0

Single-armed needles

Catalogue number	Thread size	Thread length	Needle code
3N07	CV-3	36" (91 cm)	TH-26

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-3 Thread size | Approximate USP size 2-0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
3N02	CV-3	36" (91 cm)	TT-17
3N04	CV-3	36" (91 cm)	TH-18
3N06	CV-3	36" (91 cm)	TH-35
3N08	CV-3	36" (91 cm)	TH-26
3N10	CV-3	36" (91 cm)	PH-24
3N12	CV-3	36" (91 cm)	PH-17
3N14	CV-3	36" (91 cm)	PT-17
3P24	CV-3	42" (107 cm)	PH-30
3U06	CV-3	48" (122 cm)	TH-35
3U08	CV-3	48" (122 cm)	TH-26
3U10	CV-3	48" (122 cm)	PH-24
3U20	CV-3	48" (122 cm)	PH-35

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-2 Thread size | Approximate USP size 0

Single-armed needles

Catalogue number	Thread size	Thread length	Needle code
2M25	CV-2	30" (76 cm)	CS-65
2N01	CV-0	36" (91 cm)	THX-26
2N03	CV-0	36" (91 cm)	THX-36
2N05	CV-0	36" (91 cm)	TFX-25
2N07	CV-0	48" (122 cm)	TH-50
2N13	CV-0	36" (91 cm)	THX-36
2N19	CV-0	48" (122 cm)	TLX-25
2N23	CV-0	48" (122 cm)	THX-26
2U05	CV-0	36" (91 cm)	THX-25

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-2 Thread size | Approximate USP size 0

Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
2N02	CV-2	36" (91 cm)	TH-26
2N06	CV-2	36" (91 cm)	THX-26
2N08	CV-2	36" (91 cm)	THX-36
2N10	CV-2	36" (91 cm)	PH-24
2P08	CV-2	42" (107 cm)	THX-36
2U02	CV-2	48" (122 cm)	TH-26
2U06	CV-2	48" (122 cm)	THX-26
2U10	CV-2	48" (122 cm)	PH-24
2U22	CV-2	48" (122 cm)	PS-4
M2U28	CV-2	48" (122 cm)	PS-4, THX-26

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-0 Thread size | Approximate USP size 1

Single-armed needles

Catalogue number	Thread size	Thread length	Needle code
0N05	CV-0	36" (91 cm)	THX-26
0N07	CV-0	36" (91 cm)	THX-36
0N09	CV-0	36" (91 cm)	TFX-25
0N13	CV-0	36" (91 cm)	THX-25
0U01	CV-0	48" (122 cm)	TH-50
0U03	CV-0	48" (122 cm)	TLX-25

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

CV-8 | 7-0

CV-7 | 6-0

CV-6 | 5-0

CV-5 | 4-0

CV-4 | 3-0

CV-3 | 2-0

CV-2 | 0

CV-0 | 1

Single-armed needles

Double-armed needles

CV-0 Thread size | Approximate USP size 1 Double-armed needles

Catalogue number	Thread size	Thread length	Needle code
0N08	CV-0	36" (91 cm)	THX-36
0U06	CV-0	48" (122 cm)	THX-26

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass



Carotid endarterectomy

Chest wall reconstruction

Ventral hernia repair

Chordae tendinae repair or replace (CTRR)

Thread Size:	CV-5	CV-4
Approximate USP Size:	4-0	3-0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
 Taper Point 1/2 Circle		TH-22 (with pledgets)	36" – 91 cm	3201* 3202**	3200*	SH-1	CV-25

* With ePTFE pledgets (4)
 ** With ePTFE pledgets (3)

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass

Carotid endarterectomy





Chest wall reconstruction

Ventral hernia repair

AV access graft

Thread Size: **CV-7** **CV-6**

Approximate USP Size: **6-0** **5-0**

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	24" – 61 cm	7K02	6K02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8
			30" – 76 cm	7M02	6M02		
		TTc-12	24" – 61 cm		6K10	BV	CV-11, CVF
			30" – 76 cm		6M10		
		TTc-13	24" – 61 cm		6K04	C-1	CV-11, CVF-11
			30" – 76 cm		6M04		

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass

Carotid endarterectomy

Chest wall reconstruction

Ventral hernia repair

AV fistula

Thread Size:



CV-8

CV-7

Approximate USP Size:

7-0









6-0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	18" – 46 cm	8J02	7J02	BV130-5	CV-351, MV-135-5

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
Chordae tendinae	AV access graft	AV fistula	Bypass	Carotid endarterectomy	Chest wall reconstruction
Aorto-bifemoral	Femoro-popliteal	Anastomoses	Axillo-femoral		Ventral hernia repair
Distal	Proximal				

Distal aorto-bifemoral

Thread Size:	CV-6	CV-5
Approximate USP Size:	5-0	4-0



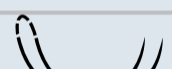

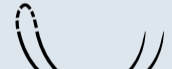
Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference	
 Taper Point 3/8 Circle		TTc-12	30" – 76 cm	6M10	BV130-5	CV-351, MV-135-5	
		TTc-13	30" – 76 cm		5M02	C-1	CV-11, CVF-11
 Taper Point 1/2 Circle		THc-13	30" – 76 cm		5M12	N/A	CV-20
		TH-18	36" – 91 cm		5N04	RB-1	CV-23, CVF-23
 Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body		PT-13	24" – 61 cm	6M08	CC-1	KV-11	

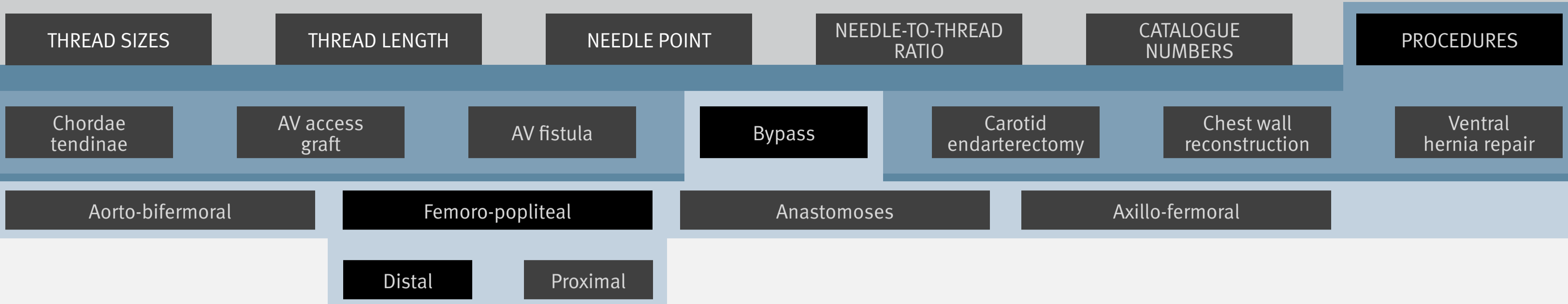
Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES	
Chordae tendinae	AV access graft	AV fistula	Bypass	Carotid endarterectomy	Chest wall reconstruction	Ventral hernia repair
Aorto-bifemoral	Femoro-popliteal	Anastomoses	Axillo-femoral			
Distal	Proximal					

Proximal aorto-bifemoral





Thread Size:	CV-4	CV-3
Approximate USP Size:	3-0	2-0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number		Ethicon reference	Medtronic reference
 Taper Point 1/2 Circle		TH-18	36" – 91 cm	4N02		N/A	CV-20
		TH-26	36" – 91 cm	4N06	3N08	SH	V-20
 Piercing Point 1/2 Circle		PH-24	36" – 91 cm	4N16	3N10	N/A	N/A

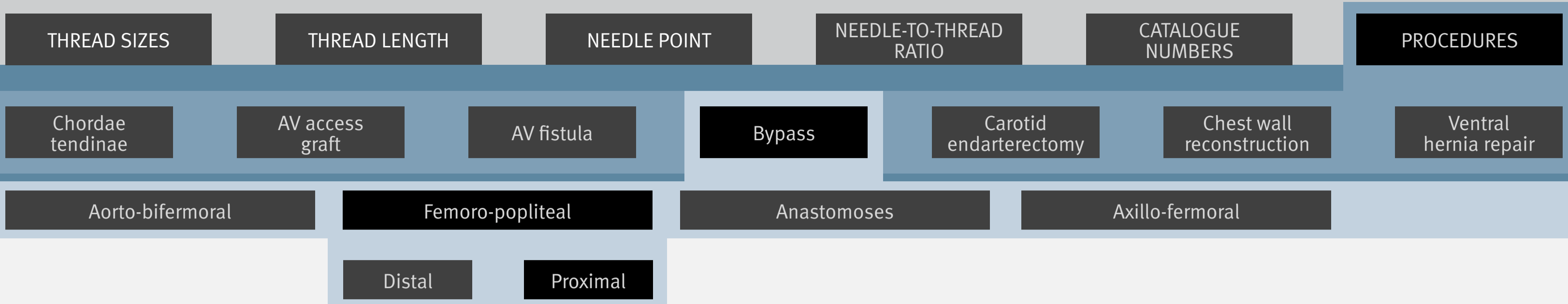


Distal femoro-popliteal

Thread Size:	CV-8	CV-7	CV-6
Approximate USP Size:	7-0	6-0	5-0






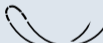
Needle type	Double-armed needles	Needle code	Thread length	Catalogue number			Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		Ttc-9	24" – 61 cm		7K02		BV-1, BV175-8	CV-1, CVF-1, MV-175-8
			30" – 76 cm	8K02	7M02	6M02		
 Piercing Point 3/8 Circle <small>Multifaceted tip for tough tissue, tapered body</small>		PT-9	30" – 76 cm		7M04	6M06	CC	KV-1

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

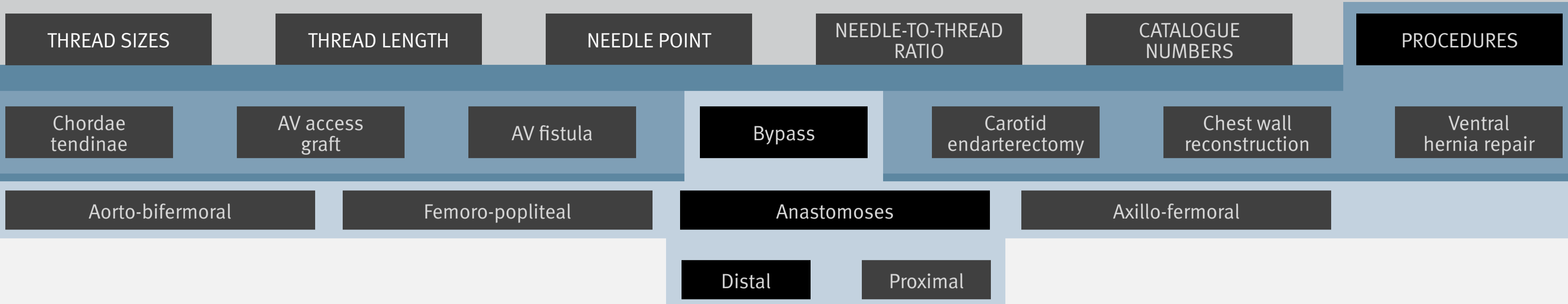


Proximal femoro-popliteal

Thread Size:	CV-6	CV-5
Approximate USP Size:	5-0	4-0




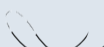

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	30" – 76 cm	6M02	BV-1, BV175-8	CV-1, CVF-1, MV-175-8
		TTc-12	30" – 76 cm	6M10		
		TTc-13	30" – 76 cm	6M04		
	36" – 91 cm			5N02		
 Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body		PT-13	30" – 76 cm	6M08	CC-1	KV-11
			36" – 91 cm			

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

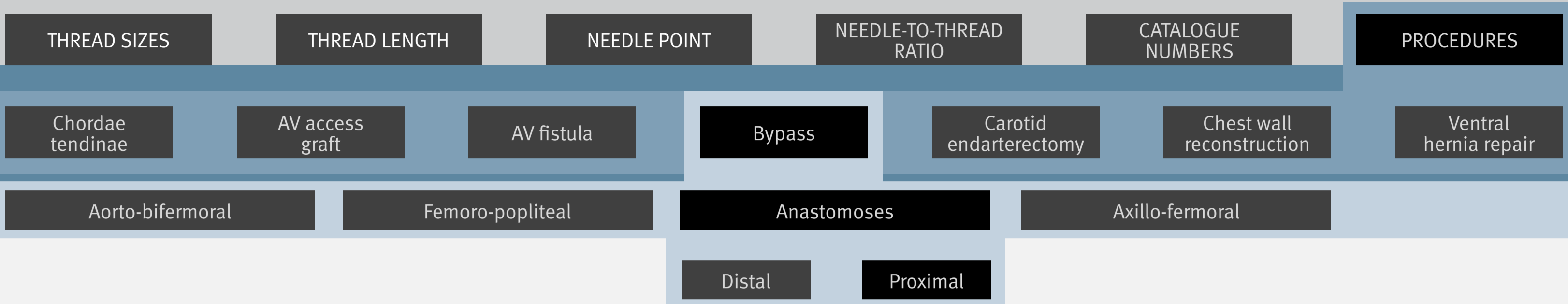


Distal anastomoses

Thread Size:	CV-8	CV-7	CV-6
Approximate USP Size:	7-0	6-0	5-0








Needle type	Double-armed needles	Needle code	Thread length	Catalogue number			Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	24" – 61 cm		7K02		BV-1, BV175-8	CV-1, CVF-1, MV-175-8
			30" – 76 cm	8M02	7M02	6M02		
 Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body		PT-9	24" – 61 cm			6K06	CC	KV-1
			30" – 76 cm		7M04			
			30" – 76 cm			6M08		
		PT-13	30" – 76 cm				CC-1	KV-11

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.



Proximal anastomoses

Thread Size:	CV-6	CV-5
Approximate USP Size:	5-0	4-0







Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	30" – 76 cm	6M02	BV130-5	CV-351, MV-135-5
		TTc-12	30" – 76 cm	6M10	BV	CV-11, CVF
		TTc-13	30" – 76 cm	6M04	C-1	CV-11, CVF-11
	36" – 91 cm			5N02		
 Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body		PT-13	30" – 76 cm	6M08	CC	KV-1
			36" – 91 cm			
		PT-17	36" – 91 cm		5N10	V-4

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES	THREAD LENGTH	NEEDLE POINT	NEEDLE-TO-THREAD RATIO	CATALOGUE NUMBERS	PROCEDURES
Chordae tendinae	AV access graft	AV fistula	Bypass	Carotid endarterectomy	Chest wall reconstruction
Aorto-bifemoral	Femoro-popliteal	Anastomoses	Axillo-femoral	Ventral hernia repair	

Axillo-femoral

Thread Size:	CV-6	CV-5
Approximate USP Size:	5-0	4-0

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	30" – 76 cm	6M02	BV130-5	CV-351, MV-135-5
		TTc-12	30" – 76 cm	6M10	BV	CV-11, CVF
		TTc-13	30" – 76 cm	6M04	C-1	CV-11, CVF-11
	36" – 91 cm			5N02		
 Piercing Point 3/8 Circle Multifaceted tip for tough tissue, tapered body		PT-13	30" – 76 cm	6M08	CC	KV-1
			36" – 91 cm			

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass

Carotid endarterectomy


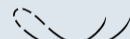
Chest wall reconstruction

Ventral hernia repair

Carotid endarterectomy

Thread Size: **CV-6**

Approximate USP Size: **5-0**

Needle type	Double-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference
 Taper Point 3/8 Circle		TTc-9	30" – 76 cm	6M02	BV130-5	CV-351, MV-135-5
		TTc-13	30" – 76 cm	6M04	C-1	CV-11, CVF-11

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass

Carotid endarterectomy

Chest wall reconstruction

Ventral hernia repair





Single-armed needles

Double-armed needles

Chest wall reconstruction

Single-armed needles

Thread Size:	CV-2	CV-0
Approximate USP Size:	0	1

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference	
 Taper Point 1/2 Circle		TH-50	48" – 122 cm		0U01	N/A	CV-20
		THX-26	36" – 91 cm	2N05	0N05	CT-2	GS-22
			48" – 122 cm	2U05			
	THX-36	36" – 91 cm	2N07	0N07	CT-1	GS-21	

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

THREAD SIZES

THREAD LENGTH

NEEDLE POINT

NEEDLE-TO-THREAD RATIO

CATALOGUE NUMBERS

PROCEDURES

Chordae tendinae

AV access graft

AV fistula

Bypass




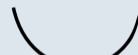

Carotid endarterectomy

Chest wall reconstruction

Ventral hernia repair

Ventral hernia repair

Thread Size:	CV-2	CV-0
Approximate USP Size:	0	1

Needle type	Single-armed needles	Needle code	Thread length	Catalogue number	Ethicon reference	Medtronic reference	
 Taper Point 1/2 Circle		TH-26	36" – 91 cm	2N02		N/A	
		TH-50	48" – 122 cm		0U01	CTX	
			THX-26	36" – 91 cm	2N06		CT-2
				36" – 91 cm	2N05	0N05	
				48" – 122 cm	2U05		
		THX-36	36" – 91 cm	2N07	0N07	CT-1	GS-21

Bold indicates 1:1 needle to thread ratio to minimize suture hole bleeding.

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