ARROW PERCUTANEOUS SHEATH INTRODUCERS

Another effective choice

AT A GLANCE

- highly kink-resistant Polyurethane shaft
- reduced kinking at hub through stress-relief hub sleeve
- reduced peel-back effect due to special design
- protection against blood contamination through Raulerson Syringe
- hydrophilic coating on distal sheath enhances placement

Through the ARROW brand, Teleflex provides an immense assortment of high-end products for vascular access. Thanks to the outstanding construction, the sheath introducers offered here reduce the potential for complications in both arterial and venous applications.
An outstanding kink-resistance due to use of our blend Polyurethane and our special stress-relief hub sleeve at the hub; reduced instances of peel-back or buckling thanks to the thicker tip and the heavy-walled design; ease of use and added protection against blood contamination through our exclusive Raulerson Syringe ensure a safe performance throughout the whole procedure.

Moreover, the wide array of sheaths sets and individual sheaths given, assures that you will have the flexibility in choices for multiple vascular applications.

** U.S. Patent Nos. 4,813,938, 5,045,065, and 5,913,814; additional international patents.*
Advanced Patent Nos. 6,477,402 and 5,484,419.

Teleflex

ORDERING INFORMATION

"CW" SETS PSI

ARROW

REF.	SIZE	LENGTH	COLOR CODED HUB	QTY
CW-08403*	4 Fr.	7.5 cm	pink	10
CW-08503*	5 Fr.	7.5 cm	grey	10
CW-08503-A	5 Fr.	11 cm	grey	10
CW-08603	6 Fr.	11 cm	green	10
CW-08703	7 Fr.	11 cm	orange	10
CW-08803	8 Fr.	11 cm	blue	10
CW-08903	9 Fr.	11 cm	black	10

EACH "CW" SET INCLUDES:

- 1 – ARROW Radiopaque Polyurethane Sheath with Integral Side Port/Hemostasis Valve and attached 3-Way Stopcock
- 1 – Arrow Raulerson Syringe
- 1 – Vessel Dilator with Snap-Lock Feature
- 1 – 17 3/4" (45 cm) long dual purpose spring-wire guide (straight soft tip on one end,"J" tip on the other end) with Arrow Advancer™. Pediatric set (*) has .021" dia. and all others have .035" dia. wire guide
- 1 – 18 Ga. x 2 1/2" T.W. Needle

"CP" SETS PSI

ARROW

REF.	SIZE	LENGTH	COLOR CODED HUB	QTY
CP-08403*	4 Fr.	7.5 cm	pink	10
CP-08503*	5 Fr.	7.5 cm	grey	10
CP-08503-A	5 Fr.	11 cm	grey	10
CP-08603-P*	6 Fr.	7.5 cm	green	10
CP-08603	6 Fr.	11 cm	green	10
CP-08703	7 Fr.	11 cm	orange	10
CP-08803	8 Fr.	11 cm	blue	10
CP-08903	9 Fr.	11cm	black	10

EACH "CP" SET INCLUDES:

- 1 – ARROW Radiopaque Polyurethane Sheath with Integral Side Port/Hemostasis Valve and attached 3-Way Stopcock
- 1 – Vessel Dilator with Snap-Lock Feature
- 1 – 17 3/4" (45 cm) long dual purpose spring-wire guide (straight soft tip on one end,"J" tip on the other end). Pediatric set (*) has .021" dia. and all others have .035" dia. wire guide

"CL" SETS PSI

ARROW

REF.	SIZE	LENGTH	COLOR CODED HUB	QTY
CL-08403*	4 Fr.	7.5 cm	pink	10
CL-08403-A	4 Fr.	11 cm	pink	10
CL-08503*	5 Fr.	7.5 cm	grey	10
CL-08503-A	5 Fr.	11 cm	grey	10
CL-08603	6 Fr.	11 cm	green	10
CL-08703	7 Fr.	11 cm	orange	10
CL-08803	8 Fr.	11 cm	blue	10
CL-08903	9 Fr.	11 cm	black	10

EACH "CL" SET INCLUDES:

- 1 – ARROW Radiopaque Polyurethane Sheath with Integral Side Port/Hemostasis Valve and attached 3-Way Stopcock
- 1 – Vessel Dilator with Snap-Lock Feature

STANDARD (11 CM) INTRODUCER SETS INCLUDE:

- Sheath with 11 cm (4 3/8") useable length
- Dilator which accepts .035" to .038" guide wires
- Sheath with hydrophilic coating on 1" of tip
- Dilator with 5cm exposed length when snap-locked into sheath

SHORT (7.5 CM) INTRODUCER SETS INCLUDE:

- Sheath with 7.5 cm (2 15/16") useable length
- Dilator which accepts .021" to .025" guide wires
- Sheath with hydrophilic coating on 1" of tip
- Dilator with 3cm exposed length when snap-locked into sheath

Caution: U.S. Federal law limits this device to sale by or on order of a physician.

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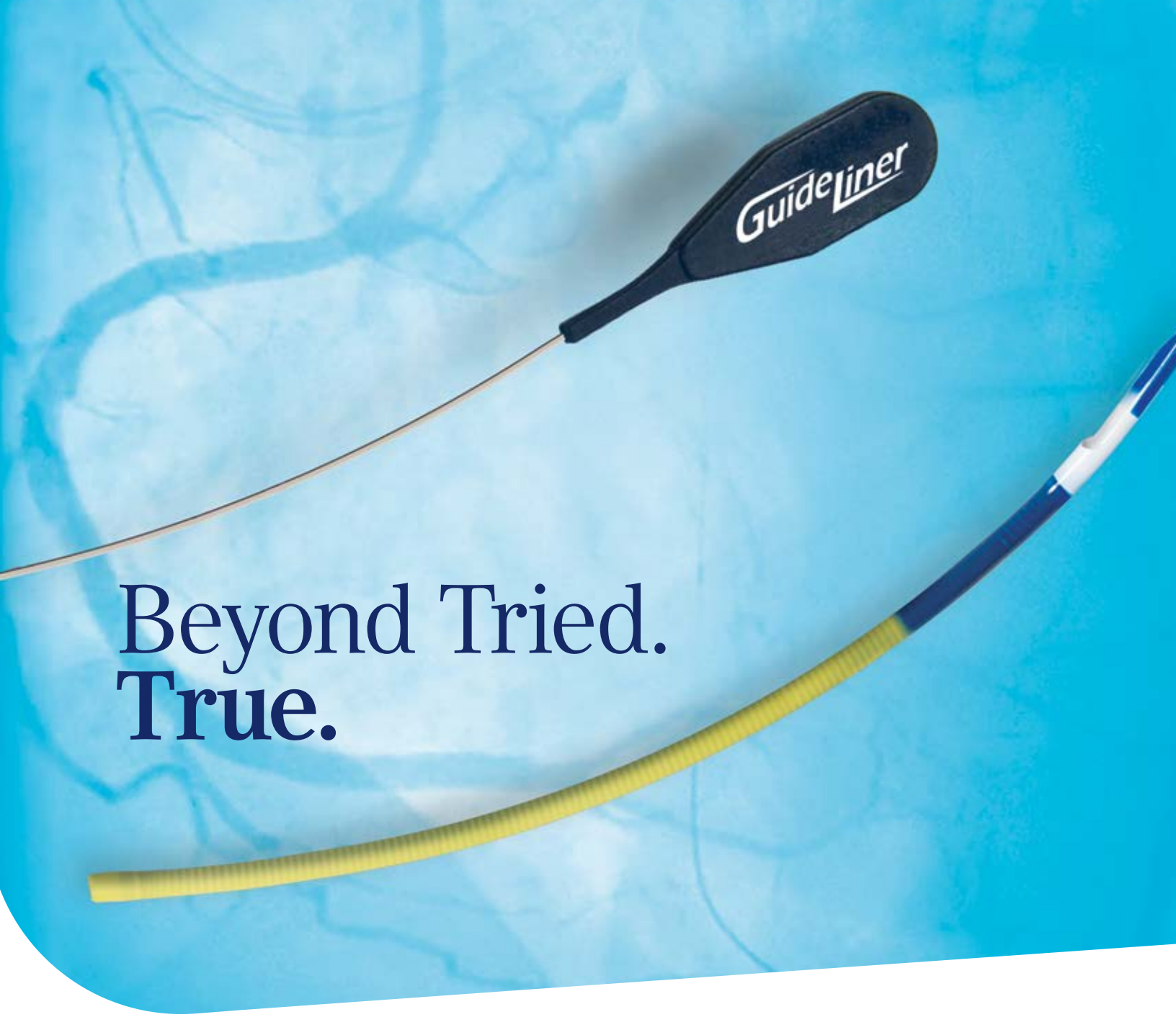


Beyond Tried. **True.**

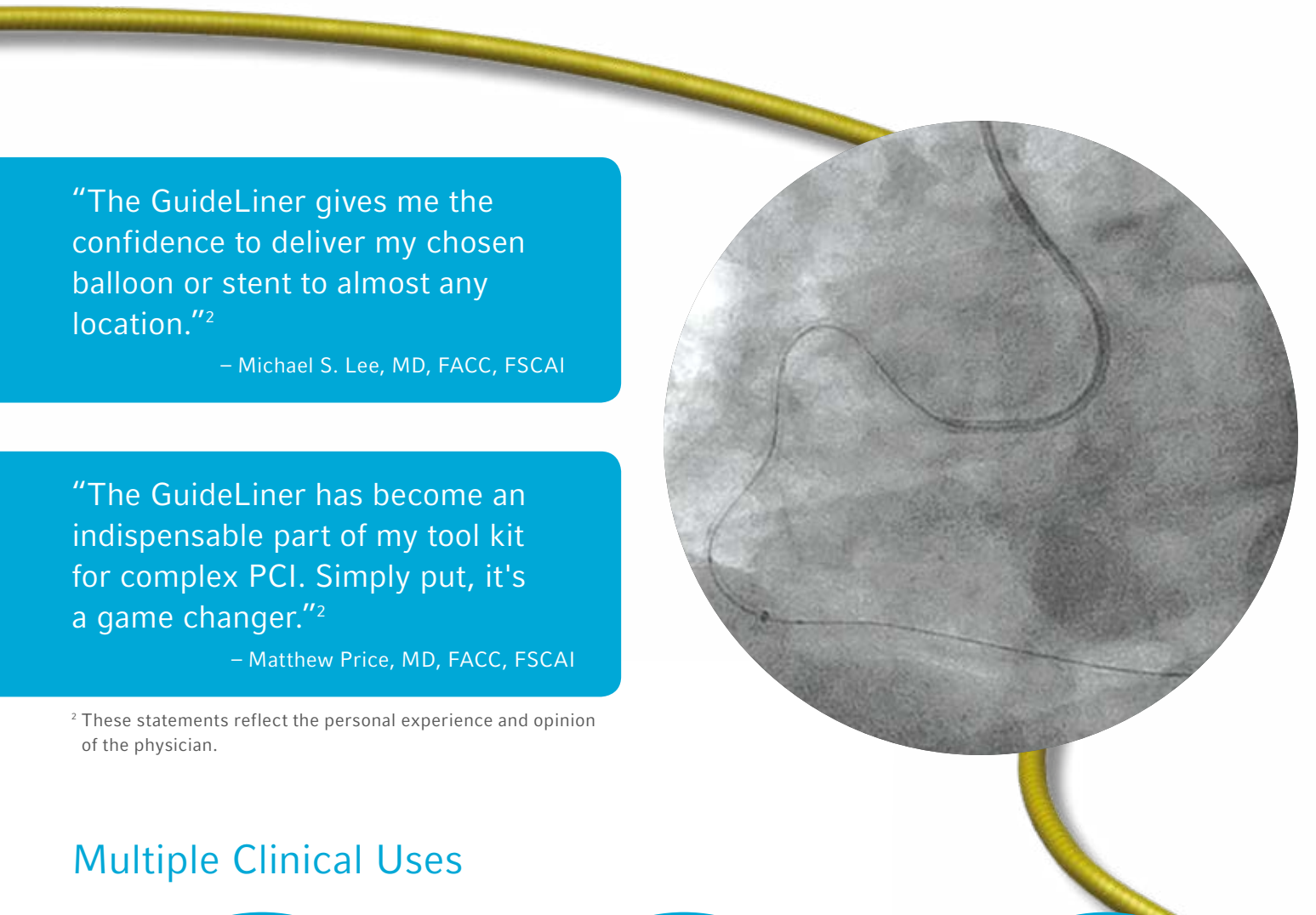
GuideLiner® V3 Catheter

Guide Extension Catheter With Half-Pipe Technology

Teleflex®

Beyond Tried. **True.**

In 2009, the GuideLiner® Catheter revolutionized the concept of guide extension, creating new possibilities in interventional cardiology. Now in its third generation, the GuideLiner® V3 Catheter continues to build on a history of innovation and performance—one that's been demonstrated with more than half a million catheters in cath labs around the world.[1]



"The GuideLiner gives me the confidence to deliver my chosen balloon or stent to almost any location."[2]

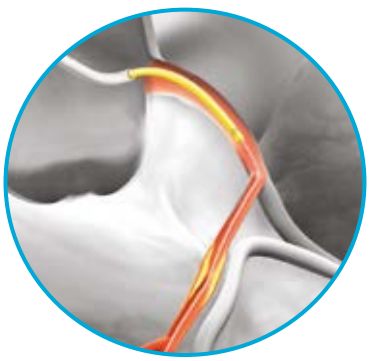
– Michael S. Lee, MD, FACC, FSCAI

"The GuideLiner has become an indispensable part of my tool kit for complex PCI. Simply put, it's a game changer."[2]

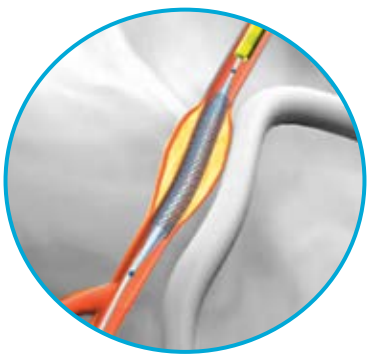
– Matthew Price, MD, FACC, FSCAI

[2] These statements reflect the personal experience and opinion of the physician.

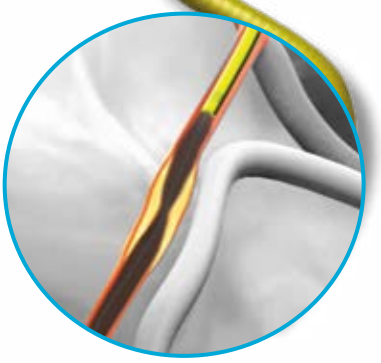
Multiple Clinical Uses



Coaxial alignment and backup support



Deep-seating for distal device delivery

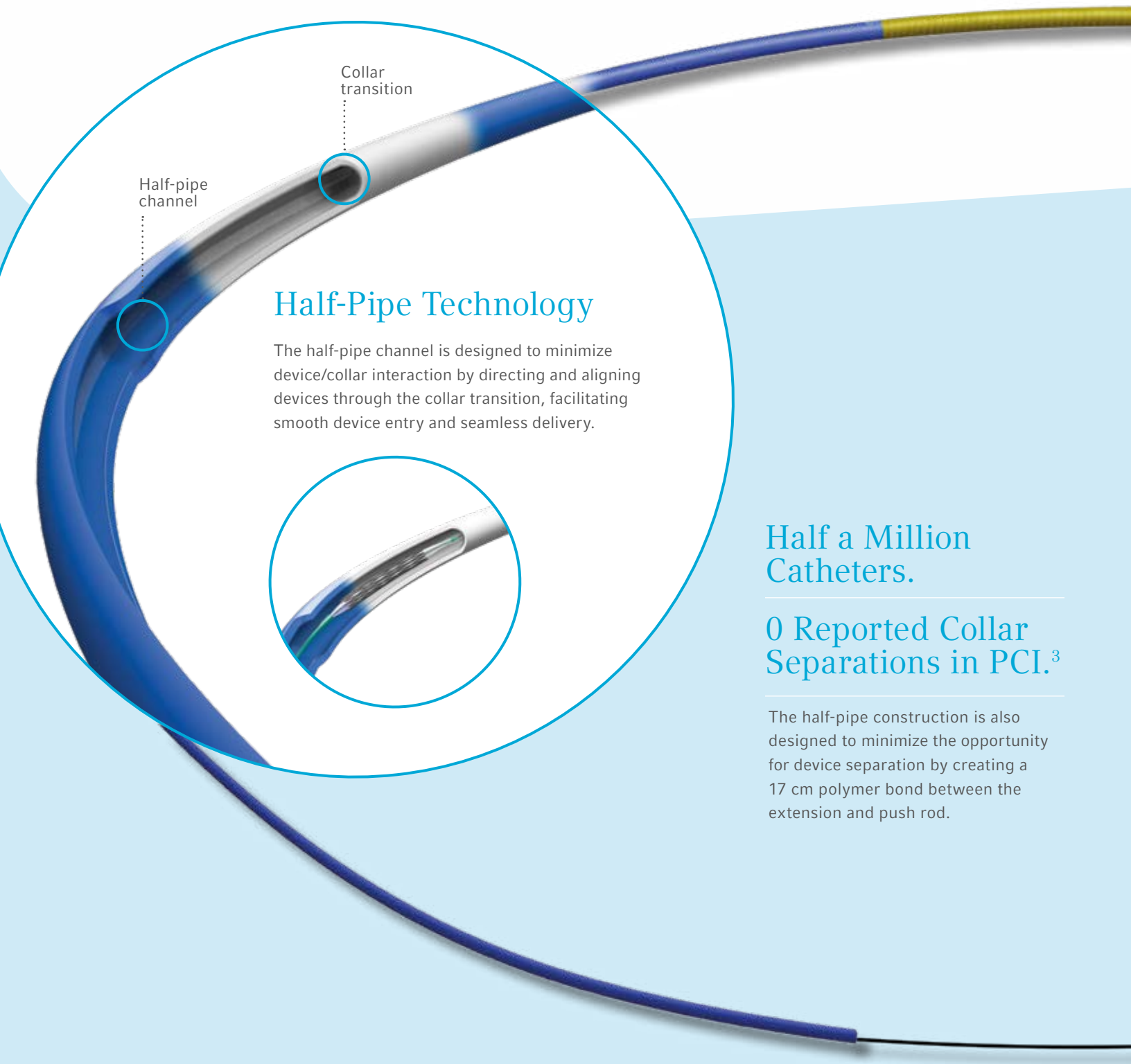


Selective delivery of contrast

1 Data on file.

Designed to Perform

It's not just the proprietary half-pipe technology that sets the GuideLiner® V3 Catheter apart. The coil-reinforced extension is specifically designed to enable dependable deep-seating for the delivery of interventional devices to distal locations.



Half-Pipe Technology

The half-pipe channel is designed to minimize device/collar interaction by directing and aligning devices through the collar transition, facilitating smooth device entry and seamless delivery.

Half a Million Catheters.

0 Reported Collar Separations in PCI.[3]

The half-pipe construction is also designed to minimize the opportunity for device separation by creating a 17 cm polymer bond between the extension and push rod.

3 Based upon a review of all device experience reports for coronary usage of GuideLiner® V3 Catheters from launch through February 13, 2018. Data on file.

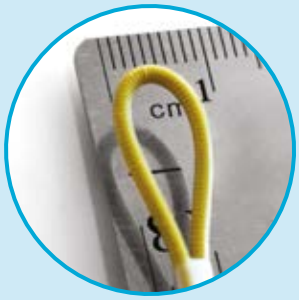
Tortuosity Tested

From challenging lesions to impossibly acute angles, percutaneous coronary interventions have grown more complex. Since being introduced, GuideLiner catheters have been recognized by interventionalists as essential tools for addressing difficult anatomies.

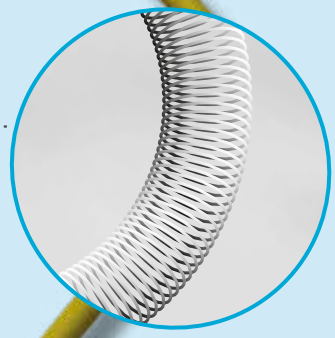
Highly Flexible, Coil-Reinforced Guide Extension

The GuideLiner® V3 Catheter's coil-reinforced guide extension provides excellent flexibility and kink resistance allowing delivery through tortuous vessels to reach the target area.

Coil-reinforced guide extension is designed to maintain luminal integrity



Kink resistant[4]



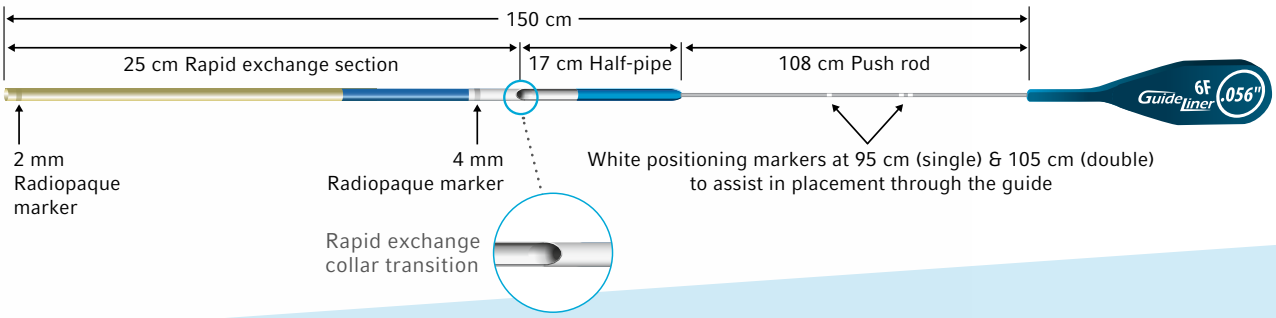
Proximal tab

Stainless steel push rod for strength and kink resistance

Ribbon wire push rod height (6 Fr.) = 0.012"

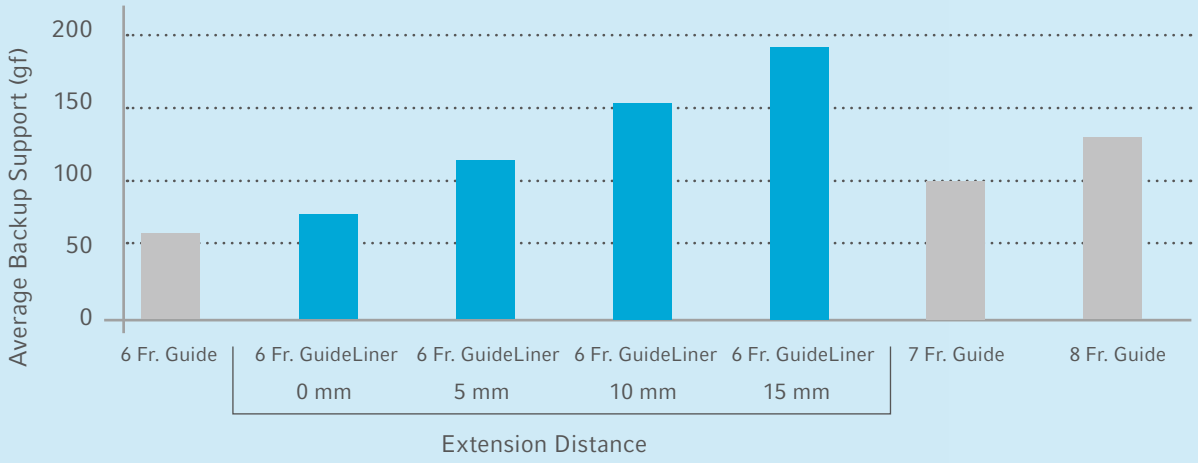
4 Data on file.

GuideLiner® V3 Catheter Dimensions



Added Backup Support

With as little as 5 mm of extension, bench testing has shown that the GuideLiner® V3 Catheter significantly increases the backup support of a 6 Fr. guide catheter.



Testing completed by Vascular Solutions, Inc. Data on file. Comparative data may not be indicative of clinical performance.

GuideLiner® V3 Catheter

GuideLiner® Catheters are intended to be used in conjunction with guide catheters to access discrete regions of the coronary and/or peripheral vasculature, and to facilitate placement of interventional devices.

PRODUCT NO.	SIZE	REQUIRED GUIDE CATHETER I.D.	PUSH ROD O.D.	GUIDE EXTENSION I.D.	TIP O.D.	RAPID EXCHANGE LENGTH	WORKING LENGTH
5569	5 Fr.	5 Fr. I.D. ≥0.056" (1.42 mm)	0.010" (0.25 mm)	0.046" (1.17 mm)	4.0 Fr. (1.35 mm / 0.053")	25 cm	150 cm
5570	5.5 Fr.	6 Fr. I.D. ≥0.066" (1.68 mm)	0.012" (0.30 mm)	0.051" (1.30 mm)	4.8 Fr. (1.60 mm / 0.063")	25 cm	150 cm
5571	6 Fr.	6 Fr. I.D. ≥0.070" (1.78 mm)	0.012" (0.30 mm)	0.056" (1.42 mm)	5.1 Fr. (1.70 mm / 0.067")	25 cm	150 cm
5572	7 Fr.	7 Fr. I.D. ≥0.078" (1.98 mm)	0.012" (0.30 mm)	0.062" (1.57 mm)	5.7 Fr. (1.90 mm / 0.075")	25 cm	150 cm
5573	8 Fr.	8 Fr. I.D. ≥0.088" (2.24 mm)	0.012" (0.30 mm)	0.071" (1.80 mm)	6.5 Fr. (2.16 mm / 0.085")	25 cm	150 cm

Packaged in quantities of 1 unit per box.

Teleflex is a global provider of medical technologies designed to improve the health and quality of people's lives. We apply purpose driven innovation – a relentless pursuit of identifying unmet clinical needs – to benefit patients and healthcare providers. Our portfolio is diverse, with solutions in the fields of vascular and interventional access, surgical, anesthesia, cardiac care, urology, emergency medicine and respiratory care. Teleflex employees worldwide are united in the understanding that what we do every day makes a difference. For more information, please visit teleflex.com.

Teleflex is the home of Arrow®, Deknatel®, Hudson RCI®, LMA®, Pilling®, Rüsch®, and Weck® – trusted brands united by a common sense of purpose.

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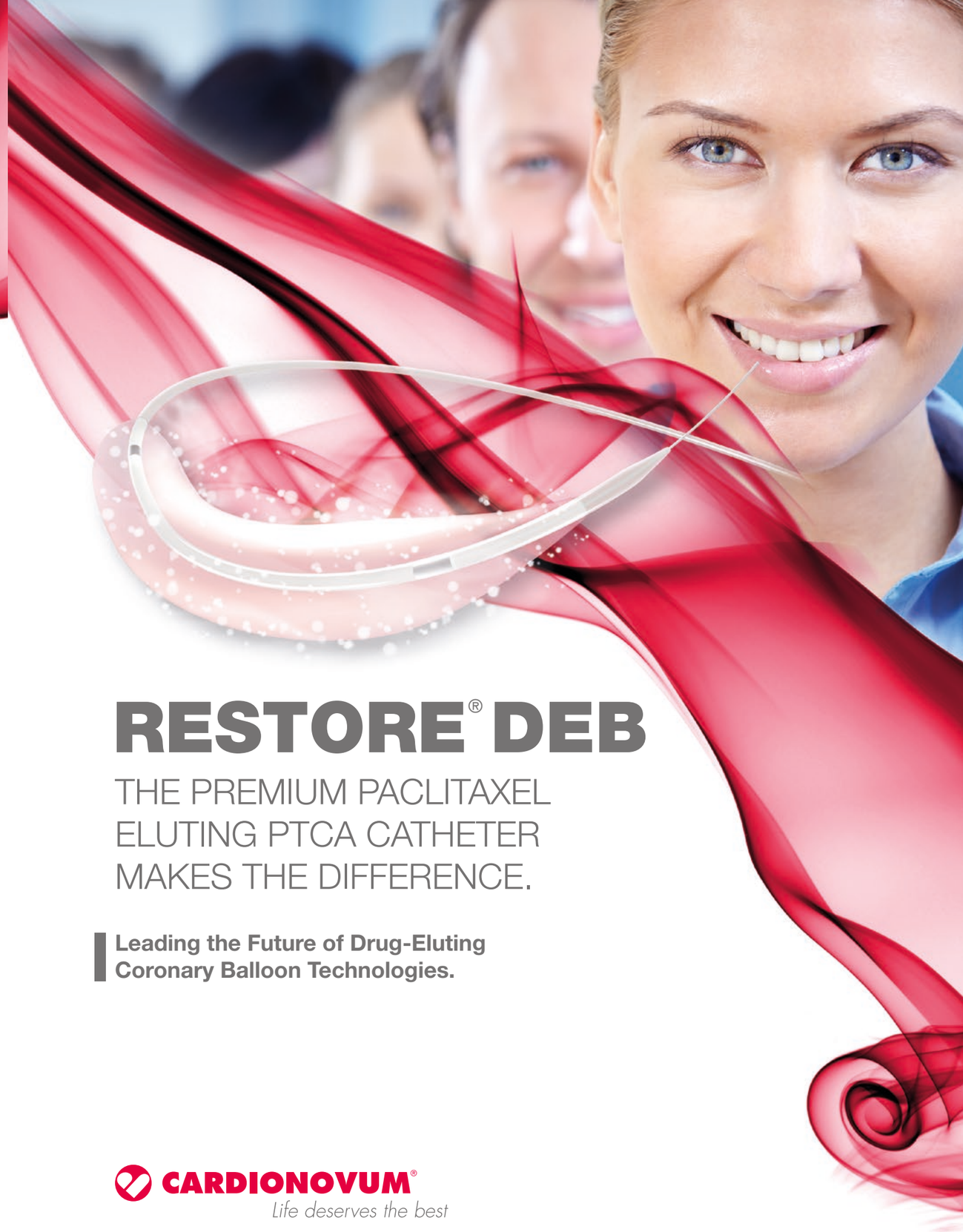
Singapore (SEA non-direct sales countries) +65 6439 3000
Slovak Republic +421 (0)3377 254 28
South Africa +27 (0)11 807 4887
Spain +34 918 300 451
Switzerland +41 (0)31 818 40 90
United Kingdom +44 (0)1494 53 27 61
For more information, please visit teleflex.com.

Please see the Instructions for Use for a complete listing of the indications, contraindications, warnings and precautions. CAUTION: Federal Law (U.S.A.) restricts this device to sale by or on the order of a physician.

Information in this material is not a substitute for the product Instructions for Use. Not all products may be available in all countries. Please contact your local representative. Revised: 02/2018.

Teleflex®

CARDIONOVUM®
Life deserves the best



RESTORE® DEB

THE PREMIUM PACLITAXEL ELUTING PTCA CATHETER MAKES THE DIFFERENCE.

Leading the Future of Drug-Eluting Coronary Balloon Technologies.

CARDIONOVUM®
Life deserves the best

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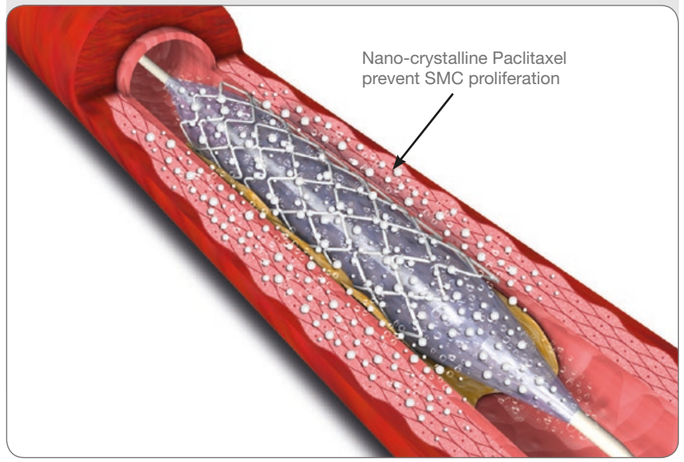
Rev. no.: R-04002

RESTORE® DEB

A STABLE DRUG-COATING QUALITY. THE BEST FOR THE CARDIOLOGIST AND THE PATIENT!

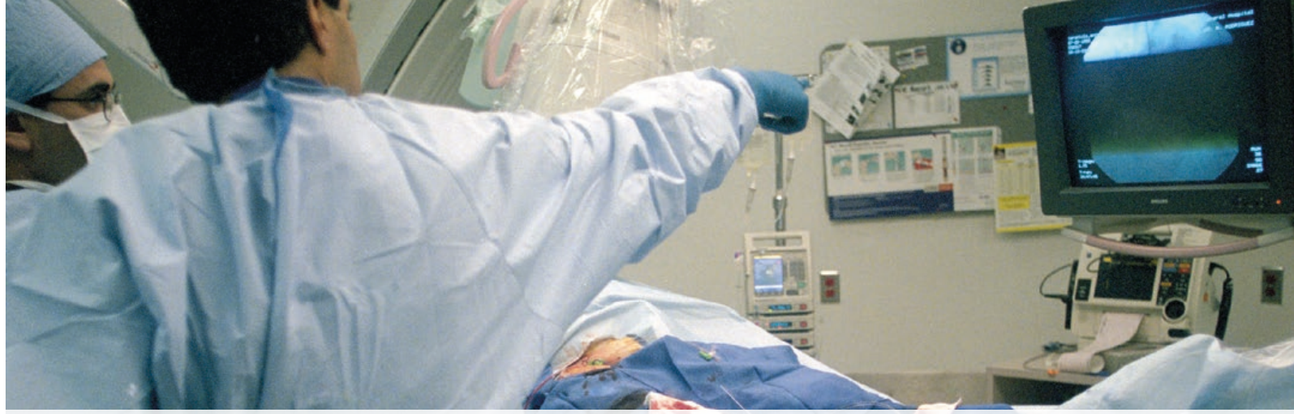
For the prevention and treatment of coronary restenosis.
Optimal stenting results and fewer stent implantations.

RESTORE DEB Dilatation of in-stent restenosis



One RESTORE DEB dilatation of coronary in-stent restenosis replaces the conventional “stent-into-stent approach” and allows for follow-up treatment options.

Coronary In-Stent restenosis



» RESTORE DEB treated arteries show no noticeable coating-induced micro emboli! «

Source: R. Virmani MD, CV-PATH Institute, Gaithersbourg USA

De novo lesion

Step 1: DEB dilatation

RESTORE DEB dilatation provides a 100% anti-proliferative lesion segment protection

Step 2: Stenting

RESTORE DEB optimizes BMS stenting results and facilitates rapid reendothelialization and early healing

The preclinical and clinical RESTORE DEB treatment quality is convincing! *

RESTORE DEB provides major clinical advantages:

1. RESTORE DEB treated arteries show a sustained anti-proliferative protection of the coronary artery lesion segment till 28 days.
2. The myocardium in RESTORE DEB treated arteries showed significantly less, and no noticeable micro emboli (collateral myocardial damage, caused by distal embolization) if compared to DEBs of the first generation, which are coated with an unstable, highly water soluble drug excipient mixture.
3. RESTORE DEB provides an excellent clinical device performance with high procedural success and absence of clinical events up to 6 months follow-up.

**Source: “From bench to bedside: Initial experience with the RESTORE DEB drug-coated balloon catheter”; Cardioangiologica, Edizioni Minerva Medica*
Authors: Carlo Briguori, MD; Renu Virmani, MD; Frank Kolodgie, PhD; Robert A. Byrne, MB BCh PhD; Michael Orlowski, PhD; Michael Joner, MD

High patient safety and revascularization efficacy.

This unparalleled, state-of-the-art product finish retains the inhibitor in its matrix scaffold till balloon inflation. A premature debonding of the Paclitaxel during catheter manipulation and the risk of unintentional cath lab contamination is thereby eliminated.

For the successful tratment of:

1. Coronary in-stent restenosis **2.** Small vessel lesions < 2.3mm
3. Side branch dilatation of bifurcated coronary artery lesions **4.** De novo lesion dilatation + BMS

RESTORE® DEB

THE MOST RELIABLE DEB DRUG COATING QUALITY.

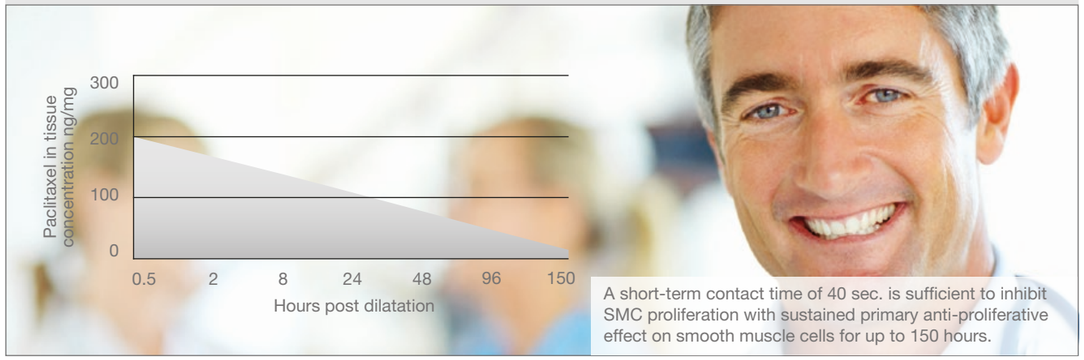
For the highest patient safety and clinical efficacy!

Uncoated balloon dilatation

RESTORE DEB:
Significantly reduced in-stent neointima in porcine coronary artery

1. “Stable” RESTORE DEB PTX coating technology
2. “Unstable” DEB PTX coating showing PTX particles on top of the balloon coating surface

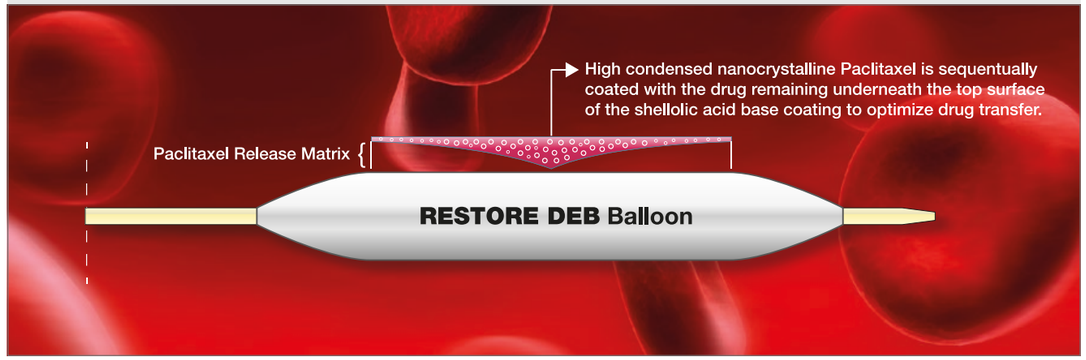
RESTORE DEB BIOAVAILABILITY IN THE ARTERIAL TISSUE.



A short-term contact time of 40 sec. is sufficient to inhibit SMC proliferation with sustained primary anti-proliferative effect on smooth muscle cells for up to 150 hours.

* Preclinical study results confirm a successful drug transfer into the vascular tissue, showing sustained drug effect up to 28 days. RESTORE DEB treated arteries show no noticeable coating-induced micro emboli!
Source: R. Virmani MD, CV-PATH Institute, Gaithersbourg USA

RESTORE DEB PTX-BOLUS-DRUG COATING TECHNOLOGY.



* Preclinical study results confirm the clinically effective condensed PTX release from its carrier matrix and facilitates intra-cellular drug uptake and retention up to 28 days.
Source: R. Virmani MD, CV-PATH Institute, Gaithersbourg USA

RESTORE DEB The key technology to clinical success.

The RESTORE DEB Drug-Coating Quality represents a new DEB generation and makes a clinically important difference compared to other DEBs coatings. A unique nanocrystalline Paclitaxel (PTX) drug formulation of 3.0µg of Paclitaxel per mm² of balloon surface is embedded underneath the surface as well as inside its newly designed, shelloic-acid drug-release matrix, which is coated onto the balloon surface. No white PTX is visible. First-generation DEBs were simply coated with a hydrophilic, water-soluble drug excipient, such as contrast media / PTX mixtures or other hydrophilic drug carriers. They provided much less surface-coating stability and functional integrity, as experienced in daily clinical practice.

“Unstable” balloon surface coatings cause PTX crystallization to form outside of the drug-release matrix on top of the coating surface, visible as unprotected white PTX particles, which easily detach. The RESTORE DEB Drug-Coating Technology protects both the physician and the patient against toxic PTX particles falling or being wiped off the balloon surface during catheter manipulation. Moreover, the “stable” RESTORE DEB Coating does not cause any significant micro emboli during DEB catheter positioning at the lesion site, and/or balloon dilatation (“Drug Wash Off Effect ”). The safe PTX-protected balloon surface coating avoids the otherwise commonly experienced potential risk of uncontrollable drug loss and contamination with Paclitaxel in the cath lab environment.

CARDIONOVUM®
Life deserves the best

RESTORE® DEB

THE NEW GENERATION PREMIUM PACLITAXEL ELUTING BALLOON DILATATION CATHETER.

Elimination and treatment of coronary stent-associated complications.
For optimal stenting results and fewer stent implantations.

RESTORE DEB RX - Technical Data	
Shaft Material	Stainless Steel
Balloon Material	Polyamide Blend
Usable Catheter Length	140 cm
Max. Recommended Guidewire	0.014“
Length of Guide Wire Lumen	25 cm
Tip Length	3.5 mm
Tip Profile	0.016"
Proximal Hypertube	1.8 F
Distal Shaft Diameter	2.6 F
Average Burst Pressure	22 bar
Paclitaxel Coating	3.0µg/mm²

Order Information

RESTORE DEB RX

Balloon Diameter (mm)	Balloon Length (mm)			
	15 mm	20 mm	25 mm	30 mm
2.00 mm	R 2.00–15	R 2.00–20	R 2.00–25	R 2.00–30
2.25 mm	R 2.25–15	R 2.25–20	R 2.25–25	R 2.25–30
2.50 mm	R 2.50–15	R 2.50–20	R 2.50–25	R 2.50–30
2.75 mm	R 2.75–15	R 2.75–20	R 2.75–25	R 2.75–30
3.00 mm	R 3.00–15	R 3.00–20	R 3.00–25	R 3.00–30
3.50 mm	R 3.50–15	R 3.50–20	R 3.50–25	R 3.50–30
4.00 mm	R 4.00–15	R 4.00–20	R 4.00–25	R 4.00–30

RESTORE DEB RX - Balloon Pressure

Balloon Pressure (bar)	Balloon Diameter (mm)					
	1.5 mm	2.0 mm	2.5 mm	3.0 mm	3.5 mm	4.0 mm
2	1.39	1.85	2.32	2.78	3.24	3.71
4	1.44	1.92	2.40	2.88	3.36	3.84
6	1.50	2.00	2.50	3.00	3.50	4.00
8	1.54	2.05	2.56	3.07	3.58	4.09
10	1.57	2.09	2.61	3.13	3.65	4.17
12	1.59	2.12	2.65	3.18	3.71	4.24
14	1.62	2.16	2.70	3.24	3.78	4.32
16	1.65	2.20	2.75	3.30	3.85	4.40
18	1.68	2.24	2.80	3.36	3.92	4.48

Pressures: Nominal diameter 6 bar / Rated burst pressure 16 bar / Average burst pressure 22 bar (at 37°C)

SAPPHIRE® II NC

Coronary Dilatation Catheter

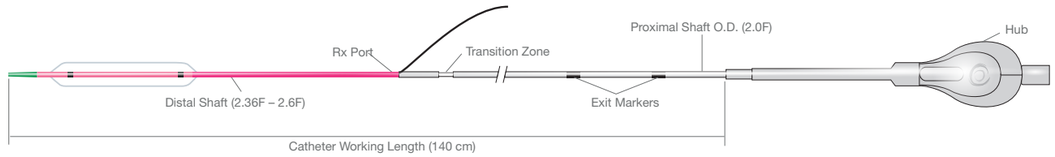
Ordering Information

Balloon Diameter (mm)	Balloon Working Length (mm)				
	8	10	12	15	18
1.75	117-1708	117-1710	117-1712	117-1715	117-1718
2.0	117-2008	117-2010	117-2012	117-2015	117-2018
2.25	117-2208	117-2210	117-2212	117-2215	117-2218
2.5	117-2508	117-2510	117-2512	117-2515	117-2518
2.75	117-2708	117-2710	117-2712	117-2715	117-2718
3.0	117-3008	117-3010	117-3012	117-3015	117-3018
3.25	117-3208	117-3210	117-3212	117-3215	117-3218
3.5	117-3508	117-3510	117-3512	117-3515	117-3518
3.75	117-3708	117-3710	117-3712	117-3715	117-3718
4.0	117-4008	117-4010	117-4012	117-4015	117-4018
4.5	117-4508	117-4510	117-4512	117-4515	117-4518
5.0	117-5008	117-5010	117-5012	117-5015	117-5018

Compliance Chart

Pressure atm	(kPa)	Balloon Diameter (mm)											
		1.75	2.0	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.5	5.0
6	(608)	1.68	1.90	2.14	2.40	2.61	2.86	3.10	3.33	3.54	3.79	4.26	4.70
8	(811)	1.70	1.93	2.17	2.44	2.66	2.91	3.15	3.39	3.61	3.86	4.34	4.80
10	(1013)	1.73	1.97	2.21	2.47	2.70	2.95	3.20	3.44	3.68	3.93	4.42	4.90
NOM* 12	(1216)	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00
14	(1419)	1.77	2.03	2.29	2.53	2.80	3.05	3.30	3.56	3.82	4.07	4.58	5.10
16	(1621)	1.80	2.07	2.33	2.56	2.84	3.09	3.35	3.61	3.89	4.14	4.66	5.20
RBP** 18	(1824)	1.82	2.10	2.36	2.60	2.89	3.14	3.40	3.67	3.96	4.21	4.74	5.30
RBP** 20	(2027)	1.84	2.13	2.40	2.63	2.93	3.18	3.45	3.72	4.03	4.27	4.82	5.40
22	(2229)	1.87	2.16	2.44	2.66	2.98	3.23	3.50	3.78	4.10	4.34	4.90	5.49
24	(2432)	1.89	2.20	2.48	2.69	3.02	3.27	3.55	3.83	4.17	4.41	4.98	5.59
26	(2634	1.92	2.23	2.51	2.72	3.07	3.32	3.59	3.89	4.24	4.48	5.06	5.69

* Nominal Pressure. The nominal in vitro device specifications do not take into account any lesion resistance.
** Rated Burst Pressure. Do not exceed RBP



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#G-70-0283 Rev03

OrbusNeich®
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SAPPHIRE® II NC
Coronary Dilatation Catheter

True Controlled Compliance and
Ultimate Crossability for a
Wide Spectrum of Vessels

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SAPPHIRE® II NC
Coronary Dilatation Catheter

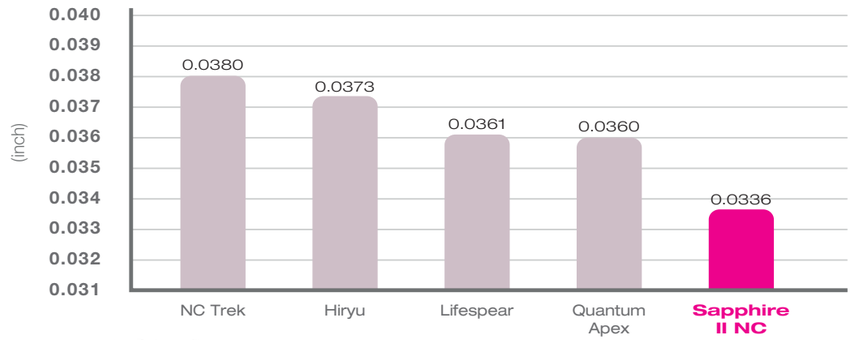
True Controlled Compliance and Ultimate Crossability for a Wide Spectrum of Vessels

Ultimate Crossability and Tip Entry Profile

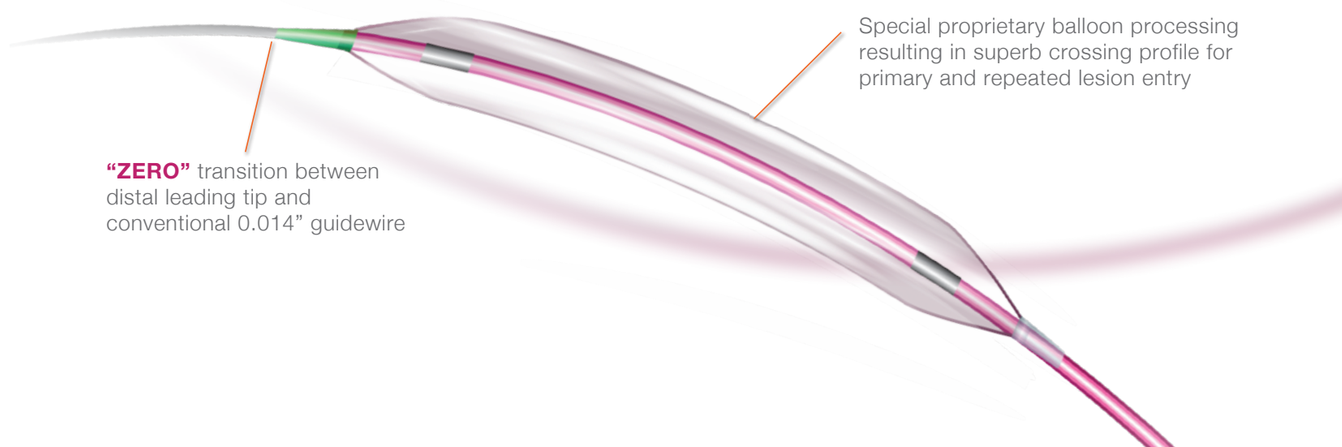
Sapphire II NC Coronary Dilatation Catheter is a well-balanced and truly non-compliant balloon catheter engineered to cross tight and calcified lesions.

Enhanced distal Z-Tip with advanced laser welding technology for “ZERO” transition with conventional steerable guidewires

Crossing Profile Comparison



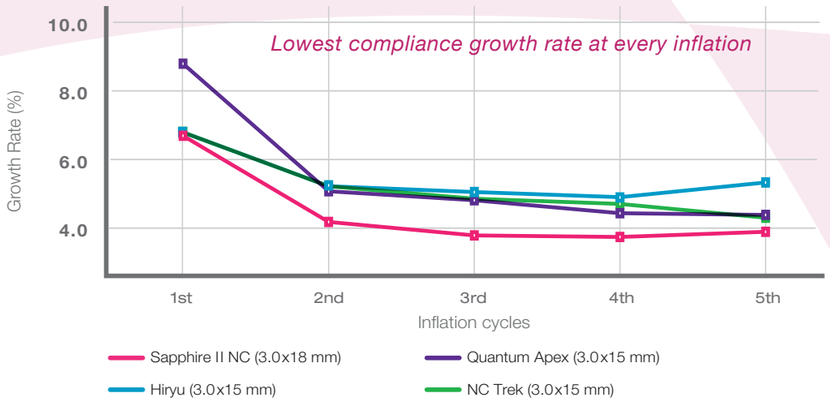
Data on file.



True Controlled Compliance

True non-compliance and minimal **overstretch for reliability** and size accuracy. Sapphire NC **brings** advanced material **engineering for** optimum reliability and deliverability.

Compliance Comparison from Nominal Pressure to RBP



Data on file.

Technical Specifications

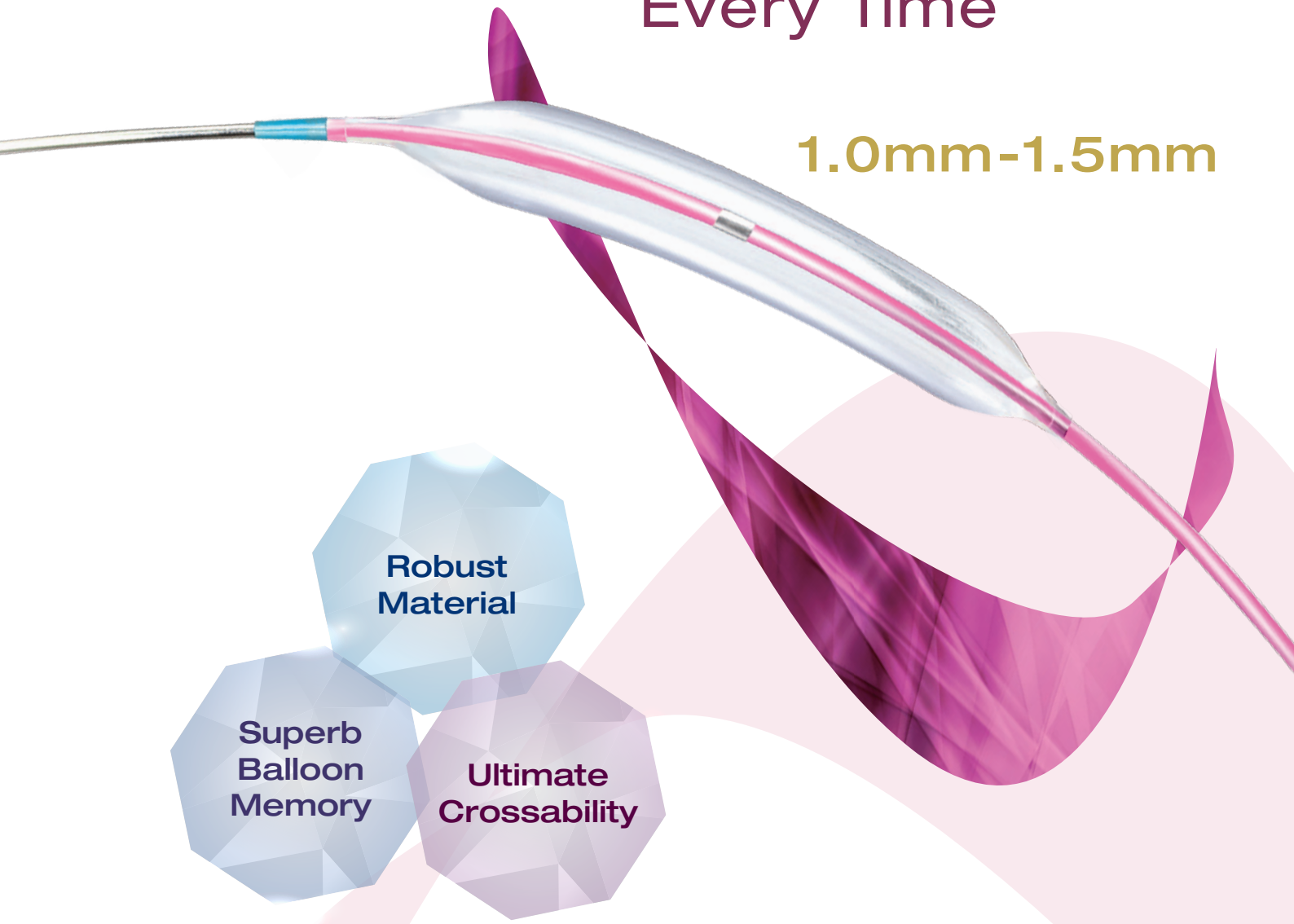
Proximal Shaft	2.0F
Distal Shaft	2.36F (1.75 - 2.0 mm); 2.55F (2.25 - 3.5 mm) 2.6F (3.75 - 5.0 mm)
Catheter Working Length	140 cm
Tip Length	1.5 mm tip for Ø 1.75 mm; 2.0 mm tip for Ø 2.0 - 3.0 mm 2.5 mm tip for Ø 3.25 - 5.0 mm
Marker Bands	2
Coating	Hydro-X (distal tip to guidewire exit port); Invio™ (guidewire lumen)
Nominal Pressure	12 atm
Rated Burst Pressure	20 atm (1.75 - 4.0 mm); 18 atm (4.5 - 5.0 mm)

SAPPHIRE® II PRO

Coronary Dilatation Catheter

Cross with Confidence Every Time

1.0mm-1.5mm



Robust Material

Superb Balloon Memory

Ultimate Crossability

Redefining the Standard of Balloon Angioplasty

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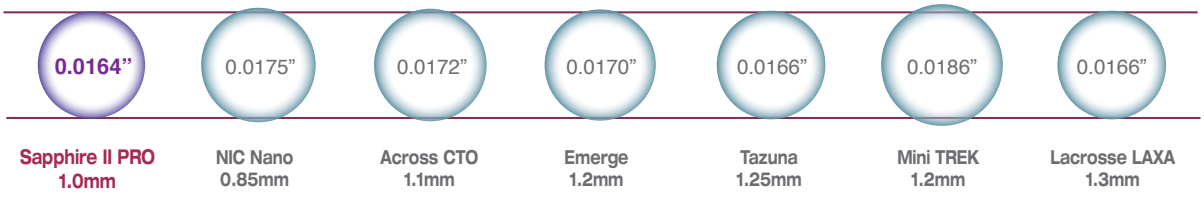
SAPPHIRE® II PRO

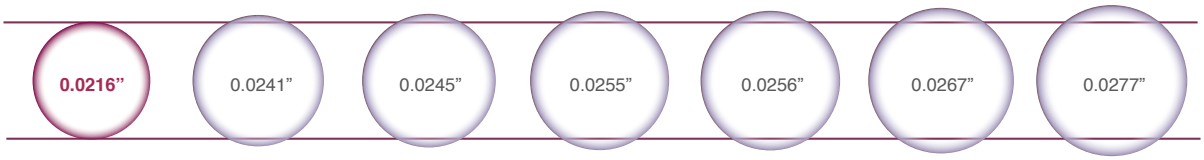
Coronary Dilatation Catheter

Tip Entry Comparison*



Sapphire II PRO 1.0mm	NIC Nano 0.85mm	Across CTO 1.1mm	Emerge 1.2mm	Tazuna 1.25mm	Mini TREK 1.2mm	Lacrosse LAXA 1.3mm

Crossing Profile Comparison*



Sapphire II PRO 1.0mm	NIC Nano 0.85mm	Across CTO 1.1mm	Emerge 1.2mm	Tazuna 1.25mm	Mini TREK 1.2mm	Lacrosse LAXA 1.3mm

*Data on file, scale depictions

Ordering Information

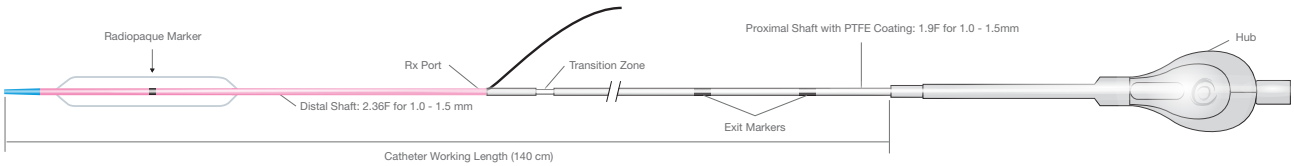
Ø (mm)	Length (mm) 5	8	10	12	15	20
1.0	210-053-5U	210-083-5U	210-103-5U	—	210-153-5U	—
1.25	212-053-5U	212-083-5U	212-103-5U	—	212-153-5U	—
1.5	—	—	215-103-5U	215-123-5U	215-153-5U	215-203-5U

Compliance Chart

Pressure (atm)	Ø (mm) 1.0	1.25	1.5
2	0.94	1.18	1.42
4	0.97	1.22	1.46
6 NOM*	1.00	1.25	1.50
8	1.03	1.28	1.54
10	1.06	1.32	1.58
12	1.09	1.35	1.62
14	1.12	1.38	1.66
16 RBP**	1.15	1.42	1.70
18	1.18	1.45	1.74
20	1.21	1.48	1.78
22	1.24	1.52	1.82

* Nominal Pressure. The nominal in-vitro device specifications do not take into account any lesion resistance.

** Rated Burst Pressure. Do not exceed RBP.



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SAPPHIRE™ II PRO
Coronary Dilatation Catheter

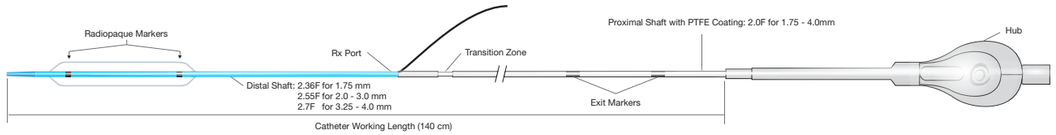
Ordering Information

Ø (mm)	Length (mm)				
	10	12	15	20	30
1.75	217-103-5U	-	217-153-5U	217-203-5U	-
2.0	220-103-5U	220-123-5U	220-153-5U	220-203-5U	-
2.25	222-103-5U	-	222-153-5U	222-203-5U	-
2.5	225-103-5U	225-123-5U	225-153-5U	225-203-5U	225-303-5U
2.75	227-103-5U	-	227-153-5U	227-203-5U	-
3.0	230-103-5U	230-123-5U	230-153-5U	230-203-5U	230-303-5U
3.25	232-103-5U	-	232-153-5U	232-203-5U	-
3.5	235-103-5U	-	235-153-5U	235-203-5U	235-303-5U
4.0	240-103-5U	-	240-153-5U	240-203-5U	-

Compliance Chart

Pressure (atm)	Ø (mm)								
	1.75	2.0	2.25	2.5	2.75	3.0	3.25	3.5	4.0
2	1.66	1.87	2.11	2.36	2.59	2.82	3.06	3.29	3.77
4	1.70	1.94	2.18	2.43	2.67	2.91	3.16	3.39	3.89
6 NOM*	**1.75**	**2.00**	**2.25**	**2.50**	**2.75**	**3.00**	**3.25**	**3.50**	**4.00**
8	1.80	2.06	2.32	2.57	2.83	3.09	3.34	3.61	4.11
10	1.84	2.13	2.39	2.64	2.91	3.18	3.44	3.71	4.23
12	1.89	2.19	2.45	2.71	2.98	3.27	3.53	3.82	4.34
14 RBP**	**1.94**	**2.25**	**2.52**	**2.78**	**3.06**	**3.36**	**3.62**	**3.92**	**4.45**
16	1.98	2.32	2.59	2.85	3.14	3.45	3.72	4.03	4.57
18	2.03	2.38	2.66	2.92	3.22	3.54	3.81	4.14	4.68

* Nominal Pressure. The nominal in-vitro device specifications do not take into account any lesion resistance.
** Rated Burst Pressure. Do not exceed RBP.



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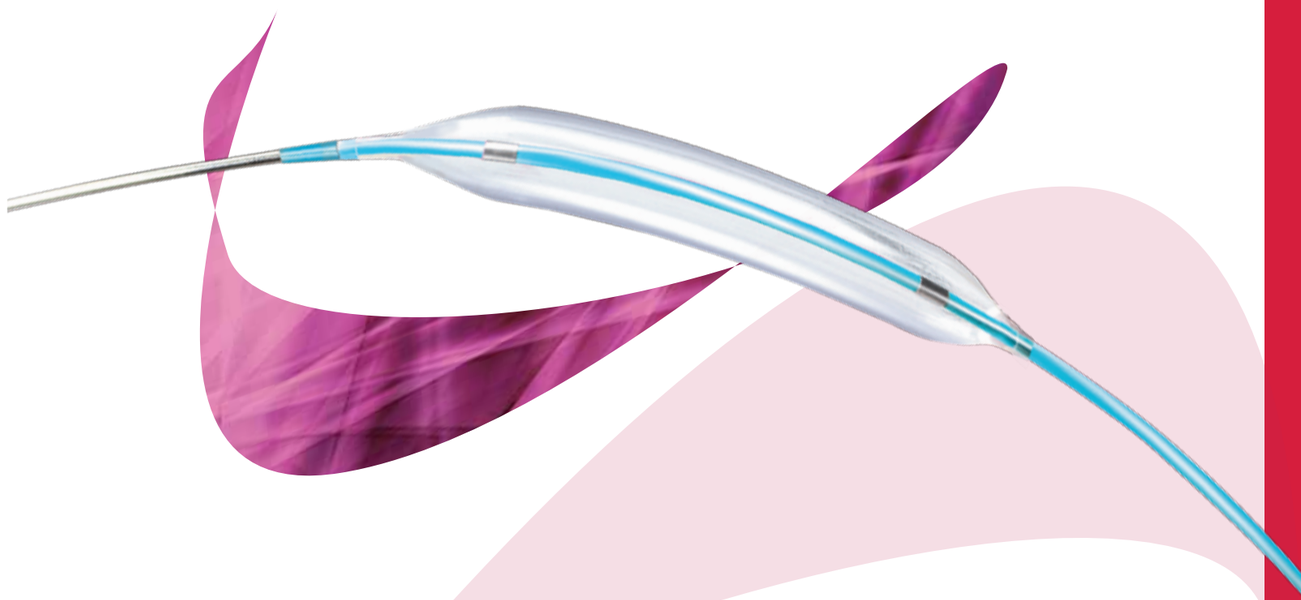
Coronary Dilatation Catheter

Redefining the Standard of
Balloon Angioplasty



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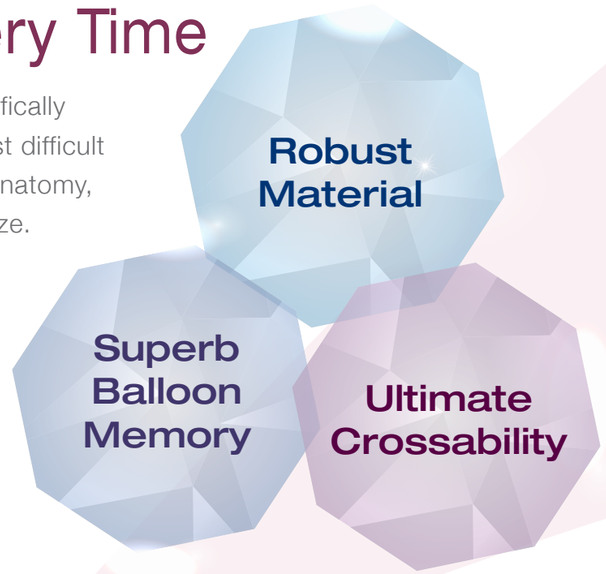
SAPPHIRE™ II PRO Coronary Dilatation Catheter

Redefining the Standard of Balloon Angioplasty

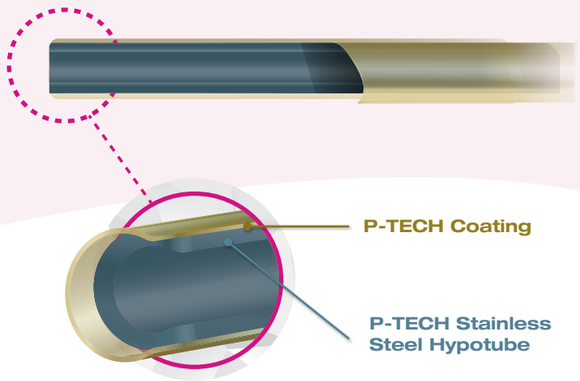
Cross with Confidence Every Time

The Sapphire II PRO is specifically engineered for crossing the most difficult lesions and tracking tortuous anatomy, tailored for every lesion size.



P-TECH Shaft for Optimal Pushability and Kink Resistance

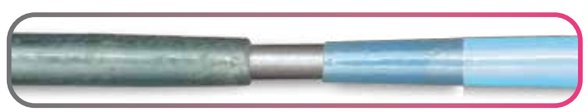
The P-TECH Shaft is uniquely constructed with a small catheter profile that is kink resistant and facilitates excellent deliverability.



Sub-zero Tip Technology for Smooth Lesion Entry

The well balanced sub-zero tapered tip has an ultra low profile and provides effortless entry through the tightest lesions.

Emerge Sapphire II PRO

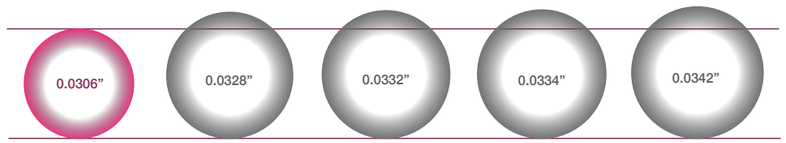


Lacrosse LAXA Sapphire II PRO

XR Balloon Engineered for the Impossible

The proprietary “XR balloon” facilitates best-in-class crossability and recrossability without compromising durability and robustness.

Crossing Profile Comparison on 3.0mm x 15mm Diameter Balloons (inches)*



*Data on file, scale depictions

Ordering Information

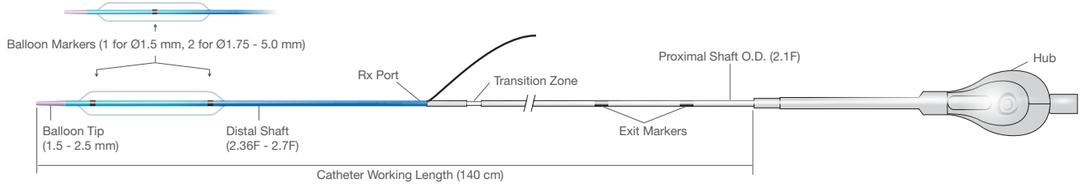
EU Manufacturing Catalogue Numbers

Balloon Diameter (mm)	Balloon Working Length (mm)						
	8	10	12	15	18	22	26
1.5	215-084-5	215-104-5	215-124-5	215-154-5	215-184-5	-	-
1.75	217-084-5	217-104-5	217-124-5	217-154-5	217-184-5	-	-
2.0	220-084-5	220-104-5	220-124-5	220-154-5	220-184-5	-	-
2.25	222-084-5	222-104-5	222-124-5	222-154-5	222-184-5	-	-
2.5	225-084-5	225-104-5	225-124-5	225-154-5	225-184-5	225-224-5	225-264-5
2.75	227-084-5	227-104-5	227-124-5	227-154-5	227-184-5	227-224-5	227-264-5
2.875	228-084-5	228-104-5	228-124-5	228-154-5	228-184-5	-	-
3.0	230-084-5	230-104-5	230-124-5	230-154-5	230-184-5	230-224-5	230-264-5
3.25	232-084-5	232-104-5	232-124-5	232-154-5	232-184-5	232-224-5	232-264-5
3.5	235-084-5	235-104-5	235-124-5	235-154-5	235-184-5	235-224-5	235-264-5
3.75	237-084-5	237-104-5	237-124-5	237-154-5	237-184-5	237-224-5	237-264-5
4.0	240-084-5	240-104-5	240-124-5	240-154-5	240-184-5	240-224-5	240-264-5
4.5	245-084-5	245-104-5	245-124-5	245-154-5	245-184-5	245-224-5	245-264-5
5.0	250-084-5	250-104-5	250-124-5	250-154-5	250-184-5	250-224-5	250-264-5

Compliance Chart

Pressure (atm)	Balloon Diameter (mm)													
	1.50	1.75	2.0	2.25	2.5	2.75	2.875	3.0	3.25	3.5	3.75	4.0	4.5	5.0
6	1.43	1.69	1.93	2.17	2.42	2.66	2.78	2.90	3.13	3.38	3.60	3.86	4.31	4.80
8	1.45	1.70	1.95	2.19	2.44	2.68	2.80	2.93	3.16	3.41	3.64	3.90	4.36	4.85
10	1.47	1.72	1.96	2.21	2.46	2.70	2.83	2.95	3.19	3.44	3.68	3.93	4.41	4.90
12	1.48	1.73	1.98	2.23	2.48	2.73	2.85	2.98	3.22	3.47	3.71	3.97	4.45	4.95
14 NOM*	1.50	1.75	2.00	2.25	2.50	2.75	2.875	3.00	3.25	3.50	3.75	4.00	4.50	5.00
16	1.52	1.77	2.02	2.27	2.52	2.77	2.90	3.02	3.28	3.53	3.79	4.03	4.55	5.05
18	1.53	1.78	2.04	2.29	2.54	2.80	2.92	3.05	3.31	3.56	3.82	4.07	4.59	5.10
20 (RBP)**	1.55	1.80	2.05	2.31	2.56	2.82	2.95	3.07	3.34	3.59	3.86	4.10	4.64	5.15
22 (RBP)**	1.57	1.81	2.07	2.33	2.58	2.84	2.97	3.10	3.37	3.62	3.90	4.14	4.69	5.20
24 (RBP)**	1.58	1.83	2.09	2.35	2.60	2.86	2.99	3.12	3.40	3.65	3.93	4.17	4.73	5.25
26	1.60	1.84	2.11	2.37	2.62	2.89	3.02	3.15	3.43	3.67	3.97	4.21	-	-
28	1.62	1.86	2.12	2.39	2.64	2.91	3.04	3.17	3.46	3.70	-	-	-	-

* Nominal Pressure. The nominal in vitro device specifications do not take into account any lesion resistance.
** Rated Burst Pressure. Do not exceed RBP



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G-70-1069 Rev04

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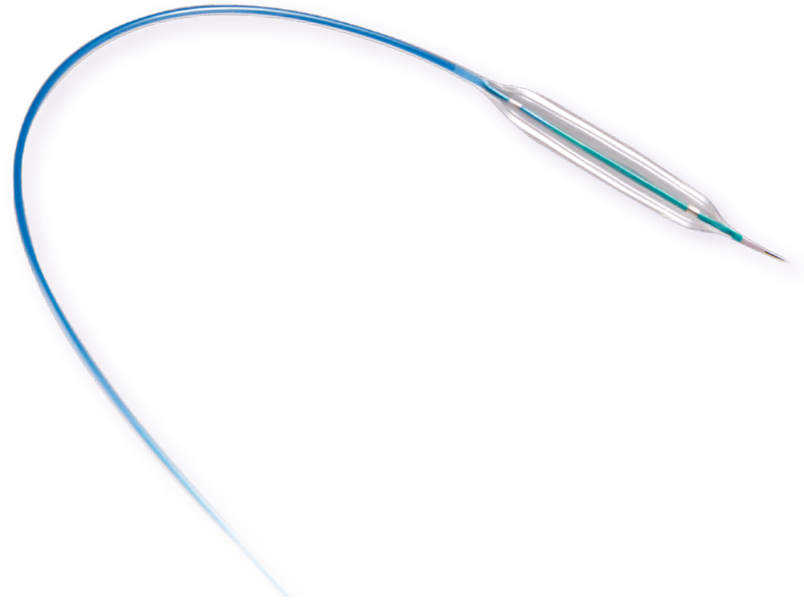
NC SAPPHIRE® Coronary Dilatation Catheter 24

Engineered for true controlled compliance, high pressure tolerance and re-crossability



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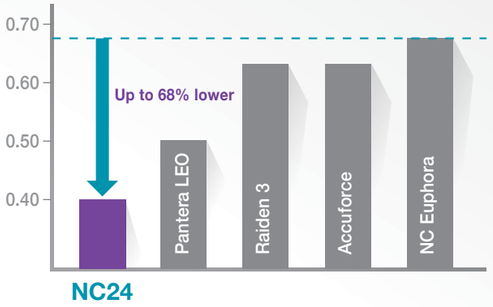
Introducing 24 atm RBP

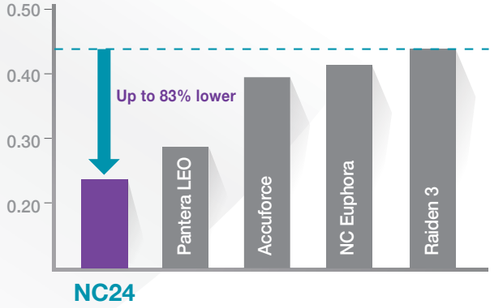
Sapphire NC24 offers a complete balance for **true controlled compliance, high pressure tolerance** and **re-crossability**

Controlled Balloon Compliance for most accurate sizing and stent optimization

Lowest % Circumferential Growth* (Nom to RBP)



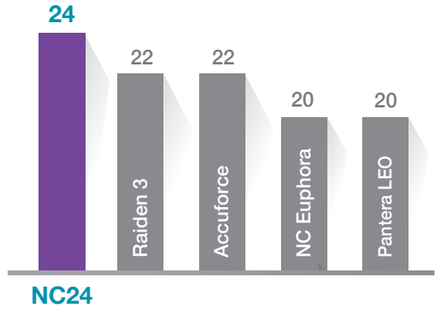
Lowest % Longitudinal Growth* (Nom to RBP)



*Data on file based on Ø 3.0mm balloons

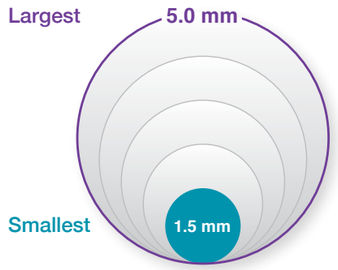
RBP at 24 atm for high pressure tolerance

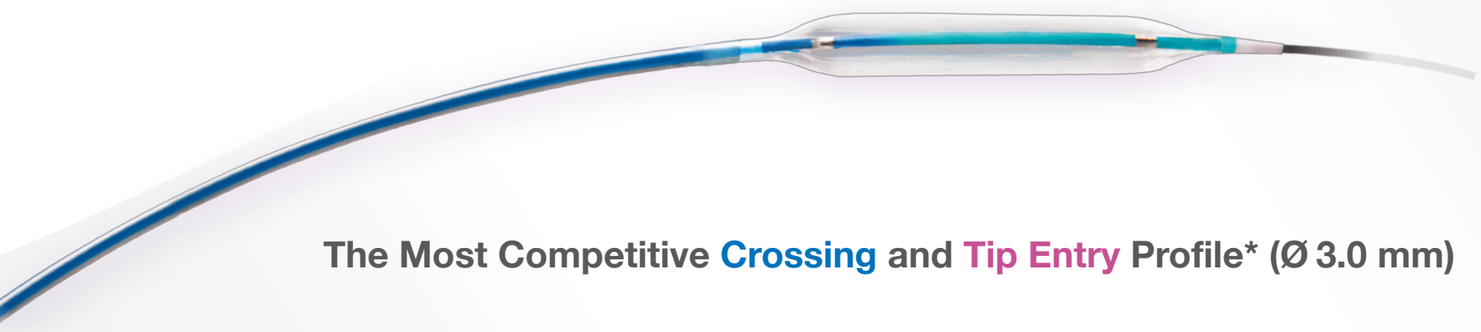
Rated Burst Pressure* (atm)



New **1.5 mm** diameter and **22 mm & 26 mm** lengths for broader range of vessel treatment

Broad range of balloon diameters and working lengths





The Most Competitive **Crossing** and **Tip Entry** Profile* (Ø 3.0 mm)

NC24	Raiden 3	Accuforce	NC Euphora	Pantera LEO
0.0345”	0.0375”	0.0397”	0.0404”	0.0408”
0.0169”	0.0190”	0.0185”	0.0187”	0.0190”

* Data on file.

Technical Specifications

Proximal Shaft	2.1F
Distal Shaft	2.36 - 2.7F (Ø1.5 - 5.0 mm)
Catheter Working Length	140 cm
Tip Length	1.5 mm - 2.5 mm (Ø1.5 - 5.0 mm)
Marker Bands	1 (Ø1.5 mm), 2 (Ø1.75 - 5.0 mm)
Balloon Folds	3 (Ø1.5 - 3.0 mm), 5 (Ø3.25 - 5.0 mm)
Coating	• Hyrdophilic (tip to guidewire exit port) • Hydrophobic (guidewire lumen)
Nominal Pressure	14 atm
Rated Burst Pressure	24 atm (Ø1.5 - 3.5 mm), 22 atm (Ø3.75 - 4.0 mm), 20 atm (Ø4.5 - 5.0 mm)

scoreflex™ NC
Coronary Dilatation Catheter

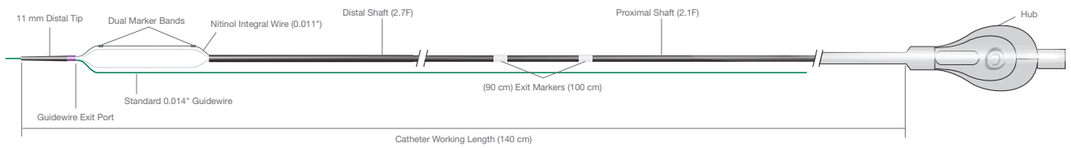
Ordering Information

Ø (mm)	Length (mm)		
	10	15	20
1.75	617-104-1	617-154-1	617-204-1
2.00	620-104-1	620-154-1	620-204-1
2.25	622-104-1	622-154-1	622-204-1
2.50	625-104-1	625-154-1	625-204-1
2.75	627-104-1	627-154-1	627-204-1
3.00	630-104-1	630-154-1	630-204-1
3.50	635-104-1	635-154-1	635-204-1
4.00	640-104-1	640-154-1	640-204-1

Technical Specifications

Scoreflex NC	
Catheter Type	Rapid exchange
Guidewire Lumen Diameter	0.014"
Balloon Material	Nylon blend
Balloon Compliance	Non-compliant
Coating (distal shaft and tip)	Hydro-X hydrophilic coating
Coating (guidewire lumen)	Invio hydrophobic coating
Crossing Profile*	0.0313" / 0.79 mm
Nominal Pressure	12 atm
Rated Burst Pressure	20 atm

* (2.5 mm diameter balloon)



For more information please visit our website at **www.OrbusNeich.com** or contact us:

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* Only for Belgium, Denmark, France, Germany, Ireland, Netherlands, Norway, Sweden and UK

G-70-0598 Rev01

OrbusNeich™
Pioneers in life-changing technologies

scoreflex™ NC
Coronary Dilatation Catheter

Focused Force Angioplasty for

Non-compliant Lesion Preparation

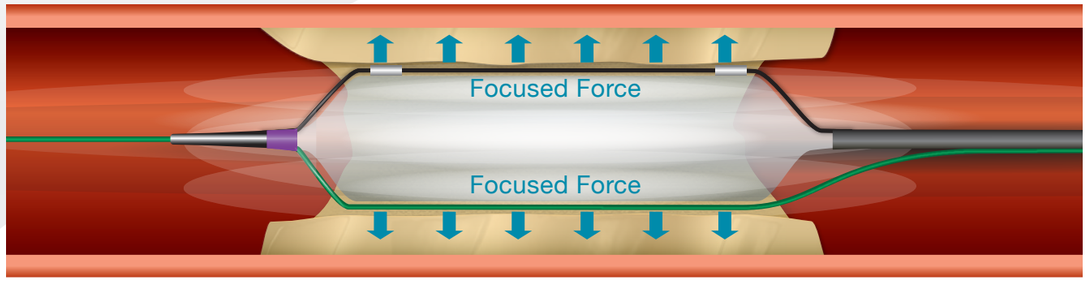
OrbusNeich™
Pioneers in life-changing technologies

scoreflex™ NC

Coronary Dilatation Catheter

Focused Force Angioplasty for
Safe and Controlled Dilatation

Scoreflex NC is a focused force dilatation balloon with a dual-wire system which creates a focal stress pattern to facilitate safe and controlled plaque modification at lower resolution pressure



Unique Catheter Design for
Dual-Wire Scoring

Short rapid exchange tip facilitates the combined effect of the built-in nitinol integral wire and the conventional guidewire to score lesions

Scoreflex NC
Recommended Applications

Coronary Applications

- Lesion preparation for stents, scaffolds, drug-coated balloons
- Calcified and fibrotic lesions
- Ostial lesions
- Bifurcation lesions
- Long diffused lesions
- Small lesions without need of stenting
- In-stent restenosis

Non-Compliant Balloon for
Safety and Accuracy

Proprietary nylon formulation gives the balloon controlled balloon growth and high rated burst pressure

Catheter Designed for
Excellent Deliverability

Lowest crossing profile in its class* and continuous hub-to-tip metal construction for optimal pushability

Lubricious Coating for
Minimal Friction

Hydrophilic coating on tip and distal shaft and hydrophobic coating in the guidewire lumen provide smooth trackability

*Data on file

SUPER ARROW-FLEX® SHEATH INTRODUCER

Flexibility you can see. Strength you can feel.

Teleflex

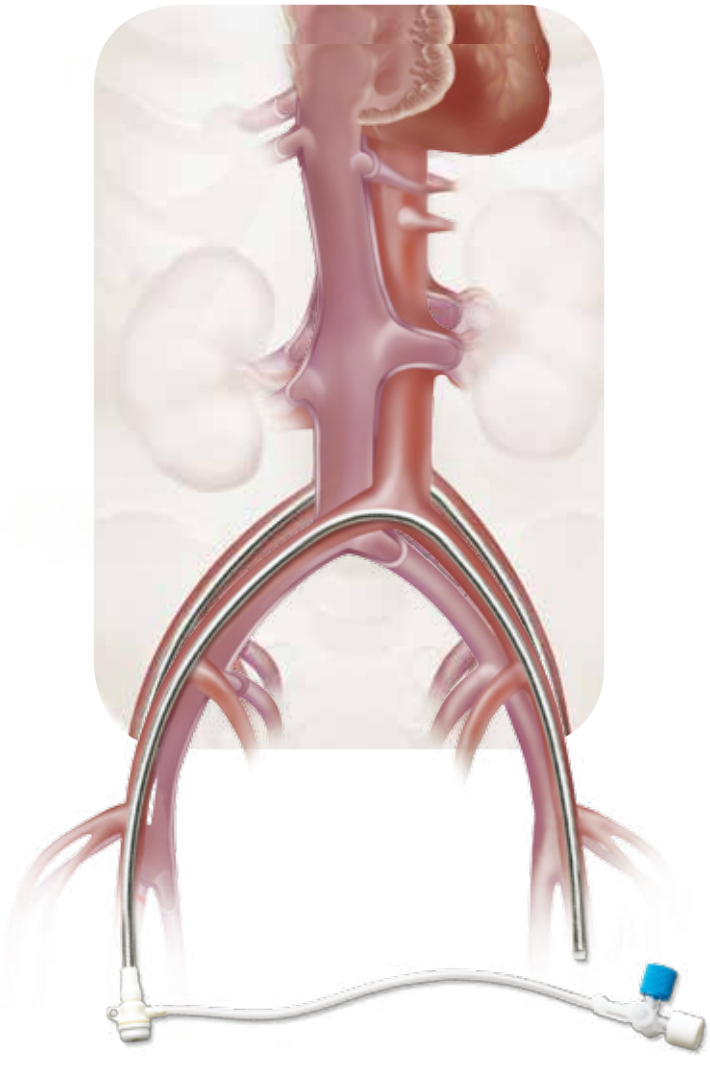
COMPLETE VASCULAR ACCESS WITHOUT KINKING OR COLLAPSING

THE FLEXIBLE, KINK-RESISTANT SUPER ARROW-FLEX SHEATH INTRODUCER

The ARROW brand of Teleflex sheath introducers continues to be the choice of many clinicians who require flexibility in sheath design in many areas of the world. Super Arrow-Flex gives you complete vascular access, thanks to its wire-reinforced design and construction. From easy insertion and handling to the highly visible radiopaque tip*, Super Arrow-Flex is designed to deliver optimal performance from start to finish. And with a wide range of sheath sizes and lengths, Super Arrow-Flex gives you flexibility of choice for multiple vascular applications.

RANGE OF PRODUCTS FOR INTERVENTIONAL PROCEDURES

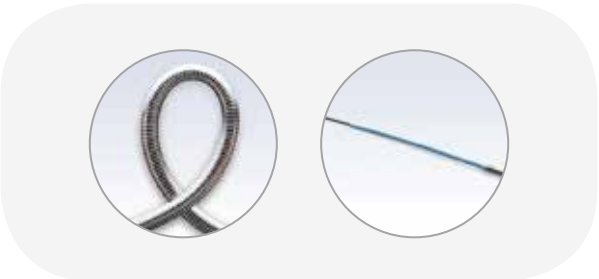
- specific designs suitable for renal, carotid, and transseptal procedures
- wide range of products provides reliable access during crossover, TIPS, and antegrade brachial procedures
- variety of product options from 5 Fr. to 11 Fr. and 7.5 cm to 100 cm
- sheath available with and without guide wire
- colour coded for convenience



*35 cm and longer, except 5 Fr.

MAXIMUM EFFECTIVENESS EVEN IN THE MOST CHALLENGING CASES

- exclusive coil-wire design allows the sheath to flex at any point and in any direction without kinking or losing support
- excellent steerability helps negotiate tortuous anatomies
- tapered dilator provides exceptional pushability to the contralateral leg and the superficial femoral artery (SFA)
- increased patient comfort and reduced back pain post-procedures due to the flexible design[1]



[1] *Waksman et al. Randomized comparison of flexible versus nonflexible femoral sheaths on patient comfort after angioplasty. American Heart Journal. 131:6, 1076-1078.*

SUPER ARROW-FLEX SHEATH INTRODUCER SETS WITH WIRE GUIDES

5-10 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CP-07511-P	5 Fr.	7.5 cm	grey	10
CP-07511	5 Fr.	11 cm	grey	10
CP-07611-P	6 Fr.	7.5 cm	green	10
CP-07611	6 Fr.	11 cm	green	10
CP-07711	7 Fr.	11 cm	orange	10
CP-07811	8 Fr.	11 cm	blue	10
CP-07911	9 Fr.	11 cm	black	10
CP-07011	10 Fr.	11 cm	white	10

EACH "CP" SET INCLUDES:

- Super Arrow-Flex sheath with integral side port/ haemostasis valve and attached 3-way stopcock
- 17 3/4" (45 cm) long dual purpose "J" tip spring-wire guide in holder with tip straightener. Short-length sheath set (P) has .021"-dia. and all others have .035"-dia. wire guide
- vessel dilator with snap-lock feature
- obturator cap

SUPER ARROW-FLEX SHEATH INTRODUCER SETS WITHOUT WIRE GUIDES

5 FR. INTRODUCERS

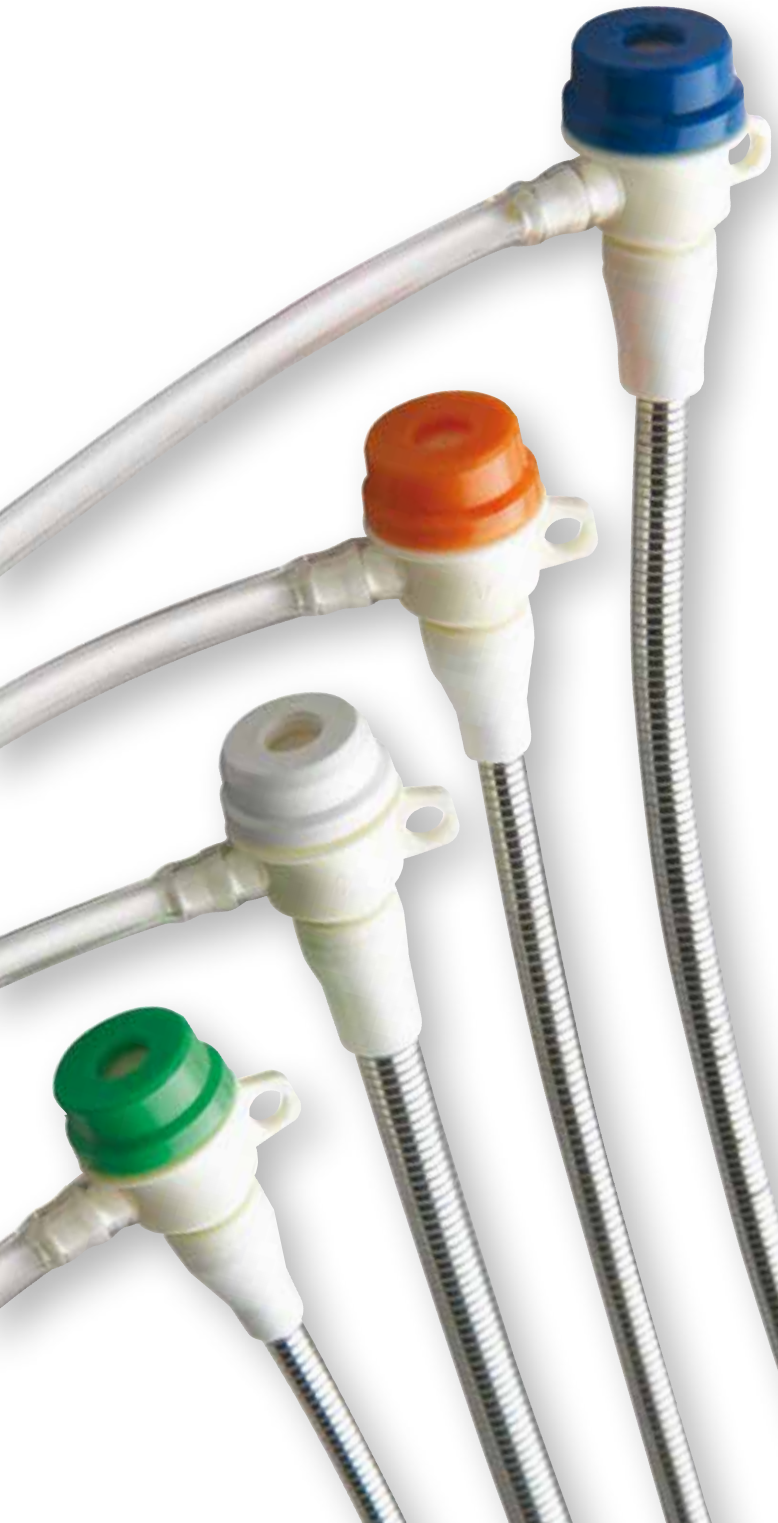
REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07511	5 Fr.	11 cm		10
CL-07524	5 Fr.	24 cm		5
CL-07545	5 Fr.	45 cm	grey	5
CL-07565	5 Fr.	65 cm		5
CL-07590	5 Fr.	90 cm		2

6 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07611	6 Fr.	11 cm		10
CL-07624	6 Fr.	24 cm		5
CL-07635	6 Fr.	35 cm		5
CL-07645	6 Fr.	45 cm	green	5
CR-07645*	6 Fr.	45 cm (renal)		5
CL-07665	6 Fr.	65 cm		5
CL-07690	6 Fr.	90 cm		2

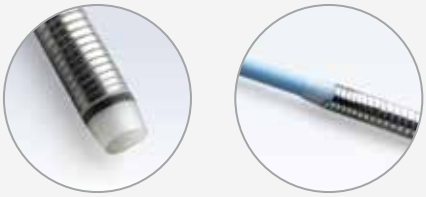
7 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07711	7 Fr.	11 cm		10
CL-07724	7 Fr.	24 cm		5
CL-07735	7 Fr.	35 cm		5
CL-07745	7 Fr.	45 cm		5
CR-07745*	7 Fr.	45 cm (renal)		5
CR-07745-NT**	7 Fr.	45 cm (renal)	orange	5
CL-07765	7 Fr.	65 cm		5
CL-07780	7 Fr.	80 cm		2
CL-07790-R*	7 Fr.	90 cm (carotid)		2
CL-07700	7 Fr.	100 cm		2



EASY PLACEMENT AND INSERTION

- radiopaque tip marker enhances visualisation during insertion and enables precise deployment of a catheter just beyond the sheath tip
- highly radiopaque sheath, yet spacing between coils enables visualisation
- smooth transition between sheath and dilator helps prevent peel-back
- hydrophilic surface facilitates smooth insertion
- valve lubrication eases catheter placement through the sheath



SAFETY AND PEACE OF MIND

- capability to be used as a guiding sheath may eliminate the need for a guiding catheter (includes obturator cap)
- colour-coded hubs for easy identification of sheath sizes
- tri-cuspid haemostasis valve facilitates catheter manipulation with minimal bleed-back
- sheath and dilator lock together to enable simultaneous and secure insertion

8 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07811	8 Fr.	11 cm		10
CL-07824	8 Fr.	24 cm		5
CL-07835	8 Fr.	35 cm		5
CL-07845	8 Fr.	45 cm		5
CT-07860	8 Fr.	60 cm (transseptal)	blue	2
CL-07865	8 Fr.	65 cm		5
CL-07880	8 Fr.	80 cm		2
CL-07890-R*/***	8 Fr.	90 cm (carotid)		2
CL-07800	8 Fr.	100 cm		2

9 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07911	9 Fr.	11 cm		10
CL-07924	9 Fr.	24 cm		5
CL-07965	9 Fr.	65 cm	black	5
CL-07980	9 Fr.	80 cm		2
CL-07900	9 Fr.	100 cm		2

10 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-07011	10 Fr.	11 cm		10
CL-07024	10 Fr.	24 cm		5
CL-07035	10 Fr.	35 cm	white	5
CL-07045	10 Fr.	45 cm		5
CL-07065	10 Fr.	65 cm		5
CL-07080	10 Fr.	80 cm		2

11 FR. INTRODUCERS

REF.	SHEATH SIZE	SHEATH LENGTH	COLOUR CODED HUB	SETS/ CASE
CL-71165	11 Fr.	65 cm		5
CL-71180	11 Fr.	80 cm	yellow	2

EACH "CL" SET INCLUDES:

- Super Arrow-Flex sheath with integral side port/ haemostasis valve and attached 3-way stopcock
- vessel dilator with snap-lock feature
- obturator cap

* *These products include a special Tuohy-Borst "Y" adapter with side arm extension.*

** *Tuohy-Borst "Y" adapter is not included with this product.*

*** *Contact your* ARROW *representative to check availability.*

Teleflex is a leading global provider of specialty medical devices used for diagnostic and therapeutic procedures in critical care, urology and surgery. Our mission is to provide solutions that enable healthcare providers to improve outcomes and enhance patient and provider safety.
We specialise in devices for general and regional anaesthesia, cardiac care, respiratory care, urology, vascular access and surgery and we serve healthcare providers in more than 130 countries. Teleflex also provides specialty products for medical device manufacturers.

Teleflex global operations: Austria, Belgium, Canada, China, Czech Republic, France, Germany, Greece, India, Ireland, Italy, Japan, Malaysia, Mexico, Netherlands, Portugal, Singapore, Slovak Republic, South Africa, Spain, Switzerland, United Kingdom, Uruguay and USA.

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For detailed information see www.teleflex.com

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Please contact your local representative. All data current at time of printing (02/2013).
Subject to technical changes without further notice.

94 10 43 - 00 00 01 · REV A · MC / WM · 02 13 02

Teleflex

Turnpike® catheters

Navigate Complex Interventions at Every Turn

Teleflex®

Keep Driving Forward

The portfolio of Turnpike® Catheters places the power in your hands. Navigate tortuous anatomy with agility and precision.
No matter the challenge, Turnpike Catheters are designed to help simplify the journey.

*"Turnpike® Catheters have a vast utility. They've given me the confidence to tackle a wide variety of highly complex lesions."**

Jon Robken, MD
Cardiovascular Medicine, P.C.

* This statement reflects the personal experience and opinion of the physician.

Ideal Combination of Flexibility and Torque Response

Turnpike® Catheters feature a unique five-layer shaft construction that provides flexibility, torque and tracking over a 0.014" guidewire in complex coronary interventions.

Outmaneuver Roadblocks

+ Complex lesions
+ Extreme tortuosity
+ Guidewire support

Enhanced Guidewire Movement
An inner PTFE liner that spans the entire catheter to ensure smooth guidewire interaction throughout the case

Responsive and Kink Resistant
Dual-layer coils and a braid make for an ideal combination of flexibility and torque response

Exceptional Delivery
A polymer outer layer, paired with a hydrophilic coating on the distal 60 cm, provides excellent lubricity for delivery

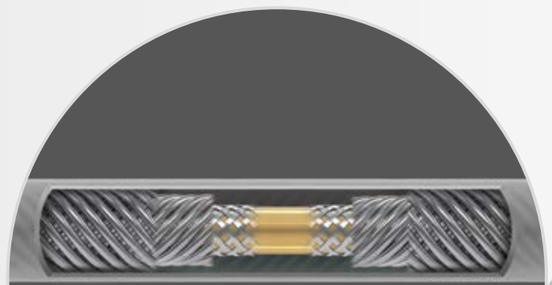
Turnpike® LP

Dual coil tapers down to single coil 21 cm from distal tip for lower profile and increased flexibility in the distal shaft and tip

Turnpike® catheter

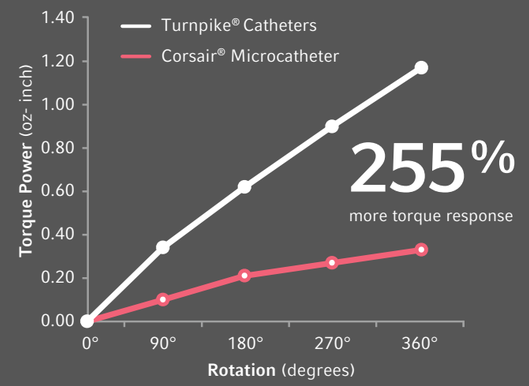
Standard version, flexible tip

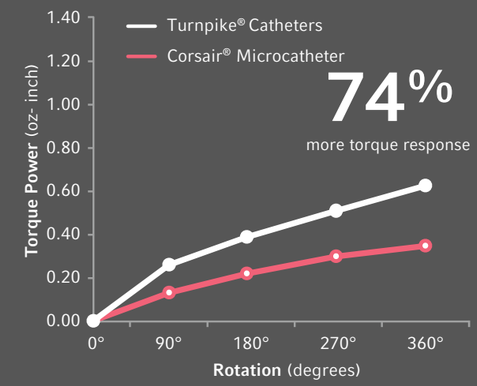
Workhorse antegrade device, as well as retrograde escalation device for increasing torque power and guidewire support[1] in resistant septal collaterals



5-layer shaft construction includes dual-layer coils and a braid for an ideal combination of flexibility and torque response

Superior Bidirectional Torque Response*



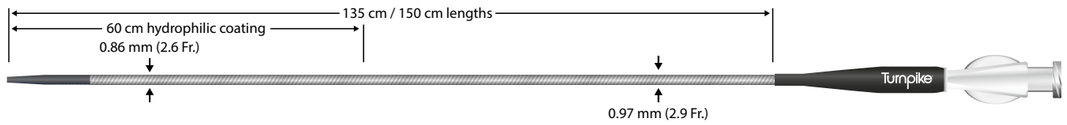


* All values based on bench test data averages, n=3, performed by Teleflex. Bench test results may not necessarily be indicative of clinical performance. Data on file.

Ordering Information

MODEL	VERSION	WORKING LENGTH	PROXIMAL SHAFT O.D.	DISTAL SHAFT O.D.	DISTAL TIP O.D.	COMPATIBLE GUIDEWIRE DIAMETER	COMPATIBLE GUIDE CATHETER SIZE
5642	Turnpike	135 cm	2.9 Fr. 0.97 mm / 0.038"	2.6 Fr. 0.86 mm / 0.034"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.
5643	Turnpike	150 cm	2.9 Fr. 0.97 mm / 0.038"	2.6 Fr. 0.86 mm / 0.034"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.

Packaged in quantities of 1 unit per box.

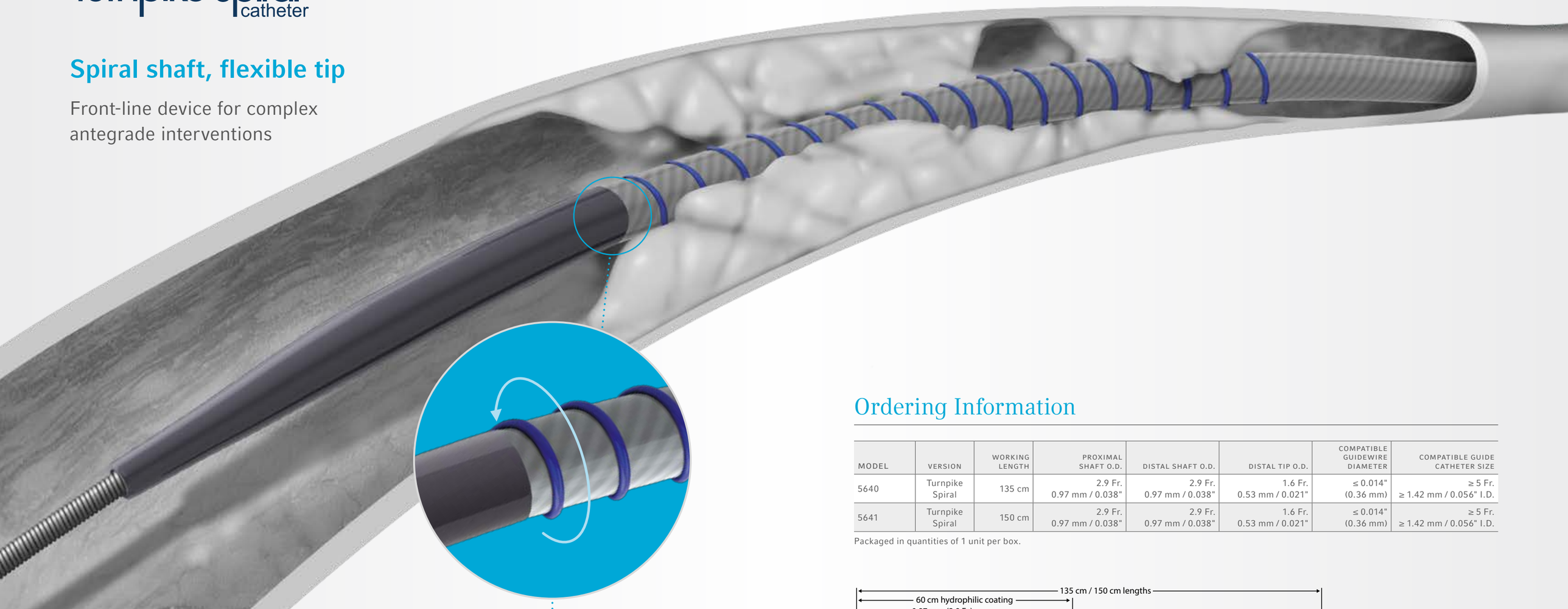


1 Compared to Turnpike® LP Catheter. Data on file.

Turnpike® Spiral catheter

Spiral shaft, flexible tip

Front-line device for complex antegrade interventions

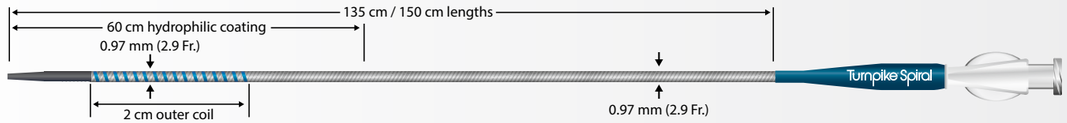


Same shaft design as the standard version with the addition of a 2 cm outer nylon coil for added rotational advancement when rotated in a clockwise direction

Ordering Information

MODEL	VERSION	WORKING LENGTH	PROXIMAL SHAFT O.D.	DISTAL SHAFT O.D.	DISTAL TIP O.D.	COMPATIBLE GUIDEWIRE DIAMETER	COMPATIBLE GUIDE CATHETER SIZE
5640	Turnpike Spiral	135 cm	2.9 Fr. 0.97 mm / 0.038"	2.9 Fr. 0.97 mm / 0.038"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.
5641	Turnpike Spiral	150 cm	2.9 Fr. 0.97 mm / 0.038"	2.9 Fr. 0.97 mm / 0.038"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.

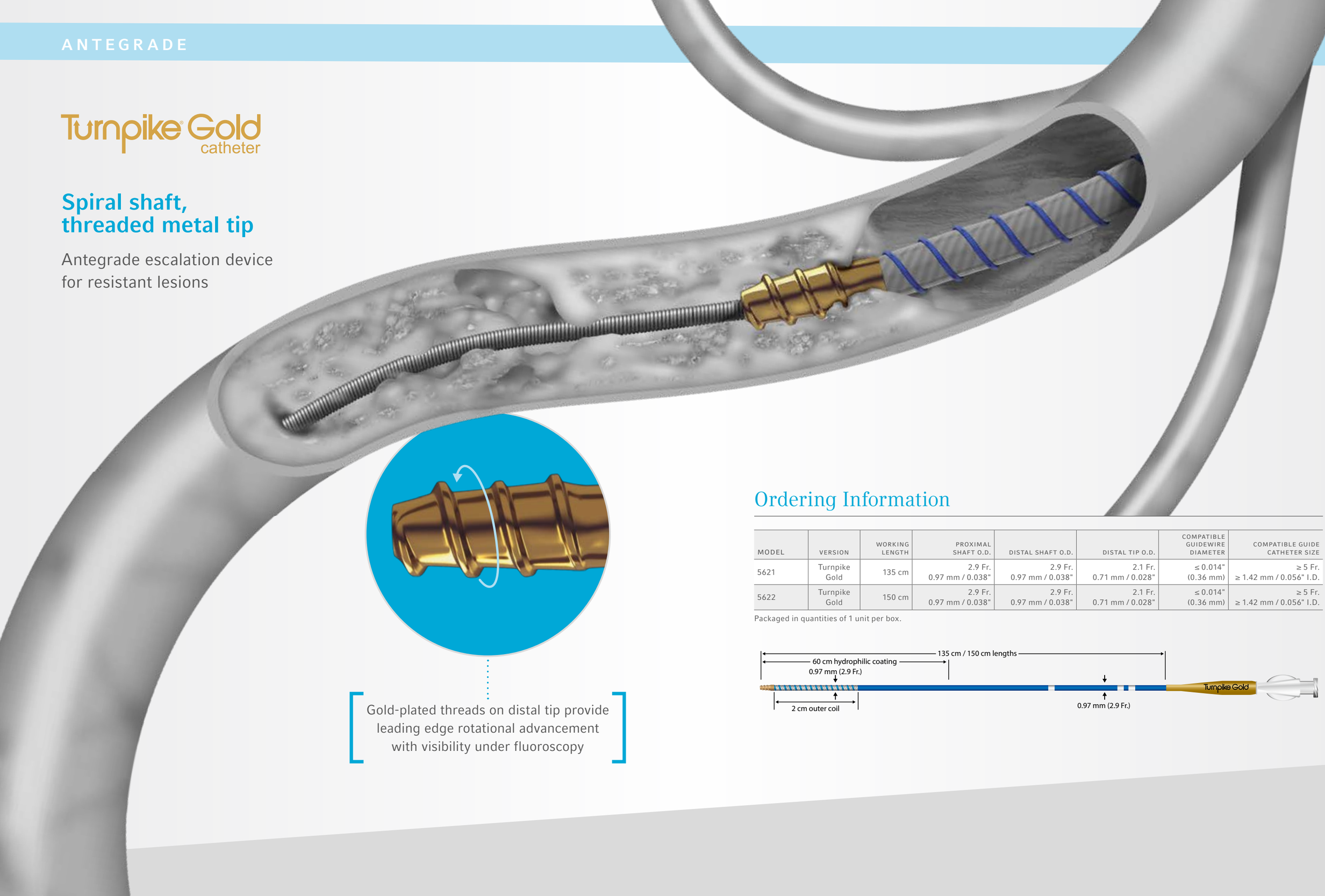
Packaged in quantities of 1 unit per box.



Turnpike® Gold catheter

Spiral shaft, threaded metal tip

Antegrade escalation device for resistant lesions



Gold-plated threads on distal tip provide leading edge rotational advancement with visibility under fluoroscopy

Ordering Information

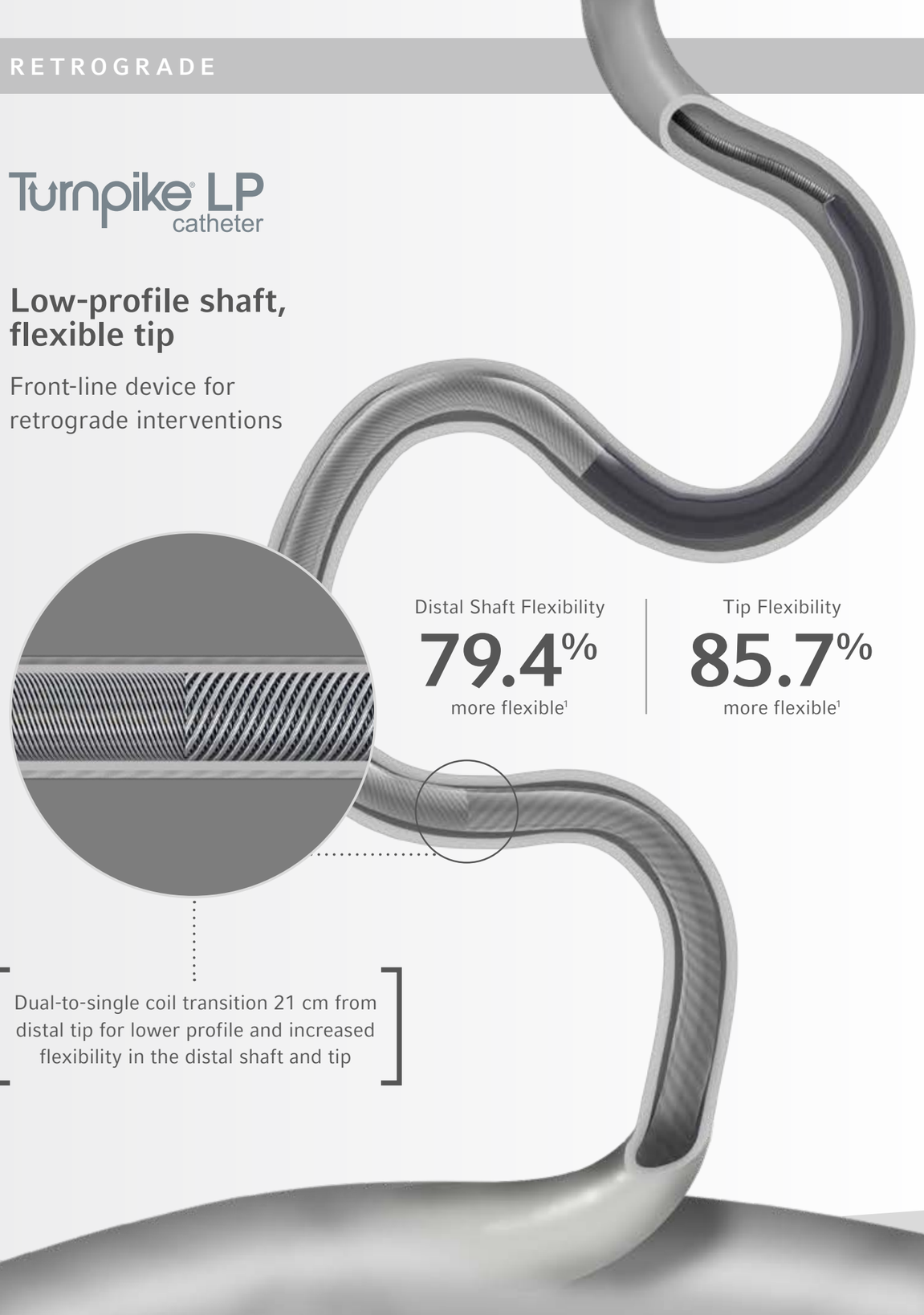
MODEL	VERSION	WORKING LENGTH	PROXIMAL SHAFT O.D.	DISTAL SHAFT O.D.	DISTAL TIP O.D.	COMPATIBLE GUIDEWIRE DIAMETER	COMPATIBLE GUIDE CATHETER SIZE
5621	Turnpike Gold	135 cm	2.9 Fr. 0.97 mm / 0.038"	2.9 Fr. 0.97 mm / 0.038"	2.1 Fr. 0.71 mm / 0.028"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.
5622	Turnpike Gold	150 cm	2.9 Fr. 0.97 mm / 0.038"	2.9 Fr. 0.97 mm / 0.038"	2.1 Fr. 0.71 mm / 0.028"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.

Packaged in quantities of 1 unit per box.

Turnpike® LP catheter

Low-profile shaft, flexible tip

Front-line device for retrograde interventions



Distal Shaft Flexibility

79.4%

more flexible[1]

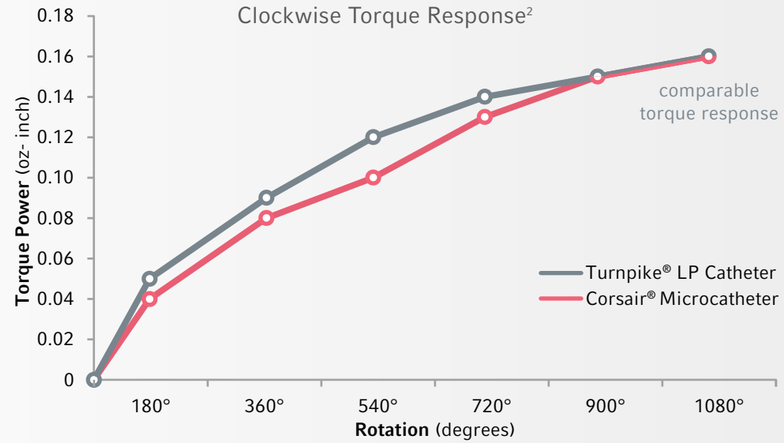
Tip Flexibility

85.7%

more flexible[1]

Dual-to-single coil transition 21 cm from distal tip for lower profile and increased flexibility in the distal shaft and tip

Turnpike® LP Catheter offers impressive torqueability with a smaller crossing profile than the Corsair® Microcatheter



Torqueable Microcatheters

15% smaller crossing profile*

- Turnpike® Catheter 2.6 Fr.
- Corsair® Microcatheter 2.6 Fr.
- Turnpike LP® Catheter 2.2 Fr.

Non-Torqueable Microcatheters

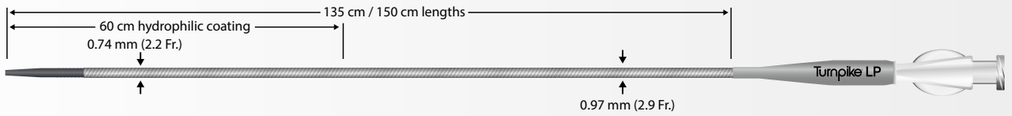
- Caravel® Microcatheter 1.9 Fr.
- Finecross® Microcatheter 1.8 Fr.

* Based on diameter values reported on competitive websites at the time of this publication.

Ordering Information

MODEL	VERSION	WORKING LENGTH	PROXIMAL SHAFT O.D.	DISTAL SHAFT O.D.	DISTAL TIP O.D.	COMPATIBLE GUIDEWIRE DIAMETER	COMPATIBLE GUIDE CATHETER SIZE
5638	Turnpike LP	135 cm	2.9 Fr. 0.97 mm / 0.038"	2.2 Fr. 0.74 mm / 0.029"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.
5639	Turnpike LP	150 cm	2.9 Fr. 0.97 mm / 0.038"	2.2 Fr. 0.74 mm / 0.029"	1.6 Fr. 0.53 mm / 0.021"	≤ 0.014" (0.36 mm)	≥ 5 Fr. ≥ 1.42 mm / 0.056" I.D.

Packaged in quantities of 1 unit per box.



1 All values based on bench test data averages compared to the standard Turnpike Catheter, n=15, performed by Teleflex. Bench test results may not necessarily be indicative of clinical performance. Data on file.
2 All values based on bench test data averages, n=2, performed by Teleflex. Bench test results may not necessarily be indicative of clinical performance. Data on file.

Turnpike® Catheters

The Turnpike® Catheters are intended to be used to access discrete regions of the coronary and/or peripheral vasculature. They may be used to facilitate placement and exchange of guidewires and to subselectively infuse/deliver diagnostic and therapeutic agents.

The Turnpike® Spiral and Turnpike® Gold catheters are contraindicated for use in vessels with an effective diameter smaller than 1 mm.

Teleflex is a global provider of medical technologies designed to improve the health and quality of people's lives. We apply purpose driven innovation – a relentless pursuit of identifying unmet clinical needs – to benefit patients and healthcare providers. Our portfolio is diverse, with solutions in the fields of vascular and interventional access, surgical, anesthesia, cardiac care, urology, emergency medicine and respiratory care. Teleflex employees worldwide are united in the understanding that what we do every day makes a difference. For more information, please visit teleflex.com.

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China (Beijing) +86 (0)10 6418 5699
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Greece +30 210 67 77 717
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Italy +39 0362 58911
Japan +81 (0)3 6632 3600
Korea +82 2 536 7550
Mexico +52 55 5002 3500
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New Zealand 0800 601 100
Poland +48 22 4624032
Portugal +351 22 541 90 85
Singapore (SEA non-direct sales countries) +65 6439 3000
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South Africa +27 (0)11 807 4887
Spain +34 918 300 451
Switzerland +41 (0)31 818 40 90
United Kingdom +44 (0)1494 53 27 61
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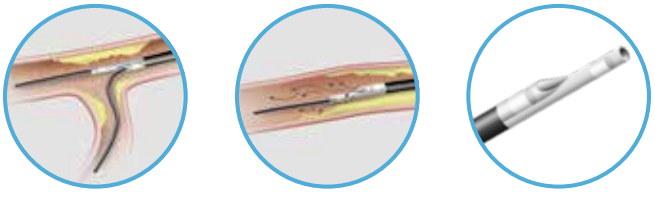
Teleflex®

Twin-Pass®
dual access catheter

Twin-Pass® Dual Access Catheters

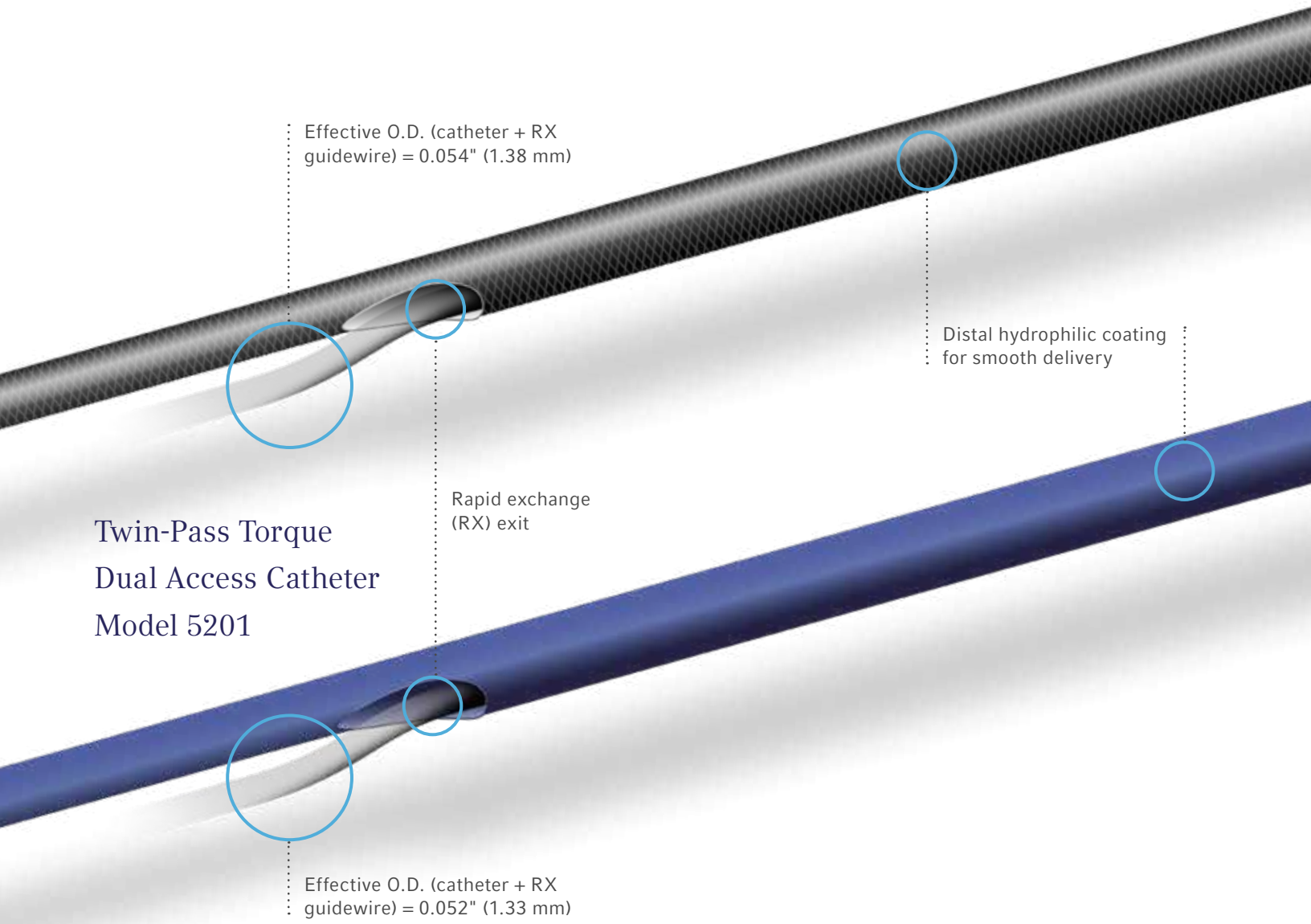
A Second Lumen When and Where It's Needed



Teleflex®

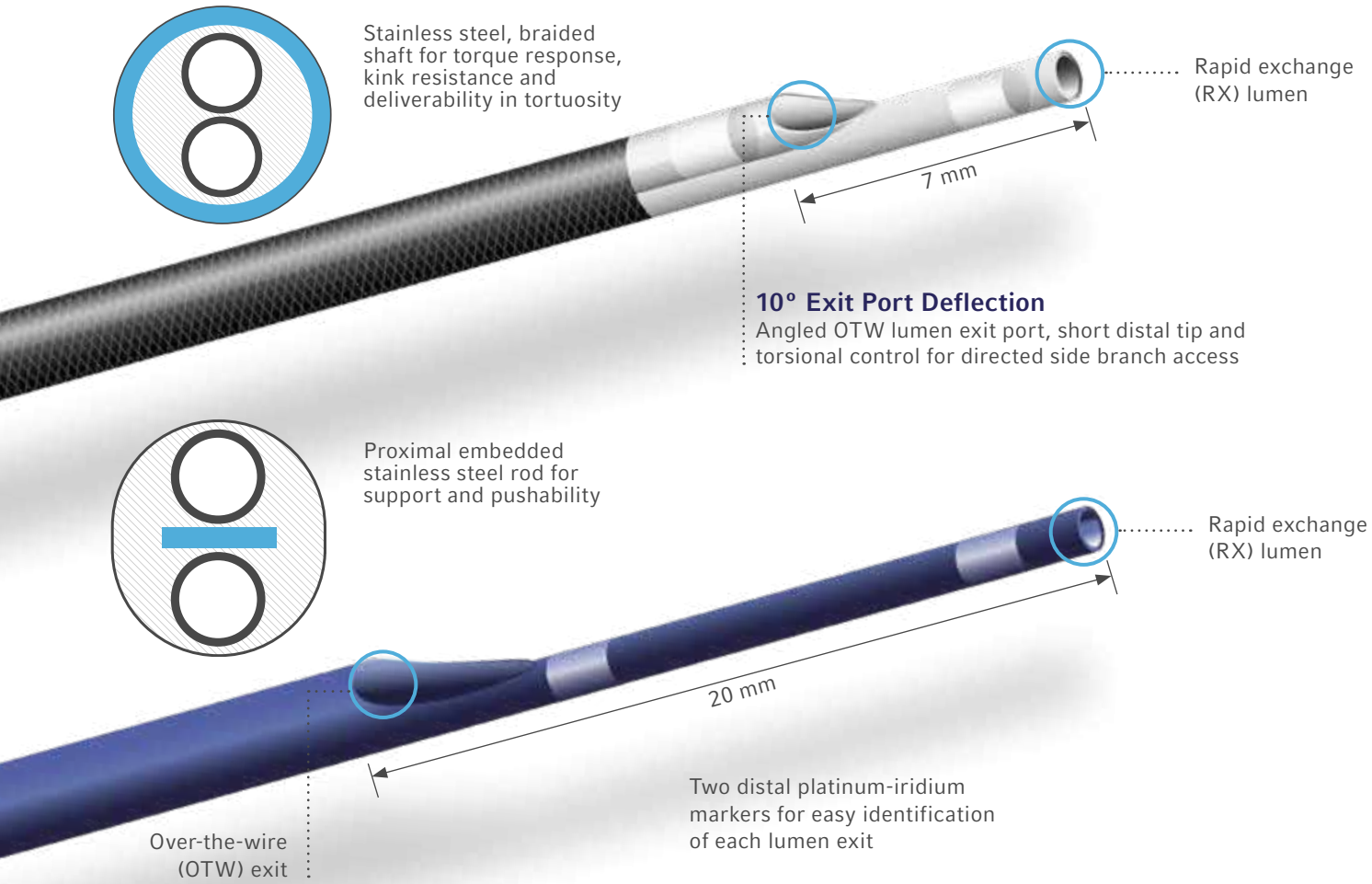
Access or Delivery While Maintaining Wire Position

The Twin-Pass® Dual Access Catheter offers the convenience of an over-the-wire lumen and a rapid exchange lumen in a single catheter. This unique design allows the guidewire to remain in place while the second lumen is used for advancement of a second 0.014" guidewire, or subselective delivery of contrast or medication.



Twin-Pass Torque Dual Access Catheter Model 5201

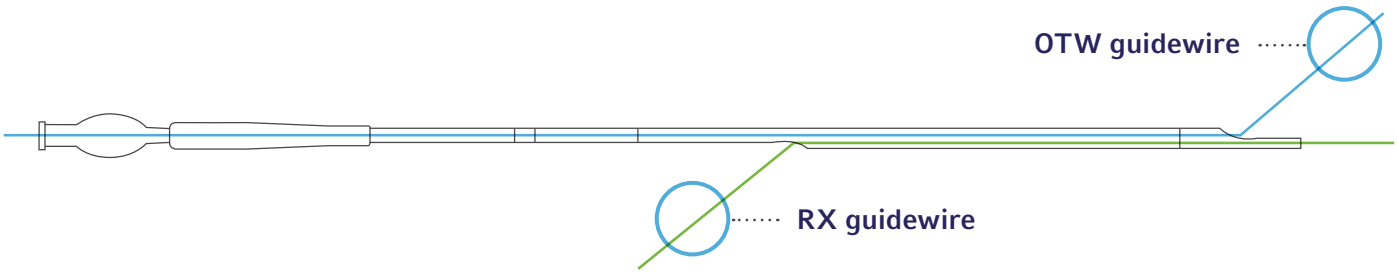
Twin-Pass Dual Access Catheter Model 5200



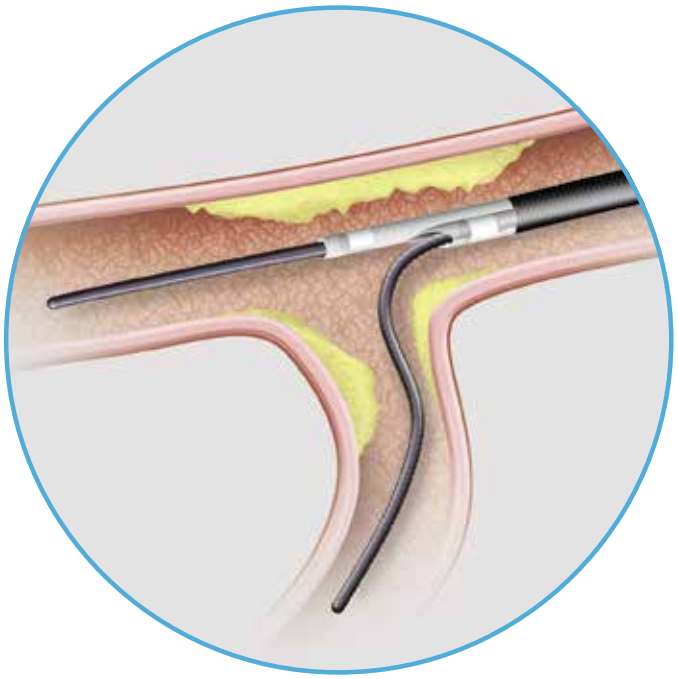
Simple Deployment in a Dual-Lumen Design

RX lumen is delivered over in-place guidewire

OTW lumen is used for subsequent delivery of a second guidewire or fluid injection

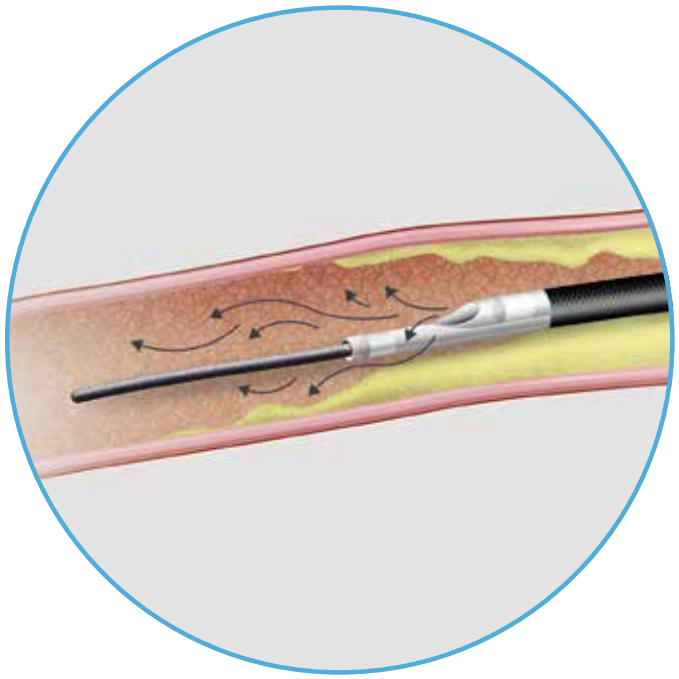


Supportive Access for Bifurcations and Wire Exchanges



With the Twin-Pass Catheter over the RX guidewire in the main branch, the OTW lumen can be used to advance a guidewire into a side branch or for guidewire exchange.

Targeted Delivery of Medication or Contrast



The RX guidewire can remain while the OTW lumen is used to deliver medication or contrast to the desired distal vessel segment.

	Twin-Pass Torque Dual Access Catheter 5201	Twin-Pass Dual Access Catheter 5200
Primary clinical usage	Procedures requiring a dual-lumen with torque response for precise angle alignment into side branches	Procedures requiring a dual-lumen for conventional fluid delivery or a second guidewire in the main vessel
OTW lumen exit port deflection angle	10°	0°
Shaft construction	Stainless steel braid	Stainless steel rod
Distal tip length	7 mm	20 mm
Dual-lumen outer diameter (Crossing Profile)	3.5 Fr. x 3.5 Fr.	3.4 Fr. x 2.7 Fr.

Ordering Information

Twin-Pass® Torque Dual Access Catheter Model 5201

The Twin-Pass Torque Catheter is intended to access discrete regions of the coronary and/or peripheral vasculature. It may be used to facilitate placement and exchange of guidewires and to subselectively infuse/deliver diagnostic and therapeutic agents.

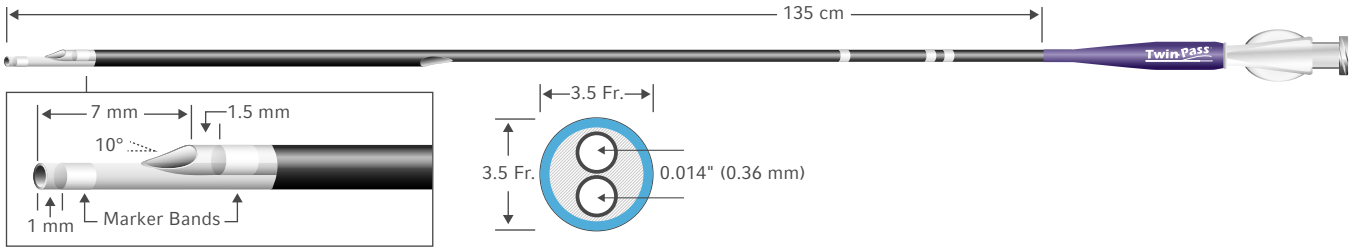
Twin-Pass® Dual Access Catheter Model 5200

The Twin-Pass Catheters are intended to be used in conjunction with steerable guidewires in order to access discrete regions of the coronary and peripheral arterial vasculature, to facilitate placement and exchange of guidewires and other interventional devices, and for use during two guidewire procedures. The Twin-Pass catheter is also used to subselectively infuse/deliver diagnostic or therapeutic agents.

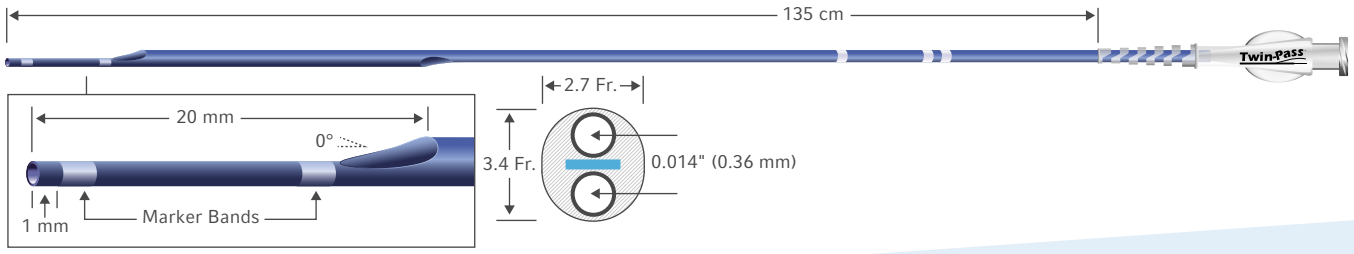
SPECIFICATIONS	TWIN-PASS TORQUE DUAL ACCESS CATHETER MODEL 5201	TWIN-PASS DUAL ACCESS CATHETER MODEL 5200
Guide catheter compatibility	≥5 Fr. (≥0.056" / 1.42 mm I.D.)	≥5 Fr. (≥0.056" / 1.42 mm I.D.)
Guidewire compatibility	≤0.014" / 0.36 mm	≤0.014" / 0.36 mm
OTW lumen O.D.	0.040" / 1.02 mm	0.038" / 0.97 mm
Dual-lumen O.D.	3.5 Fr. x 3.5 Fr. (1.17 mm / 0.046")	3.4 Fr. x 2.7 Fr. (1.14 mm / 0.045" x 0.91 mm / 0.036")
Distal tip O.D.	2.1 Fr. (0.71 mm / 0.028")	2 Fr. (0.66 mm / 0.026")
Working length	135 cm	135 cm
RX lumen length	22 cm	21 cm
Distal tip length	7 mm	20 mm
Hydrophilic coating	Distal 25 cm	Distal 18 cm
Positioning marks	95 cm (single) and 105 cm (double) from distal tip	95 cm (single) and 105 cm (double) from distal tip
OTW lumen exit port deflection angle	10°	0°

Packaged in quantities of 1 unit per box.

Twin-Pass® Torque Dual Access Catheter Model 5201



Twin-Pass® Dual Access Catheter Model 5200



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Information in this material is not a substitute for the product Instructions for Use. Not all products may be available in all countries. Please contact your local representative. Revised: 04/2018.

Teleflex®

LIMUS® The widest range of 72 stent sizes.

Stent Length (mm)	Stent Diameter (mm)							
	2.25 mm	2.50 mm	2.75 mm	3.00 mm	3.50 mm	4.00 mm	4.50 mm	5.00 mm
8 mm	XL 2.25–8	XL 2.50–8	XL 2.75–8	XL 3.00–8	XL 3.50–8	XL 4.00–8	XL 4.50–8	XL 5.00–8
12 mm	XL 2.25–12	XL 2.50–12	XL 2.75–12	XL 3.00–12	XL 3.50–12	XL 4.00–12	XL 4.50–12	XL 5.00–12
16 mm	XL 2.25–16	XL 2.50–16	XL 2.75–16	XL 3.00–16	XL 3.50–16	XL 4.00–16	XL 4.50–16	XL 5.00–16
20 mm	XL 2.25–20	XL 2.50–20	XL 2.75–20	XL 3.00–20	XL 3.50–20	XL 4.00–20	XL 4.50–20	XL 5.00–20
24 mm	XL 2.25–24	XL 2.50–24	XL 2.75–24	XL 3.00–24	XL 3.50–24	XL 4.00–24	XL 4.50–24	XL 5.00–24
28 mm	XL 2.25–28	XL 2.50–28	XL 2.75–28	XL 3.00–28	XL 3.50–28	XL 4.00–28	XL 4.50–28	XL 5.00–28
32 mm	XL 2.25–32	XL 2.50–32	XL 2.75–32	XL 3.00–32	XL 3.50–32	XL 4.00–32	XL 4.50–32	XL 5.00–32
36 mm	XL 2.25–36	XL 2.50–36	XL 2.75–36	XL 3.00–36	XL 3.50–36	XL 4.00–36	XL 4.50–36	XL 5.00–36
40 mm	XL 2.25–40	XL 2.50–40	XL 2.75–40	XL 3.00–40	XL 3.50–40	XL 4.00–40	XL 4.50–40	XL 5.00–40

Technical Data	
Material	Cobalt Chromium Alloy L-605
Strut thickness	73µm - 0.073mm - 0.0029"
Coating layer	2µm
Device lengths	Stent length = balloon length = markers distance
Metal to artery ratio	14% average
Nominal pressure	8 ATM
Rated burst pressure	16 ATM except diameters 4.5 / 5.0 and diameter 4.0 with length higher than 20mm (14 ATM)
Average foreshortening	< 1%
Guiding catheter compatibility	5F (0.058" ID) except diameters 4.5 and 5.0 —> 6F (0.071“)
Guidewire compatibility	0.014" maximum recommended
Sirolimus (Rapamycin) drug-coating	1.25µg/mm² stent surface

CARDIONOVUM®
Life deserves the best

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29229 Canwood Street Suit 202
Agoura Hills, CA 91301
USA

Rev. no. XL-04001

A REVOLUTIONARY STENT SYSTEM TO TREAT COMPLEX CORONARY LESIONS

BIODEGRADABLE DRUG ELUTION

LIMUS®

Sirolimus-eluting cobalt chromium coronary stent technology.

XLIMUS®

The most innovative Sirolimus-eluting cobalt chromium coronary stent technology available.

Leading the future of drug-eluting coronary stenting.

- XLIMUS is the ultimate coronary DES stent system to treat complex coronary artery disease by reaching and crossing the most challenging lesions.
- XLIMUS offers a stable, flexible stent delivery system featuring a flexible tip technology allowing navigating the most tortous coronary anatomies.
- XLIMUS is a next generation thin stent strut Sirolimus DES, using the No. 1 drug which demonstrated long-term patient safety and optimal clinical efficacy, in more than 10.0 Million Patients.

MACE 0%

0.0029"
optimized thin stent strut design

Perfectly

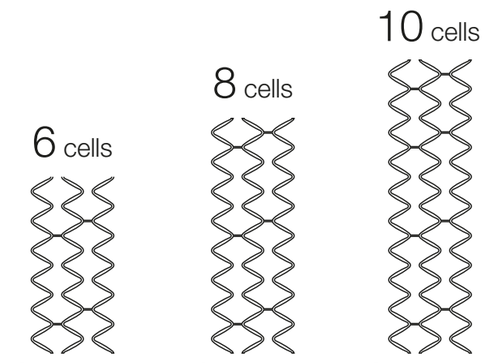
homogenous vessel wall scaffolding

L-605
Cobalt Chromium

The outstanding XLIMUS 6-8-10 stent cell design.

Ensures even vessel wall coverage.
Any different artery lesion diameter ranging from 2.25 up to 5.00mm is stented evenly.

XLIMUS®



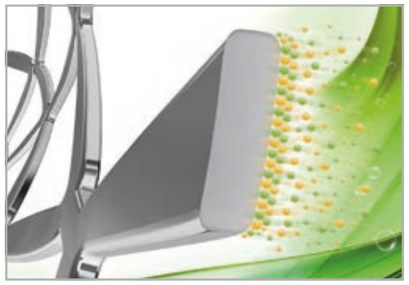
Homogenous deployment distribution: Surface A1 = A2 = A3

No stent flaring. No tissue prolapse. Clinically effective.

Homogenous, clinically effective drug delivery optimizes the anti-proliferative protection of the stented lesion segment.

No stent strut flaring. No open gaps.
The technically high standard of 6-8-10 intermediate and closed-cell stent architecture covers all vessel diameters evenly. XLIMUS quality ensures the best possible intracoronary stenting stability and minimizes stenting trauma and restenosis. Extraordinary homogenous vessel wall scaffolding.

XLIMUS assists the cardiologist
with an optimal, unsurpassed tracking performance. It has an innovative Hydrophilic-coated shaft and an extra-low tip profile to access the most tortuous lesions. The ultra-low lesion crossing profile measures only 0.90 mm. The novel XLIMUS Sirolimus-eluting coronary stent system protects the stented lesion segment through extraordinary homogeneous vessel wall scaffolding which minimizes the risk of tissue prolapse.



XLIMUS abluminal drug-coating technology.

A novel drug-eluting, cobalt chromium coronary stent system, which provides clinically effective antiproliferative, abluminal drug delivery to the coronary artery lesion to prevent restenosis, followed by a rapid functional endothelial healing.

● **Biodegradable Polymer** ● **Sirolimus Drug Elution**

Following the nature. Stent flexibility by design.

Pulse Synchronous Stent Dynamics respond to coronary artery movement, with every heart beat. Natural stent flexion minimizes friction and shear stress to avoid vessel wall trauma. For a lifetime patient safety!

Controlled biodegradable Sirolimus drug release for rapid functional endothelial healing.

The highly biocompatible PLLA (Polylactid acid) drug containing release matrix degrades smoothly and provides an optimal release kinetic profile. Within 30 days, about 70% of the anti-proliferative drug is distributed into the surrounding arterial tissue of the stent struts, ensuring a highly effective inhibition of smooth muscle cell migration and proliferation. Pharmacokinetic study result confirm sustained anti-proliferative drug efficacy up to 120 days.

Thin stent struts minimize foreign body metal volume.

XLIMUS reduces the inflammatory signal potential for prevention of late restenosis.

Cypher	140 µm
Taxus Liberte	97 µm
Endeavor	91 µm
Xience V	81 µm
XLIMUS*	**71 µm**

Source: Peter Smits,MD, from the COMPARE trial presentation at TCT 2009. *XLIMUS low metal volume stenting. Caution! Thinner struts, much below 71µm may influence stent stability.

XLIMUS controlled biodegradable Sirolimus drug release.

XLIMUS ensures a controlled drug release after stent implantation.