

# NUCLEUS™

## Percutaneous Transluminal Valvuloplasty Catheter

(Patent # 5,352,199)

### Catheter Characteristics

The NuMED NuCLEUS™ PTV catheter is engineered for maximum steering and tracking. The coaxial shaft design provides enhanced column strength and pushability combined with a flexible distal tip for optimum steerability. The innovative single balloon design facilitates positive positioning while holding the balloon in the correct location prior to and during inflation.

### Radiopaque Marker

Platinum marker bands facilitate reliable positioning of the balloon and are located at the 'waist' center and beneath the shoulders of the balloon for clear identification under fluoroscopy.

### Maximum Trackability

The distal shaft through the balloon is highly flexible for exceptional maneuverability. This, combined with the pushability of the coaxial shaft, provides outstanding tracking performance.

### Micro-Thin Non-Compliant Balloon

The NuMED NuCLEUS™ PTV patented design allows for accurate balloon placement. Initial inflation will hold balloon in the desired position, further inflation expands the center of the balloon to effect satisfactory dilatation.

The NuMED NuCLEUS™ PTV balloon is micro-thin for a low deflated profile that maintains tip flexibility. The exceptionally low profile balloon requires the smallest introducer possible. Nominal dimensions are maintained over the entire length of the non-compliant balloon.

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### Nucleus™ Specifications

NEW sizes highlighted

Balloon Diameter (MM)	Balloon Length (CM)	Introducer Size (FR)	Shaft Size (FR)	Usable Length (cm)	Guide Wire (Inches)	Rated Burst (ATM)	Catalog No.
10.0	3.0	7	6	110	0.035	9	PVN218
10.0	4.0	7	6	110	0.035	9	PVN219
10.0	5.0	7	6	110	0.035	9	PVN236
10.0	6.0	7	6	110	0.035	9	PVN237
12.0	3.0	7	6	110	0.035	7	PVN220
12.0	3.0	8	6	110	0.035	7	PVN221
12.0	4.0	7	6	110	0.035	7	PVN222
12.0	4.0	8	6	110	0.035	7	PVN223
12.0	5.0	8	6	110	0.035	7	PVN238
12.0	6.0	8	6	110	0.035	7	PVN239
14.0	3.0	9	7	110	0.035	6	PVN224
14.0	4.0	9	7	110	0.035	6	PVN225
14.0	5.0	9	7	110	0.035	6	PVN240
14.0	6.0	9	7	110	0.035	6	PVN241
16.0	3.0	9	7	110	0.035	5	PVN226
16.0	4.0	9	7	110	0.035	5	PVN227
16.0	5.0	9	7	110	0.035	5	PVN242
16.0	6.0	9	7	110	0.035	5	PVN243

### Materials

**Catheter Body:** Polymeric.

**Balloon:** Non-Compliant Thermoplastic Elastomer.

**Image Band:** Platinum Iridium.

NuMED offers Physicians speedy response to catheter design and manufacturing service. The enhanced catheter technology offers Physicians a technically superior option in dealing with clinical needs.

# NUCLEUS™

## Specifications (cont'd)

NEW sizes highlighted

Balloon Diameter (MM)	Balloon Length (CM)	Introducer Size (FR)	Shaft Size (FR)	Usable Length (cm)	Guide Wire (Inches)	Rated Burst (ATM)	Catalog No.
18.0	3.0	10	8	110	0.035	4	PVN228
18.0	4.0	10	8	110	0.035	4	PVN229
18.0	5.0	10	8	110	0.035	4	PVN244
18.0	6.0	10	8	110	0.035	4	PVN245
20.0	4.0	12	8	110	0.035	4	PVN230
20.0	5.0	12	8	110	0.035	4	PVN246
20.0	6.0	12	8	110	0.035	4	PVN247
22.0	4.0	12	9	110	0.035	4	PVN231
22.0	5.0	12	9	110	0.035	4	PVN248
22.0	6.0	12	9	110	0.035	4	PVN249
25.0	4.0	12	9	110	0.035	4	PVN232
25.0	5.0	12	9	110	0.035	4	PVN250
25.0	6.0	12	9	110	0.035	4	PVN251
28.0	4.0	12	9	110	0.035	2	PVN233
28.0	4.0	14	9	110	0.035	2	PVN234
28.0	5.0	14	9	110	0.035	2	PVN252
28.0	6.0	14	9	110	0.035	2	PVN253
30.0	4.0	14	9	110	0.035	2	PVN235
30.0	5.0	14	9	110	0.035	2	PVN254
30.0	6.0	14	9	110	0.035	2	PVN255

For information regarding inflation graduations at various pressures and fluid volumes, refer to NuMED NuCLEUS™ inflation characteristics within the instructions for use booklet.

### Feature:

*Low profile.*

*Coaxial catheter.*

*Maximum steering and trackability.*

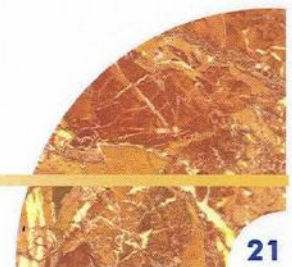
### Materials

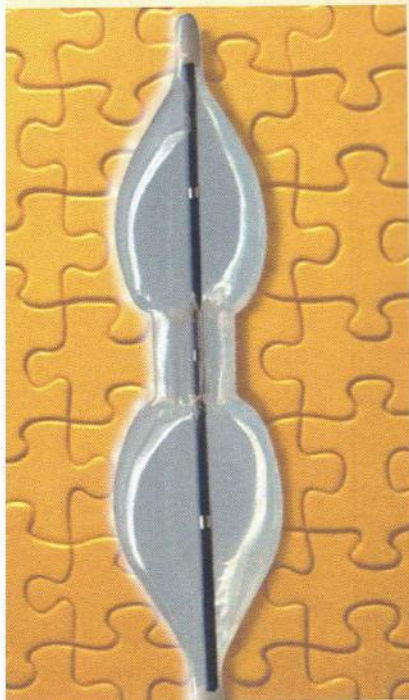
**Catheter Body:** Polymeric.

**Balloon:** Non-Compliant Thermoplastic Elastomer.

**Image Band:** Platinum Iridium.

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# NUCLEUS-X™

## Percutaneous Transluminal Valvuloplasty Catheter

Recommended for Percutaneous Transluminal Valvuloplasty (PTV) for mitral and aortic position applications. The use of this catheter is particularly indicated in stenosis where difficulty in balloon positioning during inflation is experienced.

### NUCLEUS-X™ Specifications

Balloon Diameter (MM)	Balloon Length (CM)	Introducer Size (FR)	Shaft Size (FR)	Usable Length (CM)	Guide Wire (Inches)	Rated Burst (ATM)	Catalog No.
18.0	4.0	10	9	110	0.035	4	PVN400
18.0	5.0	10	9	110	0.035	4	PVN401
18.0	6.0	10	9	110	0.035	4	PVN402
20.0	4.0	12	9	110	0.035	4	PVN403
20.0	5.0	12	9	110	0.035	4	PVN404
20.0	6.0	12	9	110	0.035	4	PVN405
22.0	4.0	12	9	110	0.035	3	PVN406
22.0	5.0	12	9	110	0.035	3	PVN407
22.0	6.0	12	9	110	0.035	3	PVN408
25.0	4.0	12	9	110	0.035	3	PVN409
25.0	5.0	12	9	110	0.035	3	PVN410
25.0	6.0	12	9	110	0.035	3	PVN411
28.0	4.0	12	9	110	0.035	2	PVN412
28.0	5.0	12	9	110	0.035	2	PVN413
28.0	6.0	12	9	110	0.035	2	PVN414
30.0	4.0	14	9	110	0.035	2	PVN415
30.0	5.0	14	9	110	0.035	2	PVN416
30.0	6.0	14	9	110	0.035	2	PVN417

### Features:

Xtra high inner lumen strength

Xtra fast guidewire movement (even with balloon inflated)

Increased pushability from new braided inner tubing

Radiopaque inner tubing

"Another addition to the quality NuMED line of catheters."



NuMED offers Physicians speedy response to catheter design and manufacturing service. The enhanced catheter technology offers Physicians a technically superior option in dealing with clinical needs.