



Cronus™ HP PTA Balloon Catheter

High pressures achieved.
Flexibility maintained.



The Cronus™ HP Advantage:

Graduated control angioplasty with a single balloon

The Cronus HP High Pressure PTA Balloon Catheter overcomes common limitations by providing flexibility and durability at high pressures while minimizing balloon dog boning. It is designed to handle even the most resilient stenoses while conforming to the natural vasculature of native fistulae.

The Strength of a Noncompliant, High-Pressure Balloon

- High-pressure circumferential dilatation lessens the potential for microtears, leading to better fistula patency³
- Durable enough to endure repeated inflations even for the most resilient strictures and stenoses¹
- Rated Burst Pressure (RBP) ranges from 22-30 atm., which aids interventionist in using one balloon during a procedure
- Over-dilatation in the AV access can increase the length of time before another intervention is needed²

The Flexibility of a Semi-Compliant Balloon

- Graduated growth balloon angioplasty allows easy access to the lesion and minimizes vessel damage³
- Shaft flexibility engineered to allow the catheter to closely follow the curvature of the guidewire
- Conforms to natural vasculature under high pressures, particularly juxta-anastomosis, where most early fistula failures occur⁴
- Engineered to navigate various stented swing segments
- Over-the-wire (OTW) catheter designed to provide added pushability and crossability, even in juxta-anastomotic stenoses

Sheath Compatibility

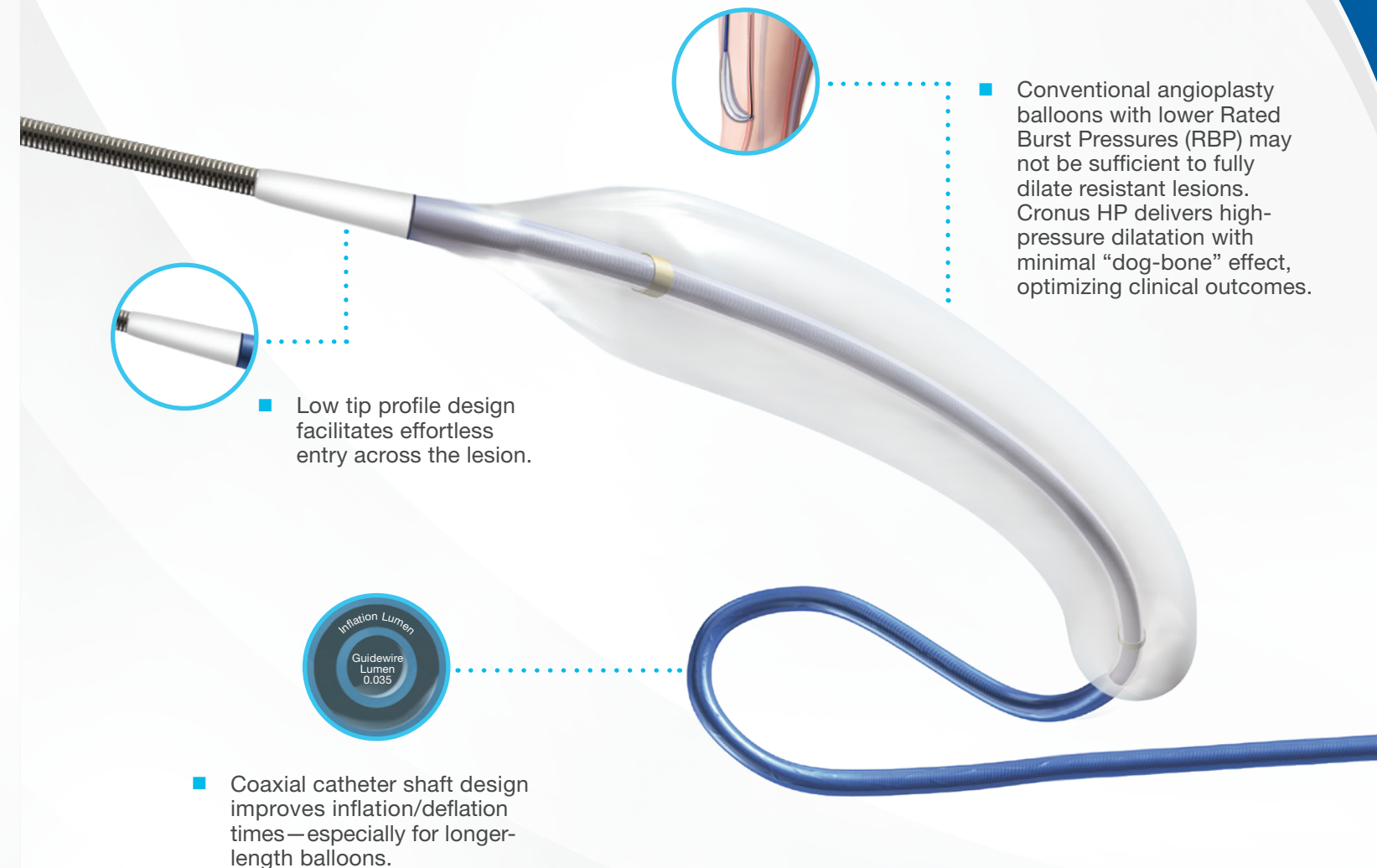
Balloon Diameter (mm)	Balloon Length (mm)				
	20	30	40	60	80
4	6F	6F	6F	6F	6F
5	6F	6F	6F	6F	6F
6	6F	6F	6F	6F	6F
7	6F	6F	6F	6F	6F
8	6F	6F	6F	6F	6F
9	7F	7F	7F	7F	
10	7F	7F	7F	7F	



Pre-installed re-folding tool helps interventionists refold and reinsert the balloon through the introducer sheath several times and with greater ease

1. Data on file
 2. Roubin, G. et al. "Influence of balloon size on initial success, acute complications, and restenosis after percutaneous transluminal coronary angioplasty. A prospective randomized study." *Circulation* 78 3 (1988): 557-65.
 3. Holzapfel G.A. et al. OLZAPFEL A Layer-Specific Three-Dimensional Model for the Simulation of Balloon Angioplasty using Magnetic Resonance Imaging and Mechanical Testing. *Annals of Biomedical Engineering*, Apr 2002 Vol. 30, Pages 753-767
 4. Asif, Arif, et al. "Early Arteriovenous Fistula Failure: A Logical Proposal for When and How to Intervene." *Clinical Journal of the American Society of Nephrology*, vol. 1, no. 2, 2005, pp. 332-39.

Designed for Strength and Flexibility



Conventional angioplasty balloons with lower Rated Burst Pressures (RBP) may not be sufficient to fully dilate resistant lesions. Cronus HP delivers high-pressure dilatation with minimal "dog-bone" effect, optimizing clinical outcomes.

Low tip profile design facilitates effortless entry across the lesion.

Coaxial catheter shaft design improves inflation/deflation times—especially for longer-length balloons.

ORDERING INFORMATION

CAUTION: Federal law restricts these devices to sale by or on the order of a physician.

Catheter Length	Balloon Length	Balloon Diameter						
		4 mm	5 mm	6 mm	7 mm	8 mm	9 mm	10 mm
45 cm	20 mm	NHP+42045	NHP+52045	NHP+62045	NHP+72045	NHP+82045	NHP+92045	NHP+ 102045
	30 mm	NHP+43045	NHP+52045	NHP+63045	NHP+73045	NHP+83045	NHP+93045	NHP+ 103045
	40 mm	NHP+44045	NHP+52045	NHP+64045	NHP+74045	NHP+84045	NHP+94045	NHP+ 104045
	60 mm	NHP+46045	NHP+52045	NHP+66045	NHP+76045	NHP+86045	NHP+96045	NHP+ 106045
	80 mm	NHP+48045	NHP+52045	NHP+68045	NHP+78045	NHP+88045	N/A	N/A
80 cm	20 mm	NHP+42080	NHP+52080	NHP+62080	NHP+72080	NHP+82080	NHP+92080	NHP+102080
	30 mm	NHP+43080	NHP+53080	NHP+63080	NHP+73080	NHP+83080	NHP+93080	NHP+103080
	40 mm	NHP+44080	NHP+54080	NHP+64080	NHP+74080	NHP+84080	NHP+94080	NHP+ 104080
	60 mm	NHP+46080	NHP+56080	NHP+66080	NHP+76080	NHP+86080	NHP+96080	NHP+106080
	80 mm	NHP+48080	NHP+58080	NHP+68080	NHP+78080	NHP+88080	N/A	N/A

Product images shown are for illustrative purposes only and may not be an exact representation of the product.

High-Pressure Balloon Product Comparison*

Product	Nominal Pressure	Rated Burst Pressure Range*	Balloon Diameter
CRONUS HP 	12 ATM	22 – 30 RBP 28 ATM (7x40 mm)	4 - 10 mm
CONQUEST (Bard) 	8 ATM	20 – 30 RBP 30 ATM (7x40 mm)	5 - 12 mm
FORTREX (Medtronic) 	7, 8, 9, 12 ATM	12 – 24 RBP 20 ATM (7x40 mm)	4 - 12 mm
ARMADA 35 (Abbott) 	4, 6, 8 ATM	14 – 28 RBP 15 ATM (7x40 mm)	3 - 14 mm
MUSTANG BALLOON CATHETER (Boston Scientific) 	8, 10 ATM	14 – 24 RBP 20 ATM (7x40 mm)	3 - 12 mm
DYNAMIS AV (Direct Access Medical) 	10, 12, 14 ATM	14 – 27 RBP 23, 25 ATM (7x40 mm)	3 - 16 mm

*Information listed from various manufacturer's websites at time of publication