Vascular Intervention // Coronary

# **PRO-Kinetic Energy**

Cobalt Chromium Coronary Stent System Indicated for discrete de-novo stenotic lesions and in-stent restenotic lesions



- Highly flexible double helix stent design for optimal deliverability and vessel conformability
- **proBIO** coating for enhanced biocompatability<sup>3</sup>
- Proven Orsiro / PK Papyrus stent design provides exceptional deliverability

<sup>1</sup> 2.0 - 3.0 mm stents

<sup>2</sup> ISAR STEREO I & II; (I) Kastrati et al. 2001. Circulation. 103(23): 2816-21.;
(II) Pache et al. 2003. J Am Coll Cardiol, 41(8): 1283-8.

<sup>3</sup> Rzany A, Schaldach M. 2001. Progress in Biomedical Research 2001 May: 182-194.



## **PRO-Kinetic Energy** Power under your control

The combined power of stent design, delivery system and **proBIO** coating are at your fingertips.

#### Advanced stent design

The PRO-Kinetic Energy stent design offers exceptional bending flexibility without compromising scaffolding or fatigue resistance. This advanced stent design allows for a smooth outer contour during bending without ridged transition zones.

Helical meanders give flexibility to the stent for excellent delivery and allow for a smooth crimped profile.

Wedge-shaped transitions at the stent ends allow for consistent scaffolding throughout the entire length of the stent.

Longitudinal connectors provide stability for optimal scaffolding and support without sacrificing flexibility.

Ultra thin strut design (60 µm)

Struts of only 60 µm<sup>1</sup> result in exceptional flexibility and deliverability of the stent in even the most challenging anatomy.

#### Powerful cobalt chromium alloy

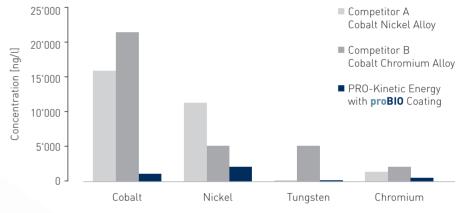
Our advanced material allow engineers to push the limits of design with novel concepts for thinner struts without compromising other aspects of the stent.

### Not just a stent, but a complete solution

#### **proBIO** silicon carbide coating

proBIO acts as a diffusion barrier, sealing the bare metal surface and reducing ion release. In vitro studies have shown up to a 96 % reduction of allergenic metal ions<sup>4</sup> when the stent surface is coated with silicon carbide.

By providing a barrier against ion release, the silicon carbide coating creates a surface that reduces platelet aggregation while facilitating endothelialization.<sup>3</sup>



#### Innovative stent delivery system

and trackability.

#### Enhanced Force Transmission (EFT) shaft Improves kink resistance and pushability due to the gradual

#### Advanced thermal crimping

Advanced thermal crimping techniques were developed for PRO-Kinetic Energy to ensure secure stent retention forces as well as a smooth, low crossing profile (0.95 mm/0.037")<sup>5</sup>.

Expect effortless deliverability from the stent delivery system built with Pantera PTCA balloon technology featuring an Enhanced Force Transmission (EFT) shaft and thinner materials for added pushability

transition from the proximal to the distal part of the shaft.

### **PRO-Kinetic Energy** Cobalt Chromium Coronary Stent System

#### Technical Data

Stent							
Stent material	Cobalt chromium, L-605						
Passive coating	roBIO (Amorphous Silicon Carbide) coating						
Strut thickness	ø 2.0 - 3.0 mm: 60 μm (0.0024"); ø 3.5 - 4.0 mm: 80 μm (0.0031"); ø 4.5 - 5.0 mm: 120 μm (0.0047")						
Delivery system							
Catheter type	Rapid exchange						
Recommended guide catheter	5F (min. I.D. 0.056")						
Lesion entry profile	0.017"						
Guide wire diameter	0.014"						
Usable catheter length	140 cm						
Balloon material	Semi Crystalline Co-Polymer material						
Coating (distal shaft)	Hydrophilic coating						
Marker bands	Two swaged platinum-iridium markers						
Proximal shaft diameter	2.0F						
Distal shaft diameter	2.5F: ø 2.0 - 3.5 mm; 2.8F: ø 4.0 - 5.0 mm						
Nominal pressure (NP)	9 atm						
Rate burst pressure (RBP)	16 atm (2.0 - 4.0 mm); 14 atm (4.5 - 5.0 mm)						

Compliance Chart	Balloon diameter x length (mm)									
		ø 2.0 x 9-20	ø 2.25 x 9-20	ø 2.5 × 9-22	ø 2.75 × 9-30	ø 3.0 × 9-30	ø 3.5 × 9-40	ø 4.0 × 9-40	ø 4.5 × 13-40 <sup>6</sup>	ø 5.0 × 13-40°
Nominal Pressure	atm*	9	9	9	9	9	9	9	9	9
(NP)	ø (mm)	2.00	2.25	2.50	2.75	3.00	3.50	4.00	4.50	5.00
Rated Burst Pressure	atm*	16	16	16	16	16	16	16	14	14
(RBP)	ø (mm)	2.33	2.59	2.83	3.12	3.42	4.07	4.65	5.11	5.63

1 atm = 1.013 bar

Ordering Information	Stent ø (mm)	Catheter length 140 cm Stent length (mm)									
		9	13	15	18	20	22	26	30	35	40
	2.007	360490	360497	360506	360515	360524	-	-	-	-	-
	2.25	360491	360498	360507	360516	360525	-	-	-	-	-
	2.50	360492	360499	360508	360517	360526	360533	-	-	-	-
	2.75	360493	360500	360509	360518	360527	360534	360538	360544	-	-
	3.00	360494	360501	360510	360519	360528	360535	360539	360545	-	-
	3.50	360495	360502	360511	360520	360529	360536	360540	360546	360550	360552
	4.00	360496	360503	360512	360521	360530	360537	360541	360547	360551	360553
	4.50	-	360504	360513	360522	360531	-	360542	360548	-	360554
	5.00	-	360505	360514	360523	360532	-	360543	360549	-	360555
									7 Size no	licensed for	sale in Canad

PRO-Kinetic Energy is part of the BIOTRONIK coronary solutions portfolio, including:

- Stents: Orsiro, PK Papyrus = Balloons: Pantera Lux, Pantera LEO, Pantera
- Guide Wires: Galeo Pro, Cruiser, Magnum

For ordering please contact your local sales representative

BIOTRONIK AG Ackerstrasse 6 8180 Bülach · Switzerland Tel +41 (0) 44 8645111 Fax +41 (0) 44 8645005 info.vi@biotronik.com www.biotronik.com

BIOTRONIK AG – All rights reserved. Specifications are subject to modification, revision and improvement.

